

**AGENDA
IRVINE RANCH WATER DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING**

June 24, 2019

PLEDGE OF ALLEGIANCE

CALL TO ORDER

5:00 p.m., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL

Directors Reinhart, Matheis, Swan, and Withers and President LaMar

NOTICE

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to three minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

COMMUNICATIONS TO THE BOARD

1. A. Written:

B. Oral:

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Recommendation: Determine the need to discuss and/or take immediate action on item(s).

PUBLIC HEARING

Resolution No. 2019-17

3. PROPOSED CHANGES TO THE SCHEDULE OF THE RATES AND CHARGES EFFECTIVE JULY 1, 2019

Reso. 2019-

Recommendation: That the Board adopt a resolution Rescinding Resolution No. 2018-16 and adopting changes to the schedule of rates and charges as set forth in Exhibit "B" to the Rules and Regulations of Irvine Ranch Water District for Water, Sewer and Recycled Water Service.

CONSENT CALENDAR

Items 4-8

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Mary Aileen Matheis, Swan, Doug Reinhart, Steve LaMar and John Withers, as described.

CONSENT CALENDAR

Items 4-8

5. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the June 10, 2019 Regular Board meeting be approved as presented.

6. MAY 2019 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Summary of Fixed and Variable Rate Debt, and Disclosure Report of Reimbursements to Board members and staff; approve the May 2019 Summary of Payroll ACH payments in the total amount of \$2,025,956 and approve the May 2019 accounts payable Disbursement Summary of warrants 398264 through 399225, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$18,754,485.

7. FISCAL YEAR 2019-20 LEGAL SERVICES PROVIDED BY ALSTON BIRD

Recommendation: That the Board authorize the General Manager to execute a variance to the Letter of Engagement with Alston & Bird for legal services related to complex issues and litigation extending the term to June 30, 2020, and increasing the not-to-exceed value of the contract by \$2,500,000.

8. RESOLUTION COMMENDING ROBERT "BOB" HILL FOR HIS DEDICATED SERVICE TO THE EL TORO WATER DISTRICT AND THE WATER INDUSTRY

Recommendation: That the Board adopt a resolution commending Mr. Robert "Bob" Hill for his dedicated service to the El Toro Water District and the water industry.

Reso. No. 2019-

ACTION CALENDAR

9. AMENDMENT NO. 2 TO THE AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT AND BARDEEN PARTNERS, INC. FOR SERVICES RELATED TO REAL ESTATE INVESTMENT PROGRAM

Recommendation: That the Board approve Amendment No. 2 to the Agreement between Irvine Ranch Water District and Bardeen Partners, Inc. for services related to Real Estate Investment Program.

ACTION CALENDAR (Continued)

10. FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATION PROJECT

Recommendation: That the Board find on the basis of the whole record before it (including the Final Initial Study/Mitigated Negative Declaration and the comments received) that there is no substantial evidence that the Syphon Reservoir Geotechnical Investigations Project will have a significant effect on the environment and that the Final Mitigated Negative Declaration reflects IRWD's independent judgment and analysis; adopt the proposed Final Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigation Project and the associated Mitigation Monitoring and Reporting Program; approve the Syphon Reservoir Geotechnical Investigations Project; and authorize staff to post and file a Notice of Determination.

11. NOMINATION OF STEVE LAMAR AS A CANDIDATE FOR PRESIDENT OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES

Recommendation: That the Board support the nomination of IRWD Director Steve Lamar for President of ACWA for a two-year term beginning January 1, 2020 and that a resolution be adopted by title subject to non-substantive changes and in accordance with ACWA's requirements nominating Steve LaMar as a candidate for President of ACWA.

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

12. General Manager's Report
 - a. Urgent Necessity Contract: Repairs on Enterprise Drive, Irvine (P.O. 213215)
 - b. Other Items
13. Directors' Comments
14. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.

OTHER BUSINESS (Continued)

15 Closed Session

CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION -
Pursuant to Government Code Section 54956.9(d)(1): *Orange County Water
District v. Sabic Innovative Plastics US, LLC, et al.*, Case No. 30-2008-
0078246-CU-TT-CXC

16. Open Session

17. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office. The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

June 24, 2019
Prepared by: D. Pardee / C. Smithson
Submitted by: C. Clary
Approved by: Paul A. Cook



PUBLIC HEARING

PROPOSED CHANGES TO THE SCHEDULE OF RATES AND CHARGES EFFECTIVE JULY 1, 2019

SUMMARY:

IRWD's Fiscal Year (FY) 2019-20 and 2020-21 Operating Budgets were adopted at the April 22, 2019 IRWD Board meeting. The proposed changes to IRWD's rates and charges were publicly noticed by mail as required under Proposition 218, and protests to the implementation of those rates and charges have been tallied by the District's independent auditors. As of June 20, 2019, nine written protest letters were received by the District, which represents less than 0.01% of the total customers, substantially less than the 50% which would have been required to prevent the Board from adopting the current proposed rates and charges. Protests may be received up until the commencement of the public hearing; staff will provide an updated report as part of the hearing process.

Pursuant to the requirements of Proposition 218, a Public Hearing on the rates and charges is required. Following the Public Hearing, staff recommends that the Board adopt the proposed changes to the Schedule of Rates and Charges for FY 2019-20 and for FY 2020-21 required to fund operating expenses.

OUTLINE OF PROCEEDINGS

President: Declare this to be the time and place for a hearing on the proposed changes to the rates and charges. Ask the Secretary how the hearing was noticed.

Secretary: The hearing was noticed by mail. Present affidavit of mailing.

Board: RECOMMENDED MOTION: "RECEIVE AND FILE THE AFFIDAVIT OF MAILING BY AN INDEPENDENT PROCESSING FIRM AS PRESENTED BY THE SECRETARY."

President: Request Legal Counsel to describe the nature of the proceedings.

Legal

Counsel: The public hearing is held, pursuant to Proposition 218, Article XIID of the Constitution of the State of California, for all persons interested to be heard, to present objections or protests, including any written comments submitted, concerning the increase in property-related rates and charges and any proposed new property-related rates and charges.

President: Request a staff report from the Executive Director of Finance or her Designee on the proposed rates and charges and inquire whether there have been any written communications.

Executive
Director
of Finance or

Designee: Provide staff report and respond regarding the number of protests received to the implementation of the rates and charges.

President: Inquire whether there is anyone present who wishes to address the Board regarding the proposed changes to the rates and charges.

President: Inquire whether there are any comments or questions from members of the Board of Directors. After comments or questions, state that the hearing will be closed.

Board: RECOMMENDED MOTION: THAT THE HEARING BE CLOSED AND THAT THE FOLLOWING RESOLUTION BE ADOPTED BY TITLE:

RESOLUTION NO. 2019 -

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH
WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
RESCINDING RESOLUTION NO. 2018-16 AND ADOPTING
CHANGES TO THE SCHEDULE OF RATES AND CHARGES FOR FISCAL YEAR 2019-20
AS SET FORTH IN EXHIBIT "B" AND CHANGES TO THE SCHEDULE OF RATES AND
CHARGES FOR FISCAL YEAR 2020-21 AS SET FORTH IN EXHIBIT "C"
TO THE RULES AND REGULATIONS OF IRVINE RANCH WATER DISTRICT
FOR WATER, SEWER AND RECYCLED WATER SERVICE

BACKGROUND:

Proposed Rates and Charges for FY 2019-20 and 2020-21:

A redline version showing the changes to the rates and charges proposed for FY 2019-20 is attached as Exhibit "B". A redline version showing the additional proposed changes for FY 2020-21 is attached as Exhibit "C". The proposed changes include both updates identified through the rate setting process and changes to the wording and format to better communicate the application of the District's rates to the customer.

All changes from the factors identified were included in the budget and rate setting process. Staff has reviewed costs and revenues for the treated water system, the sewer system, the recycled water system, and the conservation and natural treatment system. As a result of this review, changes to the water and sewer rates for the Irvine Ranch Water District recommended for FY 2019-20 and 2020-21 include:

The Treated Water System:

- The treated water tiered rates are based on cost of service and will provide the necessary funding for the water system. The rates are as follows (per ccf):

Tiers	FY 2018-19	FY 2019-20	Change	FY 2020-21	Change
Low Volume	\$1.40	\$1.47	\$0.07	\$1.54	\$0.07
Base Rate	\$1.89	\$2.00	\$0.11	\$2.12	\$0.12
Inefficient	\$4.73	\$4.86	\$0.13	\$4.91	\$0.05
Wasteful	\$13.35	\$13.63	\$0.28	\$13.65	\$0.02

- Monthly fixed service charges for the treated water system are based on cost of service. For FY 2019-20, the monthly fixed service charge for the treated water system remains at \$10.35 for a 5/8” by 3/4” meter. For FY 2020-21, the monthly fixed service charge for the treated water system increases from \$10.35 to \$10.40 for a 5/8” by 3/4” meter. The monthly service charge for both fiscal years includes a user rate contribution of \$2.80 per month for capital infrastructure enhancements and replacements.

The Sewer System:

- The sewer system rates are also based on cost of service. The rates identified will provide the necessary funding for the sewer system. For FY 2019-20, the increase for a typical residential customer based on the average use of 6-10 ccf per month for the lowest three months will increase from \$23.20 to \$23.50 per month. For FY 2020-21, the increase for a typical residential customer will increase from \$23.50 to \$23.70 per month. The monthly sewer rate for both fiscal years includes a user rate contribution of \$10.13 per month for capital infrastructure enhancements and replacements.

The Recycled Water System:

- The recycled commodity rates are also based on cost of service. The rates identified will provide the necessary funding for the recycled system. The rates are as follows (per ccf):

Tiers	FY 2018-19	FY 2019-20	Change	FY 2020-21	Change
Low Volume	\$1.13	\$1.19	\$0.06	\$1.25	\$0.06
Base Rate	\$1.47	\$1.57	\$0.10	\$1.72	\$0.15
Inefficient	\$3.11	\$3.15	\$0.04	\$3.28	\$0.13
Wasteful	\$6.44	\$6.62	\$0.18	\$6.97	\$0.35

- Monthly fixed service charges for the recycled water system are based on cost of service. For FY 2019-20, the monthly fixed service charge for the treated water system remains at \$10.35 for a 5/8” by 3/4” meter. For FY 2020-21, the monthly fixed service charge for the treated water system increases from \$10.35 to \$10.40 for a 5/8” by 3/4” meter. The monthly service charge for both fiscal years includes a user rate contribution of \$2.80 per month for capital infrastructure enhancements and replacements.

Proposed redline versions of the Schedule of Rates and Charges are provided. Exhibit “B” contains the proposed rates for FY 2019-20 and Exhibit “C” contains the proposed rates for FY 2020-21.

User/Replacement and Enhancement Capital Component:

The replacement component remains unchanged for water and sewer as noted above. Combined with the existing replacement and enhancement rate components, it is expected that the proposed rate increases will result in the following contributions to the enhancement and replacement funds:

- FY 2019-20: water \$8.7 million, sewer \$19.7 million, and recycled \$1.1 million for a total contribution of \$29.5 million; and
- FY 2020-21: water \$8.8 million, sewer \$20.4 million, and recycled \$1.2 million for a total contribution of \$30.4 million.

Comparison to City of Orange Rates:

On August 28, 2006, IRWD and the City of Orange executed an agreement by which IRWD would provide services to the area known as the “Santiago Hills II / East Orange Area”. One of the conditions stipulated in this agreement was that the cumulative fixed and commodity charges for water service to an IRWD customer using the City of Orange median amount of water (18 ccf per month) would not exceed the same charges incurred by a City of Orange customer. Based on the rates as proposed for FY 2019-20, a customer in IRWD using 18 ccf per month would pay an average of \$42.11 per month for fixed and commodity charges. Based on the most current water rates in the City of Orange, a customer using 18 ccf per month would pay an average of \$56.53 per month for fixed and commodity charges, or 34.2% more than a comparable ratepayer in IRWD.

Proposition 218 Notice:

Proposition 218, enacted in 1996, mandates that proposed increases in “property-related fees” must be noticed to property owners, and that such owners have an opportunity to protest prior to the enactment of the fee increases. In July 2006, the California Supreme Court issued a decision in the matter of Bighorn, which held that water delivery charges are property-related. Following the Supreme Court’s logic, most interpretations of the decision are that both water and sewer charges should be noticed in order to be in compliance with Proposition 218.

Under Proposition 218, the notice to customers must be sent to all property owners. As permitted by statute, the District sent its notices to all of its customers (including tenants) in the District’s service area at their billing addresses.

The District contracted with Davis Farr, Certified Public Accountants to collect and count the rate increase protests. They will provide management with a report prior to the Board meeting on June 24, 2019 (more than 45 days from the date of mailing the Prop 218 notices), and they will be present at the Public Hearing established for approval of the rates to answer questions on the process and final results.

As of June 20, 2019, the District received nine written protests from property owners in the District at a separate post office box from the rest of the District's mail. The nine written protests represent 0.010% of the 104,323 notices sent and 0.75% were returned as undeliverable. Under Proposition 218, more than 50% of the IRWD customers would have to protest in order to prevent the Board from adopting the Proposed Rates and Charges.

Copies of all nine protest letters received to date are attached as Exhibit "E".

ENVIRONMENTAL COMPLIANCE:

The establishment, modification, structuring, restructuring or approval of rates, tolls, fares, or other charges by public agencies are exempt from the requirements of the California Environmental Quality Act (CEQA) provided that certain findings are made specifying the basis for the claim of exemption. The necessary findings are contained in the proposed resolution.

FISCAL IMPACTS:

The District's FY 2019-20 Consolidated Operating Budget totals \$167.0 million, representing a \$9.8 million or 6.3% increase from the Fiscal Year 2018-19 Operating Budget. The proposed adjustments to the District's Schedule of Rates and Charges will generate additional revenue of approximately \$2.8 million for the treated water system, \$0.6 million for the sewer system and \$2.8 million for the recycled system.

The District's FY 2020-21 Consolidated Operating Budget totals \$173.6 million, representing a \$6.6 million or 4.0% increase from the Fiscal Year 2019-20 Operating Budget. The proposed adjustments to the District's Schedule of Rates and Charges will generate additional revenue of approximately \$3.2 million for the treated water system, \$0.5 million for the sewer system and \$0.8 million for the recycled system.

COMMITTEE STATUS:

The proposed changes to the Schedule of Rates and Charges were reviewed by the:

- Finance and Personnel Committee on March 5, 2019, March 19, 2019, and April 2, 2019.
- Board of Directors at a Workshop on April 8, 2019 and April 22, 2019.

LIST OF EXHIBITS:

Exhibit "A" – Resolution to Adopt Schedule of Rates and Charges

Exhibit "B" – Proposed changes to the Schedule of Rates and Charges for FY 2019-20

Exhibit "C" – Proposed changes to the Schedule of Rates and Charges for FY 2020-21

Exhibit "D" – Draft PowerPoint Presentation

Exhibit "E" – Protest Letters received as of June 20, 2019

Exhibit "A"

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT ADOPTING CHANGES TO THE SCHEDULE OF RATES AND CHARGES AS SET FORTH IN EXHIBITS "B" AND "C" TO THE RULES AND REGULATIONS OF IRVINE RANCH WATER DISTRICT FOR WATER, SEWER AND RECLAIMED WATER SERVICE

The Irvine Ranch Water District ("IRWD") is a California Water District organized and existing under the California Water District Law, and all of the lands within the boundaries of IRWD are located in the County of Orange, State of California.

Sections 35423, 35470 and Section 35501 of the California Water Code empower IRWD to establish, print and distribute equitable rules and regulations and prescribe and collect rates or other charges for water and sewer service.

The Board of Directors of IRWD, by adoption of Resolution No. 2018-14 approved and adopted "Rules and Regulations of Irvine Ranch Water District for Water, Sewer, Recycled Water, and Natural Treatment System Service," effective May 29, 2018.

Exhibit "B" of the Rules and Regulations sets forth Rates and Charges, which may be changed from time to time. Section 21080(b)(8) of the Public Resources Code provides that the establishment, modification, structuring, restructuring or approval of rates, tolls, fares, or other charges by public agencies are exempt from the requirements of the California Environmental Quality Act (CEQA) provided that certain findings are made specifying the basis for the claim of exemption.

Article XIII B of the Constitution of the State of California, limiting local agencies' appropriations of proceeds of taxes, excludes user charges or fees or regulatory fees from the definition of proceeds of taxes, as long as such fees and charges do not produce revenue exceeding the costs reasonably borne in providing the regulation, product or service, and further excludes appropriations for debt service and appropriations for qualified capital outlay projects from appropriations subject to limitation.

IRWD conducted a cost of service and rate design study through its consultant, Carollo Engineers, and the Board of Directors has received the final study dated June 18, 2015 (the "Cost Study"), as well as a Fats, Oils, and Grease Fees Study prepared by Raftelis Financial Consultants, Inc. dated February 22, 2018 ("FOG Study").

The Board of Directors of IRWD deems it advisable and finds that it would be in the best interest of the District to amend or establish certain rates and charges, consistent with applicable constitutional and statutory requirements and consistent with recommendations described in the Cost Study and the FOG Study.

Article XIII D of the Constitution of the State of California provides that, in imposing or increasing any property-related fee or charge, an agency shall provide written notice by mail of the proposed fee or charge to the record owner of each identified parcel upon which the fee or

Exhibit "A"

charge is proposed for imposition, the amount, basis of calculating, and reason for such proposed fee or charge, and the date, time and location of a public hearing on the proposed fee or charge to be conducted not less than 45 days after the mailing of said notice, and Government Code Section 53755 provides for such notice to be given by mailing to the address where billing statements are customarily sent by the District.

A mailed notice was given, setting Monday, June 24, 2019, at 5:00 p.m. in the Board of Directors Room of Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California, as the time and place for a public hearing on the proposed increases in property-related rates and charges and any proposed new property-related rates and charges set forth in Exhibit A to this resolution.

At the time set, the duly noticed public hearing was held and all persons interested were given an opportunity to be heard concerning the increases in property-related rates and charges and any proposed new property-related rates and charges.

This Board of Directors has considered all protests presented to the District by owners of identified parcels against the proposed increases in property-related rates and charges and any proposed new property-related rates and charges.

The Board of Directors previously adopted rates and charges under Resolution 2018-16, and the Board of Directors intends in adopting this Resolution to rescind, supersede, and replace Resolution 2018-16.

The Board of Directors of IRWD therefore resolves as follows:

Section 1. It is hereby found and determined that the number of written protests presented to the District against the proposed increases in property-related rates and charges and any proposed new property-related rates and charges has been tabulated and does not constitute a majority of the number of owners of identified parcels.

Section 2. It is hereby found and determined that the proposed changes to the Schedule of Rates and Charges are within the purposes set forth in Section 21080(b) of the Public Resources Code including but not by way of limitation, the purposes of (1) meeting operating expenses, (2) purchasing or leasing supplies, equipment or materials, (3) meeting financial reserve needs and requirements, and (4) obtaining funds for capital projects necessary to maintain service within existing areas, and therefore, that such changes are exempt from CEQA.

Section 3. The recommendations set forth in the Cost Study (Section 4.3.2 - decoupling of recycled water rates; Section 4.5.1 – low volume credit; and Section 4.5.6 – three month minimum use to establish volumetric sewer service charge blocks) are hereby adopted.

Section 4. It is hereby found and determined that the rates, charges and fees adopted hereby are imposed upon the request for or use of services; that the rates, charges and fees recover and allocate the costs of service in accordance with the criteria and requirements of the Constitution of the State of California; and that the water user charges satisfy the criteria and requirements of Water Code Sections 370 *et seq.* relating to allocation-based conservation water pricing.

Exhibit "A"

Section 5. It is hereby found and determined that relative to Article XIII B of the Constitution of the State of California, the user charges and fees and regulatory fees established or increased hereby do not produce revenues exceeding the costs reasonably borne in providing the regulation, product or service and/or are used for debt service or qualified capital outlay projects and accordingly do not constitute proceeds of taxes, the appropriation of which is limited under Article XIII B, and that the documentation used in making such determinations has been on file in the office of IRWD for not less than 15 days prior to the date hereof, pursuant to Section 7910 of the Government Code of the State of California.

Section 6. The new and/or revised rates, fee and/or charge as set forth in Exhibit "A" attached to this resolution and by this reference incorporated herein are hereby adopted, and the corresponding rates, fees or charges set forth in Exhibit B that are currently in effect as a result of the adoption of Resolution 2018-16, are hereby superseded and Resolution 2018-16 is hereby rescinded. Staff is directed to incorporate the new or revised rates, fees, and charges as Exhibit "B" to the Rules and Regulations for Fiscal Year 2019-20 and Exhibit "C" to the Rules and Regulations for Fiscal Year 2020-21.

Section 7. That the provisions of this Resolution shall be effective upon adoption.

Section 8. That the Secretary is hereby ordered and directed to post a certified copy of this Resolution in a public place within the Irvine Ranch Water District.

ADOPTED, SIGNED and APPROVED this 24th day of June, 2019.

President, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
Claire Hervey Collins
Lewis Brisbois Bisgaard & Smith LLP

By: _____

***IRVINE RANCH WATER DISTRICT
SCHEDULE OF RATES AND CHARGES***

FY 2019-20



Irvine Ranch
WATER DISTRICT

~~ADOPTED~~ Proposed

~~JULY 23, 2018~~ April 22, 2019

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Section 1: Water System

Monthly Water Service Charge

Meter Size	Flow Range In GPM ²	Chart (a)	Chart (b)
5/8" by 3/4" Disc	1/2-20	\$10.35	\$81.90
3/4" Disc	3/4-30	\$15.55	
1" Disc	3-50	\$25.90	\$116.05
1 1/2" Disc	2-100	\$51.75	\$117.20
2" Disc	2.5-160	\$82.80	\$146.40
2" Turbo	1-250	\$108.70	\$170.85
3" Turbo	2.5-650	\$248.40	\$310.00
4" Turbo	2-1250	\$517.50	\$560.60
6" Turbo	2.5-2500	\$1,035.05	\$1,083.80
8" Turbo	4-4700	\$1,811.35	\$1,869.45
10" Turbo	5-7000	\$2,173.60	\$2,240.55
2" Magnetic Meter	161-280	\$160.95	\$212.70
4" Magnetic Meter	751-1000	\$643.30	\$696.80
6" Magnetic Meter	1601-2000	\$1,447.50	\$1,515.70
8" Magnetic Meter	2001-3500	\$2,574.15	\$2,656.70
6" Propeller	1001-1450	\$698.65	
8" Propeller	1451-1600	\$931.55	
10" Propeller	1601-2000	\$1,242.05	
12" or 14" Propeller	2001-3500	\$1,746.65	
16", 18", or 20" Propeller	3501-5500	\$2,949.90	
4" Omni F2**	0.75-1000	\$643.30	
6" Omni F2**	1.5-2000	\$1,447.50	
8" Omni F2**	2.5-3500	\$2,574.15	
10" Omni F2**	3.5-5500	\$2,949.90	

*Construction Meters (see chart b)
 **Fire Line Meters Only

¹ Potable residential and landscape customers that have 12 calendar months of billing history and stay within the low volume tier for 9 of those 12 months will receive a \$2.00 leaseback credit on the water service charge.

² GPM is Gallons per Minute.

FY 2019-20

3" Compound	161-280	\$165.60	\$218.95
4" Compound	361-450	\$310.50	\$421.15
6" Compound	451-750	\$517.50	\$581.30
8" Compound	1001-1450	\$906.25	\$908.20
10" Compound	1451-1600	\$1,138.55	\$1,185.10
14" Compound	2001-3500	\$1,811.35	\$1,804.15

Service Charges – Private Fire Protection Service

1. Service-line charge

Service	Monthly Charge
Firelines	\$13.60/per diameter inch

2. Fire hydrant charge

The monthly charge for private fire hydrant service is \$23.70 per hydrant. This charge includes water used for fire extinguishing purposes.

3. Fire flow testing

The District will charge ~~\$250.00~~300.00 to administer any fire flow tests.

Commodity Charges: Potable Water System

Irvine Ranch Water District (IRWD) establishes a water budget for each customer. The rates billed are based on use as a percentage of budget. Water budgets are based on an assumed number of residents, landscape square footage and actual daily weather and evapotranspiration (ET) data for each of three microclimates within the District. Customers may apply for budget variances for larger than normal landscaped areas, more people living in the home or special medical needs. Rates are based on usage per hundred cubic feet (ccf). The budget process is described in detail in Budgets and Variances on page 10 and residential customers can apply for a variance at <https://www.irwd.com/services/request-a-water-variance>.

1. Commodity charge for Residential detached dwelling units

Tier	Rate/ccf ³	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

2. Commodity charge for Residential condo attached/detached dwelling units

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

3. Commodity charge for Apartments

(Base budget x number of dwelling units)

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-50
Base Rate	\$2.00 \$1.89	51-100
Inefficient	\$4.86 \$4.73	101-120
Wasteful	\$13.63 \$13.35	121+

4. Commodity charge for Commercial, industrial, public authority and non-residential mixed usage

Tier	Rate/ccf	Percent of Budget
Base Rate	\$1.89 2.00	0-100
Wasteful	\$13.35 13.63	101+

³ ccf is 100 cubic feet or 748 gallons. B-6

5.

~~7.~~

8.5. Commodity charge for potable ILandscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 <u>\$1.40</u>	0-40
Base Rate	\$2.00 <u>\$1.89</u>	41-100
Inefficient	\$4.73 <u>4.86</u>	101-160
Wasteful	\$13.35 <u>13.63</u>	161+

9.6. Commodity charge for potable agricultureAgricultural irrigation

Water supplied under this section shall be used only for the growing or raising, in conformity with recognized practices of husbandry, for the purposes of commerce, trade, or industry, of agricultural, or floricultural products, and produced (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, such products to be grown or raised on parcels of land having an area of not less than five acres utilized exclusively for that purpose.

Type	Rate/ccf	Per Acre Foot
Potable Agriculture	\$2.62 <u>2.77</u>	\$1,141.27 <u>1,206.61</u>

Commodity Charges: Untreated Water

1. Commodity charge Agricultural irrigation

The commodity charge	Rate/ccf	Per Acre Foot
Non-potable Agriculture	\$1.7058	\$740.52688.25

2. Non-potable water used for lake fillers

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.1913	0-40
Base Rate	\$1.5747	41-100
Inefficient	\$3.1511	101-140
Wasteful	\$6.6244	141+

3. Santiago Aqueduct Commission (SAC) water

The commodity charge for	Rate/ccf	Per Acre Foot
Agricultural	\$1.8075	\$784.0862.30
Non-Agricultural	\$1.7058	\$740.52688.25

4. Commodity charge Landscape irrigation

The commodity charge for non-potable water used for landscape irrigation (other than SAC water):

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.1913	0-40
Base Rate	\$1.5747	41-100
Inefficient	\$3.1511	101-140
Wasteful	\$6.6244	141+

Commodity Charges: Recycled Water System

1. Commodity charge for landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.19 \$1.13	0-40
Base Rate	\$1.57 \$1.47	41-100
Inefficient	\$3.15 \$3.11	101-140
Wasteful	\$6.62 \$6.44	141+

~~2.~~

~~3.~~

4.2. Commodity charge for landscape irrigation recycled loan commercial and industrial recycled loan customers

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

~~5.~~

~~6.~~

7.3. Commodity charge for agricultural irrigation

Source Type	Rate/ccf	Per Acre Foot
Recycled	\$1.64 52	\$714.38 62.11

~~8.~~

~~9.~~

10.4. Commodity charge for commercial and industrial

Tier	Rate/ccf	Percent of Budget
Base Rate	\$1.19 07	0-100
Wasteful	\$6.62 44	101+

~~11.~~

12.5. Commodity charge for commercial and industrial loan customers

Tier	Rate/ccf	Percent of Budget
------	----------	-------------------

	FY 2019-20	
Base Rate	<u>\$2.001.89</u>	0-100
Wasteful	<u>\$13.6343.35</u>	101+

Budgets and Variances

1. Base budgets for commodity charges

Monthly budget includes a fixed component for indoor usage and a variable component based on evapotranspiration (ET) rate for landscape irrigation.

Account Type	Base Budget Number of Residents	Landscape Area (LA)	Base Budget Indoor	Base Budget Outdoor ET x LA x PF	Total Budget
Residential Detached	4	1300 sq. ft (0.03 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Residential Condo Attached/ Detached*	3	435 sq. ft (0.01 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Apartments*	2	N/A	# Residents x 50 gpd (IU)		Indoor x # days in bill service period
Potable Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.75	Outdoor based on bill service period
Recycled Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.87	Outdoor based on bill service period
Commercial, Industrial, Institutional			Site specific, based on productivity, employees, water use efficiency practices etc.	Site specific, based on irrigation needs	Site specific, adjusted for # days in bill service period

*For master-metered apartments and condominiums, the base budget is multiplied by the number of dwelling units.

CCF = 100 cubic feet. 1 CCF = 1 billing unit = 748 gallons

ET = reference evapotranspiration – from IRWD weather stations located in coastal, central or foothill zones for cool season turf

GPD = gallons per day

IU = Internal Use – assumes 50 GPD per person

LA = irrigated landscape acres

PF = plant factor. Adjusts ET based on plant needs relative to cool season turf and irrigation system efficiency requirements. The plant factor for potable irrigation is 0.75. For recycled water the plant factor is 0.87.

2. Budget variances

Variances are available for larger than normal landscaped areas, more people living in the home or special medical needs. Applications for variances may be obtained from the District website

<https://www.irwd.com/services/request-a-water-variance> or from Customer Service at (949) 453-5300. See IRWD Rules and Regulations, Section 12.6 for variance procedure.

3. Procedure

See IRWD Rules and Regulations, Section 12.6

4.3. Grounds for variance

Applicants must provide proof acceptable to the District to support any variance request.

- a. **Number of people residing in a residential dwelling unit.**
Each additional person increases the budget by 1.6 ccf/month which is $IU \times 0.8$.
- b. **Landscape**
Increased budgets shall be given for residential lot size beyond the standard base budget lot size. Applicants must provide acceptable documentation to the District of the actual irrigated landscape area served.
- c. **Medical needs**
 - Approval is contingent upon medical documentation.
 - Increased budget will be determined on a case by case basis and based on the type of medical need.
- d. **Licensed care facilities (in a residential dwelling unit)**
 - A current license from appropriate regulatory agency will be required.
 - A licensed 24-hour care facility will be provided budget increases based on the $IU \times 0.8$ for each additional resident.
 - A licensed day care facility (not 24-hour) will be provided budget increases based on the $IU \times 0.5$ for each additional person.
 - Additional budget for medical reasons will be determined on a case by case basis.
- e. **Fire control zones**
 - Adjustments to budgets will be determined by the District based upon relevant factors such as area, slope, planting material, etc.
- f. **Commercial/industrial/public authority**
 - Adjustments to the base budget will be determined on a case by case basis. Relevant factors will include expansion of productive capacity, existing conservation practices that can be shown to have reduced water usage, severe economic hardship, etc.
- g. **New account establishment variance**
 - Landscape accounts – billed at the base rate for the first six months and, beginning in the seventh month, the budget will be based on irrigated acres.
 - Commercial and industrial accounts – billed at the base rate on usage for the first six months and, beginning in the seventh month, the monthly budget will be based on unique business and site demands as determined by the District.

5.4. Limitations

- a. An approved variance will become effective on the date the request for variance is submitted to approved by the District, but must be submitted within thirty (30) days of receipt of the bill.
- b. Approvals are valid for a period specified by the District (one year or less), and must be resubmitted on or before the expiration date to remain in effect.

6.5. Effect of increased budgets

- a. **Residential:**
Approved variances will extend each tier of the residential structure by a percentage.
- b. **Non-residential:**
Approved variances will extend each tier of the non-residential structure by a given percentage (or other method) determined on a case by case basis.

Pumping Surcharges

A surcharge will be added to the commodity rate of those users who reside at higher elevations and cause the District to incur additional pumping costs to supply their water. The surcharge is based upon prevailing energy costs.

1. Potable water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0.21-25
Zone 2	\$0.35-38
Zone 3	\$0.6568

2. Recycled water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0.24-13
Zone 2	\$0.34-23
Zone 3	\$0.4743

Temporary Water Service Connection

1. Monthly service charge

See Chart b on page 4.

2. Commodity charge

Wherever feasible, recycled water shall be used for temporary construction uses. The Commodity Charge shall be as follows:

Potable	\$3. 4526 /ccf
Recycled	\$1. 7564 /ccf

3. Meter deposit

A deposit equal to the replacement cost of the construction meter shall be collected at the time of service application. The deposit will be applied to the closing bill and any remaining amount refunded to the customer. Lost meters will result in forfeiture of deposit.

Size	Cost
1", 1-1/2", 2" Disc	\$ 1,000.00
3" Turbo T2 & H2 3" Turbo	\$ 1,900.00 \$ 1,750.00
4" Turbo	\$ 2,600.00 \$ 2,330.00
6" Turbo	\$ 4,680.00 \$ 4,200.00
8" Turbo	\$ 7,930.00 \$ 7,110.00
10" Turbo	\$ 11,750.00 \$ 9,270.00

4. Materials for repairing damaged construction meters

Item	Cost
Meter, complete	Cost by size is shown in section 3 above \$
Swivel Hose Coupling-Female Swivel	\$ 158.00 240.00
Register With AMR & Pulse Wire Register	\$ 113.00 275.00
Fire Hose Adapter 3" MIP x 2-1/2" MFH	42.00
Lock	\$ 15.00
H2 Hydrant Meter Handle Handle (main	\$ 323.00 22.00
Fire Hydrant Meter Lock - LRG	122.00
Rotor and Shaft Assembly (3") Rotor	\$ 721.00
Barrel Lock	30.00
Male Fitting	95.00
Hydrant Collar	100.00
Rotor Cap	27.00
Collar (with barrel lock)	106.00
Labor & Overhead	120.00
Stores Clearing	40% of total parts billed

5. High-lines for redevelopment

A high-line is a temporary service connection installed by the District to an existing customer during system upgrades or repairs to the District's system. Whenever feasible, high-lines will be metered and the customers will be billed at their regular rate. The District will determine whether a high-line should be metered.

If a high-line is unmetered, the customer will be charged using a reasonable average daily consumption based on prior consumption or based on other reasonable calculations in the absence of historical data.

New Account Fees and Security Deposits for Water Service

This section is applicable to all requests for new or transferred service.

1. Service establishment fee

A fee of \$25.00 shall be collected to establish a new account for water and sewer service, or to transfer an existing account to a new location.

2. Residential service deposit

For residential customers, a deposit of \$50.00 may be required until a one year payment history is established.

3. Non-residential service deposit

For non-residential customers, a deposit of \$100.00 is required until a one year payment history is established.

Other Water System Charges

1. Delinquency charges

All bills and charges for water, sewer and recycled water service shall be due and payable upon presentation and shall become delinquent twenty-five (25) calendar days thereafter. If payment is not made within twenty-five (25) calendar days after presentation, a late charge will be levied upon the unpaid balance as follows:

For residential and non-residential accounts with an unpaid balance of \$10 or more, a one-time charge of 10% of the unpaid balance plus 1.5% interest will be assessed, and each month thereafter the unpaid balance will be subject to an interest charge of 1.5%.

2. Non-sufficient funds checks

A \$20.00 service fee will be charged for each check returned from the bank for non-sufficient funds.

3. Service restoration charges

When service is discontinued because of delinquency in payment of a water, sewer, or recycled water bill, the service shall not be restored until all delinquent charges, late charges and interest charges, and a trip charge as specified below, have been paid.

a. Trip charge during normal working hours:

The trip charge applicable for work requested to be performed during normal working hours of the District will be \$70.00. Certain exceptions may apply beginning February 1, 2020.

b. Trip charge after normal working hours

The trip charge applicable for work requested to be performed after normal working hours of the District will be \$95.00.

4. Tampering

-If any person tampers with a District meter or District side angle stop and damages it, the customer shall pay the District for the cost of repairs, including but not limited to: parts, labor and equipment. In addition, the customer will be liable for any ~~finer or penalties~~charges imposed under the District's Rules and Regulations.

5. ~~Fines and penalties~~Non-cCompliance charges for illegal connections and water wasters

The District may impose ~~civil liabilities~~charges in accordance with Section 14 of the District's Rules and Regulations.

Section 2: Sewer System

Monthly Sewer Service Charge

1. Residential

<p>(a) Single Family and Multi-family Dwelling Units <u>AVERAGE MONTHLY WATER USE^{1, 2, 3, 4}</u></p>	<p style="text-align: center;"><u>SEWAGE SERVICE CHARGE PER MONTH</u></p>
Over 1000 cubic feet (> 10.0 ccf)	• 100% rate = \$ 25.75 <u>26.10</u> per unit
501-1000 cubic feet (5.01-10.0 ccf)	• 90% rate = \$ 23.20 <u>23.50</u> per unit
0-500 cubic feet (0.0-5.0 ccf)	• 75% rate = \$ 19.30 <u>19.55</u> per unit
<p>(1) Monthly sewage service charge based upon average of the actual lowest three water meter readings during the twelve month period ending December 31. Charges are based on a 30 day billing period.</p> <p>(2) To qualify for the reduced rates, a customer must have usage history for a full calendar year.</p> <p>(3) No credit will be granted for vacancies resulting from the normal turnover of occupants in an existing multiple dwelling unit. The price structure contained herein includes considerations of average vacancy rates.</p> <p>(4) A newly constructed multiple dwelling unit may be billed at the non-residential metered rate, with appropriate allowance for landscape irrigation, until the structure is released for occupancy.</p>	
<p><u>SEWAGE SERVICE CHARGE PER MONTH</u></p>	
(b) Collection Service Charge (assumes 10.0 ccf)	\$ 8.40 <u>8.50</u> per unit
(c) Treatment Service Charge (assumes 10.0 ccf)	\$ 14.80 <u>15.00</u> per unit

2. Non-Residential (Commercial, Industrial, and Institutional)

Quantity charges are based on the assumption that 90% of non-residential water consumption returns to the sewer. Because of landscape irrigation or consumptive usage, some non-residential users may discharge substantially less of their metered water into the sewer system. Those users may, upon request to the District, be permitted to have the amount of water being discharged into the sewer determined by means acceptable to the District. Upon request by the user and at the sole discretion of the District, an alternate service charge may be applied.

<p>To qualify for the sewage service charge only, a customer usage history cannot be greater than 120 ccf in a full calendar year based on actual meter readings. Usage exceeding 10.0 ccfs per month will pay a quantity charge. <u>During construction, prior to occupancy, use these rates these rates are applicable.</u></p>	<p style="text-align: center;"><u>SEWAGE SERVICE /QUANTITY/COMMODITY CHARGE PER MONTH</u></p>
Sewage service charge	\$ 25.75 <u>26.10</u>
Quantity charge beyond 10.0 ccf	\$ 2.74 <u>2.78</u> /ccf
Industrial Waste Charge if applicable	\$ 0.134 <u>0.136</u> /ccf
	} \$ 2.874 <u>2.916</u> /ccf

Non-Residential Sewage~~Other Sewer System~~ Charges

This section shall be applicable to non-residential customers who discharge extra-strength sewage into the sewage collection system, or discharge or have the potential to discharge constituents subject to federal or state standards and local discharge limitations.

1. Alternative service charges

At the sole discretion of the District, users may request the application of an aAlternative sService cCharge for use. The aAlternative sService cCharge shall be based on measured quantity and quality of water being discharged to the sewer from the user's facility by a means acceptable to the District. The aAlternative sService cCharge for use shall be computed by the following formula:

$$\text{Charge for use} = VR_v + BR_b + SR_s$$

Where V = Total volume of flow in hundred cubic feet.

B = Total discharge of biochemical oxygen demand (BOD) in pounds.

S = Total discharge of suspended solids (SS) in pounds

R_v = \$ ~~1.570~~1.590 per hundred cubic feet

R_b = \$ ~~0.437~~0.443 per pound of BOD

R_s = \$ ~~0.381~~0.386 -per pound of SS

2. Fees Charges for noncompliance with permit conditions

- a. Minor violation

Condition where the limitation is less than the violation and the violation is less than the technical review criterion.

Fee per violation - \$350

- b. Significant noncompliance or significant violation

Condition where the violation is greater than the technical review criterion or qualifies under the definition of significant noncompliance.

Fee per violation - \$550

- c. Batch dump or slug load

Fee per violation - \$550

- d. Probation orders

Enforcement Compliance Schedule Agreements and subsequent two year probation, and Regulatory Compliance Schedule Agreements.

Fee per violation - \$550

- e. Appeals to the Board of Directors

Appeal fee - \$500

3. Fats, oils, and grease (FOG) control programs fees

All terms and requirements for the Fats, Oils, and Grease (FOG) Control Program can be found in Section 7.13 of the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service.

a. FOG wastewater discharge permit fees (pursuant to Rules and Regs 7.13.6(4) Food service establishments (FSE), and those FSE that are issued a conditional waiver (CW) by the District, shall pay the following FOG wastewater discharge permit fees which do not exceed the amount determined in Table 2-29 of the 2018 Fats, Oils, & Grease Fees Study:

FSE Monthly Permit Fee:	\$7,337.89 per month
CW Monthly Permit Fee:	\$2,963.51 per month

b. These charges shall be incorporated in the monthly sewage service charges.

c. Special services/fees

1) FOG plan check fees

The following FOG plan check fees must be paid at the time FOG plans are submitted.

Food Service Establishments (FSE) and Conditional Waivers (CW)

Initial Plan Check	\$350.12
Permit Issuance and Initial Inspection	255.00
	<u>Total = \$605.12</u>

Limited Food Prep (LFP)

Initial Plan Check	\$350.12
--------------------	----------

For FSE, CW or LFP, all initial plan checks include the initial plan check and up to one revision. If more than one revision is required, the FSE, CW or LFP will be required to pay additional plan check fees in the amount of \$301.92. This subsequent plan check fee includes up to two (2) more revisions.

2) Compliance follow-up inspection fee

If during an inspection the FSE is deemed to be out of compliance with the FOG Control Program and a compliance follow-up inspection is required, the FSE shall be required to pay \$115.00 for the compliance follow-up inspection.

3) Enforcement fees

If an FSE is deemed to be out of compliance and a Notice of Violation is issued by the District to the FSE, the FSE will be charged an enforcement fee in the amount of \$1,203.79 per incident.

4) Special study fee

This fee is for the District to review special studies at the request of the FSE, such as a performance study of bio-additives to a grease interceptor. The special study fee in the amount of \$610.02 will be required at the time of request by the FSE to the District.

5) FOG-related private lateral sewage discharge response fee

If District staff responds to a private lateral sewage discharge (PLSD) that after investigation by District staff is found to be FOG-related, the following fees shall be charged to the FSE, CW or LFP:

PLSD Response Fees During Working Hours

First Response Hour -	\$932.57
Each Additional Response Hour -	\$484.72 per hour

PLSD Response Fees After Working Hours

First Response Hour -	\$1,160.62
Each Additional Response Hour -	\$712.77 per hour

4. Special purpose discharger service charges

Special purpose discharge service fees applies to customers who have been required by the District to obtain a special purpose discharge permit issued jointly by the District and Orange County Sanitation District (OCSD). Sewage service charges will be based on reported and verified monthly flow to sewer.

Flow Service Charge: up to ~~\$4,471,561~~ 1,489.42 per Million Gallons

5. Discharge limits

Discharge limits are included in Exhibit C of the Rules and Regulations.

Section 3: Developer Services

Water Connection Fees

1. Residential

	Improvement District	0-5.8 DUs/acre	5.9-10.8 DUs/acre	10.9-25.8 DUs/acre	25.9+ DUs/acre
Connection Fees Per Dwelling Unit	111*	\$3,910	\$3,448	\$2,922	\$2,467
	112	\$1,338	\$1,338	\$1,338	\$1,338
	112a (tax exempt)	\$2,462	\$2,462	\$2,462	\$2,462
	113	\$3,047	\$3,047	\$3,047	\$3,047
Development shall be gross acres excluding private parks.	125	\$2,789	\$2,789	\$2,789	\$2,789
	153	\$1,532	\$1,532	\$1,532	\$1,532
	153 PA 30	\$3,828	\$3,828	\$3,828	\$3,828
	185	\$1,748	\$1,748	\$1,748	\$1,748
	188	\$1,572	\$1,572	\$1,572	\$1,572
	*All others				

2. Commercial, industrial and public authority

	Improvement District	Commercial	Industrial	Public Authority
Connection Fees Per Gross Acre	111*	\$21,694	\$33,042	\$21,694
	112	\$8,696	\$8,696	\$8,696
	112a (tax exempt)	\$16,001	\$16,001	\$16,001
	113	\$22,258	\$0	\$22,258
	125	\$13,834	\$19,638	\$13,834
	153	\$8,047	\$11,422	\$8,047
	PA 30	\$18,993	\$26,961	\$18,993
	185	\$8,166	\$8,166	\$8,166
	188	\$6,206	\$6,206	\$6,206
	*All others			

3. Parks, churches and recreational facilities

	Improvement District	Indoor Water Use	Outdoor ⁽¹⁾ Water Use
Connection Fees Per Fixture Unit	111*	\$67.94	\$239.09
	125	\$45.98	\$161.16
(1) Calculated per Uniform Code	153	\$26.78	\$93.86
	PA 30	\$63.17	\$221.41
	185	\$46.98	\$164.99
	188	\$31.01	\$109.08
	*All others		

4. Schools (public and private)

	Improvement District	Indoor Primary &/or Intermediate	Secondary	Outdoor Primary Intermediate & Secondary
Connection Fees Per 100 Students Based on Max Daily Attendance	111*	\$5,354	\$7,180	\$230
	125	\$3,616	\$4,855	\$162
	153	\$2,106	\$2,827	\$94
	PA 30	\$4,968	\$6,670	\$222
	185	\$3,542	\$4,969	\$160
	188	\$2,836	\$3,795	\$122

*All others

Other Water Connection Charges

1. High volume user – Non-Residential commercial, industrial and public authority

This section shall apply to all commercial, industrial, and public authority non-residential applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Water User Connection Fee =
$$\frac{[\text{Est. Gallons per Day use} - (\text{no. acres} \times \text{use factor}^*)] \times \$1,221,858/\text{cfs}}{646,320 \text{ gal/day/cfs}}$$

*Non-Residential Water Use Factor	<u>Land Use Category</u>	<u>Water Use Factors (Gal/Acre x /Day)</u>
	Commercial	2,000.00
	Industrial	4,000.00
	UCI	Special Contract

Definitions

Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.

Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and
- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

2. Service installations by District

Customers may request the District to install, relocate or abandon domestic water, recycled water and fire protection service lines. To request an action listed above, the customer must submit a Quote Request ~~Form~~ for Service or Meter Modifications which can be obtained by contacting Development Services. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation.

The District reserves the right to decline a customer's request for service installations by District for any reason. In the event the District declines to perform service installations, the requester will need to submit design plans for review and approval through Development Services. For further information, see Development Services Procedural Guidelines and General Design Requirements document which can be found at www.irwd.com.

3. Meter installations by District

Customers may request the District to install or replace (downsize or upsize) domestic water or recycled water meters. To request an action listed above, the customer must submit a Quote Request Form for Service or Meter Modifications which can be obtained by contacting the District's Development Services. The District may require OCFA approval documents prior to the installation of certain meter sizes. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation. ~~Meter installation and replacement charges are as follows:~~

a. Meter Costs

<u>Meter size</u>	<u>Cost*</u>	<u>Meter size</u>	<u>Cost*</u>
5/8" x 3/4" **	\$ 130.00 110.00**	2" Disc	\$ 750.00
3/4"	200.00 170.00	2" Turbo	1,300.00 2,680.00
1"	250.00 ***240.00	3" Turbo - H2	2,100.00 1,900.00
1 1/2"	450.00 580.00	3" Turbo - T2	3,340.00
		4" Turbo	3,400.00 6,490.00

~~* Prices shown are for standard meter installations only and do not include services, angle stops, meter boxes, meter box covers, vaults or meter box lids. Additional costs may apply.~~

b. The customer shall pay for the cost of additional parts and labor needed for the installation or replacement. For example, the cost to convert from 5/8" or 3/4" to a 1" meter is \$2,000. This price is in addition to the cost for a 1" meter.

c. The customer will be responsible for any plumbing modifications downstream of the water meter.

~~** Developer-installed-Residential-only.~~

~~*** When a customer requests a meter to be upsized from 5/8" x 3/4" to 1", additional parts and labor will be required to make the conversion. The cost for District staff to perform this work is \$2,000.00 and will be collected along with the above 1" meter cost.~~

d. Costs for meters larger than 4-inches will be determined by the District's Purchasing Department at the time of request.

d.e. Meters costs includes strainer.

4. Upsizing and downsizing meter request requirements

- a. It is the customer's responsibility to ensure that any upsizing or downsizing of the meter will not have any adverse effects to the customer's system as it relates to water pressure, fire protection or ability to successfully serve the demand of the home or business. The District may require OCFA approval of any modifications and/or a signed Request & Authorization to Change Meter Size form.
- b. Any private-side (downstream of the water meter) modifications or repairs are the sole responsibility of the customer.
- c. If for any reason the customer chooses to change back to the original size meter, all installation costs would once again apply.

A Quote Request Form for Service or Meter Modifications can be obtained at the District's Development Services Counter.

5. Domestic water, recycled water and Natural Treatment System (NTS) plan check and inspection fees

Plan check and inspection fees for water systems shall be calculated as 10% of the bondable cost for the off-site, public, potable or recycled water system or a fixed fee as described below. Plan check and inspection fees for Natural Treatment System (NTS) shall be calculated as 5% of the bondable cost or a minimum of \$30,000.00. Residential or Natural Treatment Systems plans require a non-refundable deposit of 5% of the estimated cost. Non-residential plans require a nonrefundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. Any remaining fees shall be paid prior to final approval of the plans.

Installation of a 1" or 2" service	\$1,000.00
\$400.00	
Removal of a 1" or 2" service	
\$400.00 1,000.00	
Installation of Fire DDCA or fire hydrants	\$ 1,000.00
Installation of recycled water hydrants or temporary construction connections	\$ 1,000.00

The overtime inspection rate is \$175.00/hr.

6. Interim water service charge – new development

Builders and developers will be charged \$35.10 per connection ~~in a new tract and/or development~~ for water service directly related to the vertical construction process of homes. The charge applies only in a new tract and/or development for the period of time after in-tract pipelines, service mains and sewer pipelines have been connected to the District's water system. Once connections to the District pipelines are made and housing phases are released for occupancy, water used through the occupants metered house connection will be billed to the developer or resident as appropriate. Connection methods and appropriate use of water is at the sole discretion of the District. Examples of permitted uses may include construction of living structures, lot soft-scape, exterior of the home stucco/plaster, drywall, interior stonework, interior finishing work and clean-up. Examples of unpermitted uses may include, but are not limited to, connections to sales/construction trailers, flat work, hardscaping, retaining and other walls, lot or pad soaking, streetscape, water trucks/ buffaloes or any connection practice that could pose a risk to public health resulting from a backflow condition. Unpermitted connections require a temporary construction meter. Failure to properly connect to the District's Distribution System will subject the builder/developer to non-compliance charges. ~~for the period of time after in-tract lines have been connected to the District's water system until the new customer begins metered water service. Connection method and appropriate use of water is at the sole discretion of the District. Examples of unpermitted uses may include but are not limited to connections to sales/construction trailers or any construction practice that could pose risk to public health resulting from a backflow condition.~~

Unmetered water service is not permitted for custom lots. Developers for custom lots will be required to apply for a domestic water construction meter prior to starting construction.

Sewer Connection Fees

1. Residential

	Improvement <u>District</u>	0-5.8 <u>DUs/acre</u>	5.9-10.8 <u>DUs/acre</u>	10.9-25.8 <u>DUs/acre</u>	25.9+ <u>DUs/acre</u>
Connection Fees Per Dwelling Unit	1 (222)*	\$6,942	\$6,178	\$5,085	\$4,012
	212	\$3,492	\$3,492	\$3,492	\$3,492
	212a (tax exempt)	\$6,426	\$6,426	\$6,426	\$6,426
	213	\$5,331	\$5,331	\$5,331	\$5,331
Total acreage for any given	240	\$3,830	\$3,830	\$3,830	\$3,830
development shall be gross	225	\$3,012	\$3,012	\$3,012	\$3,012
acres excluding private parks.	253	\$1,780	\$1,780	\$1,780	\$1,780
Parks.	253 PA 30	\$3,995	\$3,995	\$3,995	\$3,995
	256	\$6,077	\$6,077	\$6,077	\$6,077
	285	\$3,120	\$3,120	\$3,120	\$3,120
	288	\$2,696	\$2,696	\$2,696	\$2,696
	OPA1 (Ridgeline)	\$6,077	\$6,077	\$6,077	\$6,077
	*All others				

2. Commercial, industrial and public authority

	Improvement <u>District</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public Authority</u>
Connection Fees Per Gross Acre	1 (222)*	\$38,906	\$67,880	\$38,906
	212	\$20,849	\$20,849	\$20,849
	212a (tax exempt)	\$38,365	\$38,365	\$38,365
	213	\$31,764	\$0	\$31,764
	240	\$17,490	\$0	\$17,490
	225	\$14,726	\$17,420	\$14,726
	253	\$8,168	\$13,554	\$8,168
	253 PA 30	\$17,812	\$29,556	\$17,812
	285	\$6,235	\$6,235	\$6,235
	288	\$10,640	\$10,640	\$10,640
	*All others			

3. Parks, churches and recreational facilities

	Improvement <u>District</u>	<u>Fee</u>
Connection Fees Per Fixture Unit	1 (222)*	\$430.45
	240	\$260.21
	225	\$230.81
	253	\$128.02
	253 PA 30	\$279.16
	288	\$70.60
	*All others	

4. Schools (public and private)

	Improvement <u>District</u>	<u>Primary & Intermediate</u>	<u>Secondary</u>
Connection Fees Per 100 Students	1 (222)*	\$20,397	\$27,200
	240	\$12,298	\$16,400
	225	\$10,844	\$14,459
Based on Max Daily Attendance	253	\$6,015	\$8,020
	253 PA 30	\$13,116	\$17,488
	288	\$3,399	\$4,529
	*All others		

Other Sewer Connection Charges

1. Sewer lateral installations by District

The District does not install sewer laterals.

2. Irvine Business Complex (IBC) – non-residential

-----Commercial/Industrial-----

	<u>Low Demand</u>	<u>Average Demand</u>	<u>High Demand</u>
Connection Fees Per 1,000 Square Feet	\$268	\$1,654	\$3,921

- a. Low Demand connections are the following categories of users: Nurseries, Warehouses, Parking Structures, RV Storage, Churches, Truck Terminals, RV Parks, Lumber/Construction Yards, and other discharge whose flow is similar in volume to these listed categories.
- b. Average Demand connections other than listed in Low or High Demand categories.
- c. High Demand connections are the following categories of users: Restaurants, Supermarkets, Car Washes, Coin Laundries, Amusement Parks, Shopping Centers with Restaurants, Food Processing Facilities, Textile Manufacturers, and other discharges whose flow is similar in volume to these listed categories.

3. High volume user – Non-Residential commercial, industrial and public authority

This section shall apply to commercial, industrial and public authority all non-residential applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Sewer User Connection Fee =

* Sewer GPD = 90% of [Est. GPD use * – (no. acres x use factor**)] x \$17.76/Gal. of Sewer Flow water GPD

**Non-Residential Sewage Flow Generators (Use Factors)	<u>Land Use Category</u>	<u>Average Flows</u>
	Commercial	1,300.00
	Industrial	2,600.00
	UCI	Special Contract

Definitions Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.
Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and

- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

4. Sanitary sewer plan check and inspection fees

The plan check and inspection fee for public sewer systems will be calculated as 10% of the bondable cost for the off-site public sewer system. Residential plans require a non-refundable deposit of 5% of the estimated cost. Non-residential plans require a non-refundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. of the sewer system is required with the submittal of the first plan check. Any remaining fees shall be paid prior to final approval of the plans. The overtime inspection rate is \$175.00/hr.

District closed circuit television inspection charges

a. Initial TV inspection fee

A fee of \$0.8570 per linear foot as measured from the center line of manholes will be charged for all 6-inch and larger sewer lines to be inspected by a closed circuit television camera. The District will furnish the special camera equipment and manpower to fulfill this inspection requirement. This fee is to be paid along with the other connection, meter, and inspection fees prior to the District signing developer's tract utility plans.

b. Reinspection

Fees will be assessed for Reinspection by District TV Crew after corrective work is completed. Those portions of the pipeline system that have been corrected must be retelevised.

- 1) District fees for retelevising corrective work will be a flat set-up fee of two hundred fifty dollars (\$250.00) plus \$0.8570 per linear foot of sewer line reinspected measured centerline to centerline of manholes.
- 2) Payment for retelevising estimated inspection fees must be received by the Development and Inspection Services prior to scheduling the reinspection. Retelevising will not be done until the fees are paid.

c. Cancellation of District's TV inspection

If it is determined by either the Contractor or Developer that the job site will not be ready or accessible for the television inspection on the scheduled date, as notified, the Contractor shall notify the District Inspection Division of the necessary cancellation at least 24 hours in advance of the scheduled inspection to avoid being charged a cancellation fee.

- 1) If the District's television crew arrives at the job site and the work is not ready or accessible, the Contractor and owner will be billed for the cancellation fee of two hundred fifty dollars (\$250.00), payable to the District prior to the date of the rescheduled television inspection.
- 2) A rescheduled inspection is to be made through the District's project inspection division.

d. Optional developer TV inspection

If the Contractor or Owner desires to have a portion of, or the entire job, TV inspected for his convenience, he they will be charged a fee of one hundred fifty dollars (\$150.00) plus \$0.8570 per linear foot of sewer line inspected measured centerline to centerline of manholes.

Exhibit B: History of Revisions to Schedule of Rates and Charges

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE
05-23-77	1977-49	Rescind 1973-48 & 1977-42	
08-29-77	1977-71	Change in Connection Charges	09-01-77
02-27-78	1978-31	Rescind 1977-71	Discontinue Water & Sewer Service 03-01-78
07-10-78	1978-135	Rescind 1978-31	Increase 07-10-78
08-28-78	1978-154	Rescind 1978-135	Increase Connection Fees 08-28-78
01-08-79	1979-02	Rescind 1978-154	Increase Water Commodity Charges 01-08-79
06-25-79	1979-25	Rescind 1979-02	Increase Water & Sewer Charges 07-01-79
07-30-79	1979-41	Rescind 1979-25	Increase Connection Fees 07-30-79
06-23-80	1980-28	Rescind 1979-41	Increase 07-01-80
08-25-80	1980-49	Rescind 1980-28	Increase Connection Fees 08-25-80
12-22-80	1980-77	Rescind 1980-49	Increase Wastewater System Charges 01-01-81
06-15-81	1981-103	Rescind 1980-77	Increase 07-13-81
07-13-81	1981-132	Rescind 1981-103	Increase Connection Fees 07-13-81
06-28-82	1982-48	Rescind 1981-132	Increase Connection Fees & Water & Sewer Rates 07-01-82
09-27-82	1982-61	Rescind 1982-48	Delinquency Charges 10-01-82
11-22-82	1982-67	Rescind 1981-61	High-rise Connection Fees 12-01-82
06-27-83	1983-116	Rescind 1982-67	Increase 07-01-83
11-21-83	1983-137	Rescind 1983-116	Increase Dom. Water Rates & Imply. Mod. Sewer Rates 01-01-84
12-12-83	1983-132	Rescind 1983-131	High-rise Connection Fees (Sewer) 01-01-84
04-23-84	1984-13	Rescind 1983-132	Untreated & Recycled Water For Ag Use Commodity Charges Increase 06-01-84
06-25-84	1984-22	Rescind 1984-13	Decrease Water & Sewer Charges, Increase Connection Fees 07-01-84
09-10-84	1984-43	Rescind 1984-22	Change Delinquency Charge 10-01-84
01-28-85	1985-2	Rescind 1984-43	Lower Sewer Rates 02-01-85
02-25-85	1985-7	Rescind 1985-2	High Volume Connection Fee 02-25-85
03-25-85	1985-31	Rescind 1985-7	Reduce Connection Fees I.D. 103 & 3(203) 03-25-85
06-24-85	1985-37	Rescind 1985-31	Decrease Water & Sewer Chgs. Change Recycled Landscape Charge 07-01-85
12-16-85	1985-115	Rescind 1985-37	Decrease Sewer Charges 01-01-86
06-23-86	1986-28	Rescind 1985-115	Decrease Sewer Charges 07-01-86
03-23-87	1987-11	Rescind 1986-28	High Volume Connection Fees 04-01-87

Continued

DATE ADOPTED	RESOLUTION	REVISION		EFFECTIVE DATE
06-22-87	1987-27	Rescind 1987-11	Increase R-W; Nonpotable Ag	07-01-87
08-10-87	1987-44	Rescind 1987-27	Reduce Connection Fees I.D.'s 103,3(203), 102(120)121 & 106(160)161	07-10-87
09-28-87	1987-49	Rescind 1987-44	Industrial Waste Program	10-01-87
01-25-88	1988-18	Rescind 1987-49	Add Portola Hills Sewer Serf. Add Water Pumping Surcharge	02-01-88
06-27-88	1988-61	Rescind 1988-18	Reduce Monthly Sewer Charge	07-01-88
08-22-88	1988-66	Rescind 1988-61	Adjust Connection Fees	08-23-88
06-26-89	1989-38	Rescind 1988-66	Reduce Monthly Sewer Charge Reduce Recycled Landscape Increase Untreated and Recycled Ag Rates	07-01-89
08-28-89	1989-58	Rescind 1989-38	Adjust Connection Fees	08-28-89
06-26-90	1990-20	Rescind 1989-58	Reduce Monthly Sewer Charge Reduce Untreated and Recycled Ag Rates	07-01-90
07-23-90	1990-24	Rescind 1990-20	Adjust Connection Fees	07-23-90
01-28-91	1991-05	Rescind 1990-24	Eliminate High Rise and Adjust Connection Fees Add Excessive Use Surcharge	02-01-91
04-22-91	1991-09	Rescind 1991-05	Ascending Block Rate Structure and Request for Variance	06-01-91
05-28-91	1991-13	Rescind 1991-9	Commodity Rates for Landscape Customers	06-01-91
06-10-91	1991-19	Rescind 1991-13	Commodity Rates for Ag., Untreated Landscape, Portola Hills Sewer Rates and Coastal Recycled Rates	07-01-91
07-12-91	1991-37	Rescind 1991-19	Adjust Connection Fees	07-12-91
10-28-91	1991-46	Rescind 1991-37	Increase Ag Water Rate	10-28-91
04-30-92	1992-12	Rescind 1991-46	Modify Ascending Block Rate Structure	04-30-92
06-22-92	1992-22	Rescind 1991-13	Modify Ascending Block Rate Structure	07-02-92
09-28-92	1992-40	Rescind 1992-22	Adjust Connection Fees	09-28-92
01-25-93	1993-3	Rescind 1992-40	Landscape Irrigation Rates	02-01-93
03-04-93	1993-8	Rescind 1993-3	Modify Ascending Block Rate Structure	04-01-93
06-28-93	1993-22	Rescind 1993-8	Increase Water Rate and Reduce Monthly Sewer Charge	07-01-93
07-28-93	1993-26	Rescind 1993-22	Decrease Water Rates	08-01-93
09-13-93	1993-29	Rescind 1993-26	Adjust Connection Fees	09-14-93

Continued

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE	
06-13-94	1994-10	Rescind 1993-29	Increase Water Rate	07-01-94
08-08-94	1994-18	Rescind 1993-10	Adjust Connection Fees	08-08-94
08-14-95	1995-20	Rescind 1994-18	Adjust Connection Fees	08-14-95
08-28-95	1995-24	Rescind 1995-20	Adjust Pumping Surcharges	10-01-95
09-25-95	1995-27	Rescind 1995-20	Adjust Connection Fees and	09-25-95
09-25-95	1995-27	Rescind 1995-24	Adjust Pumping Surcharges	11-01-95
10-23-95	1995-31	Rescind 1995-27	Adjust Pumping Surcharges	11-01-95
11-27-95	1995-35	Rescind 1995-31	Add Monthly Sewer Service Charge - Newport Coast	12-01-95
01-08-96	1996-3	Rescind 1995-35	Adjust Connection Fees to I.D. 240	01-08-96
06-10-96	1996-19	Rescind 1996-3	Adjust Pumping Surcharges	
			Increase Nonpotable Water Charges and Modify Ascending Block Rate Allocations	07-01-96
08-12-96	1996-27	Rescind 1996-19	Adjust Connection Fees	08-12-96
08-27-96	1996-28	Rescind 1996-27	Adjust Connection Fees to I.D.'s 140 & 240	08-27-96
09-23-96	1996-32	Rescind 1996-28	Adjust Water and Sewer Fixed Charges	09-23-96
10-14-96	1996-33	Rescind 1996-32	Adjust Sewer Service Charges for Non- Residential & Portola Hills	10-14-96
06-30-97	1997-17	Rescind 1996-33	Modify Rates and Charges and Connection Fees	06-30-97
10-01-97	1997-29	Rescind 1997-17	Modify Ascending Block Rate Structure Terminology	10-01-97
06-08-98	1998-21	Rescind 1997-29	Miscellaneous Adjustments to Schedule of Rates and Charges	07-01-98
08-24-98	1998-33	Rescind 1998-21	Adjust Connection Fees	08-24-98
06-28-99	1999-25	Rescind 1998-33	Adjustments to Schedule of Rates and Charges	07-01-99
06-26-00	2000-18	Rescind 1999-25	Adjustments to Schedule of Rates and Charges	07-01-00
07-24-00	2000-24	Rescind 2000-18	Adjustments to Schedule of Rates and Charges	07-25-00
06-25-01	2001-24	Rescind 2000-24	Adjustments to Schedule of Rates and Charges	07-01-01
06-24-02	2002-22	Rescind 2001-24	Adjustments to Schedule of Rates and Charges	07-01-02
12-09-02	2002-47	Rescind 2002-22	Adjustments to Schedule of Rates and Charges	12-09-02
03-10-03	2003-7	Rescind 2002-47	Adjustments to Schedule of Rates and Charges	03-10-03
06-23-03	2003-20	Rescind 2003-7	Adjustments to Schedule of Rates and Charges	07-01-03
09-08-03	2003-35	Rescind 2003-20	Adjustments to Schedule of Rates and Charges	09-08-03
06-28-04	2004-25	Rescind 2003-35	Adjustments to Schedule of Rates and Charges	07-01-04
07-12-04	2004-32	Rescind 2004-25	Adjustments to Schedule of Rates and Charges	07-12-04
10-11-04	2004-51	Rescind 2004-32	Adjustments to Schedule of Rates and Charges	10-11-04
06-27-05	2005-20	Rescind 2004-51	Adjustments to Schedule of Rates and Charges	07-01-05

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE
09-26-05	2005-31	Rescind 2005-20	Adjustments to Schedule of Rates and Charges 10-10-05
10-10-05	2005-35	Rescind 2005-31	Adjustments to Schedule of Rates and Charges 10-10-05
06-26-06	2006-20	Rescind 2005-35	Adjustments to Schedule of Rates and Charges 06-27-06
07-24-06	2006-27	Rescind 2006-20	Changes to Water & Sewer Connection Fees 07-24-06
06-25-07	2007-16	Partially Modifies 2006-27	Adjustments to Schedule of Rates and Charges 06-26-07
07-16-07	2007-21	Partially Modifies 2006-27	Changes to Water & Sewer Connection Fees 07-17-07
06-23-08	2008-36	Rescind 2007-21	Adjustments to Schedule of Rates and Charges 07-01-08
07-28-08	2008-45	Partially Modifies 2008-36	Changes to Water & Sewer Connection Fees 07-29-08
06-22-09	2009-20		Adjustments to Schedule of Rates and Charges 06-23-09
07/27/09	2009-24	Partially Modifies 2009-20	Changes to Water & Sewer Connection Fees 07/28/09
06/28/10	2010-19		Adjustments to Schedule of Rates and Charges 07/01/10
07/26/10	2010-22	Partially Modifies 2010-19	Changes to Water & Sewer Connection Fees 07/27/10
02/28/11	2011-3	Partially Modifies 2010-22	Changes to Sewer Connection Fees 03/01/11
06/27/11	2011-25	Rescind 2010-19	Adjustments to Schedule of Rates and Charges 07/01/11
07/25/11	2011-33	Rescind 2011-25	Changes to Water & Sewer Connection Fees 07/26/11
06/25/12	2012-26	Rescind 2011-25	Adjustments to Schedule of Rates and Charges 07/01/12
10/08/12	2012-41	Partially Modifies 2012-26	Changes to Water & Sewer Connection Fees 10/09/12
12/10/12	2012-57		Adjust Connection Fees to IDs 112 & 212 12/11/12
06/24/13	2013-21	Rescind 2012-26	Adjustments to Schedule of Rates and Charges 07/01/13
12/16/13	2013-60	Partially Modifies 2013-21	Changes to Water & Sewer Connection Fees 01/01/14
06/23/14	2014-32		Adjustments to Schedule of Rates and Charges 07/01/14
07/14/14	2014-33	Partially Modifies 2014-32	Changes to Water & Sewer Connection Fees 07/15/14
11/10/14	2014-50		Changes to the Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service 11/11/14
06/22/15	2015-17	Rescind 2014-50	Adjustments to Schedule of Rates And Charges 07/01/15
07/27/15	2015-19	Partially Modifies	Changes to Water & Sewer Connection Fees 07/28/15
06/27/16	2016-10		Adjustments to Schedule of Rates and Charges 07/01/16
07/25/2016	2016-21	Partially Modifies	Changes to Water & Sewer Connection Fees 07/26/2016

<u>DATE ADOPTED</u>	<u>RESOLUTION</u>	<u>REVISION</u>	<u>EFFECTIVE DATE</u>
06/26/2017	2017-17		Adjustments to Schedule of Rates and Charges 07/01/2017
07/24/2017	2017-19	Partially Modifies	Changes to Water & Sewer Connection Fees 09/01/2017
06/25/2018	2018-16	Rescind 2017-17	Adjustments to Schedule of Rates and Charges 07/01/2018
07/23/2018	2018-21	Partially Modifies	Changes to Water & Sewer Connection Fees 08/01/2018

***IRVINE RANCH WATER DISTRICT
SCHEDULE OF RATES AND CHARGES***

FY 2019-20



Irvine Ranch
WATER DISTRICT

ADOPTEDProposed

JULY 23, 2018April 22, 2019

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Section 1: Water System

Monthly Water Service Charge

Customer Description	
Irvine Ranch	
Residential detached, Condo attached/detached and apartments ¹	See chart (a)
Residential apartments and condominiums (master metered) ¹	See chart (a)
Commercial, Industrial, Public Authority and Landscape	See chart (a)
Landscape recycled	See chart (a)
Temporary construction meters*	See chart (b)

Meter Size	Flow Range In GPM ²	Chart (a)	Chart (b)
5/8" by 3/4" Disc	1/2-20	\$10.35	\$81.90
3/4" Disc	3/4-30	\$15.55	
1" Disc	3-50	\$25.90	\$116.05
1 1/2" Disc	2-100	\$51.75	\$117.20
2" Disc	2.5-160	\$82.80	\$146.40
2" Turbo	1-250	\$108.70	\$170.85
3" Turbo	2.5-650	\$248.40	\$310.00
4" Turbo	2-1250	\$517.50	\$560.60
6" Turbo	2.5-2500	\$1,035.05	\$1,083.80
8" Turbo	4-4700	\$1,811.35	\$1,869.45
10" Turbo	5-7000	\$2,173.60	\$2,240.55
2" Magnetic Meter	161-280	\$160.95	\$212.70
4" Magnetic Meter	751-1000	\$643.30	\$696.80
6" Magnetic Meter	1601-2000	\$1,447.50	\$1,515.70
8" Magnetic Meter	2001-3500	\$2,574.15	\$2,656.70
6" Propeller	1001-1450	\$698.65	
8" Propeller	1451-1600	\$931.55	
10" Propeller	1601-2000	\$1,242.05	
12" or 14" Propeller	2001-3500	\$1,746.65	
16", 18", or 20" Propeller	3501-5500	\$2,949.90	
4" Omni F2**	0.75-1000	\$643.30	
6" Omni F2**	1.5-2000	\$1,447.50	
8" Omni F2**	2.5-3500	\$2,574.15	
10" Omni F2**	3.5-5500	\$2,949.90	

*Construction Meters (see chart b)

**Fire Line Meters Only

¹ Potable residential and landscape customers that have 12 calendar months of billing history and stay within the low volume tier for 9 of those 12 months will receive a \$2.00 leaseback credit on the water service charge.

² GPM is Gallons per Minute.

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3" Compound	161-280	\$165.60	\$218.95
4" Compound	361-450	\$310.50	\$421.15
6" Compound	451-750	\$517.50	\$581.30
8" Compound	1001-1450	\$996.25	\$908.20
10" Compound	1451-1600	\$1,138.55	\$1,195.10
14" Compound	2001-3500	\$1,811.35	\$1,804.15
			-

Service Charges – Private Fire Protection Service

1. Service-line charge

Service	Monthly Charge
Firelines	\$13.60/per diameter inch

2. Fire hydrant charge

The monthly charge for private fire hydrant service is \$23.70 per hydrant. This charge includes water used for fire extinguishing purposes.

3. Fire flow testing

The District will charge ~~\$250.00~~ \$300.00 to administer any fire flow tests.

Exhibit"C"

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Commodity Charges: Potable Water System

Irvine Ranch Water District (IRWD) establishes a water budget for each customer. The rates billed are based on use as a percentage of budget. Water budgets are based on an assumed number of residents, landscape square footage and actual daily weather and evapotranspiration (ET) data for each of three microclimates within the District. Customers may apply for budget variances for larger than normal landscaped areas, more people living in the home or special medical needs. Rates are based on usage per hundred cubic feet (ccf). The budget process is described in detail in Budgets and Variances on page 10 and residential customers can apply for a variance at <https://www.irwd.com/services/request-a-water-variance>.

1. ~~Commodity charge for r~~Residential detached dwelling units

Tier	Rate/ccf ³	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

2. ~~Commodity charge for r~~Residential condo attached/detached dwelling units

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

3. ~~Commodity charge for a~~Apartments
(Base budget x number of dwelling units)

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-50
Base Rate	\$2.00 \$1.89	51-100
Inefficient	\$4.86 \$4.73	101-120
Wasteful	\$13.63 \$13.35	121+

4. ~~Commodity charge for e~~Commercial, industrial, public authority and non-residential mixed usage

Tier	Rate/ccf	Percent of Budget
Base Rate	\$1.89 2.00	0-100
Wasteful	\$13.35 13.63	101+

³ cCf is 100 cubic feet or 748 gallons.

5.

Exhibit"C"

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~~7.~~
~~8.5. Commodity charge for potable~~ Landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.73 4.86	101-160
Wasteful	\$13.35 13.63	161+

~~9.6. Commodity charge for potable agriculture~~ Agricultural irrigation

Water supplied under this section shall be used only for the growing or raising, in conformity with recognized practices of husbandry, for the purposes of commerce, trade, or industry, of agricultural, or floricultural products, and produced (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, such products to be grown or raised on parcels of land having an area of not less than five acres utilized exclusively for that purpose.

Type	Rate/ccf	Per Acre Foot
Potable Agriculture	\$2.62 2.77	\$1,141.27 1,206.61

Exhibit"C"

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Commodity Charges: Untreated Water

Exhibit"C"

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1. ~~Commodity ch~~Agricultural i~~rrigation~~

The commodity charge	Rate/ccf	Per Acre Foot
Non-potable Agriculture	\$1. 7058	\$ 740.52688.25

2. Non-potable water used for lake filler:

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1. 1913	0-40
Base Rate	\$1. 5747	41-100
Inefficient	\$3. 1511	101-140
Wasteful	\$6. 6244	141+

3. Santiago Aqueduct Commission (SAC) water

The commodity charge for	Rate/ccf	Per Acre Foot
Agricultural	\$1. 8075	\$ 784.0862.30
Non-Agricultural	\$1. 7058	\$ 740.52688.25

4. ~~Commodity charge~~Landscape i~~rrigation~~

~~The commodity charge for non-potable water used for landscape irrigation (other than SAC water):~~

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1. 1913	0-40
Base Rate	\$1. 5747	41-100
Inefficient	\$3. 1511	101-140
Wasteful	\$6. 6244	141+

Exhibit"C"

FY 2019-20

Commodity Charges: Recycled Water System

1. ~~Commodity charge for~~ Landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.19 \$1.13	0-40
Base Rate	\$1.57 \$1.47	41-100
Inefficient	\$3.15 \$3.11	101-140
Wasteful	\$6.62 \$6.44	141+

~~2.~~

~~3.~~

~~4.2. Commodity charge for~~ Landscape irrigation recycled loan ~~customer~~ customers

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 \$1.40	0-40
Base Rate	\$2.00 \$1.89	41-100
Inefficient	\$4.86 \$4.73	101-140
Wasteful	\$13.63 \$13.35	141+

~~5.~~

~~6.~~

~~7.3. Commodity charge for~~ Agricultural irrigation

Source Type	Rate/ccf	Per Acre Foot
Recycled	\$1.64 \$2	\$714.38 \$62.11

~~8.~~

~~9.~~

~~10.4. Commodity charge for~~ Commercial and industrial

Tier	Rate/ccf	Percent of Budget
Base Rate	\$1.19 \$0.7	0-100
Wasteful	\$6.62 \$4.4	101+

~~11.~~

~~12.5. Commodity charge for~~ Commercial and industrial loan customers

Tier	Rate/ccf	Percent of Budget
------	----------	-------------------

Exhibit"C"

	<u>FY 2019-20</u>	
Base Rate	<u>\$2.004.89</u>	0-100
Wasteful	<u>\$13.6343.35</u>	101+

Exhibit"C"

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Budgets and Variances

1. Base budgets for commodity charges

Monthly budget includes a fixed component for indoor usage and a variable component based on evapotranspiration (ET) rate for landscape irrigation.

Account Type	Base Budget Number of Residents	Landscape Area (LA)	Base Budget Indoor	Base Budget Outdoor ET x LA x PF	Total Budget
Residential Detached	4	1300 sq. ft (0.03 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Residential Condo Attached/ Detached*	3	435 sq. ft (0.01 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Apartments*	2	N/A	# Residents x 50 gpd (IU)		Indoor x # days in bill service period
Potable Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.75	Outdoor based on bill service period
Recycled Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.87	Outdoor based on bill service period
Commercial, Industrial, Institutional			Site specific, based on productivity, employees, water use efficiency practices etc.	Site specific, based on irrigation needs	Site specific, adjusted for # days in bill service period

*For master-metered apartments and condominiums, the base budget is multiplied by the number of dwelling units.

CCF = 100 cubic feet. 1 CCF = 1 billing unit = 748 gallons

ET = reference evapotranspiration – from IRWD weather stations located in coastal, central or foothill zones for cool season turf

GPD = gallons per day

IU = Internal Use – assumes 50 GPD per person

LA = irrigated landscape acres

PF = plant factor. Adjusts ET based on plant needs relative to cool season turf and irrigation system efficiency requirements. The plant factor for potable irrigation is 0.75. For recycled water the plant factor is 0.87.

2. Budget variances

Variances are available for larger than normal landscaped areas, more people living in the home or special medical needs. Applications for variances may be obtained from the District website

<https://www.irwd.com/services/request-a-water-variance> or from Customer Service at (949) 453-5300. See IRWD Rules and Regulations, Section 12.6 for variance procedure.

3. Procedure

See IRWD Rules and Regulations, Section 12.6

Exhibit"C"

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4.3. Grounds for variance

Applicants must provide proof acceptable to the District to support any variance request.

a. Number of people residing in a residential dwelling unit.

Each additional person increases the budget by 1.6 ccf/month which is $IU \times 0.8$.

b. Landscape

Increased budgets shall be given for residential lot size beyond the standard base budget lot size. Applicants must provide acceptable documentation to the District of the actual irrigated landscape area served.

c. Medical needs

- Approval is contingent upon medical documentation.
- Increased budget will be determined on a case by case basis and based on the type of medical need.

d. Licensed care facilities (in a residential dwelling unit)

- A current license from appropriate regulatory agency will be required.
- A licensed 24-hour care facility will be provided budget increases based on the $IU \times 0.8$ for each additional resident.
- A licensed day care facility (not 24-hour) will be provided budget increases based on the $IU \times 0.5$ for each additional person.
- Additional budget for medical reasons will be determined on a case by case basis.

e. Fire control zones

- Adjustments to budgets will be determined by the District based upon relevant factors such as area, slope, planting material, etc.

f. Commercial/industrial/public authority

- Adjustments to the base budget will be determined on a case by case basis. Relevant factors will include expansion of productive capacity, existing conservation practices that can be shown to have reduced water usage, severe economic hardship, etc.

g. New account establishment variance

- Landscape accounts – billed at the base rate for the first six months and, beginning in the seventh month, the budget will be based on irrigated acres.
- Commercial and industrial accounts – billed at the base rate on usage for the first six months and, beginning in the seventh month, the monthly budget will be based on unique business and site demands as determined by the District.

5.4. Limitations

- An approved variance will become effective on the date the request for variance is ~~submitted to~~ approved by the District, but must be submitted within thirty (30) days of receipt of the bill.
- Approvals are valid for a period specified by the District (one year or less), and must be resubmitted on or before the expiration date to remain in effect.

6.5. Effect of increased budgets

a. Residential:

Approved variances will extend each tier of the residential structure by a percentage.

b. Non-residential:

Approved variances will extend each tier of the non-residential structure by a given percentage (or other method) determined on a case by case basis.

Exhibit"C"

FY 2019-20

Pumping Surcharges

A surcharge will be added to the commodity rate of those users who reside at higher elevations and cause the District to incur additional pumping costs to supply their water. The surcharge is based upon prevailing energy costs.

1. Potable water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0. 24 <u>25</u>
Zone 2	\$0. 35 <u>38</u>
Zone 3	\$0. 65 <u>68</u>

2. Recycled water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0. 24 <u>13</u>
Zone 2	\$0. 34 <u>23</u>
Zone 3	\$0. 47 <u>43</u>

Temporary Water Service Connection

1. Monthly service charge

See Chart b on page 4.

2. Commodity charge

Wherever feasible, recycled water shall be used for temporary construction uses. The Commodity Charge shall be as follows:

Potable	\$ 3.4526 /ccf
Recycled	\$ 1.7564 /ccf

3. Meter deposit

A deposit equal to the replacement cost of the construction meter shall be collected at the time of service application. The deposit will be applied to the closing bill and any remaining amount refunded to the customer. Lost meters will result in forfeiture of deposit.

Size	Cost
1", 1-1/2", 2" Disc	\$ 1,000.00
3" Turbo T2 & H23" Turbo	\$ 1,900.00 \$ 1,750.00
4" Turbo	\$ 2,600.00 \$ 2,330.00
6" Turbo	\$ 4,680.00 \$ 4,200.00
8" Turbo	\$ 7,930.00 \$ 7,110.00
10" Turbo	\$ 11,750.00 \$ 9,270.00

4. Materials for repairing damaged construction meters

Item	Cost
Meter, complete	Cost by size is shown in section 3 above
Swivel Hose Coupling-FemaleSwivel	\$ 458.00 \$ 240.00
Register With AMR & Pulse WireRegister	\$ 413.00 \$ 275.00
Fire Hose Adapter 3" MIP x 2-1/2"MFH	42.00
Lock	\$ 15.00
H2 Hydrant Meter HandleHandle (main	\$ 323.00 \$ 22.00
Fire Hydrant Meter Lock - LRG	122.00
Rotor and Shaft Assembly (3")Rotor	\$ 721.00
Barrel Lock	30.00
Male Fitting	95.00
Hydrant Collar	100.00
Rotor Cap	27.00
Collar (with barrel lock)	106.00
Labor & Overhead	120.00
Stores Clearing	40% of total parts billed

Exhibit"C"

FY 2019-20

5. High-lines for redevelopment

A high-line is a temporary service connection installed by the District to an existing customer during system upgrades or repairs to the District's system. Whenever feasible, high-lines will be metered and the customers will be billed at their regular rate. The District will determine whether a high-line should be metered.

If a high-line is unmetered, the customer will be charged using a reasonable average daily consumption based on prior consumption or based on other reasonable calculations in the absence of historical data.

Exhibit"C"

FY 2019-20

New Account Fees and Security Deposits for Water Service

This section is applicable to all requests for new or transferred service.

1. Service establishment fee

A fee of \$25.00 shall be collected to establish a new account for water and sewer service, or to transfer an existing account to a new location.

2. Residential service deposit

For residential customers, a deposit of \$50.00 may be required until a one year payment history is established.

3. Non-residential service deposit

For non-residential customers, a deposit of \$100.00 is required until a one year payment history is established.

Exhibit"C"

FY 2019-20

Other Water System Charges

1. Delinquency charges

All bills and charges for water, sewer and recycled water service shall be due and payable upon presentation and shall become delinquent twenty-five (25) calendar days thereafter. If payment is not made within twenty-five (25) calendar days after presentation, a late charge will be levied upon the unpaid balance as follows:

For residential and non-residential accounts with an unpaid balance of \$10 or more, a one-time charge of 10% of the unpaid balance plus 1.5% interest will be assessed, and each month thereafter the unpaid balance will be subject to an interest charge of 1.5%.

2. Non-sufficient funds checks

A \$20.00 service fee will be charged for each check returned from the bank for non-sufficient funds.

3. Service restoration charges

When service is discontinued because of delinquency in payment of a water, sewer, or recycled water bill, the service shall not be restored until all delinquent charges, late charges and interest charges, and a trip charge as specified below, have been paid.

a. Trip charge during normal working hours:

The trip charge applicable for work requested to be performed during normal working hours of the District will be \$70.00. Certain exceptions may apply beginning February 1, 2020.

b. Trip charge after normal working hours

The trip charge applicable for work requested to be performed after normal working hours of the District will be \$95.00.

4. Tampering

-If any person tampers with a District meter or District side angle stop and damages it, the customer shall pay the District for the cost of repairs, including but not limited to: parts, labor and equipment. In addition, the customer will be liable for any ~~finer or penalties charges~~ imposed under the District's Rules and Regulations.

5. ~~Fines and penalties~~Non-cCompliance charges for illegal connections ~~and water wasters~~

The District may impose ~~civil liabilities charges~~ in accordance with Section 14 of the District's Rules and Regulations.

Section 2: Sewer System

Monthly Sewer Service Charge

1. Residential

(a) Single Family and Multi-family Dwelling Units	AVERAGE MONTHLY WATER USE^{1, 2, 3, 4}	SEWAGE SERVICE CHARGE PER MONTH
	Over 1000 cubic feet (> 10.0 ccf)	• 100% rate = \$ 25.75 <u>26.10</u> per unit
	501-1000 cubic feet (5.01-10.0 ccf)	• 90% rate = \$ 23.20 <u>23.50</u> per unit
	0-500 cubic feet (0.0-5.0 ccf)	• 75% rate = \$ 19.30 <u>19.55</u> per unit
<p>(1) Monthly sewage service charge based upon average of the actual lowest three water meter readings during the twelve month period ending December 31. Charges are based on a 30 day billing period.</p> <p>(2) To qualify for the reduced rates, a customer must have usage history for a full calendar year.</p> <p>(3) No credit will be granted for vacancies resulting from the normal turnover of occupants in an existing multiple dwelling unit. The price structure contained herein includes considerations of average vacancy rates.</p> <p>(4) A newly constructed multiple dwelling unit may be billed at the non-residential metered rate, with appropriate allowance for landscape irrigation, until the structure is released for occupancy.</p>		
		SEWAGE SERVICE CHARGE PER MONTH
(b) Collection Service Charge (assumes 10.0 ccf)		\$ 8.40 <u>8.50</u> per unit
(c) Treatment Service Charge (assumes 10.0 ccf)		\$ 44.80 <u>15.00</u> per unit

2. Non-Residential (Commercial, Industrial, and Institutional)

<p>Quantity charges are based on the assumption that 90% of non-residential water consumption returns to the sewer. Because of landscape irrigation or consumptive usage, some non-residential users may discharge substantially less of their metered water into the sewer system. Those users may, upon request to the District, be permitted to have the amount of water being discharged into the sewer determined by means acceptable to the District. Upon request by the user and at the sole discretion of the District, an alternate service charge may be applied.</p>		
<p>To qualify for the sewage service charge only, a customer usage history cannot be greater than 120 ccf in a full calendar year based on actual meter readings. Usage exceeding 10.0 ccf per month will pay a quantity charge. <u>During construction, prior to occupancy, use these rates</u> these rates are applicable.</p>		
		SEWAGE SERVICE /QUANTITY/COMMODITY CHARGE PER MONTH
Sewage service charge		\$ 25.75 <u>26.10</u>
Quantity charge beyond 10.0 ccf		\$ 2.74 <u>2.78</u> /ccf
Industrial Waste Charge if applicable		\$ 0.434 <u>136</u> /ccf
		\$ 2.874 <u>2.916</u> /ccf

Exhibit"C"

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Non Residential Sewage/Other Sewer System Charges

This section shall be applicable to non-residential customers who discharge extra-strength sewage into the sewage collection system, or discharge or have the potential to discharge constituents subject to federal or state standards and local discharge limitations.

1. Alternative service charges

At the sole discretion of the District, users may request the application of an aAlternative sService cCharge for use. The aAlternative sService cCharge shall be based on measured quantity and quality of water being discharged to the sewer from the user's facility by a means acceptable to the District. The aAlternative Sservice cCharge for use shall be computed by the following formula:

$$\text{Charge for use} = VR_v + BR_b + SR_s$$

Where V = Total volume of flow in hundred cubic feet.

B = Total discharge of biochemical oxygen demand (BOD) in pounds.

S = Total discharge of suspended solids (SS) in pounds

Rv = \$ ~~4.57~~1.590 per hundred cubic feet

Rb = \$ ~~0.437~~443 per pound of BOD

Rs = \$ ~~0.384~~386 per pound of SS

2. Fees/Charges for noncompliance with permit conditions

a. Minor violation

Condition where the limitation is less than the violation and the violation is less than the technical review criterion.

Fee per violation - \$350

b. Significant noncompliance or significant violation

Condition where the violation is greater than the technical review criterion or qualifies under the definition of significant noncompliance.

Fee per violation - \$550

c. Batch dump or slug load

Fee per violation - \$550

d. Probation orders

Enforcement Compliance Schedule Agreements and subsequent two year probation, and Regulatory Compliance Schedule Agreements.

Fee per violation - \$550

e. Appeals to the Board of Directors

Appeal fee - \$500

Exhibit"C"

FY 2019-20

3. Fats, oils, and grease (FOG) control programs fees

All terms and requirements for the Fats, Oils, and Grease (FOG) Control Program can be found in Section 7.13 of the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service.

a. FOG wastewater discharge permit fees (pursuant to Rules and Regs 7.13.6(4))
Food service establishments (FSE), and those FSE that are issued a conditional waiver (CW) by the District, shall pay the following FOG wastewater discharge permit fees which do not exceed the amount determined in Table 2-29 of the 2018 Fats, Oils, & Grease Fees Study:

FSE Monthly Permit Fee:	\$7,337.89 per month
CW Monthly Permit Fee:	\$2,963.51 per month

b. These charges shall be incorporated in the monthly sewage service charges.

c. Special services/fees

1) FOG plan check fees

The following FOG plan check fees must be paid at the time FOG plans are submitted.

Food Service Establishments (FSE) and Conditional Waivers (CW)

Initial Plan Check	\$350.12
<u>Permit Issuance and Initial Inspection</u>	<u>255.00</u>
Total =	\$605.12

Limited Food Prep (LFP)

Initial Plan Check	\$350.12
--------------------	----------

For FSE, CW or LFP, all initial plan checks include the initial plan check and up to one revision. If more than one revision is required, the FSE, CW or LFP will be required to pay additional plan check fees in the amount of \$301.92. This subsequent plan check fee includes up to two (2) more revisions.

2) Compliance follow-up inspection fee

If during an inspection the FSE is deemed to be out of compliance with the FOG Control Program and a compliance follow-up inspection is required, the FSE shall be required to pay \$115.00 for the compliance follow-up inspection.

3) Enforcement fees

If an FSE is deemed to be out of compliance and a Notice of Violation is issued by the District to the FSE, the FSE will be charged an enforcement fee in the amount of \$1,203.79 per incident.

4) Special study fee

This fee is for the District to review special studies at the request of the FSE, such as a performance study of bio-additives to a grease interceptor. The special study fee in the amount of \$610.02 will be required at the time of request by the FSE to the District.

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5) FOG-related private lateral sewage discharge response fee

If District staff responds to a private lateral sewage discharge (PLSD) that after investigation by District staff is found to be FOG-related, the following fees shall be charged to the FSE, CW or LFP:

PLSD Response Fees During Working Hours

First Response Hour -	\$932.57
Each Additional Response Hour -	\$484.72 per hour

PLSD Response Fees After Working Hours

First Response Hour -	\$1,160.62
Each Additional Response Hour -	\$712.77 per hour

4. Special purpose discharger service charges

Special purpose discharge service fees applies to customers who have been required by the District to obtain a special purpose discharge permit issued jointly by the District and Orange County Sanitation District (OCSD). Sewage service charges will be based on reported and verified monthly flow to sewer.

Flow Service Charge: up to ~~\$1,471,561~~1,489.42 per Million Gallons

5. Discharge limits

Discharge limits are included in Exhibit C of the Rules and Regulations.

Section 3: Developer Services

Water Connection Fees

1. Residential

	<u>Improvement District</u>	<u>0-5.8 DUs/acre</u>	<u>5.9-10.8 DUs/acre</u>	<u>10.9-25.8 DUs/acre</u>	<u>25.9+ DUs/acre</u>
Connection Fees Per Dwelling Unit	111*	\$3,910	\$3,448	\$2,922	\$2,467
	112	\$1,338	\$1,338	\$1,338	\$1,338
	112a (tax exempt)	\$2,462	\$2,462	\$2,462	\$2,462
	113	\$3,047	\$3,047	\$3,047	\$3,047
Development shall be gross acres excluding private parks.	125	\$2,789	\$2,789	\$2,789	\$2,789
	153	\$1,532	\$1,532	\$1,532	\$1,532
	153 PA 30	\$3,828	\$3,828	\$3,828	\$3,828
	185	\$1,748	\$1,748	\$1,748	\$1,748
	188	\$1,572	\$1,572	\$1,572	\$1,572
	*All others				

2. Commercial, industrial and public authority

	<u>Improvement District</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public Authority</u>
Connection Fees Per Gross Acre	111*	\$21,694	\$33,042	\$21,694
	112	\$8,696	\$8,696	\$8,696
	112a (tax exempt)	\$16,001	\$16,001	\$16,001
	113	\$22,258	\$0	\$22,258
	125	\$13,834	\$19,638	\$13,834
	153	\$8,047	\$11,422	\$8,047
	PA 30	\$18,993	\$26,961	\$18,993
	185	\$8,166	\$8,166	\$8,166
	188	\$6,206	\$6,206	\$6,206
	*All others			

3. Parks, churches and recreational facilities

	<u>Improvement District</u>	<u>Indoor Water Use</u>	<u>Outdoor⁽¹⁾ Water Use</u>
Connection Fees Per Fixture Unit	111*	\$67.94	\$239.09
	125	\$45.98	\$161.16
(1) Calculated per Uniform Code	153	\$26.78	\$93.86
	PA 30	\$63.17	\$221.41
	185	\$46.98	\$164.99
	188	\$31.01	\$109.08
	*All others		

4. Schools (public and private)

	<u>Improvement District</u>	<u>Indoor Primary &/or Intermediate</u>	<u>Secondary</u>	<u>Outdoor Primary Intermediate & Secondary</u>
Connection Fees Per 100 Students Based on Max Daily Attendance	111*	\$5,354	\$7,180	\$230
	125	\$3,616	\$4,855	\$162
	153	\$2,106	\$2,827	\$94
	PA 30	\$4,968	\$6,670	\$222
	185	\$3,542	\$4,969	\$160
	188	\$2,836	\$3,795	\$122

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*All others

Other Water Connection Charges

1. High volume user – ~~Non-Residential~~commercial, industrial and public authority

This section shall apply to all ~~non-residential~~commercial, industrial, and public authority applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Water User Connection Fee =
[Est. Gallons per Day use – (no. acres x use factor*)] x \$1,221,858/cfs
646,320 gal/day/cfs

*Non-Residential Water Use Factor	Land Use Category	Water Use Factors (Gal/Acre x /Day)
	Commercial	2,000.00
	Industrial	4,000.00
	UCI	Special Contract

Definitions

Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.

Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and
- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

2. Service installations by District

Customers may request the District to install, relocate or abandon domestic water, recycled water and fire protection service lines. To request an action listed above, the customer must submit a Quote Request ~~Form~~ for Service or Meter Modifications which can be obtained by contacting Development Services. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation.

The District reserves the right to decline a customer's request for service installations by District for any reason. In the event the District declines to perform service installations, the requester will need to submit design plans for review and approval through Development Services. For further information, see Development Services Procedural Guidelines and General Design Requirements document which can be found at www.irwd.com.

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3. Meter installations by District

Customers may request the District to install or replace (downsize or upsize) domestic water or recycled water meters. To request an action listed above, the customer must submit a Quote Request ~~Form~~ for Service or Meter Modifications which can be obtained by contacting the District’s Development Services. The District may require OCFA approval documents prior to the installation of certain meter sizes. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation. ~~Meter installation and replacement charges are as follows:~~

a. Meter Costs

<u>Meter size</u>	<u>Cost*</u>	<u>Meter size</u>	<u>Cost*</u>
5/8" x 3/4" **	\$ 130.00 <u>110.00**</u>	2" Disc	\$ 750.00
3/4"	200.00 <u>170.00</u>	2" Turbo	1,300.00 <u>2,680.00</u>
1"	250.00*** <u>240.00</u>	3" Turbo - H2	2,400.00 <u>1,900.00</u>
1 1/2"	450.00 <u>580.00</u>	3" Turbo - T2	3,340.00 <u>3,340.00</u>
		4" Turbo	3,400.00 <u>6,490.00</u>

~~* Prices shown are for standard meter installations only and do not include services, angle stops, meter boxes, meter box covers, vaults or meter box lids. Additional costs may apply.~~

b. The customer shall pay for the cost of additional parts and labor needed for the installation or replacement. For example, the cost to convert from 5/8" or 3/4" to a 1" meter is \$2,000. This price is in addition to the cost for a 1" meter.

c. The customer will be responsible for any plumbing modifications downstream of the water meter.

~~** Developer installed-Residential only.~~

~~*** When a customer requests a meter to be upsized from 5/8" x 3/4" to 1", additional parts and labor will be required to make the conversion. The cost for District staff to perform this work is \$2,000.00 and will be collected along with the above 1" meter cost.~~

d. Costs for meters larger than 4-inches will be determined by the District’s Purchasing Department at the time of request.

~~d.e. Meters costs includes strainer.~~

4. Upsizing and downsizing meter request requirements

- a. It is the customer’s responsibility to ensure that any upsizing or downsizing of the meter will not have any adverse effects to the customer’s system as it relates to water pressure, fire protection or ability to successfully serve the demand of the home or business. The District may require OCFA approval of any modifications and/or a signed Request & Authorization to Change Meter Size form.
- b. Any private-side (downstream of the water meter) modifications or repairs are the sole responsibility of the customer.
- c. If for any reason the customer chooses to change back to the original size meter, all installation costs would once again apply.

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A ~~Quote~~ Request Form for ~~sService or mMeter mModifications~~ can be obtained at the District's Development Services ~~cCounter~~.

- Domestic water, recycled water and Natural Treatment System (NTS) plan check and inspection fees

Plan check and inspection fees for water systems shall be calculated as 10% of the bondable cost for the off-site, public, potable or recycled water system or a fixed fee as described below. Plan check and inspection fees for Natural Treatment System (NTS) shall be calculated as 5% of the bondable cost or a minimum of \$30,000.00. ~~Residential or Natural Treatment Systems plans require a non-refundable deposit of 5% of the estimated cost. Non-residential plans require a nonrefundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. Any remaining fees shall be paid prior to final approval of the plans.~~

Installation of a 1" or 2" service	<u>\$1,000.00</u>
\$400.00	
Removal of a 1" or 2" service	
\$400.00 <u>\$1,000.00</u>	
Installation of Fire DDCA or fire hydrants	<u>\$1,000.00</u>
Installation of recycled water hydrants or temporary construction connections	<u>\$1,000.00</u>

The overtime inspection rate is \$175.00/hr.

- Interim water service charge – new development

Builders and developers will be charged \$35.10 per connection ~~in a new tract and/or development~~ for water service directly related to the vertical construction process of homes. The charge applies only in a new tract and/or development for the period of time after in-tract pipelines, service mains and sewer pipelines have been connected to the District's water system. Once connections to the District pipelines are made and housing phases are released for occupancy, water used through the occupants metered house connection will be billed to the developer or resident as appropriate. Connection methods and appropriate use of water is at the sole discretion of the District. Examples of permitted uses may include construction of living structures, lot soft-scape, exterior of the home stucco/plaster, drywall, interior stonework, interior finishing work and clean-up. Examples of unpermitted uses may include, but are not limited to, connections to sales/construction trailers, flat work, hardscaping, retaining and other walls, lot or pad soaking, streetscape, water trucks/ buffaloes or any connection practice that could pose a risk to public health resulting from a backflow condition. Unpermitted connections require a temporary construction meter. Failure to properly connect to the District's Distribution System will subject the builder/developer to non-compliance charges. ~~for the period of time after in-tract lines have been connected to the District's water system until the new customer begins metered water service. Connection method and appropriate use of water is at the sole discretion of the District. Examples of unpermitted uses may include but are not limited to connections to sales/construction trailers or any construction practice that could pose risk to public health resulting from a backflow condition.~~

Unmetered water service is not permitted for custom lots. Developers for custom lots will be required to apply for a domestic water construction meter prior to starting construction.

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Sewer Connection Fees

1. Residential

	<u>Improvement District</u>	<u>0-5.8 DUs/acre</u>	<u>5.9-10.8 DUs/acre</u>	<u>10.9-25.8 DUs/acre</u>	<u>25.9+ DUs/acre</u>
Connection Fees Per Dwelling Unit	1 (222)*	\$6,942	\$6,178	\$5,085	\$4,012
	212	\$3,492	\$3,492	\$3,492	\$3,492
	212a (tax exempt)	\$6,426	\$6,426	\$6,426	\$6,426
	213	\$5,331	\$5,331	\$5,331	\$5,331
Total acreage for any given development shall be gross acres excluding private parks.	240	\$3,830	\$3,830	\$3,830	\$3,830
	225	\$3,012	\$3,012	\$3,012	\$3,012
	253	\$1,780	\$1,780	\$1,780	\$1,780
Parks.	253 PA 30	\$3,995	\$3,995	\$3,995	\$3,995
	256	\$6,077	\$6,077	\$6,077	\$6,077
	285	\$3,120	\$3,120	\$3,120	\$3,120
	288	\$2,696	\$2,696	\$2,696	\$2,696
	OPA1 (Ridgeline)	\$6,077	\$6,077	\$6,077	\$6,077
	*All others				

2. Commercial, industrial and public authority

	<u>Improvement District</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public Authority</u>
Connection Fees Per Gross Acre	1 (222)*	\$38,906	\$67,880	\$38,906
	212	\$20,849	\$20,849	\$20,849
	212a (tax exempt)	\$38,365	\$38,365	\$38,365
	213	\$31,764	\$0	\$31,764
	240	\$17,490	\$0	\$17,490
	225	\$14,726	\$17,420	\$14,726
	253	\$8,168	\$13,554	\$8,168
	253 PA 30	\$17,812	\$29,556	\$17,812
	285	\$6,235	\$6,235	\$6,235
	288	\$10,640	\$10,640	\$10,640
	*All others			

3. Parks, churches and recreational facilities

	<u>Improvement District</u>	<u>Fee</u>
Connection Fees Per Fixture Unit	1 (222)*	\$430.45
	240	\$260.21
	225	\$230.81
	253	\$128.02
	253 PA 30	\$279.16
	288	\$70.60
	*All others	

4. Schools (public and private)

	<u>Improvement District</u>	<u>Primary & Intermediate</u>	<u>Secondary</u>
Connection Fees Per 100 Students Based on Max Daily Attendance	1 (222)*	\$20,397	\$27,200
	240	\$12,298	\$16,400
	225	\$10,844	\$14,459
	253	\$6,015	\$8,020
	253 PA 30	\$13,116	\$17,488
	288	\$3,399	\$4,529
	*All others		

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Other Sewer Connection Charges

1. Sewer lateral installations by District

The District does not install sewer laterals.

2. Irvine Business Complex (IBC) – non-residential

-----Commercial/Industrial-----

	<u>Low Demand</u>	<u>Average Demand</u>	<u>High Demand</u>
Connection Fees Per 1,000 Square Feet	\$268	\$1,654	\$3,921

- a. Low Demand connections are the following categories of users: Nurseries, Warehouses, Parking Structures, RV Storage, Churches, Truck Terminals, RV Parks, Lumber/Construction Yards, and other discharge whose flow is similar in volume to these listed categories.
- b. Average Demand connections other than listed in Low or High Demand categories.
- c. High Demand connections are the following categories of users: Restaurants, Supermarkets, Car Washes, Coin Laundries, Amusement Parks, Shopping Centers with Restaurants, Food Processing Facilities, Textile Manufacturers, and other discharges whose flow is similar in volume to these listed categories.

3. High volume user – ~~Non-Residential commercial, industrial and public authority~~

This section shall apply to ~~commercial, industrial and public authority all non-residential~~ applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Sewer User Connection Fee =

* Sewer GPD = 90% of water GPD [Est. GPD use * – (no. acres x use factor**)] x \$17.76/Gal. of Sewer Flow

**Non-Residential Sewage Flow Generators (Use Factors)	<u>Land Use Category</u>	<u>Average Flows</u>
	Commercial	1,300.00
	Industrial	2,600.00
	UCI	Special Contract

Definitions Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.
Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and

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- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

4. Sanitary sewer plan check and inspection fees

The plan check and inspection fee for public sewer systems will be calculated as 10% of the bondable cost for the off-site public sewer system. Residential plans require a non-refundable deposit of 5% of the estimated cost. -Non-residential plans require a non-refundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. of the sewer system is required with the submittal of the first plan check. Any remaining fees shall be paid prior to final approval of the plans. The overtime inspection rate is \$175.00/hr.

District closed circuit television inspection charges

a. Initial TV inspection fee

A fee of \$0.8579 per linear foot as measured from the center line of manholes will be charged for all 6-inch and larger sewer lines to be inspected by a closed circuit television camera. The District will furnish the special camera equipment and manpower to fulfill this inspection requirement. This fee is to be paid along with the other connection, meter, and inspection fees prior to the District signing developer's tract utility plans.

b. Reinspection

Fees will be assessed for rReinspection by District TV Crew after corrective work is completed. Those portions of the pipeline system that have been corrected must be retelevised.

- 1) District fees for retelevising corrective work will be a flat set-up fee of two hundred fifty dollars (\$250.00) plus \$0.8579 per linear foot of sewer line reinspected measured centerline to centerline of manholes.
- 2) Payment for retelevising estimated inspection fees must be received by the Development and Inspection Services prior to scheduling the reinspection. Retelevising will not be done until the fees are paid.

c. Cancellation of District's TV inspection

If it is determined by either the Contractor or Developer that the job site will not be ready or accessible for the television inspection on the scheduled date, as notified, the Contractor shall notify the District Inspection Division of the necessary cancellation at least 24 hours in advance of the scheduled inspection to avoid being charged a cancellation fee.

- 1) If the District's television crew arrives at the job site and the work is not ready or accessible, the Contractor and owner will be billed for the cancellation fee of two hundred fifty dollars (\$250.00), payable to the District prior to the date of the rescheduled television inspection.
- 2) A rescheduled inspection is to be made through the District's project inspection division.

d. Optional developer TV inspection

If the Contractor or Owner desires to have a portion of, or the entire job, TV inspected for his convenience, he they will be charged a fee of one hundred fifty dollars (\$150.00) plus \$0.8579 per linear foot of sewer line inspected measured centerline to centerline of manholes.

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Exhibit B: History of Revisions to Schedule of Rates and Charges

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE
05-23-77	1977-49	Rescind 1973-48 & 1977-42	
08-29-77	1977-71	Change in Connection Charges	09-01-77
02-27-78	1978-31	Rescind 1977-71	
		Discontinue Water & Sewer Service	03-01-78
07-10-78	1978-135	Rescind 1978-31	07-10-78
08-28-78	1978-154	Rescind 1978-135	08-28-78
01-08-79	1979-02	Rescind 1978-154	
		Increase Water Commodity Charges	01-08-79
06-25-79	1979-25	Rescind 1979-02	
		Increase Water & Sewer Charges	07-01-79
07-30-79	1979-41	Rescind 1979-25	07-30-79
06-23-80	1980-28	Rescind 1979-41	07-01-80
08-25-80	1980-49	Rescind 1980-28	08-25-80
12-22-80	1980-77	Rescind 1980-49	
		Increase Wastewater System Charges	01-01-81
06-15-81	1981-103	Rescind 1980-77	07-13-81
07-13-81	1981-132	Rescind 1981-103	07-13-81
06-28-82	1982-48	Rescind 1981-132	
		Increase Connection Fees & Water & Sewer Rates	07-01-82
09-27-82	1982-61	Rescind 1982-48	10-01-82
11-22-82	1982-67	Rescind 1981-61	12-01-82
06-27-83	1983-116	Rescind 1982-67	07-01-83
11-21-83	1983-137	Rescind 1983-116	
		Increase Dom. Water Rates & Imply. Mod. Sewer Rates	01-01-84
12-12-83	1983-132	Rescind 1983-131	
		High-rise Connection Fees (Sewer)	01-01-84
04-23-84	1984-13	Rescind 1983-132	
		Untreated & Recycled Water For Ag Use Commodity Charges Increase	06-01-84
06-25-84	1984-22	Rescind 1984-13	
		Decrease Water & Sewer Charges, Increase Connection Fees	07-01-84
09-10-84	1984-43	Rescind 1984-22	10-01-84
01-28-85	1985-2	Rescind 1984-43	02-01-85
02-25-85	1985-7	Rescind 1985-2	02-25-85
03-25-85	1985-31	Rescind 1985-7	03-25-85
		Reduce Connection Fees I.D. 103 & 3(203)	
06-24-85	1985-37	Rescind 1985-31	07-01-85
		Decrease Water & Sewer Chgs. Change Recycled Landscape Charge	
12-16-85	1985-115	Rescind 1985-37	01-01-86
06-23-86	1986-28	Rescind 1985-115	07-01-86
03-23-87	1987-11	Rescind 1986-28	04-01-87
		High Volume Connection Fees	

Continued

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DATE ADOPTED	RESOLUTION	REVISION		EFFECTIVE DATE
06-22-87	1987-27	Rescind 1987-11	Increase R-W; Nonpotable Ag	07-01-87
08-10-87	1987-44	Rescind 1987-27	Reduce Connection Fees I.D.'s 103,3(203), 102(120)121 & 106(160)161	07-10-87
09-28-87	1987-49	Rescind 1987-44	Industrial Waste Program	10-01-87
01-25-88	1988-18	Rescind 1987-49	Add Portola Hills Sewer Serf. Add Water Pumping Surcharge	02-01-88
06-27-88	1988-61	Rescind 1988-18	Reduce Monthly Sewer Charge	07-01-88
08-22-88	1988-66	Rescind 1988-61	Adjust Connection Fees	08-23-88
06-26-89	1989-38	Rescind 1988-66	Reduce Monthly Sewer Charge Reduce Recycled Landscape Increase Untreated and Recycled Ag Rates	07-01-89
08-28-89	1989-58	Rescind 1989-38	Adjust Connection Fees	08-28-89
06-26-90	1990-20	Rescind 1989-58	Reduce Monthly Sewer Charge Reduce Untreated and Recycled Ag Rates	07-01-90
07-23-90	1990-24	Rescind 1990-20	Adjust Connection Fees	07-23-90
01-28-91	1991-05	Rescind 1990-24	Eliminate High Rise and Adjust Connection Fees Add Excessive Use Surcharge	02-01-91
04-22-91	1991-09	Rescind 1991-05	Ascending Block Rate Structure and Request for Variance	06-01-91
05-28-91	1991-13	Rescind 1991-9	Commodity Rates for Landscape Customers	06-01-91
06-10-91	1991-19	Rescind 1991-13	Commodity Rates for Ag., Untreated Landscape, Portola Hills Sewer Rates and Coastal Recycled Rates	07-01-91
07-12-91	1991-37	Rescind 1991-19	Adjust Connection Fees	07-12-91
10-28-81	1991-46	Rescind 1991-37	Increase Ag Water Rate	10-28-91
04-30-92	1992-12	Rescind 1991-46	Modify Ascending Block Rate Structure	04-30-92
06-22-92	1992-22	Rescind 1991-13	Modify Ascending Block Rate Structure	07-02-92
09-28-92	1992-40	Rescind 1992-22	Adjust Connection Fees	09-28-92
01-25-93	1993-3	Rescind 1992-40	Landscape Irrigation Rates	02-01-93
03-04-93	1993-8	Rescind 1993-3	Modify Ascending Block Rate Structure	04-01-93
06-28-93	1993-22	Rescind 1993-8	Increase Water Rate and Reduce Monthly Sewer Charge	07-01-93
07-28-93	1993-26	Rescind 1993-22	Decrease Water Rates	08-01-93
09-13-93	1993-29	Rescind 1993-26	Adjust Connection Fees	09-14-93

Continued

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DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE	
06-13-94	1994-10	Rescind 1993-29	Increase Water Rate	07-01-94
08-08-94	1994-18	Rescind 1993-10	Adjust Connection Fees	08-08-94
08-14-95	1995-20	Rescind 1994-18	Adjust Connection Fees	08-14-95
08-28-95	1995-24	Rescind 1995-20	Adjust Pumping Surcharges	10-01-95
09-25-95	1995-27	Rescind 1995-20	Adjust Connection Fees and	09-25-95
09-25-95	1995-27	Rescind 1995-24	Adjust Pumping Surcharges	11-01-95
10-23-95	1995-31	Rescind 1995-27	Adjust Pumping Surcharges	11-01-95
11-27-95	1995-35	Rescind 1995-31	Add Monthly Sewer Service Charge - Newport Coast	12-01-95
01-08-96	1996-3	Rescind 1995-35	Adjust Connection Fees to I.D. 240	01-08-96
06-10-96	1996-19	Rescind 1996-3	Adjust Pumping Surcharges	
			Increase Nonpotable Water Charges and	
			Modify Ascending Block Rate Allocations	07-01-96
08-12-96	1996-27	Rescind 1996-19	Adjust Connection Fees	08-12-96
08-27-96	1996-28	Rescind 1996-27	Adjust Connection Fees to I.D.'s 140 & 240	08-27-96
09-23-96	1996-32	Rescind 1996-28	Adjust Water and Sewer Fixed Charges	09-23-96
10-14-96	1996-33	Rescind 1996-32	Adjust Sewer Service Charges for Non-Residential & Portola Hills	10-14-96
06-30-97	1997-17	Rescind 1996-33	Modify Rates and Charges and Connection Fees	06-30-97
10-01-97	1997-29	Rescind 1997-17	Modify Ascending Block Rate Structure Terminology	10-01-97
06-08-98	1998-21	Rescind 1997-29	Miscellaneous Adjustments to Schedule of Rates and Charges	07-01-98
08-24-98	1998-33	Rescind 1998-21	Adjust Connection Fees	08-24-98
06-28-99	1999-25	Rescind 1998-33	Adjustments to Schedule of Rates and Charges	07-01-99
06-26-00	2000-18	Rescind 1999-25	Adjustments to Schedule of Rates and Charges	07-01-00
07-24-00	2000-24	Rescind 2000-18	Adjustments to Schedule of Rates and Charges	07-25-00
06-25-01	2001-24	Rescind 2000-24	Adjustments to Schedule of Rates and Charges	07-01-01
06-24-02	2002-22	Rescind 2001-24	Adjustments to Schedule of Rates and Charges	07-01-02
12-09-02	2002-47	Rescind 2002-22	Adjustments to Schedule of Rates and Charges	12-09-02
03-10-03	2003-7	Rescind 2002-47	Adjustments to Schedule of Rates and Charges	03-10-03
06-23-03	2003-20	Rescind 2003-7	Adjustments to Schedule of Rates and Charges	07-01-03
09-08-03	2003-35	Rescind 2003-20	Adjustments to Schedule of Rates and Charges	09-08-03
06-28-04	2004-25	Rescind 2003-35	Adjustments to Schedule of Rates and Charges	07-01-04
07-12-04	2004-32	Rescind 2004-25	Adjustments to Schedule of Rates and Charges	07-12-04
10-11-04	2004-51	Rescind 2004-32	Adjustments to Schedule of Rates and Charges	10-11-04
06-27-05	2005-20	Rescind 2004-51	Adjustments to Schedule of Rates and Charges	07-01-05

Exhibit"C"

FY 2019-20

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE	
09-26-05	2005-31	Rescind 2005-20	Adjustments to Schedule of Rates and Charges	10-10-05
10-10-05	2005-35	Rescind 2005-31	Adjustments to Schedule of Rates and Charges	10-10-05
06-26-06	2006-20	Rescind 2005-35	Adjustments to Schedule of Rates and Charges	06-27-06
07-24-06	2006-27	Rescind 2006-20	Changes to Water & Sewer Connection Fees	07-24-06
06-25-07	2007-16	Partially Modifies 2006-27	Adjustments to Schedule of Rates and Charges	06-26-07
07-16-07	2007-21	Partially Modifies 2006-27	Changes to Water & Sewer Connection Fees	07-17-07
06-23-08	2008-36	Rescind 2007-21	Adjustments to Schedule of Rates and Charges	07-01-08
07-28-08	2008-45	Partially Modifies 2008-36	Changes to Water & Sewer Connection Fees	07-29-08
06-22-09	2009-20		Adjustments to Schedule of Rates and Charges	06-23-09
07/27/09	2009-24	Partially Modifies 2009-20	Changes to Water & Sewer Connection Fees	07/28/09
06/28/10	2010-19		Adjustments to Schedule of Rates and Charges	07/01/10
07/26/10	2010-22	Partially Modifies 2010-19	Changes to Water & Sewer Connection Fees	07/27/10
02/28/11	2011-3	Partially Modifies 2010-22	Changes to Sewer Connection Fees	03/01/11
06/27/11	2011-25	Rescind 2010-19	Adjustments to Schedule of Rates and Charges	07/01/11
07/25/11	2011-33	Rescind 2011-25	Changes to Water & Sewer Connection Fees	07/26/11
06/25/12	2012-26	Rescind 2011-25	Adjustments to Schedule of Rates and Charges	07/01/12
10/08/12	2012-41	Partially Modifies 2012-26	Changes to Water & Sewer Connection Fees	10/09/12
12/10/12	2012-57		Adjust Connection Fees to IDs 112 & 212	12/11/12
06/24/13	2013-21	Rescind 2012-26	Adjustments to Schedule of Rates and Charges	07/01/13
12/16/13	2013-60	Partially Modifies 2013-21	Changes to Water & Sewer Connection Fees	01/01/14
06/23/14	2014-32		Adjustments to Schedule of Rates and Charges	07/01/14
07/14/14	2014-33	Partially Modifies 2014-32	Changes to Water & Sewer Connection Fees	07/15/14
11/10/14	2014-50		Changes to the Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service	11/11/14
06/22/15	2015-17	Rescind 2014-50	Adjustments to Schedule of Rates And Charges	07/01/15
07/27/15	2015-19	Partially Modifies	Changes to Water & Sewer Connection Fees	07/28/15
06/27/16	2016-10		Adjustments to Schedule of Rates and Charges	07/01/16
07/25/2016	2016-21	Partially Modifies	Changes to Water & Sewer Connection Fees	07/26/2016

Exhibit"C"

FY 2019-20

DATE ADOPTED	RESOLUTION		REVISION	EFFECTIVE DATE
06/26/2017	2017-17		Adjustments to Schedule of Rates and Charges	07/01/2017
07/24/2017	2017-19	Partially Modifies	Changes to Water & Sewer Connection Fees	09/01/2017
06/25/2018	2018-16	Rescind 2017-17	Adjustments to Schedule of Rates and Charges	07/01/2018
07/23/2018	2018-21	Partially Modifies	Changes to Water & Sewer Connection Fees	08/01/2018

***IRVINE RANCH WATER DISTRICT
SCHEDULE OF RATES AND CHARGES***

FY 2020-2119-20



Irvine Ranch
WATER DISTRICT

Proposed

April 22, 2019

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Section 1: Water System

Monthly Water Service Charge

Customer Description			
Residential detached, Condo attached/detached and apartments ¹		See chart (a)	
Residential apartments and condominiums (master metered) ¹		See chart (a)	
Commercial, Industrial, Public Authority and Landscape		See chart (a)	
Landscape recycled		See chart (a)	
Temporary construction meters		See chart (b)	

Meter Size	Flow Range In GPM ²	Chart (a)	Chart (b)
5/8" by 3/4" Disc	1/2-20	\$10.40 \$10.35	\$82.30 \$81.90
3/4" Disc	3/4-30	\$15.65 \$15.55	
1" Disc	3-50	\$26.05 \$25.90	\$116.65 \$116.05
1 1/2" Disc	2-100	\$52.00 \$51.75	\$117.80 \$117.20
2" Disc	2.5-160	\$83.20 \$82.80	\$147.15 \$146.40
2" Turbo	1-250	\$109.25 \$108.70	\$171.70 \$170.85
3" Turbo	2.5-650	\$249.65 \$248.40	\$311.55 \$310.00
4" Turbo	2-1250	\$520.10 \$517.50	\$563.40 \$560.60
6" Turbo	2.5-2500	\$1,040.25	\$1,089.20
		\$1,035.05	\$1,083.80
8" Turbo	4-4700	\$1,820.40	\$1,878.80
		\$1,811.35	\$1,869.45
		\$2,184.45	\$2,251.75
10" Turbo	5-7000	\$2,473.60	\$2,240.55
2" Magnetic Meter	161-280	\$161.75 \$160.95	\$213.75 \$212.70
4" Magnetic Meter	751-1000	\$646.50 \$643.30	\$700.30 \$696.80
6" Magnetic Meter	1601-2000	\$1,454.75	\$1,523.30
		\$1,447.50	\$1,515.70
8" Magnetic Meter	2001-3500	\$2,587.00	\$2,670.00
		\$2,574.15	\$2,656.70
6" Propeller	1001-1450	\$702.15 \$698.65	
8" Propeller	1451-1600	\$936.20 \$931.55	
10" Propeller	1601-2000	\$1,248.25	
		\$1,242.05	
12" or 14" Propeller	2001-3500	\$1,755.40	
		\$1,746.65	
16", 18", or 20" Propeller	3501-5500	\$2,964.65	
		\$2,949.90	
4" Omni F2*	0.75-1000	\$646.50 \$643.30	
6" Omni F2*	1.5-2000	\$1,454.75	
		\$1,447.50	
8" Omni F2*	2.5-3500	\$2,587.00	
		\$2,574.15	
10" Omni F2*	3.5-5500	\$2,964.65	
		\$2,949.90	

*Fire Line Meters Only

¹ Potable residential and landscape customers that have 12 calendar months of billing history and stay within the low volume tier for 9 of those 12 months will receive a \$2.00 leaseback credit on the water service charge.

² GPM is Gallons per Minute.

Service Charges – Private Fire Protection Service

1. Service-line charge

Service	Monthly Charge
Firelines	\$13.60 <u>13.65</u> /per diameter inch

2. Fire hydrant charge

The monthly charge for private fire hydrant service is ~~\$23.70~~23.80 per hydrant. This charge includes water used for fire extinguishing purposes.

3. Fire flow testing

The District will charge ~~\$300.00~~350.00 to administer any fire flow tests.

Commodity Charges: Potable Water System

Irvine Ranch Water District (IRWD) establishes a water budget for each customer. The rates billed are based on use as a percentage of budget. Water budgets are based on an assumed number of residents, landscape square footage and actual daily weather and evapotranspiration (ET) data for each of three microclimates within the District. Customers may apply for budget variances for larger than normal landscaped areas, more people living in the home or special medical needs. Rates are based on usage per hundred cubic feet (ccf). The budget process is described in detail in Budgets and Variances on page 10 and residential customers can apply for a variance at <https://www.irwd.com/services/request-a-water-variance>.

1. Residential detached dwelling units

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.47 <u>\$1.54</u>	0-40
Base Rate	\$2.00 <u>\$2.12</u>	41-100
Inefficient	\$4.86 <u>\$4.91</u>	101-140
Wasteful	\$13.63 <u>\$13.65</u>	141+

2. Residential condo attached/detached dwelling units

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.54 <u>\$1.47</u>	0-40
Base Rate	\$2.12 <u>\$2.00</u>	41-100
Inefficient	\$4.91 <u>\$4.86</u>	101-140
Wasteful	\$13.65 <u>\$13.63</u>	141+

3. Apartments

(Base budget x number of dwelling units)

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.54 <u>\$1.47</u>	0-50
Base Rate	\$2.12 <u>\$2.00</u>	51-100
Inefficient	\$4.91 <u>\$4.86</u>	101-120
Wasteful	\$13.65 <u>\$13.63</u>	121+

4. Commercial, industrial, public authority and non-residential mixed usage

Tier	Rate/ccf	Percent of Budget
Base Rate	\$2.12 <u>\$2.00</u>	0-100
Wasteful	\$13.65 <u>\$13.63</u>	101+

5. Landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.54 \$1.47	0-40
Base Rate	\$2.12 \$2.00	41-100
Inefficient	\$4.91 \$4.86	101-160
Wasteful	\$13.65 \$13.63	161+

6. Agricultural irrigation

Water supplied under this section shall be used only for the growing or raising, in conformity with recognized practices of husbandry, for the purposes of commerce, trade, or industry, of agricultural, or floricultural products, and produced (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, such products to be grown or raised on parcels of land having an area of not less than five acres utilized exclusively for that purpose.

Type	Rate/ccf	Per Acre Foot
Potable Agriculture	\$2,772.94	\$1,206.61 1,280.66

Commodity Charges: Untreated Water

1. Agricultural irrigation

Type	Rate/ccf	Per Acre Foot
Non-potable Agriculture	\$1.70 <u>\$1.82</u>	\$740.52 <u>\$792.79</u>

2. Non-potable water used for lake filler

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.25 <u>\$1.19</u>	0-40
Base Rate	\$1.72 <u>\$1.57</u>	41-100
Inefficient	\$3.28 <u>\$3.15</u>	101-140
Wasteful	\$6.97 <u>\$6.62</u>	141+

3. Santiago Aqueduct Commission (SAC) water

Type	Rate/ccf	Per Acre Foot
Agricultural	\$1.92 <u>\$1.80</u>	\$836.36 <u>\$784.08</u>
Non-Agricultural	\$1.82 <u>\$1.70</u>	\$792.80 <u>\$740.52</u>

4. Landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.25 <u>\$1.19</u>	0-40
Base Rate	\$1.72 <u>\$1.57</u>	41-100
Inefficient	\$3.28 <u>\$3.15</u>	101-140
Wasteful	\$6.97 <u>\$6.62</u>	141+

Commodity Charges: Recycled Water System

1. Landscape irrigation

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.25 \$1.19	0-40
Base Rate	\$1.72 \$1.57	41-100
Inefficient	\$3.28 \$3.15	101-140
Wasteful	\$6.97 \$6.62	141+

2. Landscape irrigation recycled loan customers

Tier	Rate/ccf	Percent of Budget
Low Volume	\$1.54 \$1.47	0-40
Base Rate	\$2.12 \$2.00	41-100
Inefficient	\$4.91 \$4.86	101-140
Wasteful	\$13.65 \$13.63	141+

3. Agricultural irrigation

Type	Rate/ccf	Per Acre Foot
Recycled	\$1.79 \$1.64	\$779.72 \$714.38

4. Commercial and industrial

Tier	Rate/ccf	Percent of Budget
Base Rate	\$1.25 \$1.19	0-100
Wasteful	\$6.97 \$6.62	101+

5. Commercial and industrial loan customers

Tier	Rate/ccf	Percent of Budget
Base Rate	\$2.12 \$2.00	0-100
Wasteful	\$13.65 \$13.63	101+

Budgets and Variances

1. Base budgets for commodity charges

Monthly budget includes a fixed component for indoor usage and a variable component based on evapotranspiration (ET) rate for landscape irrigation.

Account Type	Base Budget Number of Residents	Landscape Area (LA)	Base Budget Indoor	Base Budget Outdoor ET x LA x PF	Total Budget
Residential Detached	4	1300 sq. ft (0.03 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Residential Condo Attached/ Detached*	3	435 sq. ft (0.01 acres)	# Residents x 50 gpd (IU)	ET x LA x 0.75	(Indoor x # days in bill service period) + Outdoor
Apartments*	2	N/A	# Residents x 50 gpd (IU)		Indoor x # days in bill service period
Potable Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.75	Outdoor based on bill service period
Recycled Irrigation		Site specific based on irrigated acreage	N/A	ET x LA x 0.87	Outdoor based on bill service period
Commercial, Industrial, Institutional			Site specific, based on productivity, employees, water use efficiency practices etc.	Site specific, based on irrigation needs	Site specific, adjusted for # days in bill service period

*For master-metered apartments and condominiums, the base budget is multiplied by the number of dwelling units.

CCF = 100 cubic feet. 1 CCF = 1 billing unit = 748 gallons

ET = reference evapotranspiration – from IRWD weather stations located in coastal, central or foothill zones for cool season turf

GPD = gallons per day

IU = Internal Use – assumes 50 GPD per person

LA = irrigated landscape acres

PF = plant factor. Adjusts ET based on plant needs relative to cool season turf and irrigation system efficiency requirements. The plant factor for potable irrigation is 0.75. For recycled water the plant factor is 0.87.

2. Budget variances

Variances are available for larger than normal landscaped areas, more people living in the home or special medical needs. Applications for variances may be obtained from the District website

<https://www.irwd.com/services/request-a-water-variance> or from Customer Service at (949) 453-5300. See IRWD Rules and Regulations, Section 12.6 for variance procedure.

3. Grounds for variance

Applicants must provide proof acceptable to the District to support any variance request.

a. Number of people residing in a residential dwelling unit

Each additional person increases the budget by 1.6 ccf/month which is IU x 0.8.

b. Landscape

Increased budgets shall be given for residential lot size beyond the standard base budget lot size. Applicants must provide acceptable documentation to the District of the actual irrigated landscape area served.

c. Medical needs

- Approval is contingent upon medical documentation.
- Increased budget will be determined on a case by case basis and based on the type of medical need.

d. Licensed care facilities (in a residential dwelling unit)

- A current license from appropriate regulatory agency will be required.
- A licensed 24-hour care facility will be provided budget increases based on the IU x 0.8 for each additional resident.
- A licensed day care facility (not 24-hour) will be provided budget increases based on the IU x 0.5 for each additional person.
- Additional budget for medical reasons will be determined on a case by case basis.

e. Fire control zones

- Adjustments to budgets will be determined by the District based upon relevant factors such as area, slope, planting material, etc.

f. Commercial/industrial/public authority

- Adjustments to the base budget will be determined on a case by case basis. Relevant factors will include expansion of productive capacity, existing conservation practices that can be shown to have reduced water usage, severe economic hardship, etc.

g. New account establishment variance

- Landscape accounts – billed at the base rate for the first six months and, beginning in the seventh month, the budget will be based on irrigated acres.
- Commercial and industrial accounts – billed at the base rate on usage for the first six months and, beginning in the seventh month, the monthly budget will be based on unique business and site demands as determined by the District.

4. Limitations

- a. An approved variance will become effective on the date the request for variance is approved by the District, but must be submitted within thirty (30) days of receipt of the bill.
- b. Approvals are valid for a period specified by the District (one year or less), and must be resubmitted on or before the expiration date to remain in effect.

5. Effect of increased budgets

a. Residential

Approved variances will extend each tier of the residential structure by a percentage.

b. Non-residential

Approved variances will extend each tier of the non-residential structure by a given percentage (or other method) determined on a case by case basis.

Pumping Surcharges

A surcharge will be added to the commodity rate of those users who reside at higher elevations and cause the District to incur additional pumping costs to supply their water. The surcharge is based upon prevailing energy costs.

1. Potable water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0.30 \$0.25
Zone 2	\$0.42 \$0.38
Zone 3	\$0.72 \$0.68

2. Recycled water pumping surcharges

Zone Name	Surcharge/ccf
Zone 1	\$0.13
Zone 2	\$0.23
Zone 3	\$0.43

Temporary Water Service Connection

1. Monthly service charge

See Chart b on page 4.

2. Commodity charge

Wherever feasible, recycled water shall be used for temporary construction uses. The Commodity Charge shall be as follows:

Potable	\$3.45 <u>3.66</u> /ccf
Recycled	\$1.75 <u>1.85</u> /ccf

3. Meter deposit

A deposit equal to the replacement cost of the construction meter shall be collected at the time of service application. The deposit will be applied to the closing bill and any remaining amount refunded to the customer. Lost meters will result in forfeiture of deposit.

Size	Cost
1", 1-1/2", 2" Disc	\$ 1,000.00
3" Turbo T2 & H2	1,900.00
4" Turbo	2,600.00
6" Turbo	4,680.00
8" Turbo	7,930.00
10" Turbo	11,750.00

4. Materials for repairing damaged construction meters

Item	Cost
Meter	Cost by size is shown in section 3 above
Swivel Hose Coupling-Female	\$ 240.00
Register With AMR & Pulse Wire	275.00
Fire Hose Adapter 3" MIP x 2-1/2"MFH	42.00
Lock	15.00
H2 Hydrant Meter Handle	22.00
Fire Hydrant Meter Lock - LRG	122.00
Rotor and Shaft Assembly (3")	721.00
Barrel Lock	30.00
Male Fitting	95.00
Hydrant Collar	100.00
Rotor Cap	27.00
Collar (with barrel lock)	106.00
Labor & Overhead	120.00
Stores Clearing	40% of total parts billed

5. High-lines for redevelopment

A high-line is a temporary service connection installed by the District to an existing customer during system upgrades or repairs to the District's system. Whenever feasible, high-lines will be metered and the customers will be billed at their regular rate. The District will determine whether a high-line should be metered.

If a high-line is unmetered, the customer will be charged using a reasonable average daily consumption based on prior consumption or based on other reasonable calculations in the absence of historical data.

New Account Fees and Security Deposits for Water Service

This section is applicable to all requests for new or transferred service.

1. Service establishment fee

A fee of \$25.00 shall be collected to establish a new account for water and sewer service, or to transfer an existing account to a new location.

2. Residential service deposit

For residential customers, a deposit of \$50.00 may be required until a one year payment history is established.

3. Non-residential service deposit

For non-residential customers, a deposit of \$100.00 is required until a one year payment history is established.

Other Water System Charges

1. Delinquency charges

All bills and charges for water, sewer and recycled water service shall be due and payable upon presentation and shall become delinquent twenty-five (25) calendar days thereafter. If payment is not made within twenty-five (25) calendar days after presentation, a late charge will be levied upon the unpaid balance as follows:

For residential and non-residential accounts with an unpaid balance of \$10 or more, a one-time charge of 10% of the unpaid balance plus 1.5% interest will be assessed, and each month thereafter the unpaid balance will be subject to an interest charge of 1.5%.

2. Non-sufficient funds checks

A \$20.00 service fee will be charged for each check returned from the bank for non-sufficient funds.

3. Service restoration charges

When service is discontinued because of delinquency in payment of a water, sewer, or recycled water bill, the service shall not be restored until all delinquent charges, late charges and interest charges, and a trip charge as specified below, have been paid.

a. Trip charge during normal working hours

The trip charge applicable for work requested to be performed during normal working hours of the District will be \$70.00. Certain exceptions may apply, ~~beginning February 1, 2020~~.

b. Trip charge after normal working hours

The trip charge applicable for work requested to be performed after normal working hours of the District will be \$95.00.

4. Tampering

If any person tampers with a District meter or District side angle stop and damages it, the customer shall pay the District for the cost of repairs, including but not limited to: parts, labor and equipment. In addition, the customer will be liable for any charges imposed under the District's Rules and Regulations.

5. Non-compliance charges for illegal connections

The District may impose charges in accordance with Section 14 of the District's Rules and Regulations.

Section 2: Sewer System

Monthly Sewer Service Charge

1. Residential

(a) Single Family and Multi-family Dwelling Units	<u>AVERAGE MONTHLY WATER USE^{1, 2, 3, 4}</u>	<u>SEWAGE SERVICE CHARGE PER MONTH</u>
	Over 1000 cubic feet (> 10.0 ccf)	• 100% rate = \$ 26.40 <u>26.35</u> per unit
	501-1000 cubic feet (5.01-10.0 ccf)	• 90% rate = \$ 23.50 <u>23.70</u> per unit
	0-500 cubic feet (0.0-5.0 ccf)	• 75% rate = \$ 49.55 <u>19.75</u> per unit
<p>(1) Monthly sewage service charge based upon average of the actual lowest three water meter readings during the twelve month period ending December 31. Charges are based on a 30 day billing period.</p> <p>(2) To qualify for the reduced rates, a customer must have usage history for a full calendar year.</p> <p>(3) No credit will be granted for vacancies resulting from the normal turnover of occupants in an existing multiple dwelling unit. The price structure contained herein includes considerations of average vacancy rates.</p> <p>(4) A newly constructed multiple dwelling unit may be billed at the non-residential metered rate, with appropriate allowance for landscape irrigation, until the structure is released for occupancy.</p>		
<u>SEWAGE SERVICE CHARGE PER MONTH</u>		
(b) Collection Service Charge (assumes 10.0 ccf)		\$ 8.50 <u>8.60</u> per unit
(c) Treatment Service Charge (assumes 10.0 ccf)		\$ 45.00 <u>15.15</u> per unit

2. Non-Residential (Commercial, Industrial, and Institutional)

<p>Quantity charges are based on the assumption that 90% of non-residential water consumption returns to the sewer. Because of landscape irrigation or consumptive usage, some non-residential users may discharge substantially less of their metered water into the sewer system. Those users may, upon request to the District, be permitted to have the amount of water being discharged into the sewer determined by means acceptable to the District. Upon request by the user and at the sole discretion of the District, an alternate service charge may be applied.</p>		
<p>To qualify for the sewage service charge only, a customer usage history cannot be greater than 120 ccf in a full calendar year based on actual meter readings. Usage exceeding 10.0 ccf per month will pay a quantity charge. During construction, prior to occupancy, these rates are applicable.</p>	<u>SEWAGE SERVICE /QUANTITY/COMMODITY CHARGE PER MONTH</u>	
Sewage service charge	\$ 26.40 <u>26.35</u>	
Quantity charge beyond 10.0 ccf	\$ 2.78 <u>2.81</u> /ccf	
Industrial Waste Charge if applicable	\$ 0.436 <u>137</u> /ccf } \$2.916 <u>2.947</u> /ccf	

Other Sewer System Charges

This section shall be applicable to non-residential customers who discharge extra-strength sewage into the sewage collection system, or discharge or have the potential to discharge constituents subject to federal or state standards and local discharge limitations.

1. Alternative service charges

At the sole discretion of the District, users may request the application of an alternative service charge for use. The alternative service charge shall be based on measured quantity and quality of water being discharged to the sewer from the user's facility by a means acceptable to the District. The alternative service charge for use shall be computed by the following formula:

$$\text{Charge for use} = VR_v + BR_b + SR_s$$

Where V = Total volume of flow in hundred cubic feet.

B = Total discharge of biochemical oxygen demand (BOD) in pounds.

S = Total discharge of suspended solids (SS) in pounds

R_v = \$ ~~4.599~~1.604 per hundred cubic feet

R_b = \$ ~~0.443~~0.447 per pound of BOD

R_s = \$ ~~0.386~~0.389 per pound of SS

2. Charges for noncompliance with permit conditions

a. Minor violation

Condition where the limitation is less than the violation and the violation is less than the technical review criterion.

Fee per violation - \$350

b. Significant noncompliance or significant violation

Condition where the violation is greater than the technical review criterion or qualifies under the definition of significant noncompliance.

Fee per violation - \$550

c. Batch dump or slug load

Fee per violation - \$550

d. Probation orders

Enforcement Compliance Schedule Agreements and subsequent two year probation, and Regulatory Compliance Schedule Agreements.

Fee per violation - \$550

e. Appeals to the Board of Directors

Appeal fee - \$500

3. Fats, oils, and grease (FOG) control programs fees

All terms and requirements for the Fats, Oils, and Grease (FOG) Control Program can be found in Section 7.13 of the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service.

a. FOG wastewater discharge permit fees (pursuant to Rules and Regs 7.13.6(4))
 Food service establishments (FSE), and those FSE that are issued a conditional waiver (CW) by the District, shall pay the following FOG wastewater discharge permit fees which do not exceed the amount determined in Table 2-29 of the 2018 Fats, Oils, & Grease Fees Study:

FSE Monthly Permit Fee:	\$7.89 per month
CW Monthly Permit Fee:	\$3.51 per month

b. These charges shall be incorporated in the monthly sewage service charges.

c. Special services/fees

1) FOG plan check fees

The following FOG plan check fees must be paid at the time FOG plans are submitted.

Food Service Establishments (FSE) and Conditional Waivers (CW)

Initial Plan Check	\$350.12
Permit Issuance and Initial Inspection	255.00
	<u>Total = \$605.12</u>

Limited Food Prep (LFP)

Initial Plan Check	\$350.12
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For FSE, CW or LFP, all initial plan checks include the initial plan check and up to one revision. If more than one revision is required, the FSE, CW or LFP will be required to pay additional plan check fees in the amount of \$301.92. This subsequent plan check fee includes up to two (2) more revisions.

2) Compliance follow-up inspection fee

If during an inspection the FSE is deemed to be out of compliance with the FOG Control Program and a compliance follow-up inspection is required, the FSE shall be required to pay \$115.00 for the compliance follow-up inspection.

3) Enforcement fees

If an FSE is deemed to be out of compliance and a Notice of Violation is issued by the District to the FSE, the FSE will be charged an enforcement fee in the amount of \$1,203.79 per incident.

4) Special study fee

This fee is for the District to review special studies at the request of the FSE, such as a performance study of bio-additives to a grease interceptor. The special study fee in the amount of \$610.02 will be required at the time of request by the FSE to the District.

5) FOG-related private lateral sewage discharge response fee

If District staff responds to a private lateral sewage discharge (PLSD) that after investigation by District staff is found to be FOG-related, the following fees shall be charged to the FSE, CW or LFP:

PLSD Response Fees During Working Hours

First Response Hour -	\$932.57
Each Additional Response Hour -	\$484.72 per hour

PLSD Response Fees After Working Hours

First Response Hour -	\$1,160.62
Each Additional Response Hour -	\$712.77 per hour

4. Special purpose discharger service charges

Special purpose discharge service fees applies to customers who have been required by the District to obtain a special purpose discharge permit issued jointly by the District and Orange County Sanitation District (OCSD). Sewage service charges will be based on reported and verified monthly flow to sewer.

Flow Service Charge: up to ~~\$1,489,421,545.35~~ per Million Gallons

5. Discharge limits

Discharge limits are included in Exhibit C of the Rules and Regulations.

Section 3: Developer Services

Water Connection Fees

1. Residential

	<u>Improvement District</u>	<u>0-5.8 DUs/acre</u>	<u>5.9-10.8 DUs/acre</u>	<u>10.9-25.8 DUs/acre</u>	<u>25.9+ DUs/acre</u>
Connection Fees Per Dwelling Unit	111*	\$3,910	\$3,448	\$2,922	\$2,467
	112	\$1,338	\$1,338	\$1,338	\$1,338
	112a (tax exempt)	\$2,462	\$2,462	\$2,462	\$2,462
	113	\$3,047	\$3,047	\$3,047	\$3,047
Development shall be gross acres excluding private parks.	125	\$2,789	\$2,789	\$2,789	\$2,789
	153	\$1,532	\$1,532	\$1,532	\$1,532
	153 PA 30	\$3,828	\$3,828	\$3,828	\$3,828
	185	\$1,748	\$1,748	\$1,748	\$1,748
	188	\$1,572	\$1,572	\$1,572	\$1,572
	*All others				

2. Commercial, industrial and public authority

	<u>Improvement District</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public Authority</u>
Connection Fees Per Gross Acre	111*	\$21,694	\$33,042	\$21,694
	112	\$8,696	\$8,696	\$8,696
	112a (tax exempt)	\$16,001	\$16,001	\$16,001
	113	\$22,258	\$0	\$22,258
	125	\$13,834	\$19,638	\$13,834
	153	\$8,047	\$11,422	\$8,047
	PA 30	\$18,993	\$26,961	\$18,993
	185	\$8,166	\$8,166	\$8,166
	188	\$6,206	\$6,206	\$6,206
	*All others			

3. Parks, churches and recreational facilities

	<u>Improvement District</u>	<u>Indoor Water Use</u>	<u>Outdoor⁽¹⁾ Water Use</u>
Connection Fees Per Fixture Unit	111*	\$67.94	\$239.09
	125	\$45.98	\$161.16
(1) Calculated per Uniform Code	153	\$26.78	\$93.86
	PA 30	\$63.17	\$221.41
	185	\$46.98	\$164.99
	188	\$31.01	\$109.08
	*All others		

4. Schools (public and private)

	<u>Improvement District</u>	<u>Indoor Primary &/or Intermediate</u>	<u>Secondary</u>	<u>Outdoor Primary Intermediate & Secondary</u>
Connection Fees Per 100 Students Based on Max Daily Attendance	111*	\$5,354	\$7,180	\$230
	125	\$3,616	\$4,855	\$162
	153	\$2,106	\$2,827	\$94
	PA 30	\$4,968	\$6,670	\$222
	185	\$3,542	\$4,969	\$160
	188	\$2,836	\$3,795	\$122

*All others

Other Water Connection Charges

1. High volume user – Non-Residential

This section shall apply to all commercial, industrial, and public authority applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Water User Connection Fee =

$$\frac{[\text{Est. Gallons per Day use} - (\text{no. acres} \times \text{use factor}^*)] \times 1,221,858/\text{cfs}}{646,320 \text{ gal/day/cfs}}$$

*Non-Residential Water Use Factor	<u>Land Use Category</u>	<u>Water Use Factors (Gal/Acre x /Day)</u>
	Commercial	2,000.00
	Industrial	4,000.00
	UCI	Special Contract

Definitions

Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.

Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and
- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

2. Service installations by District

Customers may request the District to install, relocate or abandon domestic water, recycled water and fire protection service lines. To request an action listed above, the customer must submit a Quote Request for Service or Meter Modifications which can be obtained by contacting Development Services. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation.

The District reserves the right to decline a customer's request for service installations by District for any reason. In the event the District declines to perform service installations, the requester will need to submit design plans for review and approval through Development Services. For further information, see Development Services Procedural Guidelines and General Design Requirements document which can be found at www.irwd.com.

3. Meter installations by District

Customers may request the District to install or replace (downsize or upsize) domestic water or recycled water meters. To request an action listed above, the customer must submit a Quote Request for Service or Meter Modifications which can be obtained by contacting the District’s Development Services. The District may require OCFA approval documents prior to the installation of certain meter sizes. District staff will prepare a cost estimate for the requestor. When payment is received, a work order will be issued to District staff to begin coordination and installation.

a. Meter Costs

<u>Meter size</u>	<u>Cost</u>	<u>Meter size</u>	<u>Cost</u>
5/8"	\$ 110.00	2" Disc	\$ 750.00
3/4"	170.00	2" Turbo	2,680.00
1"	240.00	3" Turbo – H2	1,900.00
1 1/2"	580.00	3" Turbo – T2	3,340.00
		4" Turbo	6,490.00

- b. The customer shall pay for the cost of additional parts and labor needed for the installation or replacement. For example, the cost to convert from 5/8" or 3/4" to a 1" meter is \$2,000. This price is in addition to the cost for a 1" meter.
- c. The customer will be responsible for any plumbing modifications downstream of the water meter.
- d. Costs for meters larger than 4-inches will be determined by the District’s Purchasing Department at the time of request.
- e. Meter cost includes strainer.

4. Upsizing and downsizing meter request requirements

- a. It is the customer’s responsibility to ensure that any upsizing or downsizing of the meter will not have any adverse effects to the customer’s system as it relates to water pressure, fire protection or ability to successfully serve the demand of the home or business. The District may require OCFA approval of any modifications and/or a signed Request & Authorization to Change Meter Size form.
- b. Any private-side (downstream of the water meter) modifications or repairs are the sole responsibility of the customer.
- c. If for any reason the customer chooses to change back to the original size meter, all installation costs would once again apply.

A quote request for service or meter modifications can be obtained at the District’s Development Services counter.

5. Domestic water, recycled water and Natural Treatment System (NTS) plan check and inspection fees

Plan check and inspection fees for water systems shall be calculated as 10% of the bondable cost for the off-site, public, potable or recycled water system or a fixed fee as described below. Plan check and inspection fees for Natural Treatment System (NTS) shall be calculated as 5% of the bondable cost or a minimum of \$30,000.00. Residential or Natural Treatment Systems plans require a non-refundable deposit of 5% of the estimated cost. Non-residential plans require a nonrefundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. Any remaining fees shall be paid prior to final approval of the plans.

Installation of a 1" or 2" service	\$1,000.00
Removal of a 1" or 2" service	1,000.00
Installation of Fire DDCA or fire hydrants	1,000.00
Installation of recycled water hydrants or temporary construction connections	1,000.00

The overtime inspection rate is \$175.00/hr.

6. Interim water service charge – new development

Builders and developers will be charged \$35.10 per connection for water service directly related to the vertical construction process of homes. The charge applies only in a new tract and/or development for the period of time after in-tract pipelines, service mains and sewer pipelines have been connected to the District's water system. Once connections to the District pipelines are made and housing phases are released for occupancy, water used through the occupants metered house connection will be billed to the developer or resident as appropriate. Connection methods and appropriate use of water is at the sole discretion of the District. Examples of permitted uses may include construction of living structures, lot soft-scape, exterior of the home stucco/ plaster, drywall, interior stonework, interior finishing work and clean-up. Examples of unpermitted uses may include, but are not limited to, connections to sales/construction trailers, flat work, hardscaping, retaining and other walls, lot or pad soaking, streetscape, water trucks/ buffaloes or any connection practice that could pose a risk to public health resulting from a backflow condition. Unpermitted connections require a temporary construction meter. Failure to properly connect to the District's Distribution System will subject the builder/developer to non-compliance charges.

Unmetered water service is not permitted for custom lots. Developers for custom lots will be required to apply for a domestic water construction meter prior to starting construction.

Sewer Connection Fees

1. Residential

	<u>Improvement District</u>	<u>0-5.8 DUs/acre</u>	<u>5.9-10.8 DUs/acre</u>	<u>10.9-25.8 DUs/acre</u>	<u>25.9+ DUs/acre</u>
Connection Fees Per Dwelling Unit	1 (222)*	\$6,942	\$6,178	\$5,085	\$4,012
	212	\$3,492	\$3,492	\$3,492	\$3,492
	212a (tax exempt)	\$6,426	\$6,426	\$6,426	\$6,426
	213	\$5,331	\$5,331	\$5,331	\$5,331
Total acreage for any given development shall be gross acres excluding private parks.	240	\$3,830	\$3,830	\$3,830	\$3,830
	225	\$3,012	\$3,012	\$3,012	\$3,012
	253	\$1,780	\$1,780	\$1,780	\$1,780
Parks.	253 PA 30	\$3,995	\$3,995	\$3,995	\$3,995
	256	\$6,077	\$6,077	\$6,077	\$6,077
	285	\$3,120	\$3,120	\$3,120	\$3,120
	288	\$2,696	\$2,696	\$2,696	\$2,696
	OPA1 (Ridgeline)	\$6,077	\$6,077	\$6,077	\$6,077
	*All others				

2. Commercial, industrial and public authority

	<u>Improvement District</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public Authority</u>
Connection Fees Per Gross Acre	1 (222)*	\$38,906	\$67,880	\$38,906
	212	\$20,849	\$20,849	\$20,849
	212a (tax exempt)	\$38,365	\$38,365	\$38,365
	213	\$31,764	\$0	\$31,764
	240	\$17,490	\$0	\$17,490
	225	\$14,726	\$17,420	\$14,726
	253	\$8,168	\$13,554	\$8,168
	253 PA 30	\$17,812	\$29,556	\$17,812
	285	\$6,235	\$6,235	\$6,235
	288	\$10,640	\$10,640	\$10,640
	*All others			

3. Parks, churches and recreational facilities

	<u>Improvement District</u>	<u>Fee</u>
Connection Fees Per Fixture Unit	1 (222)*	\$430.45
	240	\$260.21
	225	\$230.81
	253	\$128.02
	253 PA 30	\$279.16
	288	\$70.60
	*All others	

4. Schools (public and private)

	<u>Improvement District</u>	<u>Primary & Intermediate</u>	<u>Secondary</u>
Connection Fees Per 100 Students Based on Max Daily Attendance	1 (222)*	\$20,397	\$27,200
	240	\$12,298	\$16,400
	225	\$10,844	\$14,459
	253	\$6,015	\$8,020
	253 PA 30	\$13,116	\$17,488
	288	\$3,399	\$4,529
	*All others		

Other Sewer Connection Charges

1. Sewer lateral installations by District

The District does not install sewer laterals.

2. Irvine Business Complex (IBC) – non-residential

-----Commercial/Industrial-----

	<u>Low Demand</u>	<u>Average Demand</u>	<u>High Demand</u>
Connection Fees Per 1,000 Square Feet	\$268	\$1,654	\$3,921

- a. Low Demand connections are the following categories of users: Nurseries, Warehouses, Parking Structures, RV Storage, Churches, Truck Terminals, RV Parks, Lumber/Construction Yards, and other discharge whose flow is similar in volume to these listed categories.
- b. Average Demand connections other than listed in Low or High Demand categories.
- c. High Demand connections are the following categories of users: Restaurants, Supermarkets, Car Washes, Coin Laundries, Amusement Parks, Shopping Centers with Restaurants, Food Processing Facilities, Textile Manufacturers, and other discharges whose flow is similar in volume to these listed categories.

3. High volume user – Non-Residential

This section shall apply to commercial, industrial and public authority applicants in addition to standard connection fees in all improvement districts.

Connection Fee Formula Additional High Volume Sewer User Connection Fee =

* Sewer GPD = 90% of water GPD [Est. GPD use * – (no. acres x use factor**)] x \$17.76/Gal. of Sewer Flow

**Non-Residential Sewage Flow Generators (Use Factors)	<u>Land Use Category</u>	<u>Average Flows</u>
	Commercial	1,300.00
	Industrial	2,600.00
	UCI	Special Contract

Definitions Commercial: Commercial development includes but is not limited to the following uses: Hotels, retail and offices.
Industrial: Industrial development includes but is not limited to the following uses: Manufacturing, research and development, and distribution.

Methodology for calculating redevelopment connection fees

Redevelopment connection fees will be calculated using the following methodology, effective January 1, 2014:

- 1) Calculate water and sewer connection fee based on redevelopment plans utilizing current rates and charges;
- 2) Provide a credit based on the existing project (to be redeveloped) by calculating a connection fee using current rates and charges; and
- 3) The redevelopment connection fee calculation is the difference between the new development connection fee and the connection fee credit. No refunds will be given if the credit is greater than connection fee.

4. Sanitary sewer plan check and inspection fees

The plan check and inspection fee for public sewer systems will be calculated as 10% of the bondable cost for the off-site public sewer system. Residential plans require a non-refundable deposit of 5% of the estimated cost. Non-residential plans require a non-refundable \$100 deposit. The deposit shall be submitted when submitting for first plan check. Any remaining fees shall be paid prior to final approval of the plans. The overtime inspection rate is \$175.00/hr.

District closed circuit television inspection charges

a. Initial TV inspection fee

A fee of \$0.85 per linear foot as measured from the center line of manholes will be charged for all 6-inch and larger sewer lines to be inspected by a closed circuit television camera. The District will furnish the special camera equipment and manpower to fulfill this inspection requirement. This fee is to be paid along with the other connection, meter, and inspection fees prior to the District signing developer's tract utility plans.

b. Reinspection

Fees will be assessed for reinspection by District TV Crew after corrective work is completed. Those portions of the pipeline system that have been corrected must be retelevised.

- 1) District fees for retelevising corrective work will be a flat set-up fee of two hundred fifty dollars (\$250.00) plus \$0.85 per linear foot of sewer line reinspected measured centerline to centerline of manholes.
- 2) Payment for retelevising estimated inspection fees must be received by the Development and Inspection Services prior to scheduling the reinspection. Retelevising will not be done until the fees are paid.

c. Cancellation of District's TV inspection

If it is determined by either the Contractor or Developer that the job site will not be ready or accessible for the television inspection on the scheduled date, as notified, the Contractor shall notify the District Inspection Division of the necessary cancellation at least 24 hours in advance of the scheduled inspection to avoid being charged a cancellation fee.

- 1) If the District's television crew arrives at the job site and the work is not ready or accessible, the Contractor and owner will be billed for the cancellation fee of two hundred fifty dollars (\$250.00), payable to the District prior to the date of the rescheduled television inspection.
- 2) A rescheduled inspection is to be made through the District's project inspection division.

d. Optional developer TV inspection

If the Contractor or Owner desires to have a portion of, or the entire job, TV inspected for convenience, they will be charged a fee of one hundred fifty dollars (\$150.00) plus \$0.85 per linear foot of sewer line inspected measured centerline to centerline of manholes.

Exhibit B: History of Revisions to Schedule of Rates and Charges

DATE ADOPTED	RESOLUTION	REVISION		EFFECTIVE DATE
05-23-77	1977-49	Rescind 1973-48 & 1977-42		
08-29-77	1977-71	Change in Connection Charges		09-01-77
02-27-78	1978-31	Rescind 1977-71	Discontinue Water & Sewer Service	03-01-78
07-10-78	1978-135	Rescind 1978-31	Increase	07-10-78
08-28-78	1978-154	Rescind 1978-135	Increase Connection Fees	08-28-78
01-08-79	1979-02	Rescind 1978-154	Increase Water Commodity Charges	01-08-79
06-25-79	1979-25	Rescind 1979-02	Increase Water & Sewer Charges	07-01-79
07-30-79	1979-41	Rescind 1979-25	Increase Connection Fees	07-30-79
06-23-80	1980-28	Rescind 1979-41	Increase	07-01-80
08-25-80	1980-49	Rescind 1980-28	Increase Connection Fees	08-25-80
12-22-80	1980-77	Rescind 1980-49	Increase Wastewater System Charges	01-01-81
06-15-81	1981-103	Rescind 1980-77	Increase	07-13-81
07-13-81	1981-132	Rescind 1981-103	Increase Connection Fees	07-13-81
06-28-82	1982-48	Rescind 1981-132	Increase Connection Fees & Water & Sewer Rates	07-01-82
09-27-82	1982-61	Rescind 1982-48	Delinquency Charges	10-01-82
11-22-82	1982-67	Rescind 1981-61	High-rise Connection Fees	12-01-82
06-27-83	1983-116	Rescind 1982-67	Increase	07-01-83
11-21-83	1983-137	Rescind 1983-116	Increase Dom. Water Rates & Imply. Mod. Sewer Rates	01-01-84
12-12-83	1983-132	Rescind 1983-131	High-rise Connection Fees (Sewer)	01-01-84
04-23-84	1984-13	Rescind 1983-132	Untreated & Recycled Water For Ag Use Commodity Charges Increase	06-01-84
06-25-84	1984-22	Rescind 1984-13	Decrease Water & Sewer Charges, Increase Connection Fees	07-01-84
09-10-84	1984-43	Rescind 1984-22	Change Delinquency Charge	10-01-84
01-28-85	1985-2	Rescind 1984-43	Lower Sewer Rates	02-01-85
02-25-85	1985-7	Rescind 1985-2	High Volume Connection Fee	02-25-85
03-25-85	1985-31	Rescind 1985-7	Reduce Connection Fees I.D. 103 & 3(203)	03-25-85
06-24-85	1985-37	Rescind 1985-31	Decrease Water & Sewer Chgs. Change Recycled Landscape Charge	07-01-85
12-16-85	1985-115	Rescind 1985-37	Decrease Sewer Charges	01-01-86
06-23-86	1986-28	Rescind 1985-115	Decrease Sewer Charges	07-01-86
03-23-87	1987-11	Rescind 1986-28	High Volume Connection Fees	04-01-87

Continued

DATE ADOPTED	RESOLUTION	REVISION		EFFECTIVE DATE
06-22-87	1987-27	Rescind 1987-11	Increase R-W; Nonpotable Ag	07-01-87
08-10-87	1987-44	Rescind 1987-27	Reduce Connection Fees I.D.'s 103,3(203), 102(120)121 & 106(160)161	07-10-87
09-28-87	1987-49	Rescind 1987-44	Industrial Waste Program	10-01-87
01-25-88	1988-18	Rescind 1987-49	Add Portola Hills Sewer Serf. Add Water Pumping Surcharge	02-01-88
06-27-88	1988-61	Rescind 1988-18	Reduce Monthly Sewer Charge	07-01-88
08-22-88	1988-66	Rescind 1988-61	Adjust Connection Fees	08-23-88
06-26-89	1989-38	Rescind 1988-66	Reduce Monthly Sewer Charge Reduce Recycled Landscape Increase Untreated and Recycled Ag Rates	07-01-89
08-28-89	1989-58	Rescind 1989-38	Adjust Connection Fees	08-28-89
06-26-90	1990-20	Rescind 1989-58	Reduce Monthly Sewer Charge Reduce Untreated and Recycled Ag Rates	07-01-90
07-23-90	1990-24	Rescind 1990-20	Adjust Connection Fees	07-23-90
01-28-91	1991-05	Rescind 1990-24	Eliminate High Rise and Adjust Connection Fees Add Excessive Use Surcharge	02-01-91
04-22-91	1991-09	Rescind 1991-05	Ascending Block Rate Structure and Request for Variance	06-01-91
05-28-91	1991-13	Rescind 1991-9	Commodity Rates for Landscape Customers	06-01-91
06-10-91	1991-19	Rescind 1991-13	Commodity Rates for Ag., Untreated Landscape, Portola Hills Sewer Rates and Coastal Recycled Rates	07-01-91
07-12-91	1991-37	Rescind 1991-19	Adjust Connection Fees	07-12-91
10-28-81	1991-46	Rescind 1991-37	Increase Ag Water Rate	10-28-91
04-30-92	1992-12	Rescind 1991-46	Modify Ascending Block Rate Structure	04-30-92
06-22-92	1992-22	Rescind 1991-13	Modify Ascending Block Rate Structure	07-02-92
09-28-92	1992-40	Rescind 1992-22	Adjust Connection Fees	09-28-92
01-25-93	1993-3	Rescind 1992-40	Landscape Irrigation Rates	02-01-93
03-04-93	1993-8	Rescind 1993-3	Modify Ascending Block Rate Structure	04-01-93
06-28-93	1993-22	Rescind 1993-8	Increase Water Rate and Reduce Monthly Sewer Charge	07-01-93
07-28-93	1993-26	Rescind 1993-22	Decrease Water Rates	08-01-93
09-13-93	1993-29	Rescind 1993-26	Adjust Connection Fees	09-14-93

Continued

DATE ADOPTED	RESOLUTION		REVISION	EFFECTIVE DATE
06-13-94	1994-10	Rescind 1993-29	Increase Water Rate	07-01-94
08-08-94	1994-18	Rescind 1993-10	Adjust Connection Fees	08-08-94
08-14-95	1995-20	Rescind 1994-18	Adjust Connection Fees	08-14-95
08-28-95	1995-24	Rescind 1995-20	Adjust Pumping Surcharges	10-01-95
09-25-95	1995-27	Rescind 1995-20	Adjust Connection Fees and	09-25-95
09-25-95	1995-27	Rescind 1995-24	Adjust Pumping Surcharges	11-01-95
10-23-95	1995-31	Rescind 1995-27	Adjust Pumping Surcharges	11-01-95
11-27-95	1995-35	Rescind 1995-31	Add Monthly Sewer Service Charge - Newport Coast	12-01-95
01-08-96	1996-3	Rescind 1995-35	Adjust Connection Fees to I.D. 240	01-08-96
06-10-96	1996-19	Rescind 1996-3	Adjust Pumping Surcharges Increase Nonpotable Water Charges and Modify Ascending Block Rate Allocations	07-01-96
08-12-96	1996-27	Rescind 1996-19	Adjust Connection Fees	08-12-96
08-27-96	1996-28	Rescind 1996-27	Adjust Connection Fees to I.D.'s 140 & 240	08-27-96
09-23-96	1996-32	Rescind 1996-28	Adjust Water and Sewer Fixed Charges	09-23-96
10-14-96	1996-33	Rescind 1996-32	Adjust Sewer Service Charges for Non-Residential & Portola Hills	10-14-96
06-30-97	1997-17	Rescind 1996-33	Modify Rates and Charges and Connection Fees	06-30-97
10-01-97	1997-29	Rescind 1997-17	Modify Ascending Block Rate Structure Terminology	10-01-97
06-08-98	1998-21	Rescind 1997-29	Miscellaneous Adjustments to Schedule of Rates and Charges	07-01-98
08-24-98	1998-33	Rescind 1998-21	Adjust Connection Fees	08-24-98
06-28-99	1999-25	Rescind 1998-33	Adjustments to Schedule of Rates and Charges	07-01-99
06-26-00	2000-18	Rescind 1999-25	Adjustments to Schedule of Rates and Charges	07-01-00
07-24-00	2000-24	Rescind 2000-18	Adjustments to Schedule of Rates and Charges	07-25-00
06-25-01	2001-24	Rescind 2000-24	Adjustments to Schedule of Rates and Charges	07-01-01
06-24-02	2002-22	Rescind 2001-24	Adjustments to Schedule of Rates and Charges	07-01-02
12-09-02	2002-47	Rescind 2002-22	Adjustments to Schedule of Rates and Charges	12-09-02
03-10-03	2003-7	Rescind 2002-47	Adjustments to Schedule of Rates and Charges	03-10-03
06-23-03	2003-20	Rescind 2003-7	Adjustments to Schedule of Rates and Charges	07-01-03
09-08-03	2003-35	Rescind 2003-20	Adjustments to Schedule of Rates and Charges	09-08-03
06-28-04	2004-25	Rescind 2003-35	Adjustments to Schedule of Rates and Charges	07-01-04
07-12-04	2004-32	Rescind 2004-25	Adjustments to Schedule of Rates and Charges	07-12-04
10-11-04	2004-51	Rescind 2004-32	Adjustments to Schedule of Rates and Charges	10-11-04
06-27-05	2005-20	Rescind 2004-51	Adjustments to Schedule of Rates and Charges	07-01-05

DATE ADOPTED	RESOLUTION	REVISION	EFFECTIVE DATE	
09-26-05	2005-31	Rescind 2005-20	Adjustments to Schedule of Rates and Charges	10-10-05
10-10-05	2005-35	Rescind 2005-31	Adjustments to Schedule of Rates and Charges	10-10-05
06-26-06	2006-20	Rescind 2005-35	Adjustments to Schedule of Rates and Charges	06-27-06
07-24-06	2006-27	Rescind 2006-20	Changes to Water & Sewer Connection Fees	07-24-06
06-25-07	2007-16	Partially Modifies 2006-27	Adjustments to Schedule of Rates and Charges	06-26-07
07-16-07	2007-21	Partially Modifies 2006-27	Changes to Water & Sewer Connection Fees	07-17-07
06-23-08	2008-36	Rescind 2007-21	Adjustments to Schedule of Rates and Charges	07-01-08
07-28-08	2008-45	Partially Modifies 2008-36	Changes to Water & Sewer Connection Fees	07-29-08
06-22-09	2009-20		Adjustments to Schedule of Rates and Charges	06-23-09
07/27/09	2009-24	Partially Modifies 2009-20	Changes to Water & Sewer Connection Fees	07/28/09
06/28/10	2010-19		Adjustments to Schedule of Rates and Charges	07/01/10
07/26/10	2010-22	Partially Modifies 2010-19	Changes to Water & Sewer Connection Fees	07/27/10
02/28/11	2011-3	Partially Modifies 2010-22	Changes to Sewer Connection Fees	03/01/11
06/27/11	2011-25	Rescind 2010-19	Adjustments to Schedule of Rates and Charges	07/01/11
07/25/11	2011-33	Rescind 2011-25	Changes to Water & Sewer Connection Fees	07/26/11
06/25/12	2012-26	Rescind 2011-25	Adjustments to Schedule of Rates and Charges	07/01/12
10/08/12	2012-41	Partially Modifies 2012-26	Changes to Water & Sewer Connection Fees	10/09/12
12/10/12	2012-57		Adjust Connection Fees to IDs 112 & 212	12/11/12
06/24/13	2013-21	Rescind 2012-26	Adjustments to Schedule of Rates and Charges	07/01/13
12/16/13	2013-60	Partially Modifies 2013-21	Changes to Water & Sewer Connection Fees	01/01/14
06/23/14	2014-32		Adjustments to Schedule of Rates and Charges	07/01/14
07/14/14	2014-33	Partially Modifies 2014-32	Changes to Water & Sewer Connection Fees	07/15/14
11/10/14	2014-50		Changes to the Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service	11/11/14
06/22/15	2015-17	Rescind 2014-50	Adjustments to Schedule of Rates And Charges	07/01/15
07/27/15	2015-19	Partially Modifies	Changes to Water & Sewer Connection Fees	07/28/15
06/27/16	2016-10		Adjustments to Schedule of Rates and Charges	07/01/16
07/25/2016	2016-21	Partially Modifies	Changes to Water & Sewer Connection Fees	07/26/2016

DATE ADOPTED	RESOLUTION		REVISION	EFFECTIVE DATE
06/26/2017	2017-17		Adjustments to Schedule of Rates and Charges	07/01/2017
07/24/2017	2017-19	Partially Modifies	Changes to Water & Sewer Connection Fees	09/01/2017
06/25/2018	2018-16	Rescind 2017-17	Adjustments to Schedule of Rates and Charges	07/01/2018
07/23/2018	2018-21	Partially Modifies	Changes to Water & Sewer Connection Fees	08/01/2018

FY 2019-20 and 2020-21 Operating Budgets and Proposed Rates

IRWD Board Meeting – Public Hearing

June 24, 2019



Schedule for Budget & Rate Adoption

FY 2019-20 and 2020-21

Operating Budgets and Rates

March 5	F&P Committee: Preliminary Budget Review
March 19	Special F&P Committee: Detailed Budget Review
April 2	F&P Committee: Budget Update, Impact on Rates
April 8	First Board Workshop
April 22	Second Board Workshop: Adoption of Budgets and approval of Proposition 218 Notices
May 3	Proposition 218 Notices mailed
June 24	Adopt FY 2019-20 and FY 2020-21 Rates and Charges

OPERATING BUDGET



Operating Budget FY 2019-20

Key drivers comparison to prior year budget

(in millions)	Budget			
	FY 2018-19	Budget FY 2019-20	Increase / (Decrease)	% Change
Salaries and Benefits	\$ 58.1	\$ 61.5	\$ 3.4	6.0%
Purchased Water	37.5	39.2	1.7	4.8%
Repairs and Maintenance	24.0	21.8	(2.2)	-9.3%
Electricity	14.5	17.1	2.6	17.4%
Other Expenses	23.0	27.4	4.4	18.9%
Net Operating Budget	\$ 157.1	\$ 167.0	\$ 9.8	6.3%

Operating Budget FY 2019-20

Potable Rate Development				
Tiers	Low Volume	Base Rate	Inefficient	Wasteful
Lowest Cost Source of Water	\$1.47			
Melded Cost of Water		\$1.97		
Blended Cost of Baker and Potable Imported			\$3.06	
Loaded Cost of Imported Water				\$3.17
District Wide Conservation		\$0.03	\$0.03	\$0.03
Water Banking				\$1.87
Targeted Conservation			\$1.37	\$5.75
Natural Treatment Systems (NTS)			\$0.40	\$2.81
Total Cost per Tier	\$1.47	\$2.00	\$4.86	\$13.63
FY 2018-19 Rates by Tier	\$1.40	\$1.89	\$4.73	\$13.35
Change	\$0.07	\$0.11	\$0.13	\$0.28
Use of Sinking Fund for Rate Parity (M)	\$0.7	\$0.9		

Operating Budget FY 2019-20

Recycled Rate Development

Tiers	Low Volume	Base Rate	Inefficient	Wasteful
Lowest Cost Source of Water	\$1.19			
Melded Cost of Water		\$1.54		
Loaded Cost of Imported Water			\$2.73	\$2.73
District Wide Conservation		\$0.03	\$0.03	\$0.03
Targeted Conservation			\$0.00	\$1.05
Natural Treatment Systems (NTS)			\$0.39	\$2.81
Total Cost per Tier	\$1.19	\$1.57	\$3.15	\$6.62
FY 2018-19 Rates by Tier	\$1.13	\$1.47	\$3.11	\$6.44
Change	\$0.06	\$0.10	\$0.04	\$0.18

Operating Budget FY 2020-21

Key drivers comparison to prior year budget

(in millions)	Budget FY 2019-20	Budget FY 2020-21	Increase / (Decrease)	% Change
Salaries and Benefits	\$ 61.5	\$ 64.5	\$ 3.0	4.9%
Purchased Water	39.2	44.7	5.5	13.9%
Repairs and Maintenance	21.8	17.1	(4.7)	-21.0%
Electricity	17.1	18.5	1.4	8.6%
Other Expenses	27.4	28.8	1.4	5.0%
Net Operating Budget	\$ 167.0	\$ 173.6	\$ 6.6	4.0%

Operating Budget FY 2020-21

Potable Rate Development

Tiers	Low Volume	Base Rate	Inefficient	Wasteful
Lowest Cost Source of Water	\$1.54			
Melded Cost of Water		\$2.09		
Loaded Cost of Imported Water			\$3.18	\$3.18
District Wide Conservation		\$0.03	\$0.03	\$0.03
Water Banking				\$1.79
Targeted Conservation			\$1.25	\$5.40
Natural Treatment Systems (NTS)			\$0.45	\$3.25
Total Cost per Tier	\$1.54	\$2.12	\$4.91	\$13.65
FY 2019-20 Rates by Tier	\$1.47	\$2.00	\$4.86	\$13.63
Change	\$0.07	\$0.12	\$0.05	\$0.02
Use of Sinking Fund for Rate Parity (M)	\$0.7	\$0.9		

Operating Budget FY 2020-21

Recycled Rate Development

Tiers	Low Volume	Base Rate	Inefficient	Wasteful
Lowest Cost Source of Water	\$1.25			
Melded Cost of Water		\$1.69		
Loaded Cost of Imported Water			\$2.79	\$2.79
District Wide Conservation		\$0.03	\$0.03	\$0.03
Targeted Conservation			\$0.00	\$0.99
Natural Treatment Systems (NTS)			\$0.46	\$3.16
Total Cost per Tier	\$1.25	\$1.72	\$3.28	\$6.97
FY 2019-20 Rates by Tier	\$1.19	\$1.57	\$3.15	\$6.62
Change	\$0.06	\$0.15	\$0.13	\$0.35

PROPOSED RATES



Proposed Rates – FY 2019-20 and FY 2020-21

Typical Residential Customer

	Current Rate FY 2018-19	Proposed Rate FY 2019-20	Rate Change	% Change	Proposed Rate FY 2020-21	Rate Change	% Change
Water							
Service Charge *	\$10.35	\$10.35	\$0.00		\$10.40	\$0.05	
Commodity Charge **	<u>20.23</u>	<u>21.35</u>	<u>1.12</u>		<u>22.54</u>	<u>1.19</u>	
<i>Total Water Charge</i>	\$30.58	\$31.70	\$1.12		\$32.94	\$1.24	
Sewer							
Service Charge *	<u>\$23.20</u>	<u>\$23.50</u>	<u>\$0.30</u>		<u>\$23.70</u>	<u>\$0.20</u>	
Total Typical Residential Monthly Bill	\$53.78	\$55.20	\$1.42	2.6%	\$56.64	\$1.44	2.6%

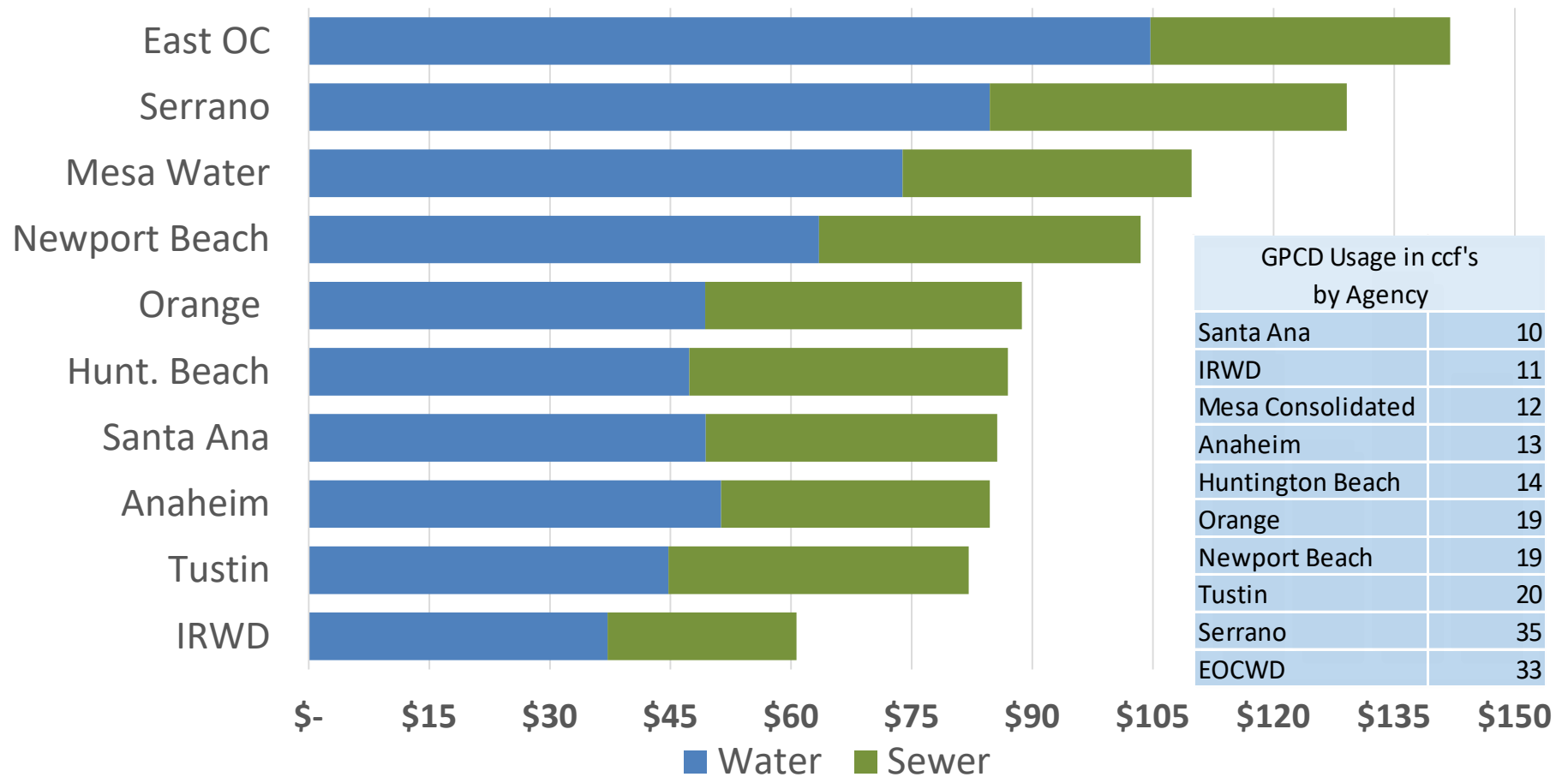
* Treated water service charge assumes a 5/8" x 3/4" meter. Both the water and sewer service charges include components for enhancement and replacement capital. No additions have been included for either fund.

** Commodity charges for a typical residential customer are based on 12 ccf (District average).

Current Rates:	Low Volume \$1.40	Base \$1.89
Proposed FY 2019-20:	Low Volume \$1.47	Base \$2.00
Proposed FY 2020-21:	Low Volume \$1.54	Base \$2.12

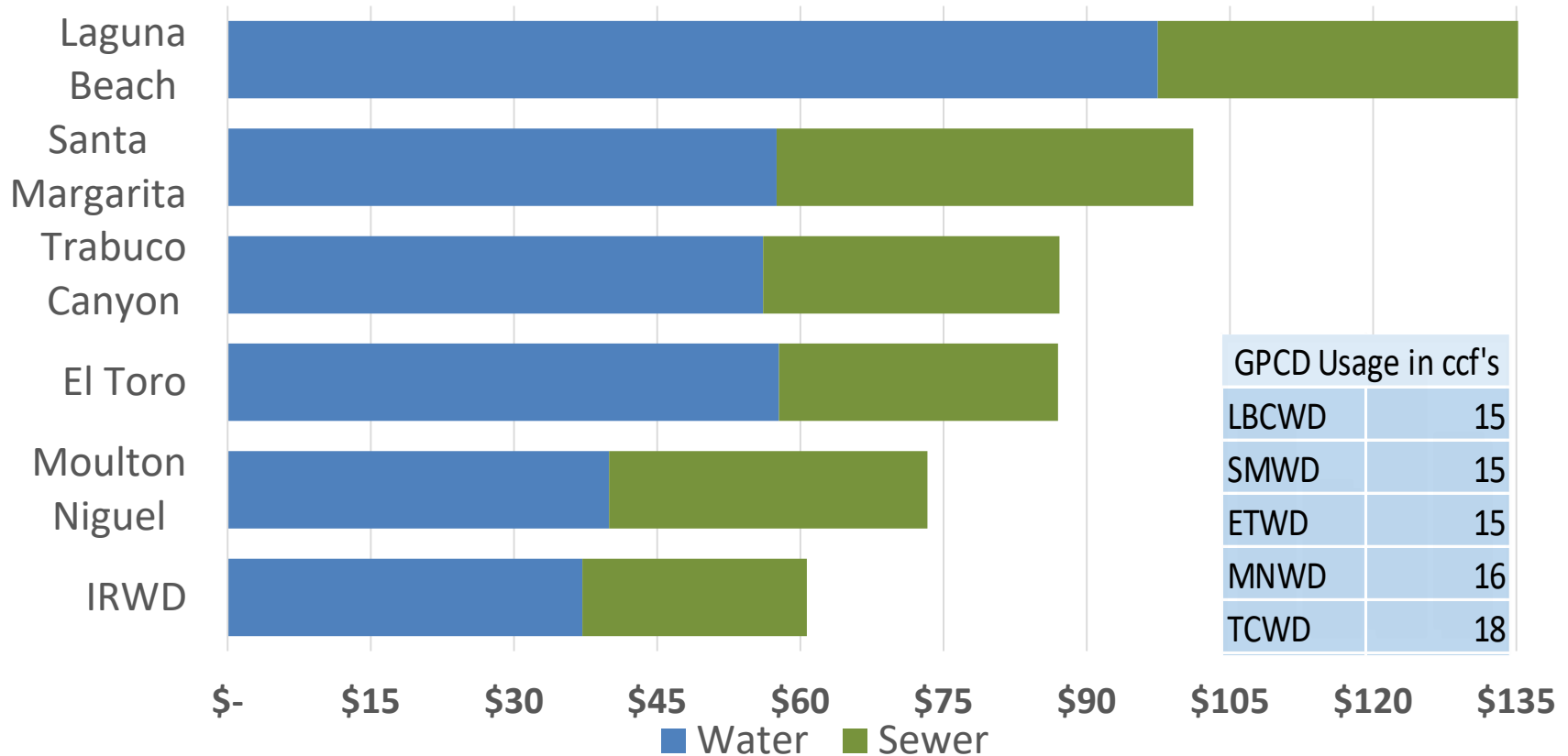
Comparison of Proposed FY 2019-20 Rates

Monthly Water & Sewer Bill Based on 15 ccf's of Usage and Groundwater Availability

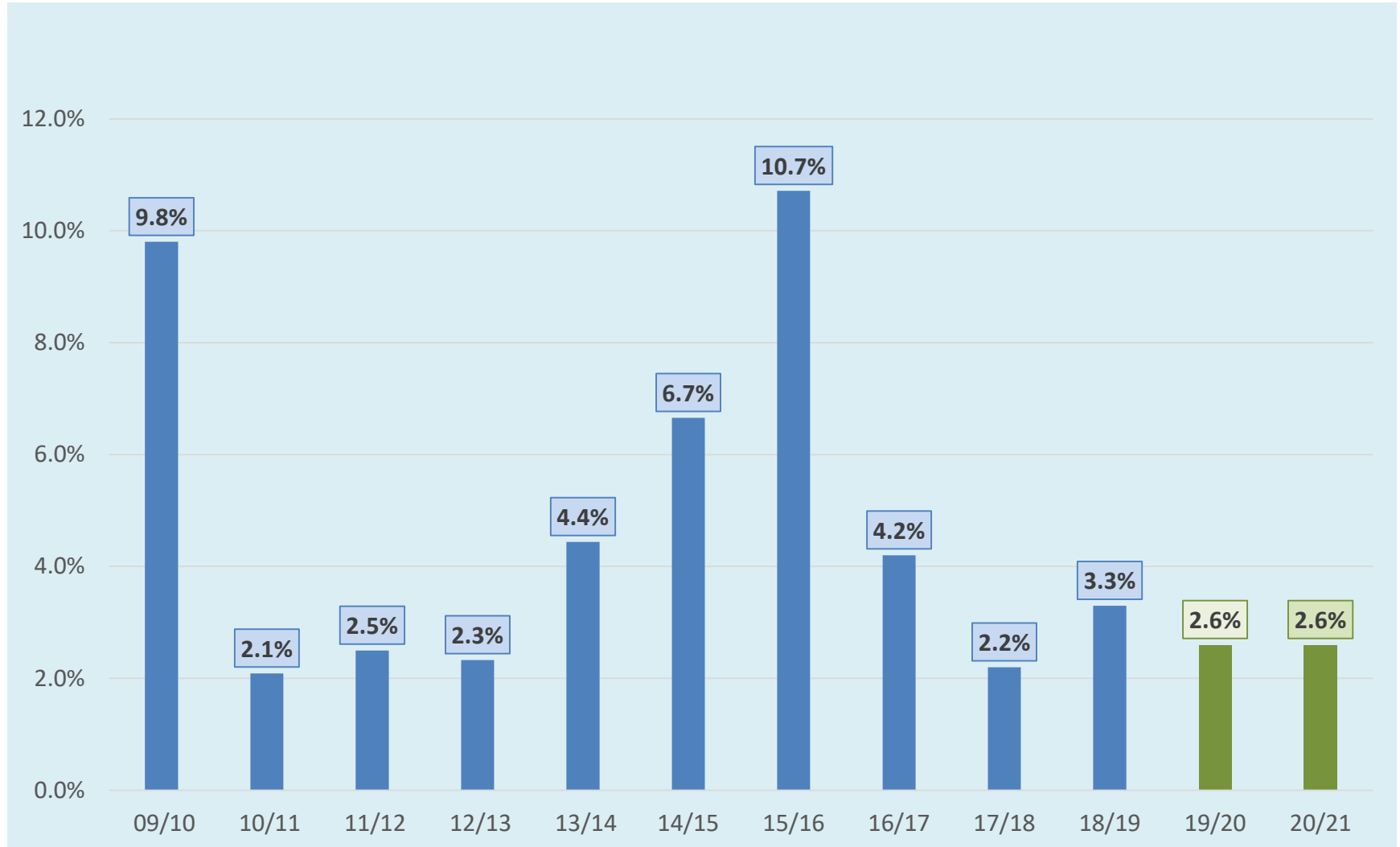


Comparison of Proposed FY 2019-20 Rates

Monthly Water & Sewer Bill Based on 15 ccf's Usage and Imported Water



Average Yearly Rate Increase History



Proposition 218 Notices

Noticing Procedure & Results

May 3 - 104,323 notices mailed

As of June 20, 2019, 782 letters returned as undeliverable

Separate notices for:

Residential, Commercial (CII), Landscape, Newport North

As of June 20, 2019, nine response letters received (included in agenda package).

Verification of protest letter counts by the District's independent auditors (Davis Farr)

Proposition 218 Notices

Primary issues raised by the protest letters:

- Protest of the rate increase percentages by tier (1 letter)
- Protest of sewer charges and the rate increase (1 letter)
- Simple protest of the rate increase (7 letters)

IRWD responses to letters:

- Individual responses
- Expanded Q & A on the IRWD website

Recommended Board Actions:

Adopt the Resolution to Approve the FY 2019-20 and FY 2020-21 changes to Rates and Charges

QUESTIONS/DISCUSSION



Exhibit "E"

May 4, 2019

IRWD
Box 5149
Irvine, CA 92616

Subject: Proposed Rate hike

Please tabulate this as a resounding **"NO" to the structure** of the proposed rate hike.

And, please pass on our sincerest **disgust** in a proposal that effective 7/1/20 would:

increase the **WASTEFUL** useage rate by ONLY **2.25%**,

yet increase the **LOW** useage rate by **10.00%**

and the **BASE** useage rate by **12.17%**

yet increase the **INEFFICIENT** useage rate by ONLY **3.8%**

It is recognized that the wasteful category is set to feel a 30 cent increase and the base category only a 23 cent increase --- but the rates were initially promulgated to encourage lower useage --- and, these proposed new rates **REDUCE INCENTIVES DRAMATICALLY!!!**

If the structure is intended to put a greater burden on low and base rate customers and provide a break for inefficient and wasteful user, the fix is certainly in:

For example: Difference between Inefficient and Base rates would DROP from \$2.86 to \$2.79

While we recognize that simply increasing all rates by an identical percentage may not be the answer, simply increasing the base and inefficient categories by the same 23 cents per ccf does not appear appropriate, either.

This is about the District's apparent choice to change to the level of striation in the future, loosening the burden for those whose useage is deemed wasteful and inefficient on the backs of those whose useage is within the base limits or below. We believe this change in the variables is unwarranted!!!!!!



Melissa Hicks & Thomas McCormack
27 Marble Sands
Newport Beach, CA 92660
(and, yes --- we are IRWD customers)

Suzanne A. Fidler
13042 Arborwalk Lane
Tustin, CA 92782

May 6, 2019

IRWD
P.O. Box 5149
Irvine, CA 92616

Dear IRWD Officials:

As a property owner located at 13042 Arborwalk Lane, Tustin, CA 92782, I adamantly object to the proposed rate increase. There must be accountability regarding where and how our dollars are being spent. Each year, our rates increase. Yet, there is no evidence of cost-savings. Why do you not budget all the money you collect from the public?

Stop this irresponsibility immediately!

Sincerely,


Suzanne A. Fidler

Elisabeth van Heeringen
24192 Kathy Ave
Lake Forest CA, 92630

May 6th 2019

IRWD
PO Box 5149
Irvine CA 92616

Re: Protest for proposed rate increase.

To Whom it may Concern:

We hereby protest for the proposed rate increase.

Mark and Julie Hendrickson

47 Calle Cabrillo
Foothill Ranch, CA 92610
949-701-2387
Ju.ma.hendrickson@gmail.com

May 6, 2019

IRWD

PO Box 5149
Irvine, CA 92616

Dear IRWD,

This is a letter expressing our opposition of the proposed rate increase for IRWD's Proposed Rate increase for Water and Sewer Services. My wife, Julie and I reside and own a house in Lake Forest and don't agree with the proposition and are sending this letter as notice of such.

Sincerely,

Mark Hendrickson and



Julie Hendrickson



FFP, LLC

May 7, 2019

Irvine Ranch Water District
P.O. Box 5149
Irvine, CA92616

Via U.S. Mail

RE: Public Hearing on the Proposed Water and Sewer Rate Change
PROTEST OF PROPOSED WATER RATE INCREASES

Dear Irvine Ranch Water District:

This is in response to the Notice of Public Hearing which was received by FFP LLC on May 6, 2019. For the record, FFP LLC is the property owner at 19531 Pauling in Foothill Ranch, CA 92610.

FFP LLC hereby opposes the Irvine Ranch Water District's proposed rate increases for July 1, 2019 and July 1, 2020.

Thank you.

Respectfully,



Cliff Russell
Operon Group
Managing Agent of FFP LLC

May 8, 2019

Irvine Ranch Water District
P.O.Box 5149
Irvine, CA 92616

To Whom It May Concern

Re Proposal for another IRWD rate increase

Your records will show that at 1 Petersburg, Irvine, we replaced the grass front yard and backyard with succulent garden. To conserve water.

Not because the IRWD corporation places restrictions on homeowners, but because it is important to conserve.

At this address, regularly the monthly water budget records LOW VOLUME.

In spite of that however the Sewer Service Charge, every statement, with all reasons and excuses provided, is three or four times the low volume water charge.

And there seems to be no end to the notices for more increase in water rates.

Ridiculous and unacceptable.

We no longer understand who makes these decisions for unending rate increases.

And why. Perhaps we need to "volunteer" to be on the Board of IRWD to understand!

This is a letter protesting the proposed rate increase.

Thanks for considering.

H. Aharonian 
1 Petersburg, Irvine, CA 92620

PS Not everyone has time to come to the public hearing or write to protest rate increases.

May 13, 2019

Irvine Ranch Water District
P.O. Box 5149
Irvine, CA92616

RE: Public Hearing on the Proposed Water and Sewer Rate Change
PROTEST OF PROPOSED WATER RATE INCREASES

Dear Irvine Ranch Water District:

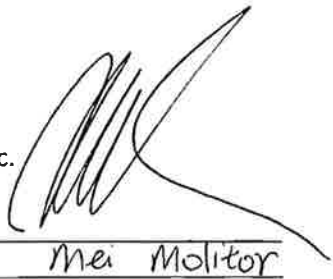
Rapid Conn, Inc. is the tenant and occupant of the property known as 19571 Pauling in Foothill Ranch, California and hereby opposes the proposed water rate increases for July 1, 2019 and July 1, 2020.

Thank you.

Sincerely,
Rapid Conn, Inc.

Signature

Print



Mei Molitor

May 25, 2019

Dear Irvine Ranch Water District,

This is a letter to oppose the proposed rate increases. The water bill keeps increasing and is not helping the cost of living. We are against the increase.

Thank you,

Lisa Che Hui

Lisa Che Hui

163 Cherrybrook Ln

Irvine CA 92618

Acct # 2749210000

FROM

L. Hui

163 Cherrybrook Ln

Irvine CA 92618



SAVE A
STAMP.
PAY
ONLINE.

Orange Lake Water District
P.O. Box 5149
Orange, CA 92616

"Written Protest Letter"

Gentlemen

I'm writing this letter in
protest to your upcoming
rate increase.

Currently, I have a very low
water usage. I'm retired
on a very fixed income.

Please reconsider my request
to not increase my fees.

Thank you.

Marilyn Lamb
39 Egret Court
Newport Beach CA 92660

June 24, 2019
Prepared and
submitted by: K. Swan
Approved by: Paul A. Cook



CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS'
ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

June 21	Monthly Discussion of District Activities with the General Manager
July 19	Southern California Water Committee Quarterly Luncheon, Carlsbad
July 27	OCSD Centrifuge Facility Opening, Fountain Valley

Mary Aileen Matheis

June 26-28	Watershed Stewardship in the Wildland Urban Interface, Auburn
July 27	OCSD Centrifuge Facility Opening, Fountain Valley
August 13-16	Urban Water Institute's 26 th Annual Water Conference, San Diego

Doug Reinhart

June 27	ACC-OC Summer Reception at the Duck Club
August 13-16	Urban Water Institute's 26 th Annual Water Conference, San Diego

John Withers

June 27	ACC-OC Summer Reception at the Duck Club
July 27	OCSD Centrifuge Facility Opening, Fountain Valley

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LAMAR, MARY AILEEN MATHEIS, DOUG REINHART, AND JOHN WITHERS AS DESCRIBED HEREIN.

LIST OF EXHIBITS:

None.

June 24, 2019
Prepared and
submitted by: L. Bonkowski
Approved by: Paul A. Cook *P. Cook.*

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the June 10, 2019 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JUNE 10, 2019 REGULAR BOARD MEETING AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – June 10, 2019 Minutes of Regular Board Meeting

EXHIBIT "A"

MINUTES OF REGULAR MEETING – JUNE 10, 2019

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President LaMar on June 10, 2019 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Matheis, Swan, Withers and LaMar.

Directors Absent: Reinhart.

Also Present: Executive Director of Finance and Administration / Acting General Manager Clary, Executive Director of Technical Services Burton, Executive Director of Water Policy Weghorst, Executive Director of Operations Chambers, Director of Water Resources Sanchez, Director of Public Affairs Beeman, Director of Human Resources Roney, General Counsel Collins, Assistant Secretary Swan, Government Relations Officer / Deputy General Counsel Compton, Director of Water Quality and Regulatory Compliance Colston, Director of Water Operations Roberts, and members of staff and the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

CONSENT CALENDAR

President LaMar asked that Item Nos. 5 and 7 be moved to the Action Calendar. Director Swan further asked that Item No. 8 be moved to the Action Calendar for discussion. There being no objections, these items were moved accordingly. On MOTION by Withers, seconded by Matheis and carried (4-0), CONSENT CALENDAR ITEMS 3, 4, 6, AND 9 WERE APPROVED AS FOLLOWS:

3. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Mary Aileen Matheis, Peer Swan, Douglas Reinhart, Steven LaMar and John Withers, as described.

4. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the May 13, 2019 Regular Board Meeting and the May 22, 2019 Adjourned Regular Board meeting be approved as presented.

6. APRIL 2019 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer’s Investment Summary Report, the summary of fixed and variable rate debt, and Disclosure Report of Reimbursements to Board members and staff; approve the April 2019 Summary of Payroll ACH payments in the total amount of \$2,012,001 and approve the April 2019 accounts payable Disbursement Summary of warrants 397438 through 398263 Workers’ Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$28,361,456.

9. WATER SUPPLY ASSESSMENT FOR THE UNIVERSITY RESEARCH PARK 9 PROJECT

Recommendation: That the Board approve the Water Supply Assessment for the University Research Park 9 Project.

ACTION CALENDAR

2019 LEGISLATIVE AND REGULATORY UPDATE

Using a PowerPoint presentation, Government Relations Officer / Deputy General Counsel Compton provided the Board with an update on the 2019 Safe Drinking Water Proposals. Following discussion, on MOTION by Matheis, seconded by Swan, and carried (4-0 vote), THE BOARD ADOPTED AN “OPPOSE UNLESS AMENDED” POSITION ON AB 217 (GARCIA) AND A “SUPPORT” POSITION ON ACA 89 (COOLEY), SB 200 (MONNING), AND THE DROUGHT RESILIENCY AND WATER SUPPLY INFRASTRUCTURE ACT (FEINSTEIN).

IRWD SALARY GRADE SCHEDULE CHANGE FOR FY 2019-20

President LaMar said that pursuant to Government Code Section 54953 (c)(3), prior to taking final action on changes to salary schedules that include salary ranges for local agency executives, he wanted to provide a summary of the recommended actions. He said that the Fiscal Year 2019-20 District Salary Grade Schedules are to be revised for the Managers, Exempt Supervisors, Confidential and Exempt Employees, the General Unit, and the Non-Exempt Supervisor Unit. He further said that the revisions consist of adjustments to the salary ranges for a Cost of Living increase adjustment of 3.3 percent effective July 1, 2019, and additions, deletions, and the reclassification of certain positions. Director Withers left the Boardroom. On MOTION by LaMar, seconded by Matheis and carried (3-0) (Swan, Matheis and LaMar voting aye, and Withers absent), THE BOARD ADOPTED THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2019 –15

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT SUPERSEDING
RESOLUTION NO. 2019-9 AND ADOPTING A REVISED
SCHEDULE OF POSITIONS AND SALARY RATE RANGES
FOR THE GENERAL EMPLOYEE UNIT, THE NON-EXEMPT
SUPERVISOR UNIT, AND FOR MANAGERS, EXEMPT
SUPERVISORS, CONFIDENTIAL AND EXEMPT EMPLOYEES

RESOLUTION FOR THE SYPHON RESERVOIR IMPROVEMENT PROJECT APPLICATION FOR TITLE XVI GRAND FUNDING

Director Swan said that to be consistent with his position on Syphon Reservoir that he is voting no on this item as he believes there are other cheaper alternatives that should be investigated, and he does not believe this is a good use of either ratepayer or taxpayer money. President LaMar reported that the Board has approved moving ahead with the Syphon Reservoir and that this item is an opportunity to reduce the cost to our customers by a significant amount, and was disappointed that Director Swan believes that he needs to vote no as staff and the Board have not yet progressed to the stage of reviewing the environmental documents or making a decision on the project, and that this item would simply allow the District to obtain some federal dollars to fund investigations and the work it is doing now. Director Swan then requested Secretary Bonkowski to include the following statement verbatim into the minutes. *“1) it is consistent with my vote against this reservoir project the first time so I have been on record as voting no against this project; and 2) the sewer master plan was done and it was a plan on how to handle recycled water, and I had asked to review that before it was adopted, and apparently the Friday report shows that it was adopted, and we are going on into yet another phase so I think it is a creeping thing if we have not yet met what I thought was a commitment to be open about this transaction in studying and looking at the alternatives. I have asked for the project to be reviewed. That request was declined. I mean a 40-year Director asking to review a \$100 million project before we go spend ratepayer’s and taxpayer’s money is just so strange and unusual that if we had some kind of press coverage at all it would have been picked up as strange so because of all of these things I am voting against this. I feel totally justified in doing this. I am upset that I cannot get staff to review the assumptions made to commit to this program because I think they are in serious error. So that is my position.”*

Director Withers returned to the Board room. Director Matheis said that while this item was placed on the Consent Calendar, it is appropriate that Director Swan state his position. She said that the Committee reviewed the item, and concurs with the staff recommendation to request Federal funding. On MOTION by Matheis, seconded by Withers, and carried (3-1) (Matheis, Withers and LaMar voting aye, and Swan voting no), THE BOARD ADOPTED THE FOLLOWING RESOLUTION BY TITLE AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A RELATED AGREEMENT TO RECEIVE GRANT FUNDING.

RESOLUTION NO. 2019-16

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT AUTHORIZING
SUBMISSION OF A GRANT APPLICATION FOR THE
WATERSMART TITLE XVI WIIN WATER RECLAMATION
AND REUSE PROGRAM TO THE DEPARTMENT OF
THE INTERIOR, BUREAU OF RECLAMATION, POLICY
AND ADMINISTRATION

LADD CANYON ROAD DOMESTIC WATER PIPELINE IMPROVEMENTS
CONSTRUCTION AWARD

Executive Director of Engineering and Water Quality Burton reported that Ladd Canyon Road Domestic Water Pipeline Improvements will replace approximately 2,100 feet of six-inch pipeline with 10-inch pipeline to improve fire flow.

Mr. Burton said that the District retained MBF Consultants to design the required pipeline improvements. Staff advertised the project for electronic construction bidding to a select list of 18 pipeline contractors with the bid opening on May 21, 2019. He said that Ferreira Construction, Leatherwood Construction, Paulus Engineering, Sukut Construction and T.E. Roberts submitted bids with Paulus Engineering as the apparent low bidder with a bid of \$444,116; the engineer's estimate was \$617,515. On MOTION by Mathies, seconded by Swan and carried (4-0), **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PAULUS ENGINEERING, INC. IN THE AMOUNT OF \$444,116 FOR THE LADD CANYON ROAD DOMESTIC WATER PIPELINE IMPROVEMENTS, PROJECT 10102.**

CONSULTANT SELECTION FOR RECYCLED WATER USE SITE INSPECTION,
TESTING, TRAINING, AND MAPPING

Recycled Water Development Manager Tettermer reported that State regulatory agencies require IRWD to conduct recycled water use site inspections, cross connection tests and Site Supervisor training. Mr. Tettermer said that since 2012, IRWD has used consulting services to augment staff's ability to conduct the work. He said to continue with this practice, staff solicited proposals from four firms to conduct inspections, testing work, training and some mapping over the next two years. Two firms responded with proposals from Aegis and Real Water. He said that over the past two years, IRWD has retained Aegis and Real Water to augment staff's efforts in performing recycled water use site inspections and tests and have been satisfied and recommends retaining the services of both qualified firms to conduct site inspection, testing, training and mapping over the next two years.

Director Matheis said that this item was reviewed by the Water Resources Policy and Communications Committee on June 5, 2019. On MOTION by Matheis, seconded by Swan and carried (4-0), **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE PROFESSIONAL SERVICE AGREEMENTS WITH AEGIS ENGINEERING MANAGEMENT AND REAL WATER CONSULTANTS, EACH IN AN AMOUNT NOT TO EXCEED \$447,500, TO PROVIDE ON-CALL RECYCLED WATER USE SITE INSPECTION, TESTING, SITE SUPERVISOR TRAINING, AND SITE MAPPING FOR A TWO-YEAR PERIOD.**

WATER EFFICIENCY TACTICAL INCENTIVES FUNDING AUTHORIZATION

Ms. Nola Hastings reported that the District's Water Use Efficiency Program includes a "Tactical Incentives" element to encourage customers to install water conservation devices that are cost-effective to the District and are one of the key elements of this program. Ms. Hastings said that the financial incentives provided by IRWD are used to

supplement existing regional rebate programs that are administered by Metropolitan Water District of Southern California or MWDOC. The IRWD incentives are provided taking into consideration costs that are avoided by IRWD as a result of the installation and use of the various water conservation devices.

Ms. Hastings said that in July 2015, the Board approved a 10-year Water Conservation Participation Agreement with MWDOC, and each fiscal year, addendums to the agreement are executed to allocate funding and to specify device rebate funding levels for the Residential, Commercial, Water Savings Incentive, Turf Removal and Spray to Drip programs. She said that proposed funding levels per device for FY 2019-20 have been revised from FY 2018-19 to reflect the elimination of indoor device incentives. She further said that the total incentives program funding in the amount of \$450,000 is included in the FY 2019-20 Operating Budget and that authorization by the Board is necessary to allocate funds to the Water Conservation Participation Agreement with MWDOC, which is necessary to continue providing program incentives through FY 2019-20.

Director Withers said that this item was reviewed by the Water Resources Policy and Communications Committee on June 5, 2019, and on MOTION by Withers, seconded by Matheis and carried (4-0), **THE BOARD AUTHORIZED THE GENERAL MANAGER TO ALLOCATE \$450,000 IN FUNDING TO THE FY 2019-20 REBATE PROGRAMS ADMINISTERED THROUGH THE WATER CONSERVATION PARTICIPATION AGREEMENT BETWEEN MWDOC AND IRWD; AND TO EXECUTE ADDENDUMS TO THE AGREEMENT AS MAY BE NECESSARY TO ALLOCATE FUNDS TO SPECIFIC PROGRAMS AND MODIFY DEVICE INCENTIVE LEVELS BASED ON CUSTOMER PARTICIPATION RATES AND REGIONAL PROGRAM FUNDING LEVELS.**

GENERAL MANAGER'S REPORT

Acting General Manager Clary reported that the District received the National Silver Anvil Award for its water efficiency water campaign, "See it from your lawn's perspective". She said that the judges complimented the District for its excellent use of focus groups, surveys and other research sources to inform the overall campaign strategy.

Ms. Clary further reported on the six-inch recycled water pipeline repair in Newport Coast noting that staff and the District's contractor Paulus Engineering conducted the repairs, which included repair of the pipe and the replacement of the asphalt, curb and gutter, and pavement striping. She said that the cause of the failure was due to the settling of a footing on a traffic light. The contractor's work was on a time and material basis, and last week, staff received the final invoice for the work in the amount of \$148,383. She said that this contract was executed as an urgent necessity contract in accordance with the District's purchasing policies, and in accordance with this policy, notification to the Board of this purchase order and amount is being provided at tonight's meeting.

DIRECTORS' COMMENTS

Director Withers relayed a repair line incident in a residential neighborhood where the customer was very grateful for the crew's and the General Manager's assistance during the

evening hours, shutting down the project until the morning to accommodate the residents to eliminate this noise.

Director Swan reported that Mr. Bob McVicker, a former IRWD employee, was selected to the fill the MWDOC Board vacancy replacing Mr. Wayne Osborne. He reported on meetings he attended including an OC Forum, an OCBC meeting, a WACO Planning Committee meeting, a WACO monthly meeting, an OC Water Summit meeting, a meeting with West Basin with MWD’s General Manager Jeff Kightlinger being the facilitator, and a Newport Chamber of Commerce meeting. He further asked staff to provide him with a copy of the Sewer Master Plan and a District membership list.

Director Matheis reported on her attendance at the swearing-in ceremony for the City of Irvine’s Council member Mike Carroll, a Shadetree Partnership event at the Cultivation Kitchen restaurant in Anaheim with Mr. Tom and Ms. Leslie Bonkowski, along with Mr. Ian Swift, a WACO monthly meeting, and a business outreach event at the City of Lake Forest.

Director LaMar reported on his attendance at an OC Forum meeting, a CCEEB/CED meeting, an ACWA Board meeting, and an ACWA JPIA 40th Anniversary event.

COMMUNITY UPDATES

Mr. Bruce Newell reported that Southern California Edison was replacing electrical poles in the canyon area, and that on September 19, a community meeting will be held to discuss its shut-off policy.

ADJOURNMENT

There being no further business, President LaMar adjourned the meeting at 6:07 p.m.

APPROVED and SIGNED this 24th day of June, 2019.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, Legal Counsel
– Lewis Brisbois

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June 24, 2019

Prepared by: J. Davis / T. Fournier

Submitted by: R. Jacobson / C. Clary

Approved by: Paul A. Cook



CONSENT CALENDAR

MAY 2019 TREASURY REPORTS

SUMMARY:

The following is submitted for the Board's information and approval:

- A. The Investment Summary Report for May 2019. This Investment Summary Report is in conformity with the 2019 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Summary of Fixed and Variable Debt as of May 31, 2019, as outlined in Exhibit "B".
- C. The Monthly Interest Rate Swap Summary as of May 31, 2019, as outlined in Exhibit "C".
- D. The May 31, 2019 Disbursement Summary of warrants 398264 through 399225, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$18,754,485 as outlined in Exhibit "D".
- E. The Summary of Payroll ACH payments in the total amount of \$2,025,956 as outlined in Exhibit "E".
- F. The Disclosure Report of Reimbursements to Board Members and Staff for May 2019, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of May 31, 2019, the book value of the investment portfolio was \$377,811,372, with a 2.11% rate of return and a market value of \$378,443,482. Based on the District's March 31, 2019 quarterly real estate investment rate of return of 9.42%, the weighted average return for the fixed income and real estate investments was 4.23%.

As of May 31, 2019, the outstanding principal amount of fixed and variable rate debt was \$668,825,000. The monthly weighted average all-in variable rate was 1.60%. Including the District's weighted average fixed rate bond issues of 3.70% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.48%.

Payroll ACH payments totaled \$2,025,956, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for May totaled \$18,754,485.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

This item was not submitted to a Committee; however, the investment and interest rate swap reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE MAY 2019 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,025,956 AND APPROVE THE MAY 2019 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 398264 THROUGH 399225 WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$18,754,485.

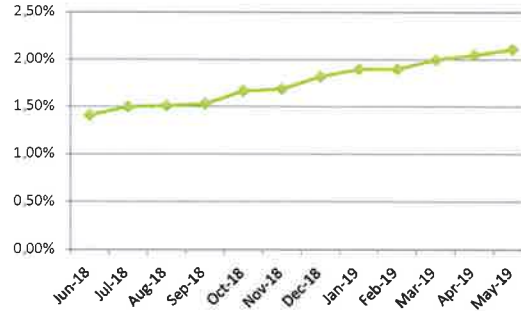
LIST OF EXHIBITS:

- Exhibit "A" – Investment Summary Report
- Exhibit "B" – Summary of Fixed and Variable Debt
- Exhibit "C" – Monthly Interest Rate Swap Summary
- Exhibit "D" – Monthly Summary of District Disbursements
- Exhibit "E" – Monthly Payroll ACH Summary
- Exhibit "F" – Disclosure of Reimbursements to Board Members and Staff

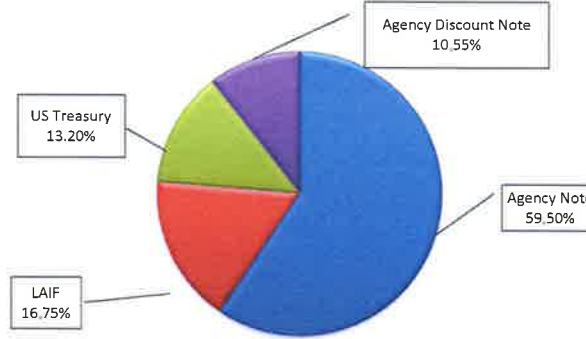
Exhibit "A"

Irvine Ranch Water District Investment Portfolio Summary May 2019

Monthly Fixed Income Yield



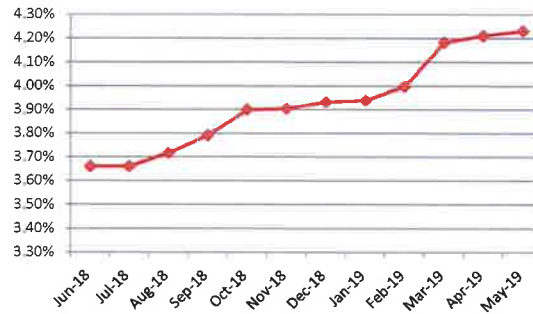
Portfolio Distribution



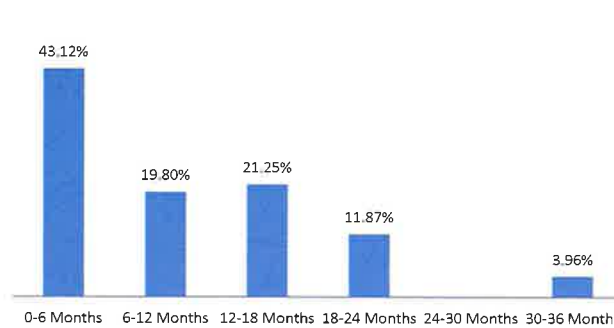
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	225,550,000	225,208,162	225,301,200
LAIF	63,500,000	63,500,000	63,509,332
US Treasury	50,000,000	49,362,072	49,884,500
Agency Discount Note	40,000,000	39,741,139	39,748,450
Grand Total	379,050,000	377,811,372	378,443,482

Weighted Average Return Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
Fed Home Loan Bank	95,000,000	25.06%
Fed Natl Mortgage Assoc	70,550,000	18.61%
Fed Farm Credit Bank	70,000,000	18.47%
State of California Treasury - LAIF	63,500,000	16.75%
US Treasury	50,000,000	13.20%
Fed Home Loan Mortgage Corp	30,000,000	7.91%
Grand Total	379,050,000	100.00%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

05/31/19

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE 5/31/2019	UNREALIZED ⁽²⁾ GAIN/(LOSS)
08/23/17			06/01/19		LAIIF	State of California Tsy.	\$63,500,000		2.440%	\$63,500,000.00	\$63,500,000.00	63,509,331.58	9,331.58
09/01/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.987%	5,087,400.00	5,001,118.31	4,998,900.00	(2,218.31)
10/12/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	1.625%	1.103%	5,068,515.88	5,002,319.00	4,998,900.00	(3,419.00)
10/12/16	NA	NA	07/19/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	1.098%	4,969,652.90	4,997,956.83	4,990,000.00	(7,956.83)
09/01/16	NA	NA	07/26/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.180%	4,995,700.00	4,999,776.47	4,990,050.00	(9,726.47)
04/18/19	NA	NA	07/31/19	NR	FHLLB - Discount Note	Fed Home Loan Bank	10,000,000	2.375%	2.425%	9,931,389.00	9,960,416.73	9,963,300.00	1,883.27
05/28/19	NA	NA	08/16/19	NR	FHLLB - Discount Note	Fed Home Loan Bank	10,000,000	2.335%	2.380%	4,974,055.50	4,975,352.78	4,975,850.00	497.22
09/01/16	NA	NA	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.160%	4,998,500.00	4,999,879.01	4,985,000.00	(14,879.01)
03/29/19	NA	NA	08/29/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.125%	1.132%	4,999,000.00	4,999,919.34	4,984,700.00	(15,219.34)
09/28/16	Quarterly	03/09/17	09/09/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.142%	4,997,500.00	4,999,761.35	4,984,250.00	(15,511.35)
04/10/18	NA	NA	09/13/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	2.375%	2.288%	5,006,000.00	5,001,197.70	4,999,900.00	(1,297.70)
09/28/16	Continuous after	12/27/16	09/27/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	1.189%	1.189%	5,001,500.00	5,000,161.79	4,982,450.00	(17,711.79)
04/18/19	NA	NA	10/01/19	NR	FHLLB - Discount Note	Fed Home Loan Bank	10,000,000	2.370%	2.429%	9,890,717.00	9,919,683.58	9,922,000.00	2,316.42
10/12/16	Continuous after	10/03/17	10/03/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	10,000,000	1.125%	1.160%	9,989,780.00	9,998,644.86	9,958,700.00	(39,944.86)
10/12/16	Continuous after	10/11/17	10/11/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.120%	1.205%	9,975,000.00	9,996,526.51	9,962,000.00	(34,526.51)
11/08/16	Quarterly	05/08/17	11/08/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	1.245%	5,000,750.00	5,000,109.59	4,976,800.00	(23,309.59)
11/28/16	NA	NA	11/15/19	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	1.375%	1.440%	4,990,550.00	4,998,541.45	4,978,250.00	(20,291.45)
05/30/19	NA	NA	11/19/19	NR	FFCB - Discount Note	Fed Farm Credit Bank	5,000,000	2.315%	2.374%	4,944,375.69	4,945,018.75	4,945,100.00	81.25
11/28/16	Quarterly	05/25/17	11/25/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.400%	1.503%	4,985,000.00	4,997,568.68	4,975,400.00	(22,168.68)
12/12/16	NA	NA	12/12/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.450%	1.440%	5,001,450.00	5,000,255.80	4,981,050.00	(19,205.80)
12/21/18	NA	NA	12/19/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.500%	1.621%	4,982,250.00	4,996,754.21	4,977,650.00	(19,104.21)
12/20/17	NA	NA	01/17/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.500%	1.932%	4,956,250.00	4,980,837.73	4,974,500.00	(6,337.73)
10/16/17	NA	NA	02/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.612%	4,987,025.00	4,995,920.00	4,970,000.00	(22,920.00)
12/19/18	NA	NA	02/29/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.250%	2.672%	9,833,593.76	9,891,093.40	9,920,300.00	29,206.60
12/20/17	NA	NA	03/13/20	Aaa/AA+/NR	FHLLB - Note	Fed Home Loan Bank	5,000,000	4.125%	1.940%	5,237,200.00	5,113,063.39	5,069,850.00	(43,213.39)
12/20/18	NA	NA	03/31/20	Aaa/AA+/AAA	Treasury - Note	US Treasury	10,000,000	2.250%	2.665%	9,948,000.00	9,964,813.70	9,994,500.00	29,686.30
10/03/17	NA	NA	04/20/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.375%	1.630%	4,968,350.00	4,988,973.55	4,961,600.00	(27,373.55)
06/29/18	NA	NA	04/23/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.500%	2.544%	4,996,000.00	4,998,093.17	5,008,250.00	10,156.83
06/29/18	NA	NA	05/15/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.566%	4,998,450.00	4,999,211.44	5,012,850.00	13,638.56
06/11/18	Continuous after	02/20/18	05/20/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.830%	1.930%	4,987,500.00	4,986,663.87	4,982,750.00	(3,913.87)
11/10/17	NA	NA	06/11/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.570%	4,997,100.00	4,998,508.34	5,015,850.00	17,341.66
11/10/17	NA	NA	06/22/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.750%	4,968,000.00	4,995,293.63	4,960,250.00	(35,043.63)
04/19/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.535%	4,886,000.00	4,941,836.73	4,961,750.00	19,913.27
06/08/17	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.052%	4,923,000.00	4,940,348.02	4,961,750.00	21,401.98
12/20/18	Quarterly	11/10/16	08/10/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.450%	2.052%	4,923,000.00	4,957,026.97	4,958,550.00	1,523.03
09/14/18	NA	NA	08/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.680%	2.789%	4,989,700.00	4,993,471.83	5,039,050.00	45,578.17
05/21/18	Continuous after	12/01/17	09/01/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.680%	2.735%	4,884,250.00	4,936,434.65	4,972,000.00	35,565.35
09/14/18	NA	NA	09/04/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.690%	2.794%	4,990,050.00	4,993,638.07	5,040,350.00	46,711.93
12/12/17	NA	NA	09/28/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%	2.000%	5,000,000.00	5,000,000.00	4,985,000.00	(10,950.00)
10/31/17	One Time	09/28/18	10/30/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%	5,550,000.00	5,522,250.00	5,522,250.00	(27,750.00)
09/28/18	NA	NA	10/31/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.750%	2.847%	4,889,453.13	4,853,858.20	4,977,550.00	123,691.80
12/13/17	Continuous after	08/23/17	11/23/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.770%	2.060%	4,958,750.00	4,975,081.32	4,982,400.00	7,318.68
12/13/17	Quarterly	05/24/18	11/24/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.900%	2.023%	4,982,500.00	4,989,422.01	4,988,600.00	(822.01)
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%	1.964%	4,983,550.00	4,991,820.28	4,987,350.00	(4,470.28)

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

05/31/19

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 5/31/2019	UNREALIZED ⁽²⁾ GAIN/(LOSS)
12/20/17	NA	NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%	2.023%	4,978,400.00	4,986,734.78	4,988,650.00	1,915.22
11/09/18	NA	NA	12/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.375%	2.958%	4,939,843.75	4,955,516.64	5,025,600.00	70,083.36
10/12/18	NA	NA	01/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.375%	2.890%	9,664,843.76	9,757,190.85	9,894,100.00	136,909.15
12/14/18	NA	NA	02/16/21	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	2.806%	4,954,750.00	4,963,344.65	5,028,700.00	65,355.35
12/14/18	NA	NA	02/28/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%	2.755%	4,919,515.95	4,934,575.54	4,999,400.00	64,824.46
02/12/19	NA	NA	03/12/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	2.500%	2.516%	9,996,500.00	9,997,002.64	10,088,200.00	91,197.36
02/25/19	NA	NA	03/12/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.375%	2.549%	4,982,700.00	4,984,926.27	5,030,900.00	45,973.73
03/08/19	NA	NA	01/15/22	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	2.500%	2.460%	5,005,468.75	5,005,023.50	5,073,050.00	68,026.50
03/21/19	NA	NA	02/03/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.030%	2.361%	4,954,350.00	4,957,480.29	5,007,300.00	49,819.71
03/08/19	NA	NA	03/11/22	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.500%	2.549%	5,002,750.00	5,002,537.31	5,071,450.00	68,912.69
TOTAL INVESTMENTS							\$379,050,000			\$377,391,130.07	\$377,811,372.18	\$378,443,481.58	\$632,109.40

Petty Cash		3,400.00
Ck Balance	Bank of America	56,357.00
		<u>\$377,450,887.07</u>

⁽¹⁾ LAIF market value is as of the most recent quarter-end as reported by LAIF.
Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.

⁽²⁾ Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers

⁽³⁾ Real estate rate of return is based on most recent quarter end return

Outstanding Variable Rate Debt	\$271,700,000
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)	\$141,700,000
Investment Balance:	\$377,450,887
Investment to Variable Rate Debt Ratio:	266%
Portfolio - Average Number of Days To Maturity	282

	Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return
May	2.11%	9.42%	4.23%
April	2.05%	9.42%	4.21%
Change	0.06%		0.02%

This Investment Summary Report is in conformity with the 2019 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.
*S - Step up

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

05/31/19

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	US Treasury
05/19	\$63,500,000	16.75%	\$63,500,000			-	
06/19	10,000,000	2.64%		10,000,000			
07/19	20,000,000	5.28%		10,000,000	10,000,000		
08/19	25,000,000	6.60%		10,000,000	15,000,000		
09/19	15,000,000	3.96%		15,000,000			
10/19	30,000,000	7.91%		20,000,000	10,000,000		
11/19	20,000,000	5.28%		15,000,000	5,000,000		
12/19	10,000,000	2.64%		10,000,000			
01/20	5,000,000	1.32%		5,000,000			
02/20	15,000,000	3.96%		5,000,000			10,000,000
03/20	15,000,000	3.96%		5,000,000			10,000,000
04/20	10,000,000	2.64%		10,000,000			
SUB-TOTAL	\$238,500,000	62.92%	\$63,500,000	\$115,000,000	\$40,000,000		\$20,000,000
13 Months - 3 YEARS							
5/31/2020 - 08/31/2020	40,000,000	10.55%		40,000,000			
9/01/2020 - 11/30/2020	40,550,000	10.70%		35,550,000			5,000,000
12/01/2020 - 2/28/2021	30,000,000	7.91%		10,000,000			20,000,000
03/01/2021 - 05/31/2021	15,000,000	3.96%		15,000,000			
6/01/2021 - 8/31/2021	-						
9/01/2021 - 11/31/2021	-						
12/01/2022 - 03/31/2022	15,000,000	3.96%		10,000,000			5,000,000
02/01/2022 - 05/31/22	-						
	-						
TOTALS	\$379,050,000	100.00%	\$63,500,000	\$225,550,000	\$40,000,000		\$50,000,000

% OF PORTFOLIO

16.75%

59.50%

10.55%

13.20%

Irvine Ranch Water District
Summary of Real Estate - Income Producing Investments
3/31/2019

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 3/31/2019	ANNUALIZED RATE OF RETURN QUARTER ENDED 3/31/2019
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 145,000,000	19.60%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 30,670,120	8.55%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 11,500,000	15.84%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 9,000,000	5.90%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 11,000,000	9.08%
Total - Income Properties				\$ 72,569,826	\$ 207,170,120	15.51%
OTHER REAL ESTATE						
DESCRIPTION						
Serrano Summit - Promissory Note	Sep-17	NA	NA	\$ 81,600,000	\$ 81,600,000	4.00%
Total - Income Producing Real Estate Investments				\$ 154,169,826	\$ 288,770,120	9.42%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
May-19

MATURITIES/SALES/CALLS

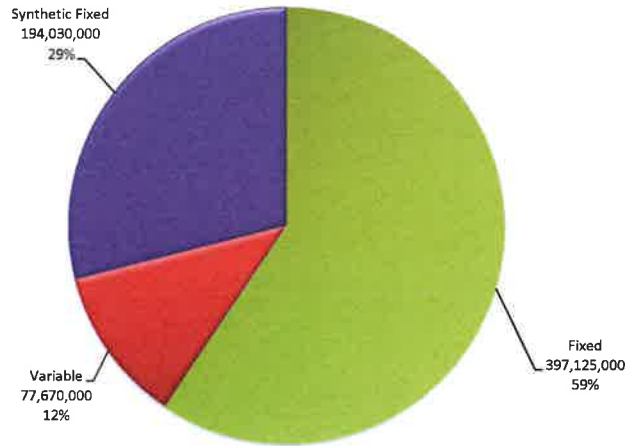
PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
5/28/2019	FHLB - Note	\$5,000,000	1.05%	5/28/2019	8/16/2019	FHLB - Discount Note	\$5,000,000	2.38%
5/30/2019	FHLMC - Note	\$5,000,000	2.25%	5/30/2019	11/19/2019	FHCB - Discount Note	\$5,000,000	2.37%

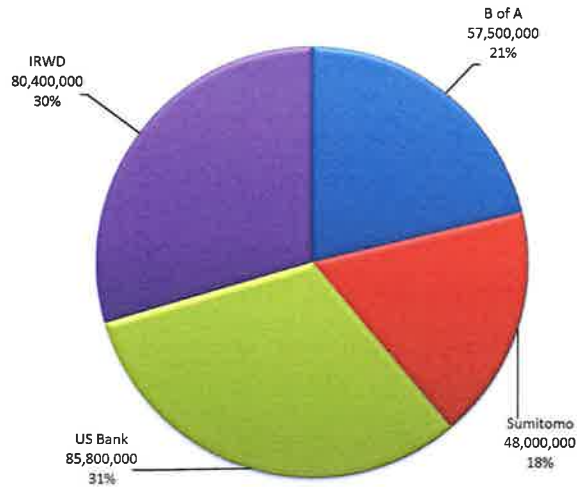
Exhibit "B"

Irvine Ranch Water District Summary of Fixed and Variable Rate Debt May 2019

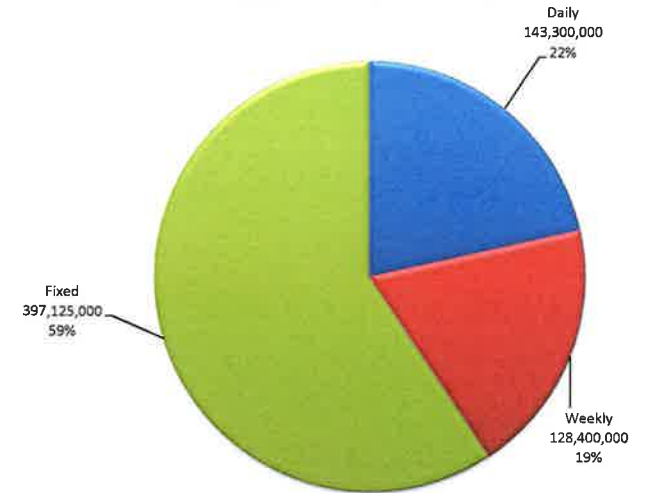
Current Debt Mix By Type



Letters of Credit / Support



Current Debt Rate Reset



Outstanding Par by Series

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit/Support	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$28,300,000	4.23%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$48,000,000	7.18%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$48,240,000	7.21%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$32,160,000	4.81%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$57,500,000	8.60%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$57,500,000	8.60%	B of A	Goldman	Variable	Daily
2010 Refunding COPS	02/23/10	03/01/20	\$1,980,000	0.30%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.46%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	26.17%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.46%	N/A	N/A	Fixed	Fixed
Total			\$668,825,000	100.00%				

IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT

May-19

ITN

Daily

Weekly

GENERAL BOND INFORMATION							LETTER OF CREDIT INFORMATION							TRUSTEE INFORMATION											
VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursement Agreement Date	L/C Exp. Date	MOODYS	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee					
SERIES 1993	05/19/93	04/01/33	APR 1	5th Bus. Day	\$38,300,000	\$28,300,000	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	\$28,681,468	0.3300%	\$94,649	BAML	DAILY	0.10%	\$28,300	BANK OF NY					
SERIES 2008-A Refunding	04/24/08	07/01/35	JUL 1	5th Bus. Day	\$60,215,000	\$48,000,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$48,710,137	0.3150%	\$153,437	BAML	WED	0.07%	\$33,600	BANK OF NY					
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	OCT 1	1st Bus. Day	\$60,545,000	\$48,240,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$60,300	BANK OF NY					
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	OCT 1	1st Bus. Day	\$40,370,000	\$32,160,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$40,200	BANK OF NY					
SERIES 2009 - A	06/04/09	10/01/41	OCT 1	1st Bus. Day	\$75,000,000	\$57,500,000	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$58,142,740	0.3300%	\$191,871	US Bank	DAILY	0.07%	\$40,250	US BANK					
SERIES 2009 - B	06/04/09	10/01/41	OCT 1	1st Bus. Day	\$75,000,000	\$57,500,000	B of A	04/01/11	07/15/19	Aa2/VMIG 1	A/A-1	A1/F1+	\$58,142,740	0.4000%	\$232,571	Goldman	DAILY	0.10%	\$57,500	US BANK					
					\$349,430,000	\$271,700,000	SUB-TOTAL VARIABLE RATE DEBT							\$193,677,085			0.3473%		\$672,528		0.10%			\$260,150	
														(Wt. Avg)					(Wt. Avg)						

FIXED RATE ISSUES																							
ISSUE	Issue Date	Maturity Date	Mar - 1	MAR/SEPT	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursement Agreement Date	L/C Exp. Date	MOODYS	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee			
2010_REFUNDING COPS	02/23/10	03/01/20	Mar - 1	MAR/SEPT	\$85,145,000	\$1,980,000	N/A	N/A	N/A	Aa1	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY		
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	MAY (2025)	MAY/NOV	\$175,000,000	\$175,000,000	N/A	N/A	N/A	Aa1	AAA	NR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK		
2016 COPS	09/01/16	03/01/46	Mar - 1	MAR/SEPT	\$116,745,000	\$116,745,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK		
SERIES 2016	10/12/16	02/01/46	Feb - 1	FEB/AUG	\$103,400,000	\$103,400,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY		
					\$480,290,000	\$397,125,000	SUB-TOTAL FIXED RATE DEBT																
					\$629,720,000	\$668,825,000	TOTAL - FIXED & VARIABLE RATE DEBT																

Remarketing Agents			GO VS COP's		
Goldman	137,900,000	51%	GO:	550,100,000	82%
BAML	76,300,000	28%	COPS:	118,725,000	18%
US Bank	57,500,000	21%	Total	668,825,000	
	271,700,000				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	48,000,000	Daily Issues	143,300,000 21%
BANK OF AMERICA	57,500,000	Weekly Issues	48,000,000 7%
US BANK	85,800,000	ITN Issues	80,400,000 12%
	191,300,000	Sub-Total	271,700,000
		Fixed Rate Issues	\$397,125,000 59%
		Sub-Total - Fixed	397,125,000
		TOTAL DEBT	
		FIXED & VAR	668,825,000 100%

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
May-19

Rmkt Agent Mode	GOLDMAN DAILY	GOLDMAN WEEKLY	GOLDMAN WEEKLY	MERRILL LYNCH DAILY	MERRILL LYNCH WEEKLY	US BANK DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	57,500,000	48,240,000	32,160,000	28,300,000	48,000,000	57,500,000
Bank Reset	BOFA	(SIFMA -1) Wednesday	(SIFMA -1) Wednesday	US BANK	Sumitomo Wednesday	US BANK
5/1/2019	1.83%	2.29%	2.29%	1.90%	2.25%	1.95%
5/2/2019	1.66%	2.11%	2.11%	1.70%	1.94%	1.80%
5/3/2019	1.48%	2.11%	2.11%	1.53%	1.94%	1.62%
5/4/2019	1.48%	2.11%	2.11%	1.53%	1.94%	1.62%
5/5/2019	1.48%	2.11%	2.11%	1.53%	1.94%	1.62%
5/6/2019	1.32%	2.11%	2.11%	1.43%	1.94%	1.47%
5/7/2019	1.13%	2.11%	2.11%	1.28%	1.94%	1.30%
5/8/2019	0.97%	2.11%	2.11%	1.17%	1.94%	1.18%
5/9/2019	0.96%	1.58%	1.58%	0.97%	1.42%	1.00%
5/10/2019	0.80%	1.58%	1.58%	0.79%	1.42%	0.95%
5/11/2019	0.80%	1.58%	1.58%	0.79%	1.42%	0.95%
5/12/2019	0.80%	1.58%	1.58%	0.79%	1.42%	0.95%
5/13/2019	0.75%	1.58%	1.58%	0.71%	1.42%	0.80%
5/14/2019	0.68%	1.58%	1.58%	0.67%	1.42%	0.66%
5/15/2019	0.60%	1.58%	1.58%	0.64%	1.42%	0.62%
5/16/2019	0.62%	1.34%	1.34%	0.63%	1.12%	0.55%
5/17/2019	0.64%	1.34%	1.34%	0.63%	1.12%	0.60%
5/18/2019	0.64%	1.34%	1.34%	0.63%	1.12%	0.60%
5/19/2019	0.64%	1.34%	1.34%	0.63%	1.12%	0.60%
5/20/2019	0.65%	1.34%	1.34%	0.70%	1.12%	0.68%
5/21/2019	0.73%	1.34%	1.34%	0.76%	1.12%	0.72%
5/22/2019	0.73%	1.34%	1.34%	0.83%	1.12%	0.82%
5/23/2019	0.77%	1.31%	1.31%	0.99%	1.07%	0.92%
5/24/2019	1.04%	1.31%	1.31%	1.19%	1.07%	1.00%
5/25/2019	1.04%	1.31%	1.31%	1.19%	1.07%	1.00%
5/26/2019	1.04%	1.31%	1.31%	1.19%	1.07%	1.00%
5/27/2019	1.04%	1.31%	1.31%	1.19%	1.07%	1.00%
5/28/2019	1.12%	1.31%	1.31%	1.23%	1.07%	1.20%
5/29/2019	1.16%	1.31%	1.31%	1.25%	1.07%	1.16%
5/30/2019	1.21%	1.41%	1.41%	1.23%	1.14%	1.27%
5/31/2019	1.22%	1.41%	1.41%	1.30%	1.14%	1.23%
Avg Interest Rates	1.00%	1.59%	1.59%	1.06%	1.40%	1.06%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.40%			0.33%	0.32%	0.33%
All-In Rate	1.50%	1.71%	1.71%	1.49%	1.78%	1.46%
Par Amount	105,740,000		32,160,000	76,300,000		57,500,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	52.74%	143,300,000	1.48%	1.04%
Weekly	47.26%	128,400,000	1.74%	1.52%
	100.00%	\$ 271,700,000	1.60%	1.26%
Fixed				
COPS 2010	0.50%	1,980,000	3.82%	
COPS 2016	29.40%	116,745,000	2.90%	
BABS 2010	44.07%	175,000,000	4.45%	(1)
SERIES 2016	26.04%	103,400,000	3.32%	
	100.00%	\$ 397,125,000	3.70%	
All-In Debt Rate Including \$130 Million Notional Amount of Swaps				3.48%

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 6.2%

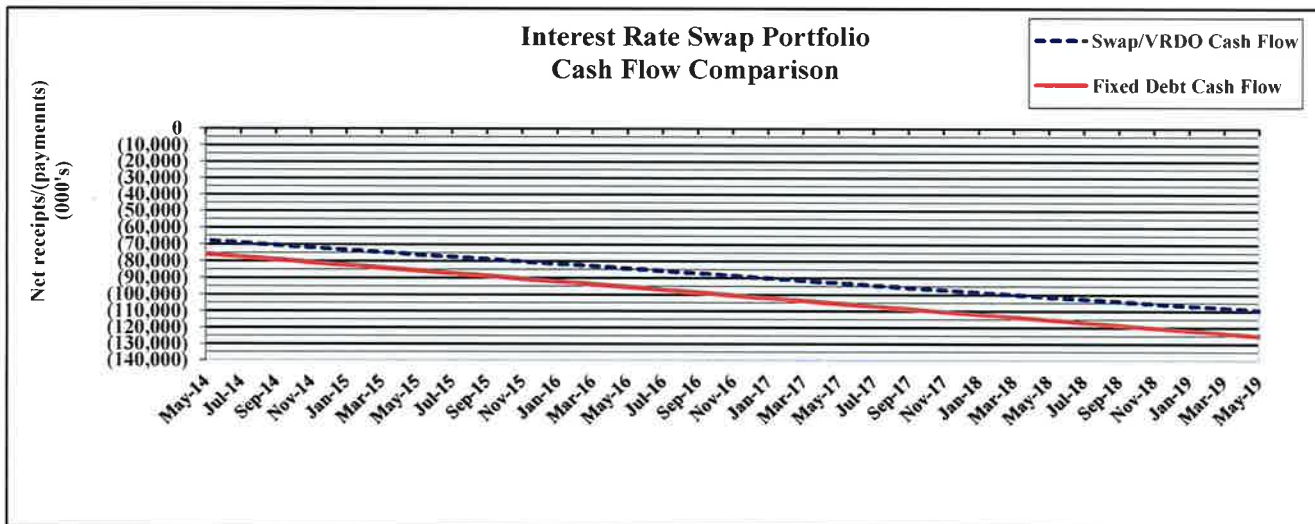
**IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
May 31, 2019**

Exhibit "C"

								Prior Mo.	Current Mo.	12-Mo Avg					
								LIBOR Avg %	2.48%	2.44%	2.32%				
Current Fiscal Year Active Swaps								Cash Flow				(Since 6/06)	Mark to Market		
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference		
Fixed Payer Swaps - By Effective Date															
6/4/2006	6/4/2019	0.0	ML	\$ 20,000,000	FXP	LIBOR	6.200%	(58,541)	(64,261)	\$ (709,136)	\$ (12,565,528)	\$ 19,995,245	\$ (4,755)		
6/4/2006	6/4/2019	0.0	CG	20,000,000	FXP	LIBOR	6.200%	(58,541)	(64,261)	(709,136)	(12,565,528)	19,995,245	(4,755)		
6/17/2006	6/17/2019	0.0	CG	30,000,000	FXP	LIBOR	6.140%	(86,425)	(95,192)	(1,049,578)	(18,633,286)	29,953,190	(46,810)		
3/10/2007	3/10/2029	9.8	ML	30,000,000	FXP	LIBOR	5.687%	(75,309)	(83,338)	(922,464)	(16,774,372)	20,065,988	(9,934,012)		
3/10/2007	3/10/2029	9.8	CG	30,000,000	FXP	LIBOR	5.687%	(75,309)	(83,338)	(922,464)	(16,774,372)	20,065,988	(9,934,012)		
Totals/Weighted Avgs		4.5		\$ 130,000,000			5.949%	\$ (354,125)	\$ (390,390)	\$ (4,312,778)	\$ (77,313,084)	\$ 110,075,656	\$ (19,924,344)		
Total Current Year Active Swaps				\$ 130,000,000				\$ (354,125)	\$ (390,390)	\$ (4,312,778)	\$ (77,313,084)	\$ 110,075,656	\$ (19,924,344)		

Current Fiscal Year Terminated Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date		Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Total Current Year Terminated Swaps								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
								Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Total Current Year Active & Terminated Swaps				\$ 130,000,000				\$ (354,125)	\$ (390,390)	\$ (4,312,778)	\$ (77,313,084)	\$ 110,075,656	\$ (19,924,344)



Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$109,325,458
Fixed Rate =	\$125,090,937
Assumptions:	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Exhibit "D"

IRWD Ledger Upgrade Report Date: 04-JUN-2019 10:42
 Void Payment Register Page: 1
 Include Zero Amount Payments: Yes Period From: 01-MAY-19 To: 31-MAY-19
 Display Payee Address: No Date: Void Date

Bank: Bank of America N.A. Branch: Los Angeles Account: Checking AP and FR
 Bank Account Currency: USD Payment Currency: USD (US Dollar)

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date

Payment Document: IRWD CHECK						
394524	20-DEC-18	INDEPENDENT SPECIAL DISTRIC	FOUNTAIN VALLEY		50.00	14-MAY-19
394862	03-JAN-19	ZHANG, MIN	PAY		24.07	14-MAY-19
395198	17-JAN-19	LI, GUOZHEN	PAY		13.84	14-MAY-19
395205	17-JAN-19	MANWARREN, WILLIAM A	PAY		31.47	14-MAY-19
395285	17-JAN-19	TRUONG, JESSICA	PAY		46.70	14-MAY-19
395297	17-JAN-19	XU, YI	PAY		428.36	14-MAY-19
395301	17-JAN-19	ZHANG, RUI	PAY		75.50	14-MAY-19
395303	17-JAN-19	ZHANG, YONGAIAN	PAY		43.94	14-MAY-19
395352	24-JAN-19	BOONE, TERRIE	PAY		32.93	14-MAY-19
395381	24-JAN-19	CLAREY, CHRISTY	PAY		302.77	14-MAY-19
395400	24-JAN-19	DERISCHEBOURG, DALE	PAY		75.00	14-MAY-19
395401	24-JAN-19	DEWEY, JANET	PAY		37.84	14-MAY-19
395448	24-JAN-19	HONG, SARINA	PAY		46.24	14-MAY-19
395483	24-JAN-19	MENDOZA, GEORGE	PAY		37.65	14-MAY-19
395499	24-JAN-19	NGUYEN, DUC	PAY		115.92	14-MAY-19
395564	24-JAN-19	THE LINDA SWAN NASH TRUST	PAY		27.67	14-MAY-19
395592	24-JAN-19	ZOU, SHANQUAN	PAY		43.12	14-MAY-19
395737	30-JAN-19	UN BRADFORD AND JASON KOO	PAY		14.15	14-MAY-19
396922	14-MAR-19	HUANG, SHIYI	PAY		17.32	14-MAY-19
397869	18-APR-19	BENBOW, JILLIAN	PAY		39.17	14-MAY-19
398065	18-APR-19	YOHEN, MASARU	PAY		39.99	14-MAY-19
398485	09-MAY-19	Ho, Connie	HOME		251.95	09-MAY-19
398955	23-MAY-19	HERITAGE FIELDS EL TORO, LL ALISO VIEJO			94,150.00	28-MAY-19
399057	24-MAY-19	U.S. BANK NATIONAL ASSOCIAT	ST. LOUIS		38,782.63	24-MAY-19

Payment Document Subtotal	134,728.23

Bank Account Subtotal	134,728.23

Voids

Report Count: 24 Report Total 134,728.23
 IRWD Ledger Upgrade Void Payment Register Report Date: 04-JUN-2019 10:42
 Include Zero Amount Payments: Yes Page: 2
 Display Payee Address: No Period From: 01-MAY-19 To: 31-MAY-19
Date: Void Date

*** End of Report ***

IRWD Ledger Upgrade Payment Register For 01-MAY-19 To 31-MAY-19 Report Date: 04-JUN-2019 10:41
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398264		02-MAY-19	Hufana, Mr. Eugenio D II (Gino)		169.02	02-MAY-19	169.02	Reconciled
398265		02-MAY-19	Johnson, Dane		1,847.22	08-MAY-19	1,847.22	Reconciled
398266		02-MAY-19	LaMar, Steven E		118.15	10-MAY-19	118.15	Reconciled
398267		02-MAY-19	Matheis, Mary Aileen		494.55	21-MAY-19	494.55	Reconciled
398268		02-MAY-19	Murphy, Alexander J (Alexander)		15.00	07-MAY-19	15.00	Reconciled
398269		02-MAY-19	Mwe, Nang		45.00	06-MAY-19	45.00	Reconciled
398270		02-MAY-19	Nash, Joel		54.52	03-MAY-19	54.52	Reconciled
398271		02-MAY-19	Oldewage, Lars D (Lars)		366.64	06-MAY-19	366.64	Reconciled
398272		02-MAY-19	Perry, Guy M (Matthew)		78.00	08-MAY-19	78.00	Reconciled
398273		02-MAY-19	Reinhart, Douglas J		935.10	06-MAY-19	935.10	Reconciled
398274		02-MAY-19	Saini, Mohit		35.90	02-MAY-19	35.90	Reconciled
398275		02-MAY-19	Stone, Mark (Mark)		1,979.42	09-MAY-19	1,979.42	Reconciled
398276		02-MAY-19	Swan, Peer		2,781.12	03-MAY-19	2,781.12	Reconciled
398277		02-MAY-19	Vo, Dan (Daniel)		278.51	15-MAY-19	278.51	Reconciled
398278		02-MAY-19	Withers, John B		120.64	06-MAY-19	120.64	Reconciled
398279		02-MAY-19	RED WING SHOE STORE	DALLAS	2,579.80	06-MAY-19	2,579.80	Reconciled
398280		02-MAY-19	ACCESS TECHNOLOGIES, INC.		9,170.83	08-MAY-19	9,170.83	Reconciled
398281		02-MAY-19	AGILENT TECHNOLOGIES, INC.		101.07	06-MAY-19	101.07	Reconciled
398282		02-MAY-19	AIRGAS, INC.		1,255.88	06-MAY-19	1,255.88	Reconciled
398283		02-MAY-19	ALEXANDER'S CONTRACT SERVICES, INC.		120,229.85	13-MAY-19	120,229.85	Reconciled
398284		02-MAY-19	ALLIANT INSURANCE SERVICES, INC		1,500.00	06-MAY-19	1,500.00	Reconciled
398285		02-MAY-19	ALSTON & BIRD LLP		161,051.36	13-MAY-19	161,051.36	Reconciled
398286		02-MAY-19	AMAZON CAPITAL SERVICES, INC.		237.78	06-MAY-19	237.78	Reconciled
398287		02-MAY-19	APPLIED INDUSTRIAL TECHNOLOGIES - CA LLC		211.48	03-MAY-19	211.48	Reconciled
398288		02-MAY-19	AQUA BEN CORPORATION		33,063.20	20-MAY-19	33,063.20	Reconciled
398289		02-MAY-19	ARMSTRONG, TORRI		352.25	10-MAY-19	352.25	Reconciled
398290		02-MAY-19	ASIAN BUSINESS ASSOCIATION, ORANGE COUNTY		1,500.00	22-MAY-19	1,500.00	Reconciled

IRWD Ledger Upgrade Payment Register For 01-MAY-19 To 31-MAY-19 Report Date: 04-JUN-2019 10:41
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398291		02-MAY-19	AT&T		55.49	07-MAY-19	55.49	Reconciled
398292		02-MAY-19	AT&T		11.59	07-MAY-19	11.59	Reconciled
398293		02-MAY-19	AT&T		503.80	07-MAY-19	503.80	Reconciled
398294		02-MAY-19	AUTOZONE PARTS, INC.		66.17	08-MAY-19	66.17	Reconciled
398295		02-MAY-19	AZTEC CONTAINER		18,446.80	14-MAY-19	18,446.80	Reconciled
398296		02-MAY-19	B & K ELECTRIC WHOLESALE		775.80	06-MAY-19	775.80	Reconciled
398297		02-MAY-19	BANK OF AMERICA		16,557.05	13-MAY-19	16,557.05	Reconciled
398298		02-MAY-19	BANK OF NEW YORK MELLON TRUST COMPANY NA		4,763.00	06-MAY-19	4,763.00	Reconciled
398299		02-MAY-19	BAO, JIANYONG		22.93	15-MAY-19	22.93	Reconciled
398300		02-MAY-19	BARRY SAYWITZ PROPERTIES TWO LP		83.13	07-MAY-19	83.13	Reconciled
398301		02-MAY-19	BAVCO BACKFLOW APPARATUS & VALVE COMPANY		598.52	06-MAY-19	598.52	Reconciled
398302		02-MAY-19	BELSHIRE ENVIRONMENTAL SERVICES, INC.		2,605.35	07-MAY-19	2,605.35	Reconciled
398303		02-MAY-19	BILL'S SWEEPING SERVICE INC		1,772.50	07-MAY-19	1,772.50	Reconciled
398304		02-MAY-19	BLACK & VEATCH CORPORATION		265,911.67	13-MAY-19	265,911.67	Reconciled
398305		02-MAY-19	BOOT WORLD, INC.		5,899.15	22-MAY-19	5,899.15	Reconciled

398306	02-MAY-19	BRENNTAG PACIFIC INC	21,426.09	13-MAY-19	21,426.09	Reconciled
398307	02-MAY-19	BSI SERVICES AND SOLUTIONS (WEST), INC.	6,535.00	07-MAY-19	6,535.00	Reconciled
398308	02-MAY-19	CALIFORNIA BARRICADE RENTAL, INC.	25,078.13	14-MAY-19	25,078.13	Reconciled
398309	02-MAY-19	CAROLLO ENGINEERS, INC	129,912.16	15-MAY-19	129,912.16	Reconciled
398310	02-MAY-19	CDW GOVERNMENT LLC	4,123.09	06-MAY-19	4,123.09	Reconciled
398311	02-MAY-19	CHAIREL CUSTOM HAY, INC.	2,767.64	07-MAY-19	2,767.64	Reconciled
398312	02-MAY-19	CHEM TECH INTERNATIONAL INC	2,600.40	14-MAY-19	2,600.40	Reconciled
398313	02-MAY-19	CHEN, JEFFREY	86.24			Negotiable
398314	02-MAY-19	CITY OF ORANGE	172.70	06-MAY-19	172.70	Reconciled
398315	02-MAY-19	CITY OF TUSTIN	66,020.33	13-MAY-19	66,020.33	Reconciled
398316	02-MAY-19	CIVIL SOURCE, INC.	48,877.50	20-MAY-19	48,877.50	Reconciled
398317	02-MAY-19	CLASS, PAT	525.00	15-MAY-19	525.00	Reconciled

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 3
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398318		02-MAY-19	CLIFFORD MORIYAMA		4,000.00	08-MAY-19	4,000.00	Reconciled
398319		02-MAY-19	COAST PLUMBING HEATING AND AIR, INC		3,500.00	06-MAY-19	3,500.00	Reconciled
398320		02-MAY-19	COMMANDER 63RD REGIONAL		1,198.52			Negotiable
398321		02-MAY-19	CONSTELLATION NEWENERGY, INC.		23,133.89	08-MAY-19	23,133.89	Reconciled
398322		02-MAY-19	COX COMMUNICATIONS, INC.		264.96	06-MAY-19	264.96	Reconciled
398323		02-MAY-19	CS-AMSCO		1,702.34	06-MAY-19	1,702.34	Reconciled
398324		02-MAY-19	CUES, INC.		146.75	06-MAY-19	146.75	Reconciled
398325		02-MAY-19	CULLIGAN OF SANTA ANA		6,000.00	08-MAY-19	6,000.00	Reconciled
398326		02-MAY-19	D & Q INTERNATIONAL PROPERTY INVESTMENT, LLC		10.50	09-MAY-19	10.50	Reconciled
398327		02-MAY-19	DIAZ, FABIOLA		113.74	03-MAY-19	113.74	Reconciled
398328		02-MAY-19	DING, NAN		26.73	07-MAY-19	26.73	Reconciled
398329		02-MAY-19	DIRECTV INC		132.53	06-MAY-19	132.53	Reconciled
398330		02-MAY-19	DIVERSIFIED COMMUNICATIONS SERVICES, INC.		8,940.00	06-MAY-19	8,940.00	Reconciled
398331		02-MAY-19	EAST ORANGE COUNTY WATER DISTRICT		70,389.18	07-MAY-19	70,389.18	Reconciled
398332		02-MAY-19	EDWARD P BAKER III		5,475.00	09-MAY-19	5,475.00	Reconciled
398333		02-MAY-19	EISEL ENTERPRISES INC		7,081.02	07-MAY-19	7,081.02	Reconciled
398334		02-MAY-19	ENTERPRISE HOLDINGS, INC.		17,066.04	13-MAY-19	17,066.04	Reconciled
398335		02-MAY-19	ENVIRONMENTAL RESOURCE ASSOCIATES		399.95	07-MAY-19	399.95	Reconciled
398336		02-MAY-19	ENVIRONMENTAL SCIENCE ASSOCIATES		2,915.00	07-MAY-19	2,915.00	Reconciled
398337		02-MAY-19	EXECUTIVE LIGHTING & ELECTRIC		895.48	07-MAY-19	895.48	Reconciled
398338		02-MAY-19	FACCOC FILIPINO AMERICAN CHAMBER OF COMMERCE OF ORANGE COUNTY		205.91	30-MAY-19	205.91	Reconciled
398339		02-MAY-19	FARRELL & ASSOCIATES		148.52	03-MAY-19	148.52	Reconciled
398340		02-MAY-19	FEDEX		264.63	06-MAY-19	264.63	Reconciled

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 4
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398341		02-MAY-19	FERGUSON ENTERPRISES, INC.		38,591.73	13-MAY-19	38,591.73	Reconciled
398342		02-MAY-19	FIERRO, SERGIO D		3,960.00	08-MAY-19	3,960.00	Reconciled
398343		02-MAY-19	FIRE EXTINGUISHING SAFETY & SERVICE		786.53	13-MAY-19	786.53	Reconciled
398344		02-MAY-19	FIRST CHOICE SERVICES		966.80	07-MAY-19	966.80	Reconciled

398345	02-MAY-19	FISHER SCIENTIFIC COMPANY LLC	4,816.56	06-MAY-19	4,816.56	Reconciled
398346	02-MAY-19	FITCH RATINGS, INC.	8,000.00	07-MAY-19	8,000.00	Reconciled
398347	02-MAY-19	FREEWAY MACHINE & WELDING SHOP	2,546.32	06-MAY-19	2,546.32	Reconciled
398348	02-MAY-19	FRONTIER CALIFORNIA INC.	282.66	10-MAY-19	282.66	Reconciled
398349	02-MAY-19	FUSCOE ENGINEERING, INC.	6,787.04	03-MAY-19	6,787.04	Reconciled
398350	02-MAY-19	GANAHL LUMBER CO.	142.63	09-MAY-19	142.63	Reconciled
398351	02-MAY-19	GARWOOD, RICHARD G	13.60	21-MAY-19	13.60	Reconciled
398352	02-MAY-19	GE, HAOJUN	16.10	08-MAY-19	16.10	Reconciled
398353	02-MAY-19	GEI CONSULTANTS INC	1,329.00	06-MAY-19	1,329.00	Reconciled
398354	02-MAY-19	GEIGER BROS	800.18	07-MAY-19	800.18	Reconciled
398355	02-MAY-19	GEIGER, KAYE	277.31	16-MAY-19	277.31	Reconciled
398356	02-MAY-19	GEOCON WEST, INC.	665.00	06-MAY-19	665.00	Reconciled
398357	02-MAY-19	GRAINGER	574.88	06-MAY-19	574.88	Reconciled
398358	02-MAY-19	HAAKER EQUIPMENT COMPANY	802.94	07-MAY-19	802.94	Reconciled
398359	02-MAY-19	HACH COMPANY	978.93	06-MAY-19	978.93	Reconciled
398360	02-MAY-19	HARDY & HARPER, INC.	25,060.00	13-MAY-19	25,060.00	Reconciled
398361	02-MAY-19	HARMSWORTH ASSOCIATES	3,680.00	17-MAY-19	3,680.00	Reconciled
398362	02-MAY-19	HARPER, KYLEENA	1.21	07-MAY-19	1.21	Reconciled
398363	02-MAY-19	HDR ENGINEERING INC	76,687.94	13-MAY-19	76,687.94	Reconciled
398364	02-MAY-19	HELPMATES STAFFING SERVICES	23,160.25	13-MAY-19	23,160.25	Reconciled
398365	02-MAY-19	HERITAGE FIELDS EL TORO, LLC	119,908.20			Negotiable
398366	02-MAY-19	HGCPM, INC	11,561.14	13-MAY-19	11,561.14	Reconciled
398367	02-MAY-19	HILL BROTHERS CHEMICAL COMPANY	17,441.64	16-MAY-19	17,441.64	Reconciled
398368	02-MAY-19	HISPANIC CHAMBER OF COMMERCE OF ORANGE COUNTY	1,500.00	07-MAY-19	1,500.00	Reconciled

IRWD Ledger Upgrade Payment Register For 01-MAY-19 To 31-MAY-19 Report Date: 04-JUN-2019 10:41
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398369		02-MAY-19	HOME DEPOT USA INC		569.27	09-MAY-19	569.27	Reconciled
398370		02-MAY-19	HSG INC		3,405.00	06-MAY-19	3,405.00	Reconciled
398371		02-MAY-19	HSU, LULU M.H.		366.00	06-MAY-19	366.00	Reconciled
398372		02-MAY-19	INDUSTRIAL METAL SUPPLY CO		249.96	08-MAY-19	249.96	Reconciled
398373		02-MAY-19	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		194,316.67	16-MAY-19	194,316.67	Reconciled
398374		02-MAY-19	IRVINE PIPE & SUPPLY INC		4,512.54	06-MAY-19	4,512.54	Reconciled
398375		02-MAY-19	JCI JONES CHEMICALS INC		3,678.68	06-MAY-19	3,678.68	Reconciled
398376		02-MAY-19	JOHNSON, JEFF		200.66			Negotiable
398377		02-MAY-19	JOHNSTONE SUPPLY		678.65	07-MAY-19	678.65	Reconciled
398378		02-MAY-19	KAO, INA		34.44	14-MAY-19	34.44	Reconciled
398379		02-MAY-19	KEATING, KATE		11.20			Negotiable
398380		02-MAY-19	KENT & AMY DAHLBERG		5,984.18	07-MAY-19	5,984.18	Reconciled
398381		02-MAY-19	KIM, BYOUNG		161.54	06-MAY-19	161.54	Reconciled
398382		02-MAY-19	KIM, SOON TAE		900.00	06-MAY-19	900.00	Reconciled
398383		02-MAY-19	KIMBALL MIDWEST		136.57	06-MAY-19	136.57	Reconciled
398384		02-MAY-19	KLEINFELDER, INC.		3,161.50	06-MAY-19	3,161.50	Reconciled
398385		02-MAY-19	KOREAN AMERICAN CHAMBER OF COMMERCE OF ORANGE COUNTY		200.00	10-MAY-19	200.00	Reconciled
398386		02-MAY-19	KOURY ENGINEERING & TESTING, INC.		3,564.00	07-MAY-19	3,564.00	Reconciled
398387		02-MAY-19	LA HABRA FENCE COMPANY INC		1,184.00	08-MAY-19	1,184.00	Reconciled
398388		02-MAY-19	LAGUNA BEACH COUNTY WATER DISTRICT		1,447.68	21-MAY-19	1,447.68	Reconciled
398389		02-MAY-19	LAI, FEIYING		59.62	10-MAY-19	59.62	Reconciled
398390		02-MAY-19	LAKE FOREST CHAMBER OF COMMERCE INC		285.00	09-MAY-19	285.00	Reconciled
398391		02-MAY-19	LAWRENCE E HIEGER AND LINDA M HIEGER		4,816.23	10-MAY-19	4,816.23	Reconciled
398392		02-MAY-19	LEED ELECTRIC, INC.		63,458.48	14-MAY-19	63,458.48	Reconciled
398393		02-MAY-19	LENNAR HOMES		2,432.79	07-MAY-19	2,432.79	Reconciled
398394		02-MAY-19	LIN, QUINN		35.82	13-MAY-19	35.82	Reconciled
398395		02-MAY-19	LOS OLIVOS APARTMENTS		29.77	23-MAY-19	29.77	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398396		02-MAY-19	LU'S LIGHTHOUSE, INC.		385.87	07-MAY-19	385.87	Reconciled
398397		02-MAY-19	MARINO, JUDY		55.00			Negotiable
398398		02-MAY-19	MC MASTER CARR SUPPLY CO		782.43	06-MAY-19	782.43	Reconciled
398399		02-MAY-19	METTLER-TOLEDO RAININ, LLC		1,296.30	06-MAY-19	1,296.30	Reconciled
398400		02-MAY-19	MICHAEL BAKER INTERNATIONAL, INC.		8,182.88	06-MAY-19	8,182.88	Reconciled
398401		02-MAY-19	MOBILE MODULAR MANAGEMENT CORPORATION		1,212.19	06-MAY-19	1,212.19	Reconciled
398402		02-MAY-19	MUNICIPAL MAINTENANCE EQUIPMENT INC		426.00	06-MAY-19	426.00	Reconciled
398403		02-MAY-19	NARAYANA, ANURADHA		32.71	07-MAY-19	32.71	Reconciled
398404		02-MAY-19	NATIONAL READY MIXED CONCRETE CO.		677.57	06-MAY-19	677.57	Reconciled
398405		02-MAY-19	NAVIGANT CONSULTING, INC		32,437.50	13-MAY-19	32,437.50	Reconciled
398406		02-MAY-19	NMG GEOTECHNICAL INC		5,350.00	10-MAY-19	5,350.00	Reconciled
398407		02-MAY-19	NORTH EAST BIOSOLIDS & RESIDUALS ASSOCIATION		2,000.00	31-MAY-19	2,000.00	Reconciled
398408		02-MAY-19	OLIN CORPORATION		21,978.38	13-MAY-19	21,978.38	Reconciled
398409		02-MAY-19	OMAR DANDASHI		920.87	21-MAY-19	920.87	Reconciled
398410		02-MAY-19	ONESOURCE DISTRIBUTORS LLC		3,378.60	06-MAY-19	3,378.60	Reconciled
398411		02-MAY-19	ORANGE COUNTY AUTO PARTS CO		739.56	03-MAY-19	739.56	Reconciled
398412		02-MAY-19	ORANGE COUNTY FIRE AUTHORITY		406.00	06-MAY-19	406.00	Reconciled
398413		02-MAY-19	ORANGE COUNTY LAFCO		5,600.00	07-MAY-19	5,600.00	Reconciled
398414		02-MAY-19	ORANGE COUNTY SANITATION DISTRICT		1,520.00	06-MAY-19	1,520.00	Reconciled
398415		02-MAY-19	OSTS, INC		1,150.00	07-MAY-19	1,150.00	Reconciled
398416		02-MAY-19	PACIFIC PARTS & CONTROLS INC		306.01	07-MAY-19	306.01	Reconciled
398417		02-MAY-19	PATTERSON, MICHAEL		19.23	06-MAY-19	19.23	Reconciled
398418		02-MAY-19	PAYNE & FEARS LLP		8,050.00	06-MAY-19	8,050.00	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 7
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398419		02-MAY-19	PCL CONSTRUCTION, INC.		93,812.50	21-MAY-19	93,812.50	Reconciled
398420		02-MAY-19	PIVOT INTERIORS INC		3,577.21	06-MAY-19	3,577.21	Reconciled
398421		02-MAY-19	PONTO AND SON'S WHOLESALE		569.85	06-MAY-19	569.85	Reconciled
398422		02-MAY-19	PRAXAIR DISTRIBUTION INC		2,029.23	06-MAY-19	2,029.23	Reconciled
398423		02-MAY-19	QUINCY COMPRESSOR LLC		1,165.13	07-MAY-19	1,165.13	Reconciled
398424		02-MAY-19	QUINTANA, WATTS & HARTMANN, LLC		5,000.00	06-MAY-19	5,000.00	Reconciled
398425		02-MAY-19	R C FOSTER CORPORATION		21,375.00	13-MAY-19	21,375.00	Reconciled
398426		02-MAY-19	RAM AIR ENGINEERING INC		6,079.87	07-MAY-19	6,079.87	Reconciled
398427		02-MAY-19	REAL WATER CONSULTANTS INC.		15,168.00	21-MAY-19	15,168.00	Reconciled
398428		02-MAY-19	RED HAWK FIRE & SECURITY (CA) LLC		375.00	10-MAY-19	375.00	Reconciled
398429		02-MAY-19	RED WING SHOE STORE		2,517.46	06-MAY-19	2,517.46	Reconciled
398430		02-MAY-19	RICHARD C. SLADE & ASSOCIATES LLC		16,138.07	14-MAY-19	16,138.07	Reconciled
398431		02-MAY-19	ROBINSON, PHILIP		26.11	10-MAY-19	26.11	Reconciled
398432		02-MAY-19	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT		16,858.44	20-MAY-19	16,858.44	Reconciled

398433	02-MAY-19	ROSS, LESLIE	72.72	06-MAY-19	72.72	Reconciled
398434	02-MAY-19	ROYAL INDUSTRIAL SOLUTIONS	2,264.23	06-MAY-19	2,264.23	Reconciled
398435	02-MAY-19	RUBICON COMMUNICATIONS, LLC	795.88	10-MAY-19	795.88	Reconciled
398436	02-MAY-19	SAFETY-KLEEN SYSTEMS, INC	403.75	06-MAY-19	403.75	Reconciled
398437	02-MAY-19	SANDERS PAVING INC	19,725.00	13-MAY-19	19,725.00	Reconciled
398438	02-MAY-19	SANTA ANA BLUE PRINT	565.78	07-MAY-19	565.78	Reconciled
398439	02-MAY-19	SANTA MARGARITA FORD	5,089.60	07-MAY-19	5,089.60	Reconciled
398440	02-MAY-19	SCHINDLER ELEVATOR CORPORATION	214.92	06-MAY-19	214.92	Reconciled
398441	02-MAY-19	SEAL ANALYTICAL INC	1,333.72	06-MAY-19	1,333.72	Reconciled
398442	02-MAY-19	SHAH, ANKIT	12.38	17-MAY-19	12.38	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398443		02-MAY-19	SHAMROCK SUPPLY CO INC		61.59	06-MAY-19	61.59	Reconciled
398444		02-MAY-19	SITMATIC		3,799.15	06-MAY-19	3,799.15	Reconciled
398445		02-MAY-19	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		1,679.71	10-MAY-19	1,679.71	Reconciled
398446		02-MAY-19	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		2,659.60	06-MAY-19	2,659.60	Reconciled
398447		02-MAY-19	SOUTHERN CALIFORNIA EDISON COMPANY		203,109.35	06-MAY-19	203,109.35	Reconciled
398448		02-MAY-19	SPARKLETTS		227.38	08-MAY-19	227.38	Reconciled
398449		02-MAY-19	SPATIAL WAVE, INC.		2,940.00	03-MAY-19	2,940.00	Reconciled
398450		02-MAY-19	THERMO ELECTRON		1,109.00	06-MAY-19	1,109.00	Reconciled
398451		02-MAY-19	NORTH AMERICA LLC THYSSENKRUPP ELEVATOR CORPORATION		198.24	07-MAY-19	198.24	Reconciled
398452		02-MAY-19	TIC-IPG-COMMON		1,721.65	28-MAY-19	1,721.65	Reconciled
398453		02-MAY-19	TREE OF LIFE NURSERY		1,986.00	06-MAY-19	1,986.00	Reconciled
398454		02-MAY-19	TRI POINTE HOMES, INC.		39.29	16-MAY-19	39.29	Reconciled
398455		02-MAY-19	TRIPAC MARKETING INC		1,047.73	06-MAY-19	1,047.73	Reconciled
398456		02-MAY-19	TROPICAL PLAZA NURSERY INC		42,019.84	13-MAY-19	42,019.84	Reconciled
398457		02-MAY-19	TRUCPARCO		1,870.42	10-MAY-19	1,870.42	Reconciled
398458		02-MAY-19	UNITED PARCEL SERVICE INC		29.00	06-MAY-19	29.00	Reconciled
398459		02-MAY-19	VAHIDTARI, ROYA		25.00	07-MAY-19	25.00	Reconciled
398460		02-MAY-19	VERIZON WIRELESS SERVICES LLC		8,718.58	06-MAY-19	8,718.58	Reconciled
398461		02-MAY-19	VO, PAUL		21.99	06-MAY-19	21.99	Reconciled
398462		02-MAY-19	WALTERS WHOLESALE ELECTRIC		1,205.89	06-MAY-19	1,205.89	Reconciled
398463		02-MAY-19	WASTE MANAGEMENT OF ORANGE COUNTY		2,690.94	06-MAY-19	2,690.94	Reconciled
398464		02-MAY-19	WAXIE'S ENTERPRISES, INC		424.44	06-MAY-19	424.44	Reconciled
398465		02-MAY-19	WECK LABORATORIES INC		6,170.00	09-MAY-19	6,170.00	Reconciled
398466		02-MAY-19	WEST COAST SAFETY SUPPLY INC		17,266.29	20-MAY-19	17,266.29	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398467		02-MAY-19	WESTERN WEATHER GROUP INC		2,998.00	09-MAY-19	2,998.00	Reconciled
398468		02-MAY-19	WOODARD & CURRAN INC		78,309.62	14-MAY-19	78,309.62	Reconciled
398469		02-MAY-19	WU, FAN		24.72	10-MAY-19	24.72	Reconciled
398470		02-MAY-19	ZEBRON CONTRACTING INC		46,725.00	14-MAY-19	46,725.00	Reconciled
398471		02-MAY-19	OCTA	ORANGE	2,620.00	29-MAY-19	2,620.00	Reconciled
398472		02-MAY-19	AREA ELECTRONICS SYSTEMS, INC	PURCHASE	57,434.48	14-MAY-19	57,434.48	Reconciled

398473	06-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	3,495.95	09-MAY-19	3,495.95	Reconciled
398474	06-MAY-19	SOUTHERN CALIFORNIA EDISON COMPANY	P.O. BOX 800	23,300.00	08-MAY-19	23,300.00	Reconciled
398475	07-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	1,576.58	13-MAY-19	1,576.58	Reconciled
398476	07-MAY-19	LaMar, Steven E	HOME	926.91	10-MAY-19	926.91	Reconciled
398477	09-MAY-19	RED WING SHOE STORE	DALLAS	2,543.30	13-MAY-19	2,543.30	Reconciled
398478	09-MAY-19	Beltran, Benjamin Vega		118.50	14-MAY-19	118.50	Reconciled
398479	09-MAY-19	Bonkowski, Leslie A (Leslie)		53.48	13-MAY-19	53.48	Reconciled
398480	09-MAY-19	Chan, Cara		116.33	13-MAY-19	116.33	Reconciled
398481	09-MAY-19	Compton, Christine A		24.36	20-MAY-19	24.36	Reconciled
398482	09-MAY-19	Danielson, Gregg B (Gregg)		69.67	17-MAY-19	69.67	Reconciled
398483	09-MAY-19	Fabris, John		82.24	14-MAY-19	82.24	Reconciled
398484	09-MAY-19	Hartoog, Jeremy		92.00	09-MAY-19	92.00	Reconciled
398485	09-MAY-19	Ho, Connie		251.95			Voided
398486	09-MAY-19	King, Casey (Casey)		177.76	10-MAY-19	177.76	Reconciled
398487	09-MAY-19	La, Jason (Jason)		643.35	09-MAY-19	643.35	Reconciled
398488	09-MAY-19	Lao, Richard S		48.72	14-MAY-19	48.72	Reconciled
398489	09-MAY-19	Leonard, Joshua (Josh)		139.00	14-MAY-19	139.00	Reconciled
398490	09-MAY-19	McElroy, Dorien		98.07	20-MAY-19	98.07	Reconciled
398491	09-MAY-19	Pizanie, Nicholas B		118.50	15-MAY-19	118.50	Reconciled
398492	09-MAY-19	Srader, Lisa		19.50	13-MAY-19	19.50	Reconciled
398493	09-MAY-19	Vanderploeg, Gina V		40.00	17-MAY-19	40.00	Reconciled
398494	09-MAY-19	RED WING SHOE STORE	DALLAS	2,224.99	13-MAY-19	2,224.99	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 10
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398495		09-MAY-19	A&A WIPING CLOTH CO		1,336.10	13-MAY-19	1,336.10	Reconciled
398496		09-MAY-19	ABC ICEHOUSE, INC.		263.95	13-MAY-19	263.95	Reconciled
398497		09-MAY-19	ABM INDUSTRY GROUPS, LLC		18,915.01	15-MAY-19	18,915.01	Reconciled
398498		09-MAY-19	ABSOLUTE STANDARDS, INC.		1,225.00	15-MAY-19	1,225.00	Reconciled
398499		09-MAY-19	ACCUSOURCE, INC.		1,869.10	28-MAY-19	1,869.10	Reconciled
398500		09-MAY-19	ADS LLC		2,160.00	13-MAY-19	2,160.00	Reconciled
398501		09-MAY-19	AECOM TECHNICAL SERVICES, INC.		26,538.71	17-MAY-19	26,538.71	Reconciled
398502		09-MAY-19	AGILENT TECHNOLOGIES, INC.		1,303.89	13-MAY-19	1,303.89	Reconciled
398503		09-MAY-19	AQUA-METRIC SALES COMPANY		115,191.22	21-MAY-19	115,191.22	Reconciled
398504		09-MAY-19	ARIZONA PIPELINE COMPANY		212.08	17-MAY-19	212.08	Reconciled
398505		09-MAY-19	AT&T		1,426.30	14-MAY-19	1,426.30	Reconciled
398506		09-MAY-19	AUSTIN HARDWOODS, INC		59.04	15-MAY-19	59.04	Reconciled
398507		09-MAY-19	AUTOZONE PARTS, INC.		164.41	13-MAY-19	164.41	Reconciled
398508		09-MAY-19	AWDE, TERRI		1,052.62	20-MAY-19	1,052.62	Reconciled
398509		09-MAY-19	BALSLEY, STEPHEN		6.73			Negotiable
398510		09-MAY-19	BATTERIES PLUS AND BATTERIES PLUS BULBS		216.10	13-MAY-19	216.10	Reconciled
398511		09-MAY-19	BAUERNFEIND, CHRISTIE		20.42	22-MAY-19	20.42	Reconciled
398512		09-MAY-19	BELSHIRE ENVIRONMENTAL SERVICES, INC.		4,902.76	14-MAY-19	4,902.76	Reconciled
398513		09-MAY-19	BORCHARD SURVEYING & MAPPING, INC.		1,740.00	15-MAY-19	1,740.00	Reconciled
398514		09-MAY-19	BRE CA OFFICE OWNER LLC		9,567.16			Negotiable
398515		09-MAY-19	C WELLS PIPELINE MATERIALS INC		2,344.66	22-MAY-19	2,344.66	Reconciled
398516		09-MAY-19	CALIFORNIA BARRICADE RENTAL, INC.		25,229.32	16-MAY-19	25,229.32	Reconciled
398517		09-MAY-19	CANON FINANCIAL SERVICES, INC		401.91	13-MAY-19	401.91	Reconciled
398518		09-MAY-19	CANON SOLUTIONS AMERICA, INC.		100.80	13-MAY-19	100.80	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 11
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398519		09-MAY-19	CANYON RIM PROPERTIES LLC		76.16			Negotiable
398520		09-MAY-19	CAPTIVE AUDIENCE MARKETING INC.		79.00	14-MAY-19	79.00	Reconciled
398521		09-MAY-19	CDW GOVERNMENT LLC		5,672.05	13-MAY-19	5,672.05	Reconciled
398522		09-MAY-19	CHARLES P CROWLEY COMPANY INC		26,870.74	16-MAY-19	26,870.74	Reconciled
398523		09-MAY-19	CHARLES WILLIAM ROBLE, JR.		405.00	14-MAY-19	405.00	Reconciled
398524		09-MAY-19	CHEN, NATALIA		405.96	13-MAY-19	405.96	Reconciled
398525		09-MAY-19	CHO DESIGN ASSOCIATES, INC		2,400.00	13-MAY-19	2,400.00	Reconciled
398526		09-MAY-19	CHOI, HEESUN		54.50			Negotiable
398527		09-MAY-19	CITY OF IRVINE		8,248.60	13-MAY-19	8,248.60	Reconciled
398528		09-MAY-19	CLA-VAL COMPANY		4,988.09	14-MAY-19	4,988.09	Reconciled
398529		09-MAY-19	CLARIS STRATEGY INC.		8,875.00	13-MAY-19	8,875.00	Reconciled
398530		09-MAY-19	CNC ENGINEERING		458.75	15-MAY-19	458.75	Reconciled
398531		09-MAY-19	COASTLINE EQUIPMENT COMPANY		295.23	15-MAY-19	295.23	Reconciled
398532		09-MAY-19	CONSTELLATION NEWENERGY, INC.		25,689.56	14-MAY-19	25,689.56	Reconciled
398533		09-MAY-19	CORELOGIC INC		28.79	13-MAY-19	28.79	Reconciled
398534		09-MAY-19	CORRPRO COMPANIES, INC.		70,081.23	24-MAY-19	70,081.23	Reconciled
398535		09-MAY-19	COTTONS POINT DESIGN, INC.		13,501.65	20-MAY-19	13,501.65	Reconciled
398536		09-MAY-19	CUES, INC.		189,101.25	16-MAY-19	189,101.25	Reconciled
398537		09-MAY-19	CULLIGAN OF SANTA ANA		7,000.00	15-MAY-19	7,000.00	Reconciled
398538		09-MAY-19	DELL MARKETING LP		11,028.85	15-MAY-19	11,028.85	Reconciled
398539		09-MAY-19	ECOLOGY CONTROL INDUSTRIES		4,299.45	13-MAY-19	4,299.45	Reconciled
398540		09-MAY-19	EI&C ENGINEERING INC		49,343.88	20-MAY-19	49,343.88	Reconciled
398541		09-MAY-19	ELITE EQUIPMENT, INC.		981.88	23-MAY-19	981.88	Reconciled
398542		09-MAY-19	ENVIRONMENTAL RESOURCE ASSOCIATES		667.68	14-MAY-19	667.68	Reconciled
398543		09-MAY-19	ENVIRONMENTAL SCIENCE ASSOCIATES		23,108.75	16-MAY-19	23,108.75	Reconciled
398544		09-MAY-19	EUROFINS EATON ANALYTICAL, INC.		244.65	16-MAY-19	244.65	Reconciled
398545		09-MAY-19	FARRELL & ASSOCIATES		1,690.02	13-MAY-19	1,690.02	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles
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Payment Document : IRWD CHECK								
398546		09-MAY-19	FASTENAL COMPANY		38.04	13-MAY-19	38.04	Reconciled
398547		09-MAY-19	FEDEX		216.88	13-MAY-19	216.88	Reconciled
398548		09-MAY-19	FERGUSON ENTERPRISES, INC.		4,945.73	13-MAY-19	4,945.73	Reconciled
398549		09-MAY-19	FIONA HUTTON & ASSOCIATES, INC.		39,215.00	15-MAY-19	39,215.00	Reconciled
398550		09-MAY-19	FIRST CHOICE SERVICES		687.65	15-MAY-19	687.65	Reconciled
398551		09-MAY-19	FISHER SCIENTIFIC COMPANY LLC		692.83	13-MAY-19	692.83	Reconciled
398552		09-MAY-19	FLEET SOLUTIONS LLC		4,866.35	13-MAY-19	4,866.35	Reconciled
398553		09-MAY-19	FLW, INC.		2,444.25	15-MAY-19	2,444.25	Reconciled
398554		09-MAY-19	FOUGHT, CYNTHIA J.		2,784.83	13-MAY-19	2,784.83	Reconciled
398555		09-MAY-19	GARZA INDUSTRIES, INC		1,501.17	13-MAY-19	1,501.17	Reconciled
398556		09-MAY-19	GEI CONSULTANTS INC		3,705.00	13-MAY-19	3,705.00	Reconciled
398557		09-MAY-19	GHD INC.		7,043.75	13-MAY-19	7,043.75	Reconciled
398558		09-MAY-19	GRACE, DANE		42.31	14-MAY-19	42.31	Reconciled
398559		09-MAY-19	GRAINGER		1,632.69	13-MAY-19	1,632.69	Reconciled
398560		09-MAY-19	GRAYBAR ELECTRIC COMPANY		1,449.80	13-MAY-19	1,449.80	Reconciled
398561		09-MAY-19	GREATER IRVINE CHAMBER OF COMMERCE		1,600.00	13-MAY-19	1,600.00	Reconciled
398562		09-MAY-19	HAAKER EQUIPMENT COMPANY		1,512.81	14-MAY-19	1,512.81	Reconciled
398563		09-MAY-19	HARRINGTON INDUSTRIAL		12,397.54	15-MAY-19	12,397.54	Reconciled

398564	09-MAY-19	PLASTICS LLC HARRIS & ASSOCIATES, INC.	900.00	13-MAY-19	900.00	Reconciled
398565	09-MAY-19	HDR ENGINEERING INC	25,459.28	16-MAY-19	25,459.28	Reconciled
398566	09-MAY-19	HELPMATES STAFFING SERVICES	17,443.56	14-MAY-19	17,443.56	Reconciled
398567	09-MAY-19	HELTNE, DOUG	713.60	21-MAY-19	713.60	Reconciled
398568	09-MAY-19	HILL BROTHERS CHEMICAL COMPANY	22,159.54	20-MAY-19	22,159.54	Reconciled
398569	09-MAY-19	HINSILBLON LTD	35,285.00	24-MAY-19	35,285.00	Reconciled
398570	09-MAY-19	HOLLINS, STEVEN	355.16	14-MAY-19	355.16	Reconciled
398571	09-MAY-19	HOME DEPOT USA INC	1,996.60	15-MAY-19	1,996.60	Reconciled
398572	09-MAY-19	HOPKINS TECHNICAL PRODUCTS INC	2,321.91	16-MAY-19	2,321.91	Reconciled
398573	09-MAY-19	HSUEH, KAREN	80.56	13-MAY-19	80.56	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 13
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398574		09-MAY-19	HUMANA INSURANCE COMPANY		73.80	17-MAY-19	73.80	Reconciled
398575		09-MAY-19	IDEXX		9,357.47	13-MAY-19	9,357.47	Reconciled
398576		09-MAY-19	DISTRIBUTION, INC		24,480.00	16-MAY-19	24,480.00	Reconciled
398577		09-MAY-19	INFOSYS LIMITED		156.35	16-MAY-19	156.35	Reconciled
398578		09-MAY-19	IRVINE PACIFIC		1,077.42	13-MAY-19	1,077.42	Reconciled
398579		09-MAY-19	IRVINE PIPE & SUPPLY INC		1,655.82	09-MAY-19	1,655.82	Reconciled
398580		09-MAY-19	IRWD-PETTY CASH CUSTODIAN		128.56			Negotiable
398581		09-MAY-19	KHAN, REZAUR		1,931.56	13-MAY-19	1,931.56	Reconciled
398582		09-MAY-19	KIMBALL MIDWEST		10,038.75	15-MAY-19	10,038.75	Reconciled
398583		09-MAY-19	KINETIC ENERGY SYSTEMS CORPORATION		34.90			Negotiable
398584		09-MAY-19	KOBAYASHI, MARIKO		981,729.43	16-MAY-19	981,729.43	Reconciled
398585		09-MAY-19	KPRS CONSTRUCTION SERVICES, INC.		2,562.22	21-MAY-19	2,562.22	Reconciled
398586		09-MAY-19	LAGUNA BEACH COUNTY WATER DISTRICT		42,265.85	16-MAY-19	42,265.85	Reconciled
398587		09-MAY-19	LANDCARE HOLDINGS, INC.		635,393.63	15-MAY-19	635,393.63	Reconciled
398588		09-MAY-19	LAYFIELD USA CORPORATION		2,720.77	15-MAY-19	2,720.77	Reconciled
398589		09-MAY-19	LEE & RO, INC.		39.48			Negotiable
398590		09-MAY-19	LEE, YULING		134.26	13-MAY-19	134.26	Reconciled
398591		09-MAY-19	LENG, SUFEN		192.50	15-MAY-19	192.50	Reconciled
398592		09-MAY-19	LENNAR HOMES		10,000.00	23-MAY-19	10,000.00	Reconciled
398593		09-MAY-19	MARK KADESH		19.73	14-MAY-19	19.73	Reconciled
398594		09-MAY-19	MC FADDEN-DALE INDUSTRIAL		94.01	28-MAY-19	94.01	Reconciled
398595		09-MAY-19	MCCORMICK SCHMICK SEAFOOD RESTAURANT		29.53	17-MAY-19	29.53	Reconciled
398596		09-MAY-19	MIKITA, DAIYU		12.30	13-MAY-19	12.30	Reconciled
398597		09-MAY-19	MOHAMMADIAN		102.68	14-MAY-19	102.68	Reconciled
398598		09-MAY-19	AHRABI, MALIHEH		1,398.60	14-MAY-19	1,398.60	Reconciled
398599		09-MAY-19	MPULSE MOBILE, INC		14.84	20-MAY-19	14.84	Reconciled
398600		09-MAY-19	MURATALLA, RODRIGO		651.05	13-MAY-19	651.05	Reconciled
398601		09-MAY-19	NATIONAL READY MIXED CONCRETE CO.		850.00	13-MAY-19	850.00	Reconciled
398602		09-MAY-19	NATURES IMAGE INC		13,361.60	16-MAY-19	13,361.60	Reconciled
398603		09-MAY-19	NEWPORT REAL ESTATE SERVICES		4,569.75	13-MAY-19	4,569.75	Reconciled
398603		09-MAY-19	NINYO & MOORE					Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 14
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398604		09-MAY-19	NOVACOAST INC		21,750.00	15-MAY-19	21,750.00	Reconciled
398605		09-MAY-19	O.C. SUPERIOR		1,040.00	20-MAY-19	1,040.00	Reconciled
398606		09-MAY-19	CUSTOM CLEANING		7,651.50	23-MAY-19	7,651.50	Reconciled
398607		09-MAY-19	OCEAN BLUE ENVIRONMENTAL SERVICES INC		29,523.54	20-MAY-19	29,523.54	Reconciled
398608		09-MAY-19	OLIN CORPORATION		14,447.12	15-MAY-19	14,447.12	Reconciled
398609		09-MAY-19	ONESOURCE DISTRIBUTORS LLC		22,840.00	16-MAY-19	22,840.00	Reconciled
398609		09-MAY-19	ONYX PAVING COMPANY INC.					Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
398610		09-MAY-19	ORACLE AMERICA, INC.		19,380.90	17-MAY-19	19,380.90	Reconciled
398611		09-MAY-19	ORANGE COUNTY AUTO PARTS CO		1,748.13	13-MAY-19	1,748.13	Reconciled
398612		09-MAY-19	PACIFIC HYDROTECH CORPORATION		3,072.36	13-MAY-19	3,072.36	Reconciled
398613		09-MAY-19	PACIFIC HYDROTECH CORPORATION		58,374.72	15-MAY-19	58,374.72	Reconciled
398614		09-MAY-19	PAPER DEPOT DOCUMENT DESTRUCTION LLC		674.73	17-MAY-19	674.73	Reconciled
398615		09-MAY-19	PARKER HANNIFIN CORPORATION		89,982.70	31-MAY-19	89,982.70	Reconciled
398616		09-MAY-19	PARKHOUSE TIRE INC		2,410.46	14-MAY-19	2,410.46	Reconciled
398617		09-MAY-19	PASCAL & LUDWIG CONSTRUCTORS		31,790.99	15-MAY-19	31,790.99	Reconciled
398618		09-MAY-19	PASCAL & LUDWIG CONSTRUCTORS		604,028.78	15-MAY-19	604,028.78	Reconciled
398619		09-MAY-19	PATTERSON CUSTOM HOMES		844.35	13-MAY-19	844.35	Reconciled
398620		09-MAY-19	PAULUS ENGINEERING, INC.		152,120.00	16-MAY-19	152,120.00	Reconciled
398621		09-MAY-19	PHENOVA, INC.		178.90	13-MAY-19	178.90	Reconciled
398622		09-MAY-19	PILAR ONATE		5,000.00			Negotiable
398623		09-MAY-19	PRAXAIR DISTRIBUTION INC		515.27	13-MAY-19	515.27	Reconciled
398624		09-MAY-19	PRIME CONTROLS COMPANY INC		6,435.81	14-MAY-19	6,435.81	Reconciled
398625		09-MAY-19	PRO MOBILE AUTO DETAILING		1,200.00	16-MAY-19	1,200.00	Reconciled
398626		09-MAY-19	R & S SOIL PRODUCTS INC		700.38	14-MAY-19	700.38	Reconciled
398627		09-MAY-19	RAM AIR ENGINEERING INC		6,939.10	13-MAY-19	6,939.10	Reconciled
398628		09-MAY-19	RAMIREZ, ROSE		40.50	31-MAY-19	40.50	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398629		09-MAY-19	RED WING SHOE STORE		1,288.61	13-MAY-19	1,288.61	Reconciled
398630		09-MAY-19	REFRIGERATION SUPPLIES DISTRIBUTOR		277.22	13-MAY-19	277.22	Reconciled
398631		09-MAY-19	RENTOKIL NORTH AMERICA, INC		22,014.00	22-MAY-19	22,014.00	Reconciled
398632		09-MAY-19	RESA POWER SOLUTIONS - TRANSFORMER SERVICES, LLC		6,680.00	15-MAY-19	6,680.00	Reconciled
398633		09-MAY-19	RLG ENTERPRISES, INC		588.17	13-MAY-19	588.17	Reconciled
398634		09-MAY-19	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT		21,387.81	20-MAY-19	21,387.81	Reconciled
398635		09-MAY-19	ROYAL INDUSTRIAL SOLUTIONS		847.56	13-MAY-19	847.56	Reconciled
398636		09-MAY-19	SANTA ANA BLUE PRINT		935.70	14-MAY-19	935.70	Reconciled
398637		09-MAY-19	SANTA MARGARITA FORD		1,854.01	14-MAY-19	1,854.01	Reconciled
398638		09-MAY-19	SCHWEITZER ENGINEERING LABORATORIES, INC.		2,047.25	13-MAY-19	2,047.25	Reconciled
398639		09-MAY-19	SCIENCE FIRST LLC		257.64	13-MAY-19	257.64	Reconciled
398640		09-MAY-19	SECURITAS SECURITY SERVICES USA, INC.		58,497.20	15-MAY-19	58,497.20	Reconciled
398641		09-MAY-19	SHEA HOMES LIMITED PARTNERSHIP		144.74	31-MAY-19	144.74	Reconciled
398642		09-MAY-19	SHERWIN WILLIAMS COMPANY		82.07	20-MAY-19	82.07	Reconciled
398643		09-MAY-19	SHOETERIA		24.23	14-MAY-19	24.23	Reconciled
398644		09-MAY-19	SHOICHI FUJIWARA C/O TA REALTY		65.29	23-MAY-19	65.29	Reconciled
398645		09-MAY-19	SKORUZ TECHNOLOGIES		18,252.00	16-MAY-19	18,252.00	Reconciled
398646		09-MAY-19	SMARTCOVER SYSTEMS		4,099.21	14-MAY-19	4,099.21	Reconciled
398647		09-MAY-19	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		3,231.48	16-MAY-19	3,231.48	Reconciled
398648		09-MAY-19	SOUTH COAST WATER CO.		90.00	16-MAY-19	90.00	Reconciled
398649		09-MAY-19	SOUTH COAST WATER DISTRICT		1,006.48	15-MAY-19	1,006.48	Reconciled

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398650		09-MAY-19	SOUTHERN CALIFORNIA EDISON COMPANY		184,983.38	13-MAY-19	184,983.38	Reconciled
398651		09-MAY-19	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		1,375.19	22-MAY-19	1,375.19	Reconciled
398652		09-MAY-19	SPARKLETTS		127.12	15-MAY-19	127.12	Reconciled
398653		09-MAY-19	STANTEC CONSULTING SERVICES INC.		5,829.50	13-MAY-19	5,829.50	Reconciled
398654		09-MAY-19	STAR REAL ESTATE		13.62	16-MAY-19	13.62	Reconciled
398655		09-MAY-19	STREAKWAVE WIRELESS, INC.		3,211.57	14-MAY-19	3,211.57	Reconciled
398656		09-MAY-19	SURAGAIRIN, MICHAEL		29.45	13-MAY-19	29.45	Reconciled
398657		09-MAY-19	SWAINS ELECTRIC MOTOR SERVICE		800.91	30-MAY-19	800.91	Reconciled
398658		09-MAY-19	T.E. ROBERTS, INC.		185,836.62	21-MAY-19	185,836.62	Reconciled
398659		09-MAY-19	TAYLOR MORRISON		11.14	30-MAY-19	11.14	Reconciled
398660		09-MAY-19	TEKDRUALICS		29,247.50	15-MAY-19	29,247.50	Reconciled
398661		09-MAY-19	TOLL BROS., INC.		212.78	21-MAY-19	212.78	Reconciled
398662		09-MAY-19	TROPICAL PLAZA NURSERY INC		3,035.88	13-MAY-19	3,035.88	Reconciled
398663		09-MAY-19	TRUCPARCO		92.33	14-MAY-19	92.33	Reconciled
398664		09-MAY-19	TRUKSPECT, INC		14,171.70	20-MAY-19	14,171.70	Reconciled
398665		09-MAY-19	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		264.27	21-MAY-19	264.27	Reconciled
398666		09-MAY-19	UNITED HEALTHCARE INSURANCE COMPANY		42.42	13-MAY-19	42.42	Reconciled
398667		09-MAY-19	UNITED PARCEL SERVICE INC		852.63	13-MAY-19	852.63	Reconciled
398668		09-MAY-19	UNITED SITE SERVICES OF CALIFORNIA INC		4,492.00	13-MAY-19	4,492.00	Reconciled
398669		09-MAY-19	UNIVAR USA INC		4,736.15	13-MAY-19	4,736.15	Reconciled
398670		09-MAY-19	VERIZON WIRELESS SERVICES LLC		8,923.96	17-MAY-19	8,923.96	Reconciled
398671		09-MAY-19	VERTECH INDUSTRIAL SYSTEMS, LLC		1,470.43	13-MAY-19	1,470.43	Reconciled
398672		09-MAY-19	VULCAN MATERIALS COMPANY		3,291.59	13-MAY-19	3,291.59	Reconciled
398673		09-MAY-19	VWR INTERNATIONAL, LLC					
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BANK: Bank of America N.A.			Branch : Los Angeles		Account: Checking AP and PR		Page: 17	
Bank Account Currency: USD (US Dollar)					Payment Currency: USD (US Dollar)			
Payment Type: All					Display Supplier Address: No			

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398674		09-MAY-19	WAXIE'S ENTERPRISES, INC		499.18	13-MAY-19	499.18	Reconciled
398675		09-MAY-19	WECK LABORATORIES INC		665.00	15-MAY-19	665.00	Reconciled
398676		09-MAY-19	WESTAMERICA COMMUNICATIONS, INC.		825.00	13-MAY-19	825.00	Reconciled
398677		09-MAY-19	WOODBRIIDGE ANIMAL HOSPITAL		493.02			Negotiable
398678		09-MAY-19	WORKFORCE SAFETY LLC		5,972.00	17-MAY-19	5,972.00	Reconciled
398679		09-MAY-19	YANG, XIAOWEN		66.37	15-MAY-19	66.37	Reconciled
398680		09-MAY-19	Ho, Connie	HOME	20.24	10-MAY-19	20.24	Reconciled
398681		09-MAY-19	Fabris, John	HOME	31.90	14-MAY-19	31.90	Reconciled
398682		09-MAY-19	Ho, Connie	HOME	11.95	10-MAY-19	11.95	Reconciled
398683		10-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	2,472.89	13-MAY-19	2,472.89	Reconciled
398684		10-MAY-19	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	DIAMOND BAR	1,625.00	16-MAY-19	1,625.00	Reconciled
398685		10-MAY-19	FRANCHISE TAX BOARD	SACRAMENTO 1	100.00	21-MAY-19	100.00	Reconciled
398686		10-MAY-19	ORANGE COUNTY SHERIFF'S OFFICE	4601 JAMBOREE	62.50	15-MAY-19	62.50	Reconciled
398687		10-MAY-19	PERS LONG TERM CARE	PASADENA	538.89	14-MAY-19	538.89	Reconciled
398688		16-MAY-19	Cariker, Cody J (Cody)		95.00	29-MAY-19	95.00	Reconciled
398689		16-MAY-19	Frost, Garrick A (Garrick)		143.72	20-MAY-19	143.72	Reconciled
398690		16-MAY-19	Kanoff, Debbie G		203.00	24-MAY-19	203.00	Reconciled

398691	16-MAY-19	(Debbie) Kessler, Christian L (Christian)	142.68	21-MAY-19	142.68	Reconciled
398692	16-MAY-19	Morse, Devon	42.76	23-MAY-19	42.76	Reconciled
398693	16-MAY-19	Oldewage, Lars D (Lars)	415.26	20-MAY-19	415.26	Reconciled
398694	16-MAY-19	Olson, Richard Jr (Richard)	235.00	28-MAY-19	235.00	Reconciled
398695	16-MAY-19	Pilgrim, Jason S	218.94	16-MAY-19	218.94	Reconciled
398696	16-MAY-19	Weghorst, Paul A (Paul)	158.98	16-MAY-19	158.98	Reconciled
398697	16-MAY-19	A&Y ASPHALT CONTRACTORS, INC.	70,077.00	22-MAY-19	70,077.00	Reconciled
398698	16-MAY-19	ACCUSOURCE, INC.	741.50	22-MAY-19	741.50	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398699		16-MAY-19	AECOM TECHNICAL SERVICES, INC.		1,711.59	20-MAY-19	1,711.59	Reconciled
398700		16-MAY-19	AERATION INDUSTRIES INTERNATIONAL INC		7,371.45	20-MAY-19	7,371.45	Reconciled
398701		16-MAY-19	AIRGAS, INC.		759.12	20-MAY-19	759.12	Reconciled
398702		16-MAY-19	AJANG, OWRANG		100.72	23-MAY-19	100.72	Reconciled
398703		16-MAY-19	ALLEN, CAROL		53.87	21-MAY-19	53.87	Reconciled
398704		16-MAY-19	ALLIANCE AG SERVICES, LLC		3,000.00	23-MAY-19	3,000.00	Reconciled
398705		16-MAY-19	AQUA-METRIC SALES COMPANY		55,262.56	28-MAY-19	55,262.56	Reconciled
398706		16-MAY-19	ARMORCAST PRODUCTS COMPANY		6,458.86	20-MAY-19	6,458.86	Reconciled
398707		16-MAY-19	AT&T		1,666.07	21-MAY-19	1,666.07	Reconciled
398708		16-MAY-19	AT&T		64.26	21-MAY-19	64.26	Reconciled
398709		16-MAY-19	AT&T		5,880.66	21-MAY-19	5,880.66	Reconciled
398710		16-MAY-19	ATHENS SERVICES		1,619.68	22-MAY-19	1,619.68	Reconciled
398711		16-MAY-19	AUDIO FONIXX, INC.		4,392.65	28-MAY-19	4,392.65	Reconciled
398712		16-MAY-19	AUTOZONE PARTS, INC.		116.88	20-MAY-19	116.88	Reconciled
398713		16-MAY-19	BALI CONSTRUCTION		2,330.00	20-MAY-19	2,330.00	Reconciled
398714		16-MAY-19	BILL'S SWEEPING SERVICE INC		460.00	21-MAY-19	460.00	Reconciled
398715		16-MAY-19	BIOMAGIC INC		19,565.68	22-MAY-19	19,565.68	Reconciled
398716		16-MAY-19	BOLLARD, CINDEL		34.34	28-MAY-19	34.34	Reconciled
398717		16-MAY-19	BORCHARD SURVEYING & MAPPING, INC.		1,545.00	30-MAY-19	1,545.00	Reconciled
398718		16-MAY-19	BOYD & ASSOCIATES		3,753.00	21-MAY-19	3,753.00	Reconciled
398719		16-MAY-19	BRADFORD, MICHAEL		12.28	30-MAY-19	12.28	Reconciled
398720		16-MAY-19	BROADCOM LTD		182.64			Negotiable
398721		16-MAY-19	BROWN AND CALDWELL		5,553.31	20-MAY-19	5,553.31	Reconciled
398722		16-MAY-19	BSI SERVICES AND SOLUTIONS (WEST), INC.		33,947.00	23-MAY-19	33,947.00	Reconciled
398723		16-MAY-19	BUSH & ASSOCIATES INC		5,440.00	30-MAY-19	5,440.00	Reconciled
398724		16-MAY-19	CALIFORNIA BARRICADE RENTAL, INC.		14,785.00	28-MAY-19	14,785.00	Reconciled
398725		16-MAY-19	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION		2,594.00	22-MAY-19	2,594.00	Reconciled

IRWD Ledger Upgrade
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398726		16-MAY-19	CALIFORNIA ENVIRONMENTAL EDUCATION FOUNDATION		2,500.00	30-MAY-19	2,500.00	Reconciled
398727		16-MAY-19	CALIFORNIA PACIFIC HOMES		51.33	21-MAY-19	51.33	Reconciled
398728		16-MAY-19	CANON SOLUTIONS AMERICA, INC.		27.80	20-MAY-19	27.80	Reconciled
398729		16-MAY-19	CDW GOVERNMENT LLC		143.20	20-MAY-19	143.20	Reconciled
398730		16-MAY-19	CHAO, PUHSIEN		305.90	23-MAY-19	305.90	Reconciled
398731		16-MAY-19	CHEN, JENNIFER		85.56			Negotiable
398732		16-MAY-19	CHENG, JENNIFER		126.10	20-MAY-19	126.10	Reconciled
398733		16-MAY-19	CHO DESIGN ASSOCIATES, INC		1,600.00	17-MAY-19	1,600.00	Reconciled
398734		16-MAY-19	CLA-VAL COMPANY		8,878.76	21-MAY-19	8,878.76	Reconciled

398735	16-MAY-19	COMMERCIAL COATING RESOURCE INC	485.00				Negotiable
398736	16-MAY-19	CONSTELLATION NEWENERGY, INC.	13,810.21	21-MAY-19	13,810.21		Reconciled
398737	16-MAY-19	CONSUMERS PIPE & SUPPLY CO.	10,131.15	21-MAY-19	10,131.15		Reconciled
398738	16-MAY-19	CR & R INCORPORATED	175.95	20-MAY-19	175.95		Reconciled
398739	16-MAY-19	CR & R INCORPORATED	231.63	20-MAY-19	231.63		Reconciled
398740	16-MAY-19	DISCOUNT COURIER SERVICE INC.	67.47	20-MAY-19	67.47		Reconciled
398741	16-MAY-19	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY	95,492.60	28-MAY-19	95,492.60		Reconciled
398742	16-MAY-19	DUDEK	1,512.50	21-MAY-19	1,512.50		Reconciled
398743	16-MAY-19	DUTHIE ELECTRIC SERVICE CORPORATION	4,900.00	21-MAY-19	4,900.00		Reconciled
398744	16-MAY-19	EAGLE PRINT DYNAMICS	8,464.64	20-MAY-19	8,464.64		Reconciled
398745	16-MAY-19	EDWARDS LIFESCIENCES	3,240.05	24-MAY-19	3,240.05		Reconciled
398746	16-MAY-19	EISENMAN, HOLLIE	39.72	21-MAY-19	39.72		Reconciled
398747	16-MAY-19	ELABRA INC	1,070.00	23-MAY-19	1,070.00		Reconciled
398748	16-MAY-19	ELITE EQUIPMENT, INC.	517.60	23-MAY-19	517.60		Reconciled
398749	16-MAY-19	EMERGENCY POWER CONTROLS INC	3,200.00	21-MAY-19	3,200.00		Reconciled
398750	16-MAY-19	ENTERPRISE HOLDINGS, INC.	13,258.93	29-MAY-19	13,258.93		Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398751		16-MAY-19	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		13,690.00	22-MAY-19	13,690.00	Reconciled
398752		16-MAY-19	ENVIRONMENTAL RESOURCE ASSOCIATES		1,611.63	22-MAY-19	1,611.63	Reconciled
398753		16-MAY-19	EVERETT DOREY LLP		3,958.55	21-MAY-19	3,958.55	Reconciled
398754		16-MAY-19	EXECUTIVE LIGHTING & ELECTRIC		594.19	21-MAY-19	594.19	Reconciled
398755		16-MAY-19	FARRELL & ASSOCIATES		8,179.57	17-MAY-19	8,179.57	Reconciled
398756		16-MAY-19	FEDEX		448.87	20-MAY-19	448.87	Reconciled
398757		16-MAY-19	FERGUSON ENTERPRISES, INC.		1,121.11	20-MAY-19	1,121.11	Reconciled
398758		16-MAY-19	FISERV		280.95	20-MAY-19	280.95	Reconciled
398759		16-MAY-19	FISHER SCIENTIFIC COMPANY LLC		269.79	20-MAY-19	269.79	Reconciled
398760		16-MAY-19	FRONTIER CALIFORNIA INC.		55.44	22-MAY-19	55.44	Reconciled
398761		16-MAY-19	GANAHL LUMBER CO.		54.62	22-MAY-19	54.62	Reconciled
398762		16-MAY-19	GEIGER BROS		2,539.64	21-MAY-19	2,539.64	Reconciled
398763		16-MAY-19	GEORGE HILLS COMPANY, INC.		178.50	22-MAY-19	178.50	Reconciled
398764		16-MAY-19	GO, EMERSON		165.79	17-MAY-19	165.79	Reconciled
398765		16-MAY-19	GORDON, MELINDA		52.49	22-MAY-19	52.49	Reconciled
398766		16-MAY-19	GRAINGER		6,494.21	20-MAY-19	6,494.21	Reconciled
398767		16-MAY-19	GRANDE, WENDY		61.48	20-MAY-19	61.48	Reconciled
398768		16-MAY-19	GREEN, DOUG		16.27			Negotiable
398769		16-MAY-19	HACH COMPANY		12,355.48	23-MAY-19	12,355.48	Reconciled
398770		16-MAY-19	HANASHIRO, GUSTAVO		34.90	20-MAY-19	34.90	Reconciled
398771		16-MAY-19	HELPMATES STAFFING SERVICES		18,471.95	21-MAY-19	18,471.95	Reconciled
398772		16-MAY-19	HERITAGE FIELDS EL TORO, LLC		18.97			Negotiable
398773		16-MAY-19	HERITAGE FIELDS EL TORO, LLC		107,449.53			Negotiable
398774		16-MAY-19	HILL BROTHERS CHEMICAL COMPANY		8,440.73	22-MAY-19	8,440.73	Reconciled
398775		16-MAY-19	HILTS CONSULTING GROUP, INC.		8,192.00	20-MAY-19	8,192.00	Reconciled
398776		16-MAY-19	HINSILBLON LTD		8,825.00			Negotiable
398777		16-MAY-19	HOME DEPOT USA INC		673.45	21-MAY-19	673.45	Reconciled
398778		16-MAY-19	INDEPENDENT SPECIAL DISTRICT OF ORANGE COUNTY		50.00			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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 Payment Document : IRWD CHECK

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
398779		16-MAY-19	INDUSTRIAL METAL SUPPLY CO		65.18	20-MAY-19	65.18	Reconciled
398780		16-MAY-19	INSITUFORM TECHNOLOGIES INC		34,179.30	24-MAY-19	34,179.30	Reconciled
398781		16-MAY-19	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		31,661.17	24-MAY-19	31,661.17	Reconciled
398782		16-MAY-19	IRVINE PIPE & SUPPLY INC		867.67	20-MAY-19	867.67	Reconciled
398783		16-MAY-19	IRWD-PETTY CASH CUSTODIAN		693.39	20-MAY-19	693.39	Reconciled
398784		16-MAY-19	JACKSON TIDUS, A LAW CORPORATION		16,464.00	21-MAY-19	16,464.00	Reconciled
398785		16-MAY-19	JAMES BRADFORD HALDEMAN		2,000.00	22-MAY-19	2,000.00	Reconciled
398786		16-MAY-19	JEFFERY SIMONDS AND KATHERINE ARMSTRONG		3.68	20-MAY-19	3.68	Reconciled
398787		16-MAY-19	JENSEN, JOHN P		87.00	22-MAY-19	87.00	Reconciled
398788		16-MAY-19	JIG CONSULTANTS		4,443.93	22-MAY-19	4,443.93	Reconciled
398789		16-MAY-19	KALTHIA, HARJI		1,192.34	20-MAY-19	1,192.34	Reconciled
398790		16-MAY-19	KAYUGA SOLUTION INC		9,000.00	17-MAY-19	9,000.00	Reconciled
398791		16-MAY-19	KEARNS, MARC		35.89			Negotiable
398792		16-MAY-19	KOELLER, NEBEKER, CARLSON & HALUCK, LLP		1,240.00	17-MAY-19	1,240.00	Reconciled
398793		16-MAY-19	KONECRANES INC		5,790.64	20-MAY-19	5,790.64	Reconciled
398794		16-MAY-19	LAKE FOREST COMM ASSN		31,821.79	23-MAY-19	31,821.79	Reconciled
398795		16-MAY-19	MBC AQUATIC SCIENCES, INC.		1,350.00	20-MAY-19	1,350.00	Reconciled
398796		16-MAY-19	MC FADDEN-DALE INDUSTRIAL		968.86	21-MAY-19	968.86	Reconciled
398797		16-MAY-19	MERRIMAC PETROLEUM, INC.		29,001.44	20-MAY-19	29,001.44	Reconciled
398798		16-MAY-19	MESHKAT, AVA		34.90	03-JUN-19	34.90	Reconciled
398799		16-MAY-19	MICHAEL BAKER INTERNATIONAL, INC.		15,657.13	23-MAY-19	15,657.13	Reconciled
398800		16-MAY-19	MISSION COMMUNICATIONS, LLC		2,037.60	23-MAY-19	2,037.60	Reconciled
398801		16-MAY-19	MSC INDUSTRIAL SUPPLY CO		135.42			Negotiable

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398802		16-MAY-19	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		3,475.77	20-MAY-19	3,475.77	Reconciled
398803		16-MAY-19	NATIONAL READY MIXED CONCRETE CO.		1,518.45	20-MAY-19	1,518.45	Reconciled
398804		16-MAY-19	NATURALWELL, LLC		742.50	17-MAY-19	742.50	Reconciled
398805		16-MAY-19	NAVIGANT CONSULTING, INC		8,614.00	20-MAY-19	8,614.00	Reconciled
398806		16-MAY-19	NEPTUNE TECHNOLOGY GROUP, INC.		77,062.80	23-MAY-19	77,062.80	Reconciled
398807		16-MAY-19	NMG GEOTECHNICAL INC		14,872.20	24-MAY-19	14,872.20	Reconciled
398808		16-MAY-19	NORTHERN SAFETY CO INC		361.31	20-MAY-19	361.31	Reconciled
398809		16-MAY-19	NORTHWOOD PLACE APTS		36.49			Negotiable
398810		16-MAY-19	NOVACOAST INC		525.00	20-MAY-19	525.00	Reconciled
398811		16-MAY-19	OLIN CORPORATION		18,291.21	24-MAY-19	18,291.21	Reconciled
398812		16-MAY-19	ONESOURCE DISTRIBUTORS LLC		1,334.70	20-MAY-19	1,334.70	Reconciled
398813		16-MAY-19	ORACLE AMERICA, INC.		1,748.75	23-MAY-19	1,748.75	Reconciled
398814		16-MAY-19	ORANGE COUNTY AUTO PARTS CO		1,183.94	17-MAY-19	1,183.94	Reconciled
398815		16-MAY-19	ORANGE COUNTY FIRE AUTHORITY		2,019.00	21-MAY-19	2,019.00	Reconciled
398816		16-MAY-19	ORANGE COUNTY SANITATION DISTRICT		1,520.00	20-MAY-19	1,520.00	Reconciled
398817		16-MAY-19	ORANGE LINE OIL COMPANY		638.22	23-MAY-19	638.22	Reconciled
398818		16-MAY-19	PACIFIC AUTO WASH PARTNERS		144.99	28-MAY-19	144.99	Reconciled
398819		16-MAY-19	PACIFIC HYDROTECH CORPORATION		21,364.44	23-MAY-19	21,364.44	Reconciled
398820		16-MAY-19	PACIFIC HYDROTECH		405,924.31	24-MAY-19	405,924.31	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
398821	16-MAY-19		CORPORATION		4,457.74	21-MAY-19	4,457.74	Reconciled
398822	16-MAY-19		PARKHOUSE TIRE INC		36.91	23-MAY-19	36.91	Reconciled
398823	16-MAY-19		RICHARD		578.43			Negotiable
398824	16-MAY-19		PIEVAC, DEBORAH		1,596.59	29-MAY-19	1,596.59	Reconciled
398825	16-MAY-19		PLUMBERS DEPOT INC.		674.94	20-MAY-19	674.94	Reconciled
			PMC ENGINEERING LLC.					

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398826	16-MAY-19		PRAXAIR		231.05	20-MAY-19	231.05	Reconciled
398827	16-MAY-19		DISTRIBUTION INC		1,475.81	20-MAY-19	1,475.81	Reconciled
398828	16-MAY-19		PRIME CONTROLS COMPANY INC		6,490.77	20-MAY-19	6,490.77	Reconciled
398829	16-MAY-19		PRUDENTIAL OVERALL SUPPLY		2,255.33	21-MAY-19	2,255.33	Reconciled
398830	16-MAY-19		PTI SAND & GRAVEL INC		2,925.00	20-MAY-19	2,925.00	Reconciled
398831	16-MAY-19		PUBLIC FINANCIAL MANAGEMENT, INC.		3,780.00	20-MAY-19	3,780.00	Reconciled
398832	16-MAY-19		R&B AUTOMATION, INC.		10,935.00	21-MAY-19	10,935.00	Reconciled
398833	16-MAY-19		RAM AIR ENGINEERING INC		4,953.44	22-MAY-19	4,953.44	Reconciled
398834	16-MAY-19		RANGE KLEEN MFG., INC		37.76			Negotiable
398835	16-MAY-19		RAVELLA, SIVA BHARGAV		2,791.00	23-MAY-19	2,791.00	Reconciled
398836	16-MAY-19		RED HAWK FIRE & SECURITY (CA) LLC		492.52	21-MAY-19	492.52	Reconciled
398837	16-MAY-19		RED WING SHOE STORE		1,649.50	22-MAY-19	1,649.50	Reconciled
398838	16-MAY-19		RENTOKIL NORTH AMERICA, INC		1,680.00	21-MAY-19	1,680.00	Reconciled
398839	16-MAY-19		SAFETY CENTER INCORPORATED		15,010.00	24-MAY-19	15,010.00	Reconciled
398840	16-MAY-19		SANCON		2,900.00	22-MAY-19	2,900.00	Reconciled
398841	16-MAY-19		TECHNOLOGIES, INC. SANDERS PAVING INC		797.88	21-MAY-19	797.88	Reconciled
398842	16-MAY-19		SANTA ANA BLUE PRINT		494.79	20-MAY-19	494.79	Reconciled
398843	16-MAY-19		SEAL ANALYTICAL INC		29.99			Negotiable
398844	16-MAY-19		SELVAN, PRADEEP		848.00	20-MAY-19	848.00	Reconciled
398845	16-MAY-19		SHAMROCK SUPPLY CO INC		189.59	20-MAY-19	189.59	Reconciled
398846	16-MAY-19		SHERWIN WILLIAMS COMPANY		62.08	24-MAY-19	62.08	Reconciled
398847	16-MAY-19		SHUANG WANG AND XI CHEN		63,129.11	20-MAY-19	63,129.11	Reconciled
398848	16-MAY-19		SOUTHERN CALIFORNIA EDISON COMPANY		35,035.68	20-MAY-19	35,035.68	Reconciled
			SOUTHERN CALIFORNIA GAS COMPANY					

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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398849	16-MAY-19		SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY		1,880.00	28-MAY-19	1,880.00	Reconciled
398850	16-MAY-19		SOUTHLAND WATER TECHNOLOGIES LLC		1,626.31	23-MAY-19	1,626.31	Reconciled
398851	16-MAY-19		STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES		115,140.00	24-MAY-19	115,140.00	Reconciled
398852	16-MAY-19		STERIS CORPORATION		1,419.00	20-MAY-19	1,419.00	Reconciled
398853	16-MAY-19		STONEY MILLER CONSULTANTS INC		1,962.50	24-MAY-19	1,962.50	Reconciled
398854	16-MAY-19		SUKUT CONSTRUCTION, LLC		1,825.46	20-MAY-19	1,825.46	Reconciled
398855	16-MAY-19		SUSAN A. SIROTA		4,611.12	17-MAY-19	4,611.12	Reconciled
398856	16-MAY-19		TETRA TECH, INC		12,313.00	23-MAY-19	12,313.00	Reconciled
398857	16-MAY-19		THE KRAVE KOBE		337.47	20-MAY-19	337.47	Reconciled

398858	16-MAY-19	BURGER GRILL THE MAIN PLACE	29.60				Negotiable
398859	16-MAY-19	CHRISTIAN FELLOWSHIP		14.44	23-MAY-19	14.44	Reconciled
398860	16-MAY-19	TODAY REAL ESTATE TRI COUNTY PUMP COMPANY	5,940.00		20-MAY-19	5,940.00	Reconciled
398861	16-MAY-19	TRUCPARCO	336.57		29-MAY-19	336.57	Reconciled
398862	16-MAY-19	UNITED STATES POST OFFICE	1,630.00		03-JUN-19	1,630.00	Reconciled
398863	16-MAY-19	UNITED WATER WORKS, INC.	49.13		21-MAY-19	49.13	Reconciled
398864	16-MAY-19	VAUGHAN'S INDUSTRIAL REPAIR CO INC	17,715.89		23-MAY-19	17,715.89	Reconciled
398865	16-MAY-19	VULCAN INDUSTRIES INC	7,870.77		20-MAY-19	7,870.77	Reconciled
398866	16-MAY-19	VULCAN MATERIALS COMPANY	1,470.43		20-MAY-19	1,470.43	Reconciled
398867	16-MAY-19	WASTE MANAGEMENT OF ORANGE COUNTY	2,640.86		21-MAY-19	2,640.86	Reconciled
398868	16-MAY-19	WATERSMART SOFTWARE, INC	13,597.50		22-MAY-19	13,597.50	Reconciled
398869	16-MAY-19	WAXIE'S ENTERPRISES, INC	1,535.17		20-MAY-19	1,535.17	Reconciled
398870	16-MAY-19	WECK LABORATORIES INC	655.00		21-MAY-19	655.00	Reconciled

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Payment Document : IRWD CHECK								
398871		16-MAY-19	WEST COAST SAFETY SUPPLY INC		35,014.15	29-MAY-19	35,014.15	Reconciled
398872		16-MAY-19	WEST YOST ASSOCIATES, INC		4,957.00	22-MAY-19	4,957.00	Reconciled
398873		16-MAY-19	WIRELESS WATCHDOGS, LLC		1,100.00			Negotiable
398874		16-MAY-19	WISCONSIN STATE LABORATORY OF HYGENE		660.00	20-MAY-19	660.00	Reconciled
398875		16-MAY-19	WU, ZHE		42.78			Negotiable
398876		16-MAY-19	YELLOW CAB OF GREATER ORANGE COUNTY		39.00	21-MAY-19	39.00	Reconciled
398877		22-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	5,255.25	28-MAY-19	5,255.25	Reconciled
398878		23-MAY-19	Bennett, Ray R (Ray)		195.96	30-MAY-19	195.96	Reconciled
398879		23-MAY-19	Johnson, Dane		89.78			Negotiable
398880		23-MAY-19	Kulick, Michael		70.00	29-MAY-19	70.00	Reconciled
398881		23-MAY-19	Ludwig, Jason		159.02	28-MAY-19	159.02	Reconciled
398882		23-MAY-19	McElroy, Dorien		102.00	28-MAY-19	102.00	Reconciled
398883		23-MAY-19	Moore, Rory M (Rory)		410.00	29-MAY-19	410.00	Reconciled
398884		23-MAY-19	Mwe, Nang		35.73	28-MAY-19	35.73	Reconciled
398885		23-MAY-19	Parker, Esther A		33.24	24-MAY-19	33.24	Reconciled
398886		23-MAY-19	Toland, Scott Andrew		59.16	28-MAY-19	59.16	Reconciled
398887		23-MAY-19	Welch, Kelly A (Kellie)		164.60	23-MAY-19	164.60	Reconciled
398888		23-MAY-19	ABEBE, ABBI		35.09	28-MAY-19	35.09	Reconciled
398889		23-MAY-19	AERATION INDUSTRIES INTERNATIONAL INC		3,932.88	31-MAY-19	3,932.88	Reconciled
398890		23-MAY-19	AGARWALA, TARLA		19.53			Negotiable
398891		23-MAY-19	AGILENT TECHNOLOGIES, INC.		4,000.11	28-MAY-19	4,000.11	Reconciled
398892		23-MAY-19	AIR TECHNOLOGY LABORATORIES		717.00	31-MAY-19	717.00	Reconciled
398893		23-MAY-19	AIRKINETICS, INC		7,550.00	30-MAY-19	7,550.00	Reconciled
398894		23-MAY-19	ALSTON & BIRD LLP		202,567.46	03-JUN-19	202,567.46	Reconciled
398895		23-MAY-19	AMAZON CAPITAL SERVICES, INC.		4,758.45	28-MAY-19	4,758.45	Reconciled
398896		23-MAY-19	ANDERSONPENNA PARTNERS, INC		64,898.50			Negotiable
398897		23-MAY-19	ASSOCIATION OF CALIFORNIA CITIES		4,000.00	31-MAY-19	4,000.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								

398898	23-MAY-19	AT&T	8,487.39	29-MAY-19	8,487.39	Reconciled
398899	23-MAY-19	AT&T	173.55	29-MAY-19	173.55	Reconciled
398900	23-MAY-19	AUTOZONE PARTS, INC.	177.78	28-MAY-19	177.78	Reconciled
398901	23-MAY-19	BATTERIES PLUS AND BATTERIES PLUS BULBS	1,393.58	28-MAY-19	1,393.58	Reconciled
398902	23-MAY-19	BDC SPECIAL WASTE	559.98	28-MAY-19	559.98	Reconciled
398903	23-MAY-19	BEE EMERGENCY RESPONSE TEAM	175.00	29-MAY-19	175.00	Reconciled
398904	23-MAY-19	BELL TOWER FLORIST & GIFTS	183.16			Negotiable
398905	23-MAY-19	BORCHARD SURVEYING & MAPPING, INC.	3,822.50	30-MAY-19	3,822.50	Reconciled
398906	23-MAY-19	BRADY INDUSTRIES, LLC	81.24	28-MAY-19	81.24	Reconciled
398907	23-MAY-19	BRENNTAG PACIFIC INC	4,140.00	28-MAY-19	4,140.00	Reconciled
398908	23-MAY-19	BROADCOM LTD	1,052.47			Negotiable
398909	23-MAY-19	BROWN AND CALDWELL	140,171.87	30-MAY-19	140,171.87	Reconciled
398910	23-MAY-19	BUENA VISTA WATER STORAGE DISTRICT	169,090.90	31-MAY-19	169,090.90	Reconciled
398911	23-MAY-19	BUSH & ASSOCIATES INC	2,512.00			Negotiable
398912	23-MAY-19	CALIFORNIA BARRICADE RENTAL, INC.	8,380.00	28-MAY-19	8,380.00	Reconciled
398913	23-MAY-19	CALIFORNIA NEWSPAPER PARTNERSHIP	1,848.35	30-MAY-19	1,848.35	Reconciled
398914	23-MAY-19	CALIFORNIA STATE UNIVERSITY, FULLERTON	10,584.00	31-MAY-19	10,584.00	Reconciled
398915	23-MAY-19	CANON FINANCIAL SERVICES, INC	9,377.68	29-MAY-19	9,377.68	Reconciled
398916	23-MAY-19	CANON SOLUTIONS AMERICA, INC.	9.05	29-MAY-19	9.05	Reconciled
398917	23-MAY-19	CDW GOVERNMENT LLC	1,323.77	30-MAY-19	1,323.77	Reconciled
398918	23-MAY-19	CERTIFIED TRANSPORTATION	755.58	28-MAY-19	755.58	Reconciled
398919	23-MAY-19	CHAIREL CUSTOM HAY, INC.	6,928.11	28-MAY-19	6,928.11	Reconciled
398920	23-MAY-19	CHARLES P CROWLEY COMPANY INC	771.48	30-MAY-19	771.48	Reconciled
398921	23-MAY-19	CHEM TECH INTERNATIONAL INC	2,600.40	31-MAY-19	2,600.40	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398922		23-MAY-19	CITY OF LAKE FOREST		20,614.23			Negotiable
398923		23-MAY-19	CITY OF NEWPORT BEACH		921.22	28-MAY-19	921.22	Reconciled
398924		23-MAY-19	CIVIL SOURCE, INC.		41,510.00	03-JUN-19	41,510.00	Reconciled
398925		23-MAY-19	CONSTELLATION NEWENERGY, INC.		7,563.81	30-MAY-19	7,563.81	Reconciled
398926		23-MAY-19	DATA CLEAN CORPORATION		534.00	29-MAY-19	534.00	Reconciled
398927		23-MAY-19	DEACON, JANET		100.69			Negotiable
398928		23-MAY-19	DEE JASPAR & ASSOCIATES, INC.		4,295.38	31-MAY-19	4,295.38	Reconciled
398929		23-MAY-19	DILYTICS INC		59,720.00	03-JUN-19	59,720.00	Reconciled
398930		23-MAY-19	DIRECTV INC		131.98	30-MAY-19	131.98	Reconciled
398931		23-MAY-19	DRIVELINES UNLIMITED		190.81	29-MAY-19	190.81	Reconciled
398932		23-MAY-19	EAGLE AERIAL PHOTOGRAPHY, INC.		16,500.00			Negotiable
398933		23-MAY-19	EDAH-TALLY, ISSA		44.85			Negotiable
398934		23-MAY-19	ENTERPRISE SECURITY, INC		2,163.10	28-MAY-19	2,163.10	Reconciled
398935		23-MAY-19	ENVIRONMENTAL RESOURCE ASSOCIATES		5,552.52	30-MAY-19	5,552.52	Reconciled
398936		23-MAY-19	EUROFINS EATON ANALYTICAL, INC.		192.15	29-MAY-19	192.15	Reconciled
398937		23-MAY-19	FEDEX		137.73	28-MAY-19	137.73	Reconciled
398938		23-MAY-19	FERGUSON ENTERPRISES, INC.		1,967.30	28-MAY-19	1,967.30	Reconciled
398939		23-MAY-19	FIONA HUTTON & ASSOCIATES, INC.		24,163.75	31-MAY-19	24,163.75	Reconciled
398940		23-MAY-19	FIRE EXTINGUISHING SAFETY & SERVICE		661.44	28-MAY-19	661.44	Reconciled
398941		23-MAY-19	FISHER SCIENTIFIC COMPANY LLC		1,981.39	28-MAY-19	1,981.39	Reconciled
398942		23-MAY-19	FLECK, MARCEL		26.95	29-MAY-19	26.95	Reconciled
398943		23-MAY-19	FRONTIER CALIFORNIA INC.		554.82	30-MAY-19	554.82	Reconciled

398944	23-MAY-19	FULLER TRUCK ACCESSORIES	382.04	30-MAY-19	382.04	Reconciled
398945	23-MAY-19	FUSCOE ENGINEERING, INC.	6,392.50	29-MAY-19	6,392.50	Reconciled
398946	23-MAY-19	GEIGER BROS	1,948.16	29-MAY-19	1,948.16	Reconciled
398947	23-MAY-19	GRAINGER	837.77	28-MAY-19	837.77	Reconciled
398948	23-MAY-19	GRAYBAR ELECTRIC COMPANY	24,855.68	28-MAY-19	24,855.68	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398949		23-MAY-19	HAAKER EQUIPMENT COMPANY		987.75	29-MAY-19	987.75	Reconciled
398950		23-MAY-19	HACH COMPANY		4,413.12	28-MAY-19	4,413.12	Reconciled
398951		23-MAY-19	HAMILTON, KURT		812.85			Negotiable
398952		23-MAY-19	HARRINGTON INDUSTRIAL PLASTICS LLC		9,548.49	28-MAY-19	9,548.49	Reconciled
398953		23-MAY-19	HDR ENGINEERING INC		144,544.42	03-JUN-19	144,544.42	Reconciled
398954		23-MAY-19	HELPMATES STAFFING SERVICES		19,644.10	29-MAY-19	19,644.10	Reconciled
398955		23-MAY-19	HERITAGE FIELDS EL TORO, LLC		94,150.00			Voided
398956		23-MAY-19	HERITAGE HILLS IRVINE, LLC		54.61			Negotiable
398957		23-MAY-19	HGCPM, INC		1,678.00	28-MAY-19	1,678.00	Reconciled
398958		23-MAY-19	HILL BROTHERS CHEMICAL COMPANY		21,438.32	31-MAY-19	21,438.32	Reconciled
398959		23-MAY-19	HOME DEPOT USA INC		402.08	28-MAY-19	402.08	Reconciled
398960		23-MAY-19	ICE QUBE, INC.		4,983.97	28-MAY-19	4,983.97	Reconciled
398961		23-MAY-19	IDE, TAKASHI		11.47			Negotiable
398962		23-MAY-19	INDUSTRIAL NETWORKING SOLUTIONS		797.66	28-MAY-19	797.66	Reconciled
398963		23-MAY-19	INFOSYS LIMITED		24,480.00	31-MAY-19	24,480.00	Reconciled
398964		23-MAY-19	INTEGRATED PERFORMANCE CONSULTANTS, INC.		5,150.00	30-MAY-19	5,150.00	Reconciled
398965		23-MAY-19	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,567.69	28-MAY-19	1,567.69	Reconciled
398966		23-MAY-19	IRVINE PACIFIC		262.43	31-MAY-19	262.43	Reconciled
398967		23-MAY-19	IRVINE PIPE & SUPPLY INC		387.95	28-MAY-19	387.95	Reconciled
398968		23-MAY-19	IRWD-PETTY CASH CUSTODIAN		1,271.58	24-MAY-19	1,271.58	Reconciled
398969		23-MAY-19	JACKSON TIDUS, A LAW CORPORATION		13,440.00	29-MAY-19	13,440.00	Reconciled
398970		23-MAY-19	KENT & AMY DAHLBERG		4,076.00	30-MAY-19	4,076.00	Reconciled
398971		23-MAY-19	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES		2,575.00	29-MAY-19	2,575.00	Reconciled
398972		23-MAY-19	KRONICK MOSKOVITZ TIEDEMANN & GIRARD		9,106.15	28-MAY-19	9,106.15	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398973		23-MAY-19	LANDCARE HOLDINGS, INC.		2,688.00	29-MAY-19	2,688.00	Reconciled
398974		23-MAY-19	LCS TECHNOLOGIES, INC.		6,750.00	28-MAY-19	6,750.00	Reconciled
398975		23-MAY-19	LENNAR HOMES		15.94	28-MAY-19	15.94	Reconciled
398976		23-MAY-19	LINE-X OF SOUTH COAST		1,893.20	30-MAY-19	1,893.20	Reconciled
398977		23-MAY-19	LIU, ZHE		262.33			Negotiable
398978		23-MAY-19	LUBRICATION ENGINEERS, INC.		7,856.92	28-MAY-19	7,856.92	Reconciled
398979		23-MAY-19	LV, ZHELIANG		41.38			Negotiable
398980		23-MAY-19	MAAL, SETARE		48.22	28-MAY-19	48.22	Reconciled
398981		23-MAY-19	MAP COMMUNICATIONS, INC.		940.62	29-MAY-19	940.62	Reconciled
398982		23-MAY-19	MC FADDEN-DALE INDUSTRIAL		53.52	29-MAY-19	53.52	Reconciled
398983		23-MAY-19	MC MASTER CARR SUPPLY CO		1,277.76	28-MAY-19	1,277.76	Reconciled
398984		23-MAY-19	MERRIMAC		16,658.01	28-MAY-19	16,658.01	Reconciled

398985	23-MAY-19	PETROLEUM, INC. MESA LABORATORIES, INC.	1,103.92	29-MAY-19	1,103.92	Reconciled
398986	23-MAY-19	MICHAEL BAKER INTERNATIONAL, INC.	89,860.28	31-MAY-19	89,860.28	Reconciled
398987	23-MAY-19	MICHELE CHAVIS- LOVING	656.79	28-MAY-19	656.79	Reconciled
398988	23-MAY-19	MOODY'S INVESTORS SERVICE INC	7,700.00	28-MAY-19	7,700.00	Reconciled
398989	23-MAY-19	NATIONAL READY MIXED CONCRETE CO.	549.54	28-MAY-19	549.54	Reconciled
398990	23-MAY-19	NCH CORPORATION	1,305.71	28-MAY-19	1,305.71	Reconciled
398991	23-MAY-19	NEWAGE INDUSTRIES INC	1,182.63	28-MAY-19	1,182.63	Reconciled
398992	23-MAY-19	NINYO & MOORE	9,866.25	28-MAY-19	9,866.25	Reconciled
398993	23-MAY-19	OLIN CORPORATION	11,162.24	31-MAY-19	11,162.24	Reconciled
398994	23-MAY-19	OLSON, HAGEL & FISHBURN, LLP	1,025.00	28-MAY-19	1,025.00	Reconciled
398995	23-MAY-19	ONESOURCE DISTRIBUTORS LLC	935.65	28-MAY-19	935.65	Reconciled
398996	23-MAY-19	ORANGE COUNTY AUTO PARTS CO	1,246.33	28-MAY-19	1,246.33	Reconciled
398997	23-MAY-19	ORANGE COUNTY COASTKEEPER	2,500.00	28-MAY-19	2,500.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
398998		23-MAY-19	ORANGE COUNTY FIRE AUTHORITY		317.00	28-MAY-19	317.00	Reconciled
398999		23-MAY-19	ORANGE COUNTY WATER DISTRICT		394,937.50	30-MAY-19	394,937.50	Reconciled
399000		23-MAY-19	PACIFIC COAST BOLT CORP		164.96	30-MAY-19	164.96	Reconciled
399001		23-MAY-19	PACIFIC PARTS & CONTROLS INC		2,905.06	29-MAY-19	2,905.06	Reconciled
399002		23-MAY-19	PAPCUN-CHUPACK, JOY ANN		401.29			Voided
399003		23-MAY-19	PASCAL & LUDWIG CONSTRUCTORS		7,501.83	29-MAY-19	7,501.83	Reconciled
399004		23-MAY-19	PASCAL & LUDWIG CONSTRUCTORS		142,534.84	30-MAY-19	142,534.84	Reconciled
399005		23-MAY-19	PAYNE & FEARS LLP		1,862.68	28-MAY-19	1,862.68	Reconciled
399006		23-MAY-19	PINNACLE TOWERS LLC		749.21	28-MAY-19	749.21	Reconciled
399007		23-MAY-19	PTI SAND & GRAVEL INC		483.51	28-MAY-19	483.51	Reconciled
399008		23-MAY-19	QUICKEL PAVING INC		595.00	28-MAY-19	595.00	Reconciled
399009		23-MAY-19	QUINN COMPANY		122.48	28-MAY-19	122.48	Reconciled
399010		23-MAY-19	RINCON TRUCK CENTER INC.		922.37	29-MAY-19	922.37	Reconciled
399011		23-MAY-19	ROMERO, EVELYN		65.63			Negotiable
399012		23-MAY-19	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT		18,639.76			Negotiable
399013		23-MAY-19	S & J SUPPLY CO INC		3,614.77	28-MAY-19	3,614.77	Reconciled
399014		23-MAY-19	SANTA MARGARITA FORD		772.28	28-MAY-19	772.28	Reconciled
399015		23-MAY-19	SERRANO WATER DISTRICT		73,127.76	03-JUN-19	73,127.76	Reconciled
399016		23-MAY-19	SHAMROCK SUPPLY CO INC		1,986.97	28-MAY-19	1,986.97	Reconciled
399017		23-MAY-19	SIMI VALLEY LANDFILL AND RECYCLING CENTER		591.12	28-MAY-19	591.12	Reconciled
399018		23-MAY-19	SITEONE LANDSCAPE SUPPLY, LLC		2,941.94	28-MAY-19	2,941.94	Reconciled
399019		23-MAY-19	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		1,462.78	28-MAY-19	1,462.78	Reconciled

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Payment Document : IRWD CHECK								
399020		23-MAY-19	SOUTH ORANGE COUNTY REGIONAL CHAMBERS OF COMMERCE		2,500.00			Negotiable
399021		23-MAY-19	SOUTHERN		629,954.53	28-MAY-19	629,954.53	Reconciled

399022	23-MAY-19	CALIFORNIA EDISON COMPANY SOUTHERN	27.66	29-MAY-19	27.66	Reconciled
399023	23-MAY-19	CALIFORNIA EDISON COMPANY SOUTHERN	59.46	28-MAY-19	59.46	Reconciled
399024	23-MAY-19	CALIFORNIA GAS COMPANY	3,473.21	28-MAY-19	3,473.21	Reconciled
399025	23-MAY-19	SOUTHERN COUNTIES LUBRICANTS LLC	29.07			Negotiable
399026	23-MAY-19	SPINNEY, WILLIAM STANDARD REGISTER, INC.	2,565.13	29-MAY-19	2,565.13	Reconciled
399027	23-MAY-19	STANTEC CONSULTING SERVICES INC.	6,674.00	28-MAY-19	6,674.00	Reconciled
399028	23-MAY-19	STETSON ENGINEERS INC.	1,820.00	28-MAY-19	1,820.00	Reconciled
399029	23-MAY-19	SUEZ TREATMENT SOLUTIONS INC.	274.36	28-MAY-19	274.36	Reconciled
399030	23-MAY-19	TELL STEEL INC.	5,230.74	29-MAY-19	5,230.74	Reconciled
399031	23-MAY-19	TONHO INTERNATIONAL	4,840.96	30-MAY-19	4,840.96	Reconciled
399032	23-MAY-19	TRI POINTE HOMES, INC.	452.44			Negotiable
399033	23-MAY-19	TRI POINTE HOMES, INC.	211.06			Negotiable
399034	23-MAY-19	TROPICAL PLAZA NURSERY INC	25,666.00	30-MAY-19	25,666.00	Reconciled
399035	23-MAY-19	TRUCPARCO	803.27			Negotiable
399036	23-MAY-19	TULLUS, TRACIE	28.76	31-MAY-19	28.76	Reconciled
399037	23-MAY-19	UNITED PARCEL SERVICE INC	118.18	28-MAY-19	118.18	Reconciled
399038	23-MAY-19	UNITED SITE SERVICES OF CALIFORNIA INC	852.63	28-MAY-19	852.63	Reconciled
399039	23-MAY-19	VIETNAMESE AMERICAN CHAMBER OF COMMERCE	200.00			Negotiable
399040	23-MAY-19	VWR INTERNATIONAL, LLC	3,152.22	29-MAY-19	3,152.22	Reconciled

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Payment Document : IRWD CHECK								
399041		23-MAY-19	WARD, WILLIAM P JR.		1,390.38	30-MAY-19	1,390.38	Reconciled
399042		23-MAY-19	WASTE MANAGEMENT OF ORANGE COUNTY		855.68	28-MAY-19	855.68	Reconciled
399043		23-MAY-19	WATERBORNE, INC		515.00	30-MAY-19	515.00	Reconciled
399044		23-MAY-19	WATERLINE TECHNOLOGIES INC		2,840.00	28-MAY-19	2,840.00	Reconciled
399045		23-MAY-19	WECK LABORATORIES INC		1,630.00	30-MAY-19	1,630.00	Reconciled
399046		23-MAY-19	WEST COAST SAFETY SUPPLY INC		9,717.34	29-MAY-19	9,717.34	Reconciled
399047		23-MAY-19	WESTAMERICA COMMUNICATIONS, INC.		7,627.62	28-MAY-19	7,627.62	Reconciled
399048		23-MAY-19	WESTERN AV		22,683.31	31-MAY-19	22,683.31	Reconciled
399049		23-MAY-19	WIN-911 SOFTWARE		1,030.00	31-MAY-19	1,030.00	Reconciled
399050		23-MAY-19	YP LLC		91.00	28-MAY-19	91.00	Reconciled
399051		24-MAY-19	Swan, Peer	HOME	562.50	29-MAY-19	562.50	Reconciled
399052		24-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	3,292.80	28-MAY-19	3,292.80	Reconciled
399053		24-MAY-19	PERS LONG TERM CARE	PASADENA	538.89	29-MAY-19	538.89	Reconciled
399054		24-MAY-19	FRANCHISE TAX BOARD	SACRAMENTO 1	280.00			Negotiable
399055		24-MAY-19	ORANGE COUNTY SHERIFF'S OFFICE	4601 JAMBOREE	62.50			Negotiable
399056		24-MAY-19	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	DIAMOND BAR	2,450.87	31-MAY-19	2,450.87	Reconciled
399057		24-MAY-19	U.S. BANK NATIONALST. LOUIS ASSOCIATION		38,782.63			Voided
399058		28-MAY-19	CITY OF IRVINE	IRVINE 1	5,936.00	29-MAY-19	5,936.00	Reconciled
399059		28-MAY-19	JCI JONES CHEMICALS INC	PO BOX 830674	3,446.37	31-MAY-19	3,446.37	Reconciled
399060		28-MAY-19	LUU, VAN	PAY	383.60	31-MAY-19	383.60	Reconciled
399061		28-MAY-19	SOUTHERN CALIFORNIA EDISON COMPANY	PURCHASE	76,931.75	30-MAY-19	76,931.75	Reconciled
399062		29-MAY-19	Chambers, Wendy		569.18			Negotiable
399063		29-MAY-19	Chaney, Michael A (Michael)		762.31			Negotiable
399064		29-MAY-19	Clary, Cheryl L		39.44			Negotiable
399065		29-MAY-19	Clinton, Bryan R		25.00	03-JUN-19	25.00	Reconciled

(Bryan)
 399066 29-MAY-19 Hansen, Casey 75.86 Negotiable
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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399067		29-MAY-19	Lin, Eileen		475.23	31-MAY-19	475.23	Reconciled
399068		29-MAY-19	(Eileen) Nelson, Mark D		105.00	03-JUN-19	105.00	Reconciled
399069		29-MAY-19	Phuong, Sophia		22.10			Negotiable
399070		29-MAY-19	Valencia, Reynaldo		59.52			Negotiable
399071		29-MAY-19	Zaragoza, Anthony		29.93			Negotiable
399072		29-MAY-19	ANTHEM BLUE CROSS	LOS ANGELES	234.65	03-JUN-19	234.65	Reconciled
399073		29-MAY-19	ANTHEM BLUE CROSS	LOS ANGELES	597.14	03-JUN-19	597.14	Reconciled
399074		29-MAY-19	ANTHEM BLUE CROSS	LOS ANGELES	597.14	03-JUN-19	597.14	Reconciled
399075		29-MAY-19	AAF INTERNATIONAL		1,079.62	03-JUN-19	1,079.62	Reconciled
399076		29-MAY-19	ABSOLUTE STANDARDS, INC.		246.50			Negotiable
399077		29-MAY-19	AEGIS ENGINEERING MANAGEMENT, INC.		18,249.00			Negotiable
399078		29-MAY-19	AIRGAS, INC.		148.70	03-JUN-19	148.70	Reconciled
399079		29-MAY-19	ALSTON & BIRD LLP		120,441.30			Negotiable
399080		29-MAY-19	AM LEONARD INC		1,076.11	03-JUN-19	1,076.11	Reconciled
399081		29-MAY-19	AMAZON CAPITAL SERVICES, INC.		1,864.94	03-JUN-19	1,864.94	Reconciled
399082		29-MAY-19	AMERICAN VAN EQUIPMENT, INC		463.18	03-JUN-19	463.18	Reconciled
399083		29-MAY-19	APPLIED INDUSTRIAL TECHNOLOGIES - CA LLC		210.64	03-JUN-19	210.64	Reconciled
399084		29-MAY-19	AQUA-METRIC SALES COMPANY		40,892.42			Negotiable
399085		29-MAY-19	ARAMEXX CONSTRUCTION		1,255.72			Negotiable
399086		29-MAY-19	ARCADIS U.S., INC.		53,789.14			Negotiable
399087		29-MAY-19	AT&T		53.47			Negotiable
399088		29-MAY-19	AT&T		248.14			Negotiable
399089		29-MAY-19	AT&T		11.59			Negotiable
399090		29-MAY-19	BEENE, JOHN		250.00			Negotiable
399091		29-MAY-19	BROOKFIELD ENCLAVE LLC		479.00			Negotiable
399092		29-MAY-19	BROOKFIELD RESIDENTIAL		244.27			Negotiable
399093		29-MAY-19	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC		300.68	31-MAY-19	300.68	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 34
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399094		29-MAY-19	CALIFORNIA BARRICADE RENTAL, INC.		9,185.07			Negotiable
399095		29-MAY-19	CALIFORNIA INVASIVE PLANT COUNCIL		1,000.00			Negotiable
399096		29-MAY-19	CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION		12,790.00			Negotiable
399097		29-MAY-19	CAROLLO ENGINEERS, INC		84,369.50			Negotiable
399098		29-MAY-19	CDW GOVERNMENT LLC		369.51	03-JUN-19	369.51	Reconciled
399099		29-MAY-19	CEDAR CREEK APARTMENTS		104.34			Negotiable
399100		29-MAY-19	CHARAN, NARIN		27.13			Negotiable
399101		29-MAY-19	CITY CIRCUIT BREAKERS		3,333.79	03-JUN-19	3,333.79	Reconciled
399102		29-MAY-19	CITY OF LAKE FOREST		12,069.25			Negotiable
399103		29-MAY-19	CITY OF SANTA ANA		114.98	03-JUN-19	114.98	Reconciled
399104		29-MAY-19	CIVIL SOURCE, INC.		44,135.00			Negotiable
399105		29-MAY-19	CONNEXUS INDUSTRIES INC.		27,119.32			Negotiable
399106		29-MAY-19	CONSTELLATION NEWENERGY, INC.		1,829.30			Negotiable

399107	29-MAY-19	CROSS CREEK APTS	94.08					Negotiable
399108	29-MAY-19	CULLIGAN OF SANTA ANA	4,000.00	03-JUN-19		4,000.00		Reconciled
399109	29-MAY-19	DAVID WILSON'S FORD OF ORANGE	45,800.85					Negotiable
399110	29-MAY-19	DELL MARKETING LP	839.88	03-JUN-19		839.88		Reconciled
399111	29-MAY-19	DENALI WATER SOLUTIONS LLC	5,077.31	03-JUN-19		5,077.31		Reconciled
399112	29-MAY-19	DEVINE, ILA RUTH	78.17					Negotiable
399113	29-MAY-19	DIRECTV INC	132.53					Negotiable
399114	29-MAY-19	DIVITA BUILDER, INC	1,626.00					Negotiable
399115	29-MAY-19	ECO SERVICES LLC	5,238.42	03-JUN-19		5,238.42		Reconciled
399116	29-MAY-19	EDWARD P BAKER III	2,775.00					Negotiable
399117	29-MAY-19	FARWEST CORROSION CONTROL COMPANY	1,667.33	03-JUN-19		1,667.33		Reconciled
399118	29-MAY-19	FEDEX	305.34	03-JUN-19		305.34		Reconciled
399119	29-MAY-19	FIELD ASSESTS SERVICES LLC	109.92					Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399120		29-MAY-19	FISHER SCIENTIFIC COMPANY LLC		17,386.26			Negotiable
399121		29-MAY-19	FLOTECH, INC.		3,264.36	03-JUN-19	3,264.36	Reconciled
399122		29-MAY-19	FRONTIER CALIFORNIA INC.		328.49			Negotiable
399123		29-MAY-19	GARDENSOFT CORP		3,000.00	03-JUN-19	3,000.00	Reconciled
399124		29-MAY-19	GEI CONSULTANTS INC		9,238.69	03-JUN-19	9,238.69	Reconciled
399125		29-MAY-19	GENUINE ENGINEERING INC		1,608.13			Negotiable
399126		29-MAY-19	GHD INC.		11,555.24			Negotiable
399127		29-MAY-19	GILL, FRANCES		9.00	31-MAY-19	9.00	Reconciled
399128		29-MAY-19	GRACE LEE HSIA, WENLI		56.67	31-MAY-19	56.67	Reconciled
399129		29-MAY-19	GRAINGER		4,937.96	03-JUN-19	4,937.96	Reconciled
399130		29-MAY-19	GRAYBAR ELECTRIC COMPANY		2,731.44	03-JUN-19	2,731.44	Reconciled
399131		29-MAY-19	HARRINGTON INDUSTRIAL PLASTICS LLC		3,488.13	03-JUN-19	3,488.13	Reconciled
399132		29-MAY-19	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY		72.30	03-JUN-19	72.30	Reconciled
399133		29-MAY-19	HDR ENGINEERING INC		72,442.04			Negotiable
399134		29-MAY-19	HELPMATES STAFFING SERVICES		10,556.08			Negotiable
399135		29-MAY-19	HILL BROTHERS CHEMICAL COMPANY		8,409.95			Negotiable
399136		29-MAY-19	HOME DEPOT USA INC		1,177.28	03-JUN-19	1,177.28	Reconciled
399137		29-MAY-19	HONG, CHRISTINA		112.44			Negotiable
399138		29-MAY-19	HORIZON LIGHTING, INC.		2,399.94	31-MAY-19	2,399.94	Reconciled
399139		29-MAY-19	HUMANA INSURANCE COMPANY		73.80			Negotiable
399140		29-MAY-19	HYLIION, INC		13.75			Negotiable
399141		29-MAY-19	INSITUFORM TECHNOLOGIES, LLC		917.31			Negotiable
399142		29-MAY-19	IRVINE PIPE & SUPPLY INC		3,848.12	31-MAY-19	3,848.12	Reconciled
399143		29-MAY-19	IRVINE UNIFIED SCHOOL DISTRICT		1,057.93			Negotiable
399144		29-MAY-19	IRWD-PETTY CASH CUSTODIAN		1,011.93	30-MAY-19	1,011.93	Reconciled
399145		29-MAY-19	JOHN MICHAEL COVAS		173.20			Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399146		29-MAY-19	KEY INFORMATION SYSTEMS, INC.		2,050.00	03-JUN-19	2,050.00	Reconciled
399147		29-MAY-19	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES		1,400.00	03-JUN-19	1,400.00	Reconciled
399148		29-MAY-19	KLEINFELDER, INC.		1,641.25	03-JUN-19	1,641.25	Reconciled
399149		29-MAY-19	KOURY ENGINEERING & TESTING, INC.		29,440.00			Negotiable
399150		29-MAY-19	KUTAK ROCK LLP		7,550.00	03-JUN-19	7,550.00	Reconciled

399151	29-MAY-19	LEE, JACK	61.69					Negotiable
399152	29-MAY-19	LENNAR HOMES	22.06	03-JUN-19		22.06		Reconciled
399153	29-MAY-19	LI, LI	28.80					Negotiable
399154	29-MAY-19	MA, QIANG	1,321.43					Negotiable
399155	29-MAY-19	MACKLE, ERIN	44.88					Negotiable
399156	29-MAY-19	MANDEVILLE HOLDINGS, LLC	796.20					Negotiable
399157	29-MAY-19	MATT WHITE CUSTOM INC	1,347.00					Negotiable
399158	29-MAY-19	MAVANDADI, AZITA	1,623.88					Negotiable
399159	29-MAY-19	MC FADDEN-DALE INDUSTRIAL	145.72					Negotiable
399160	29-MAY-19	MC MASTER CARR SUPPLY CO	989.82	03-JUN-19		989.82		Reconciled
399161	29-MAY-19	MOODY'S INVESTORS SERVICE INC	15,400.00					Negotiable
399162	29-MAY-19	MPULSE MOBILE, INC	135.48					Negotiable
399163	29-MAY-19	MRO ELECTRIC & SUPPLY CO.	13,914.00					Negotiable
399164	29-MAY-19	NATIONAL READY MIXED CONCRETE CO.	1,787.82	03-JUN-19		1,787.82		Reconciled
399165	29-MAY-19	NINYO & MOORE	4,116.00	03-JUN-19		4,116.00		Reconciled
399166	29-MAY-19	NMG GEOTECHNICAL INC	3,332.60	31-MAY-19		3,332.60		Reconciled
399167	29-MAY-19	OLIN CORPORATION	12,833.02					Negotiable
399168	29-MAY-19	ONESOURCE DISTRIBUTORS LLC	3,049.71	03-JUN-19		3,049.71		Reconciled
399169	29-MAY-19	ORANGE COAST PLUMBING	1,303.08	03-JUN-19		1,303.08		Reconciled
399170	29-MAY-19	ORANGE COUNTY AUTO PARTS CO	113.60	31-MAY-19		113.60		Reconciled
399171	29-MAY-19	PRAXAIR DISTRIBUTION INC	1,122.47	03-JUN-19		1,122.47		Reconciled
399172	29-MAY-19	PRE-PAID LEGAL SERVICES INC	1,188.10					Negotiable
399173	29-MAY-19	PURE EFFECT INC	7,553.50					Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399174		29-MAY-19	RAM AIR ENGINEERING INC		1,980.00			Negotiable
399175		29-MAY-19	RANCHO MADERAS APTS		10.67			Negotiable
399176		29-MAY-19	RAO, PING		12.11			Negotiable
399177		29-MAY-19	REACH EMPLOYEE ASSISTANCE INC		1,066.80			Negotiable
399178		29-MAY-19	REAL WATER CONSULTANTS INC.		11,502.00			Negotiable
399179		29-MAY-19	RESILIENT COMMUNICATIONS INC.		1,241.60			Negotiable
399180		29-MAY-19	RICHARD C. SLADE & ASSOCIATES LLC		3,626.67			Negotiable
399181		29-MAY-19	RICHMOND AMERICAN HOMES OF MARYLAND, INC		410.97			Negotiable
399182		29-MAY-19	RIVERA, EDSEL		153.31			Negotiable
399183		29-MAY-19	RLG ENTERPRISES, INC		1,741.32	31-MAY-19	1,741.32	Reconciled
399184		29-MAY-19	RONQUILLO, STACY		23.48			Negotiable
399185		29-MAY-19	SAGHIR, RUBY		43.04			Negotiable
399186		29-MAY-19	SAN LEON APTS		15.84			Negotiable
399187		29-MAY-19	SANSHIN ELECTRONICS CORP		302.05	03-JUN-19	302.05	Reconciled
399188		29-MAY-19	SANTA ANA BLUE PRINT		605.56			Negotiable
399189		29-MAY-19	SCAPARO, JORDAN		1,004.33			Negotiable
399190		29-MAY-19	SHEA HOMES LIMITED PARTNERSHIP		1,221.00			Negotiable
399191		29-MAY-19	SHERWIN WILLIAMS COMPANY		30.13			Negotiable
399192		29-MAY-19	SMOG TIME		360.00			Negotiable
399193		29-MAY-19	SNYDER LANGSTON L.P.		1,457.29			Negotiable
399194		29-MAY-19	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		3,288.70			Negotiable
399195		29-MAY-19	SOUTHERN CALIFORNIA EDISON COMPANY		227,104.07	03-JUN-19	227,104.07	Reconciled
399196		29-MAY-19	SPARKLETTS		282.67			Negotiable
399197		29-MAY-19	STANDARD & POOR'S FINANCIAL SERVICES LLC		5,000.00	03-JUN-19	5,000.00	Reconciled

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Payment Type: All

Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399198		29-MAY-19	STANTEC CONSULTING SERVICES INC.		7,761.75	03-JUN-19	7,761.75	Reconciled
399199		29-MAY-19	STRADLING YOCCA CARLSON & RAUTH		1,624.00	03-JUN-19	1,624.00	Reconciled
399200		29-MAY-19	SUMMIT CHEMICAL SPECIALTY PRODUCTS		11,769.12			Negotiable
399201		29-MAY-19	TETRA TECH, INC		19,259.00			Negotiable
399202		29-MAY-19	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC		1,343.36			Negotiable
399203		29-MAY-19	TIC-OFFICE PROPERTIES		389.90			Negotiable
399204		29-MAY-19	TOLL BROS., INC.		1,283.07			Negotiable
399205		29-MAY-19	TROPICAL PLAZA NURSERY INC		44,559.84			Negotiable
399206		29-MAY-19	TRUKSPECT, INC		903.96			Negotiable
399207		29-MAY-19	UNITED HEALTHCARE INSURANCE COMPANY		264.27			Negotiable
399208		29-MAY-19	UNIVAR USA INC		3,650.00	03-JUN-19	3,650.00	Reconciled
399209		29-MAY-19	USA PORTOLA WEST, LLC		4,200.00			Negotiable
399210		29-MAY-19	VERIZON WIRELESS SERVICES LLC		10,905.95	03-JUN-19	10,905.95	Reconciled
399211		29-MAY-19	VULCAN INDUSTRIES INC		5,225.65	03-JUN-19	5,225.65	Reconciled
399212		29-MAY-19	VULCAN MATERIALS COMPANY		1,475.86	03-JUN-19	1,475.86	Reconciled
399213		29-MAY-19	VWR INTERNATIONAL, LLC		798.46	03-JUN-19	798.46	Reconciled
399214		29-MAY-19	WATEREUSE ASSOCIATION		7,500.00			Negotiable
399215		29-MAY-19	WAXIE'S ENTERPRISES, INC		1,096.40	03-JUN-19	1,096.40	Reconciled
399216		29-MAY-19	WEST COAST SAFETY SUPPLY INC		589.27			Negotiable
399217		29-MAY-19	WESTERN SAFETY PRODUCTS INC		4,713.95			Negotiable
399218		29-MAY-19	WIECEK, TIMOTHY		29.75			Negotiable
399219		29-MAY-19	YANG, MO		26.54	03-JUN-19	26.54	Reconciled
399220		29-MAY-19	YST, INC		3,781.50	03-JUN-19	3,781.50	Reconciled
399221		30-MAY-19	US BANK NAT'L ASSOCIATION NORTH DAKOTA	PO BOX 790428	70,300.08			Negotiable
399222		30-MAY-19	DAN'S MACHINE TOOL, INC.	PAY	1,206.52			Negotiable
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
399223		30-MAY-19	Gronlund, Brandon A		50.00	03-JUN-19	50.00	Reconciled
399224		30-MAY-19	Hastings, Nola		35.72			Negotiable
399225		30-MAY-19	Mitchem, Dennis		325.00	03-JUN-19	325.00	Reconciled
Payment Document Subtotal:					12,897,330.91		11,489,187.15	

Payment Document : IRWD Wire

13159		01-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	MASON	1,401.80			Negotiable
13160		07-MAY-19	YORK INSURANCE SERVICES GROUP INC - CA	PAY	5,980.32			Negotiable
13161		08-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	2,982.52			Negotiable
13162		08-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	19,737.72			Negotiable
13163		10-MAY-19	INTERNAL REVENUE SERVICE	FRESNO	201,668.47			Negotiable
13164		10-MAY-19	FRANCHISE TAX BOARD	SACRAMENTO	61,789.04			Negotiable
13165		10-MAY-19	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	15,264.07			Negotiable
13166		10-MAY-19	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	3,026.42			Negotiable
13167		10-MAY-19	GREAT-WEST LIFE &	DENVER	155,043.49			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
ANNUITY INSURANCE COMPANY								
13168		10-MAY-19	CALPERS	SACRAMENTO	202,372.10			Negotiable
13169		10-MAY-19	CALPERS	SACRAMENTO	6.35			Negotiable
13170		13-MAY-19	CALPERS	SACRAMENTO	2,891.07			Negotiable
1								
13171		13-MAY-19	CALPERS	SACRAMENTO	510,602.81			Negotiable
1								
13172		14-MAY-19	MOHAMED, ASHRAF	PAY	39.12			Negotiable
13173		14-MAY-19	HORIBA, DAN	PAY	45.65			Negotiable
13174		15-MAY-19	U.S. BANK NATIONALST. LOUIS ASSOCIATION		8,057.57			Negotiable
13175		15-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	8,741.19			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAY-19 To 31-MAY-19 Report Date: 04-JUN-2019 10:41
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 40
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
13176		15-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	2,144.56			Negotiable
13177		16-MAY-19	YORK INSURANCE SERVICES GROUP INC - CA	PAY	3,285.75			Negotiable
13178		21-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	3,748.23			Negotiable
13179		21-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	5,574.75			Negotiable
13180		22-MAY-19	YORK INSURANCE SERVICES GROUP INC - CA	PAY	6,401.44			Negotiable
13181		24-MAY-19	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	117,670.35			Negotiable
13182		24-MAY-19	U.S. BANK NATIONALST. LOUIS ASSOCIATION		77,727.36			Negotiable
13183		24-MAY-19	BANK OF AMERICA	SAN FRANCISCO	76,640.45			Negotiable
13184		24-MAY-19	U.S. BANK NATIONALST. LOUIS ASSOCIATION		38,782.63			Negotiable
13185		24-MAY-19	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	66,108.49			Negotiable
13186		28-MAY-19	FILANC-BALFOUR BEATTY JV	ACT 4427724347	331,293.60			Negotiable
13187		28-MAY-19	FILANC-BALFOUR BEATTY JV	ESR 211084000	16,323.45			Negotiable
13188		28-MAY-19	INTERNAL REVENUE SERVICE	FRESNO	205,474.88			Negotiable
13189		28-MAY-19	FRANCHISE TAX BOARD	SACRAMENTO	63,894.42			Negotiable
13190		28-MAY-19	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	15,352.32			Negotiable
13191		28-MAY-19	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	3,269.65			Negotiable
13192		28-MAY-19	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	156,168.05			Negotiable
13193		29-MAY-19	INTERNAL REVENUE SERVICE	FRESNO	12,457.38			Negotiable
13194		29-MAY-19	FRANCHISE TAX BOARD	SACRAMENTO	3,467.09			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAY-19 To 31-MAY-19 Report Date: 04-JUN-2019 10:41
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 41
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
13195		29-MAY-19	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	1,007.60			Negotiable
13196		29-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	2,078.84			Negotiable
13197		29-MAY-19	CHARD SNYDER & ASSOCIATES, INC.	PURCHASE	15,786.73			Negotiable
13198		29-MAY-19	BANK OF AMERICA MERRILL LYNCH	CHICAGO	15,170.40			Negotiable
13199		29-MAY-19	CALPERS	SACRAMENTO	202,194.17			Negotiable
13200		29-MAY-19	CALPERS	SACRAMENTO	13,121.67			Negotiable
13201		30-MAY-19	CALPERS	SACRAMENTO	1,336.77			Negotiable
13202		30-MAY-19	ORANGE COUNTY	FOUNTAIN	3,334,548.37			Negotiable

13203	SANITATION DISTRICT	VALLEY		
	30-MAY-19 CALPERS	SACRAMENTO	1,203.69	Negotiable
	Payment Document Subtotal:		5,991,882.80	
	Bank Account Subtotal :		18,889,213.71	11,489,187.15
Report Count : 1007	Report Total:	18,889,213.71	11,489,187.15	
		Disbursements		

*** End of Report ***

\$ 18,889,213.71	Disbursements
<134,728.23>	Voids
\$ 18,754,485.48	Total Voids and Disbursements

Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

May
2019

	AMOUNT	VENDOR	PURPOSE
5/10/2019	1,004,897.08	BANK OF AMERICA	ACH Payments for Payroll
5/24/2019	1,021,059.06	BANK OF AMERICA	ACH Payments for Payroll
	<u>\$2,025,956.14</u>		


Exhibit "F"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.

01-MAY-19 to 31-MAY-19

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Beltran, Benjamin	398478	9-May-19	118.50	Other(Misc)	Wireless phone accessories
Bennett, Ray	398878	23-May-19	180.96	Mileage	SGMA meeting and Kern Water Trading Pilot presentation at Rosedale-Rio Bravo
Chambers, Wendy	399062	29-May-19	538.00	Airfare	Attended WEF-IWA Biosolids Conf., Ft. Lauderdale, FL - May 6-10, 2019
Chan, Cara	398480	9-May-19	116.33	Other(Misc)	Safety shoe allowance
Frost, Garrick	398689	16-May-19	143.72	Mileage	Attended Western States 53rd Annual Corrosion Seminar, Pomona, CA - May 7-9, 2019
Kanoff, Debbie	398690	16-May-19	134.97	Other(Misc)	Meeting supplies
King, Casey	398486	9-May-19	177.76	Other(Misc)	Safety shoe allowance
La, Jason	398487	9-May-19	169.12	Lodging	AWWA International Symposium on Waterborne Pathogens, Tampa, FL - April 28, 2019
La, Jason	398487	9-May-19	169.12	Lodging	AWWA International Symposium on Waterborne Pathogens, Tampa, FL - April 29, 2019
La, Jason	398487	9-May-19	169.12	Lodging	AWWA International Symposium on Waterborne Pathogens, Tampa, FL - April 30, 2019
LaMar, Steve	398476	7-May-19	506.86	Lodging	Calif. Environmental Dialogue Plenary meeting, Sacramento, CA - Dec. 5, 2018
LaMar, Steve	398476	7-May-19	281.08	Lodging	Calif. Environmental Dialogue Plenary meeting, Sacramento, CA - Dec. 6, 2018
Leonard, Joshua	398489	9-May-19	139.00	Other(Misc)	Wireless phone accessories
Lin, Eileen	399067	29-May-19	368.04	Lodging	GFOA 113th Annual Conference, Los Angeles, CA - May 20, 2019
Matheis, Mary	398267	2-May-19	174.61	Lodging	Colorado River Water Users Assoc. Annual Conf., Las Vegas, NV - Dec. 12, 2018
Matheis, Mary	398267	2-May-19	174.61	Lodging	Colorado River Water Users Assoc. Annual Conf., Las Vegas, NV - Dec. 13, 2018
McElroy, Dorien	398882	23-May-19	102.00	Certification Renewal	CWEA Collection System Maintenance Grade IV
Mitchem, Dennis	399225	30-May-19	120.00	Certification Renewal	SWRCB Water Treatment Grade II and Distribution Grade II
Mitchem, Dennis	399225	30-May-19	155.00	Certification Renewal	SWRCB Wastewater Treatment Operator Grade II
Moore, Rory	398883	23-May-19	205.00	Certification Renewal	SWRCB Water Treatment Operator T4
Moore, Rory	398883	23-May-19	205.00	Certification Renewal	SWRCB Water Distribution Operator Grade D5
Nelson, Mark	399068	29-May-19	105.00	Certification Renewal	SWRCB Water Distribution Operator Grade 4
Oldewage, Lars	398271	2-May-19	277.00	Membership Renewal	AWWA Annual membership
Oldewage, Lars	398693	16-May-19	193.96	Airfare	ACWA Regulatory Update meeting, Monterey, CA - May 7, 2019
Oldewage, Lars	398693	16-May-19	102.73	Auto Rental	ACWA Regulatory Update meeting, Monterey, CA - May 7, 2019
Olson, Richard Jr	398694	16-May-19	130.00	Certification Renewal	SWRCB Distribution Grade IV Exam Fee
Olson, Richard Jr	398694	16-May-19	105.00	Certification Renewal	SWRCB Certification Fee Reimbursement
Pilgrim, Jason	398695	16-May-19	209.50	Mileage	Western States Corrosion 53rd Annual Seminar, Pomona, CA - May 7-9, 2019
Pizanie, Nicholas	398491	9-May-19	118.50	Other(Misc)	Wireless phone accessories
Reinhart, Doug	398273	2-May-19	174.61	Lodging	Colorado River Water Users Assoc. Annual Conf., Las Vegas, NV - Dec. 13, 2018
Reinhart, Doug	398273	2-May-19	115.65	Mileage	Urban Water Institute 2019 Water Conf., Palm Springs, CA - Feb. 26-28, 2019
Reinhart, Doug	398273	2-May-19	188.26	Lodging	Urban Water Institute 2019 Water Conf., Palm Springs, CA - Feb. 27, 2019
Reinhart, Doug	398273	2-May-19	188.26	Lodging	Urban Water Institute 2019 Water Conf., Palm Springs, CA - Feb. 28, 2019
Swan, Peer	398276	2-May-19	142.10	Mileage	Calif. Assoc. of Sanitation Agencies' Winter Conf., Indian Wells, CA - Jan. 23-25, 2019
Swan, Peer	398276	2-May-19	316.68	Lodging	Calif. Assoc. of Sanitation Agencies' Winter Conf., Indian Wells, CA - Jan. 23, 2019
Swan, Peer	398276	2-May-19	327.06	Lodging	Calif. Assoc. of Sanitation Agencies' Winter Conf., Indian Wells, CA - Jan. 24, 2019
Swan, Peer	398276	2-May-19	573.96	Airfare	Calif. Assoc. of Sanitation Agencies Federal Legislation, Sacramento, CA - Dec. 7, 2019
Swan, Peer	398276	2-May-19	599.96	Airfare	Colorado River Water Users Assoc. Annual Conf., Las Vegas, NV - Dec. 12-14, 2018
Swan, Peer	398276	2-May-19	197.29	Lodging	Colorado River Water Users Assoc. Annual Conf., Las Vegas, NV - Dec. 13, 2018
Weghorst, Paul	398696	16-May-19	139.00	Other(Misc)	IPad accessories
Withers, John	398278	2-May-19	120.64	Mileage	Urban Water Institute 2019 Water Conf., Palm Springs, CA - Feb. 28, 2019
Total Amount:			\$8,673.96		

June 24, 2019
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook 

CONSENT CALENDAR

FISCAL YEAR 2019-2020 LEGAL SERVICES PROVIDED BY ALSTON & BIRD

SUMMARY:

IRWD has adopted a team approach to the procurement of legal services. The approach divides legal service responsibility for regular issues and matters across multiple law firms. In order to implement IRWD's approach, the Board authorized the General Manager to enter into several agreements for legal services. One of the firms the District has contracted with is Alston & Bird. Alston & Bird currently provides legal services to the District related to complex matters and complex litigation under a letter of engagement.

On March 26, 2018, the Board authorized the General Manager to execute a variance to the letter of engagement with Alston & Bird for legal services related to complex issues and litigation with a term of April 1, 2018, to June 30, 2019, and a not-to-exceed amount of \$1,500,000. Given the number of complex matters and amount of complex litigation the District has faced this last year, the Board authorized a second variance to the letter of engagement with Alston & Bird increasing the not-to-exceed amount by \$1,500,000.

Alston & Bird continues to provide a high level of service to the District, and continues to handle a number of complex litigation matters for the District. Given the matters and litigation in which the firm represents District, staff recommends that the Board authorize the General Manager to execute an additional variance to the letter of engagement with Alston & Bird extending the term of the letter through June 30, 2020, and increasing the not-to-exceed amount by \$2,500,000.

BACKGROUND:

The District has adopted a team approach that divides legal service responsibility for regular issues and matters among several law firms. The approach utilizes an outside general counsel who provides legal services related to municipal law, transactional and non-complex issues, rate setting, and other routine general counsel matters. The general counsel also provides coordination among the District's various legal counsel. Additionally, the approach utilizes at least two different law firms to provide legal services related to complex issues, complex litigation, and legal matters related to water resources and policy issues. Staff provides legal services management and legal service continuity along with other duties.

In order to implement the District's adopted approach to general legal services, the District entered into an agreement with the selected general counsel and agreements with two other law firms. One of the firms was Alston & Bird.

Services Provided by and Proposed Variance with Alston & Bird:

Alston & Bird currently provides legal services to the District related to complex matters and complex litigation under a letter of engagement. The services, representation, and counsel provided by the firm have been of a good quality.

On March 26, 2018, the Board authorized the General Manager to execute a variance to the letter of engagement with Alston & Bird for legal services related to complex issues and litigation with a term of April 1, 2018, to June 30, 2019, and a not-to-exceed amount of \$1,500,000. Given the number of complex matters and amount of complex litigation the District has faced the last year, the Board authorized the General Manager to enter into a second variance to the Letter of Engagement with Alston & Bird increasing the not-to-exceed amount by \$1,500,000.

Staff recommends that the Board authorize the General Manager to execute an additional variance to the letter of engagement with Alston & Bird extending the term of the letter through June 30, 2020, and increasing the not-to-exceed amount by \$2,500,000.

FISCAL IMPACTS:

Legal services will be charged against the Fiscal Year 2019-2020 Operating Budgets, as appropriate. Legal services related to capital projects will be billed to the capital budgets, as appropriate.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was not reviewed by a committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A VARIANCE TO THE LETTER OF ENGAGEMENT WITH ALSTON & BIRD FOR LEGAL SERVICES RELATED TO COMPLEX ISSUES AND LITIGATION EXTENDING THE TERM TO JUNE 30, 2020, AND INCREASING THE NOT-TO-EXCEED VALUE OF THE CONTRACT BY \$2,500,000.

LIST OF EXHIBITS:

None.

June 24, 2019
Prepared and
Submitted by: L. Bonkowski
Approved by: Paul A. Cook



PRESENTATION

RESOLUTION COMMENDING ROBERT “BOB” HILL FOR HIS DEDICATED
SERVICE TO THE EL TORO WATER DISTRICT AND THE WATER INDUSTRY

SUMMARY:

Staff recommends commending Mr. Robert “Bob” Hill for his dedicated service to the El Toro Water District and the water industry, and has prepared a resolution for presentation at the meeting.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT COMMENDING
ROBERT R. “BOB” HILL FOR HIS DEDICATED AND
LOYAL SERVICE TO EL TORO WATER DISTRICT
AND THE WATER INDUSTRY

LIST OF EXHIBITS:

Exhibit “A” – Resolution

EXHIBIT "A"

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT COMMENDING
ROBERT R. "BOB" HILL FOR HIS DEDICATED AND LOYAL SERVICE TO
THE EL TORO WATER DISTRICT AND THE WATER INDUSTRY

WHEREAS, Robert R. "Bob" Hill began his career with the El Toro Water District (ETWD) in operations and contract administration, then became its Operations Manager for 10 years, its Assistant General Manager for eight years, and its General Manager for 18 years; and

WHEREAS, Bob, as General Manager, was responsible for numerous innovative projects which saved ETWD and its ratepayers millions of dollars while saving billions of gallons of water by promoting its efficient use. Bob is to be commended for diversifying and improving the reliability of ETWD's water supply over the past four decades; and

WHEREAS, Bob's milestones include leading the effort on ETWD being awarded the Transparency Certificate of Excellence Award and the District of Distinction accreditation by the Special District Leadership Foundation; development and implementation of an expansion plan for the El Toro Reservoir, increasing the capacity from 223 million gallons of water to 275 million gallons of water; and partnered with Irvine Ranch Water District and three other water agencies in the joint regional Baker Water Treatment Plant that provides 28.1 million gallons per day of drinking water to south Orange County; and

Whereas, throughout his years at ETWD, Bob has been a respected leader, team player and collaborator within the Orange County water industry and established numerous partnerships with neighboring water agencies. His leadership and consensus building style improved services and achieved economies of scale through cost sharing. His collaborative leadership approach proved effective to solve problems including water reclamation/recycling, storage, and drought-related issues.

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors of the Irvine Ranch Water District commends Robert "Bob" Hill for his 45 years of service at ETWD, and his dedication that he has rendered to the water industry. On this occasion, the Board extends its best wishes for Bob in his retirement.

SIGNED and APPROVED this 24th day of June 2019.

President, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

June 24, 2019
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook



ACTION CALENDAR

AMENDMENT NO. 2 TO THE AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT AND BARDEEN PARTNERS, INC., FOR SERVICES RELATED TO REAL ESTATE INVESTMENT PROGRAM

SUMMARY:

Recently, staff and legal counsel reviewed the bylaws, governing documents, and agreements for Bardeen Partners, Inc. Two of documents reviewed were the "Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program" (the "Agreement"), and the first amendment to the Agreement ("Amendment No. 1"). The review revealed the Agreement needed to be amended to reflect the current District committee assigned to oversee IRWD's real estate investments.

Staff recommends that the Board of Directors approve Amendment No. 2 to the Agreement replacing IRWD's Real Estate Investment Committee, which no longer exists, with IRWD's Finance and Personnel Committee – the committee with oversight of the District's real estate investments.

BACKGROUND:

In 1991, IRWD and Bardeen Partners, Inc. entered into an agreement for services related to a real estate investment program. The agreement, entitled "Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program," and the first amendment to the Agreement calls for Bardeen Partners, Inc. to provide IRWD with services related to the District's real estate investment program. The Agreement, as amended by Amendment No. 1, is attached as Exhibit "A"

The Agreement provides that Bardeen Partners, Inc. will provide services as requested by "IRWD's Real Estate Investment Committee or any ad hoc committee whose assigned subject matter concerns a real estate investment." IRWD's Real Estate Investment Committee no longer exists and now the IRWD Finance and Personnel Committee has authority to oversee issues related to IRWD's real estate investments.

Staff recommends that the Board of Directors approve Amendment No. 2 to the Agreement replacing IRWD's Real Estate Investment Committee with the IRWD's Finance and Personnel Committee for purposes of carrying out the Agreement. A copy of proposed Amendment No. 2 is attached as Exhibit "B".

FISCAL IMPACTS:

None.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

THAT THE BOARD APPROVE AMENDMENT NO. 2 TO THE AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT AND BARDEEN PARTNERS, INC. FOR SERVICES RELATED TO REAL ESTATE INVESTMENT PROGRAM.

LIST OF EXHIBITS:

- Exhibit "A" – "Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program," as amended by Amendment No. 1
- Exhibit "B" – Proposed Amendment No. 2 to "Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program"

EXHIBIT "A"

AGREEMENT BETWEEN IRVINE RANCH
WATER DISTRICT AND BARDEEN PARTNERS, INC.,
FOR SERVICES RELATED TO REAL ESTATE
INVESTMENT PROGRAM

This Agreement is made and entered into as of this
25th day of March, 1991, by and between
Bardeen Partners, Inc., a nonprofit public benefit corporation
duly organized and existing under the laws of the State of
California ("Corporation"), and Irvine Ranch Water District, a
California water district duly organized and existing pursuant to
Section 34000 et seq. of the California Water Code ("IRWD").

R E C I T A L S:

A. Pursuant to Section 35912 of the California Water Code,
IRWD may invest or reinvest its Replacement Reserve Fund in real
estate and interests therein and improvements thereon, located
within the County of Orange, as an investment for the production
of income, provided that the total aggregate amount of those
investments shall not exceed 30% of IRWD's total Replacement
Reserve Fund.

B. By adoption of Resolution No. 1990-30, the Board of
Directors of IRWD has established policies for implementation of
a real estate investment program in accordance with the Water
Code Section 35912.

C. Pursuant to such policies, IRWD desires to enter into an agreement to obtain services related to property acquisition, development, operation and disposition, portfolio management and other activities consistent with the real estate investment program.

D. Corporation was formed for purposes including the rendering of financial assistance to IRWD, the acquisition by lease, purchase or otherwise of real or personal property or any interest therein and the making of any part or all of such real or personal property available to or for the benefit of IRWD.

E. IRWD desires to enter into this Agreement for the purpose of obtaining Corporation's services on IRWD's behalf with respect to investments under its real estate investment program, and Corporation, in furtherance of its purposes, desires to provide such services and enter into this Agreement with IRWD.

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein and for other valuable consideration, the parties hereto do hereby agree as follows:

Section 1. Corporation shall provide services related to property acquisition, development, operation and disposition, portfolio management and other activities as may be requested from time to time by the Real Estate Investment Committee of the Board of Directors of IRWD and approved by the Board of Directors of Corporation. Such services include, but are not limited to, the execution and delivery by Corporation of any and all

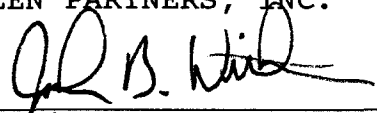
documents and instruments and the taking of all actions and doing all things necessary or proper to carry out such real estate investment transactions.

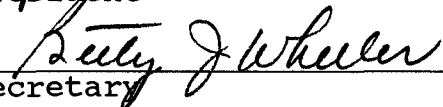
Section 2. IRWD agrees to promptly reimburse Corporation for any expenses which may be incurred by Corporation in the carrying out of its obligations under this Agreement.

Section 3. Corporation agrees that any earnings, income or profits which it may be entitled to receive through transactions entered into under this Agreement are received for IRWD and shall be promptly delivered to IRWD.

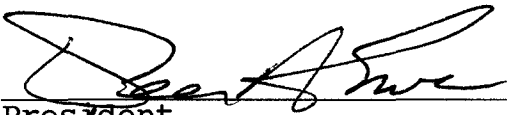
IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

BARDEEN PARTNERS, INC.

By 
President

By 
Secretary

IRVINE RANCH WATER DISTRICT

By 
President

By 
Secretary

AMENDMENT NO. 1 TO
AGREEMENT BETWEEN IRVINE RANCH WATER
DISTRICT AND BARDEEN PARTNERS, INC.,
FOR SERVICES RELATED TO REAL
ESTATE INVESTMENT PROGRAM

THIS AMENDMENT NO. 1 TO AGREEMENT FOR SERVICES RELATED TO REAL ESTATE INVESTMENT PROGRAM, dated as of April 20, 1998, is entered into by and between BARDEEN PARTNERS, INC., a non-profit public benefit corporation duly organized and existing under the laws of the State of California ("Corporation") and the IRVINE RANCH WATER DISTRICT, a California water district duly organized and existing pursuant to Section 34000 et seq. of the California Water Code ("IRWD").

R E C I T A L S:

A. Corporation and IRWD have entered into that certain agreement entitled "Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program," dated as of March 25, 1991 (the "Agreement").

B. Under Section 1 of the Agreement, Corporation has agreed to provide services related to property acquisition, development, operation and disposition, portfolio management and other activities as may be requested from time to time by the Real Estate Investment Committee of the Board of Directors of IRWD and approved by the Board of Directors of Corporation.

C. Corporation and IRWD desire to amend the Agreement to provide that such services shall also include services requested by an ad hoc committee of the IRWD Board of Directors.

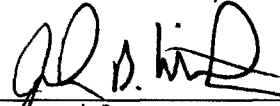
NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and for other valuable consideration, the parties hereto do hereby agree as follows:

Section 1 of the Agreement is hereby amended to read as follows:

"Section 1. Corporation shall provide services related to property acquisition, development, operation and disposition, portfolio management and other activities as may be requested from time to time by the Real Estate Investment Committee of the Board of Directors of IRWD, or any ad hoc committee of the Board of Directors of IRWD whose assigned subject matter concerns a real estate investment, and approved by the Board of Directors of Corporation. Such services include, but are not limited to, the execution and delivery by Corporation of any and all documents and instruments and the taking of all actions and doing all things necessary or proper to carry out such real estate investment transactions."

IN WITNESS WHEREOF, this Amendment No. 1 has been executed by Corporation and IRWD as of the date first hereinabove written.

Corporation
BARDEEN PARTNERS, INC.

By 
President

By 
Secretary

IRWD
IRVINE RANCH WATER DISTRICT

By 
President


By 
Secretary

EXHIBIT “B”

AMENDMENT NO. 2 TO
AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT
AND BARDEEN PARTNERS, INC.
FOR SERVICES RELATED TO
REAL ESTATE INVESTMENT PROGRAM

This Amendment No. 2 to Agreement for Services Related to Real Estate Investment Program (“**Amendment No. 2**”), dated as of June 24, 2019, is between Bardeen Partners, Inc., a non-profit public benefit corporation duly organized and existing under the laws of the State of California (“**Corporation**”) and the Irvine Ranch Water District, a California water district (“**IRWD**”). IRWD and Corporation are each a “**Party**” and together are the “**Parties.**”

A. The Parties previously entered into an *Agreement Between Irvine Ranch Water District and Bardeen Partners, Inc., for Services Related to Real Estate Investment Program* dated March 25, 1991 (“**Agreement**”), which was amended by an *Amendment No. 1* dated April 20, 1998.

B. Under Section 1 of the Agreement, as amended, the Corporation provides services as requested by IRWD’s Real Estate Investment Committee or any ad hoc committee whose assigned subject matter concerns a real estate investment.

C. Since 1998, the Real Estate Investment Committee of the Board of Directors of IRWD has been disbanded. IRWD’s Finance and Personnel Committee currently oversees issues related to real estate investment.

D. The Parties intend by this Amendment No. 2 to provide that IRWD’s Finance and Personnel Committee, or any other successor standing or ad hoc committee of IRWD that is charged with overseeing a real estate investment, may request services of the Corporation.

E. In addition, the Parties intend to clarify that in any other agreement between or involving the Parties, that any mention of the Real Estate Investment Committee will be interpreted to mean the Finance and Personnel Committee or any successor standing committee.

Therefore, the Parties agree as follows:

1. Section 1 of the Agreement is hereby amended to read as follows:

“Corporation shall provide services related to property acquisition, development, operation and disposition, and portfolio management, and shall perform other services related to any other activities as may be requested from time to time by the Finance and Personnel Committee of the Board of Directors of IRWD or any successor standing committee or any ad hoc committee of IRWD that is charged with overseeing a real estate investment, and approved by the Board of Directors of the Corporation.”

2. In any other agreement between the Parties or among the Parties and a third party, any mention of the Real Estate Investment Committee will be deemed to mean the Finance and Personnel Committee or any successor standing committee responsible for overseeing real estate investment.

The Parties are executing this Amendment No. 2 to be effective as of the Effective Date.

BARDEEN PARTNERS, INC.

By: _____
President

By: _____
Secretary

IRVINE RANCH WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
LEWIS BRISBOIS BISGAARD & SMITH LLP

By: _____
District Counsel

June 24, 2019

Prepared by: J. Corey / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook



ACTION CALENDAR

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

SUMMARY:

A Final Initial Study/Mitigated Negative Declaration (Final IS/MND) has been prepared for the proposed Syphon Reservoir Geotechnical Investigations Project to be conducted at the Syphon Reservoir site. The purpose of the Geotechnical Investigations Project is to characterize the geologic and geotechnical conditions at the reservoir site to inform the ongoing environmental documentation process and the future final design phase of the proposed Syphon Reservoir Improvement Project. Staff will provide an overview of the Final IS/MND for the Geotechnical Investigations Project as well as an overview of the status and schedule of the overall Syphon Reservoir Improvement Project. Staff recommends that the Board adopt the Final IS/MND and the associated Mitigation Monitoring and Reporting Program, approve the Syphon Reservoir Geotechnical Investigations Project, and authorize staff to file a Notice of Determination.

BACKGROUND:

In 2010, IRWD acquired the Syphon Reservoir from the Irvine Company and integrated this facility into the IRWD recycled water storage and distribution system. IRWD has completed several analyses and studies of the feasibility and constructability of expanding the current reservoir from its current size of 500 acre-feet (AF) to up to 5,000 AF. A location map of the Syphon Reservoir is provided as Exhibit "A". The proposed Syphon Reservoir Improvement Project will expand recycled water storage to meet the seasonal demand of IRWD's recycled water customers and enhance water supply reliability by maximizing the use of recycled water in IRWD's service area.

In 2012, IRWD prepared the Syphon Reservoir Expansion Engineering Feasibility Study which provided baseline geotechnical information for the Syphon Reservoir site area. This study was limited in the location and number of borings conducted due to requirements to remain within existing on-site roadways and to avoid vegetation. In 2013, IRWD implemented the Syphon Interim Facilities Project, which included minor improvements to integrate the reservoir into IRWD's recycled water system. In 2016, IRWD conducted dry lakebed geotechnical exploration work to obtain information on the extent and character of sediments that had accumulated in the reservoir over time. Due to site access constraints, only limited geotechnical investigations have been completed to date.

In June 2017, the Board approved an expenditure authorization for work on supporting engineering services and environmental documentation for the Syphon Reservoir Improvement Project.

Syphon Reservoir Geotechnical Investigations Project:

Scope of Work:

The proposed Syphon Reservoir Geotechnical Investigations Project is necessary to characterize the geologic and geotechnical conditions at the reservoir site. It will evaluate the dam foundation and abutments to determine the appropriate excavation depths and the requirements for dam seepage control measures. The investigations will also evaluate the characteristics of potential dam construction materials that could be extracted from borrow areas on the project site and used to construct the new dam. The investigations will verify the location and historical activity of the previously documented inactive (for approximately 35,000 years) Central Valley Fault. In order to accomplish these goals, the work will involve a combination of exploratory test pits, borings and geophysical surveys to characterize the subsurface conditions of the soil at each exploratory location. Prior to the start of these activities, the reservoir will be drained to allow the reservoir bottom to dry out so that the borings, test pits, and trenches can be implemented on dry land. The following activities are planned for the Geotechnical Investigations Project:

- 53 borings;
- 16 exploratory test pits;
- Three fault evaluation trenches;
- Five seismic refraction survey lines conducted laterally across the reservoir bottom; and
- Four electrical resistivity survey lines conducted laterally across the reservoir bottom.

The exploration points were selected based on the location of the proposed dam and reservoir improvements, access considerations and the need to avoid environmentally sensitive areas. The results of these investigations will inform the ongoing environmental documentation process and the future final design phase of the proposed Syphon Reservoir Improvement Project.

Environmental Review:

A Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the Syphon Reservoir Geotechnical Investigations Project was prepared by environmental consultants at Environmental Science Associates (ESA). On February 8, 2019, the Draft IS/MND was circulated for a 30-day public review period pursuant to the California Environmental Quality Act (CEQA). Eight letters providing comments on the Draft IS/MND were received during the public review period that concluded on March 11, 2019. The agencies that provided comments were the Gabrieleno Band of Mission Indians-Kizh Nation, the City of Irvine, South Coast Air Quality Management District, Orange County Public Works, Orange County Fire Authority, the Transportation Corridor Agencies, U.S. Fish & Wildlife Service (USFWS) / CA Department of Fish & Wildlife (CDFW), and the Department of Water Resources.

Staff reviewed all comments received and worked with ESA to prepare responses to comments and a Mitigation Monitoring and Reporting Plan which are included in the Final IS/MND attached as Exhibit "B". Staff also coordinated with USFWS and CDFW to ensure that the agencies were satisfied with the response to comments. As a result of this coordination, USFWS and CDFW issued a joint letter stating that they do not object to the activities proposed for the Syphon

Reservoir Geotechnical Investigations Project. The joint letter from the wildlife agencies is included in the Final IS/MND.

Schedule:

At the meeting Staff will present an overview of the Final Draft IS/MND completed for the Geotechnical Investigations Project. Staff anticipates that the geotechnical work will begin in fall of 2019 and be completed in early to mid-2020. Staff will also provide an overview of the status and schedule for the proposed Syphon Reservoir Improvement Project that includes the proposed geotechnical work. A copy of staff's presentation is included as Exhibit "C".

FISCAL IMPACTS:

The funds necessary for the environmental review and required filing fees associated with the proposed Syphon Reservoir Geotechnical Investigations Project are included in project 03808 in the FY 2018-19 Capital Budget. The existing budget and Expenditure Authorizations are sufficient at this time. ESA conducted the environmental review for the Geotechnical Investigations through a Professional Services Agreement executed within staff authorities.

ENVIRONMENTAL COMPLIANCE:

This project is subject to CEQA and in conformance with California Code of Regulations Title 14, Chapter 3, Article 6. A Notice of Intent to adopt a Mitigated Negative Declaration was filed with the County of Orange and the State Clearinghouse on February 8, 2019. Pursuant to State Guideline §15073, the IS/MND was made available for public review for a period of 30 days from February 8, 2019, through March 11, 2019.

COMMITTEE STATUS:

This item was reviewed with the Engineering and Operations Committee on May 21, 2019.

RECOMMENDATION:

THAT THE BOARD FIND ON THE BASIS OF THE WHOLE RECORD BEFORE IT (INCLUDING THE FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND THE COMMENTS RECEIVED) THAT THERE IS NO SUBSTANTIAL EVIDENCE THAT THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT WILL HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND THAT THE FINAL MITIGATED NEGATIVE DECLARATION REFLECTS IRWD'S INDEPENDENT JUDGMENT AND ANALYSIS; ADOPT THE PROPOSED FINAL MITIGATED NEGATIVE DECLARATION FOR THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT AND THE ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM; APPROVE THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT; AND AUTHORIZE STAFF TO POST AND FILE A NOTICE OF DETERMINATION.

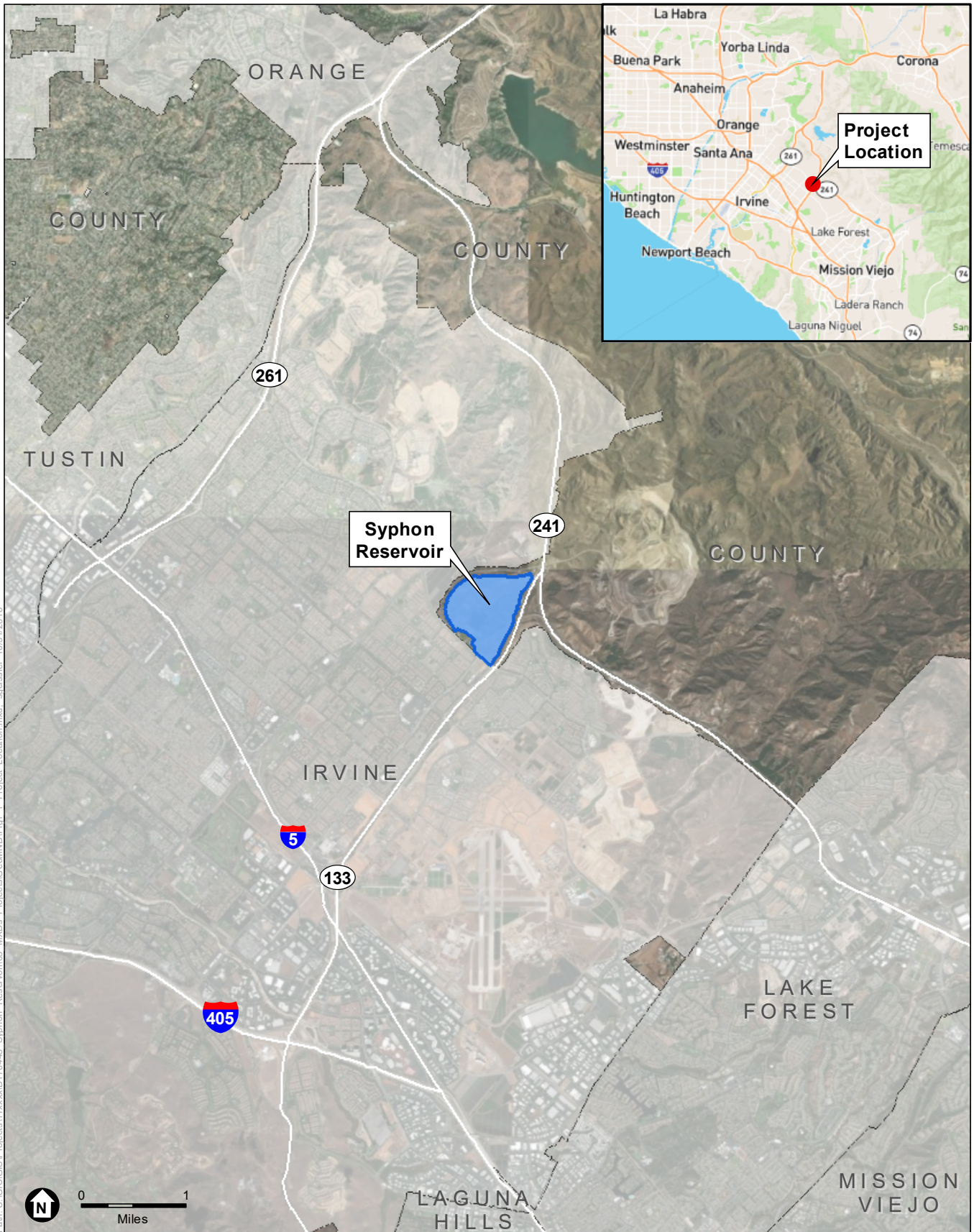
LIST OF EXHIBITS:

Exhibit “A” – Syphon Reservoir Geotechnical Investigations Project Location Map

Exhibit “B” – Syphon Reservoir Geotechnical Investigations Final Initial Study/Mitigated
Negative Declaration

Exhibit “C” – Presentation on Environmental Review of Syphon Reservoir Geotechnical
Investigations Project

EXHIBIT "A"



SOURCE: ESRI, 2016; OC LAFCO, 2018

IRWD Syphon Reservoir

Figure 1-1
Project Location

Exhibit "B"

IRVINE RANCH WATER DISTRICT SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

Final Initial Study/Mitigated Negative Declaration
SCH #2019029041

Prepared for
Irvine Ranch Water District

June 2019



IRVINE RANCH WATER DISTRICT SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

Final Initial Study/Mitigated Negative Declaration
SCH #2019029041

Prepared for
Irvine Ranch Water District

June 2019

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- AQ: Air Quality Appendix
- BIO: Syphon Reservoir Geotechnical Investigations Project Biological Resources
Technical Report
- CUL: Syphon Reservoir Improvement Project Cultural Resources Assessment
Report (Confidential)
- NOI: Construction Noise Calculation Worksheets

List of Acronyms

24/7	twenty-four hours, seven days a week
AERMOD	American Meteorological Society/ Environmental Protection Agency Regulatory Model
AF	acre/feet
AJD	Approved Jurisdictional Determination
BACT	Best Available Control Technology
BC3	Business Council on Climate Change
BMPs	best management practices
CalOSHA	California Division of Occupational Safety and Health
CARB	California Air Resources Board
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEC-A15	California Retail Fuel Outlet Annual Reporting
CEQA	California Environmental Quality Act
CGS	Department of Conservation, California Geologic Survey
CH ₄	methane
CHRIS	California Historical Resources Information System
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
CO ₂	carbon dioxide
CWA	Clean Water Act
DOC	Department of Conservation
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
ERP	Emergency Response Plan
GEI	GEI Consultants, Inc
GHG	greenhouse gas
GIWP	Geotechnical Investigations Work Plan
GWP	global warming potential
HFCs	hydrofluorocarbons
IC	Irvine Company
IMC	City of Irvine Municipal Code
IPCC	International Panel on Climate Change
IPD	Irvine Police Department
IRWD	Irvine Ranch Water District
IS	Initial Study
IUSD	Irvine Unified School District
LACM	Natural History Museum of Los Angeles County
LSTs	localized significance thresholds
MLD	Most Likely Descendant

MND	Mitigated Negative Declaration
MWD	Metropolitan Water District of Southern California
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
OCFA	Orange County Fire Authority
OCMC	Orange County Municipal Code
OCSO	Orange County Sheriff's Department
OCTA	Orange County Transit Authority
OEHHA	Office of Environmental Health Hazard Assessment
PFCs	perfluorocarbons
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
PRC	Public Resource Codes
REL	Reference Exposure Level
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCS	Sustainable Communities Standard
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SLF	Sacred Lands File
SO ₂	sulfur dioxide
SR	State Route
SR-133	State Route 133
SRA	Source-Receptor Area
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TNM	Traffic Noise Model
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
VHFHSZ	Very High Fire Hazard Severity Zone
VOC	volatile organic compounds
WDR	Waste Discharge Requirement
WRP	Water Recycling Plant

SECTION 1

Introduction

Irvine Ranch Water District (IRWD or District), as the lead agency pursuant to the California Environmental Quality Act (CEQA), is proposing to implement the Syphon Reservoir Geotechnical Investigations Project (Project).

1.1 Statutory Authority and Requirements

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000–21177) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.), IRWD, acting in the capacity of lead agency, is required to prepare an Initial Study (IS) to determine if the proposed Project may have a significant effect on the environment (CEQA Guidelines Section 15063). If a lead agency finds that there is no substantial evidence that a project, either as proposed or as modified to include the mitigation measures identified in the IS, may cause a significant effect on the environment, the lead agency must prepare a Negative Declaration or Mitigated Negative Declaration (MND) for that project. (Public Resources Code Section 21080(c), CEQA Guidelines Section 15070(b)).

This document is prepared in accordance with the CEQA Guidelines and is intended to provide an environmental analysis to support subsequent discretionary actions associated with the proposed Project (CEQA Guidelines Section 15074). This analysis is not a policy document and its approval by IRWD neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. This environmental documentation and supporting analysis is subject to a public review period (CEQA Guidelines Sections 15073, 15105); and therefore, is being circulated for public review and comment for a period of 30 days from February 8, 2019 to March 11, 2019. IRWD will consider any comments received as part of the proposed Project’s environmental review and include them with the CEQA documentation for consideration by the IRWD Board of Directors. Please send all comments to:

Irvine Ranch Water District
Water Resources & Policy Department
Attn: Jo Ann Corey, Environmental Compliance Specialist
15600 Sand Canyon Avenue
Irvine, CA 92618
Email: Corey@irwd.com
Phone: (949) 453-5300

SECTION 2

Project Description

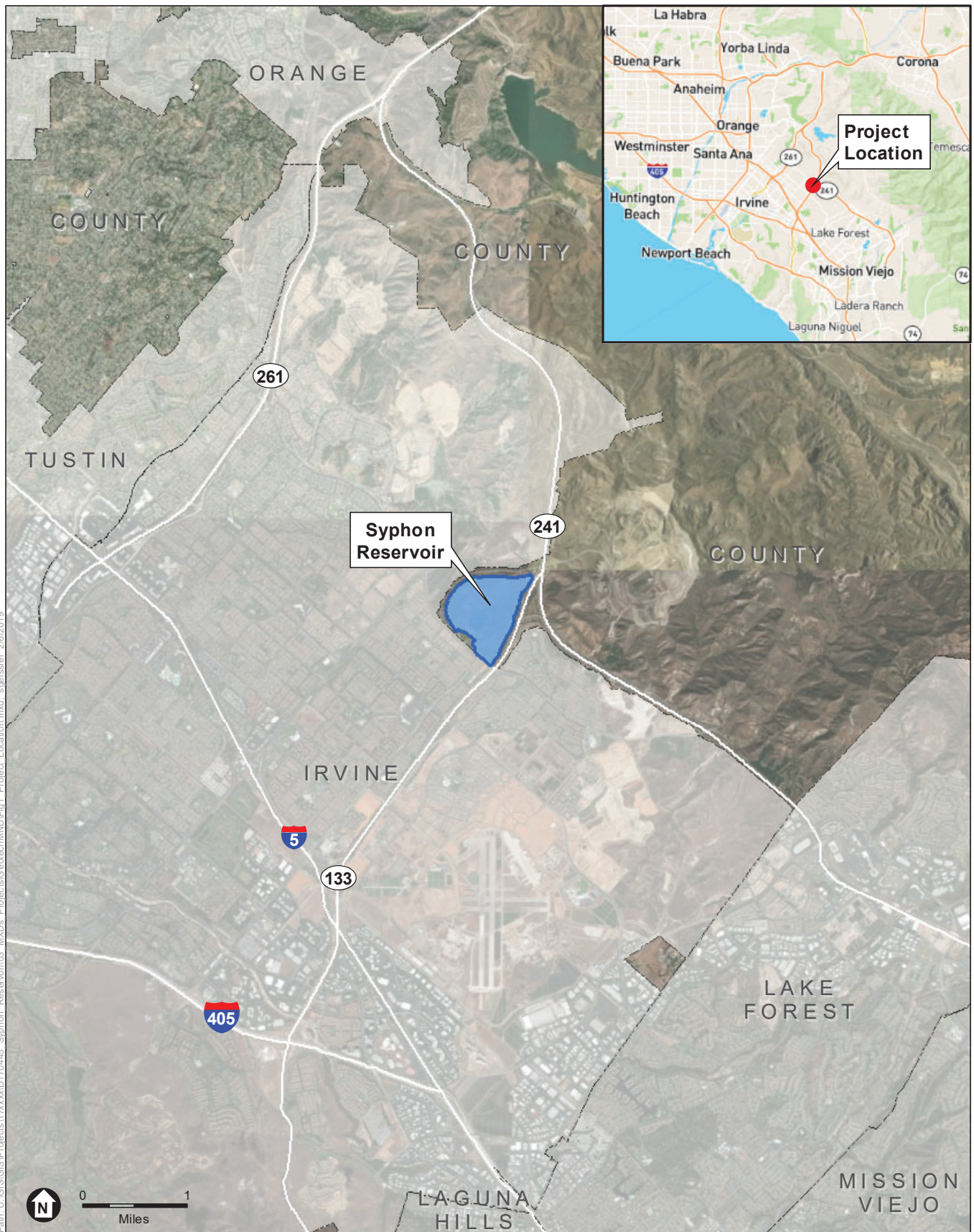
2.1 Introduction

Irvine Ranch Water District (IRWD or District), as the lead agency pursuant to the California Environmental Quality Act (CEQA), is proposing to implement the Syphon Reservoir Geotechnical Investigations Project (Project). The proposed geotechnical investigations are outlined in the Geotechnical Investigations Work Plan (GIWP) (HDR 2018a) and are intended to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir. As described further below, this work is necessary in order to inform the design of an enlarged reservoir, which will provide the IRWD service area with a more reliable water supply.

2.2 Project Location

The Project would be implemented within the IRWD service area at the location of Syphon Reservoir, which is an existing recycled water storage reservoir, built in 1949 and located in unincorporated County of Orange, California. IRWD is located in central Orange County in southern California, where its service area encompasses 181 square miles extending from the Pacific Coast to the foothills and provides service to approximately 20 percent of Orange County's total land area. The District's primary service area includes the City of Irvine and portions of Costa Mesa, Lake Forest, Newport Beach, Orange, Tustin, and unincorporated areas of Orange County. The District is bordered to the west by the cities of Orange, Tustin, Santa Ana, Costa Mesa, and unincorporated Orange County areas; to the north by unincorporated Orange County; to the east by Lake Forest, Mission Viejo, and unincorporated Orange County areas; and to the south by Newport Beach, Laguna Beach, and the Pacific Ocean.

Specifically, Syphon Reservoir is located on the northeast side of Portola Parkway between Bee Canyon Access Road and State Route 133 (SR-133) in County of Orange (see Figure 1). IRWD owns the majority of the property bounded by these thoroughfares. The Crean Lutheran High School's recreation facilities are located between Portola Parkway and the toe of the existing dam. Residential neighborhoods are located on the southwest side of Portola Parkway. The ground surrounding the reservoir, which dominates the Syphon site, is hilly with ridgelines and terraced slopes. Ground surface elevations at the site range from about 675 feet above sea level in the northeast corner to about 319 feet above sea level at Portola Parkway immediately downstream of the existing reservoir. Syphon Reservoir is surrounded by sensitive upland and wetland vegetation communities that are protected under local, state and federal environmental regulatory requirements, as well as school recreation facilities and residential neighborhoods.



SOURCE: ESRI, 2016; OC LAFCO, 2018

Syphon Reservoir Geotechnical Investigations Project

Figure 1
Project Location

2.3 Project Background

Established in 1961 as a California Water District under the provisions of the state of California Water Code, IRWD is an independent special district serving central Orange County, California. IRWD provides drinking water, reliable wastewater collection and treatment, recycled water and urban runoff treatment to approximately 403,000 residents. As an independent public agency, IRWD is governed by a five-member publicly elected Board of Directors that are responsible for the District's policies and decision-making. Day-to-day operations are supervised by the General Manager and District Staff.

IRWD has a diverse water supply that includes local groundwater, recycled water, imported water, and local surface water. Approximately 54 percent of the IRWD water supply comes from 27 local groundwater wells in the Orange County Groundwater Basin; approximately 19 percent of the District's water supply is imported from the Metropolitan Water District of Southern California (MWD); and roughly 25 percent of the District's water demands are met with recycled water. IRWD produces recycled water at its Michelson Water Recycling Plant (WRP) located in Irvine, CA and its Los Alisos WRP located in Lake Forest, CA. This recycled water is provided to customers primarily for irrigation of public landscaping such as street medians, parks and golf courses as well as agricultural. It is also used in industrial processes such as mixing concrete, office building uses such as toilet flushing and cooling towers as well as for firefighting. When recycled water production exceeds seasonal demands, recycled water can be stored at Syphon Reservoir, as well as other recycled water storage reservoirs operated by IRWD, including San Joaquin, Rattlesnake, and Sand Canyon Reservoirs.

IRWD acquired Syphon Reservoir in 2010 from the Irvine Company (TIC). Multiple studies and activities have occurred at the Project site to support use of the reservoir to store and distribute recycled water. In 2012, IRWD prepared the Syphon Reservoir Expansion Engineering Feasibility Study (GEI 2012), which provided baseline geotechnical information for the Project site. This study was limited in the location and number of borings conducted due to requirements to remain within existing roadways on-site and to avoid vegetation disturbance. In 2013, IRWD implemented the Syphon Reservoir Interim Facilities Project, which included minor improvements to integrate the reservoir into IRWD's recycled water system. In 2016, IRWD conducted a dry lakebed geotechnical exploration to obtain information on the extent and character of sediments that have accumulated in the reservoir over time (GEI 2016). While IRWD's existing recycled water storage reservoirs provide storage for recycled water, once the storage reservoirs are full to capacity in winter months, recycled water supplies are either diverted to Orange County Sanitation District (OCSD) or discharged to the ocean. Under such conditions, IRWD is left short of recycled water to meet its demands and must then purchase supplemental imported water from MWD to meet the summer demands of IRWD's recycled water customers. Based on projected demands and supplies, IRWD estimates that it will need an additional 3,200 acre-feet (AF) of recycled water seasonal storage capacity in 2020 and about 4,500 AF by the year 2030.

The purpose of the Syphon Reservoir Improvement Project is to store additional recycled water to meet the seasonal demand of recycled water customers and to enhance IRWD's water supply reliability. In an effort to achieve these goals, IRWD is proposing to increase the existing recycled water seasonal storage capacity at Syphon Reservoir, which will allow the storage of additional recycled water produced at the Michelson WRP during periods of low demand (winter months) for use during periods of high demand (summer months). This would be accomplished by replacing the existing engineered earthen embankment dam at Syphon Reservoir with a new and larger engineered dam that would meet and exceed the latest state and federal safety standards. The expansion of the reservoir's storage capacity from the current 500 AF to approximately 5,000 AF would help IRWD become more self-sufficient by reducing its dependence on costly and less reliable imported water during summer months, and would increase the use of recycled water for public landscaping, agricultural, business and industrial uses. Increased use of recycled water for these purposes will make more drinking water available to the region to better withstand future water shortages. The Syphon Reservoir Improvement Project will improve IRWD's water supply reliability, reduce diversions of wastewater to OCSD, and reduce discharges of recycled water to the ocean that could otherwise be used by IRWD customers to meet demands. However, before the Syphon Reservoir Improvement Project can be implemented to expand the reservoir, implementation of the Geotechnical Investigations Project is necessary to characterize the geologic and geotechnical conditions that will inform design of the proposed new engineered dam and reservoir expansion.

2.4 Project Objectives

The primary objective of the Project is to characterize the geologic and geotechnical conditions of the Syphon Reservoir site to support potential development of a future reservoir expansion. The Project would specifically:

- Conduct an extensive geologic and geotechnical investigation program to fully characterize and evaluate the existing soil and subsurface conditions at the site;
- Evaluate the existing engineered embankment dam foundation and abutments to determine appropriate excavation depths and the requirements for dam seepage control measures;
- Evaluate the potential borrow site¹ to be used for future reservoir enlargement to provide detailed engineering characteristics of potential embankment construction materials; and
- Verify the location and historic activity of the Central Valley Fault.

2.5 Project Description

The Project would implement geotechnical investigations to evaluate geologic and seismic conditions at the dam embankment, spillway, outlet,² and borrow sites. Additionally, geotechnical explorations would occur to verify the characteristics of the Center Valley Fault,

¹ A borrow site is an excavated area where material has been dug for use as fill material at another location.

² An embankment dam is an earthen dam built by compacting successive layers of earth, using the most impervious materials to form a core and placing more permeable substances on the upstream and downstream sides. A spillway is structure provided to control the release of flows from behind a dam such that the dam does not overtop. An outlet is a device used to regulate flow from a dam.

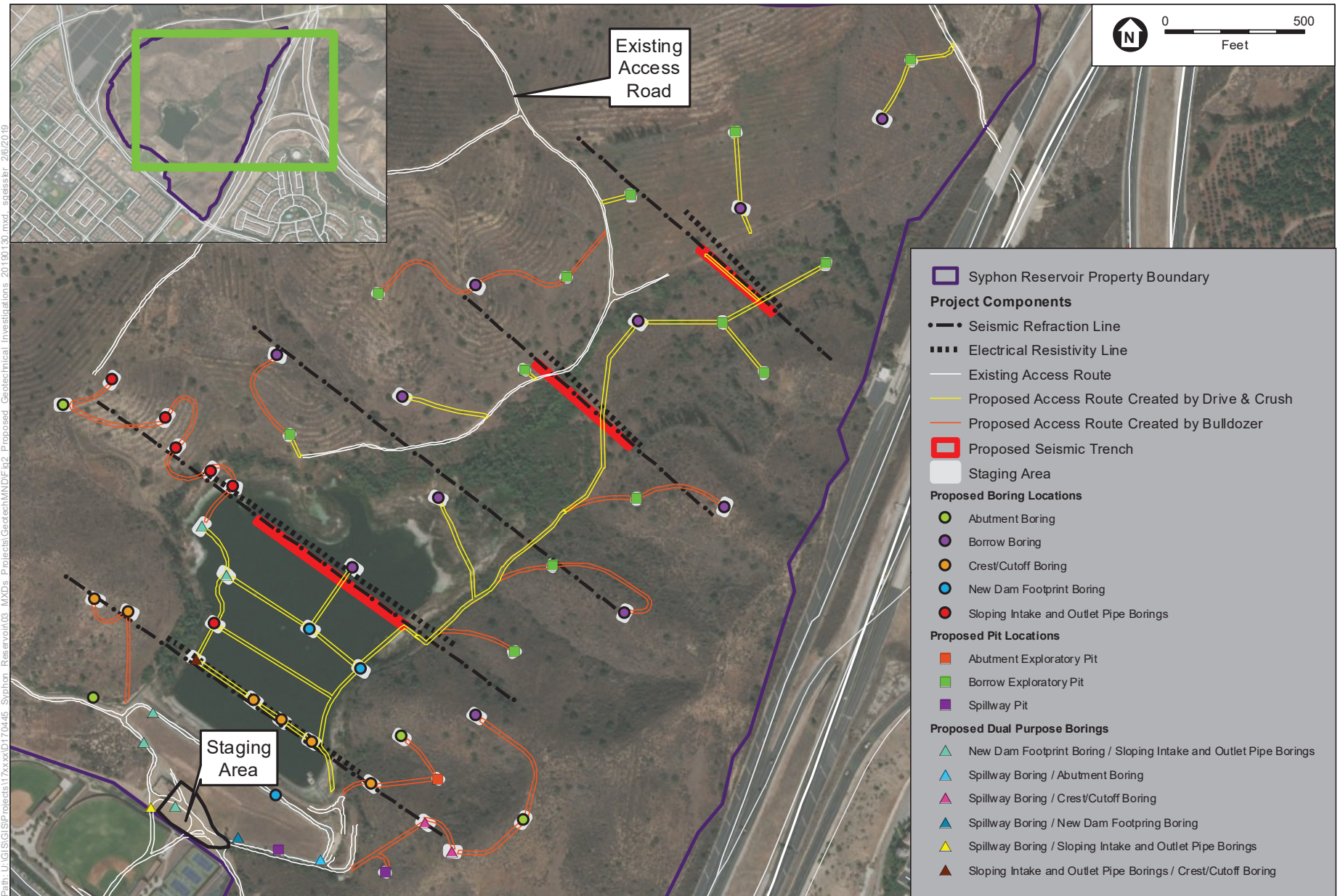
which previously has been documented as inactive (GEI 2012). The Project would use a combination of exploratory test pits, borings, and geophysical surveys to characterize the subsurface conditions of the soil at each exploration location. The general locations of the proposed explorations are shown on **Figure 2**. In general, the exploration points were selected based on location of the proposed engineered dam and reservoir improvements, access considerations, avoidance of environmentally sensitive areas, and correspondence with IRWD. These locations may be modified by the subsurface exploration subcontractor as needed in the field to respond to exploration plan revisions as well as unexpected field conditions, including to avoid trees and rare plants if feasible. In addition, to reduce the potential for the spread of weed seeds during the Project, all heavy equipment proposed for use on-site would be cleaned (including wheels, tracks, undercarriages, and bumpers, as applicable) before delivery to the Project site. In total, the following activities are proposed as part of the Project:

- Approximately 53 borings
- Approximately 16 exploratory test pits;
- Approximately three (3) fault evaluation trenches totaling up to about 1,900 feet;
- Approximately five (5) seismic refraction survey lines totaling up to about 7,400 feet; and
- Approximately four (4) electrical resistivity survey lines totaling up to about 2,900 feet.

Table 1 summarizes the activities proposed for the borings and exploratory test pits. Many of the borings serve dual purposes. For instance, one single boring may provide information about the outlet conduit and embankment footprint. As a result, Table-1 is not a summation of all borings, but instead provides information about the kinds of activities proposed for each exploration category. The exploratory depths identified in the table are approximate and may be modified based on actual conditions encountered in the field and exploration plan revisions.

**TABLE 1
BORINGS AND EXPLORATORY TEST PITS**

Exploration Area	Approximate Number	Approximate Depth (feet bgs)
Embankment Dam Explorations		
Crest/Cutoff Boring	8	100-270
Abutment Boring	6	50-100
New Footprint Boring	9	50-120
Abutment Exploratory Pit	1	10-20
Spillway and Outlet Explorations		
Spillway Boring	4	25-180
Sloping Intake and Outlet Pipe Boring	15	25-180
Spillway Exploratory Pit	2	10-20
Borrow Investigations		
Borrow Boring	11	30-70
Borrow Exploratory Pit	13	10-20



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project
Figure 2
 Proposed Geotechnical Investigations

Access to many of the test locations will be through use of existing access roads. For test locations that are not accessible using existing access roads, temporary access roads would be provided with some grading. For each exploration, a graded work pad would be installed with room to navigate required equipment. The graded work pad for the borings would be approximately 20 by 50 feet, and the pad for test pits would be approximately 10 by 20 feet. All temporary access roads would be approximately 12 feet wide. Samples of subsurface materials would be collected from the exploratory test pits and borings for examination and laboratory testing.

Prior to the start of geotechnical exploration activities, the reservoir would be drained, and sufficient time would be required to allow the reservoir bottom to dry out, so that borings, test pits, and trenches could be implemented on dry land. IRWD conducts draining of the reservoir as part of its routine operations. The recycled water currently in the reservoir would be drained through the existing pipeline infrastructure and used to meet IRWD customer demands.

2.5.1 Dam Explorations

Explorations are needed to characterize the subsurface conditions along the crest of the proposed engineered dam, at the right and left abutments of the proposed dam, and in the new foundation footprint area. The proposed engineered dam will be an earthen embankment which is an earthen dam built by compacting successive layers of earth, using the more impervious materials to form a core and placing more permeable materials on the upstream and downstream sides. The explorations proposed at the engineered dam include approximately 23 borings and one (1) abutment exploratory test pit as shown in Figure 2. Borings could be drilled at depths ranging from approximately 50 to 270 feet below ground surface (bgs). The test pit would be excavated to an approximate depth of 10 to 20 feet or until excavation refusal³ is encountered.

2.5.2 Spillway and Outlet Explorations

Geotechnical explorations are needed to characterize the conditions at the outlet of the dam and associated sloping intake area, along the outlet pipeline, at the spillway foundation area, and along the spillway pipeline, as shown on Figure 2. The explorations proposed as part of the spillway and outlet explorations include approximately 19 borings and two (2) spillway exploratory pits. Borings would be drilled at depths ranging from approximately 25 to 180 feet bgs. The test pits would be excavated to an approximate depth of 15 to 20 feet or until excavation refusal is encountered.

2.5.3 Borrow Investigations

Material to construct the new proposed engineered dam will need to be extracted or borrowed from existing locations at the Project site. Areas of potential borrow locations need to be evaluated to provide detailed engineering characteristics of potential embankment materials, including strength parameters, seepage characteristics, and shrinkage potential. Explorations for the borrow areas include approximately 11 borings and approximately 13 test pits as shown on

³ Soil refusal is very hard soil or rock material that is encountered during excavation. Further excavation below the point of refusal is typically prevented by friction and cannot be conducted without stronger equipment.

Figure 2. Borings could be drilled at depths ranging from approximately 30 to 70 feet bgs. The test pits would be excavated to an approximate depth of 10 to 20 feet or until excavation refusal is encountered.

2.5.4 Fault and Bedrock Profile Investigations

Geotechnical explorations would evaluate alluvium and bedrock materials on the Project site and characterize the previously-documented inactive Center Valley Fault, which runs through the Project site. Explorations would include seismic refraction and electrical resistivity lines along with a series of fault trenches to characterize the fault along various traverse lines across the Project site, as summarized in Table 2.

Approximately five (5) seismic refraction survey lines would be conducted laterally across the reservoir bottom to evaluate bedrock conditions and to further evaluate the location of the Center Valley Fault. The seismic refraction survey lines would range in distance from 1,000 to 1,800 feet. Approximately four (4) electrical resistivity survey lines would be conducted to further evaluate fault characteristics, especially the fault location in relation to the Silverado and Vaqueros/Sespe Formations. The electrical resistivity survey lines would be conducted adjacent and parallel to some of the seismic refraction lines and would range from approximately 500 to 1,000 feet in length. Both the seismic refraction survey lines and the electrical resistivity survey lines would involve minimal ground disturbance by temporarily inserting probes several inches into the ground, and would not result in greater than one (1) foot of disturbance bgs. Examples of the work involved with implementation of seismic survey refraction lines are depicted in **Figure 3**.

Approximately three (3) fault trenches would be excavated ranging in depth from 15 to 20 feet. The trenches would be excavated in approximately 30- to 50-foot long segments along the lines shown on Figure 2, for a total excavation length ranging from approximately 500 to 900 feet. The trenches would evaluate the alluvium and bedrock for evidence of faults in order to provide an exact location of the fault as well as its age and latest activity.

TABLE 2
FAULT SURVEYS AND TRENCHES

Exploration Area	Approximate Number	ID	Approximate Depth (feet bgs)	Approximate Length (feet)
Fault and Bedrock Investigations				
Seismic Refraction Survey	5	SR-17 to SR-21	1 bgs	1,000-1,800
Electrical Resistivity Survey	4	ER-1 to ER-4	1 bgs	500-1,000
Fault Trenches	3	T-1 to T-3	15-20	500-900

HDR 2018.



Image source USGS Office of Groundwater, 2006



Image source HDR, 2018

D170445.00

SOURCE: ESA, 2019

Syphon Reservoir Geotechnical Investigations Project

Figure 3
Example Depictions of Seismic Refraction Survey Lines



2.5.6 Staging Area

The initial staging area would be located within the existing disturbed area at the toe of the dam slope (see Figure 2). As the geotechnical investigations move toward the back of the reservoir area, equipment may also be staged within the dried bed of the existing reservoir. These areas would already be disturbed.

2.5.7 Site Access

All equipment and materials would be transported to the site on public highways and local roads using standard transport equipment. Primary access to the Project site would be provided along existing access roads from Portola Parkway. Additional site access may be provided from Bee Canyon Road. The equipment would be off-loaded on-site at the staging area located below the toe of the existing engineered dam and then mobilized to each drilling or trenching location. Traffic control is not anticipated to be required.

Within the Project site, temporary access to each exploratory drilling or trenching location would be created as shown on Figure 2. Access would either be established by the “drive and crush” method, which involves driving over vegetation so as to limit vegetation disturbance, or by grading a 12-foot wide dirt path, using a bulldozer.

2.6 Project Implementation

Activities associated with implementation of the geotechnical exploration program would require the following equipment to be used on-site: one (1) or two (2) drill rigs; one (1) water truck; one (1) or two (2) support trucks, one (1) backhoe; one (1) excavator; one (1) bulldozer; and five (5) pick-up trucks. Actual equipment numbers may vary from day-to-day of exploration. All equipment, with possible exception of the pick-up trucks, would be diesel powered and would be anticipated to be used on-site for the duration of the geotechnical investigation activities.

An average of approximately eight (8) construction workers would be required on-site to implement the Project. Workers would commute individually to the site and park at the staging area identified at the bottom of the dam (see Figure 2). The average commute would be up to an approximate 60-mile round trip. If multiple activities are conducted on one day, the worst case number of workers on-site would be increased up to approximately 46. If the staging area and immediate vicinity cannot accommodate that amount of workers, workers would carpool from a designated site located within the IRWD service area.

During the exploration program, soil to be tested would be stored in appropriate containers, bags and core boxes within a secured container on-site in an undisturbed area. Drill cuttings would be contained at each drill site and then spread within the previously cleared drill rig pad. All other soil excavated would be stockpiled adjacent to each excavation and used as backfill once each exploration activity is completed. Each individual geotechnical investigation activity is anticipated to be completed within one working day and not result in an open hole/trench beyond working hours. Borings and sample pits will typically be filled on the same day, as well as shorter seismic trenches. A few of the longer seismic trenches may remain open for a few days while the

geologist analyzes the excavation. During these isolated conditions, IRWD would require the contractor to cover the open trench with a layer of plastic, followed by a plywood or metal plate to secure the trench at the end of each work day. Sandbags would also be placed around the edges of the lining to secure the trench.

2.6.1 Borings

Drilling of borings would include site preparation, mobilization of equipment to the boring site, drilling, and finishing of the boring with cement grout or installation of temporary piezometers. The drill rig would be equipped with either a track-mounted drill rig using rotary wash and/or hollow stem augers. Water required for the rotary wash borings would be obtained from a support truck. The amount of water used depends on the boring depth but could range from approximately 65 to 700 gallons.

Borings would be vertical, with exception of one being drilled with about a 30-degree incline, and extend into bedrock a sufficient depth to determine competency and weathering profiles, or as dictated by the needs and intent of the Project design. Rotary wash drilling and hollow stem auger drilling methods would be utilized to explore the soil conditions until bedrock is encountered. At that time, rotary wash drilling/coring would be performed to advance into the bedrock utilizing the hollow stem augers as casing. Cuttings would be monitored as they are discharged from the borehole in order to assess changes in stratigraphy between sample intervals and to enable proper sampler choice. When drilling through or within the existing embankments using rotary wash methods, drill fluid pump pressure would be limited to a maximum pressure of ½ pounds per square inch per foot of depth to avoid hydrofracture. Monitoring would occur continuously to maintain low drill fluid pump pressure. If fluid loss is noted when drilling within the embankments, drilling would be stopped and the hole would be backfilled with cement grout (see below). Additional measures for hydrofracture prevention are provided in USACE ER 1110-1-1807 (USACE 2014).

All boreholes would be backfilled with a neat cement grout at their completion in accordance with Orange County Environmental Health well permit requirements. Borings would be backfilled within 24 hours of completion. The borings would not allow for the introduction of surface waters or foreign materials into them and would be secured such that they do not endanger public health. The grout would be placed in the boreholes using a vertical or nearly vertical pipe through which concrete is placed by gravity feed below. Observed groundwater levels for auger borings would be recorded prior to grouting the holes. The boreholes would be backfilled with grout prior to the removal of the drill casing or augers.

Instead of backfilling all borings, approximately 17 core borings would be completed as piezometers, which monitor the pressure or depth of groundwater. Piezometers are instruments that can be used to monitor depth to groundwater. The piezometers would be temporarily used during the Syphon Reservoir Improvement Project design process to collect information about groundwater levels below the reservoir. The piezometer filter and slotted pipe section would target the underlying aquifer. The piezometers would be constructed by installation of a well screen (slotted PVC pipe) at the bottom of the excavated borehole, which would be surrounded by

a sand filter. A solid PVC pipe would be installed in the remaining portion of the borehole which would be filled in with bentonite grout.

2.6.2 Exploratory Test Pits and Seismic Trenches

Excavation of test pits and seismic trenches would involve site preparation, mobilization of equipment to the site, excavation, and backfilling. Exploratory test pits and seismic trenches would be excavated using a truck- and/or a track-mounted excavator with an excavation bucket. Typical bucket widths used for test pit and trench explorations are approximately 30- to 36-inches wide. The test pits would be excavated to an approximate depth of 15 to 20 feet or until excavation refusal is encountered, approximately 3 feet wide (depending on overall depth and whether the excavation is stepped or shored), and up to approximately 10 feet long. Bulk samples of each subsurface unit encountered would be obtained for additional review and potential future laboratory testing. The seismic trenches would be excavated to an approximate depth of 15 to 20 feet or until excavation refusal is encountered, approximately 3 feet wide (depending on overall depth and whether the excavation is stepped or shored), and up to approximately 30 to 50 feet long. The exact depths and dimensions will be determined in the field based on the conditions encountered. It is anticipated that several, approximately 30 to 50-foot long seismic trenches will be excavated along the lines shown on Figure 2.

Following completion of the excavation of exploratory test pits and seismic trenches, the area would be backfilled with material generated from the excavation. The excavation would be backfilled with the loose excavation spoils in lifts and, compacted using the excavator bucket. A sufficient amount of compaction effort would be applied to place the backfill material to a relatively firm and unyielding condition. Following the completion of the test pit backfilling operation, the location of the test pit shall be returned to near pre-excavation conditions and the surface shall be free draining such that ponding does not occur at the test pit location. Any excess spoils will be smoothly mounded over the test pit footprint in anticipation of future minor settlement.

2.6.3 Access Routes

Existing access routes would be used to the maximum extent possible. Temporary access routes would be constructed by grading an approximately 12-foot wide graded dirt path, or using the “drive and crush” method, along the routes shown on Figure 2. Once the geotechnical exploration has been completed, the graded access roads would be restored to their original condition. Where possible, access to sites will occur by driving overland without grading.

2.7 Schedule

The geotechnical investigations would occur over an approximate seven-month period, currently anticipated to begin in the Fall of 2019, but could be longer if weather restricts exploration work. This includes site preparation, access road improvements, boring and trenching, and site restoration. Weather permitting, the Project activities would involve the following durations:

- Access Road Improvements would require approximately 20 days. Access road improvements would occur prior to drilling activities. Once initial roads are graded to access

the initial boring locations, the remaining access roads would be graded concurrent with explorations.

- Borings would require approximately 51 days;
- Test pits would require approximately 6 days;
- Fault trenches would require approximately 38 days; and
- Seismic refraction and electrical resistivity lines would require approximately 10 days.

If the Project is implemented consecutively such that only one exploration activity is conducted at a time (with no concurrent work and no gaps), a minimum of approximately 105 days are needed. Alternatively, Project implementation may involve simultaneous exploration activities, which for example could include simultaneous drilling of 2 borings, excavation of 2 test pits, 1 fault trench and construction of 2,500 feet of access roads. Under this scenario, Project implementation may require less than 105 days since equipment would be operating simultaneously. The greatest number of equipment operated on a single day would be expected to be as follows: 2 drill rigs, 3 backhoes, 1 bulldozer, and 2 water/support trucks. These numbers would be subject to change dependent on weather, field conditions and scheduling requirements.

2.8 Permits and Approvals

Potential regulatory agencies that may have approval requirements are identified in **Table 3**.

The United States Army Corps of Engineers (USACE) issued an Approved Jurisdictional Determination (AJD) letter for the Project, which confirmed that waters of the United States do not occur within the Project study area since Syphon Reservoir is an intrastate isolated water with no apparent interstate or foreign commerce connection (USACE 2018). The Clean Water Act also excludes certain features from this regulation, including “wastewater recycling facility constructed on dry land” (see 33 CFR §230.3 (o)(2)(vii)). As such, the Project would not require a Clean Water Action Section 404 or Section 401 permit.

The AJD identified features in the Project study area potentially regulated by the Regional Water Quality Control Board (RWQCB). Based on consultation with RWQCB, a Waste Discharge Requirement (WDR) will not be required for this Project, since the reservoir is used for recycled water storage, and RWQCB understands that it is in IRWD’s best interest to maintain water quality during construction.

**TABLE 3
REGULATORY REQUIREMENTS AND AUTHORIZATIONS**

Agency	Type of Approval
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement; NCCP/HCP Compliance
U.S. Fish and Wildlife Service	NCCP/HCP Compliance
State Water Resources Control Board	Discharge from well drilling to storm drain
Orange County Environmental Health	Well permit

2.9 References

GEI 2012. Syphon Reservoir Expansion Engineering Feasibility Study – Geotechnical Data Report.

GEI Consultants, Inc., 2016. *Syphon Reservoir Dry Lakebed Geotechnical Exploration*. June 13, 2016.

HDR 2018. Syphon Reservoir Expansion Project Geotechnical Investigation Work Plan (Preliminary Draft), Syphon Reservoir Expansion Project, Irvine, California. September 4, 2018.

SECTION 3

Initial Study Checklist

3.1 Background

1. Project Title: Irvine Ranch Water District Syphon Reservoir Geotechnical Investigations Project
2. Lead Agency Name and Address: Irvine Ranch Water District 15600 Sand Canyon Ave. Irvine, CA 92618
3. Contact Person and Phone Number: Jo Ann Corey Environmental Compliance Specialist (949) 453-5300
4. Project Location: Intersection of Portola Parkway and Bee Canyon Access Road in County of Orange, CA
5. Project Sponsor's Name and Address: Irvine Ranch Water District
6. General Plan Designation(s): Orange County General Plan: Open Space Reserve
7. Zoning: General Agriculture
8. Description of the Project: Characterize the geologic and geotechnical conditions of the Syphon Reservoir site in order to support development of a potential future reservoir expansion.
9. Surrounding Land Uses and Setting: See Section 2.2
10. Other public agencies whose approval is required (e.g., permits): See Section 2.8

3.2 Environmental Factors Potentially Affected


The environmental factors checked below include impacts that are “Less Than Significant with Mitigation Incorporated.” There are no environmental factors that have an impact that is identified as a “Potentially Significant Impact” because all potential significant impacts can be reduced to less than significant with the incorporation of mitigation measures.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils/Seismicity | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Wildfire | |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION:

On the basis of this IS:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



 Signature

2/6/19

 Date

Jo Ann Corey, Environmental Compliance Specialist
 Printed Name

Irvine Ranch Water District
 For

SECTION 4

Environmental Analysis

Sections 4.1 through 4.21 analyze the potential environmental impacts associated with the Project. The environmental issue areas that are evaluated are:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities/Services Systems
- Energy
- Wildfire
- Mandatory Findings of Significance

The environmental analysis in the following sections is patterned after the CEQA Guidelines Appendix G, Environmental Checklist, which was revised by the Office of Planning and Research on December 28, 2018, and used by IRWD in its environmental review process. The Environmental Checklist will identify and briefly explain the environmental effects of the Project. For any effects that are determined to be potentially significant, the Environmental Checklist will identify and evaluate feasible measures that may be incorporated into the project to avoid or mitigate any adverse impacts.

For the evaluation of potential impacts, the questions in the Environmental Checklist are stated and an answer is provided according to the analysis undertaken. The proposed Project would implement geotechnical exploration activities that would allow for the characterization of the geologic and geotechnical conditions of the Syphon Reservoir site in order to support development of a potential future reservoir expansion. Since the Project does not involve long-term operation of any permanent facilities, this analysis only focuses on the short-term direct and indirect impacts associated with implementing the geotechnical exploration activities. To each question, there are four possible responses:

- **No Impact.** The Project will not have any measurable environmental impact on the environment.
- **Less than Significant Impact.** The Project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Less than Significant with Mitigation Incorporated.** The Project will have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The Project could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

The following is a discussion of potential project impacts as identified in the Environmental Checklist. Explanations are provided for each item.

4.1 Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. Scenic vistas are defined as expansive views of distant landforms and aesthetic features from public vantage points, including areas designated as official scenic vistas along roadway corridors or otherwise designated by local jurisdictions. The Project area is within unincorporated Orange County and immediately adjacent to the City of Irvine. The Project area is not officially designated as a scenic vista in the County of Orange Scenic Highway Plan (County of Orange, 2005a). However, views of mountains, hills, flatlands, coastal areas, open space and conservation areas are considered important scenic resources within the County of Orange and the City of Irvine (County of Orange 2005; City of Irvine 2015). Visual resources that contribute to the scenic qualities of the Project vicinity include the undeveloped hillsides that surround the existing Syphon storage reservoir.

Activities associated with implementation of the proposed Project would include site preparation, excavation, access road improvements, borings, preparation of test pits, trenching and refraction activities to detect fault activity. Construction equipment necessary for these geotechnical exploration activities include drill rigs, a water truck, support trucks, a backhoe, an excavator, a bulldozer, and pick-up trucks. Areas of disturbance and construction equipment located within and adjacent to the reservoir bottom would generally be shielded from view by the walls of the existing dam. Construction equipment located in upland areas or below the existing dam may be visible from public vantage points along Portola Parkway; construction equipment would not be visible from State Route 133 due to intervening topography. Due to the limited area of disturbance for each exploration activity, and the short-term temporary nature of Project activities

and presence of construction equipment, Project implementation would not significantly impact surrounding scenic vistas or scenic undeveloped hillsides. In addition, as discussed in Section 2.5 Project Description, disturbed areas would be restored upon completion of exploration activities. Therefore, impacts to scenic vistas would be considered less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. A scenic highway is officially designated as a State Scenic Highway when a local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official Scenic Highway. Based on a review of the Caltrans List of Scenic Highways, the Project area is not located along a State Scenic Highway (Caltrans 2018). The nearest Officially Designated State Scenic Highway is a segment of State Route (SR)-91, which is approximately 10.5 miles northwest of the Project area. Exploration activities associated with the proposed Project would not be visible from motorists traveling along this portion of SR-91 due to the distance and intervening topography. Therefore, the proposed Project would not impact scenic resources, which include rock outcroppings, trees, or historic buildings within a designated State Scenic Highway corridor. No impacts would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. Visual character of a project site and its immediate surroundings is defined by existing land uses and the associated natural or built environment, including vegetation, landforms, and structural features. As described above for Question 4.1(a), Project exploration activities would result in the short-term temporary presence of construction equipment and ground disturbance in certain portions of the Project site that could be visible from public vantage points. As discussed in Section 2.5 Project Description, disturbed areas would be restored upon completion of exploration activities; and construction equipment would be removed from the Project site once exploration activities are complete. As such, the proposed Project would not permanently or significantly impact the existing visual character and quality of public views of the Project site and immediate vicinity. Therefore, impacts would be considered less than significant.

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

No Impact. There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Depending upon the location of the light source and its proximity to adjacent light-sensitive uses, light introduction can be a

nuisance, affecting adjacent areas and diminishing the view of the clear night sky. Light spillage is typically defined as unwanted illumination from light fixtures on adjacent properties.

Existing light sources in the vicinity of the Project area include existing uses of the adjacent Crean Lutheran High School Sports Complex and residential uses to the south across Portola Parkway. The Project area itself contains few, if any, existing on-site uses that involve lighting. Project activities would not involve the use of nighttime lighting. The proposed Project would not require or involve the construction of any new physical facilities or aboveground infrastructure. Therefore, no lighting would be required after proposed exploration activities cease. There would be no new sources of light to affect daytime or nighttime views. No new facilities would be built that would be considered to have reflective surfaces. There would be no new sources of glare to affect daytime or nighttime views. There would be no impact.

References

California Department of Transportation (Caltrans), 2018. Officially Designated Scenic Highway, Orange County. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed November 2018.

City of Irvine, 2015. *City of Irvine General Plan, Conservation and Open Space Element*. Amended June 2015.

County of Orange, 2005. County of Orange General Plan, Resources Element. Available at: <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40235>, accessed December 2018.

County of Orange, 2005a. County of Orange, General Plan Chapter IV, Scenic Highway Plan. Available at: <http://www.ocpublicworks.com/civicax/filebank/blobdload.aspx?blobid=8588>, accessed December 2018.

4.2 Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
2. AGRICULTURAL AND FOREST RESOURCES —				
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No Impact. Prime Farmland is land which has the best combination of physical and chemical features able to sustain long-term agricultural production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings such as greater slopes or less ability to store soil moisture (CDC 2018a). Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards (CDC 2018b).

The California Department of Conservation (CDC) Farmland Map for Orange County identified the Project area as “Other Land,” which includes low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry or aquatic facilities, strip mines, borrow puts, and water bodies smaller than 40 acres. Further, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the Project vicinity (CDC 2018c). The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; therefore, no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. A Williamson Act Contract requires private landowners to voluntarily restrict their land to agriculture and compatible open-space uses. The Project area does not include land enrolled in a Williamson Act Contract (CDC 2004). However, the Project area is zoned as General Agriculture by the County of Orange (2015). According to the Orange County Zoning Code (Section 7-9-55.1), the General Agricultural District “is established to provide for agriculture, outdoor recreational uses, and those low-intensity uses which have a predominately open space character” such as the existing Syphon Reservoir. The proposed Project would not result in lasting changes to the existing Syphon Reservoir that would result in conflicts with the General Agricultural zoning designation. Therefore, there would be no impact associated with agricultural zoning conflicts or Williamson Act contracts.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The proposed Project would not conflict with existing zoning of forest land or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production. The Project area is currently zoned as General Agriculture. The Project does not involve any changes to current General Plan land use or zoning designations for forest land, or timberland. Additionally, there are no timberland zoned production areas within the Project area or immediate surrounding area. Therefore, no impact to forest land or timberland would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project area and surrounding areas contain no forest land. Thus, implementation of the proposed Project would result in no impacts related to the loss or conversion of forest land to non-forest use.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No Impact. Refer to Questions 4.2(a) through 4.2(d) above. The Project area includes the existing Syphon Reservoir and Dam within an undeveloped open area. No other adverse impacts to the existing environment would occur from implementation of the proposed exploration activities that could result in conversion of farmland to nonagricultural use or forest land to non-forest use. Thus, no impact would occur.

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4.3 Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
3. AIR QUALITY —				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The Project area is located in unincorporated Orange County adjacent to the City of Irvine and is within the South Coast Air Basin (SCAB). The SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere’s ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

The proposed Project is the geotechnical investigation of the area at the Syphon Reservoir site. Once geotechnical activities and surveys are completed the operation of the area will return to the existing operations. There would be no impacts to air quality from an operational standpoint and, therefore, the following environmental analysis for air quality discusses only the temporary geotechnical (construction) activities.

Existing Air Quality

SCAQMD maintains monitoring stations within district boundaries that monitor air quality and compliance with associated ambient standards. The Project area is located in the Inland Orange County general forecast area and specifically within the Saddleback Valley source receptor area. Currently, the nearest monitoring station to the Project area is the Mission Viejo Station (26081 Via Pera Mission Viejo, CA 92691). This station monitors ambient concentrations of carbon monoxide (CO), ozone, respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}). The nearest monitoring station that monitors for nitrogen dioxide (NO₂) is the Anaheim station. There are no stations within the Inland Orange County general forecast area that monitors for sulfur dioxide (SO₂). Historical data of ambient ozone, NO₂, CO, PM₁₀ and PM_{2.5} concentrations from these monitoring stations for the most recent 3 years of available data (2014–2016) are shown in **Table 4**.

TABLE 4
AIR QUALITY DATA SUMMARY (2014 – 2016) FOR PROJECT AREA

Pollutant	Monitoring Data by Year			
	Standard ^a	2014	2015	2016
Ozone – Mission Viejo				
Highest 1 Hour Average (ppm)		0.115	0.099	0.122
Days over State Standard	0.09 ppm	4	2	5
Highest 8 Hour Average (ppm)		0.088	0.085	0.093
Days over National Standard	0.070 ppm	10	8	13
Days over State Standard	0.070 ppm	10	8	13
Carbon Monoxide – Mission Viejo				
Highest 8 Hour Average (ppm)		0.7	0.7	0.7
Days over National Standard	9.0 ppm	0	0	0
Days over State Standard	9.0 ppm	0	0	0
Nitrogen Dioxide – Anaheim				
Highest 1 Hour Average (ppm)		75.8	70.2	75.2
Days over National Standard	0.100 ppm	0	0	0
Days over State Standard	0.18 ppm	0	0	0
Annual Average (ppm)		15.2	25.4	23.4
Days over National Standard	0.053 ppm	0	0	0
Days over State Standard	0.030 ppm	0	0	0
Particulate Matter (PM₁₀) – Mission Viejo				
Highest 24 Hour Average (µg/m ³) ^b		41	49	59
Days over National Standard (measured) ^c	150 µg/m ³	0	0	0
Days over State Standard (measured) ^c	50 µg/m ³	0	0	1
Annual Average (µg/m ³) ^b	20 µg/m ³		19	21

Pollutant	Monitoring Data by Year			
	Standard ^a	2014	2015	2016
Particulate Matter (PM_{2.5}) – Mission Viejo				
Highest 24 Hour Average (µg/m ³) ^b		25.5	31.5	24.79
Days over National Standard (measured) ^c	35 µg/m ³	0	0	0
Annual Average (µg/m ³) ^b	12 µg/m ³	8.02	7.05	7.36

NOTES:
 ppm = parts per million; µg/m³ = micrograms per cubic meter.
 * = Insufficient data available to determine the value.
^a Generally, state standards and national standards are not to be exceeded more than once per year.
^b Concentrations and averages represent federal statistics. State and federal statistics may differ because of different sampling methods.
^c Measurements are usually collected every 6 days. Days over the standard represent the measured number of days that the standard has been exceeded.
 SOURCE: SCAQMD 2016, 2015a, 2014.

Both the California Air Resources Board (CARB) and United States Environmental Protection Agency (USEPA) use this type of monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment. The current attainment status for the Orange County portion of the SCAB is provided in **Table 5**.

**TABLE 5
 SOUTH COAST AIR BASIN ATTAINMENT STATUS (ORANGE COUNTY PORTION)**

Pollutant	Attainment Status	
	California Standards	Federal Standards
Ozone	Extreme Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
PM ₁₀	Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment
Lead	Attainment	Attainment

SOURCE: CARB, 2017; USEPA, 2018.

Environmental Evaluation

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The proposed Project is located within the SCAB, which is under the jurisdiction of the SCAQMD. As such, SCAQMD's 2016 AQMP is the applicable air quality plan for the proposed Project. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The Project would result in an increase in short-term employment compared to existing conditions. Also, construction employees are typically employees of the construction firm and are not hired specifically for any one construction job. Being relatively small in number and temporary in nature, construction jobs under the Project would not conflict with the long-term employment projections upon which the AQMP is based. Control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the 2016 AQMP as MOB-08 and MOB-10 and are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. Construction contractors would be required to comply with the California Air Resources Board (CARB) Air Toxic Control Measure that limits heavy duty diesel motor vehicle idling to no more than five minutes at any given location with certain limited exceptions defined in the regulation for equipment in which idling is integral to the function of the equipment or activity such as concrete trucks and concrete pouring. In addition, contractors would be required to comply with required and applicable Best Available Control Technology (BACT) and the CARB In-Use Off-Road Diesel Vehicle Regulation to use lower emitting equipment in accordance with the phased-in compliance schedule for equipment fleet operators. The Project would not conflict with implementation of these strategies. The Project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Because the Project would not conflict with the control strategies intended to reduce emissions from construction equipment the Project would not conflict with or obstruct implementation of the AQMP, and impacts would be less than significant with respect to construction activities.

The proposed Project is a geotechnical study of the Syphon Reservoir site. Once the investigation is completed the operations will return to the existing conditions and no jobs or additional processes are added. Additionally, as this is not a residential development, it would not result in the creation of new housing or potential residential growth. Because the land use will not change, and has been in operation since before the creation of the 2016 AQMP, the proposed Project

would not change the regional growth forecasts as identified in the local General Plan or those of the 2016 AQMP. Therefore, the proposed Project would not conflict with, or obstruct, implementation of the AQMP, and this impact would be less than significant with respect to operational activities.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. A cumulative impact arises when two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts, meaning that the proposed Project's incremental effects must be viewed in connection with the effects of past, current, and probable future projects.

The Project area is located within the SCAB, which is considered the cumulative study area for air quality. Because the SCAB is currently classified as a state nonattainment area for ozone, PM₁₀, and PM_{2.5}, cumulative development consisting of the proposed Project along with other past, present, and reasonably foreseeable future projects in the SCAB as a whole could violate an air quality standard or contribute to an existing or projected air quality violation. However, based on SCAQMD's cumulative air quality impact methodology, SCAQMD recommends that if an individual Project results in air emissions of non-attainment criteria pollutants (VOC, NO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the proposed Project region is in non-attainment under an applicable federal or state ambient air quality standard.

Construction emissions are considered short term and temporary, but have the potential to represent a significant impact with respect to air quality. Particulate matter (i.e., PM₁₀ and PM_{2.5}) are among the pollutants of greatest localized concern with respect to construction activities. Particulate emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Particulate emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction emissions of PM can vary greatly depending on the level of activity, the specific operations taking place, the number and types of equipment operated, local soil conditions, weather conditions, and the amount of earth disturbance.

Emissions of ozone precursors of volatile organic compounds (VOC) and nitrogen oxides (NO_x) are primarily generated from mobile sources and vary as a function of vehicle trips per day associated with delivery of construction materials, the importing and exporting of soil, vendor trips, and worker commute trips, and the types and number of heavy-duty, off-road equipment used and the intensity and frequency of their operation.

The maximum daily construction emissions for the proposed Project during each year of construction were estimated using the California Emissions Estimator Model (CalEEMod), which is designed to model construction emissions for land use development projects based on building size, land use and type, and disturbed acreage, and allows for the input of project-specific information. Proposed Project-generated emissions of criteria air pollutants (e.g., PM₁₀) and precursors (i.e., VOC and NO_x) were modeled based on general information provided in the proposed Project description, and default SCAQMD-recommended settings and parameters attributable to the proposed land use types and site location.

It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for controlling fugitive dust. Incorporating Rule 403 into the proposed Project would reduce regional PM₁₀ and PM_{2.5} fugitive dust emissions from the geotechnical activities. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project area, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12 inches, and maintaining effective cover over exposed areas. Compliance with Rule 403 was accounted for in the construction emissions modeling.⁴ Site watering and application of soil binders would reduce the particulate matter from becoming airborne, while washing of transport vehicle tires and undercarriages would reduce re-entrainment of construction dust onto the local roadway network.

Construction activities would begin in the fall of 2019 with construction occurring periodically over a maximum of approximately 125 days. However, as there is the potential for activities to occur concurrently, a worst case modeling scenario was used, which assumes the geotechnical investigation occurring on a single day would include two borings, two test pits, one trench, and one survey.

Table 6 summarizes the daily emissions of criteria air pollutants and ozone precursors associated with each individual activity as well as the Maximum Day activities (refer to **Appendix AQ** for a detailed summary of the CalEEMod modeling assumptions, inputs, and outputs). As shown in Table 6, the Project's construction emissions would not exceed the SCAQMD's daily threshold for any non-attainment criteria pollutants or pollutant precursors and would not contribute to a considerable net increase in area emissions. Therefore, the Project would result in a less than significant cumulative impacts.

⁴ Note that the way CalEEMod is designed, fugitive dust controls pursuant to Rule 403 are incorporated in the model as "mitigation." Therefore, the "mitigated" fugitive dust emissions in CalEEMod represent the unmitigated conditions with the application of Rule 403 compliance.

**TABLE 6
PROPOSED PROJECT: REGIONAL UNMITIGATED CONSTRUCTION EMISSIONS**

Construction Activity	Estimated Maximum Daily Emissions (lbs/day) ^a					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Access Road	2	16	7	<1	3	2
Borings	1	12	9	<1	2	1
Test Pits	2	15	12	<1	2	1
Trenches	2	15	12	<1	2	1
Seismic Surveys	<1	<1	<1	<1	<1	<1
Sampling Deliveries & Breakdown	<1	2	<1	<1	<1	<1
Maximum Day ^b	7	60	46	<1	8	4
<i>Regional Significance Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Significant Impact?	No	No	No	No	No	No

^a Totals may not add up exactly due to rounding of the modeling calculation results.

^b Note that the Maximum Day emissions are not the sum of the listed activities. The Maximum Day emissions assumes construction activities from two boring locations, two test pit locations, one trench location, and one survey location would occur at the same time. This overlap is not a direct correlation to the sum of the individual activities as some equipment would be double counted if all the activities were summed together. For example, emissions of each boring location, each test pit, and each trench assumes the use of a water truck when modeled separately; however, the Maximum Day assumes a maximum of 2 water trucks operating onsite at any given time.

Source: Refer to Appendix AQ

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors at nearby residences or on the recreational bike path will be exposed to a significant level of TAC pollutant concentrations as described below.

CO Hotspots

CO hotspots are primarily a concern during the operational period of a project where the project increases local daily traffic foreseeable future. The proposed Project will not generate any new operational trips. The geotechnical activities would include temporary vehicle trips to and from the Project site; however, the number of trips would be minimal with up to approximately 46 worker round trips during the peak hour on a Maximum Day, which would not substantially contribute to an increase in traffic volumes on the roadway network compared to existing conditions. Therefore, the Project would not result in the formation of a CO hotspot and impacts would be less than significant.

LST

The daily on-site construction emissions generated by the proposed Project were evaluated against SCAQMD’s localized significance thresholds (LSTs) for a 1-acre site to determine whether the emissions would cause or contribute to adverse localized air quality impacts. The nearest sensitive receptor to the Project area is the residential development located approximately 600 feet (approximately 183 meters) to the south across Portola Parkway from the closest boring location. Therefore, to analyze the most conservative assumptions, the analysis compares the on-site construction emissions for the boring locations to the look-up table thresholds for a 1-acre

site at 50 meters. All other activities occur at distances greater than 200 meters from the nearest sensitive receptors and are compared to the thresholds for a 1-acre site at 200 meters within SCAQMD's Source-Receptor Area (SRA) 19 (Saddleback Valley).

As shown in **Table 7**, the daily unmitigated emissions generated on-site by the proposed Project's worst-case construction scenario would not exceed the applicable SCAQMD LSTs during construction. Therefore, localized air quality emissions associated with the Project would have a less than significant impact.

**TABLE 7
PROPOSED PROJECT UNMITIGATED LOCALIZED DAILY CONSTRUCTION EMISSIONS**

Construction Phase	Estimated Maximum Daily On-Site Emissions (lbs/day) ^a			
	NO _x	CO	PM10 ^b	PM2.5 ^b
Borings	12	7	1.1	0.8
SCAQMD Threshold (50 meters)	93	833	11	4
All other activities	16	11	3.1	2.0
SCAQMD Threshold (200 meters)	250	2,376	48	19
Maximum Day	60	39	5.1	3.7
SCAQMD Threshold (50 meters)	93	833	11	4
Significant Impact?	No	No	No	No

NOTE: Mechanical/Electrical Equipment and Systems is assumed to share equipment with other phases; emissions would be accounted for within the above listed phases.

^a According to SCAQMD's LST methodology, LSTs are only applicable to the on-site construction emissions that are generated by a project and do not apply to emissions generated off-site such as mobile emissions on roadways from worker, vendor, and haul truck trips. Totals may not add up exactly due to rounding of the modeling calculation results.

^b Emissions account for implementation of dust control measures as required by SCAQMD Rule 403 (Fugitive Dust).

Source: Refer to Appendix AQ

The LST methodology described above considers residential sensitive receptors. The proposed Project would implement borings adjacent to the Crean Lutheran High School Athletic Complex, in close proximity to students, which also would be considered sensitive receptors. The LST methodology assumes that residences are occupied 24 hours per day, seven days per week (24/7) and thus exposed to emissions 24/7 as well. The duration of recreational use by individuals at the Athletic Complex would be limited to a few hours per day and thus exposure to air emissions would be less than that calculated above for the residential sensitive receptors. As a result, impacts for all sensitive receptors would be less than significant.

Construction TACs

The proposed Project would result in short-term emissions of diesel PM, a known toxic air contaminant (TAC). Diesel PM poses a carcinogenic health risk that is measured using an exposure period of 70 years. The exhaust from the use off-road heavy-duty diesel equipment would result in emissions of diesel PM during boring, test pit, trenching and other miscellaneous activities. SCAQMD has not adopted a methodology for analyzing short-term and temporary construction health risk impacts. For stationary source permitting projects in which the SCAQMD

is the lead agency, the SCAQMD evaluates health risk impacts in accordance with its Risk Assessment Procedures for Rules 1401, 1401.1 and 212 (September 1, 2017) (SCAQMD 2017), which generally follows the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). Therefore, for the purposes of this analysis, a health risk assessment was conducted based on guidance from the SCAQMD Risk Assessment Procedures and the 2015 OEHHA methodology.

In order to estimate the concentration of diesel PM emissions from the geotechnical activities at the air quality-sensitive residential receptors, dispersion modeling was performed using the USEPA and SCAQMD-approved AMS/EPA Regulatory Model (AERMOD) consistent with SCAQMD dispersion modeling recommendations. Consistent with SCAQMD recommendations, AERMOD was run using the urban dispersion modeling parameter. Meteorological data is from the SCAQMD's Mission Viejo monitoring station located within SRA 19, which provides representative local weather conditions and prevailing winds data. The SCAQMD provides AERMOD-ready meteorological data files at this location for years, 2011, 2012, 2013, 2014, and 2016. Terrain data from the U.S. Geological Survey was used to assign elevations to modeled emissions sources and modeled receptor locations. The emission sources (i.e., heavy-duty diesel-fueled equipment used for the geotechnical activities) were characterized as area sources and volume sources within AERMOD. Cartesian grid receptor points were placed within AERMOD at sensitive receptor locations discussed above in consideration of the proximity of the sensitive receptors to the Project site and their potential to result in maximum impacts for the residential receptors in the vicinity.

According to OEHHA, carcinogenic health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period or duration of activities associated with the proposed Project. OEHHA recommends a health risk assessment be conducted for any project that disturbs more than one acre and lasts more than two months. The proposed Project would last for up to 125 days would disturb approximately four acres. Health risk impact calculations were performed based on the results of the AERMOD dispersion model and calculation methodologies in the SCAQMD Risk Assessment Procedures, which accounts for daily breathing rate, exposure duration, and age sensitivity factors that account for increased sensitivity to TAC emissions for infants and children. The SCAQMD threshold of significance is an incremental increase in cancer risk of 10 in one million.

Potential non-cancer chronic health impacts were evaluated using the Hazard Index approach. The Hazard Index is calculated by dividing the maximum modeled concentration of a TAC at the maximum impacted sensitive receptor by the Reference Exposure Level (REL). The REL is the concentration at or below which no adverse non-cancer health effects are known or expected to occur for that TAC. Therefore, a Hazard Index of less than 1.0 means that the maximum impacted sensitive receptor would be exposed to TAC concentrations at a level in which adverse non-cancer health effects would not be known or expected to occur. A Hazard Index equal to or greater than 1.0 represents a significant chronic health hazard.

Without mitigation the proposed Project's estimated incremental increase in cancer risk would be 0.31 in one million and the chronic non-cancer Hazard Index would be 0.003. The cancer risk would not exceed the SCAQMD thresholds of 10 in one million and the chronic health impact would not exceed the SCAQMD threshold of a Hazard Index of 1.0. Therefore, project construction would not expose sensitive receptors to substantial emissions of TACs. This impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. During construction of the proposed Project, exhaust from equipment may produce discernible odors typical of most construction sites. Such odors could be a temporary source of nuisance to adjacent uses, but would not affect a substantial number of people. Additionally, the closest boring location would be approximately 600 feet from sensitive residential receptors. As distance increases between receptor and source, the potential for odor to impact receptors decreases. As odors associated with project construction would be temporary and intermittent in nature, the odors would not be considered to be a significant environmental impact. Therefore, impacts associated with other emissions would be less than significant.

Results of the attainment criteria pollutant calculations are presented in Table 6. The daily emissions for these criteria pollutants (CO and SO_x) would be below SCAQMD significance thresholds. Additionally, since construction of the Project would not exceed the regional significance or local (see Table 7) thresholds, the Project is not anticipated to contribute to health impacts related to these pollutants.

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4.4 Biological Resources

<u>Issues (and Supporting Information Sources):</u>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

The following evaluation is based on the findings provided in a Biological Resources Technical Report prepared by ESA in January 2019 and included as **Appendix BIO**.

Would the Project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less than Significant with Mitigation Incorporated. Two special-status plant species, Catalina mariposa lily (*Calochortus catalinae*) (California Rare Plant Rank [CRPR] 4.2, Natural Communities Conservation Plan/Habitat Conservation Plan [NCCP/HCP] Covered) and San Diego County viguiera (*Bahiopsis laciniata*) (CRPR 4.3), were observed within the study area during focused surveys in spring 2018. Although the Project will avoid most of these special-status plants, two individual Catalina mariposa lilies may be impacted during construction. Regardless, impacts to two individuals would not threaten the existence of the species or the

population, and would not be significant. Additionally, Catalina mariposa lily is a covered species under the NCCP/HCP, and thus this species is considered conserved within the NCCP/HCP region since the NCCP/HCP Reserve provides for the regional conservation for covered species. Although the majority of the study area is within the NCCP/HCP Reserve and potential impacts to any Catalina mariposa lily would occur within the Reserve, at the time that the NCCP/HCP was prepared the NCCP/HCP included provisions for IRWD to build a future reservoir, and the proposed Project is in support of the future Syphon Reservoir Improvement Project, which is “a permitted use within the Reserve System” (R.J. Meade Consulting 1996). Thus, even with potential impacts to this species within the Reserve, this species is considered adequately covered under the NCCP/HCP. Therefore, impacts to Catalina mariposa lily are less than significant, and no mitigation is required.

One individual San Diego County viguiera plant was observed on-site in the easternmost portion of the study area; however, the Project would not impact this species, and no mitigation is required.

Special-status wildlife species observed within the study area, or having a low-to-moderate, moderate, or high potential to occur, include the NCCP/HCP Covered Species of coastal California gnatcatcher (*Polioptila californica*), orange-throated whiptail (*Aspidoscelis hyperythra*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), red-shouldered hawk (*Buteo lineatus*), northern harrier (*Circus cyaneus*), American peregrine falcon (*Falco peregrinus anatum*), coyote (*Canis latrans*), sharp-shinned hawk (*Accipiter striatus*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Diego desert woodrat (*Neotoma lepida intermedia*), and western spadefoot (*Spea hammondi*). The NCCP/HCP Conditionally Covered Species least Bell’s vireo (*Vireo bellii pusillus*), prairie falcon (*Falco mexicanus*), and southwestern willow flycatcher (*Empidonax traillii extimus*) were also either observed or with the potential to occur, as were the non-NCCP/HCP covered species of yellow warbler (*Setophaga petechia*), grasshopper sparrow (*Ammodramus savannarum*), white-tailed kite (*Elanus leucurus*), and yellow-breasted chat (*Icteria virens*).

The coastal California gnatcatcher, orange-throated whiptail, southern California rufous-crowned sparrow, red-shouldered hawk, northern harrier, prairie falcon⁵, American peregrine falcon, coyote, sharp-shinned hawk, coastal whiptail, San Diego desert woodrat, and western spadefoot, as covered species under the NCCP/HCP, are considered conserved within the NCCP/HCP region. Although the majority of the study area is within the NCCP/HCP Reserve and potential impacts to NCCP/HCP Covered Species may occur within the Reserve, the NCCP/HCP included provisions for IRWD to build a future reservoir, and the proposed Project is in support of the future Syphon Reservoir Improvement Project, which is “a permitted use within the Reserve System” (R.J. Meade Consulting 1996). Thus, even with potential impacts to these Covered Species within the Reserve, these species are considered adequately covered under the

⁵ Prairie falcon is a conditionally covered under the NCCP/HCP. Planned activities are authorized if the habitat is more than one-half mile from an active or historically active nesting site, and this species is currently not known to nest within Orange County, and have not occurred within the county for over a decade (CDFW 2018, Catino-Davenport 2019).

NCCP/HCP. Therefore, impacts to these special-status species are less than significant, and no mitigation is required.

The least Bell's vireo and southwestern willow flycatcher are both federal and state endangered and NCCP/HCP Conditionally Covered species. The conditional coverage for these species specify that "impacts to major occurrences outside the reserve must not have significant long-term conservation value and that provision is made for any other appropriate mitigation" (R.J. Meade Consulting 1996). Since the majority of the study area is within the Reserve and is an area of significant long-term conservation value, these species are not covered by the NCCP/HCP. Both species are found in riparian habitat. The Project would temporarily drain the reservoir, which may be used for foraging and provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations⁶ after the Project's geotechnical investigations are completed, and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to these special-status species associated with draining the reservoir are not expected to be significant. The proposed geotechnical investigations would also temporarily impact 0.36 acre of riparian communities (including 0.02 acre of black willow thicket, 0.08 acre of mule fat scrub, and 0.26 acre of freshwater marsh) by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the "drive and crush" method. Although impacts are temporary, the removal of habitat and potential disturbance to these special-status bird species would be potentially significant. Implementation of **Mitigation Measures BIO-1** and **BIO-2** would reduce impacts to a less than significant level.

The yellow warbler, grasshopper sparrow, and yellow-breasted chat are species of special concern, and white-tailed kite is a state fully protected species. The yellow warbler and yellow-breasted chat would be found in riparian habitat; the grasshopper sparrow favors native grasslands on rolling hills with a mix of grasses, forbs, and scattered shrubs; and the white-tailed kite would be found in grasslands, meadows, or marshes for foraging next to deciduous woodland with dense-topped trees for nesting and perching. The Project would temporarily drain the reservoir, which may be used for foraging and provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project's geotechnical investigations are completed, and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to these riparian-associated special-status species resulting from draining the reservoir are not expected to be significant. The proposed geotechnical investigations would also temporarily impact 6.42 acres of natural communities, including 0.36 acre of riparian communities (i.e., black willow thicket, mule fat scrub, and freshwater marsh) that provide the preferred habitat for these special-status species (although no non-native grasslands will be impacted), by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the "drive and crush" method. With 259.32 acres of natural areas remaining

⁶ The water surface elevation at Syphon Reservoir fluctuates on a regular basis depending on recycled water supply and demand. "Normal operations" means that Syphon Reservoir is typically filled to capacity during wet (winter) months when recycled water supply exceeds demand, and drawdown typically occurs during dry (summer) months when recycled water demand exceeds supply. Riparian habitat adjacent to the reservoir has established despite these fluctuations.

available within the approximately 265-acre study area that will be avoided by the proposed Project, including 12.13 acres of riparian habitat (i.e., arroyo willow thicket, black willow thicket, mule fat scrub, and freshwater marsh) and 5.27 acres of non-native grasslands, as well as natural areas within the surrounding vicinity, potential impacts to foraging and/or nesting habitat for these species are not expected to threaten regional populations. Direct impacts would also be avoided as these species are mobile and would be expected to fly away from the construction area, if present. However, if construction and maintenance work cannot be scheduled outside of nesting season, impacts to nesting special-status bird species, would be potentially significant. Implementation of Mitigation Measure BIO-2 would reduce impacts to a less than significant level.

Mitigation Measures

BIO-1: Mitigate Temporary Impacts to Special-Status Species. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to special-status species:

- a. Areas where temporary impacts occur would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to special-status species associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:
 1. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio.
 2. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable, as determined acceptable by the USFWS and CDFW.

BIO-2: Avoid Impacts to Nesting Birds. Impacts to nesting birds, including white-tailed kite, would be avoided by conducting all construction activities outside of the bird nesting season (i.e., work should occur September 1 to February 14, or July 1 to January 14 for raptors). If bird nesting season cannot be avoided, the following measures would be followed:

- a. Prior to work during the bird nesting season (February 15 to August 31, or January 15 to June 31 for raptors), a qualified biologist should conduct a pre-construction survey of all suitable habitat for the presence of nesting birds no more than 7 days prior to construction and/or maintenance activities. The results of the pre-construction survey would be valid for 7 days; if vegetation removal activities do not commence within 7 days following the survey, a new pre-construction nesting bird survey should be conducted before these activities begin again.
- b. If any active nests are found during a pre-construction nesting bird survey, a buffer of 300 feet (500 feet for raptors), or as determined appropriate by the qualified biologist (based on species-specific tolerances and site-specific conditions) in consultation with IRWD, would be delineated, flagged, and avoided until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). The qualified biologist may also recommend alternative measures to minimize disturbances to the nest, which may include, but are not limited to, erection of sound barriers (e.g., noise blankets), erection of visual barriers (e.g., hay bales), or full-time monitoring by a qualified biologist.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated. ~~Eleven~~^{Ten} sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, freshwater marsh, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The Project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket, freshwater marsh), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project's geotechnical investigations are completed, including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed Project would temporarily impact ~~4.314-05~~^{4.31} acres of sensitive natural communities, including 0.02 acre of black willow thicket, 0.26 acre of freshwater marsh, 2.02 acres of California sagebrush scrub, and 2.01 acres of nonnative herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the "drive and crush" method. Table 8 summarizes the temporary impacts on sensitive natural communities from the proposed Project. The Project would avoid ~~184.491-78.88~~^{184.49} acres of sensitive natural communities (including 4.11 acres of black willow thicket, 5.61 acres of

freshwater marsh, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area. It is anticipated that access routes created by the “drive and crush” method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the “drive and crush” access routes would be “self-mitigating”. However, temporary impacts to sensitive natural communities that would result from boring, trenching, and creating access routes using a bulldozer would be significant. Implementation of **Mitigation Measure BIO-3** would reduce impacts to a less than significant level.

**TABLE 8
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh_	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61
Coyote Brush Scrub**	0.91	-	-	-	0.91
Chaparral Bushmallow Scrub**	0.45	-	-	-	0.45
Chaparral Bushmallow Scrub/Coyote Brush Scrub**	0.49	-	-	-	0.49
Chaparral Bushmallow Scrub/Non-Native Herbaceous Cover**	4.72	-	-	-	4.72
Sumac Chaparral	1.63	-	0.03	0.03	1.60
California Sagebrush Scrub**	91.74	-	2.02 (0.22)	2.02 (0.22)	89.72
California Sagebrush Scrub**/Non-Native Herbaceous Cover	7.86	-	-	-	7.86
Coast Prickly Pear Scrub*	0.69	-	-	-	0.69
Eucalyptus Woodland	2.78	-	0.05 (0.01)	0.05 (0.01)	2.73
Non-Native Grassland	5.27	-	-	-	5.27
Non-Native Herbaceous Cover	44.16	-	0.67 (0.41)	0.67 (0.41)	43.49
Non-Native Herbaceous Cover/California Sagebrush Scrub**	71.70	-	2.01 (0.44)	2.01 (0.44)	69.69
Open Water	13.93	-	1.26 (0.72)	1.26 (0.72)	12.67
Disturbed	6.92	-	0.02	0.02	6.90
Total	265.74	0.0	6.42 (1.98)	6.42 (1.98)	259.32

* Asterisk indicates that an alliance/association is considered sensitive by CDFW.

** Double asterisk indicates that an alliance/association that is a covered habitat type under the NCCP/HCP and is therefore considered a sensitive natural community.

*** Acreage in parentheses indicate impacts from access routes created by the “drive and crush” method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally.

In addition, a large portion of the study area supports riparian habitat, which is considered CDFW jurisdictional lakes, streams, and associated vegetation. The Project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project’s geotechnical investigations are completed including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to CDFW jurisdictional riparian habitat resulting from draining the reservoir are not expected to be significant. The proposed Project would also temporarily impact 1.60 acres of CDFW jurisdictional lakes, streams, and associated vegetation. **Table 9** summarizes the temporary impacts on CDFW jurisdictional riparian habitat from the proposed Project. The Project would avoid 24.89 acres of CDFW jurisdictional lakes, streams, and associated vegetation within the study area. As mentioned above, it is anticipated access routes created by the “drive and crush” method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the “drive and crush” access routes would be “self-mitigating”. However, temporary impacts to CDFW jurisdictional riparian habitat that could result from boring, trenching, and creating access routes using a bulldozer could be significant. Implementation of **Mitigation Measure BIO-4** would reduce impacts to a less than significant level.

TABLE 9
IMPACTS TO CDFW POTENTIALLY JURISDICTIONAL AREAS

Jurisdiction Types	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)*	Total Impacts (Acres)*	Avoided (Acres)
CDFW Lakes, Streams, and Associated Vegetation	26.49	-	1.60 (0.90)	1.60 (0.90)	24.89
Total	26.49	0.0	1.60 (0.90)	1.60 (0.90)	24.89

* Acreage in parentheses indicate impacts from access routes created by the “drive and crush” method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally.

Mitigation Measures

BIO-3: Mitigate Temporary Impacts to Sensitive Natural Communities. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to sensitive natural communities:

- a. Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with locally indigenous species, and would include performance standards, success criteria, maintenance, and future monitoring.

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to sensitive natural communities associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:
1. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio.
 2. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing sensitive natural communities or comparable, as determined acceptable by the USFWS and CDFW.

BIO-4: Mitigate Temporary Impacts to Riparian Habitat. IRWD shall obtain a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW or obtain a “No Effect” letter from CDFW. One, or a combination, of the following would be incorporated into the permitting, subject to approval by CDFW:

- a. Areas where temporary impacts occur to CDFW jurisdictional lakes, streams, and associated vegetation would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to CDFW jurisdictional riparian habitat associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future

Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:

1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing CDFW riparian habitat or comparable, as determined acceptable by the CDFW.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation Incorporated. Based on coordination with the U.S. Army Corps of Engineers (USACE), the USACE issued an Approved Jurisdictional Determination letter (refer to Biological Resources Technical Report, Appendix BIO), which confirmed that waters of the U.S. do not occur within the study area since Syphon Reservoir is an intrastate isolated water with no apparent interstate or foreign commerce connection (USACE 2018). The Clean Water Act (CWA) also excludes certain features from this regulation, including “wastewater recycling facility constructed on dry land” (see 33 CFR §230.3 (o)(2)(vii)). Thus, jurisdictional features identified are only subject to the jurisdiction of the State (i.e., wetlands and non-wetland waters of the State, and CDFW lakes, streams, and associated vegetation [previously discussed above]).

The Project would temporarily drain the reservoir in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project’s geotechnical investigations are completed, including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to wetlands and non-wetland waters of the State resulting from draining the reservoir are not expected to be significant. The proposed Project would temporarily impact 1.43 acres of wetlands and waters of the State (0.17 acre of wetlands, 1.26 acres of non-wetland waters of the State) as summarized in **Table 10**. The Project would avoid 4.16 acres of wetlands and 12.69 acres of waters of the State within the study area. It is anticipated access routes created by the “drive and crush” method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the “drive and crush” access routes would be “self-mitigating.” However, temporary impacts to wetlands and waters of the State that would result from boring, trenching, and creating access routes using a bulldozer would be significant. Implementation of **Mitigation Measure BIO-5** would reduce impacts to a less than significant level. In addition, it should be noted that based on consultation with RWQCB, a Waste Discharge Requirement (WDR) will not be required for this Project, since the reservoir is used for recycled water storage, so RWQCB understands that it is in IRWD’s best interest to maintain water quality during construction.

**TABLE 10
IMPACTS TO RWQCB POTENTIALLY JURISDICTIONAL AREAS**

Jurisdiction Types	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)*	Total Impacts (Acres)*	Avoided (Acres)
Wetland Waters of the State	4.33	-	0.17 (0.12)	0.17 (0.12)	4.16
Non-Wetland Waters of the State	13.95	-	1.26 (0.72)	1.26 (0.72)	12.69
Total	18.28	0.0	1.43 (0.84)	1.43 (0.84)	16.85

* Acreage in parentheses indicate impacts from access routes created by the “drive and crush” method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally.

Mitigation Measures

BIO-5: Mitigate Temporary Impacts to Jurisdictional Wetlands. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to RWQCB jurisdictional wetlands and “waters of the State:”

- a. Areas where temporary impacts occur to wetlands and waters of the State shall be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to wetlands and waters of the State associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:
 - 1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing wetlands and waters or comparable, as determined acceptable by the RWQCB/CDFW.
- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Less than Significant with Mitigation Incorporated. Although movement would not occur through the study area to the west or south, the study area is on the edge of a larger contiguous block of habitat that would be used for regional wildlife movement (e.g., dispersal habitat for coastal California gnatcatcher within this region). The reservoir is also an important regional water source that attracts a number of avian species and supports habitat for migrating birds. Thus, the study area functions as a part of a wildlife movement corridor from a regional perspective, as well as provides live-in and movement habitat for a variety of species on a local scale.

The Project would temporarily impact 6.42 acres of natural communities to conduct geotechnical investigations to evaluate geologic and seismic conditions on-site. However, the Project would avoid 259.32 acres of natural communities, and the temporarily impacted areas would not inhibit movement of wildlife that could use the study area. The Project would temporarily drain the reservoir, which is used by a number of birds and other wildlife for water supply and foraging, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project's geotechnical investigations are completed, including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts associated with draining the reservoir are not expected to be significant. Thus, impacts to regional and local wildlife movement are less than significant, and no mitigation is required.

Nesting activity typically occurs from February 15 to August 31 (or January 15 to June 31 for raptors). Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. Any potential impacts to songbird and/or raptor nests would be considered potentially significant. Implementation of Mitigation Measure BIO-2, above, would reduce impacts to a less than significant level.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. There are no local policies or ordinances protecting biological resources, such as tree preservation ordinance. Therefore, the implementation of the proposed Project would not conflict with any local policies or ordinances, and no impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant with Mitigation Incorporated. The study area is within the Central Subregion of the County of Orange NCCP/HCP, and is located with the NCCP/HCP Reserve. IRWD is participating landowner of the Central & Coastal Subregion NCCP/HCP. The NCCP/HCP included provisions for IRWD to build a future reservoir "as a permitted use within the Reserve System" (R.J. Meade Consulting 1996). At the time that the NCCP/HCP was prepared, IRWD was studying four alternative seasonal reclaimed water storage reservoirs, all of which were located within the subregional Reserve System, though only one reservoir would

ultimately be needed. Since the exact location had not been determined, IRWD did not ask for specific authorization for Incidental Take as a part of the NCCP/HCP. However, the need for a future reservoir was identified as “a permitted use within the Reserve System in the event that public health, safety, and welfare require such a facility in the future. At the time such a facility is needed, IRWD will review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the Incidental Take associated with the new reservoir” (R.J. Meade Consulting 1996).

The proposed Project (i.e., the Syphon Reservoir Geotechnical Investigations Project) is in support of the future Syphon Reservoir Improvement Project, which is a permitted use within the Reserve System. Compliance with specific conditions required for NCCP/HCP conditionally covered species (i.e., least Bell’s vireo and southwestern willow flycatcher) are discussed in above. However, the removal of coastal sage scrub communities would be considered potentially significant. Implementation of **Mitigation Measure BIO-6**, below, would reduce impacts to a less than significant level.

Mitigation Measures

BIO-6: NCCP/HCP Construction Related Minimization Measures. IRWD will implement the following:

- a. In accordance with the NCCP/HCP, certain construction-related mitigation measures are required to minimize impacts to the coastal California gnatcatcher and other coastal sage scrub species. The removal of coastal sage scrub communities will be conducted in compliance with the NCCP/HCP’s Construction Related Minimization Measures:
 1. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15).
 2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.
 3. A monitoring biologist, acceptable to USFWS/CDFW will be on-site during any clearing of coastal sage scrub. IRWD will advise USFWS/CDFW at least seven calendar days (and preferably fourteen calendar days) prior to the clearing of any habitat occupied by Identified Species⁷ to allow USFWS/CDFW to work with

⁷ NCCP/HCP Identified Species that occur, or have potential to occur, on-site include the following: coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, coastal western whiptail, red-diamond rattlesnake, coast horned lizard, western spadefoot, northern harrier, sharp-shinned hawk, prairie falcon, American peregrine falcon, red-shouldered hawk, southern California rufous-crowned sparrow, San Diego desert woodrat, gray fox, and coyote.

the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.

4. Following the completion of initial grading/earth moving activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.
5. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle/equipment transportation routes and staging areas will be restricted to a minimum number during construction consisted with Project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operator shall be conducted and documented to ensure maximum practicable adherence to these measures.
6. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.

References

- California Department of Fish and Wildlife (CDFW). 2018a. *California Natural Diversity Database (CNDDDB) Rarefind 5*. Electronic database, Sacramento, California. Accessed at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed on April 6 and December 12, 2018.
- Catino-Davenport, Jaelyn of ESA (formerly of Bloom Biological). 2019. Personal communication via email with Maile Tanaka (Biologist) of ESA on January 16, 2019.
- Dudek. 2012. *Syphon Reservoir Environmental Regulatory Evaluation Preliminary Draft*. Prepared for Irvine Ranch Water District. October 2012.
- ESA. 2019. *Biological Resources Technical Report for the Syphon Reservoir Geotechnical Investigations Project, County of Orange, California*. January 2019. Prepared for Irvine Ranch Water District.
- GEI Consultants, Inc. (GEI). 2012. *Syphon Reservoir Expansion Engineering Feasibility Study – Geotechnical Data Report*. Prepared by GEI in association with Stantec Consulting, Inc.; Dudek; and Flow Science, Inc. August 2012.

HDR 2018. *Syphon Reservoir Expansion Project Geotechnical Investigation Work Plan (Preliminary Draft)*, Syphon Reservoir Expansion Project, Irvine, California. September 4, 2018.

R.J. Meade Consulting, Inc. 1996. *County of Orange Natural Community Conservation Plan & Habitat Conservation Plan. Central & Coastal Subregion. Parts I & II: NCCP/HCP*. July 17, 1996.

4.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The following evaluation is based on the findings provided in a Cultural Resources Assessment prepared by ESA in December 2018 (Bever et al. 2018; **Appendix CUL** (Confidential)).

Environmental Evaluation

Would the Project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

Less than Significant with Mitigation Incorporated. A total of nine resources were identified within the Project area as a result of the cultural resources assessment. These include four prehistoric archaeological sites (CA-ORA-601, -1237, -1246, and -1400) identified through a records search at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) on October 2, 2018. In addition, a prehistoric isolate consisting of a mano (ISO-HC-001), a historic-period archaeological site consisting of an artifact scatter and foundation remnants (designated the Latrine Site), and three historic period built architectural resources (an undocumented segment of P-30-176748/Highline Canal, a small stucco building designated IRWD-Cottage, and the Syphon Dam itself and associated facilities, including the remnants of a dock), were identified in a field survey conducted for the Project on November 6, 7, and 14, 2018. Two of the previously recorded archaeological sites (CA-ORA-601 and -1246) could not be located during the survey and are presumed destroyed.

Five resources (CA-ORA-601, -1237, -1246, ISO-HC-001, and the Latrine Site), while documented within the Project area, occur outside the area of impacts for the Project and will not be impacted by the Project. Isolated artifacts, given their lack of context and association, generally are not considered eligible for listing in the California Register; therefore, ISO-HC-001 does not qualify as a historical resource. Furthermore, two of the resources (CA-ORA-601 and -1246) appear to have been destroyed. The remaining two resources have not been evaluated for eligibility for listing in the California Register. For the purposes of this Project, the resources are considered historical resources. With implementation of **Mitigation Measure CR-1**, these impacts will be avoided, and impacts would be less than significant.

The remaining four resources likely will be impacted by the Project. Through a program of surface inventory and subsurface testing, prehistoric archaeological site CA-ORA-1400 was previously determined ineligible for listing in the National Register of Historic Places due to a lack of integrity. For the same reasons, it does not qualify for listing in the California Register of Historical Resources (California Register). A previously recorded segment of resource P-30-176748 (the Highline Canal) located outside the Project boundary was previously determined ineligible for the National Register and California Register because the segment does not retain integrity. The segment of P-30-176748 documented within the Project boundary is likewise in poor condition, and also is not eligible for listing in the California Register. Finally, both the IRWD-Cottage and the Syphon Reservoir dam and associated facilities have been subject to significant alterations that have severely compromised their integrity. Consequently, both resources have been recommended ineligible for listing in the California Register. Since none of the four resources that will be impacted by the Project qualify for listing in the California Register, none are historical resource as defined in §15064.5. Finally, an analysis of indirect impacts to adjacent historical resources was conducted and the Project would not result in an indirect impact to historical resources. Impacts would be less than significant.

While the Project as designed will not have an impact on historical resources, the presence of both historic period and prehistoric archaeological sites within and within the vicinity of the Project area indicates that the area is sensitive for archaeological resources. If unknown archaeological resources are encountered during Project implementation, and if such resources are determined to be historical resources as defined in §15064.5, impacts to the resources would be considered significant. **Mitigation Measures CR-2** through **CR-4** would ensure that any impacts are reduced to less than significant.

Mitigation Measures

CR-1: Avoidance of Unevaluated Resources. Two resources (CA-ORA-1237 and the Latrine Site) are considered historical resources for purposes of this Project. While both resources fall outside the area of impacts for the Project, if any Project-related activities occur in close proximity to (within 100 feet of) the resources, Environmentally Sensitive Areas consisting of protective fencing or flagging shall be established around the boundary of each resource, including a 50-foot buffer. The establishment of the Environmentally Sensitive Areas and installation of required fencing or flagging shall be carried out under the supervision of a Qualified Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's standards for archaeology (USDI 2008), or an archaeologist working under the direction of the Qualified Archaeologist. Environmentally Sensitive Areas should be clearly marked in the field and on design plans with exclusion markers to ensure avoidance during Project-related ground disturbance. The protective fencing or flagging should not identify the Environmentally Sensitive Areas as cultural resource areas to discourage unauthorized disturbance or collection of artifacts.

CR-2: Worker Sensitivity Training. Prior to the start of geotechnical investigation activities, all construction personnel should be trained to identify the types of cultural resources that may be encountered during Project implementation. These include both prehistoric and historic period archaeological resources. In addition to cultural resources recognition, the training should convey procedures to follow in the event of a potential

cultural resources discovery, including notification procedures. The training should be provided by the Qualified Archaeologist or an archaeologist working under their supervision.

CR-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the Qualified Archaeologist) and a Native American monitor shall observe all ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The Qualified Archaeologist, in coordination with IRWD and the Native American monitor(s), may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project. The Native American monitor shall be from a tribe that is culturally and geographically affiliated with the Project area (according to the California Native American Heritage Commission's contact list for this Project). The archaeological and Native American monitors shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the Qualified Archaeologist has evaluated the discovery, consulted with IRWD, and determined appropriate treatment (as prescribed in CR-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the Qualified Archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to IRWD and any Native American groups who request a copy. The Qualified Archaeologist shall submit a copy of the final report to the California Historic Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC).

CR-4: Protocols for Unanticipated Discoveries. If cultural resources are encountered during Project implementation, all activity within 50 feet of the find should cease until the find can be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines that the resources may be significant, he or she will notify IRWD and develop an appropriate treatment plan for the resource. IRWD should consult with the Native American monitor or other appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Under CEQA, preservation in place is the preferred manner of mitigating impacts to archaeological sites. In considering any suggested measures proposed by the archaeologist to mitigate impacts to archaeological resources, IRWD will determine whether avoidance is feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures will be instituted, which could include, among other options, detailed documentation, or data recovery excavation. Work may proceed on other parts of the Project area while mitigation for cultural resources is being carried out.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. Six archaeological resources were identified within the APE, including four previously documented archaeological sites, and one prehistoric isolate and one historic-period archaeological site identified during the field survey conducted for the Project. As discussed above, two of the previously documented sites (CA-

ORA-601 and -1246) could not be relocated and are presumed destroyed. CA-ORA-1400 was previously determined ineligible for the National Register and the California Register, and is not a significant archaeological resource pursuant to §15064.5. As an isolated occurrence, ISO-HC-001 also is not a significant archaeological resource. Two resources (CA-ORA-1237 and the Latrine Site) have not been evaluated for listing in the California Register and could qualify as archaeological resources pursuant to §15064.5. However, both occur outside the area of impacts for the Project and can be avoided. **Mitigation Measure CR-1** will ensure avoidance of the resources.

The presence of both historic period and prehistoric archaeological sites within and within the vicinity of the Project area indicates that the area is sensitive for archaeological resources. If unknown archaeological resources are encountered during Project implementation, and if such resources are determined to be archaeological resources as defined in §15064.5, impacts to the resources would be considered significant. **Mitigation Measures CR-2 through CR-4** will ensure that any impacts are reduced to less than significant.

Mitigation Measures

Implement Mitigation Measures CR-1 through CR-4.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact. No human remains were identified in the Project area as a result of the archival research or survey, and it is anticipated that the Project would have no impact on human remains. That said, the area was known to have been used by prehistoric Native Americans. In the unlikely event that human remains are uncovered during ground disturbing activities, appropriate state law would apply. Specifically, California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

Further, California PRC Section 5097.98, as amended by Assembly Bill 2641, provides procedures in the event human remains of Native American origin are discovered during Project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that would not be subject to further disturbance. No impact would occur with adherence to state laws identified above.

References

Bever et al., 2018. *Cultural Resources Assessment Report for the Syphon Reservoir Improvement Project, County of Orange, California*. January 2019.

US Department of the Interior, National Park Service, 2008. Secretary of the Interior's Standards and Guidelines, Archaeology and Historic Preservation. Available at: http://www.nps.gov/history/local-law/arch_stnds_0.htm, accessed May 2018.

4.6 Energy

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
6. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

In accordance with the requirements under CEQA, this section provides an estimate of energy consumption for the proposed Project and the potential impacts from associated exploration activities. Because the Project includes geotechnical exploration activities, and does not include the implementation of any new built permanent structures or facilities, the Project is not adding new processes. Therefore, there will be no new operational activities and no operational emissions. As operational emissions from the Project site will not change from the current existing conditions, operational activities are not addressed in this analysis. Supporting documentation of the energy calculations provided in this section are included in Appendix AQ of this IS/MND.

The evaluation of the proposed Project’s potential impacts related to energy usage, include electricity, natural gas, and transportation fuel. Energy consumption during construction is assessed. The Project’s estimated energy consumption was calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and spreadsheet calculations to determine transportation fuel consumption. Energy consumption associated the supply and conveyance of water used for dust control as well as electricity used for powering lighting, electronic equipment, and other construction activities is assumed to be negligible. Additionally, the geotechnical exploration activities are not expected to require the consumption of natural gas. Therefore, this analysis is limited to a discussion of transportation energy associated with construction and exploration activities.

Environmental Evaluation

Would the Project:

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Less than Significant Impact. The proposed Project would require a variety of construction equipment. Electricity would also be used for construction lighting and electrically driven construction devices such as air compressors, pumps and other equipment. Nevertheless, construction would be temporary and would not result in a substantial use of energy.

The primary energy demand during construction would be associated with the short-term and temporary use of gasoline- and diesel-powered mobile construction equipment. The equipment used onsite would be limited by California law to a maximum of 5 minutes of idling time per location. The estimated Project fuel consumption and comparison to existing (2017) state and county usage are provided in **Table 11**. As shown, the limited construction time period results in a minimal amount of fuel consumption as compared to typical State and County usage. Therefore, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant.

**TABLE 11
ESTIMATED PROJECT FUEL CONSUMPTION**

	Total Project Fuel Consumption (gallons)	
	Diesel	Gasoline
Total Project	5,392	1,342
State Usage ^{a,b}	3,089,833,627	15,540,154,774
% State Usage	<0.001%	<0.001%
County Usage ^c	1,236,000,000	54,000,000
% County Usage	<0.001%	<0.001%

Source: Refer to Appendix AQ
^a CEC. 2018a
^b CEC. 2018b
^c CEC 2018c

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. There is no new long-term electrical, natural gas, or fuel consumption after the geotechnical survey completed. Fuel consumption during geotechnical activities is minimal (see Table 11). As the Project is bound by California and SCAQMD regulations regarding equipment operation, it is not anticipated the proposed Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

References

California Energy Commission (CEC). 2018a. Gasoline Fuel Data, Facts and Statistics. Taxable Diesel Sales in California. Available: http://www.energy.ca.gov/almanac/transportation_data/gasoline/. Accessed December 2018.

CEC. 2018b. Diesel Fuel Data, Facts and Statistics. Taxable Diesel Sales in California. Available: http://www.energy.ca.gov/almanac/transportation_data/diesel.html. Accessed December 2018.

CEC 2018c. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. 2010-2017 CEC-A15 Results and Analysis.xls. Available:
https://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html.
Accessed December 2018.

U.S. Energy Information Administration. 2017. *How much carbon dioxide is produced from burning gasoline and diesel fuel?* May 19. Available:
<https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>. Accessed December 2018.

4.7 Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
7. GEOLOGY and Soils —				
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The following evaluation is based on geologic and seismic information derived from various sources and compiled in this section to develop a comprehensive understanding of the potential constraints and hazards associated with geotechnical exploration activities. Information sources include geologic and soils maps and information prepared by GEI Consultants, Inc., Department of Conservation, California Geologic Survey (CGS), the county of Orange, and city of Irvine, all of which reflect the most up-to-date understanding of the regional geology and seismicity. Additionally, a paleontological resources fossil locality search was conducted by the Natural History Museum of Los Angeles County (LACM) on October 12, 2018.

Environmental Evaluation

Would the Project:

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)**

No Impact. The Alquist-Priolo Earthquake Fault Zoning Act, signed into law in December of 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development and prohibit construction on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones are the regulatory zones delineated on maps that include surface traces of active faults. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones, which include all land divisions and most structures for human occupancy.

Active or potentially active faults that could potentially affect Syphon Reservoir include the San Joaquin Hills, Chino, Elsinore, Newport-Inglewood, Puente Hills, San Jacinto, and San Andreas faults; the closest is Puente Hills, which is located 4.3 miles away from the Project site. Previous studies indicate that two faults are located within the Project site, one of which runs directly beneath the existing reservoir and dam (GEI Consultants, Inc. 2012). Neither fault is considered active or potentially active or included within an Alquist-Priolo Earthquake Fault Zone. This IS/MND evaluates geotechnical exploration activities and seismic studies that would further evaluate the inactive fault traces beneath the dam and reservoir. The proposed Project would not involve the construction and implementation of permanent, built facilities. Therefore, the proposed Project would have no adverse effects to people or structures within an Alquist-Priolo Earthquake Fault Zone. No impacts would occur.

- ii) **Strong seismic ground shaking?**

Less than Significant Impact. In general, Southern California is a seismically active area, with most locations in proximity to faults that can produce detectable seismic ground shaking. As described above, the two faults located within the Project site are not considered active or potentially active. Other local active faults listed above have the potential to subject the Project area to ground shaking.

The Project area does not include permanent structures that would house people. However, during implementation of Project exploration activities, ground shaking could expose persons working in the Project area to seismic hazards while operating heavy equipment or working in trenches. IRWD and its contractors would be required to adhere to all California Division of Occupational Safety and Health (CalOSHA) requirements for working within active construction sites,

including specific provisions for working within trenches, that would ensure the safety of all construction workers onsite. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to strong seismic ground shaking. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is a phenomenon where unconsolidated and/or near saturated soils loses cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil cohesion during strong earthquake shaking results in the temporary fluid-like behavior of the soil. There is a high potential for liquefaction to occur within the near surface, which consists of loose to medium dense sandy alluvial deposits beneath the existing Syphon Dam (GEI Consultants, Inc. 2012). Thus, in the event of a large earthquake with a high acceleration of seismic shaking, the potential for liquefaction exists.

During Project exploration activities, a liquefaction event could have potential adverse effects to construction workers onsite while operating heavy equipment or working in trenches. IRWD and its contractor would be required to adhere to all CalOSHA requirements for working within active construction sites, including specific provisions for working within trenches, to ensure worker safety given the known site conditions. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to liquefaction. Impacts would be less than significant.

iv) Landslides?

Less than Significant Impact. Landslides are deep-seated ground failures (several tens to hundreds of feet deep) in which a large section of a slope detaches and slides downhill. The Syphon Reservoir bottom is relatively flat terrain but is surrounded by hills as well as the existing Syphon dam. The Project area is within a State-Designated Seismic Hazard Zone for Earthquake-Induced Landslides (CDC 2015). However, according to the Project's Engineering Feasibility Study (GEI Consultants, Inc. 2012), no deep-seated landslides were interpreted to exist at the Project site. Therefore, landslides are not expected to be a significant hazard within the Project area. In addition, IRWD and its contractor would be required to adhere to all CalOSHA requirements for working within active construction sites, including specific provisions for working within trenches, to ensure worker safety given the known site conditions. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to landslides. Impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The proposed Project would involve ground disturbance that would remove existing vegetation and expose underlying soils to rain and wind, which could result in soil erosion. Excavation of pits and trenches would require stockpiling of soils. As explained in Section 2.5 Project Description, all soil stockpiles would be covered at the end of each working day so as to avoid soil erosion. Soils eventually would be backfilled into trenches and boreholes at the end of the geotechnical exploration activities, and disturbed areas would be

restored. No substantial soil erosion or loss of topsoil would occur. Impacts would be less than significant.

Furthermore, implementation of the proposed Project would need to comply with SCAQMD Rule 403 for dust control that would ensure the prevention of the loss of topsoil and erosion during Project implementation. See Section 4.3 Air Quality for additional information.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact. Non-seismically-induced geologic hazards such as landslides, lateral spreading, settlement, and slope failure can be caused by unstable soils. Subsidence of the ground surface occurs under static conditions (i.e., due to consolidation settlement from overlying load or long-term water or mineral extraction), but can also be accelerated and accentuated by earthquakes. The extraction of fluid resources from subsurface sedimentary layers (i.e., water or oil) can result in subsidence from the removal of supporting layers in the geologic formation. Settlement of loose, unconsolidated soils generally occurs slowly, but can cause significant structural damage if structures are not properly designed.

The proposed Project would not involve the construction of any new structures that would be adversely affected by unstable soils. Similar to impacts described above for Questions 4.6(a)(ii) through 4.6(a)(iv), during implementation of Project exploration activities, unstable soils could expose persons working in the Project area to hazards while operating heavy equipment or working in trenches. Project exploration activities include borings that would remove small amounts of subsurface material from the bore holes, as well as excavation of test pits and trenches. The proposed bore holes would be backfilled with cement grout or installation of temporary piezometers. The proposed test pits and trenches also would be backfilled with previously-excavated soils. As such, the design of Project activities would prevent the occurrence of lateral spreading, subsidence or collapse. According to the Project's Engineering Feasibility Study (GEI Consultants, Inc. 2012), no deep-seated landslides were interpreted to exist at the Project site. Therefore, landslides are not expected to be a significant hazard within the Project area.

IRWD and its contractors would be required to adhere to all California Division of Occupational Safety and Health (CalOSHA) requirements for working within active construction sites, including specific provisions for working within trenches that would ensure the safety of all construction workers onsite. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to unstable soils. Impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

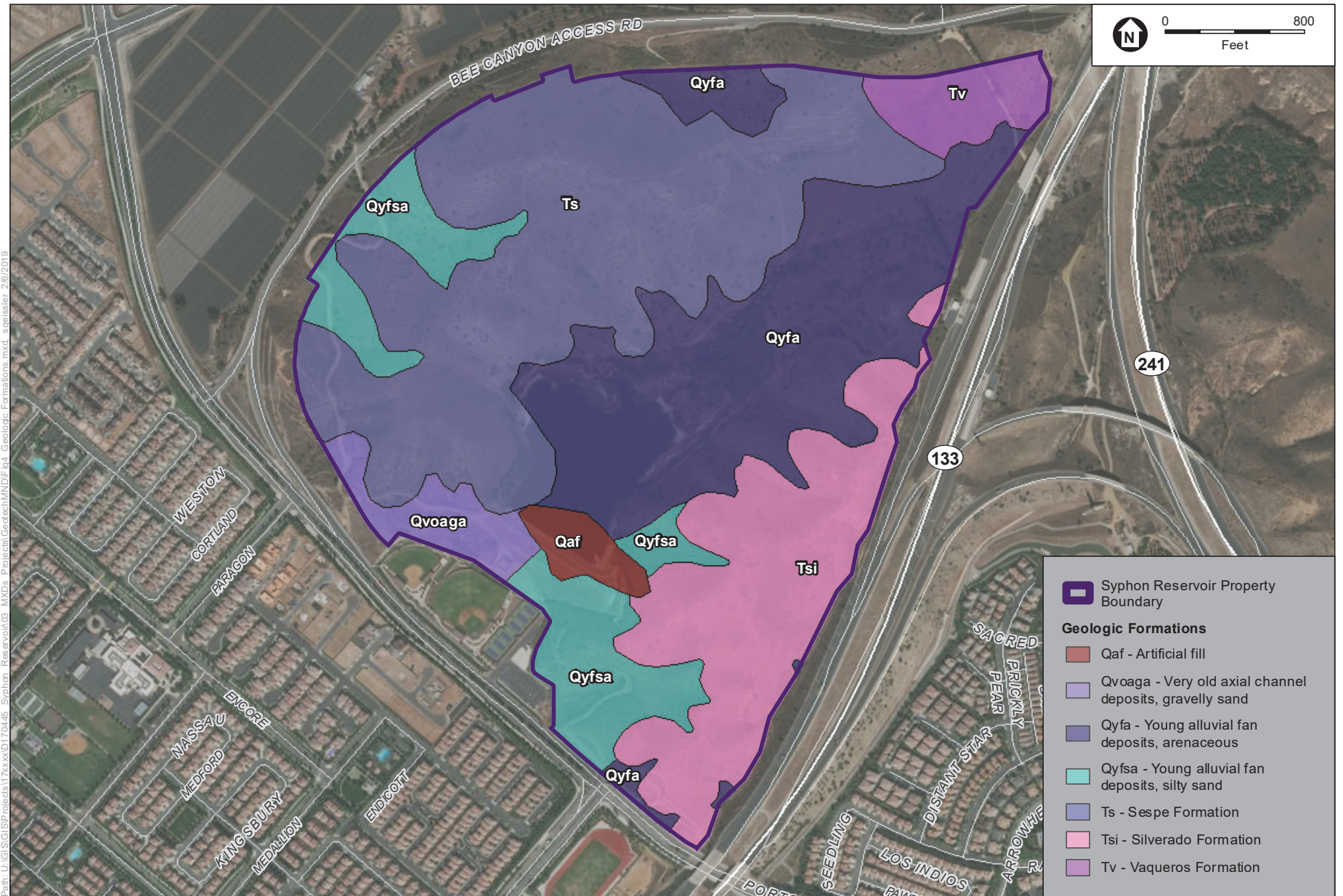
No Impact. Expansive soils are predominantly comprised of clays, which expand in volume when water is absorbed and shrink when the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. Soils with a moderate to high shrink-swell potential can cause damage to roads, buildings, and infrastructure (USDA 2018). The Project area and immediate vicinity may include expansive soil where clays are present (GEI Consultants, Inc. 2012); however, the proposed Project would not involve the construction of any new structures or infrastructure. The Project exploration activities would require the presence of an average of approximately 8 workers per day onsite, operating heavy equipment or working in trenches. Exposure of construction workers to expansive soils in an undeveloped area would not present risks to life or property. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to expansive soils. There would be no impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed Project does not include the installation of septic tanks or alternative wastewater disposal systems. During Project implementation, IRWD or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Once the exploration activities are concluded, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations. There would be no impact associated with wastewater disposal.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. The paleontological resources fossil locality search conducted by the LACM indicates that while no recorded fossil specimens occur within the Project area, multiple specimens do occur nearby and within the same sedimentary deposits that occur within the Project. As shown in **Figure 4**, these formations include the Paleocene Silverado Formation and Sespe/Vaqueros Formations, which occurs as bedrock exposures in the northern, northwestern, and southeastern portions of the Project area, and very old Quaternary Alluvium, which occurs as surface exposures in the southwestern portion and at shallow depth in the less elevated portions of the Project area (underlying less sensitive younger Quaternary Alluvium). The Silverado Formation, the Sespe/Vaqueros Formation, and very old Quaternary Alluvium have a moderate to high paleontological sensitivity. Excavation in any of these formations may expose significant vertebrate fossils, and impacts to such fossils could constitute a significant impact on the environment. **Mitigation Measures GEO-1 through GEO-4** would ensure that impacts to paleontological resources are reduced to less than significant levels.



SOURCE: Rachel M. Hauser and Kelly R. Ruppert, 2004; ESRI, 2016.

Syphon Reservoir Geotechnical Investigations Project

Figure 4
Geologic Formations

Mitigation Measures

GEO-1: Appoint a Qualified Paleontologist. A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the start of ground disturbing activities. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the Project kick-off meeting and Project progress meetings on a regular basis, and shall report to the site in the event potential paleontological resources are encountered.

GEO-2: Worker Sensitivity Training. The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). This can occur in coordination with Cultural Resources Worker Sensitivity Training (Mitigation Measure CR-1). In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the Project site and the procedures to be followed if they are found. Documentation shall be retained demonstrating that all construction personnel attended the training.

GEO-3: Paleontological Monitoring. Paleontological resources monitoring shall be conducted for ground disturbing activities occurring in previously undisturbed sediments with high paleontological sensitivity, including any areas containing the Silverado Formation or Sespe/Vaqueros Formation, very old Quaternary Alluvium, and deeper layers of younger Quaternary Alluvium (which overly sensitive older Quaternary Alluvium). Ground disturbing activities include trench and test pit excavation, as well as any vegetation removal, grading, pavement removal, roadway improvements, or other similar activities within these sensitive formations. Boring of cores shall only require spot checks given the limited opportunity to observe impacted deposits. For undisturbed sediments mapped as the Silverado Formation, Sespe/Vaqueros Formation, or very old Quaternary Alluvium, monitoring of all ground disturbance is initially required. A depth of 5 feet bgs is established as the depth at which high sensitivity and paleontological monitoring should begin in the younger Quaternary Alluvium. The Qualified Paleontologist shall evaluate ground disturbing activities on an intermittent basis and consult with IRWD on whether the depth of required monitoring should be revised.

Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist, and in conjunction with IRWD. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils in order to recover the fossil specimens. Any significant fossils collected during Project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. The Qualified Paleontologist shall prepare a final monitoring and mitigation report to document the results of the monitoring effort.

GEO-4: Fossil Discovery. If personnel or workers discover any potential fossils during Project implementation, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery, consulted with IRWD, and made recommendations as to the appropriate treatment. If the find is deemed significant, it should be salvaged following the standards of the SVP (2010) and curated with a certified repository.

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4.8 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
8. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

“Global warming” and “global climate change” are the terms used to describe the increase in the average temperature of the earth’s near-surface air and oceans since the mid-20th century and its projected continuation. According to the International Panel on Climate Change (IPCC) warming of the climate system is now considered unequivocal (IPCC, 2007). Natural processes and human actions have been identified as the causes of this warming. The IPCC has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. After 1950, increasing greenhouse gas (GHG) concentrations resulting from human activity such as fossil fuel burning and deforestation are believed to be responsible for most of the observed temperature increase. Increases in GHG concentrations in the earth’s atmosphere are thought to be the main cause of human-induced climate change. Certain gases in the atmosphere naturally trap heat by impeding the exit of solar radiation that is reflected back into space after striking the earth. This is sometimes referred to as the “greenhouse effect,” and the gases that cause it are called “greenhouse gases.” Some GHGs occur naturally and are necessary for keeping the earth’s surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and increasing average global temperatures.

State law defines GHGs as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect may be intensified. CO₂, CH₄ and N₂O occur naturally, and through human activity. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing⁸ associated with agricultural practices and landfills. Other human-generated GHGs include fluorinated gases such as HFCs, PFCs and SF₆, which have much higher heat-absorption potential than CO₂, and are byproducts of certain industrial processes.

CO₂ is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-

⁸ Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

for-pound basis, how much a gas contributes to global warming relative to how much warming would be caused by the same mass of CO₂. For example, CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of 25 and 298 times that of CO₂, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO₂ equivalents (CO₂e). CO₂e is calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO₂e, both from residential/commercial developments and human activity in general.

The proposed Project is the geotechnical investigation of the area near the Syphon Reservoir site. Once geotechnical activities and surveys are completed the operation of the area will return to the existing operations. There would be no impacts to air quality from an operational standpoint and, therefore, the following environmental analysis for air quality discusses only the temporary geotechnical (construction) activities.

Although GHG emissions can be quantified as discussed under Methodology below, CARB, SCAQMD, and Orange County have not formally adopted project-level significance thresholds for GHG emissions that would be applicable to the Project. The Governor's Office of Planning and Research released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," (OPR 2008) and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment." Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project." (OPR 2008).

Per *State CEQA Guidelines* Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.⁹ To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.¹⁰ Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."¹¹ Thus, *CEQA Guidelines* Section

⁹ 14 CCR Section 15064(h)(3).

¹⁰ 14 CCR Section 15064(h)(3).

¹¹ 14 CCR Section 15064(h)(3).

15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program or other regulatory schemes to reduce GHG emissions.¹²

Environmental Evaluation

Would the Project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant Impact. According to SCAQMD, because GHG emissions are a cumulative impact, project significance is determined by the combined amortized construction and operational emissions. However, as the operational activities do not change with the implementation of the Project, the Project would only generate temporary construction GHG emissions. As a method for evaluating significance under CEQA, SCAQMD developed a draft tiered flowchart in 2008 for determining significance thresholds for GHGs for industrial projects where SCAQMD is acting as the lead agency. In December 2008, SCAQMD adopted a 10,000 metric tons of CO₂e (MTCO₂e)/year threshold for industrial facilities for projects in which SCAQMD is the lead agency. SCAQMD has not adopted a threshold of significance for residential or commercial projects at the time of this writing. SCAQMD formed a GHG Significance Threshold Working Group to evaluate potential GHG significance thresholds and had drafted a 3,000 MTCO₂e/year threshold for mixed-use developments. However, the aforementioned Working Group has been inactive since 2011 and no thresholds drafted by the Working Group have been formally adopted for land use development projects. Nonetheless, while the proposed Project does not fit neatly into either category (industrial or commercial/mixed-use), in the absence of a formally adopted threshold applicable to this Project, the more stringent of the two quantitative thresholds discussed above (i.e., 3,000 MTCO₂e/year) is used to evaluate the significance for this Project.

Construction-related GHG emissions for the proposed Project were estimated using CalEEMod Version 2016.3.2 with the same assumptions as the air quality analysis as detailed in Appendix AQ. Proposed Project-generated emissions were modeled based on general information provided in the proposed Project description and default SCAQMD-recommended settings and parameters attributable to the proposed land use types and site location. Construction activities would begin in 2019 with construction occurring for up to 125 days depending on construction schedule. For

¹² See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ABR's Cap-and-Trade regulation cannot constitute significant increases under CEQA..." Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 MTCO₂e/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade project, SCH No. 2014121014 (August 2015).

conservative modeling purposes, each activity was anticipated to occur for the total number of days independent of the other activities. This results in a conservative estimate of total GHG emissions. If the different geotechnical activities would occur concurrently, some of the construction equipment would not be doubled (e.g., if five activities are occurring at once, a maximum of two water trucks would be on site instead of one for each activity as is anticipated during the modeling for each individual phase). Therefore, the analysis of GHG emissions provides a conservative assessment.

The proposed Project's total estimated GHG emissions during the geotechnical activities would be approximately 133 MTCO₂e over the entire Project duration of up to a maximum of 125 days. This would equal approximately 4 MTCO₂e per year after amortization over 30 years per SCAQMD methodology. As the amortized Project emissions are less than the 3,000 MTCO₂e/year SCAQMD drafted threshold, the proposed Project would result in less than significant impacts.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The proposed Project would not conflict with any plan, policy, or regulation aimed at reducing the emissions of greenhouse gas emissions.

Consistency with CARB Scoping Plan

The CARB Scoping Plan was designed to reduce GHG emissions from new land use projects. The proposed geotechnical exploration at the Syphon Reservoir site and would be subject to the Scoping Plan requirements. The majority of the Scoping Plan measures target measures that reduce energy and transportation emissions from residential and commercial/industrial development and therefore the majority of the Scoping Plan measures are not applicable to the proposed Project. Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the proposed Project would be reducing diesel-fueled commercial motor vehicle idling, and Waste management plan to divert 50 percent of solid waste from disposal facilities. The proposed Project would be designed to comply with the California regulations to limit idling of onsite vehicles to 5 minutes or less per location. Also, cuttings from the Project drilling and excavations will be maintained onsite unless part of the laboratory thus eliminating unnecessary disposal of soils to landfills or other offsite locations. As the Project is not a long-term consumer of energy nor does it increase traffic within the region, the Project would not conflict with any of the Scoping Plan measures. That combined with the reduction in vehicle idling and maintaining soil cuttings onsite, the proposed Project would be consistent with the Scoping Plan measures applicable to the Project.

Consistency with SB 375

The key goal of the Sustainable Communities Standard (SCS) is to achieve GHG emission reduction targets through integrated land use and transportation strategies. The focus of these reductions is on transportation and land use strategies that influence vehicle travel. The proposed Project would not significantly or permanently increase vehicle traffic within the County or the region. Therefore, the proposed Project would not conflict with the implementation of SB 375.

References

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4.9 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
9. HAZARDS AND HAZARDOUS MATERIALS —				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less than Significant Impact. The California Office of Emergency Services oversees state agencies and programs that regulate hazardous materials (Health and Safety Code, Article 1, Chapter 6.95). A hazardous material is any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. The proposed Project would require the use of construction vehicles and equipment and thus involve the routine transport, use, storage, and disposal of hazardous materials such as diesel fuel, gasoline, oils, grease, equipment fluids, cleaning solutions and solvents, lubricant oils, and adhesives. If such hazardous materials were not handled properly, in accordance with federal, state and local regulations, a potentially significant hazards to the public or environmental could occur.

Existing federal and state law regulates the handling, storage and transport of hazardous materials and hazardous wastes. Pursuant to the federal Hazardous Materials Transportation Act, 49 U.S.C. § 5101 et seq., the United States Department of Transportation promulgated strict regulations applicable to all trucks transporting hazardous materials. Occupational safety standards have been established in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace, including construction sites. The California Division of Occupational Safety and Health (CalOSHA) has primary responsibility for developing and enforcing standards for safe workplaces and work practices in California in accordance with regulations specified in California Code of Regulations (CCR) Title 8. For example, under Title 8 CCR 5194 (Hazard Communication Standard), construction workers must be informed about hazardous substances that may be encountered, and under Title 8 CCR 3203 (Injury Illness Prevention Program) workers must be properly trained to recognize workplace hazards and to take appropriate steps to reduce potential risks due to such hazards. Thus, during construction, contractors handling, storing or transporting hazardous materials or wastes must comply with regulations that would reduce the risk of accidental release and provide protocols and notification requirements should an accidental release occur. Therefore, by complying with relevant federal, state, and local laws, the proposed Project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials during implementation of the proposed Project. Impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As discussed above in the response to Question 4.9(a), the proposed Project would involve the routine use of hazardous materials during construction and geotechnical exploration activities; the transport, use, storage and disposal of such hazardous materials would be required to comply with existing applicable federal, state and local regulations. Accidental spills of small amounts of these materials could occur during routine transport, use, storage or disposal, and could potentially injure construction workers, contaminate soil, and/or affect the groundwater below the reservoir. Impacts associated with the accidental release, although localized to the Project site, could potentially create a significant hazard to the environment.

In the event of an accidental release during implementation of the proposed Project, containment and clean up would be in accordance with existing applicable regulatory requirements. Title 8 CCR 5194 requires preparation of a hazards communication program identifying hazardous materials onsite and reducing the potential for a spill; and 29 CFR 1910.120 includes requirements for emergency response to releases or substantial threats of releases of hazardous substances. Contractors would be required to prepare and implement a Hazardous Materials Business Plan, as required under the state Hazardous Materials Release Response Plans and Inventory Act, to manage any hazardous materials they use. A HMBP is a document containing detailed information on the inventory of hazardous materials at a facility; Emergency Response Plans (ERP) and procedures in the event of a reportable release or threatened release of a hazardous material; a Site Safety Plan with provisions for training for all workers; a site map that

contains north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, hazardous material handling and storage areas, and emergency response equipment. Further, all spent hazardous materials would be disposed of in accordance with California Department of Toxic Substances Control (DTSC) and County regulations. Construction specifications prepared for the proposed Project would identify best management practices (BMPs) to ensure the lawful transport, use, storage, and disposal of hazardous materials. Therefore, potential impacts to the public or the environment related to reasonably foreseeable accident conditions involving hazardous materials would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Less than Significant Impact. The Project area is located adjacent to (approximately 0.07 miles northwest of) the Crean Lutheran High School's Sport Complex. Construction activities would use limited quantities of hazardous materials as described above, which would occur within one-quarter mile of the school sports complex. However, IRWD is required to comply with all relevant and applicable federal, state and local laws and regulations that pertain to the release of hazardous materials during construction activities as described in response to Questions 4.9(a) and 4.9(b). Compliance with all applicable federal, state and local regulations would reduce potential impacts to the public or the environment regarding hazardous waste emissions within one-quarter mile of a school. Impacts would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. A review of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances List – Site Cleanup (Cortese List) indicates that there are no identified hazardous material sites located within the Project site (DTSC 2018a). A database search of hazardous materials sites using the online DTSC EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker databases identified zero hazardous clean-up sites (DTSC 2018b; SWRCB 2018). The proposed Project would not be located on a hazardous materials site and no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport to the Project area is the John Wayne Airport, located approximately 7.7 miles southwest of the Project area. The proposed Project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. No impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. Construction of the proposed Project is not anticipated to physically interfere with an adopted emergency response plan or evacuation plan because all construction and geotechnical activities and staging areas would be within the boundaries of IRWD's Syphon Reservoir site. Construction activities would not interfere with emergency response access to the Project vicinity, including the Crean Lutheran High School's Sport Complex. No impacts would occur related to interference with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less than Significant with Mitigation Incorporated. The Project area is located within an undeveloped area containing preserved lands and sensitive vegetative communities. The Project area is located within a State/Federal Responsibility Area (SRA), Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2011). The use of spark-producing construction machinery within these fire risk areas could create hazardous fire conditions and expose construction workers to wildfire risks. The implementation of **Mitigation Measure HAZ-1** would ensure fire hazard reduction measures are conducted during exploration activities to reduce the potential for wildfire impacts on people or structures to less than significant levels.

Mitigation Measures

HAZ-1: Implement Fire Hazard Reduction Measures. During Project implementation, IRWD shall require all spark arrestors on construction equipment to be in good working order. Contractors shall require all vehicles and crews to have access to functional fire extinguishers at all times.

References

- CAL FIRE, 2011. Very High Fire Hazard Severity Zones in LRA. Available at: http://frap.fire.ca.gov/webdata/maps/orange/fhszl_map.30.pdf, accessed November 2018.
- Department of Toxic Substances Control (DTSC), 2018a. DTSC's Hazardous Waste and Substances Site List- Site Cleanup (Cortese List). Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed November 2018.
- DTSC, 2018b. EnviroStor, Map Location of Interest. Available at: <http://www.envirostor.dtsc.ca.gov/public/>, accessed November 2018.
- State Water Resources Control Board (SWRCB), 2018. GeoTracker. Available at: <https://geotracker.waterboards.ca.gov/>, accessed November 2018.

4.10 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
10. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or river or through the addition of imperious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Less than Significant Impact. The proposed Project would include earthwork activities such as excavation, drilling and grading, which would involve the disturbance and exposure of surface soils. As such, exposed soils could increase erosion and sedimentation in surface runoff during storm events. In addition, exploration activities would involve use of chemicals and solvents such as fuel and lubricating grease for motorized heavy equipment, which could accidentally spill and subsequently impact stormwater quality. (For more discussion of this topic please refer to Section 4.9, Hazards and Hazardous Materials). Within the catchment area of the reservoir, stormwater would be contained onsite behind the dam and would prevent the release of sediment or hazardous materials to downstream receiving waters. For Project exploration activities below the dam, the activities are limited to borings within existing roadways, and therefore are not

~~anticipated to generate additional sediment in appreciable quantities leading to transport beyond the immediate work area, there is potential for stormwater to transport sediment and/or hazardous materials downstream to other receiving waters.~~

Since Project exploration activities below the dam would disturb an area ~~less~~ greater than an acre, the Project would ~~not~~ be subject to a Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. ~~As required under the Construction General Permit, IRWD or its contractor would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.~~

~~In particular, erosion control BMPs would be used to prevent the degradation of water quality in the construction area. Other BMPs that could be used to enhance erosion control include scheduling to avoid wet weather events; preservation of existing vegetation where feasible; hydraulic mulching; hydroseeding; using soil binders; straw mulching; using geotextiles, plastic covers, and erosion control blankets/mats; and wood mulching. Examples of erosion control BMPs are installing a silt fence; creating a sediment/desilting basin; installing sediment traps; installing check dams; using fiber rolls; creating gravel bag berms; street sweeping and vacuuming; creating a sandbag barrier; creating a straw bale barrier; and storm drain inlet protection. BMPs would also include practices for proper handling of chemicals such as avoidance of fueling at the construction site and overtopping during fueling, and installation of containment pans. Further, implementation of the construction BMPs would be consistent with the Orange County Stormwater Program and would begin with the commencement of construction and continue through the completion of exploration activities (OC Public Works 2018).~~

~~Implementation of the SWPPP and BMPs in compliance with the NPDES permitting requirements would avoid or reduce all erosion and sedimentation impacts to below a level of significance. Since the dam will contain any impacts from the upstream Project activities, and since no appreciable impacts are anticipated by the downstream Project activities, all erosion and sedimentation impacts are expected to be below a level of significance.~~

In addition, geotechnical borings would encounter groundwater during drilling activities. Borings would be backfilled within 24 hours of completion and would not allow for the introduction of surface waters or foreign materials into the groundwater basin. As a result, impacts to groundwater quality would be less than significant.

- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Less than Significant Impact. Previous studies indicate groundwater levels in some portions of the Project site are approximately 7 feet below ground surface (bgs) (GEI 2016). In many areas where boring or trenching would occur, shallow groundwater would be present and could potentially interfere with construction activities. Trenching activities would excavate to depths of

15-20 feet bgs. Geotechnical borings would encounter groundwater during drilling activities. Water discharged during well drilling could be recycled back into the well borehole during drilling or stored in tanks on-site for eventual discharge into a nearby storm drain under a permit from the Santa Ana Regional Water Quality Control Board. No permanent facilities would be constructed that would interfere with or impede groundwater recharge. As a result, the Project would not substantially decrease groundwater supplies or interfere with recharge in a way that would impede sustainable groundwater management of the basin. In addition, a Notice of Intent to comply with Santa Ana RWQCB Groundwater Dewatering General Permit would be required for all trenching and boring activities. As a result, impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. The proposed Project would not introduce impervious surfaces or structures that could substantially alter the existing drainage pattern of the Project site in a manner which would result in substantial erosion or siltation. Temporary earth-moving activities would slightly alter the topography of the Project area to facilitate the exploration activities, creating temporary access roads and grading small areas for borings, test pits, and trenches. As discussed above in response to Question 4.10(a), erosion control measures would be implemented to reduce the potential for stormwater-induced erosion or sedimentation offsite during Project activities. All boreholes, pits and trenches would be backfilled and other disturbed areas, such as temporary access roads, would also be restored once exploration activities are completed, as described in Section 2.5 Project Description. Thus, the proposed Project would not substantially alter the existing drainage pattern of the Project area in a way such that substantial erosion or siltation would occur on-site or off-site. Impacts would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

No Impact. As stated above in response to Question 4.10(c)(i), the proposed Project would not substantially alter the local drainage pattern of the site. The proposed Project does not include the construction of permanent structures or impervious surfaces that would change the rate or amount of surface runoff from the Project site. As such, the proposed Project would not result in flooding on-site or off-site. There would be no impact.

iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. As mentioned in in Question 4.10(c)(ii), an increase in runoff would not occur as a result of the Project. As such, the proposed Project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

As discussed above in response to Question 4.10(a), ~~(a/f), the Project would require implementation of a SWPPP, including BMPs for erosion control and for proper handling of chemicals. As such,~~ the proposed Project would not provide substantial additional sources of polluted runoff. Impacts would be less than significant.

iv) impede or redirect flood flows?

No Impact. The FEMA National Flood Hazard Layer for the Project area (Panel No. 06059C0305J) shows that the Project area is located within a Zone A “1% Annual Chance Flood Hazard” location. This area is a 100-year flood zone (FEMA 2009). However, because no permanent facilities would be constructed as a result of geotechnical investigations, the Project would not involve infrastructure or activities that could impede or redirect flows. No impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. As stated above in Question 4.10(c)(iv), the proposed Project is in a 100-year flood zone. As discussed above in Question 4.10(a), the proposed Project would not provide substantial additional sources of polluted runoff. a SWPPP would be prepared and implemented during the proposed geotechnical investigations to ensure proper handling of chemicals and avoid release of pollutants to the Project site. As such, impacts due to potential release of pollutants in a flood hazard area would be less than significant.

A seiche is a wave set up on a river, reservoir, pond, or lake when seismic waves from an earthquake pass through the area (USGS 2018a). Since the reservoir would be drained prior to commencement of the proposed Project, there would be no potential impacts associated with the risk of release of pollutants due to Project inundation from a seiche.

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with earthquakes, major submarine slides or exploding volcanic islands (USGS 2018b). An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. The Project area is located approximately 11 miles northeast of the Pacific Ocean and is not located within the tsunami risk zone. Therefore, the Proposed Project would not be subject to tsunamis and would not risk release of pollutants due to Project inundation from a tsunami. No impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Santa Ana RWQCB Water Quality Control Plan (Basin Plan) sets water quality objectives that are qualitative and quantitative in order to protect the beneficial uses within the basin. The water quality constituents that have numerical limits for groundwater include: arsenic, bacteria, barium, boron, chloride, cyanide, total dissolved solids, fluoride, metals, Methylene Blue-Activated Substances, pH, radioactivity, sodium, and sulfate (RWQCB

2015). Geotechnical borings would encounter groundwater during drilling activities. Water discharged during well drilling could be recycled back into the well borehole during drilling or stored in tanks on-site for eventual discharge into a nearby storm drain under a permit from the Santa Ana Regional Water Quality Control Board. IRWD, in conjunction with other local water agencies and municipalities, submitted an Alternative to a Groundwater Sustainability Plan (Alternative) to the Department of Water Resources (DWR) in January 2017 for Basin 8-1, Coastal Plain of Orange County Groundwater Basin, in compliance with the Sustainable Groundwater Management Act (SGMA). The Alternative to a GSP indicates that the basin has operated within its sustainable yield over a period of at least 10 years (IRWD et al. 2018). Syphon Reservoir is located within Basin 8-1 and is managed within the requirements of SGMA by IRWD. This Project does not involve groundwater extraction and would not otherwise interfere with management of the basin. As a result, there would be no conflict with implementation of a water quality control plan or groundwater management plan, and impacts would be less than significant.

References

- FEMA, 2009. FEMA National Flood Hazard Layer (Official). Available at: <https://msc.fema.gov/portal/search?AddressQuery=irvine#searchresultsanchor>, accessed December 2018.
- GEI Consultants, Inc., 2012. *Syphon Reservoir Expansion Engineering Feasibility Study, Engineering Summary Report*. August 2012.
- GEI Consultants, Inc., 2016. *Syphon Reservoir Dry Lakebed Geotechnical Exploration*. June 13, 2016.
- IRWD, OCWD, City of La Habra, 2018. *2016-17 Annual Report, Basin 8-1, Coastal Plain of Orange County Groundwater Basin*, March 29, 2018.
- OC Public Works, 2018. OC Stormwater Program. Available at: <http://www.ocwatersheds.com/programs/waterways/stormwater>, accessed December 2018.
- USGS, 2018a. Seismic Seiches. Available at: <https://earthquake.usgs.gov/learn/topics/seiche.php>, accessed December 2018.
- USGS, 2018b. Earthquake Glossary, Tsunami. Available at: <https://earthquake.usgs.gov/learn/glossary/?term=tsunami>, accessed December 2018.
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4.11 Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
11. LAND USE AND LAND USE PLANNING — Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

a) Physically divide an established community?

No Impact. The physical division of an established community generally refers to the construction of a feature such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. Given that the proposed Project would not construct any permanent, aboveground physical structures at the existing Syphon Reservoir, the proposed Project would result in no impact to the physical division of an established community.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project area, where the existing Syphon Reservoir is located, is designated as Open Space Reserve and is zoned as General Agriculture (County of Orange 2015a; County of Orange 2015b). The proposed Project would not develop any permanent built facilities that would change the land use of the Project site. As such, the proposed Project would not conflict with the Orange County General Plan or Orange County Zoning Code. For additional discussion, refer to the response to Question 2(b) above in Section 4.2 Agricultural and Forestry Resources. No impact would occur.

References

County of Orange, 2015a. Orange County General Plan, Land Use Element Amendment. Available at: <http://www.ocpublicworks.com/civicax/filebank/blobdload.aspx?blobid=52410>, accessed December 2018.

County of Orange, 2015b. Zoning, Unincorporated County of Orange, California. Available at: <http://www.ocpublicworks.com/civicax/filebank/blobdload.aspx?blobid=52866>, accessed December 2018.

4.12 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
12. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No Impact. According to USGS’ Mineral Resources Data System (USGS 2018), the Project area is not identified as a known mineral resource area and does not have a history of mineral extraction uses. In addition, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil wells exist on the Project site (DOC 2018). The proposed Project would not result in the loss of availability of a known mineral resource, and no impact would occur.

- b) **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

No Impact. The County of Orange General Plan does not identify the Project area as a mineral resource zone (County of Orange 2005). Therefore, the implementation of the proposed Project would not result in the loss of a locally important mineral resource recovery site. No impact would occur.

References

California Department of Conservation, 2018. Division of Oil, Gas, and Geothermal Resources Well Finder. Available at: <http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx>, accessed December 2018.

County of Orange, 2005. County of Orange General Plan, Resources Element. Available at: <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40235>, accessed December 2018.

United States Geologic Survey (USGS), 2018. Mineral Resources Data System. Available at: <https://mrdata.usgs.gov/mineral-resources/mrds-us.html>, accessed December 2018.

4.13 Noise

<u>Issues (and Supporting Information Sources):</u>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
13. NOISE — Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Environmental Evaluation

Would the Project:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than Significant Impact. Activities associated with implementation of the geotechnical exploration program would be short-term construction activities, which would be evaluated against, but not subject to, the noise regulations of Orange County, as well as the City of Irvine since the nearest residential sensitive receptors are located in the City on the west side of Portola Parkway. The noise regulations limit the allowable period of construction hours, but do not establish a construction noise limit as per the local codes below:

- The City of Irvine Municipal Code (IMC) Section 6.8.205.A limits construction activities between the hours of 7:00 A.M. to 7:00 P.M. Mondays through Fridays, and 9:00 A.M. to 6:00 P.M. on Saturdays. No construction activities shall be permitted outside of these hours or on Sundays and federal holidays, unless a temporary waiver is granted by the Chief Building Official or his or her authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials, equipment service, maintenance of any devices or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the City. Any waiver granted shall take impact upon the community into consideration. No construction activity will be permitted outside of these hours except in emergencies including maintenance work on the City rights-of-way that might be required.

- The Orange County Municipal Code (OCMC) Section 4-6-7(e) exempts noise associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 A.M. to 8:00 P.M. on weekdays, including Saturday.

Activities associated with implementation of the proposed Project would require the following equipment to be used on-site: one (1) or two (2) drill rigs; one (1) water truck; one (1) or two (2) support trucks, one (1) backhoe; one (1) excavator; one (1) rubber-tired dozer; and five (5) pick-up trucks. Equipment that would be used for the Project, with possible exception of on-road pick-up trucks, would be diesel-fueled and would be anticipated to be used on-site for the duration of the geotechnical investigation activities. An average of approximately eight (8) workers would be required on-site to implement the Project. Workers would commute individually to the site and park at the staging area located at the bottom of the dam. The average commute would be up to an approximate 60-mile round trip. If multiple activities are conducted on one day, the anticipated maximum number of workers on-site would be up to approximately 46 workers.

The noise-sensitive receptors located nearest to the geotechnical exploration activities would be students and the public using the adjacent Crean Lutheran High School Athletic Complex and single-family residential uses along Portola Parkway located approximately 600 feet to the south of the Project site area. Other noise-sensitive receptors include residential uses to the east of the Project Site area. The Project may create a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above noise levels existing without the Project. This analysis addresses potential stationary and mobile noise sources.

Table 12 shows typical maximum noise levels associated with various types of stationary equipment, depending upon the equipment type and number, and usage factor. **Table 13** shows estimated noise levels activities associated with implementation of the geotechnical exploration program at the nearest residential noise-sensitive receptors.

**TABLE 12
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

Construction Equipment	Typical Maximum Noise Levels (dBA) at 50 feet	Acoustical Usage Factor
Backhoe	78	40%
Bore/Drill Rig	78	40%
Excavator	81	40%
Pickup Truck	75	40%
Rubber Tired Dozer	79	40%
Support Truck	76	40%
Water Truck	80	10%

SOURCE: FHWA, 2006.

TABLE 13
ESTIMATE OF GEOTECHNICAL EXPLORATION PROGRAM NOISE LEVELS (L_{eq}) AT OFF-SITE SENSITIVE RECEPTOR LOCATIONS

Geotechnical Exploration Program	Nearest Distance from The Project Activity to Property Line of Sensitive Receptor (ft.)	Reference Geotechnical Exploration Program Noise Level at Property Line of Off-Site Sensitive Location (dBA L_{eq}) ^a
Access Road	900	46
Borings	600	55
Test Pits	600	55
Trenches	1,600	47
Seismic/Electric Surveys	900	41

^a Detailed calculations are provided in Appendix NOI of this MND.

SOURCE: ESA 2018.

As shown in Table 13, estimate noise levels associated with geotechnical investigation activities would be up to 55 dBA at the nearest residential noise-sensitive receptors. Borings and test pits would be located approximately 100 feet from the Athletic Complex. Boring activities would result in noise levels of 78 dBA at 50 feet (see Table 12). Activities associated with implementation of the geotechnical exploration program would occur within the allowable construction hours of the City of Irvine and Orange County. Therefore, activities associated with implementation of the geotechnical exploration program would not conflict with noise standards or applicable noise standards. Impacts would be less than significant. No mitigation would be required.

With regard to mobile noise sources, all equipment and materials would be transported to the Project site on public highways and local roads using standard transport equipment. Primary access to the Project site would be provided along existing access roads from Portola Parkway. Additional site access may be provided from Bee Canyon Road. The equipment would be off-loaded at the staging area located below the toe of the existing dam and then mobilized to each drilling or trenching location. Traffic control is not anticipated to be required. The nearest sensitive receptors would be single-family residential uses approximately 100 feet the existing access roads from Portola Parkway.

A maximum of approximately forty-six (46) workers would be required on-site to implement the Project. During the implementation of the Project, there would be up to 10 pick-up trucks per day. Noise associated with construction truck trips were estimated using the FHWA Traffic Noise Model (TNM) Version 2.5 method described in FHWA Traffic Noise Model Technical Manual (FHWA 1998) and based on the maximum number of truck trips in a day. The results of the analysis indicate that the Project truck trips would generate noise levels of approximately 55 dBA L_{eq} at the noise sensitive receptors along Portola Parkway. However, as noted above, Project construction activities would occur during the allowable hours as per the City's and the County's construction noise standards. Therefore, off-site mobile-source noise impacts would be less than significant, and no mitigation measures would be required.

The proposed Project would not include any permanent, long-term operational activities after the completion of proposed geotechnical exploration activities. Therefore, no permanent impacts to ambient noise levels would occur.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Activities associated with implementation of the geotechnical exploration program at the Project site have the potential to generate low levels of groundborne vibration due to the operation of equipment (i.e., rubber-tired dozer, drill rigs, and haul trucks). Groundborne vibrations propagate through the ground and rapidly diminish in intensity with increasing distance from the source. No high-impact activities, such as pile driving or blasting, would be used during geotechnical exploration activities. The nearest off-site receptors to the Project site that could be exposed to vibration levels generated from Project activities include single-family residential uses located on the west side of Portola Parkway. Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment* (FTA, 2006) has identified the human annoyance response to vibration levels as 80 VdB and building damage with a threshold of 0.2 in/sec PPV for non-engineered timber buildings.

The nearest sensitive receptor to the Project components are single-family residences located approximately 600 feet from the proposed geotechnical investigation activities. At a distance of 600 feet, vibration levels from equipment such as drill rigs would be approximately 0.0008 in/sec PPV. Therefore, vibration levels would not exceed the potential building damage threshold of 0.2 in/sec PPV. Therefore, structural damage from construction vibration would be less than significant. At the distance of 600 feet, VdB levels from heavy equipment, such as a drill rig, would be approximately 46 VdB, and would not exceed the 80 VdB vibration significance criteria. Therefore, construction activity that would occur 600 feet from existing sensitive receptors would not exceed vibration impact criteria; and impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project area is not located within the vicinity of a private airstrip. Further, the nearest airport to the Project area is the John Wayne Airport, located approximately 7.7 miles to the southwest of the Project area. The proposed Project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. No impact would occur.

4.14 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
14. POPULATION AND HOUSING — Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The proposed Project does not include construction of new homes or businesses that would result in a direct increase in population or create a substantial numbers of jobs. While the proposed Project could result in temporary employment during construction and exploration activities, the on-site workforce of a daily average of 8 people for construction is negligible for a seven-month period. If multiple activities are implemented concurrently, up to a maximum of 46 workers would be required at the site. The construction workers would come from the existing labor pool within Orange County. As such, the Project would not require construction of housing to accommodate workers, since they would commute to the site. Once the proposed geotechnical exploration activities are complete, the proposed Project would not otherwise directly induce population growth. No impact would occur.

The proposed Project would not remove an obstacle to growth, such as constraint on a required public service, such as roads, water supply or wastewater treatment capacity. The proposed Project is not a water supply project and would not provide any resources to support or accommodate population growth. The proposed Project would not indirectly induce population growth. No impact would occur.

- b) **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact. There are no existing residences within the Project area, and no residences would be condemned or displaced by the proposed Project. Therefore, the proposed Project would not displace people or housing necessitating the construction of replacement housing elsewhere. Therefore, no impacts would occur.

4.15 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
15. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

i) Fire protection?

No Impact. The proposed Project would be implemented in the County of Orange. The Orange County Fire Authority (OCFA) provides fire protection and emergency services in the vicinity of the Project (Orange County Fire Authority 2018). The nearest station to the Project area is Station 55 located approximately 1.3 mile northwest at 4955 Portola Parkway in Irvine. The proposed Project would not change existing demand for fire protection services because construction and geotechnical exploration activities would not result in a permanent increase of employees or population to the Project area. The proposed Project would not substantially increase the need for new fire department staff or new facilities, and no impact would occur.

ii) Police protection?

No Impact. The Orange County Sheriff’s Department (OCSD) provides police protection services to the Project site (Orange County Sheriff’s Department 2018). The Irvine Police Department (IPD) also provides services to the Project area (City of Irvine 2018). The nearest OCSD station is located 4.7 miles east of the Project area at 20202 Windrow Drive in Lake Forest. The nearest IPD police station is located 5.6 miles southwest of the Project area at 1 Civic

Center Plaza in Irvine. The proposed Project does not include new homes or businesses that would require any additional services or extended response times for police protection services beyond those required with the existing on-site uses. Therefore, the OCSD and IPD would not be required to expand or construct new police stations to serve the proposed Project. No impacts would occur because additional police protection facilities would not be needed.

iii) Schools?

No Impact. The Project area lies within the Irvine Unified School District (IUSD) (IUSD 2018). The student generation rates or enrollment numbers within IUSD would not be affected or altered by the proposed Project. As such, the proposed Project would not require new or expanded school facilities. No impacts would occur because no new schools would be constructed.

iv) Parks?

No Impact. The proposed Project would not result in the construction of new public parks, or require the alteration of existing public parks. The Project area is located adjacent to the privately-owned Crean Lutheran High School Athletic Complex. IRWD would notify Crean Lutheran High School prior to implementation of construction activities. The Project would not require new parks in order to maintain service ratios. There would be no impact.

v) Other public facilities?

No Impact. The proposed Project would not require or impact other additional public facilities. No impacts would occur because new public facilities would not be needed.

References

- City of Irvine, 2018. Public Safety. Available at: <http://www.cityofirvine.org/irvine-gives/public-safety>, accessed December 2018.
- Orange County Fire Authority, 2018. Service Area. Available at: <https://www.ocfa.org/AboutUs/AboutOCFA.aspx#servicearea>, accessed December 2018.
- Orange County Sheriff's Department, 2018. Patrol Areas. Available at: <http://www.ocsd.org/patrol>, accessed December 2018.
- IUSD, 2018. Irvine Unified School District. Available at: <https://iusd.org/>, accessed December, 2018.

4.16 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
16. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No Impact. In the vicinity of the Project area, the City of Irvine and Orange County Parks (OC Parks) maintain nearby parks and provide recreational services. The nearest public park or recreational facility is Mockingbird Park, located 0.12 miles away from the proposed Project site. The nearest private recreational facility is the Crean Lutheran High School Athletic Complex located adjacent to the Project site. The proposed Project would not directly or indirectly induce population growth (see Section 4.14 Population and Housing) and as such would not introduce new residents to Project area. Therefore, the proposed Project would not increase the use of these existing recreational facilities and would result in no impact to the physical deterioration of recreational facilities.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Impact. Implementation of the proposed Project would not require recreational facilities to serve the Project. Therefore, the proposed Project would not result in an adverse physical effect on the environment from the construction or expansion of additional recreational facilities. No impact would occur. (For additional discussion of temporary impacts to recreational facilities at Crean Lutheran High School Athletic Complex, refer to Section 4.15 Public Services, Question 4.15(a)(iv).)

References

OC Parks, 2018. Orange County Parks. Available at: <http://www.ocparks.com/>, accessed December 2018.

4.17 Transportation and Traffic

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
17. TRANSPORTATION/TRAFFIC —				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Circulation System

Less than Significant Impact. Direct impacts to the local circulation system would occur due to the temporary addition of Project-related vehicles to local roadways over the seven-month time period. Implementation of the proposed Project could temporarily increase the number of vehicles on local roadways due to the transport and delivery of construction equipment, daily worker commute trips over a seven-month period, and soil/testing material trips. All equipment and materials would be transported to the site on public highways, local roads, and private driveways, using standard transport vehicles. Primary access to the Project site would occur from Portola Parkway, a four lane roadway. Additional site access may be provided from Bee Canyon Road, which is a private road. The construction and geotechnical exploration equipment would be off-loaded at the staging area located below the toe of the existing dam and then mobilized to each boring or trenching location. The Orange County Transit Authority (OCTA) and the City of Irvine operate bus and train services near the Project area, however there are no bus or train routes within the immediate vicinity or along Portola Parkway directly adjacent to the Project area (City of Irvine 2018).

The delivery of construction vehicles and equipment to the Project site is only expected to occur when the equipment is delivered to/from the site (two one-way trips for all equipment). Additionally, soil/testing materials would be removed from the site after construction work is finished, resulting in two one-way trips. The majority of traffic impacts would occur from the daily arrival and departure of workers, which would be an average of 8 round-trips per day over the seven-month Project schedule. If multiple exploration activities occur at the same time, a maximum of up to 46 workers would be required at the site per day. The addition of an average of

8 worker round trips (16 one-way trips) along local roads such as Portola Parkway and Sand Canyon Avenue, a four-lane roadway, would not substantially affect the circulation capacity. Even in the worst case scenario, with up to 102 one way trips which could occur for several days over a seven-month period, the trips would not substantially affect the capacity of the local roadways. Traffic control is not anticipated to be required along local streets. IRWD would coordinate with the Crean Lutheran High School Athletic Complex to ensure adequate turning radii and space is provided for large equipment transported to the site. All worker parking would be accommodated at the staging area on-site, however carpooling may be required if up to 46 workers are needed at any given time (which would reduce the number of overall trips). Project-generated traffic would be temporary, and therefore, would not result in any long-term degradation in operating conditions on local roadways used for the Project. Impacts to the local circulation system would be less than significant.

Transit, Roadway, Bicycle, Pedestrian Facilities

No Impact. The proposed Project would not conflict with adopted policies, plans, or programs related to public transit or alternative modes of transportation. As mentioned above in response to Question 4.17(a), there are no bus or train routes within the immediate Project vicinity. There is a bike lane and pedestrian sidewalks along Portola Parkway. However, Project-related vehicles will travel along Portola Parkway to access the Project site similar to other vehicles currently using the roadway. No bike lane or pedestrian closures would be required as a result of the proposed Project. The Project would not decrease the performance or safety of these facilities. Project activities would not disrupt services along local public transit, bicycle, or pedestrian routes. No impacts would occur.

b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

No Impact. “Vehicle miles traveled” refers to the amount and distance of automobile travel attributed to a project. An average of 8 workers and up to a maximum of 46 workers would be required during various proposed geotechnical investigation and exploration activities. These trips would be temporary over the approximately seven-month construction period and would not result in any perceivable increase in vehicle miles traveled that would exceed a City or County threshold of significance. There are no new permanent vehicle trips associated with the proposed Project. As a result, the proposed Project would be consistent with CEQA Guidelines section 15064.3 subdivision (b), and no impacts would occur.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed Project would be implemented entirely within the Syphon Reservoir site and adjacent to the Crean Lutheran High School Athletic Complex. The proposed Project does not include the construction or design of any roadway infrastructure that would cause a safety risk to vehicle operations. The proposed Project would not adversely alter the physical configuration of the existing roadway network serving the area, and would not introduce unsafe design features associated with large equipment transport. In addition, the proposed Project would

not introduce uses (types of vehicles) that are incompatible with existing uses already served by the area's road system. There would be no impact.

d) Result in inadequate emergency access?

No Impact. Refer to response to Question 4.9(f) in Section 4.9 Hazards and Hazardous Materials, and Question 4.17(a) and 4.17(c) above. The proposed Project would temporarily add vehicles to the local roadway and circulation system. However, no lane or road closures would be required. All Project-related activities would occur onsite at Syphon Reservoir or the adjacent Athletic Complex. The proposed Project would not interfere with emergency response access. The proposed Project would not impact long-term emergency access.

References

City of Irvine, 2018. Irvine Transportation Network, Orange county Transportation authority (OCTA). Available at: https://legacy.cityofirvine.org/cityhall/pw/itn_new/transit/octa.asp, accessed December 2018.

4.18 Tribal Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
18. Tribal Cultural Resources —				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The California Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on November 12, 2018, to request a search of the SLF for the Project area. The response dated December 5, 2018, indicated negative results. In addition, IRWD notified the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notification of projects within IRWD’s jurisdiction, pursuant to Public Resources Code Section 21080.3.1. IRWD sent letters on November 15, 2018, to three tribal organizations: the Gabrieleño Band of Mission Indians – Kizh Nation, the Juaneño Band of Mission Indians – Acjachemen Nation, and the Torres Martinez Desert Cahuilla Indians. The letters provided a brief description of the Project and invited the tribal representatives to consult. Representatives from two California Native American tribes responded.

Mrs. Joyce Stanfield Perry, Tribal Manager with the Juaneño Band of Mission Indians – Acjachemen Nation, requested in a telephone call with IRWD a copy of the Cultural Resources Assessment report. The report was provided by IRWD on January 3, 2019. Following review of the report, Mrs. Stanfield Perry concurred with the findings, and further requested archaeological and Native American monitoring during ground disturbing activities. This has been included as a mitigation measure for the Project, as discussed under Section 4.5 Cultural Resources. No specific tribal cultural resources were identified as a result of correspondence with the Juaneño Band of Mission Indians – Acjachemen Nation, and consultation with the tribe is complete.

By letter dated November 26, 2018, Mr. Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians – Kizh Nation, requested consultation on the Project. IRWD and the Gabrieleño Band of Mission Indians – Kizh Nation held a consultation call on January 8, 2019. The Gabrieleño Band of Mission Indians – Kizh Nation discussed archaeological and other resources

of concern to the tribe that might occur within or within the vicinity of the Project site. However, no specific information regarding the locations of resources was provided, and no tribal cultural resources were identified in the Project area as a result of consultation. Regardless, archaeological and Native American monitoring has been included as a mitigation measure for the Project, as discussed under Section 4.5 Cultural Resources. Consultation with the Gabrieleño Band of Mission Indians – Kizh Nation is considered complete.

Environmental Evaluation

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)**

No Impact. A records search at the SCCIC, an archaeological field survey, a Sacred Lands File search at the NAHC, and consultation with the Juaneño Band of Mission Indians – Acjachemen Nation and the Gabrieleño Band of Mission Indians – Kizh Nation, conducted pursuant to AB 52, did not identify any tribal cultural resources that are listed in or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k). Given this, there will be no impacts to tribal cultural resources and no specific mitigation is required. While consultation did indicate that there is potential for impacts to archaeological and other cultural resources, mitigation for impacts to such resources, including archaeological and Native American monitoring, is included in Section 4.5 Cultural Resources.

- b) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

No Impact. Similarly, no tribal cultural resources that have been determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1, were identified within the Project site. Given this, there will be no impacts to tribal cultural resources and no specific mitigation is required. While consultation did indicate that there is potential for impacts to archaeological and other cultural resources, mitigation for impacts to such resources, including archaeological and Native American monitoring, is included in Section 4.5 Cultural Resources.

4.19 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
19. UTILITIES AND SERVICE SYSTEMS —				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?**

No Impact. The proposed Project may require a limited use of potable water during construction activities. Water required for rotary wash borings would be obtained from a support truck. The amount of water used depends on the boring depth but could range from 65 to 700 gallons. New water facilities or expansion of existing facilities would not be required to support this use. No water or wastewater treatment facilities would be installed as part of the proposed Project. No improvements are currently planned to support geotechnical exploration activities that require new electric power, natural gas, or telecommunications facilities. (See also response to Question 4.6(a) above.)

As stated above in response to Question 4.10(c), the proposed Project would not substantially alter the local drainage pattern of the site. The proposed Project does not include the construction of permanent structures or impervious surfaces that would change the rate or amount of surface runoff from the Project site. As such, the proposed Project would not require the construction or expansion of new storm water drainage facilities. Therefore, there would be no construction of utility infrastructure associated with the proposed Project; there would be no impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years

No Impact. Water would be needed temporarily during implementation of the proposed Project. Water would be required for rotary wash borings and would be obtained from a support truck. The amount of water used depends on the boring depth but could range from 65 to 700 gallons. No permanent water supply would be required to serve the Project. Therefore, no impacts would occur related to water supplies.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed Project would result in the generation of wastewater associated with temporary use of portable toilets. During Project implementation, IRWD or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Given the relatively small construction workforce of an average of 8 and up to a maximum of 46 workers onsite daily for the seven-month construction period, this amount of waste would be minimal. Once the exploration activities are concluded, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations. Therefore, the proposed Project does not require a wastewater treatment provider to serve the Project. No impacts would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. Implementation of the proposed Project would result in nominal solid waste, limited to trash and other construction-related materials. Because the proposed Project would not demolish existing facilities on-site or require building materials for infrastructure, there would be no construction debris to be disposed of or transported. During the exploration activities, soil to be tested would be kept in appropriate bags and core boxes within a secured container stored on-site in undisturbed areas. After the exploration program is complete, the drill cuttings would be contained at each drill site and then spread within the previously cleared drill rig pad. All other soil excavated would be stockpiled and stored on-site. As no other debris would be required to be removed from the proposed Project site, no landfills in the vicinity would need to be used. In any case, the Frank R. Bowerman landfill which is located adjacent to the Project site has a remaining capacity through the year 2053, should it need to be used (County of Orange Waste and Recycling 2018). The Project would result in no impacts related to local infrastructure capacity and would not impair attainment of solid waste reduction goals.

e) **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

No Impact. As stated above in response to Question 4.19(f), implementation of the proposed Project would result in nominal solid waste. Statewide policies regarding solid waste have become progressively more stringent, reflecting Assembly Bill 939, which requires local government to develop waste reduction and recycling policies and meet mandated solid waste reduction targets. For the minor amount of solid waste anticipated to be produced by the proposed Project, IRWD would be required to comply with all laws and regulations related to the disposal and recycling of waste. There would be no impact.

References

County of Orange Waste and Recycling, 2018. Available at:

<http://www.oclandfills.com/landfill/active/bowerman>, accessed December 2018.

Irvine Ranch Water District (IRWD), 2016. 2015 Urban Water Management Plan. Available at:

https://www.irwd.com/images/pdf/doing-business/environmental-documents/UWMP/IRWD_UWMP_2015_rev_01-03-17_FINAL.pdf, accessed December 2018.

4.20 Wildfire

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
20. Wildfire—If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

No Impact. As discussed in response to Question 4.9(f), implementation of the proposed Project is not anticipated to substantially impair an adopted emergency response plan or evacuation plan because all geotechnical investigation activities and staging areas would be within the boundaries of IRWD’s Syphon Reservoir site. Construction activities would not interfere with emergency response access to the Project vicinity, including the Crean Lutheran High School’s Sport Complex. No impacts would occur.

- b) **Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

Less than Significant with Mitigation Incorporated. As discussed in response to Question 4.9(g), the Project area is located within a SRA, VHFHSZ. Further, the Project area includes slopes that surround the existing reservoir and is susceptible to prevailing winds. During construction, equipment and on-site diesel fuel could pose a risk to wildfire with possible ignition sources such as internal combustion engines, gasoline-powered tools, and equipment that could produce a spark, fire, or flame. The use of spark-producing construction machinery within fire risk areas such as the Project area could expose temporary Project workers and contractors to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. However, contractors would have to comply with Public Resource Codes (PRC) Sections 4427, 4428, 4431,

and 4442. During construction, strict adherence to these PRC sections would ensure that contractors are responsible for all monitoring and safety measures ensuring that any risk to exacerbate wildfire. Furthermore, as described in Section 4.9, implementation of Mitigation Measure HAZ-1 would ensure fire hazard reduction measures are implemented during exploration activities to further reduce the potential for wildfire impacts on Project workers and contractors to a less than significant level.

The Project does not involve operation of any facilities, or permanent workers or occupants at the Project site. As a result, no impact would occur during operation.

Mitigation Measures

Implement Mitigation Measure HAZ-1.

- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Less than Significant Impact. Geotechnical exploration activities would not result in the installation of permanent roads, fuel breaks, emergency water sources or new power lines and other utilities. All construction must comply with fire protection and prevention requirements specified by the California Code of Regulations (CCR) and Cal/OSHA. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. With adherence to applicable laws and regulations, impacts would be reduced to a less than significant level.

- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No Impact. As discussed in Sections 4.7(a)(iv), 4.7(c), 4.10(c)(ii), and 4.10(c)(i), the Project would not result in increased drainage or runoff that could contribute to landslide or flooding impacts. No impact would occur.

4.21 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less-Than-Significant Impact</i>	<i>No Impact</i>
21. MANDATORY FINDINGS OF SIGNIFICANCE —				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the Project:

- a) **Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less than Significant with Mitigation Incorporated. As discussed in Section 4.4 Biological Resources, the least Bell’s vireo and southwestern willow flycatcher are both federal and state endangered and NCCP/HCP Conditionally Covered species, and Project activities could temporarily impact riparian habitat associated with these species. The proposed geotechnical investigations would temporarily impact 0.36 acre of riparian communities (including 0.02 acre of black willow thicket, 0.08 acre of mule fat scrub, and 0.26 acre of freshwater marsh) by boring, trenching, and creating access routes using a bulldozer. Although impacts are temporary, the removal of habitat and potential disturbance to these special-status bird species would be potentially significant. Implementation of mitigation measures BIO-1 and BIO-2, below, would reduce impacts to a less than significant level.

The proposed Project would temporarily impact 4.05 acres of sensitive natural communities, including 0.02 acre of black willow thicket, 2.02 acres of California sagebrush scrub, and 2.01 acres of non-native herbaceous cover/California sagebrush scrub, by boring, trenching, and

creating access routes using a bulldozer. These temporary impacts would be significant. Implementation of Mitigation Measure BIO-3, would reduce impacts to a less than significant level. In addition, a large portion of the study area supports riparian habitat, which is considered CDFW jurisdictional lakes, streams, and associated vegetation. The proposed Project would temporarily impact 1.60 acres of CDFW jurisdictional lakes, streams, and associated vegetation, which would be considered a significant impact. Implementation of Mitigation Measure BIO-4 would reduce impacts to a less than significant level.

The proposed Project would temporarily impact 1.43 acres of wetlands and waters of the State that would result from boring, trenching, and creating access routes using a bulldozer. These impacts would be considered significant. Implementation of Mitigation Measure BIO-5 would reduce impacts to a less than significant level.

The proposed Project (i.e., the Syphon Reservoir Geotechnical Investigations Project) is in support of the future Syphon Reservoir Improvement Project, which is a permitted use within the Reserve System. Compliance with specific conditions required for NCCP/HCP conditionally covered species (i.e., least Bell's vireo and southwestern willow flycatcher) are discussed in above. However, the removal of coastal sage scrub communities would be considered potentially significant. Implementation of Mitigation Measure BIO-6 would reduce impacts to a less than significant level.

As discussed in Section 4.5 Cultural Resources, while there are known cultural resources within the Project area, construction of the proposed Project would not result in direct or indirect impacts to resources. However, construction of the Proposed Project could potentially encounter unknown archaeological, paleontological resources or human remains. With implementation of Mitigation Measures CR-1 through CR-4 and GEO-1 through GEO-4, impacts would be reduced to a less than significant level. Once constructed, operation of the proposed Project would have no long-term permanent impacts to biological or cultural resources.

Mitigation Measures

Implement Mitigation Measures BIO-1 through BIO-6, CR-1 through CR-4, and GEO-1 through GEO-4.

- b) Have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less than Significant with Mitigation Incorporated. A cumulative impact could occur if the proposed Project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. No direct significant impacts were identified for the proposed Project that could not be mitigated to a less than significant level. However, when combined with other projects within the vicinity, the proposed Project may result in a contribution to a potentially significant cumulative impact.

The proposed Project does not include any agricultural or forestry resources, mineral resources, or tribal cultural resources that could be impacted and the proposed Project and would have no effect on land use and planning, population and housing, public services, recreation or utilities. In addition, impacts would be less than significant for aesthetics, air quality, energy, GHG emissions, hydrology and water quality, noise, and transportation and traffic. As a result, cumulative impacts related to these resources would be less than significant.

Potential impacts to biological resources, cultural resources, and paleontological resources (geology and soils), as well as wildfire risks (covered under both hazards/hazardous materials and wildfire sections) that are generated by geotechnical investigations would be short term and occur over a 7-month period. The impacts for the proposed Project are limited in nature and scope to the Project area in and around the Syphon Reservoir. The Project work itself will largely occur within the reservoir and will be contained such that off-site impacts do not occur. As a result, the impacts of the proposed Project would not combine together with other related Projects in the vicinity to produce a significant environmental impact. No permanent facilities would be constructed as part of the proposed Project and therefore long-term cumulative impacts would not occur. With implementation of mitigation measures, which aim to reduce Project impacts to neighboring sensitive receptors and to sensitive natural resources, impacts related to biological resources, cultural resources, paleontological resources and wildfire risk would be less than cumulatively considerable. Therefore, the proposed Project would not result in any impacts that would be cumulatively considerable resulting from the proposed Project. While there are pending residential developments under review by the City of Irvine in the Orchard Hills area, these developments are located farther northeast of the Project nearer to Rattlesnake Reservoir, and would not combine together with effects of the proposed Project's localized environmental impacts to create a significant effect (City of Irvine 2018). There are no projects that would coincide with the implementation timeline of the proposed Project associated with the Crean Lutheran High School Sports Complex, which is the nearest facility to the proposed Project, that could interact with potential impacts of the proposed Project to create a cumulatively considerable impact. Therefore, cumulative impacts would be considered less than significant with implementation of mitigation.

Mitigation Measures

Implement Mitigation Measures BIO-1 through BIO-6, CR-1 through CR-4, GEO-1 through GEO-4, and HAZ-1.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The proposed Project would not result in substantial adverse effects, either direct or indirect, on human beings. The Project would provide important geotechnical information for the Project area to ensure the most geotechnical-sound development takes place when designing the future Syphon Reservoir improvements. As described in Section 4.3 Air Quality, air emissions associated with the proposed Project would not result in adverse health effects to sensitive receptors. As described in Section 4.13 Noise, construction noise also would not result in adverse effects to sensitive receptors. Impacts to human beings would be less than significant.

References

City of Irvine, 2018. Current Discretionary Projects Under Review, accessed at:
<http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=11038>, July 26, 2018.

SECTION 5

Comment Letters

The Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the Syphon Reservoir Geotechnical Investigations Project (Project) was circulated for public review for 30 days (February 8, 2019 through March 11, 2019) in accordance with the requirements of CEQA Guidelines Section 15072(a). The Irvine Ranch Water District (IRWD) received ten comment letters during the public review period, which are listed in **Table 5-1** and are included within this chapter. The letters have been marked with brackets that delineate comments pertaining to environmental issues and the information and analysis contained in the Draft IS/MND. Responses to such comments are provided in Section 6. The responses to comments include minor revisions to the IS/MND text, which are summarized in Section 7.

**TABLE 5-1
COMMENT LETTERS RECEIVED**

Comment Letter No.	Commenter	Date of Comment
1	South Coast Air Quality Management District	February 20, 2019
2	Gabrieleño Band of Mission Indians	February 14, 2019
3	City of Irvine	March 6, 2019
4	South Coast Air Quality Management District	March 6, 2019
5	Orange County Public Works	March 11, 2019
6	Orange County Fire Authority	March 11, 2019
7	USFWS and CDFW	March 11, 2019
8	Transportation Corridor Agencies	March 11, 2019
9	California Department of Water Resources	March 7, 2019
10	State Clearinghouse	March 12, 2019
11	Wildlife Agencies	June 11, 2019

In addition, IRWD received a follow up letter from USFWS and CDFW, dated June 11, 2019, after the close of the 30-day comment period. This letter is also included at the end of this section, although no responses are provided.

Comment Letter 1: South Coast Air Quality Management District

Sarah Spano

From: Jo Ann Corey <Corey@irwd.com>
Sent: Thursday, February 21, 2019 8:29 AM
To: Jennifer Jacobus; Sarah Spano
Subject: Fwd: Technical Data Request for the Syphon Reservoir Geotechnical Investigations Project

Importance: High

Please see information listed. Can you assist and send to this contact any and all information that may assist them?

Thank you in advance for your prompt attention.

>>> Robert Dalbeck <RDalbeck@aqmd.gov> 2/20/2019 5:06 PM >>>

Dear Ms. Corey,

SCAQMD staff has received the Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Syphon Reservoir Geotechnical Investigations project for review (SCAQMD Control Number: ORC190208-03) before March 11, 2019.

Please provide all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete a review of the air quality analysis in a timely manner.

You may burn the data onto a CD and send it to SCAQMD Attn: CEQA-Intergovernmental Review, to the address in my signature below. Or, you may send the above-mentioned documents via a Dropbox link in which they may be accessed and downloaded by SCAQMD staff. Thank you.

Best Regards,

Robert Dalbeck | Assistant Air Quality Specialist, CEQA IGR
South Coast Air Quality Management District
21865 Copley Drive | Diamond Bar, CA 91765
Phone: (909) 396-2139 | Email: RDalbeck@aqmd.gov
**Please note that the SCAQMD is closed on Mondays.*

1-1

Comment Letter 2: Gabrieleno Band of Mission Indians



GABRIELENO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Notice of Intent to Adopt An Initial Study/ Mitigated Negative Declaration

February 14, 2019

Irvine Ranch Water District
15600 Sand Canyon Avenue,
Irvine, CA 92618

Good Afternoon Jo Ann Corey,

We have received your Notice of Intent to adopt a Negative Declaration for the Syphon Reservoir Geotechnical Investigation in the location of the of Orange County. Our Tribal Government would like to be consulted if any ground disturbance will be conducted for this project.

2-1

Sincerely,
Gabrieleno Band of Mission Indians/Kizh Nation
(1844) 390-0787 Office

Andrew Salas, Chairman
Albert Perez, treasurer I

Nadine Salas, Vice-Chairman
Martha Gonzalez Lemos, treasurer II

Dr. Christina Swindall Martinez, secretary
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723

www.gabrielenoindians@yahoo.com

gabrielenoindians@yahoo.com



Community Development

cityofirvine.org

1 Civic Center Plaza, Irvine, CA 92606-5208

949-724-6000

March 6, 2019

Ms. Jo Ann Corey
Water Resources Department
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Subject: Initial Study and Mitigated Negative Declaration for Syphon Reservoir Geotechnical Investigations Project

Dear Ms. Corey:

Thank you for the opportunity to review the Initial Study and Mitigated Negative Declaration for the Irvine Water Ranch District's (IRWD) Syphon Reservoir Geotechnical Investigations Project. The site is located on the northeast side of Portola Parkway between Bee Canyon Access Road and SR -133. The purpose of this project is to evaluate the site's soil and subsurface conditions in order to design an enlarged dam and reservoir that will improve IRWD's water supply reliability. The City staff has completed its review and has no comments. If you have any questions, you may contact me at 949-724-6364 or at jequina@cityofirvine.org.

3-1

Sincerely,

Justin Equina
Associate Planner

cc: Bill Jacobs, Principal Planner



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS:

March 6, 2019

Corey@irwd.com

Jo Ann Corey, Environmental Compliance Specialist
Irvine Ranch Water District, Water resources & Policy Department
15600 Sand Canyon Avenue
Irvine, CA 92618

Mitigated Negative Declaration (MND) for the Proposed Syphon Reservoir Geotechnical Investigations Project

South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final MND.

4-1

SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to conduct a geotechnical study consisting of 53 borings, 16 exploratory test pits, three fault evaluation trenches (1,900 feet), five seismic refraction survey lines (7,400 feet), and four electrical resistivity survey lines (2,900 feet)¹ on four acres² (Proposed Project). The objective of the Proposed Project is to characterize the geologic and geotechnical subsurface conditions and dam foundation of the reservoir for future dam expansion. The Proposed Project is located on the northwest corner of the State Route 241 (SR-241) and State Route 133 (SR-133) interchange in unincorporated County of Orange. The Proposed Project is expected to occur over 125 days.

4-2

SCAQMD Permits

The Proposed Project may include the use of equipment that requires a permit for operation. It is recommended that the Lead Agency consult with SCAQMD's Engineering and Permitting staff to determine if operation of any of the proposed equipment expected to be used throughout the duration of the study will require a permit from SCAQMD or if the equipment will need to be registered under the Portable Equipment Registration Program (PERP) through the California Air Resources Board (CARB)³. If a permit from SCAQMD is required, SCAQMD should be identified as a Responsible Agency for the Proposed Project in the Final MND. Any assumptions used in the Air Quality Analysis in the Final MND will be used as the basis for permit conditions and limits for the Proposed Project. Should there be any questions on permits, please contact SCAQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit SCAQMD's webpage at: <http://www.aqmd.gov/home/permits>. For more information on the PERP Program, please contact CARB at (916) 324-5869 or visit CARB's webpage at: <https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>.

4-3

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide SCAQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, response should provide

4-4

¹ MND, Page 6.

² MND, Page 34.

³ South Coast Air Quality Management District. *Portable Equipment Registration Program (PERP)*. Accessed at: <http://www.aqmd.gov/home/permits/equipment-registration/perp>.

Comment Letter 4: South Coast Air Quality Management District

Jo Ann Corey

2

March 6, 2019

sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project.

4-4

SCAQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Robert Dalbeck, Assistant Air Quality Specialist, at RDalbeck@aqmd.gov or (909) 396-2139, should you have any questions.

4-5

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS:RD
ORC190208-03
Control Number



March 7, 2019

NCL-19-001

Irvine Ranch Water District
Water Resources & Policy Department
15600 Sand Canyon Avenue
Irvine, 92618
Attn: Jo An Corey, Environmental Compliance Specialist

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigations Project.

Dear Ms. Jo An Corey:

Thank you for the opportunity to comment on the Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigations Project. The County of Orange offers the following comments for your consideration.

OC Infrastructure Programs /Flood Programs/Hydrology

1. All work within or adjacent to any OCFCD right-of-way for flood control facilities shall be conducted so as not to adversely impact channel's structural integrity, hydraulic flow conditions, access and maintainability. Furthermore, all proposed projects within OCFCD's right-of-way should be reviewed and approved by OC Public Works, and the work should be conducted only after an encroachment permit has been obtained. For information regarding the permit application process and other details please refer to the Encroachment Permits Section link on OC Public Works' website http://www.ocpublicworks.com/ds/permits/encroachment_permits. Technical reviews and approvals for the proposed work will be accomplished within the permit process.

5-1

Sincerely,

for Richard Vuong, Manager, Planning Division
OC Public Works Service Area/OC Development Services
300 North Flower Street
Santa Ana, California 92702-4048
Richard.Vuong@ocpw.ocgov.com

cc: Penny Lew, OC Flood Programs/Hydrology & Floodplain Management
Sahar Parsi, OC Flood Programs/Hydrology & Floodplain Management

Jo Ann Corey - Notice of Intent to Adopt Mitigated Negative Declaration - Syphon Reservoir Geotechnical Investigations Report

From: "Rivers, Tamy" <TamyRivers@ocfa.org>
To: "corey@irwd.com" <corey@irwd.com>
Date: 3/11/2019 12:23 PM
Subject: Notice of Intent to Adopt Mitigated Negative Declaration - Syphon Reservoir Geotechnical Investigations Report

Thank you for the opportunity to review the subject document. OCFA has no comments.

6-1

Have a great day.



Tamera Rivers

Management Analyst
Orange County Fire Authority
Office: 714-573-6199
tamyrivers@ocfa.org

We visualize problems and solutions through the eyes of those we serve.

**Comment Letter 7: U.S. Fish and Wildlife Service,
California Department of Fish and Wildlife**



U.S. FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



CALIFORNIA DEPARTMENT OF
FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, California 92123

In Reply Refer To:
FWS/CDFW-FWS-OR-13B0091-19CPA0129

March 11, 2019
Sent by Email

Jo Ann Corey
Environmental Compliance Specialist
Irvine Ranch Water District - Water Resources and Policy Department
15600 Sand Canyon Avenue
Irvine, California 92618

Subject: Comments on the Notice of Intent to adopt a Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigations Project (SCH#2019029041)

Dear Ms. Corey:

The U.S Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the above-referenced Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the Syphon Reservoir Geotechnical Investigations Project (Project; SCH#2019029041) dated February 2019. The Wildlife Agencies have identified potential effects of this project on wildlife and sensitive habitats. The Project details provided herein are based on the information provided in the NOI and associated documents.

7-1

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCPs) developed under section 10(a)(1)(B) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.* The Department also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The Irvine Ranch Water District (IRWD) is a Participating Landowner under the County of Orange Central and Coastal Subregion NCCP/HCP (NCCP/HCP; Plan). As a Participating Landowner, IRWD is permitted take of covered species under the NCCP/HCP provided that the activity is consistent with the Plan.

7-2

The proposed Project would include geotechnical investigations that are intended to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir. Syphon Reservoir is an existing recycled water storage reservoir located in the County of Orange (County), and the majority of the proposed Project would occur in the habitat Reserve System (Reserve) established by the

7-3

**Comment Letter 7: U.S. Fish and Wildlife Service,
California Department of Fish and Wildlife**

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

2

NCCP/HCP. This work is necessary in order to inform the design of a potential future Reservoir Improvement Project, which would include enlargement of the Syphon Reservoir to help IRWD meet recycled water seasonal demands. The current Project would use a combination of exploratory test pits, borings, and geophysical surveys to characterize the subsurface conditions of the soil at each exploration location. Test work at the majority of borings, sample pits, and seismic trenches would be completed within 1 working day and open holes and trenches would be filled on the same day. A few of the longer seismic trenches may be required to remain open for more than 1 day, in which case plywood or metal plates would be used to cover the open trench. Access to the test locations would be through existing access roads as feasible or through temporary access roads that are created by either driving over existing vegetation (drive and crush method) or by grading a 12-foot wide path using a bulldozer. The Project is scheduled to begin in fall 2019 and is expected to take up to 7 months to complete.

7-3

Habitat impacts associated with the Project would include 6.42 acres of temporary impacts to natural communities, including 4.05 acres of temporary impacts to sensitive natural communities (0.02 acre of black willow thicket, 2.02 acres of California sagebrush scrub, and 2.01 acres of nonnative herbaceous cover/California sagebrush scrub). Temporary impacts to sensitive natural communities are expected to recover via natural recruitment or through the implementation of a revegetation plan that includes performance standards, success criteria, maintenance, and future monitoring. Special-status plant species observed within the Project area during 2018 focused surveys include Catalina mariposa lily (*Calochortus catalinae*) and San Diego County viguiera (*Bahiopsis laciniata*). Special-status wildlife species observed within the study area include the federally threatened coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher), the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), and yellow warbler (*Setophaga petechia*), a state species of special concern. An additional 10 special-status wildlife species have the potential to occur or have been previously detected within the study area but were not detected during 2018 surveys.

7-4

We offer the following comments and recommendations regarding Project-related biological impacts based on our review of the draft MND, associated appendices, and on-going discussions with IRWD during Project development to ensure the Project is consistent with ongoing regional habitat planning efforts:

1. A large portion the current Project and future Reservoir Improvement Project overlap with habitat that was previously restored as mitigation for impacts associated with the development of the Eastern Transportation Corridor and is subject to the use restrictions identified in Section 4.2 of the Grant Deed that was recorded January 4, 2010 (IRWD Doc. D0204). It is our understanding that the current Project as well as the future Reservoir Improvement Project are not currently approved activities under the Grant Deed, and it is unclear in the MND if IRWD has addressed this issue. Prior to any activity associated with the current Project or future project occurring, IRWD should demonstrate that it has received the necessary approvals from applicable government agencies in accordance with 4.2(c) of the Grant Deed. The remaining comments provided herein apply if the necessary approvals for the current Project and future Reservoir Improvement Project are received.
2. The MND suggests that the impacts from the current Project and future Reservoir Improvement Project are already mitigated through IRWD's participation in the NCCP/HCP. However,

7-5

7-6

**Comment Letter 7: U.S. Fish and Wildlife Service,
California Department of Fish and Wildlife**

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

3

while the future Reservoir Improvement Project is a permitted use in the Reserve, IRWD did not seek specific take authorization for this project at the time of NCCP/HCP completion because no decision had been made to build a new storage reservoir. Instead, it was anticipated that “at the time such a facility [was] needed, IRWD [would] review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the incidental take associated with the reservoir” (NCCP/HCP page II-361). Therefore, take of covered species, including gnatcatcher and least Bell’s vireo, is not authorized until a mitigation plan is developed in coordination with the Wildlife Agencies.

7-6

Through early coordination meetings, the Wildlife Agencies and IRWD have agreed that it is appropriate to delay implementation of such a mitigation plan for impacts associated with the current geotechnical investigations, if the impact area overlaps with the potential future Reservoir Improvement Project. We recommend the language in the MND regarding impacts to special-status species be updated to reflect this and clearly state that impacts will be mitigated in accordance with a mitigation plan developed for the future Reservoir Improvement Project or, in the event the future project does not move forward, in accordance with a mitigation plan developed for the current Project. The mitigation plan for the current Project should be finalized prior to impacts occurring and implemented within 1 year of Project completion if the future project does not move forward. As described in the mitigation measures, the mitigation plan could involve a combination of use of IRWD’s incidental take credits for impacts to coastal sage scrub habitat and/or on-/off-site land acquisition preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable activities, as determined acceptable by the Wildlife Agencies. This would enable the Wildlife Agencies to provide the necessary take authorizations to allow the proposed Project to move forward under the NCCP/HCP.

7-7

3. Any mitigation plan(s) described above for both the future and current Project would need to account for the past restoration efforts and adequately replace the lost habitat that was protected by the Grant Deed. For permanent impacts, the Wildlife Agencies typically recommend mitigating for any current project impacts, in addition to past project impacts through increased ratios or protection of habitat that is of higher quality and value to the Reserve. For temporary impacts, the Wildlife Agencies recommend that areas should be restored immediately following project completion and additional mitigation should be provided for the temporal loss of habitat that was otherwise expected to provide benefits to previously impacted species. Currently, the Grant Deed is only briefly mentioned in the Biological Resources Technical Report (Appendix BIO), and there is no reference of the Grant Deed in the MND or additional mitigation to account for the proposed impacts to these areas. We recommend including a discussion of the Grant Deed in the MND. This discussion should include a figure that clearly depicts where the current Project overlaps with the habitat protected by the Grant Deed. For areas that fall outside of the future Reservoir Improvement Project footprint but within the Grant Deed, a mitigation plan that accounts for the temporal loss of covered species habitat should be developed and implemented immediately following Project impacts. The mitigation plan could include a combination of revegetation of temporary impacts and additional restoration or conservation of habitat to benefit impacted species and should be developed in coordination with the Wildlife Agencies. For habitat impacts within the footprint of the future Reservoir Improvement Project, we agree that implementation of

7-8

**Comment Letter 7: U.S. Fish and Wildlife Service,
California Department of Fish and Wildlife**

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

4

such a mitigation plan may be delayed until it is determined if the future Reservoir Improvement Project will move forward as described in Comment 2 above. However, the mitigation plan should be finalized and approved by the Wildlife Agencies prior to impacts occurring. In the interim, we would expect these areas to be allowed to naturally recover as described in BIO-1, BIO-3, BIO-4, and BIO-5.

7-8

4. Part of the Project will include the temporary draining of the reservoir to allow the soil to dry prior to boring and excavation activities. Although draining of the reservoir currently occurs as part of the ongoing operations of the reservoir, it is unclear if the draining associated with the current Project would be of the same scope (i.e., timing and duration) as the draining associated with ongoing operations. Draining the reservoir during the avian breeding season (February 15 to August 31) has the potential to disturb nesting patterns for least Bell's vireo and other sensitive avian species that are present within the Project footprint. We recommend any draining to be done outside the nesting season and for the MND to be updated to clarify the timing and extent of the draining activity and whether it is consistent with current practices. In addition, excavation and boring activities that must occur within those portions of the reservoir that become inundated during the wet season should be prioritized and targeted for completion during the fall dry season to allow the regular hydrological conditions to return as quickly as possible and to limit the amount of time the riparian habitat could be impacted.

7-9

5. Mitigation measures BIO-1, BIO-3, BIO-4, and BIO-5 propose to allow areas that were temporarily impacted during Project implementation to passively recover following its conclusion and to be monitored for a 3-year period, or until a qualified biologist determines that the impact site has returned to pre-Project conditions. For areas that do not reestablish naturally following Project completion, a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring. Although this approach may be appropriate for access roads impacted by the drive and crush method, it is unlikely to be appropriate for areas that were graded or excavated due to the level of soil disturbance associated with these activities. We recommend the Project proponent anticipate needing to actively revegetate graded and excavated areas following Project completion and including a revegetation component in the mitigation plan that is developed as described above. For those areas that lie outside of the footprint of the future Reservoir Improvement Project, implementation of the Wildlife Agency approved mitigation plan should begin immediately following Project completion.

7-10

6. The MND indicates that the majority of boring and sample pit sites will be filled on the same day, as will the shorter seismic trenches. However, a few of the longer seismic trenches may remain open for a few days and would be required to be covered with plywood or metal plates to secure the trench at the end of each work day. In addition to the plywood or metal plate, we recommend covering the trench with a layer of plastic and lining the edges with sandbags to prevent small mammals and/or herpetofauna from entering the trench during off hours. The plywood or metal plates should then be placed on top of the plastic. We also recommend that the monitoring biologist referenced in mitigation measure BIO-6 be experienced in small mammal/herpetofauna trapping and be present on-site during the work day while the trenches are open in order to effectively trap and remove any species that fall into the trench.

7-11

**Comment Letter 7: U.S. Fish and Wildlife Service,
California Department of Fish and Wildlife**

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

5

7. The Project is expected to temporarily impact a total of 6.42 acres of habitat, including 4.05 acres that are classified as sensitive natural communities. The MND lists black willow thicket, California sagebrush scrub, and nonnative herbaceous cover/California sagebrush scrub as sensitive natural communities that occur on-site. However, it fails to include freshwater marsh habitat as a sensitive natural community. The California Native Plant Society's Manual of California Vegetation ranks the *Schoenoplectus (acutus, californicus)* Herbaceous Alliance as S3, which is considered a sensitive natural community. Given that the MND utilized the same classification manual for identifying sensitive natural communities, it is unclear if the community was simply misidentified as non-sensitive, or if there is additional reasoning to not include it as a sensitive natural community. We recommended either providing more information as to why freshwater marsh was not considered a sensitive natural community or to update the MND to include it as such. This would also entail updating any acreages of impacted habitats.

7-12

We appreciate IRWD's early coordination on this Project and the opportunity to comment on this MND. We are confident that through continued coordination between IRWD and the Wildlife Agencies, we can ensure the protection necessary for the biological resources that would be affected by this Project. If you have questions or comments regarding this letter, please contact Colleen Draguesku of the Service at (760) 431-9440 extension 241, or Kyle Rice of the Department at (858) 467-4250.

Sincerely,

JONATHAN
SNYDER
Digitally signed by
JONATHAN SNYDER
Date: 2019.03.11
16:17:50 -07'00'

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service



Gail K. Sevens
Environmental Program Manager
California Department of Fish and Wildlife

cc:
State Clearinghouse

Comment Letter 8: Transportation Corridor Agencies

San Joaquin Hills
Transportation
Corridor Agency



Transportation Corridor Agencies™

Foothill/Eastern
Transportation
Corridor Agency

Chair:
Fred Minagar
Laguna Niguel

Chair:
Christina Shea
Irvine

March 11, 2019

Via Email: corey@irwd.com

Jo Ann Corey
Environmental Compliance Specialist
Irvine Ranch Water District
Water Resources & Policy Department
15600 Sand Canyon Avenue
Irvine, California 92618

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigations Project

Dear Ms. Corey:

The Transportation Corridor Agencies (TCA) has reviewed and is pleased to submit these comments on the Irvine Ranch Water District (IRWD) Syphon Reservoir Geotechnical Investigations Project (Project) Draft Initial Study/Mitigated Negative Declaration (IS/MND). The IRWD, as the lead agency pursuant to the California Environmental Quality Act (CEQA), is proposing to implement the Project to investigate and provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir. Specifically, the Project would implement geotechnical investigations to evaluate geologic and seismic conditions at the dam embankment, spillway, outlet, and borrow sites. This work is necessary in order to design an enlarged dam and reservoir, which will support further improvement of water supply reliability for IRWD.

8-1

The Biological Resources Technical Report [page 5] acknowledges that when IRWD acquired Syphon Reservoir from The Irvine Company, the Conveyance Agreement included a Grant Deed with use restrictions to provide for the conservation of the biological resources associated with the previous TCA mitigation lands on a large portion of the Project's Study Area. The Technical Report further acknowledges the need for coordination with the third-party beneficiaries of the Grant Deed (i.e., TCA and U.S. Fish and Wildlife Service). As such, TCA is looking forward to this coordination and requests to be kept on the IRWD's distribution list for all future notices, along with any other forthcoming documentation for the Project.

8-2

TCA appreciates the opportunity to provide input to your planning process. If you have questions or require additional information, please do not hesitate to contact me at 949.754.3496 or via email (dferemenga@thetollroads.com).

Sincerely,

Doug Feremenga, AICP CEP, LEED AP
Manager, Environmental Planning

Comment Letter 9: California Department of Water Resources

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



MAR 07 2019

Ms. Jo Ann Corey, Environmental Compliance Specialist
Irvine Ranch Water District
Water Resources and Policy Department
15600 Sand Canyon Avenue
Irvine, California 92618

SCH2019029041, Notice of Intent to Adopt a Mitigated Negative Declaration, Syphon Reservoir Geotechnical Investigations Project
Orange County

Dear Ms. Corey:

We have reviewed the Notice of Intent to Adopt a Mitigated Negative Declaration, Syphon Reservoir Geotechnical Investigations for the above referenced project (Project) which describes a geotechnical investigation to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir in order to design an enlarged dam and reservoir.

9-1

Syphon Reservoir, No. 1029-4, is currently under State jurisdiction; therefore, the proposed work described for the Project is subject to State jurisdiction. An alteration application, together with plans, specifications, and the appropriate filing fee must be filed with the Division of Safety of Dams for this project. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the direction of a Civil Engineer registered in California. Erik Malvick, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 227-4660.

9-2

If you have any questions or need additional information, you may contact, Area Engineer Richard Draeger at (916) 227-4755 or Acting Regional Engineer Ernie Tapia at (916) 227-4600.

Sincerely,

Ernie. M. Tapia, Acting Regional Engineer
Southern Region
Field Engineering Branch
Division of Safety of Dams

cc: (See Attached List)

Comment Letter 9: California Department of Water Resources

Ms. Corey
MAR 07 2019
Page 2

cc: Governor's Office of Planning and Research
State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044

Comment Letter 10: State Clearinghouse



Gavin Newsom
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Kate Gordon
Director

March 12, 2019

Jo Ann Corey
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92718

Subject: Syphon Reservoir Geotechnical Investigations Project
SCH#: 2019029041

Dear Jo Ann Corey:

The State Clearinghouse submitted the above named MND to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on 3/11/2019, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

Check the CEQA database for submitted comments for use in preparing your final environmental document: <https://ceqanet.opr.ca.gov/2019029041>. Should you need more information or clarification of the comments, **we recommend that you contact the commenting agency directly.**

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL 1-916-445-0613 state.clearinghouse@opr.ca.gov www.opr.ca.gov

10-1

Comment Letter 10: State Clearinghouse

clear
3/11/2019
E



U.S. FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



CALIFORNIA DEPARTMENT OF
FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, California 92123

In Reply Refer To:
FWS/CDFW-FWS-OR-13B0091-19CPA0129

Governor's Office of Planning & Research

MAR 11 2019

March 11, 2019
Sent by Email

Jo Ann Corey
Environmental Compliance Specialist
Irvine Ranch Water District - Water Resources and Policy Department
15600 Sand Canyon Avenue
Irvine, California 92618

STATE CLEARINGHOUSE

Subject: Comments on the Notice of Intent to adopt a Mitigated Negative Declaration for the Syphon Reservoir Geotechnical Investigations Project (SCH#2019029041)

Dear Ms. Corey:

The U.S Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the above-referenced Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the Syphon Reservoir Geotechnical Investigations Project (Project; SCH#2019029041) dated February 2019. The Wildlife Agencies have identified potential effects of this project on wildlife and sensitive habitats. The Project details provided herein are based on the information provided in the NOI and associated documents.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCPs) developed under section 10(a)(1)(B) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.* The Department also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The Irvine Ranch Water District (IRWD) is a Participating Landowner under the County of Orange Central and Coastal Subregion NCCP/HCP (NCCP/HCP; Plan). As a Participating Landowner, IRWD is permitted take of covered species under the NCCP/HCP provided that the activity is consistent with the Plan.

The proposed Project would include geotechnical investigations that are intended to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir. Syphon Reservoir is an existing recycled water storage reservoir located in the County of Orange (County), and the majority of the proposed Project would occur in the habitat Reserve System (Reserve) established by the

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

2

NCCP/HCP. This work is necessary in order to inform the design of a potential future Reservoir Improvement Project, which would include enlargement of the Syphon Reservoir to help IRWD meet recycled water seasonal demands. The current Project would use a combination of exploratory test pits, borings, and geophysical surveys to characterize the subsurface conditions of the soil at each exploration location. Test work at the majority of borings, sample pits, and seismic trenches would be completed within 1 working day and open holes and trenches would be filled on the same day. A few of the longer seismic trenches may be required to remain open for more than 1 day, in which case plywood or metal plates would be used to cover the open trench. Access to the test locations would be through existing access roads as feasible or through temporary access roads that are created by either driving over existing vegetation (drive and crush method) or by grading a 12-foot wide path using a bulldozer. The Project is scheduled to begin in fall 2019 and is expected to take up to 7 months to complete.

Habitat impacts associated with the Project would include 6.42 acres of temporary impacts to natural communities, including 4.05 acres of temporary impacts to sensitive natural communities (0.02 acre of black willow thicket, 2.02 acres of California sagebrush scrub, and 2.01 acres of nonnative herbaceous cover/California sagebrush scrub). Temporary impacts to sensitive natural communities are expected to recover via natural recruitment or through the implementation of a revegetation plan that includes performance standards, success criteria, maintenance, and future monitoring. Special-status plant species observed within the Project area during 2018 focused surveys include Catalina mariposa lily (*Calochortus catalinae*) and San Diego County viguiera (*Bahiopsis laciniata*). Special-status wildlife species observed within the study area include the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*; gnatcatcher), the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), and yellow warbler (*Setophaga petechia*), a state species of special concern. An additional 10 special-status wildlife species have the potential to occur or have been previously detected within the study area but were not detected during 2018 surveys.

We offer the following comments and recommendations regarding Project-related biological impacts based on our review of the draft MND, associated appendices, and on-going discussions with IRWD during Project development to ensure the Project is consistent with ongoing regional habitat planning efforts:

1. A large portion the current Project and future Reservoir Improvement Project overlap with habitat that was previously restored as mitigation for impacts associated with the development of the Eastern Transportation Corridor and is subject to the use restrictions identified in Section 4.2 of the Grant Deed that was recorded January 4, 2010 (IRWD Doc. D0204). It is our understanding that the current Project as well as the future Reservoir Improvement Project are not currently approved activities under the Grant Deed, and it is unclear in the MND if IRWD has addressed this issue. Prior to any activity associated with the current Project or future project occurring, IRWD should demonstrate that it has received the necessary approvals from applicable government agencies in accordance with 4.2(c) of the Grant Deed. The remaining comments provided herein apply if the necessary approvals for the current Project and future Reservoir Improvement Project are received.
2. The MND suggests that the impacts from the current Project and future Reservoir Improvement Project are already mitigated through IRWD's participation in the NCCP/HCP. However,

while the future Reservoir Improvement Project is a permitted use in the Reserve, IRWD did not seek specific take authorization for this project at the time of NCCP/HCP completion because no decision had been made to build a new storage reservoir. Instead, it was anticipated that “at the time such a facility [was] needed, IRWD [would] review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the incidental take associated with the reservoir” (NCCP/HCP page II-361). Therefore, take of covered species, including gnatcatcher and least Bell’s vireo, is not authorized until a mitigation plan is developed in coordination with the Wildlife Agencies.

Through early coordination meetings, the Wildlife Agencies and IRWD have agreed that it is appropriate to delay implementation of such a mitigation plan for impacts associated with the current geotechnical investigations, if the impact area overlaps with the potential future Reservoir Improvement Project. We recommend the language in the MND regarding impacts to special-status species be updated to reflect this and clearly state that impacts will be mitigated in accordance with a mitigation plan developed for the future Reservoir Improvement Project or, in the event the future project does not move forward, in accordance with a mitigation plan developed for the current Project. The mitigation plan for the current Project should be finalized prior to impacts occurring and implemented within 1 year of Project completion if the future project does not move forward. As described in the mitigation measures, the mitigation plan could involve a combination of use of IRWD’s incidental take credits for impacts to coastal sage scrub habitat and/or on-/off-site land acquisition preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable activities, as determined acceptable by the Wildlife Agencies. This would enable the Wildlife Agencies to provide the necessary take authorizations to allow the proposed Project to move forward under the NCCP/HCP.

3. Any mitigation plan(s) described above for both the future and current Project would need to account for the past restoration efforts and adequately replace the lost habitat that was protected by the Grant Deed. For permanent impacts, the Wildlife Agencies typically recommend mitigating for any current project impacts, in addition to past project impacts through increased ratios or protection of habitat that is of higher quality and value to the Reserve. For temporary impacts, the Wildlife Agencies recommend that areas should be restored immediately following project completion and additional mitigation should be provided for the temporal loss of habitat that was otherwise expected to provide benefits to previously impacted species. Currently, the Grant Deed is only briefly mentioned in the Biological Resources Technical Report (Appendix BIO), and there is no reference of the Grant Deed in the MND or additional mitigation to account for the proposed impacts to these areas. We recommend including a discussion of the Grant Deed in the MND. This discussion should include a figure that clearly depicts where the current Project overlaps with the habitat protected by the Grant Deed. For areas that fall outside of the future Reservoir Improvement Project footprint but within the Grant Deed, a mitigation plan that accounts for the temporal loss of covered species habitat should be developed and implemented immediately following Project impacts. The mitigation plan could include a combination of revegetation of temporary impacts and additional restoration or conservation of habitat to benefit impacted species and should be developed in coordination with the Wildlife Agencies. For habitat impacts within the footprint of the future Reservoir Improvement Project, we agree that implementation of

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

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such a mitigation plan may be delayed until it is determined if the future Reservoir Improvement Project will move forward as described in Comment 2 above. However, the mitigation plan should be finalized and approved by the Wildlife Agencies prior to impacts occurring. In the interim, we would expect these areas to be allowed to naturally recover as described in BIO-1, BIO-3, BIO-4, and BIO-5.

4. Part of the Project will include the temporary draining of the reservoir to allow the soil to dry prior to boring and excavation activities. Although draining of the reservoir currently occurs as part of the ongoing operations of the reservoir, it is unclear if the draining associated with the current Project would be of the same scope (i.e., timing and duration) as the draining associated with ongoing operations. Draining the reservoir during the avian breeding season (February 15 to August 31) has the potential to disturb nesting patterns for least Bell's vireo and other sensitive avian species that are present within the Project footprint. We recommend any draining to be done outside the nesting season and for the MND to be updated to clarify the timing and extent of the draining activity and whether it is consistent with current practices. In addition, excavation and boring activities that must occur within those portions of the reservoir that become inundated during the wet season should be prioritized and targeted for completion during the fall dry season to allow the regular hydrological conditions to return as quickly as possible and to limit the amount of time the riparian habitat could be impacted.
5. Mitigation measures BIO-1, BIO-3, BIO-4, and BIO-5 propose to allow areas that were temporarily impacted during Project implementation to passively recover following its conclusion and to be monitored for a 3-year period, or until a qualified biologist determines that the impact site has returned to pre-Project conditions. For areas that do not reestablish naturally following Project completion, a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring. Although this approach may be appropriate for access roads impacted by the drive and crush method, it is unlikely to be appropriate for areas that were graded or excavated due to the level of soil disturbance associated with these activities. We recommend the Project proponent anticipate needing to actively revegetate graded and excavated areas following Project completion and including a revegetation component in the mitigation plan that is developed as described above. For those areas that lie outside of the footprint of the future Reservoir Improvement Project, implementation of the Wildlife Agency approved mitigation plan should begin immediately following Project completion.
6. The MND indicates that the majority of boring and sample pit sites will be filled on the same day, as will the shorter seismic trenches. However, a few of the longer seismic trenches may remain open for a few days and would be required to be covered with plywood or metal plates to secure the trench at the end of each work day. In addition to the plywood or metal plate, we recommend covering the trench with a layer of plastic and lining the edges with sandbags to prevent small mammals and/or herpetofauna from entering the trench during off hours. The plywood or metal plates should then be placed on top of the plastic. We also recommend that the monitoring biologist referenced in mitigation measure BIO-6 be experienced in small mammal/herpetofauna trapping and be present on-site during the work day while the trenches are open in order to effectively trap and remove any species that fall into the trench.

Ms. Jo Ann Corey (FWS/CDFW-OR-13B0091-19CPA0129)

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7. The Project is expected to temporarily impact a total of 6.42 acres of habitat, including 4.05 acres that are classified as sensitive natural communities. The MND lists black willow thicket, California sagebrush scrub, and nonnative herbaceous cover/California sagebrush scrub as sensitive natural communities that occur on-site. However, it fails to include freshwater marsh habitat as a sensitive natural community. The California Native Plant Society's Manual of California Vegetation ranks the *Schoenoplectus (acutus, californicus)* Herbaceous Alliance as S3, which is considered a sensitive natural community. Given that the MND utilized the same classification manual for identifying sensitive natural communities, it is unclear if the community was simply misidentified as non-sensitive, or if there is additional reasoning to not include it as a sensitive natural community. We recommended either providing more information as to why freshwater marsh was not considered a sensitive natural community or to update the MND to include it as such. This would also entail updating any acreages of impacted habitats.

We appreciate IRWD's early coordination on this Project and the opportunity to comment on this MND. We are confident that through continued coordination between IRWD and the Wildlife Agencies, we can ensure the protection necessary for the biological resources that would be affected by this Project. If you have questions or comments regarding this letter, please contact Colleen Draguesku of the Service at (760) 431-9440 extension 241, or Kyle Rice of the Department at (858) 467-4250.

Sincerely,

**JONATHAN
SNYDER**

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

Digitally signed by
JONATHAN SNYDER
Date: 2019.03.11
16:17:50 -07'00'



Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

cc:
State Clearinghouse

Comment Letter 11: Wildlife Agencies



U.S. FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



CALIFORNIA DEPARTMENT OF
FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, California 92123

In Reply Refer to:
FWS/CDFW-OR-13B0091-19CPA0208

June 11, 2019
Sent by Email

JoAnn Corey
Environmental Compliance Specialist
Irvine Ranch Water District
15600 Sand Canyon Ave.
Irvine, California 92618

Subject: Response to Request for Approval of the May 2019 Habitat Restoration and Enhancement Plan for the Syphon Reservoir Geotechnical Investigations Project

Dear Ms. Corey:

This letter is in response to a June 4, 2019, email from Scott Holbrook of Environmental Science Associates (ESA) on behalf of the Irvine Ranch Water District (IRWD), requesting U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (Department; collectively the Wildlife Agencies) approval of the May 2019 draft Habitat Restoration and Enhancement Plan (HREP) for upland habitat impacts associated with the proposed Syphon Reservoir Geotechnical Investigations Project (Project). The request is to ensure that, with implementation of the HREP, the Wildlife Agencies do not object to the activities proposed in the Initial Study/Mitigated Negative Declaration (IS/MND) for the Irvine Ranch Water District Syphon Reservoir Geotechnical Investigations Project. The Project will take place within the Nature Reserve of Orange County, established under the County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), and within an area that is protected by a conservation Grant Deed recorded January 4, 2010 (IRWD Doc. D0204).

As described in our comment letter dated March 11, 2019, in response to the Notice of Intent to adopt an MND for the Project, a mitigation plan developed in coordination with the Wildlife Agencies is necessary for the Project to receive authorization for incidental take of Covered Species under the NCCP/HCP (Section 5.9.3, page II-361). In addition, the Grant Deed requires IRWD to receive approval from all applicable government agencies in order to enhance the capacity of the reservoir facilities on the property (Section 4.2(c)). Although the geotechnical investigations will not directly enhance the capacity of the reservoir and are not specifically described in the Grant Deed, their implementation is necessary to determine whether future enhancement is possible. As such, the Wildlife Agencies agree that they are allowed within the Grant Deed property, provided they comply with the same restrictions that apply to a reservoir enhancement project (i.e., approval from applicable government agencies). It is our interpretation that the Wildlife Agencies would be considered applicable government agencies under the Grant Deed due to our required involvement in the development of a proposed mitigation plan under

Ms. JoAnn Corey (FWS/CDFW-OR-13B0091-19CPA0208)

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the NCCP/HCP, the Service's right as a third-party beneficiary to enforce the provisions of the covenants, conditions, and restrictions of the Grant Deed, and the Department's regulatory authority over activities in streams and/or lakes pursuant to section 1600 of the Fish and Game Code.

The Project will occur within and outside of the potential future footprint of a reservoir expansion project. IRWD proposes to offset impacts outside of the future reservoir footprint concurrent with the geotechnical investigation and to defer offsetting impacts within the reservoir expansion footprint until either the reservoir expansion project is implemented or the reservoir expansion project is delayed beyond 4 years. The geotechnical investigations will result in an estimated 1.44 acres of impact to coastal sage scrub (CSS) habitat outside of the future reservoir expansion footprint and up to 2.64 acres of CSS impact within the future reservoir expansion footprint.

The Wildlife Agencies reviewed the HREP for consistency with the NCCP/HCP and in consideration of our required approval under the Grant Deed and provided feedback and recommendations to ESA for ensuring appropriate mitigation of upland habitat impacts associated with the Project. Based on our discussions and subsequent email correspondence, an addendum will be added to the HREP that specifies that a total of 5.52 acres of coastal sage scrub (CSS) habitat will be enhanced, in addition to restoring all temporary impacts outside the future reservoir expansion footprint. The 5.52 acres of enhancement is intended to mitigate for the impacts to habitat outside of the reservoir expansion footprint that is protected by the Grant Deed, as well as for temporal losses associated with impacts to habitat both within and outside of the reservoir expansion footprint.

The addendum will also document that if the reservoir expansion project does not move forward or is delayed beyond 4 years, IRWD will utilize their existing take credits under the NCCP/HCP at a 1:1 ratio or will enhance CSS at a 1:1 ratio for each acre impacted within the future reservoir expansion footprint. Temporary impacts within the future reservoir expansion footprint will also be restored as described in the HREP if the reservoir expansion project does not move forward or is delayed beyond 4 years. In addition to the above addendum, the HREP will be amended to require erosion protection in areas disturbed by the Project that are adjacent to CSS habitat. The HREP will further clarify that IRWD is responsible for achieving the performance criteria in the HREP, regardless of damage that could result in the event of wildfire or pest infestation/disease.

With the inclusion of the addendum and the additional revisions to the HREP, the Wildlife Agencies agree that the May 2019 HREP appropriately mitigates upland habitat impacts associated with the Project and incidental take of covered species is authorized under the NCCP/HCP. This letter also serves as formal approval as required by the Grant Deed in our role in determining consistency with the NCCP/HCP and the Service's role as a third-party beneficiary. However, final Department approval pursuant to section 1600 of the Fish and Game Code must be evaluated and ultimately authorized through the streambed notification process. Finally, please note that our concurrence regarding the HREP is not intended to indicate that we will approve the potential reservoir expansion project, as that decision cannot be made until subsequent documentation that includes information about anticipated impacts and proposed

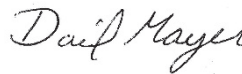
Ms. JoAnn Corey (FWS/CDFW-OR-13B0091-19CPA0208)

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measures to avoid and mitigate those impacts is provided for review by the public and the Wildlife Agencies. We appreciate IRWD's early coordination on this Project and their continued partnership in the successful implementation of the NCCP/HCP. If you have any questions or would like to discuss this matter further, please contact Kyle Rice of the Department at 858-467-4250 or Colleen Draguesku of the Service at 760-431-9440 ext. 241.

Sincerely,

JONATHAN
SNYDER
Digitally signed by
JONATHAN SNYDER
Date: 2019.06.11
11:03:20 -07'00'



for Karen Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

for Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

cc:

Scott Holbrook (Environmental Science Associates), SHolbrook@esassoc.com
Jim Sulentich (Natural Communities Coalition), jsulentich@occonservation.org

SECTION 6

Responses to Comments

Letter 1: South Coast Air Quality Management District

Comment 1-1

The commenter requests that the Irvine Ranch Water District (IRWD) provide all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality monitoring and health risk assessment files in order to allow South Coast Air Quality Management District (SCAQMD) staff to complete a review of the air quality analyses in a timely manner.

Response 1-1

ESA provided the technical documentation via email to Mr. Dalbeck of the SCAQMD on February 21, 2019, as requested.

Letter 2: Gabrieleño Band of Mission Indians

Comment 2-1

The commenter requests that the Gabrieleño Band of Mission Indians' Tribal Government be consulted in the event any discoveries occur as a result of the ground disturbance that will be conducted during Project construction.

Response 2-1

IRWD consulted with the Gabrieleño Band of Mission Indians' Tribal Government regarding the Project, specifically with Mr. Andrew Salas, on January 8, 2019. He is aware of the ground-disturbing activities associated with the Project.

Additionally, as outlined in Mitigation Measure CR-3, an archaeological and a Native American monitor shall observe ground-disturbing activities associated with the Project, which include brush clearance, vegetation removal, grubbing, grading, and excavation. Further, the archaeological and Native American monitors shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the Qualified Archaeologist has evaluated the discovery, consulted with IRWD, and determined appropriate treatment according to established protocols for unanticipated discoveries.

Letter 3: City of Irvine

Comment 3-1

The commenter states that the City of Irvine Community Development staff has completed their review for the Project and has no further comments.

Response 3-1

IRWD thanks the City of Irvine for reviewing the IS/MND. The comment is noted and will be included in the Project record.

Letter 4: South Coast Air Quality Management District

Comment 4-1

The commenter states that the following comments are meant as guidance for IRWD and requests that the comments be incorporated into the Final IS/MND.

Response 4-1

IRWD thanks SCAQMD for reviewing the IS/MND. The comment is noted and will be included in the Project record.

Comment 4-2

The commenter provides the SCAQMD staff summary of the Project Description.

Response 4-2

The comment is noted and will be included in the Project record.

Comment 4-3

The commenter states that the Project may include the use of equipment that requires a permit for operation, and recommends that IRWD consult SCAQMD Engineering and Permitting staff to determine if operation of any of the proposed equipment expected to be used throughout the duration of the study will require a permit from SCAQMD or if the equipment will need to be registered under the Portable Equipment Registration Program (PERP) through the California Air Resources Board (CARB). The commenter further states that if a permit from SCAQMD is required, SCAQMD should be identified as a Responsible Agency for the Project in the Final IS/MND.

Response 4-3

As stated in Table 3 of the IS/MND, IRWD has not identified any permits that will be needed from SCAQMD related to the environmental review process. While a specific contractor has not yet been identified to complete the Project work, IRWD expects that the contractor selected to implement the Project will have all appropriate permits for equipment to be used on-site and that no additional permitting through the SCAQMD would be required.

Comment 4-4

The commenter requests that SCAQMD be provided with responses written in good faith and that include reasoned analysis pursuant to the purpose and goal of CEQA on public disclosure.

Response 4-4

Section 15074(b) of the CEQA Guidelines states that: “Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process. The decision-making body shall adopt the proposed negative declaration or mitigated negative declaration only if it finds on the basis of the whole record before it (including the initial study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects that lead agency’s independent judgment and analysis.” Thus, IRWD will consider SCAQMD’s comments in its decision-making process about whether or not to approve the Project. Per the CEQA Guidelines, IRWD is not required to submit responses to public review comments prior to approving the Project.

Comment 4-5

The commenter offers to address any air quality questions that may arise from public comments and provides contact information for SCAQMD staff.

Response 4-5

The comment is noted and will be included in the Project record.

Letter 5: Orange County Public Works

Comment 5-1

The commenter states that all work within or adjacent to any Orange County Flood Control District (OCFCD) right-of-way for flood control facilities shall be conducted so as not to adversely impact the channel’s structural integrity, hydraulic flow conditions, access and maintainability. The commenter further states that all Project work within OCFCD’s right-of-way should be reviewed and approved by Orange County Public Works, and the work should be conducted only after an encroachment permit has been obtained.

Response 5-1

IRWD reviewed the OCFCD’s Base Map of Drainage Facilities¹³ that overlaps with the proposed Project analyzed in the IS/MND. None of the Project facilities overlap with OCFCD facilities. IRWD will coordinate with OCFCD if an encroachment permit is needed for the Project.

¹³ <http://www.ocgov.com/civicax/filebank/blobdload.aspx?BlobID=23122>

Letter 6: Orange County Fire Authority

Comment 6-1

The commenter states that the Orange County Fire Authority (OCFA) has reviewed the Notice of Intent (NOI) to adopt an IS/MND for the Project, and has no comments.

Response 6-1

IRWD thanks the OCFA for reviewing the IS/MND. The comment is noted and will be included in the Project record.

Letter 7: U.S. Fish and Wildlife Service / California Department of Fish and Wildlife

Background

IRWD, along with several other parties including both the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), is a participant in the Central and Coastal Subregion Natural Community Conservation Plan / Habitat Conservation Plan (NCCP/HCP), dated July 17, 1996 (collectively the “Plan”) and is a signatory to the Implementation Agreement Regarding the Natural Community Conservation Plan for the Central/Coastal Orange County Subregion of the Coastal Sage Scrub Natural Community Conservation Program, dated July 17, 1996 (the “Implementation Agreement”). The Plan contemplates, and authorizes, IRWD’s proposed construction of new reservoir facilities for recycled water¹⁴ and the Implementation Agreement specifies that IRWD is allowed a certain amount of “take” within the boundaries of the Plan for future projects.¹⁵

The purpose of the proposed Project is to conduct geotechnical investigations to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir. This work is necessary to inform the design of an enlarged reservoir, which will reduce the need for imported water and provide the IRWD service area with a more reliable water supply. The geotechnical project will provide additional data and information to develop a more specific design of the future reservoir improvements, and will help to refine the project description in the environmental document for the future expansion project. The geotechnical data will allow IRWD to refine the limits of disturbance, thus minimizing potential impacts associated with the reservoir expansion project.

The scope of the proposed Project, as described in the IS/MND, includes physical activities in the form of 53 borings, 16 exploratory test pits, 3 fault trenches, 5 seismic refraction survey lines, 4 electrical resistivity survey lines, and the associated temporary roads (graded) and “drive and crush” routes (non-graded) to access certain work areas that are not otherwise accessible from existing access roads. All of these activities would be performed within small discrete areas of

¹⁴ See Section 5.9.3 of the Plan, pages II-359-II-362. Specifically, the Plan permits siting a new reservoir within the Reserve System and requires IRWD to review plans with appropriate agencies to discuss siting, design and mitigation issues.

¹⁵ See Section 4.4 of the Implementation Agreement, page 34.

the Project site that were selected to avoid or minimize impacts to biological resources wherever feasible, and all of which constitute temporary impacts that would be mitigated through implementation of the proposed mitigation measures.

IRWD convened a meeting with USFWS and CDFW on April 23, 2019 to discuss the comment letter (dated March 11, 2019) submitted jointly by both agencies. The responses to comments provided below are informed by discussions that ensued at the meeting.

Comment 7-1

The commenter states that the USFWS and the CDFW, collectively referred to as the Wildlife Agencies, have reviewed the Notice of Intent (NOI) to adopt an IS/MND for the Project, and have identified potential effects of this Project on wildlife and sensitive habitats.

Response 7-1

IRWD thanks the Wildlife Agencies for reviewing the IS/MND. The comment is noted and is included in the Project record.

Comment 7-2

The commenter cites USFWS's legal authority over various natural resources occurring in the United States, and states its responsibility to administer the Federal Endangered Species Act (Act) of 1973, including habitat conservation plans (HCPs). The commenter cites CDFW's legal authority as a Trustee Agency and Responsible Agency pursuant to CEQA, the California Endangered Species Act (CESA) and the Fish and Game Code, and states its responsibility to administer the Natural Community Conservation Planning (NCCP) program. The commenter indicates IRWD is a Participating Landowner under the Plan and would be permitted take of covered species under the NCCP/HCP provided that the activity is consistent with the Plan.

Response 7-2

The comment is noted and included in the Project record.

Comment 7-3

The commenter summarizes the Project Description as stated in the NOI.

Response 7-3

The comment is noted and included in the Project record.

Comment 7-4

The commenter summarizes habitat impacts associated with the Project as stated in the NOI.

Response 7-4

The comment is noted and included in the Project record.

Comment 7-5

The commenter states that a large portion of the Geotechnical Investigations Project and future Reservoir Improvement Project overlap with habitat that was previously restored as mitigation for impacts associated with the development of the Eastern Transportation Corridor and is subject to the use restrictions identified in Section 4.2 of the Grant Deed that was recorded January 4, 2010 (IRWD Doc. D0204). The commenter states its understanding that the proposed and future Projects are not currently approved activities under the Grant Deed, and states that it is unclear whether IRWD has addressed this issue in the IS/MND. The commenter requests that prior to any activity associated with the proposed Project and future Reservoir Improvement Project, IRWD should demonstrate that it has received the necessary approvals from applicable government agencies in accordance with 4.2(c) of the Grant Deed. The commenter states that the remaining comments provided by the commenter only apply if the necessary approvals for the proposed Project and future Reservoir Improvement Project are received.

Response 7-5

The proposed Project involves geotechnical investigations to characterize the geologic and geotechnical conditions of the Syphon Reservoir site to inform the design of the future Syphon Reservoir Improvement Project. Section 4.2 of the Grant Deed requires that the associated Mitigation Land at the Project site be used for protection of endangered and threatened species and their habitat and open space preservation. Section 4.2(c) of the Grant Deed allows IRWD the ability to “install, maintain, repair and replace improvements to enhance the safety or capacity of the Reservoir Facilities.” Section 4.2(b) allows for utilities to install facilities such as “electric, telephone, communication, water, gas and sanitary sewer lines, drainage facilities and facilities related thereto.” Section 4.2(b) states that the utilities “will not be deemed to materially interfere with the use of the Land for Environmental Mitigation Purposes if any damage to the Land or the habitat thereon will be substantially repaired and restored... within six months of the installation of the utility.”

The IS/MND for the proposed Geotechnical Investigations Project describes the temporary impacts to endangered and threatened species and their habitat at the Project site, all of which would be mitigated through implementation of the proposed mitigation measures. Implementation of the proposed Project will not install any permanent facilities and would not preclude the Mitigation Lands at the Project site to continue to be used for protection of all endangered/threatened species and their habitat as well as open space preservation.

While not a CEQA issue, IRWD fully recognizes its responsibility under the Grant Deed and intends to uphold and adhere to the conditions established therein. IRWD and its consultants have held several meetings and discussions with representatives from both USFWS and CDFW to discuss the proposed Project and the potential future Syphon Reservoir Improvement Project, including the most recent meeting on April 23, 2019. Those discussions have included preliminary estimates of mitigation requirements and sources for mitigation land. IRWD acknowledges its responsibility to coordinate with the Foothill/Eastern Transportation Corridor Agency (F/ETCA) as well, regarding proposed activities within the Grant Deed parcels and

appropriate mitigation to offset permanent impacts associated with the future Syphon Reservoir Improvement Project.

At present, given the limited scope of the proposed Project, the only approvals required are a 1602 Streambed Alteration Permit (the “1602”) and clearance from USFWS and CDFW under the Plan. CDFW is the approval agency for the 1602, but the IS/MND is a necessary prerequisite for CDFW’s consideration of the 1602. For temporary impacts associated with the Geotechnical Investigations Project, IRWD will submit a mitigation plan for the Wildlife Agencies to review (see Response 7-7 and Response 7-8 below). As discussed at the meeting on April 23, 2019, the Wildlife Agencies would issue a joint letter to IRWD indicating that they do not object to the Geotechnical Investigations Project as proposed.

Comment 7-6

The commenter states that the IS/MND suggests that the impacts from the current and future Project are already mitigated through IRWD’s participation in the NCCP/HCP. The commenter indicates that while the future Reservoir Improvement Project is a permitted use in the Reserve, IRWD did not seek specific take authorization for this Project at the time of NCCP/HCCP completion because no decision had been made to build a new storage reservoir. Instead, it was anticipated that “at the time such facility [was] needed, IRWD [would] review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the incidental take associated with the reservoir” (NCCP/HCP Page II-361). Therefore, the commenter states that take of covered species, including gnatcatcher and least Bell’s vireo, is not authorized until a mitigation plan is developed in coordination with the Wildlife Agencies.

Response 7-6

While the exact location for a future reservoir had not been determined at the time that the NCCP/HCP was prepared, the need for such a facility was clearly identified and a future reservoir was provided for in the NCCP/HCP as “a permitted use within the Reserve System” (as stated in Section 4.4 on page 47 of the IS/MND). As a signatory to the NCCP/HCP Implementation Agreement and as a full participant in the NCCP/HCP, IRWD acknowledges its obligations under both the Plan and the Implementation Agreement. Although the commenter identifies the language in the NCCP/HCP that indicates a mitigation plan or fee payment is required for take to be authorized, the Implementation Agreement, which was completed after the NCCP/HCP, allows use of non-specific take credits to be applied to offset removal of coastal sage scrub (CSS) habitat. Therefore, IRWD may spend part of its allocation of these credits as an acceptable alternative to “payment of fees” to offset CSS impacts (see Mitigation Measure BIO-1 as revised). In addition, Mitigation Measure BIO-6 will ensure the Project’s compliance with the NCCP/HCP’s Construction Related Minimization Measures.

Furthermore, the impacts associated with the geotechnical investigations under the proposed Project will be temporary and will occur within small discrete areas and along several access routes within the NCCP Reserve. Given the limited areas affected (about 2.1% of total CSS and about 2.4% of mixed non-native grassland/CSS habitat), and recognizing that the temporary uses

will occur outside the breeding season, no take of covered species is anticipated with the implementation of Mitigation Measures BIO-1 and BIO-2.

Comment 7-7

The commenter states that through early coordination meetings, the Wildlife Agencies and IRWD have agreed that it is appropriate to delay implementation of a mitigation plan for impacts associated with the current geotechnical investigations if the impact area overlaps with the potential future Reservoir Improvement Project. The commenter recommends the language in the IS/MND regarding impacts to special-status species be updated to reflect this and clearly state that impacts will be mitigated in accordance with a mitigation plan developed for the future Reservoir Improvement Project or, in the event the future project does not move forward, in accordance with a mitigation plan developed for the proposed Project. The commenter states that the mitigation plan for the proposed Project should be finalized prior to impacts occurring and implemented within 1 year of Project completion if the future project does not move forward.

Response 7-7

As noted by the Wildlife Agencies, it was agreed that mitigation for impacts associated with the proposed Project that occur within the footprint of the future Reservoir Improvement Project may be delayed. Mitigation Measures BIO-1, BIO-3, BIO-4, and BIO-5 include provisions to allow for mitigation for impacts within the footprint of the future project to be used to offset impacts for the proposed Project in-lieu of returning temporary impacts to pre-Project conditions (i.e., since the larger future project will re-impact most of the same areas impacted in the proposed Project) as determined acceptable by the Wildlife Agencies. However, language in Mitigation Measures BIO-1, BIO-3, BIO-4, and BIO-5 has been revised to better clarify the timing of mitigation implementation.

The text of Mitigation Measure BIO-1 related to special-status species is revised on page 40 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to special-status species associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

The text of Mitigation Measure BIO-3 related to sensitive natural communities is revised on page 43 to 44 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to sensitive natural communities associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:...

The text of Mitigation Measure BIO-4 related to CDFW jurisdictional riparian habitat is revised on page 44 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to CDFW jurisdictional riparian habitat associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

The text of Mitigation Measure BIO-5 related to wetlands and waters of the State is revised on page 45 to 46 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to wetlands and waters of the State associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the

same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

In addition, IRWD also recognizes that it is appropriate to restore any areas where CSS is directly affected beyond the footprint of the future Reservoir Improvement Project. A plan to restore such areas is currently being prepared and will be submitted for review by the Wildlife Agencies prior to commencing the proposed Geotechnical Investigations Project. Implementation of restoration efforts detailed in that plan would commence immediately upon completion of the proposed Project, although application of seed may not occur until the appropriate season (e.g., mid-to-late Fall).

Comment 7-8

The commenter states that any mitigation plan(s) described above for both the future and proposed Project would need to account for the past restoration efforts and adequately replace the lost habitat that was protected by the Grant Deed. For permanent impacts, the Wildlife Agencies typically recommend mitigating for any current project impacts, in addition to past project impacts through increased ratios or protection of habitat that is of higher quality and value to the Reserve. For temporary impacts, the Wildlife Agencies recommend that areas should be restored immediately following project completion and additional mitigation should be provided for the temporal loss of habitat that was otherwise expected to provide benefits to previously impacted species. The commenter states that currently, the Grant Deed is only briefly mentioned in the Biological Resources Technical Report (Appendix BIO), and there is no reference of the Grant Deed in the IS/MND or additional mitigation to account for the proposed impacts to these areas. The commenter recommends including a discussion of the Grant Deed in the IS/MND, and states that this discussion should include a figure that clearly depicts where the proposed Project overlaps with the habitat protected by the Grant Deed. For areas that fall outside of the future Reservoir Improvement Project footprint but within the Grant Deed, the commenter states that a mitigation plan that accounts for the temporal loss of covered species habitat should be developed and implemented immediately following Project impacts. For habitat impacts within the footprint of the future Reservoir Improvement Project, the commenter agrees that implementation of such a mitigation plan may be delayed until it is determined if the future Reservoir Improvement Project will move forward. However, the mitigation plan should be finalized and approved by the Wildlife Agencies prior to impacts occurring. In the interim, the commenter would expect these areas to be allowed to naturally recover as described in BIO-1, BIO-3, BIO-4, and BIO-5.

Response 7-8

The comment is acknowledged and IRWD is currently researching mitigation opportunities for the future Syphon Reservoir Improvement Project with these considerations in mind. Proposed mitigation will be in coordination with the Wildlife Agencies. Based on earlier coordination with the Wildlife Agencies, IRWD understands that, in addition to mitigation to offset the proposed Project and future Syphon Reservoir Improvement Project, USFWS and CDFW are requesting mitigation for habitat that was previously restored as mitigation for impacts associated with the development of the Eastern Transportation Corridor, which was presumed conserved prior to the Syphon Reservoir Improvement Project being proposed.

It is important to recognize that the impacts associated with the proposed Project within the Mitigation Grant Deed parcels on the property are not considered permanent impacts, except where impacts would occur within the future Reservoir Improvement Project's footprint of permanent impacts (see Response 7-7). Accordingly, they will not be restored if the future project is implemented up to four years after the start of the geotechnical investigations since the future project will permanently impact those areas and will provide mitigation to offset those impacts, as determined acceptable by the Wildlife Agencies. Outside the limit of the future Reservoir Improvement Project impacts, the proposed Project's temporary impacts within CSS habitat will be restored as noted in the previous response, with restoration to be initiated immediately after completion of the proposed Project with the implementation of Mitigation Measures BIO-1 and BIO-3. A plan to restore such areas is currently being prepared and will be submitted for review by the Wildlife Agencies prior to commencing the proposed Project. In addition, the plan will include provisional mitigation for restoration of areas within the limits of the future Reservoir Improvement Project. In the event that construction of the future project is not initiated within four years following initiation of the Geotechnical Investigations Project, measures are included to address temporal loss of habitat.

The Grant Deed is disclosed in the IS/MND for background information; however, details of the Grant Deed are reserved for IRWD and F/ETCA and USFWS, and will continue to be discussed between the parties directly involved. IRWD appreciates the suggestion and has updated Figures 4, 12, 13, 14A and 14B of Appendix BIO the IS/MND to include the Grant Deed boundary to show where the proposed Project overlaps with the habitat protected by the Grant Deed. The revised figures are included in Section 7, Errata.

Comment 7-9

The commenter states that although draining of the reservoir currently occurs as part of the ongoing operation of the reservoir, it is unclear if the draining associated with the proposed Project would be of the same scope (i.e., timing and duration) as the draining associated with ongoing operations. The commenter states that draining the reservoir during the avian breeding season (February 15 to August 31) has the potential to disturb nesting patterns for least Bell's vireo and other sensitive avian species that are present within the Project footprint. The commenter recommends that any draining be done outside the nesting season and requests that the IS/MND to be updated to clarify the timing and extent of the draining activity and whether it is consistent with current practices. In addition, the commenter states that excavation and boring

activities that must occur within those portions of the reservoir that become inundated during the wet season should be prioritized and targeted for completion during the fall dry season to allow the regular hydrological conditions to return as quickly as possible and to limit the amount of time the riparian habitat could be impacted.

Response 7-9

The Geotechnical Investigations Project is proposed to occur during the non-breeding season (e.g., August 31 to February 15). Draining the reservoir must occur prior to starting the geotechnical exploration to adequately dry the reservoir enough for the geotechnical investigation work to occur. The reservoir is drained frequently as part of the ongoing operations of the reservoir but draining and refilling are not conducted according to a set annual schedule. The commenter's recommendations are noted regarding prioritization of Project activities within inundation areas.

Comment 7-10

Mitigation Measures BIO-1, BIO-3, BIO-4, and BIO-5 propose to allow areas that were temporarily impacted during Project implementation to passively recover following its conclusion and to be monitored for a 3-year period, or until a qualified biologist determines that the impact site has returned to pre-Project conditions. For areas that do not reestablish naturally following Project completion, a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring. The commenter states that although this approach may be appropriate for access roads impacted by the drive and crush method, it is unlikely to be appropriate for areas that were graded or excavated due to the level of soil disturbance associated with these activities. The commenter recommends that the Project proponent anticipate needing to actively revegetate graded and excavated areas following Project completion and including a revegetation component in the mitigation plan that is developed as described above. For those areas that lie outside of the footprint of the future Reservoir Improvement Project, the commenter states that implementation of the approved mitigation plan should begin immediately following Project completion.

Response 7-10

As noted in Responses 7-7 and 7-8, a detailed plan will be prepared and submitted to the Wildlife Agencies to address CSS habitat areas that lie outside the footprint of the future Reservoir Improvement Project. The mitigation plan will specify timing for particular elements of implementation. Initial site preparations and re-contouring to re-establish surface conditions would commence immediately following completion of the current Project. Seed application would be performed during the Fall following Project completion as noted in Response 7-7.

Comment 7-11

The IS/MND indicates that the majority of boring and sample pit sites will be filled on the same day, as will the shorter seismic trenches. However, the commenter states that a few of the longer seismic trenches may remain open for a few days and would be required to be covered with plywood or metal plates to secure the trench at the end of each work day. In addition to the

plywood or metal plate, the commenter recommends covering the trench with a layer of plastic and lining the edges with sandbags to prevent small mammals and/or herpetofauna from entering the trench during off hours. The plywood or metal plates should then be placed on top of the plastic. The commenter also recommends that the monitoring biologist referenced in Mitigation Measure BIO-6 be experienced in small mammal/herpetofauna trapping and be present on-site during the work day while the trenches are open in order to effectively trap and remove any species that fall into the trench.

Response 7-11

This Project does not anticipate impacts to small mammals or herpetofauna that would require such specialized monitoring and trapping expertise as recommended by the commenter. As stated on page 12 of the IS/MND, the longer seismic trenches would only remain open for a few days. However, as a protective practice to be implemented during construction, IRWD has added details about trench covering to the Project Description.

The text of the IS/MND is revised on page 12 as follows:

A few of the longer seismic trenches may remain open for a few days while the geologist analyzes the excavation. During these isolated conditions, IRWD would require the contractor to cover the open trench with a layer of plastic, followed by a plywood or metal plate to secure the trench at the end of each work day. Sandbags would also be placed around the edges of the lining to secure the trench.

Comment 7-12

The Project is expected to temporarily impact a total of 4.05 acres that are classified as sensitive natural communities. The IS/MND lists black willow thicket, CSS, and nonnative herbaceous cover/California sagebrush scrub as sensitive natural communities that occur on-site. However, that commenter states that the IS/MND fails to include freshwater marsh habitat as a sensitive natural community. The California Native Plant Society's Manual of California Vegetation ranks the *Schoenoplectus (acutus, californicus)* Herbaceous Alliance as S3, which the commenter indicates is considered a sensitive natural community. Given that the IS/MND utilized the same classification manual for identifying sensitive natural communities, the commenter states that it is unclear if the community was simply misidentified as non-sensitive, or if there is additional reasoning to not include it as a sensitive natural community. The commenter recommends either providing more information as to why freshwater marsh was not considered a sensitive natural community or to update the IS/MND to include it as such. This would also entail updating any acreages of impacted habitats.

Response 7-12

The comment is correct. Freshwater marsh is considered a sensitive natural community by CDFW (52.114.02 – *Schoenoplectus californicus*), and this has been revised in Section 4.4 of the IS/MND and Appendix BIO.

The text of the IS/MND on pages 41-42 is revised as follows:

Less than Significant with Mitigation Incorporated. ~~Eleven~~ sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, freshwater marsh, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/nonnative herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The Project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket, freshwater marsh), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project’s geotechnical investigations are completed, including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed Project would temporarily impact ~~4.314-05~~ acres of sensitive natural communities, including 0.02 acre of black willow thicket, 0.26 acre of freshwater marsh, 2.02 acres of California sagebrush scrub, and 2.01 acres of nonnative herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. Table 8 summarizes the temporary impacts on sensitive natural communities from the proposed Project. The Project would avoid ~~184.49178.88~~ acres of sensitive natural communities (including 4.11 acres of black willow thicket, 5.61 acres of freshwater marsh, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area...

**TABLE 8
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh*	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61

The text of the IS/MND on page 43 is revised as follows:

- a. Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-Project conditions...

The text of Appendix BIO on page 22 is revised as follows:

**TABLE 2
NATURAL COMMUNITIES**

Natural Community	Acres	State Rank¹
Arroyo Willow Thicket*	0.24	S4
Black Willow Thicket*	4.13	S3
Mule Fat Scrub	2.25	S4
Freshwater Marsh*	5.87	S4

The text of Appendix BIO on page 23 is revised as follows:

Freshwater marsh is ~~not~~ considered a sensitive natural community by CDFW (52.114.02 – *Schoenoplectus californicus*) (CDFW 2018c).

The text of Appendix BIO on pages 52-53 is revised as follows:

~~Eleven~~^{Ten} sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, freshwater marsh, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket, freshwater marsh), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project’s geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed project would temporarily impact ~~4.314.05~~ acres of sensitive natural communities, including 0.02 acre of black willow thicket, 0.26 acre of freshwater marsh, 2.02 acres of California sagebrush scrub, and 2.01 acres of non-native herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. **Table 4** summarizes the permanent and temporary impacts on sensitive natural communities from the proposed project (shown in **Figure 13**). The project would avoid ~~184.49178.88~~ acres of sensitive natural communities (including 4.11 acres of black willow thicket, 5.61 acres of freshwater marsh, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the

arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area...

**TABLE 4
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh*	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61

The text of Appendix BIO on page 62 is revised as follows:

Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-project conditions (i.e., pre-project conditions...

Letter 8: Transportation Corridor Agencies

Comment 8-1

The commenter summarizes the Project Description.

Response 8-1

IRWD thanks the Transportation Corridor Agencies (TCA) for reviewing the IS/MND. The comment is noted and will be included in the Project record.

Comment 8-2

The commenter states that the Biological Resources Technical Report (page 5) acknowledges that when IRWD acquired Syphon Reservoir from the Irvine Company, the Conveyance Agreement included a Grant Deed with use restrictions to provide for the conservation of the biological resources associated with the previous TCA mitigation lands on a large portion of the Project’s Study Area. The commenter states that the Biological Resources Technical Report further acknowledges the need for coordination with the third-party beneficiaries of the Grant Deed (i.e., TCA and U.S. Fish and Wildlife Service). As such, the commenter states that TCA is looking forward to this coordination and requests to be kept on the IRWD’s distribution list for all future notices, along with any other forthcoming documentation for the Project. The commenter provides contact information for IRWD in the event that any questions or comments arise.

Response 8-2

Please refer to Responses 7-5 and 7-8 above. IRWD will continue coordination with USFWS and meet with TCA regarding the proposed Geotechnical Investigations Project and appropriate mitigation to offset impacts, potential mitigation opportunities, and requirements prior to the commencement of any activity associated with the proposed Project. TCA will remain on the distribution list for all relevant documentation regarding the proposed Project and any potential future projects implemented at Syphon Reservoir.

Letter 9: California Department of Water Resources**Comment 9-1**

The commenter states that Syphon Reservoir is currently under State jurisdiction; therefore, the proposed work described for the Project is subject to State jurisdiction. An alteration application, together with plans, specifications, and the appropriate filing fee must be filed with the Division of Safety of Dams (DSOD) for the Project.

Response 9-1

IRWD thanks the California Department of Water Resources for reviewing the IS/MND. The comment is noted and will be included in the public record. IRWD has submitted an alteration application, geotechnical investigation work plan and associated filing fee for DSOD's review and approval.

Comment 9-2

The commenter states that all dam safety related issues must be resolved prior to approval of the alteration application, and that the work must be performed under direction of a Civil Engineer registered in California. The commenter provides contact information in the event that IRWD would like assistance with the application process.

Response 9-2

This comment is noted. IRWD will continue to coordinate with the DSOD regarding all regulated activities at Syphon Reservoir and will obtain all required approvals.

Letter 10: State Clearinghouse**Comment 10-1**

The commenter states that IRWD has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA. The commenter provides a copy of a comment letter previously submitted to IRWD from USFWS/CDFW.

Response 10-1

Responses to the USFWS/CDFW letter are provided in Responses 7-1 through 7-12 above.

SECTION 7

Errata

Page 11

The text of the IS/MND is revised on pages 11-12 as follows:

A few of the longer seismic trenches may remain open for a few days while the geologist analyzes the excavation. During these isolated conditions, IRWD would require the contractor to cover the open trench with a layer of plastic, followed by a plywood or metal plate to secure the trench at the end of each work day. Sandbags would also be placed around the edges of the lining to secure the trench.

Page 40

The text of Mitigation Measure BIO-1 related to special-status species is revised on page 40 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to special-status species associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

Page 41

The text of the IS/MND on pages 41-42 is revised as follows:

Less than Significant with Mitigation Incorporated. ~~Eleven~~~~ten~~ sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, freshwater marsh, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/nonnative herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The Project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket, freshwater marsh), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the Project’s geotechnical investigations are completed, including when IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed Project would temporarily impact ~~4.314.05~~ acres of sensitive natural communities, including 0.02 acre of black willow thicket, 0.26 acre of freshwater marsh, 2.02 acres of California sagebrush scrub, and 2.01 acres of nonnative herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. Table 8 summarizes the temporary impacts on sensitive natural communities from the proposed Project. The Project would avoid ~~184.49178.88~~ acres of sensitive natural communities (including 4.11 acres of black willow thicket, 5.61 acres of freshwater marsh, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area...

**TABLE 8
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh [†]	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61

Page 43

The text of Mitigation Measure BIO-3 related to sensitive natural communities is revised on page 43 to 44 of the IS/MND as follows:

- a. Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-Project conditions...
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to sensitive natural communities associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement

Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:...

Page 44

The text of Mitigation Measure BIO-4 related to CDFW jurisdictional riparian habitat is revised on page 44 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to CDFW jurisdictional riparian habitat associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

Page 45

The text of Mitigation Measure BIO-5 related to wetlands and waters of the State is revised on page 45 to 46 of the IS/MND as follows:

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (~~i.e., since the larger future Project will re-impact most of the same areas impacted in this Project~~) may be used to offset impacts to wetlands and waters of the State associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: ...

Page 75

Based on direct correspondence with the RWQCB, the text on pages 75 to 76 of the IS/MND is revised as follows:

Less than Significant Impact. The proposed Project would include earthwork activities such as excavation, drilling and grading, which would involve the disturbance and exposure of surface soils. As such, exposed soils could increase erosion and sedimentation in surface runoff during storm events. In addition, exploration activities would involve use of chemicals and solvents such as fuel and lubricating grease for motorized heavy equipment, which could accidentally spill and subsequently impact stormwater quality. (For more discussion of this topic please refer to Section 4.9, Hazards and Hazardous Materials). Within the catchment area of the reservoir, stormwater would be contained onsite behind the dam and would prevent the release of sediment or hazardous materials to downstream receiving waters. For Project exploration activities below the dam, the activities are limited to borings within existing roadways, and therefore are not anticipated to generate additional sediment in appreciable quantities leading to transport beyond the immediate work area. ~~there is potential for stormwater to transport sediment and/or hazardous materials downstream to other receiving waters.~~

Since Project exploration activities below the dam would disturb an area ~~less~~ greater than an acre, the Project would not be subject to a Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. ~~As required under the Construction General Permit, IRWD or its contractor would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.~~

~~In particular, erosion control BMPs would be used to prevent the degradation of water quality in the construction area. Other BMPs that could be used to enhance erosion control include scheduling to avoid wet weather events; preservation of existing vegetation where feasible; hydraulic mulching; hydroseeding; using soil binders; straw mulching; using geotextiles, plastic covers, and erosion control blankets/mats; and wood mulching. Examples of erosion control BMPs are installing a silt fence; creating a sediment/desilting basin; installing sediment traps; installing check dams; using fiber rolls; creating gravel bag berms; street sweeping and vacuuming; creating a sandbag barrier; creating a straw bale barrier; and storm drain inlet protection. BMPs would also include practices for proper handling of chemicals such as avoidance of fueling at the construction site and overtopping during fueling, and installation of containment pans. Further, implementation of the construction BMPs would be consistent with the Orange County Stormwater Program and would begin with the commencement of construction and continue through the completion of exploration activities (OC Public Works 2018).~~

~~Implementation of the SWPPP and BMPs in compliance with the NPDES permitting requirements would avoid or reduce all erosion and sedimentation impacts to below a~~

~~level of significance. Since the dam will contain any impacts from the upstream Project activities, and since no appreciable impacts are anticipated by the downstream Project activities, all erosion and sedimentation impacts are expected to be below a level of significance.~~

In addition, geotechnical borings would encounter groundwater during drilling activities. Borings would be backfilled within 24 hours of completion and would not allow for the introduction of surface waters or foreign materials into the groundwater basin. As a result, impacts to groundwater quality would be less than significant.

Page 77

Based on direct correspondence with the RWQCB, the text on page 77 of the IS/MND is revised as follows:

~~As discussed above in response to Question 4.10(a), (a/f), the Project would require implementation of a SWPPP, including BMPs for erosion control and for proper handling of chemicals. As such, the proposed Project would not provide substantial additional sources of polluted runoff. Impacts would be less than significant.~~

Page 77

Based on direct correspondence with the RWQCB, the text on page 78 of the IS/MND is revised as follows:

Less than Significant Impact. As stated above in Question 4.10(c)(iv), the proposed Project is in a 100-year flood zone. As discussed above in Question 4.10(a), the proposed Project would not provide substantial additional sources of polluted runoff. a SWPPP would be prepared and implemented during the proposed geotechnical investigations to ensure proper handling of chemicals and avoid release of pollutants to the Project site. As such, impacts due to potential release of pollutants in a flood hazard area would be less than significant.

Appendix BIO

The text of Appendix BIO on page 22 is revised as follows:

**TABLE 2
NATURAL COMMUNITIES**

Natural Community	Acres	State Rank¹
Arroyo Willow Thicket*	0.24	S4
Black Willow Thicket*	4.13	S3
Mule Fat Scrub	2.25	S4
Freshwater Marsh*	5.87	S4

The text of Appendix BIO on page 23 is revised as follows:

Freshwater marsh is ~~not~~ considered a sensitive natural community by CDFW (52.114.02 – *Schoenoplectus californicus*) (CDFW 2018c).

The text of Appendix BIO on pages 52-53 is revised as follows:

~~Eleven~~^{Ten} sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, freshwater marsh, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket, freshwater marsh), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project’s geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed project would temporarily impact ~~4.31~~^{4.05} acres of sensitive natural communities, including 0.02 acre of black willow thicket, 0.26 acre of freshwater marsh, 2.02 acres of California sagebrush scrub, and 2.01 acres of non-native herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. **Table 4** summarizes the permanent and temporary impacts on sensitive natural communities from the proposed project (shown in **Figure 13**). The project would avoid ~~184.49~~^{178.88} acres of sensitive natural communities (including 4.11 acres of black willow thicket, 5.61 acres of freshwater marsh, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area...

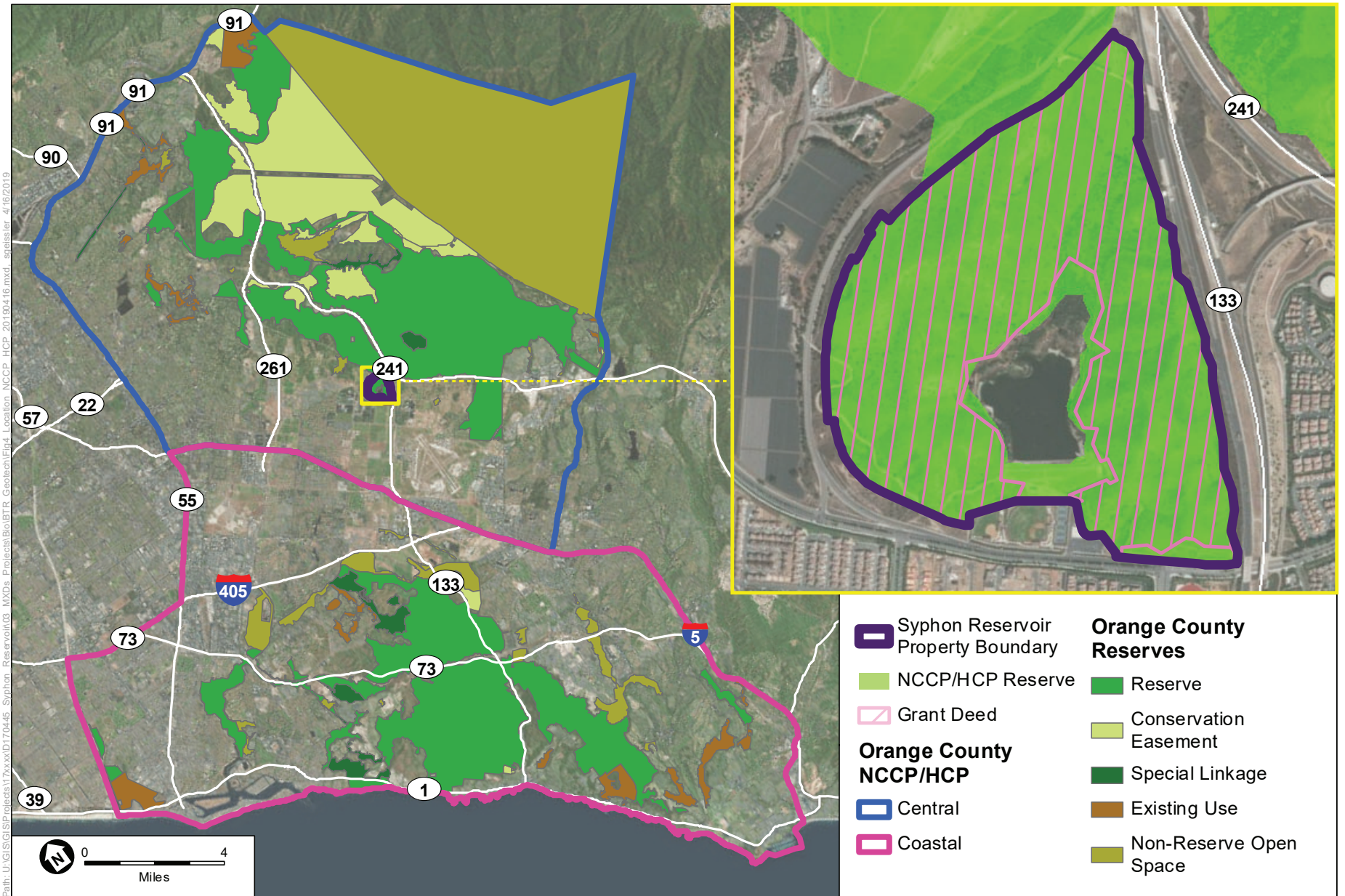
**TABLE 4
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh*	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61

The text of Appendix BIO on page 62 is revised as follows:

Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-project conditions (i.e., pre-project conditions...

The Grant Deed is disclosed in the IS/MND for background information; however, details of the Grant Deed are reserved for IRWD and F/ETCA and USFWS, and will continue to be discussed between the parties directly involved. IRWD appreciates the suggestion and has updated Figures 4, 12, 13, 14A and 14B of Appendix BIO to the IS/MND to include the Grant Deed boundary to show where the proposed Project overlaps with the habitat protected by the Grant Deed.

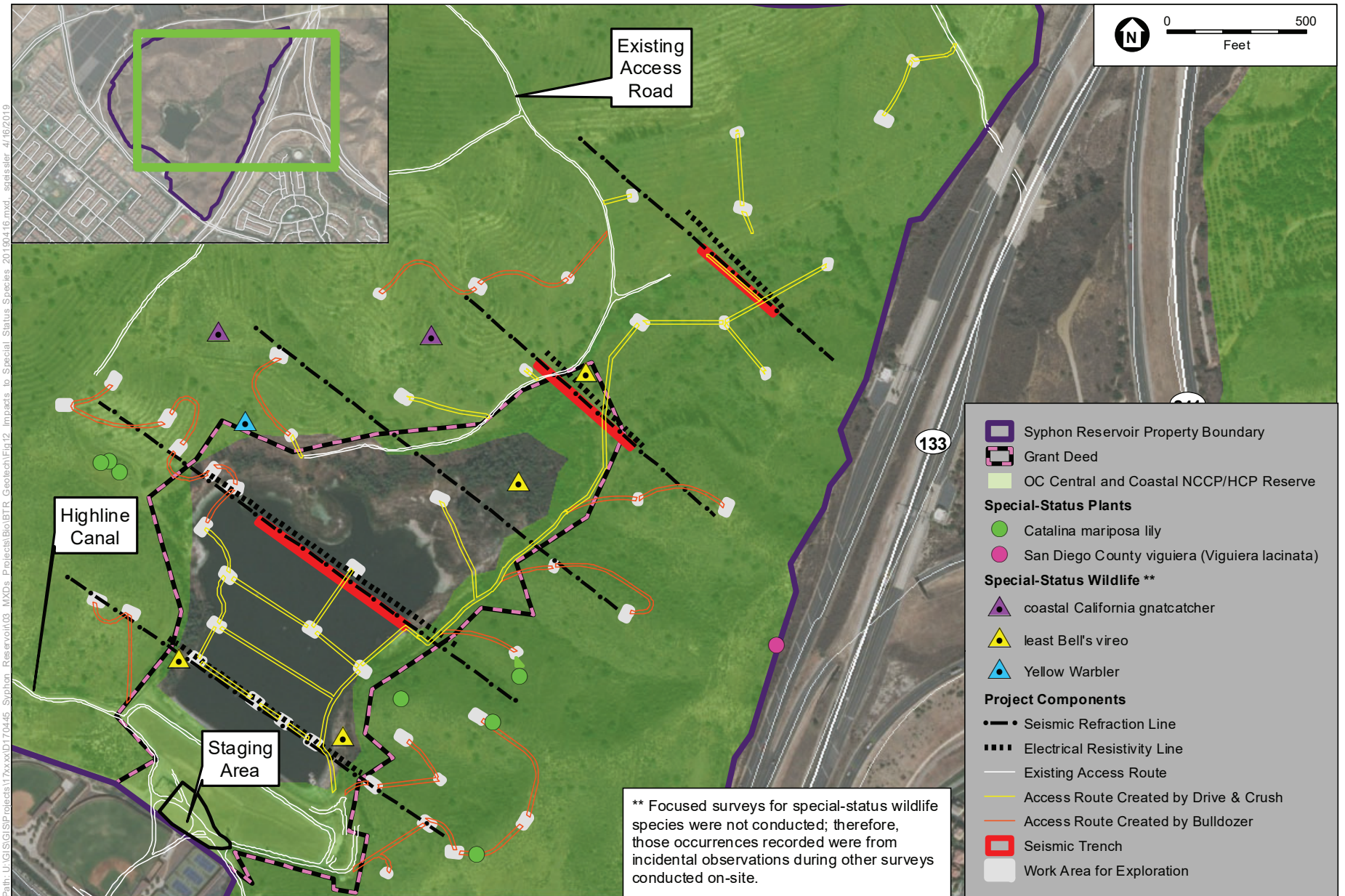


SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 4

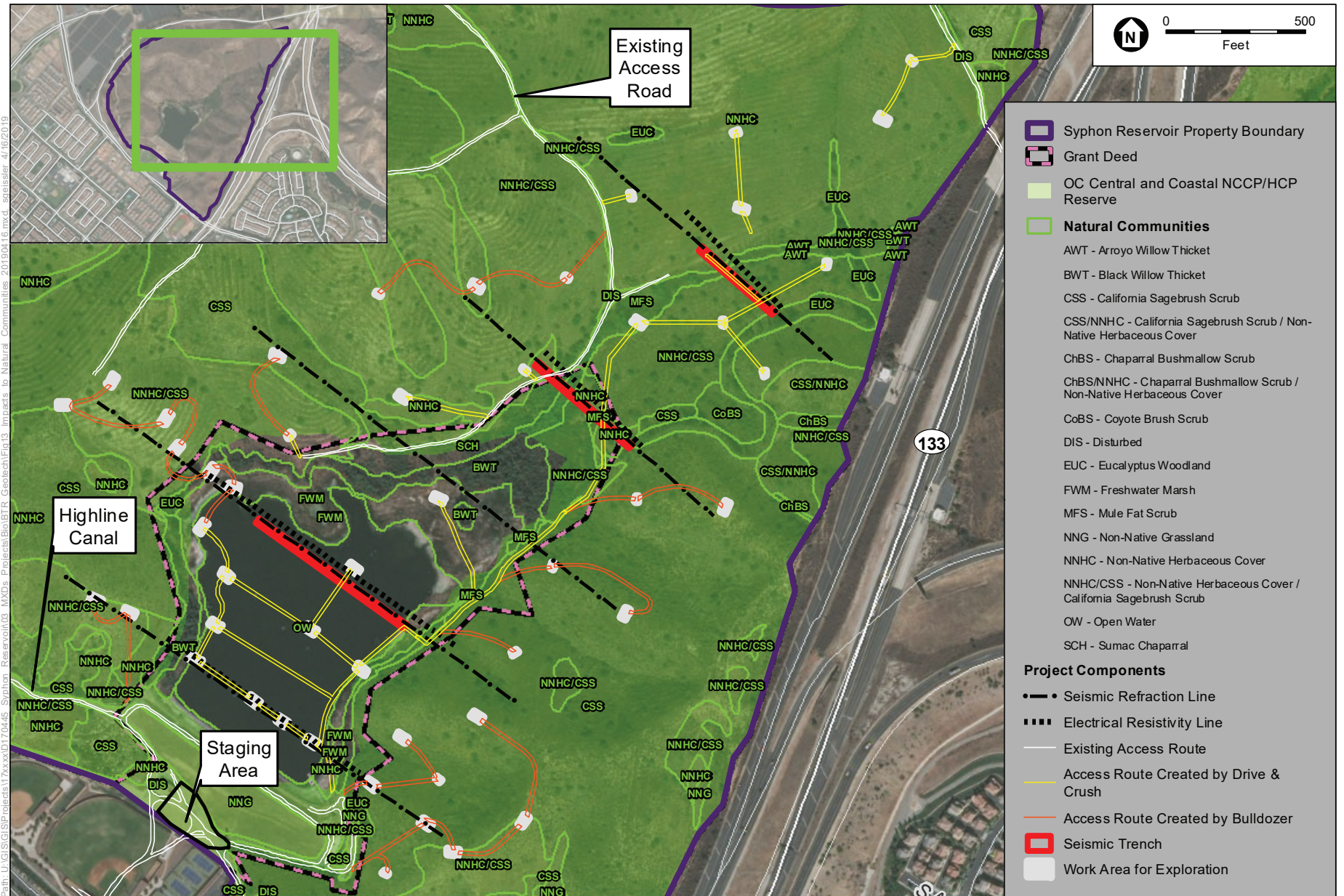
Study Area Location within NCCP/HCP



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 12
Impacts to Special-Status Species



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project
Figure 13
 Impacts to Natural Communities

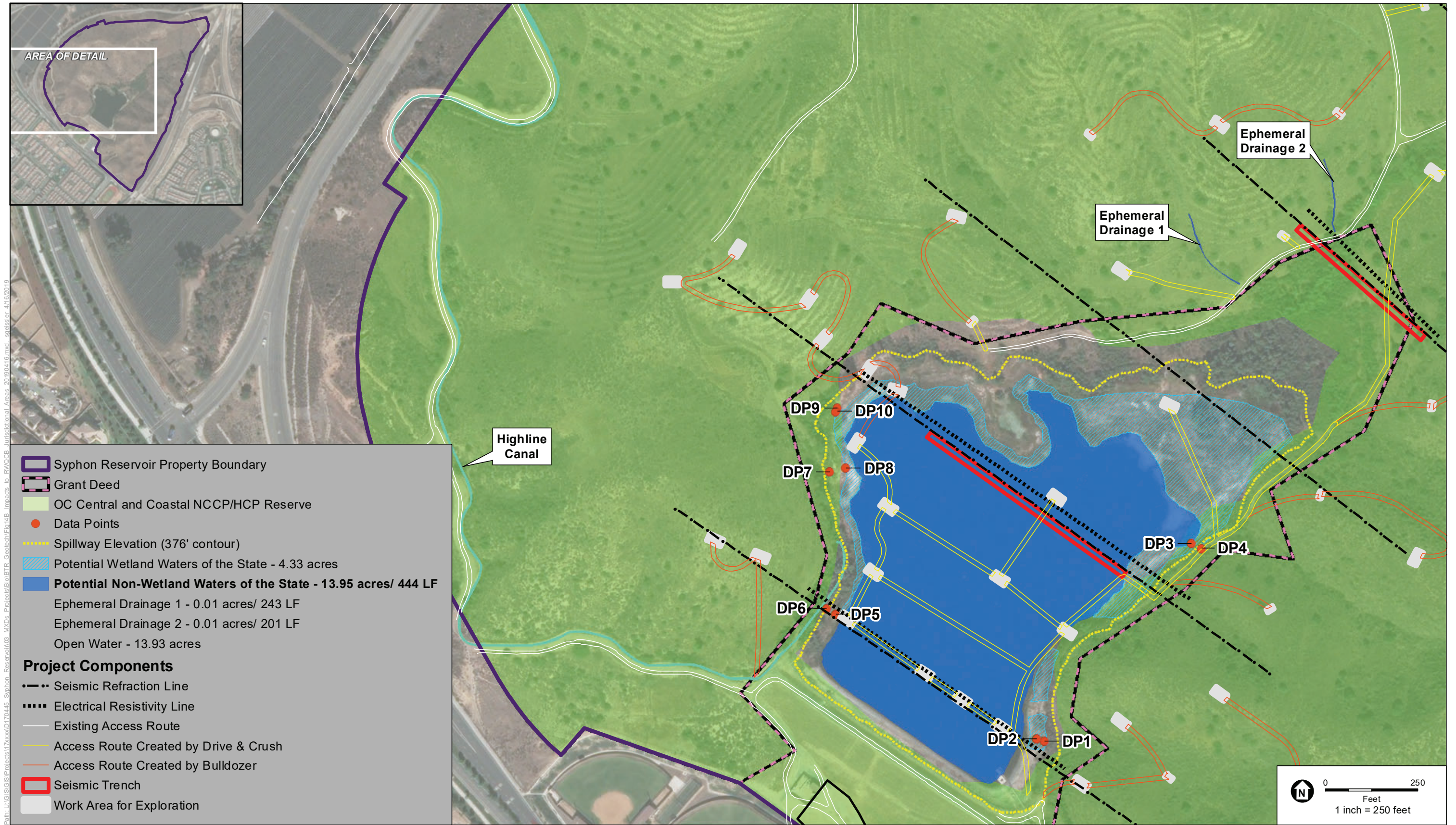
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SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 14A
Impacts to CDFW Jurisdictional Areas



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 14B
Impacts to RWQCB Jurisdictional Areas

SECTION 8

Mitigation Monitoring and Reporting Program

In accordance with Section 15097 of the CEQA Guidelines, “[i]n order to ensure that the mitigation measures and project revisions identified in the...negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” As such, the Mitigation Monitoring and Reporting Program (MMRP) for the Syphon Reservoir Geotechnical Investigations Project is presented in the table below. The MMRP summarizes the mitigation commitments identified in the IS/MND. The mitigation measures are presented in the same order as they occur in the IS/MND.

The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less-than-significant level.
- **Implementation, Monitoring, and Reporting Action:** The appropriate steps to implement and document compliance with the mitigation measures.
- **Schedule:** The general schedule for conducting each task, either prior to construction, during construction and/or after construction.
- **Responsibility:** The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, IRWD, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the program (CEQA Guidelines, Section 15097(a)).

**TABLE 14
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE
IRWD SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT**

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
Biological Resources			
<p>BIO-1: Mitigate Temporary Impacts to Special-Status Species. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to special-status species:</p> <p>a. Areas where temporary impacts occur would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.</p> <p>b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project may be used to offset impacts to special-status species associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:</p> <ol style="list-style-type: none"> 1. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio. 2. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable, as determined acceptable by the USFWS and CDFW. 	<ul style="list-style-type: none"> • Retain a qualified biologist to prepare a Habitat Restoration and Enhancement Plan to implement BIO-1. • Retain a qualified biologist to implement the Habitat Restoration and Enhancement Plan. • Conduct monitoring of impacted areas in accordance with mitigation requirements and the Habitat Restoration and Enhancement Plan. • Maintain copies of monitoring reports in the project files. • If necessary, coordinate with USFWS and CDFW in accordance with mitigation requirements. • Maintain copies of USFWS and/or CDFW correspondence, meetings, and approvals as applicable. 	<ul style="list-style-type: none"> • Prior to Construction • Post-Construction 	<ul style="list-style-type: none"> • IRWD

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>BIO-2: Avoid Impacts to Nesting Birds. Impacts to nesting birds, including white-tailed kite, would be avoided by conducting all construction activities outside of the bird nesting season (i.e., work should occur September 1 to February 14, or July 1 to January 14 for raptors). If bird nesting season cannot be avoided, the following measures would be followed:</p> <p>a. Prior to work during the bird nesting season (February 15 to August 31, or January 15 to June 31 for raptors), a qualified biologist should conduct a pre-construction survey of all suitable habitat for the presence of nesting birds no more than 7 days prior to construction and/or maintenance activities. The results of the pre-construction survey would be valid for 7 days; if vegetation removal activities do not commence within 7 days following the survey, a new pre-construction nesting bird survey should be conducted before these activities begin again.</p> <p>b. If any active nests are found during a pre-construction nesting bird survey, a buffer of 300 feet (500 feet for raptors), or as determined appropriate by the qualified biologist (based on species-specific tolerances and site-specific conditions) in consultation with IRWD, would be delineated, flagged, and avoided until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). The qualified biologist may also recommend alternative measures to minimize disturbances to the nest, which may include, but are not limited to, erection of sound barriers (e.g., noise blankets), erection of visual barriers (e.g., hay bales), or full-time monitoring by a qualified biologist.</p>	<ul style="list-style-type: none"> • Retain a qualified biologist to conduct a pre-construction nesting survey if necessary. • Establish buffers if required in accordance with mitigation requirements. • Retain a qualified biologist to conduct routine inspections of buffers during project construction. • Maintain copies of survey report and inspection notes in the project file 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors
<p>BIO-3: Mitigate Temporary Impacts to Sensitive Natural Communities. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to sensitive natural communities:</p> <p>a. Areas where temporary impacts occur to sensitive natural communities (black willow thicket, freshwater marsh, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with locally indigenous species, and would include performance standards, success criteria, maintenance, and future monitoring.</p> <p>b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project may be used to offset impacts to sensitive natural communities associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a)</p>	<ul style="list-style-type: none"> • Retain a qualified biologist to prepare a Habitat Restoration and Enhancement Plan to implement BIO-3. • Retain a qualified biologist to implement the Habitat Restoration and Enhancement Plan. • Conduct monitoring of impacted areas in accordance with mitigation requirements and the Habitat Restoration and Enhancement Plan. • Maintain copies of monitoring reports in the project files. • If necessary, coordinate with USFWS and CDFW in accordance with mitigation requirements. 	<ul style="list-style-type: none"> • Prior to Construction • Post-Construction 	<ul style="list-style-type: none"> • IRWD

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:</p> <ol style="list-style-type: none"> 1. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio. 2. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing sensitive natural communities or comparable, as determined acceptable by the USFWS and CDFW. 	<ul style="list-style-type: none"> • Maintain copies of USFWS and/or CDFW correspondence, meetings, and approvals as applicable. 		
<p>BIO-4: Mitigate Temporary Impacts to Riparian Habitat. IRWD shall obtain a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW or obtain a “No Effect” letter from CDFW. One, or a combination, of the following would be incorporated into the permitting, subject to approval by CDFW:</p> <ol style="list-style-type: none"> a. Areas where temporary impacts occur to CDFW jurisdictional lakes, streams, and associated vegetation would be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring. b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project may be used to offset impacts to CDFW jurisdictional riparian habitat associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to: <ol style="list-style-type: none"> 1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing CDFW riparian habitat or comparable, as determined acceptable by the CDFW. 	<ul style="list-style-type: none"> • Retain a qualified biologist to prepare a Provisional Habitat Restoration Plan to implement BIO-4. • Retain a qualified biologist to implement the Provisional Habitat Restoration Plan. • Conduct monitoring of impacted areas in accordance with mitigation requirements and the Provisional Habitat Restoration Plan. • Maintain copies of monitoring reports in the project files. • If necessary, coordinate with USFWS and CDFW in accordance with mitigation requirements. • Maintain copies of USFWS and/or CDFW correspondence, meetings, and approvals as applicable. 	<ul style="list-style-type: none"> • Prior to Construction • Post-Construction 	<ul style="list-style-type: none"> • IRWD

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>BIO-5: Mitigate Temporary Impacts to Jurisdictional Wetlands. IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to RWQCB jurisdictional wetlands and “waters of the State:”</p> <p>a. Areas where temporary impacts occur to wetlands and waters of the State shall be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the Project site has returned to pre-Project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.</p> <p>b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project may be used to offset impacts to wetlands and waters of the State associated with the Syphon Reservoir Geotechnical Investigations Project. This is because the future Syphon Reservoir Improvement Project will re-impact most of the same areas impacted in the Geotechnical Investigations Project. This would be in-lieu of the mitigation outlined above; however, in the event the potential future project does not move forward within 4 years after initiation of the geotechnical investigations, the mitigation outlined above under item (a) would be required. Additionally, the mitigation outlined above would still be required for all impacts outside of the potential future Syphon Reservoir Improvement Project impact footprint. Mitigation may include, but is not limited to:</p> <ol style="list-style-type: none"> 1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing wetlands and waters or comparable, as determined acceptable by the RWQCB/CDFW. 	<ul style="list-style-type: none"> • Retain a qualified biologist to prepare a Provisional Habitat Restoration Plan to implement BIO-5. • Retain a qualified biologist to implement the Provisional Habitat Restoration Plan. • Conduct monitoring of impacted areas in accordance with mitigation requirements and the Provisional Habitat Restoration Plan. • Maintain copies of monitoring reports in the project files. • If necessary, coordinate with USFWS and CDFW in accordance with mitigation requirements. • Maintain copies of USFWS and/or CDFW correspondence, meetings, and approvals as applicable. 	<ul style="list-style-type: none"> • Prior to Construction • Post-Construction 	<ul style="list-style-type: none"> • IRWD
<p>BIO-6: NCCP/HCP Construction Related Minimization Measures. IRWD will implement the following:</p> <p>a. In accordance with the NCCP/HCP, certain construction-related mitigation measures are required to minimize impacts to the coastal California gnatcatcher and other coastal sage scrub species. The removal of coastal sage scrub communities will be conducted in compliance with the NCCP/HCP’s Construction Related Minimization Measures:</p> <ol style="list-style-type: none"> 1. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15). 2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or 	<ul style="list-style-type: none"> • Include mitigation measure in construction contractor specifications. • Retain a qualified biologist to delineate limits to areas of disturbance during construction as described. • Retain a qualified construction monitor to conduct routine inspections of mitigation implementation during project construction. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction • 	<ul style="list-style-type: none"> • IRWD • Construction Contractors

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>other activities involving disturbance of coastal sage scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.</p> <p>3. A monitoring biologist, acceptable to USFWS/CDFW will be on-site during any clearing of coastal sage scrub. IRWD will advise USFWS/CDFW at least seven calendar days (and preferably fourteen calendar days) prior to the clearing of any habitat occupied by Identified Species 16 to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.</p> <p>4. Following the completion of initial grading/earth moving activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.</p> <p>5. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle/equipment transportation routes and staging areas will be restricted to a minimum number during construction consistent with Project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operator shall be conducted and documented to ensure maximum practicable adherence to these measures.</p> <p>6. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.</p>	<ul style="list-style-type: none"> • Maintain written inspection records in the project file to verify compliance. • Maintain a written record of coordination with USFWS/CDFW on bird flushing/capture activities. 		

¹⁶ NCCP/HCP Identified Species that occur, or have potential to occur, on-site include the following: coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, coastal western whiptail, red-diamond rattlesnake, coast horned lizard, western spadefoot, northern harrier, sharp-shinned hawk, prairie falcon, American peregrine falcon, red-shouldered hawk, southern California rufous-crowned sparrow, San Diego desert woodrat, gray fox, and coyote.

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
Cultural Resources			
<p>CR-1: Avoidance of Unevaluated Resources. Two resources (CA-ORA-1237 and the Latrine Site) are considered historical resources for purposes of this Project. While both resources fall outside the area of impacts for the Project, if any Project-related activities occur in close proximity to (within 100 feet of) the resources, Environmentally Sensitive Areas consisting of protective fencing or flagging shall be established around the boundary of each resource, including a 50-foot buffer. The establishment of the Environmentally Sensitive Areas and installation of required fencing or flagging shall be carried out under the supervision of a Qualified Archaeologist, defined as an archaeologist meeting the Secretary of the Interior’s standards for archaeology (USDI 2008), or an archaeologist working under the direction of the Qualified Archaeologist. Environmentally Sensitive Areas should be clearly marked in the field and on design plans with exclusion markers to ensure avoidance during Project-related ground disturbance. The protective fencing or flagging should not identify the Environmentally Sensitive Areas as cultural resource areas to discourage unauthorized disturbance or collection of artifacts.</p>	<ul style="list-style-type: none"> • Retain a Qualified Archaeologist to delineate limits to areas of disturbance during construction as described. • Retain a qualified construction monitor to conduct routine inspections of mitigation requirements during project construction. • Maintain written inspection records in the project file to verify compliance. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors
<p>CR-2: Worker Sensitivity Training. Prior to the start of geotechnical investigation activities, all construction personnel should be trained to identify the types of cultural resources that may be encountered during Project implementation. These include both prehistoric and historic period archaeological resources. In addition to cultural resources recognition, the training should convey procedures to follow in the event of a potential cultural resources discovery, including notification procedures. The training should be provided by the Qualified Archaeologist or an archaeologist working under their supervision.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contractor specification • Retain a Qualified Archaeologist to conduct cultural resources sensitivity training for all construction personnel. • Retain documentation demonstrating the attendance of all personnel. 	<ul style="list-style-type: none"> • Prior to Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors
<p>CR-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the Qualified Archaeologist) and a Native American monitor shall observe all ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The Qualified Archaeologist, in coordination with IRWD and the Native American monitor(s), may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project. The Native American monitor shall be from a tribe that is culturally and geographically affiliated with the Project area (according to the California Native American Heritage Commission’s contact list for this Project). The archaeological and Native American monitors shall be empowered to halt or</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Retain an appropriate number of qualified archaeological monitors to coordinate with IRWD and Native American monitors to conduct monitoring of project-related ground disturbance as required. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>redirect ground-disturbing activities away from the vicinity of a discovery until the Qualified Archaeologist has evaluated the discovery, consulted with IRWD, and determined appropriate treatment (as prescribed in CR-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the Qualified Archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to IRWD and any Native American groups who request a copy. The Qualified Archaeologist shall submit a copy of the final report to the California Historic Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC).</p>	<ul style="list-style-type: none"> • Conduct periodic monitoring of mitigation commitments during construction. • Retain construction monitoring logs and reports in project file. 		
<p>CR-4: Protocols for Unanticipated Discoveries. If cultural resources are encountered during Project implementation, all activity within 50 feet of the find should cease until the find can be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines that the resources may be significant, he or she will notify IRWD and develop an appropriate treatment plan for the resource. IRWD should consult with the Native American monitor or other appropriate Native American representatives in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric or Native American in nature. Under CEQA, preservation in place is the preferred manner of mitigating impacts to archaeological sites. In considering any suggested measures proposed by the archaeologist to mitigate impacts to archaeological resources, IRWD will determine whether avoidance is feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures will be instituted, which could include, among other options, detailed documentation, or data recovery excavation. Work may proceed on other parts of the Project area while mitigation for cultural resources is being carried out.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Retain a Qualified Archaeologist to coordinate with IRWD and Native American representatives on developing an appropriate treatment plan for discovered resources, if any. • If found, document and retain records regarding discovery of archaeological resources. • Retain construction monitoring report in project file. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors
Geology, Soils, and Seismicity			
<p>GEO-1: Appoint a Qualified Paleontologist. A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the start of ground disturbing activities. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the Project kick-off meeting and Project progress meetings on a regular basis, and shall report to the site in the event potential paleontological resources are encountered.</p>	<ul style="list-style-type: none"> • Retain a Qualified Paleontologist. • Retain paleontological monitoring reports in the project file. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>GEO-2: Worker Sensitivity Training. The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). This can occur in coordination with Cultural Resources Worker Sensitivity Training (Mitigation Measure CR-1). In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the Project site and the procedures to be followed if they are found. Documentation shall be retained demonstrating that all construction personnel attended the training.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contractor specification • Retain a Qualified Paleontologist to conduct paleontological sensitivity training for all construction personnel. • Retain documentation demonstrating the attendance of all personnel. 	<ul style="list-style-type: none"> • Prior to Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractor
<p>GEO-3: Paleontological Monitoring. Paleontological resources monitoring shall be conducted for ground disturbing activities occurring in previously undisturbed sediments with high paleontological sensitivity, including any areas containing the Silverado Formation or Sespe/Vaqueros Formation, very old Quaternary Alluvium, and deeper layers of younger Quaternary Alluvium (which overly sensitive older Quaternary Alluvium). Ground disturbing activities include trench and test pit excavation, as well as any vegetation removal, grading, pavement removal, roadway improvements, or other similar activities within these sensitive formations. Boring of cores shall only require spot checks given the limited opportunity to observe impacted deposits. For undisturbed sediments mapped as the Silverado Formation, Sespe/Vaqueros Formation, or very old Quaternary Alluvium, monitoring of all ground disturbance is initially required. A depth of 5 feet bgs is established as the depth at which high sensitivity and paleontological monitoring should begin in the younger Quaternary Alluvium. The Qualified Paleontologist shall evaluate ground disturbing activities on an intermittent basis and consult with IRWD on whether the depth of required monitoring should be revised.</p> <p>Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist, and in conjunction with IRWD. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils in order to recover the fossil specimens. Any significant fossils collected during Project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. The Qualified Paleontologist shall prepare a final monitoring and mitigation report to document the results of the monitoring effort.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Retain an appropriate number of Qualified Paleontologists to conduct monitoring of project-related ground disturbance as required. • Conduct periodic monitoring of mitigation commitments during construction. • Retain construction monitoring logs and reports in project file. 	<ul style="list-style-type: none"> • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors

Mitigation Measure	Implementation, Monitoring and Reporting Action	Schedule	Responsibility
<p>GEO-4: Fossil Discovery. If personnel or workers discover any potential fossils during Project implementation, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery, consulted with IRWD, and made recommendations as to the appropriate treatment. If the find is deemed significant, it should be salvaged following the standards of the SVP (2010) and curated with a certified repository.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Retain a Qualified Paleontologist to coordinate with IRWD developing an appropriate treatment plan for discovered fossils, if any. • If found, document and retain records regarding discovery of archaeological resources. • Retain construction monitoring report in project file. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors
Hazards and Hazardous Materials			
<p>HAZ-1: Implement Fire Hazard Reduction Measures. During Project implementation, IRWD shall require all spark arrestors on construction equipment to be in good working order. Contractors shall require all vehicles and crews to have access to functional fire extinguishers at all times.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Retain a qualified construction monitor to conduct routine inspections of mitigation implementation during project construction. • Maintain written inspection records in the project file to verify compliance. 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • IRWD • Construction Contractors

Appendix AQ

Air Quality



Air Quality Appendix

Assumptions

Syphon Geotechnical Assumptions

The Syphon Reservoir Geotechnical Investigations Project (Project), is intended to provide details about the geologic/seismic and geotechnical baseline conditions at Syphon Reservoir. The analysis will only study the environmental impacts from the geotechnical investigations and does not include any permanent development. As the activities are more closely associated with construction activities (soil movement, excavation, boreholes), the analysis is structured as a "construction only" project and does not include any operational analysis.

CalEEMod Inputs (Non-Default information only)

Project Location	
County	Orange County
Air District	SCAQMD
Climate Zone	8
Operational Year	2020 <i>No Operation activities added because required by model</i>
Utility Provider	Southern California Edison
Source Receptor Area (SCAQMD)	19 Saddleback Valley

	Base	2015 ¹	2020 ¹	2030
CO2 intensity	702.4363	531.7443	411.6277	351.2182
% renewable	0%	24.30%	41.40%	50.00%

Land Use	Building SQFT	Building KFS	(seat/ room/ space)	Acres	CalEEMod Land Use Type
Disinfection and FC facilities	0	0	-	4	City Park

Note: 28 acres is total project area. Analysis uses 4 acres because that is the anticipated area of grading/ground disturbance and therefore the area from which fugitive dust would be emitted.

Acerage Determination

	ft	ft	sqft	Area of disturbance		Acres
				#	Total sqft	
Boring:	20	50	1,000	43	43,000	0.99
Pit:	20	50	1,000	16	16,000	0.37
Access Road:	12					1.89
Trench:	20	50	1,000	38	38,000	0.87
Total:						4

Notes:

- 1 area of disturbance is the graded area for each activity.
- 2 # for boring and pit area actual number of locations.
- 3 # for Access road is 1 as the square footage takes into account the total length of access roads.
- 4 # of trenches is the number of trenches that will be dug assuming each trench is 50 feet in length and there is 1,900 feet of trenches.

Construction Schedule

Phases / Activity	Project Schedule			Modeled Schedule		CalEEMod Source
	# of Locations	Total # Days	Days per location	Start (month/date/year)	Finish (month/date/year)	
Access Road	2 ^{2,3}	20	0.10	1/1/2019	1/28/2019	Site Preparation
Borings	43	51	1.19	1/29/2019	4/9/2019	Grading
Test Pits	16	6	0.38	1/29/2019	2/5/2019	Grading
Trenches	38	38	1.00	1/29/2019	3/21/2019	Grading
Seismic/Electrical Surveys	9	10	1.11	1/29/2019	2/11/2019	Site Preparation
Soil Sample Transport Modeled as 1 day delivery only						

Notes:

1. Construction would occur 5 days per week.
2. Access roads are number of acres graded, not number of roads. Days are days per acre.
3. There are 2 types of access roads. Bulldozed access roads, totaling 6,891.13 ft and disturbing 1.89 acres. These roads are accounted for in the modeling. Drive & Crush access routes total 7,177.39 ft and 1.98 acres. As there is no grading and only have vehicles driving over the roadways, they are not included in the modeling.

Construction Equipment

Access Road

Phase Type Site Preparation

<u>Soil Import/Export</u>	0 Cubic/yards of soil import				
	0 cubic/yards soil export				
	0 trucks				
X	Soils balanced onsite				
<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Rubber Tired Dozer	1	8	Default	Default	Rubber Tired Dozer
Water Truck	1	0	Default	Default	Modeled as part of Borings.

Borings

Phase Type Grading

Equipment per location

<u>Soil Import/Export</u>	0 Cubic/yards of soil import				
	0 cubic/yards soil export				
	0 trucks				
X	Soils balanced onsite				
<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Drill Rig	1	8	Default	Default	Drill Rig
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Support Truck	2	2	Default	Default	Off Highway Truck
Water Truck	1	4	Default	Default	Off Highway Truck
Pick-up Trucks	5	2	Not modeled as they are gasoline		

Test Pits

Phase Type Grading

Equipment per location

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
X Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Excavator	1	8	Default	Default	Excavator
Backhoes	1	8	Default	Default	Backhoes
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Water Truck	1	0	Default	Default	Modeled as part of Trenching
Support Truck	2	2	Default	Default	Off Highway Truck
Pick-up Trucks	1	2	Not modeled as they are gasoline		

Trenches

Phase Type Grading

Equipment per location

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
X Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Excavator	1	8	Default	Default	Excavator
Backhoes	1	8	Default	Default	Backhoes
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Support Truck	2	2	Default	Default	Off Highway Truck
Pick-up Trucks	1	2	Not modeled as they are gasoline		
Water Truck	1	4	Default	Default	Off Highway Truck

Seismic/Electrical Surveys

Phase Type Site Preparation

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
0 Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Pick-up Trucks	1	2	Not modeled as they are gasoline		

Maximum Daily Activity

	Borings	Test Pits	Trenches	Seismic Surveys	Total
Number:	2	2	1	1	
Equipment:					
Drill Rig	2	0	0	0	2
Rubber Tired Dozer	1	0	0	0	1
Tractors/Loaders/Backhoes	0	2	1	0	3
Excavator	0	2	1	0	3
Support Truck	4	4	2	0	10
Water Truck	1	0	1	0	2
Pick-up Trucks	10	0	0	0	10

Notes

- 1 Dozer and water trucks assume to move between locations as needed.
- 2 Assumes pick-up trucks also move between sites as needed.

Construction Trips and Vehicle Miles Traveled

Phase Name	# Workers	Worker		Vendor		Haul	
		# Trips	VMT/Trip	# Trips	VMT/Trip	# Trucks	VMT/Trip
Access Road	2	5	30	0	default	4	default
Borings	12	27	30	0	default	0	default
Test Pits	9	20	30	0	default	0	default
Trenches	9	20	30	0	default	0	default
Seismic Surveys	2	5	30	0	default	0	default
Sampling Deliveries & Breakdown	0	0	30	2	20	0	default
Max Daily	46	104	30	0	default	4	default

Note:

- 1 All trips indicated in this table are one-way trips
- 2 Boring and Trenches contain the workers for driving the water truck
- 3 Worker trips is determined by the number of persons times 2.25 trips per person (assumes some offsite travel for lunch etc). As a conservative analysis it assumes all employees drive separately to the site.
- 4 Workers are per activity (ex 1 boring location)
- 5 Haul trucks are for bringing in and hauling off equipment.

Worker Assumptions

Employees per individual activity

Water Truck	1 per truck	Support Truck	1 per truck
Bulldozer	1 per grader	Sampling	2 per location
Excavator	1 per excavator	Seismic Surveys	2 per location
Drill Rig	2 per drill rig	Geo-logging	1 per location
Backhoe	1 per backhoe		

Employees per Activity

Access Roads:	2 Bulldozer only, 1 water truck
Boring:	12 1 drill rig, 1 dozer, 1 water truck, 2 support trucks, 2 samplers, 1 geo-logger, 5 pick-up trucks
Test Pit:	9 1 excavator, 1 backhoe, 1 dozer, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Trench:	9 1 excavator, 1 backhoe, 1 dozer, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Survey:	2 one location at a time
Sample Transport:	1 driver - one time only

Max Daily

	#	Employees per
Borings:	2	22 2 drill rigs, 1 dozer, 1 water truck, 4 support trucks, 4 samplers, 2 geo-logger, 8 pick-up trucks
Test Pits:	2	14 2 excavators, 2 backhoes, 4 support trucks, 4 samplers, 2 geo-loggers
Trenches:	1	8 1 excavator, 1 backhoe, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Surveys:	1	2 2 surveyors

Maximum Daily Unmitigated Construction Emissions

Syphon Geotechnical

Maximum Daily Unmitigated Construction Emissions

CalEEMod 2016.3.2

Title: Syphon Geotechnical

Date: 12/20/2018

Unmitigated Construction

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	lbs/day					
Access Road	2	16	7	0	3	2
Borings	1	12	9	0	2	1
Test Pits	2	15	12	0	2	1
Trenches	2	15	12	0	2	1
Seismic Surveys	0	0	0	0	0	0
Sampling Deliveries & Breakdown	0	2	0	0	0	0
Max Daily	7	60	46	0	8	4
SCAQMD Thresholds	75	100	550	150	150	55
Significant	No	No	No	No	No	No

Syphon Geotechnical

Maximum Daily Unmitigated Construction Emissions

Unmitigated Construction

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
lbs/day Winter						
Access Road	1.54	15.78	6.62	0.02	3.19	1.99
Borings	1.34	12.13	8.80	0.03	1.71	0.93
Test Pits	1.66	15.34	11.89	0.03	1.95	1.11
Trenches	1.66	15.34	11.89	0.03	1.95	1.11
Seismic Surveys	0.04	0.03	0.31	0.00	0.11	0.03
Sampling Deliveries & Breakdown	0.05	1.64	0.42	0.00	0.12	0.04
Max Daily	6.54	60.27	45.61	0.12	7.51	4.32

		Winter					
		ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Access Road	Fugitive					2.3486	1.291
	Onsite	1.4913	15.6872	6.2925	0.0152	0.7201	0.6625
	Offsite					0.1175	0.0312
	Exhaust	0.044	0.0887	0.3276	1.23E-03	9.60E-04	8.90E-04
	Total	1.5353	15.7759	6.6201	0.01643	3.18716	1.98559
Borings	Fugitive					0.6196	0.3263
	Onsite	1.1091	11.9791	7.1074	0.021	0.4712	0.4335
	Offsite					0.6156	0.1632
	Exhaust	0.2282	0.1546	1.6892	5.80E-03	3.94E-03	3.63E-03
	Total	1.3373	12.1337	8.7966	0.026802	1.71034	0.92663
Test Pits	Fugitive					0.794	0.3451
	Onsite	1.4871	15.2274	10.6337	0.0236	0.694	0.6385
	Offsite					0.456	0.1209
	Exhaust	0.1693	0.1145	1.2513	4.31E-03	2.92E-03	2.69E-03
	Total	1.6564	15.3419	11.885	0.02791	1.94692	1.10719
Trenches	Fugitive					0.794	0.3451
	Onsite	1.4871	15.2274	10.6337	0.0236	0.694	0.6385
	Offsite					0.456	0.1209
	Exhaust	0.169	0.1145	1.2513	4.31E-03	2.92E-03	2.69E-03
	Total	1.6561	15.3419	11.885	0.02791	1.94692	1.10719
Seismic Surveys	Fugitive					0	0
	Onsite	0	0	0	0	0	0
	Offsite					0.114	0.0302
	Exhaust	0.0423	0.0286	0.3128	1.08E-03	7.30E-04	6.70E-04
	Total	0.0423	0.0286	0.3128	0.00108	0.11473	0.03087
Sampling Deliveries & Breakdown	Fugitive					0	0
	Onsite	0	0	0	0	0	0
	Offsite					0.1066	0.0297
	Exhaust	0.0507	1.6361	0.4232	4.32E-03	8.94E-03	8.55E-03
	Total	0.0507	1.6361	0.4232	0.00432	0.11554	0.03825
Max Daily	Fugitive					2.5554	1.3133
	Onsite	5.6587	59.6792	39.1044	0.0983	2.5693	2.3638
	Offsite					2.3713	0.6288
	Exhaust	0.8788	0.5955	6.5066	2.24E-02	0.0152	0.014
	Total	6.5375	60.2747	45.611	0.1207	7.5112	4.3199

Syphon Geotechnical

Maximum Daily Unmitigated Construction Emissions

Unmitigated Construction

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
lbs/day Summer						
Access Road	1.53	15.77	6.65	0.02	3.19	1.98
Borings	1.31	12.12	8.96	0.03	1.71	0.93
Test Pits	1.63	15.33	12.01	0.03	1.95	1.11
Trenches	1.63	15.33	12.01	0.03	1.95	1.11
Seismic Surveys	0.04	0.03	0.34	0.00	0.11	0.03
Sampling Deliveries & Breakdown	0.05	1.61	0.40	0.00	0.12	0.04
Max Daily	6.42	60.22	46.25	0.12	7.51	4.32

		Summer					
		ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Access Road	Fugitive					2.3486	1.291
	Onsite	1.4913	15.6872	6.2925	0.0152	0.7201	0.6625
	Offsite					0.1175	0.0302
	Exhaust	0.0383	0.0853	0.3577	1.30E-03	9.60E-04	8.90E-04
	Total	1.5296	15.7725	6.6502	0.0165	3.18716	1.98459
Borings	Fugitive					0.6196	0.3263
	Onsite	1.1091	11.9791	7.1074	0.021	0.4712	0.4335
	Offsite					0.6156	0.1632
	Exhaust	0.1977	0.1406	1.8546	6.16E-03	3.94E-03	3.63E-03
	Total	1.3068	12.1197	8.962	0.02716	1.71034	0.92663
Test Pits	Fugitive					0.794	0.3451
	Onsite	1.4871	15.2274	10.6337	0.0236	0.694	0.6385
	Offsite					0.456	0.1209
	Exhaust	0.1464	0.1041	1.3738	4.56E-03	2.92E-03	2.69E-03
	Total	1.6335	15.3315	12.0075	0.02816	1.94692	1.10719
Trenches	Fugitive					0.794	0.3451
	Onsite	1.4871	15.2274	10.6337	0.0236	0.694	0.6385
	Offsite					0.456	0.1209
	Exhaust	0.1464	0.1041	1.3738	4.56E-03	2.92E-03	2.69E-03
	Total	1.6335	15.3315	12.0075	0.02816	1.94692	1.10719
Seismic Surveys	Fugitive					0	0
	Onsite	0	0	0	0	0	0
	Offsite					0.114	0.0302
	Exhaust	0.0366	0.026	0.3434	1.14E-03	7.30E-04	6.70E-04
	Total	0.0366	0.026	0.3434	0.00114	0.11473	0.03087
Sampling Deliveries & Breakdown	Fugitive					0	0
	Onsite	0	0	0	0	0	0
	Offsite					0.1066	0.0297
	Exhaust	0.0494	1.6127	0.4011	4.37E-03	8.81E-03	8.44E-03
	Total	0.0494	1.6127	0.4011	0.00437	0.11541	0.03814
Max Daily	Fugitive					2.5554	1.3133
	Onsite	5.6587	59.6792	39.1044	0.0983	2.5693	2.3638
	Offsite					2.3713	0.6288
	Exhaust	0.7614	0.5415	7.1436	2.37E-02	0.0152	0.014
	Total	6.4201	60.2207	46.248	0.122	7.5112	4.3199

LST Analysis

	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Boring		12	7		1	1
Threshold		93	833		11	4
Other Activities		16	11		3	2
Threshold		140	2376		48	19
Max (1 acre)		60	39		5	4
Threshold		93	833		11	4
Significant		No	No		No	No

SRA	19			
			Max	
Receptor Distance	50	>250	varies	meters from Site
	50	200	50	meter threshold used
Site Size	variable	variable	variable	site acreage
	1	1	1	LST Acre comparison

The screening criteria for NO_x were developed based on the 1-hour NO₂ CAAQS of 0.18 ppm. However, since the publication of the SCAQMD's guidance, the USEPA has promulgated a 1-hour NO₂ NAAQS of 0.100 ppm based on a 98th percentile value, which is more stringent than the CAAQS. In order to determine if Project emissions would result in an exceedance of the 1 hour NO₂ NAAQS, an approximated LST was estimated to evaluate the federal 1-hour NO₂ standard, as the SCAQMD significance threshold has not been updated to reflect this standard. Calculated by scaling the NO₂ LST for by the ratio of 1-hour NO₂ standards (federal/state)(i.e., 780 lb/day * (0.10/0.18) =433 lb/day).

CalEEMod Output

Syphon Geotechnical - Orange County, Winter

**Syphon Geotechnical
Orange County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	411.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - see assumptions - personel only no heavy duty equipment

Off-road Equipment - See assumptions - onroad truck only, no equipment

Off-road Equipment - See Assumptions

Trips and VMT - See Assumptions

Vehicle Trips - No Operational

Energy Use -

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	8.00	38.00
tblConstructionPhase	NumDays	8.00	51.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	8.00	38.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	PhaseEndDate	2/1/2019	3/12/2019
tblConstructionPhase	PhaseEndDate	1/22/2019	1/28/2019
tblConstructionPhase	PhaseStartDate	1/23/2019	1/1/2019
tblConstructionPhase	PhaseStartDate	1/16/2019	1/1/2019
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	AcresOfGrading	0.00	3.00

tblGrading	AcresOfGrading	0.00	19.00
tblGrading	AcresOfGrading	0.00	19.00
tblOffRoadEquipment	HorsePower	402.00	168.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	411.63
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	VendorTripNumber	29.00	2.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	27.00
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	0.00	5.00
tblTripsAndVMT	WorkerTripNumber	53.00	104.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

- Summary Emissions not used

3.0 Construction Detail

- Mitigation used for Fugitive Dust Only

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Access Road	Site Preparation	1/1/2019	1/28/2019	5	20	
2	Borings	Grading	1/1/2019	3/12/2019	5	51	
3	Test Pits	Grading	1/1/2019	1/8/2019	5	6	
4	Trenches	Grading	1/1/2019	2/21/2019	5	38	
5	Surveys	Site Preparation	1/1/2019	1/14/2019	5	10	
6	Sample Delivery	Building Construction	3/1/2019	3/1/2019	5	1	
7	Maximum Daily	Grading	1/1/2019	1/1/2019	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Sample Delivery	Cranes	0	7.00	231	0.29
Test Pits	Excavators	1	8.00	158	0.38
Trenches	Excavators	1	8.00	158	0.38
Sample Delivery	Forklifts	0	8.00	89	0.20
Sample Delivery	Generator Sets	0	8.00	84	0.74
Test Pits	Graders	0	8.00	187	0.41
Borings	Excavators	0	8.00	158	0.38
Trenches	Graders	0	8.00	187	0.41
Test Pits	Rubber Tired Dozers	1	2.00	247	0.40
Trenches	Rubber Tired Dozers	1	2.00	247	0.40

Borings	Rubber Tired Dozers	1	2.00	247	0.40
Surveys	Rubber Tired Dozers	0	8.00	247	0.40
Sample Delivery	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Borings	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Test Pits	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Borings	Graders	0	8.00	187	0.41
Trenches	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Rubber Tired Dozers	1	8.00	247	0.40
Surveys	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Sample Delivery	Welders	0	8.00	46	0.45
Access Road	Off-Highway Trucks	1	4.00	402	0.38
Borings	Bore/Drill Rigs	1	8.00	221	0.50
Borings	Off-Highway Trucks	2	2.00	402	0.38
Borings	Off-Highway Trucks	1	4.00	168	0.40
Test Pits	Off-Highway Trucks	1	4.00	402	0.38
Test Pits	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	1	4.00	402	0.38
Maximum Daily	Excavators	3	8.00	158	0.38
Maximum Daily	Graders	0	8.00	187	0.41
Maximum Daily	Rubber Tired Dozers	1	8.00	247	0.40
Maximum Daily	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Maximum Daily	Bore/Drill Rigs	2	8.00	221	0.50
Maximum Daily	Off-Highway Trucks	10	2.00	402	0.38
Maximum Daily	Off-Highway Trucks	2	4.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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Sample Delivery	0	0.00	2.00	4.00	30.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Access Road	2	5.00	0.00	4.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Borings	5	27.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Test Pits	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenches	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Surveys	0	5.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maximum Daily	21	104.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Access Road - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.4913	15.6872	6.2925	0.0152		0.7201	0.7201		0.6625	0.6625		1,502.5636	1,502.5636	0.4754		1,514.4485
Total	1.4913	15.6872	6.2925	0.0152	6.0221	0.7201	6.7422	3.3102	0.6625	3.9727		1,502.5636	1,502.5636	0.4754		1,514.4485

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7100e-003	0.0601	0.0151	1.5000e-004	3.4800e-003	2.3000e-004	3.7200e-003	9.5000e-004	2.2000e-004	1.1800e-003		16.9958	16.9958	1.8500e-003		17.0420
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0286	0.3128	1.0800e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		107.5611	107.5611	2.5500e-003		107.6249
Total	0.0440	0.0887	0.3279	1.2300e-003	0.1175	9.6000e-004	0.1185	0.0312	8.9000e-004	0.0321		124.5569	124.5569	4.4000e-003		124.6669

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	0.3716	7.1836	8.0506	0.0152		0.2725	0.2725		0.2725	0.2725	0.0000	1,502.5636	1,502.5636	0.4754		1,514.4485
Total	0.3716	7.1836	8.0506	0.0152	2.3486	0.2725	2.6211	1.2910	0.2725	1.5635	0.0000	1,502.5636	1,502.5636	0.4754		1,514.4485

Mitigated Construction Off-Site

3.3 Borings - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.5887	0.0000	1.5887	0.8365	0.0000	0.8365			0.0000			0.0000
Off-Road	1.1091	11.9791	7.1074	0.0210		0.4712	0.4712		0.4335	0.4335		2,077.1468	2,077.1468	0.6572		2,093.5765
Total	1.1091	11.9791	7.1074	0.0210	1.5887	0.4712	2.0599	0.8365	0.4335	1.2700		2,077.1468	2,077.1468	0.6572		2,093.5765

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2282	0.1546	1.6892	5.8200e-003	0.6156	3.9400e-003	0.6196	0.1632	3.6300e-003	0.1669		580.8297	580.8297	0.0138		581.1744
Total	0.2282	0.1546	1.6892	5.8200e-003	0.6156	3.9400e-003	0.6196	0.1632	3.6300e-003	0.1669		580.8297	580.8297	0.0138		581.1744

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6196	0.0000	0.6196	0.3263	0.0000	0.3263			0.0000			0.0000
Off-Road	0.5189	10.0322	11.8949	0.0210		0.3948	0.3948		0.3948	0.3948	0.0000	2,077.1468	2,077.1468	0.6572		2,093.5765
Total	0.5189	10.0322	11.8949	0.0210	0.6196	0.3948	1.0144	0.3263	0.3948	0.7210	0.0000	2,077.1468	2,077.1468	0.6572		2,093.5765

Mitigated Construction Off-Site

3.4 Test Pits - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0358	0.0000	2.0358	0.8848	0.0000	0.8848			0.0000			0.0000
Off-Road	1.4871	15.2274	10.6337	0.0236		0.6940	0.6940		0.6385	0.6385		2,337.7561	2,337.7561	0.7396		2,356.2471
Total	1.4871	15.2274	10.6337	0.0236	2.0358	0.6940	2.7298	0.8848	0.6385	1.5233		2,337.7561	2,337.7561	0.7396		2,356.2471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1690	0.1145	1.2513	4.3100e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		430.2442	430.2442	0.0102		430.4995
Total	0.1690	0.1145	1.2513	4.3100e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		430.2442	430.2442	0.0102		430.4995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7940	0.0000	0.7940	0.3451	0.0000	0.3451			0.0000			0.0000
Off-Road	0.5786	11.4524	14.3977	0.0236		0.5156	0.5156		0.5156	0.5156	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471
Total	0.5786	11.4524	14.3977	0.0236	0.7940	0.5156	1.3095	0.3451	0.5156	0.8606	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471

Mitigated Construction Off-Site

3.5 Trenches - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0358	0.0000	2.0358	0.8848	0.0000	0.8848			0.0000			0.0000
Off-Road	1.4871	15.2274	10.6337	0.0236		0.6940	0.6940		0.6385	0.6385		2,337.7561	2,337.7561	0.7396		2,356.2471
Total	1.4871	15.2274	10.6337	0.0236	2.0358	0.6940	2.7298	0.8848	0.6385	1.5233		2,337.7561	2,337.7561	0.7396		2,356.2471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1690	0.1145	1.2513	4.3100e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		430.2442	430.2442	0.0102		430.4995
Total	0.1690	0.1145	1.2513	4.3100e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		430.2442	430.2442	0.0102		430.4995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7940	0.0000	0.7940	0.3451	0.0000	0.3451			0.0000			0.0000
Off-Road	0.5786	11.4524	14.3977	0.0236		0.5156	0.5156		0.5156	0.5156	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471
Total	0.5786	11.4524	14.3977	0.0236	0.7940	0.5156	1.3095	0.3451	0.5156	0.8606	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471

Mitigated Construction Off-Site

3.6 Surveys - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0286	0.3128	1.0800e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		107.5611	107.5611	2.5500e-003		107.6249
Total	0.0423	0.0286	0.3128	1.0800e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		107.5611	107.5611	2.5500e-003		107.6249

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

3.7 Sample Delivery - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0341	1.2013	0.3009	3.0600e-003	0.0697	4.6500e-003	0.0743	0.0191	4.4500e-003	0.0235		339.9162	339.9162	0.0370			340.8398
Vendor	0.0165	0.4349	0.1223	1.2600e-003	0.0369	4.2900e-003	0.0412	0.0106	4.1000e-003	0.0147		136.3818	136.3818	9.8300e-003			136.6275
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0507	1.6361	0.4232	4.3200e-003	0.1066	8.9400e-003	0.1155	0.0297	8.5500e-003	0.0382		476.2979	476.2979	0.0468			477.4673

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

3.8 Maximum Daily - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	5.6587	59.6792	39.1044	0.0983		2.5693	2.5693		2.3638	2.3638		9,733.0110	9,733.0110	3.0794		9,809.9966
Total	5.6587	59.6792	39.1044	0.0983	6.5523	2.5693	9.1217	3.3675	2.3638	5.7313		9,733.0110	9,733.0110	3.0794		9,809.9966

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.8788	0.5955	6.5066	0.0224	2.3713	0.0152	2.3865	0.6288	0.0140	0.6427		2,237.2698	2,237.2698	0.0531		2,238.5976
Total	0.8788	0.5955	6.5066	0.0224	2.3713	0.0152	2.3865	0.6288	0.0140	0.6427		2,237.2698	2,237.2698	0.0531		2,238.5976

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.4175	47.5359	57.9625	0.0983		2.0466	2.0466		2.0466	2.0466	0.0000	9,733.0110	9,733.0110	3.0794		9,809.9965
Total	2.4175	47.5359	57.9625	0.0983	2.5554	2.0466	4.6020	1.3133	2.0466	3.3599	0.0000	9,733.0110	9,733.0110	3.0794		9,809.9965

Mitigated Construction Off-Site

4.0 Operational Detail - Mobile

- No Operational Emissions

Syphon Geotechnical - Orange County, Summer

**Syphon Geotechnical
Orange County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	411.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - see assumptions - personel only no heavy duty equipment

Off-road Equipment - See assumptions - onroad truck only, no equipment

Off-road Equipment - See Assumptions

Trips and VMT - See Assumptions

Vehicle Trips - No Operational

Energy Use -

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	8.00	38.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	PhaseEndDate	2/1/2019	3/12/2019
tblConstructionPhase	PhaseEndDate	1/22/2019	1/28/2019
tblConstructionPhase	PhaseStartDate	1/23/2019	1/1/2019
tblConstructionPhase	PhaseStartDate	1/16/2019	1/1/2019
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	AcresOfGrading	0.00	3.00

tblGrading	AcresOfGrading	0.00	19.00
tblGrading	AcresOfGrading	0.00	19.00
tblOffRoadEquipment	HorsePower	402.00	168.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
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tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	411.63
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	VendorTripNumber	29.00	2.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
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tblTripsAndVMT	WorkerTripLength	14.70	30.00
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tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	27.00
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	0.00	5.00
tblTripsAndVMT	WorkerTripNumber	53.00	104.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

-Emission Summary not used

3.0 Construction Detail

-Mitigation used for Onsite Fugitive Dust Only

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Access Road	Site Preparation	1/1/2019	1/28/2019	5	20	
2	Borings	Grading	1/1/2019	3/12/2019	5	51	
3	Test Pits	Grading	1/1/2019	1/8/2019	5	6	
4	Trenches	Grading	1/1/2019	2/21/2019	5	38	
5	Surveys	Site Preparation	1/1/2019	1/14/2019	5	10	
6	Sample Delivery	Building Construction	3/1/2019	3/1/2019	5	1	
7	Maximum Daily	Grading	1/1/2019	1/1/2019	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Sample Delivery	Cranes	0	7.00	231	0.29
Test Pits	Excavators	1	8.00	158	0.38
Trenches	Excavators	1	8.00	158	0.38
Sample Delivery	Forklifts	0	8.00	89	0.20
Sample Delivery	Generator Sets	0	8.00	84	0.74
Test Pits	Graders	0	8.00	187	0.41
Borings	Excavators	0	8.00	158	0.38
Trenches	Graders	0	8.00	187	0.41
Test Pits	Rubber Tired Dozers	1	2.00	247	0.40
Trenches	Rubber Tired Dozers	1	2.00	247	0.40

Borings	Rubber Tired Dozers	1	2.00	247	0.40
Surveys	Rubber Tired Dozers	0	8.00	247	0.40
Sample Delivery	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Borings	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Test Pits	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Borings	Graders	0	8.00	187	0.41
Trenches	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Rubber Tired Dozers	1	8.00	247	0.40
Surveys	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Sample Delivery	Welders	0	8.00	46	0.45
Access Road	Off-Highway Trucks	1	4.00	402	0.38
Borings	Bore/Drill Rigs	1	8.00	221	0.50
Borings	Off-Highway Trucks	2	2.00	402	0.38
Borings	Off-Highway Trucks	1	4.00	168	0.40
Test Pits	Off-Highway Trucks	1	4.00	402	0.38
Test Pits	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	1	4.00	402	0.38
Maximum Daily	Excavators	3	8.00	158	0.38
Maximum Daily	Graders	0	8.00	187	0.41
Maximum Daily	Rubber Tired Dozers	1	8.00	247	0.40
Maximum Daily	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Maximum Daily	Bore/Drill Rigs	2	8.00	221	0.50
Maximum Daily	Off-Highway Trucks	10	2.00	402	0.38
Maximum Daily	Off-Highway Trucks	2	4.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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Sample Delivery	0	0.00	2.00	4.00	30.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Access Road	2	5.00	0.00	4.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Borings	5	27.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Test Pits	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenches	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Surveys	0	5.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maximum Daily	21	104.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Access Road - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.4913	15.6872	6.2925	0.0152		0.7201	0.7201		0.6625	0.6625		1,502.5636	1,502.5636	0.4754		1,514.4485
Total	1.4913	15.6872	6.2925	0.0152	6.0221	0.7201	6.7422	3.3102	0.6625	3.9727		1,502.5636	1,502.5636	0.4754		1,514.4485

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6600e-003	0.0593	0.0142	1.6000e-004	3.4800e-003	2.3000e-004	3.7100e-003	9.5000e-004	2.2000e-004	1.1700e-003		17.2515	17.2515	1.8000e-003		17.2965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0260	0.3434	1.1400e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		113.6997	113.6997	2.7100e-003		113.7675
Total	0.0383	0.0853	0.3577	1.3000e-003	0.1175	9.6000e-004	0.1185	0.0312	8.9000e-004	0.0321		130.9511	130.9511	4.5100e-003		131.0640

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	0.3716	7.1836	8.0506	0.0152		0.2725	0.2725		0.2725	0.2725	0.0000	1,502.5636	1,502.5636	0.4754		1,514.4485
Total	0.3716	7.1836	8.0506	0.0152	2.3486	0.2725	2.6211	1.2910	0.2725	1.5635	0.0000	1,502.5636	1,502.5636	0.4754		1,514.4485

Mitigated Construction Off-Site

3.3 Borings - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.5887	0.0000	1.5887	0.8365	0.0000	0.8365			0.0000			0.0000
Off-Road	1.1091	11.9791	7.1074	0.0210		0.4712	0.4712		0.4335	0.4335		2,077.1468	2,077.1468	0.6572		2,093.5765
Total	1.1091	11.9791	7.1074	0.0210	1.5887	0.4712	2.0599	0.8365	0.4335	1.2700		2,077.1468	2,077.1468	0.6572		2,093.5765

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1977	0.1406	1.8546	6.1600e-003	0.6156	3.9400e-003	0.6196	0.1632	3.6300e-003	0.1669		613.9783	613.9783	0.0147		614.3445
Total	0.1977	0.1406	1.8546	6.1600e-003	0.6156	3.9400e-003	0.6196	0.1632	3.6300e-003	0.1669		613.9783	613.9783	0.0147		614.3445

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6196	0.0000	0.6196	0.3263	0.0000	0.3263			0.0000			0.0000
Off-Road	0.5189	10.0322	11.8949	0.0210		0.3948	0.3948		0.3948	0.3948	0.0000	2,077.1468	2,077.1468	0.6572		2,093.5765
Total	0.5189	10.0322	11.8949	0.0210	0.6196	0.3948	1.0144	0.3263	0.3948	0.7210	0.0000	2,077.1468	2,077.1468	0.6572		2,093.5765

Mitigated Construction Off-Site

3.4 Test Pits - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0358	0.0000	2.0358	0.8848	0.0000	0.8848			0.0000			0.0000
Off-Road	1.4871	15.2274	10.6337	0.0236		0.6940	0.6940		0.6385	0.6385		2,337.7561	2,337.7561	0.7396		2,356.2471
Total	1.4871	15.2274	10.6337	0.0236	2.0358	0.6940	2.7298	0.8848	0.6385	1.5233		2,337.7561	2,337.7561	0.7396		2,356.2471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1464	0.1041	1.3738	4.5600e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		454.7987	454.7987	0.0109		455.0700
Total	0.1464	0.1041	1.3738	4.5600e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		454.7987	454.7987	0.0109		455.0700

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7940	0.0000	0.7940	0.3451	0.0000	0.3451			0.0000			0.0000
Off-Road	0.5786	11.4524	14.3977	0.0236		0.5156	0.5156		0.5156	0.5156	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471
Total	0.5786	11.4524	14.3977	0.0236	0.7940	0.5156	1.3095	0.3451	0.5156	0.8606	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471

Mitigated Construction Off-Site

3.5 Trenches - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0358	0.0000	2.0358	0.8848	0.0000	0.8848			0.0000			0.0000
Off-Road	1.4871	15.2274	10.6337	0.0236		0.6940	0.6940		0.6385	0.6385		2,337.7561	2,337.7561	0.7396		2,356.2471
Total	1.4871	15.2274	10.6337	0.0236	2.0358	0.6940	2.7298	0.8848	0.6385	1.5233		2,337.7561	2,337.7561	0.7396		2,356.2471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
Worker	0.1464	0.1041	1.3738	4.5600e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		454.7987	454.7987	0.0109		455.0700
Total	0.1464	0.1041	1.3738	4.5600e-003	0.4560	2.9200e-003	0.4590	0.1209	2.6900e-003	0.1236		454.7987	454.7987	0.0109		455.0700

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7940	0.0000	0.7940	0.3451	0.0000	0.3451			0.0000			0.0000
Off-Road	0.5786	11.4524	14.3977	0.0236		0.5156	0.5156		0.5156	0.5156	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471
Total	0.5786	11.4524	14.3977	0.0236	0.7940	0.5156	1.3095	0.3451	0.5156	0.8606	0.0000	2,337.7561	2,337.7561	0.7396		2,356.2471

Mitigated Construction Off-Site

3.6 Surveys - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0260	0.3434	1.1400e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		113.6997	113.6997	2.7100e-003		113.7675
Total	0.0366	0.0260	0.3434	1.1400e-003	0.1140	7.3000e-004	0.1147	0.0302	6.7000e-004	0.0309		113.6997	113.6997	2.7100e-003		113.7675

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

3.7 Sample Delivery - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0333	1.1857	0.2842	3.1000e-003	0.0697	4.5500e-003	0.0742	0.0191	4.3600e-003	0.0234		345.0291	345.0291	0.0360		345.9295
Vendor	0.0162	0.4270	0.1168	1.2700e-003	0.0369	4.2600e-003	0.0412	0.0106	4.0800e-003	0.0147		137.7045	137.7045	9.5900e-003		137.9442
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0494	1.6127	0.4011	4.3700e-003	0.1066	8.8100e-003	0.1154	0.0297	8.4400e-003	0.0381		482.7336	482.7336	0.0456		483.8738

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

3.8 Maximum Daily - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	5.6587	59.6792	39.1044	0.0983		2.5693	2.5693		2.3638	2.3638		9,733.0110	9,733.0110	3.0794		9,809.9966
Total	5.6587	59.6792	39.1044	0.0983	6.5523	2.5693	9.1217	3.3675	2.3638	5.7313		9,733.0110	9,733.0110	3.0794		9,809.9966

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.7614	0.5415	7.1436	0.0237	2.3713	0.0152	2.3865	0.6288	0.0140	0.6427		2,364.9534	2,364.9534	0.0564		2,366.3640
Total	0.7614	0.5415	7.1436	0.0237	2.3713	0.0152	2.3865	0.6288	0.0140	0.6427		2,364.9534	2,364.9534	0.0564		2,366.3640

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.4175	47.5359	57.9625	0.0983		2.0466	2.0466		2.0466	2.0466	0.0000	9,733.0110	9,733.0110	3.0794		9,809.9965
Total	2.4175	47.5359	57.9625	0.0983	2.5554	2.0466	4.6020	1.3133	2.0466	3.3599	0.0000	9,733.0110	9,733.0110	3.0794		9,809.9965

Mitigated Construction Off-Site

4.0 Operational Detail - Mobile

-No Operational Emissions

**Construction Health Risk
Assumptions and Risk Summary**

Syphon Geotechnical Construction Health Risk Assumptions

	3rd	0-2	2-16	>16	Units
DBR	361	1090	631	261	L/kg
A	1	1	1	1	no units
EF	0.958904	0.958904	0.958904	0.958904	years
Constant 1	0.000001	0.000001	0.000001	0.000001	no units
CPF	1.1	1.1	1.1	1.1	mg/kg-day-1
ASF	10	10	3	1	no units
Access Roads	0.08	0.08	NA	NA	years
Borings	0.20	0.20	NA	NA	years
Test Pits	0.02	0.02	NA	NA	years
Trenching	0.15	0.15	NA	NA	years
AT	70	70	70	70	years
FAH	1	1	0.72	0.73	day
Constant 2	1,000,000	1,000,000	1,000,000	1,000,000	no units

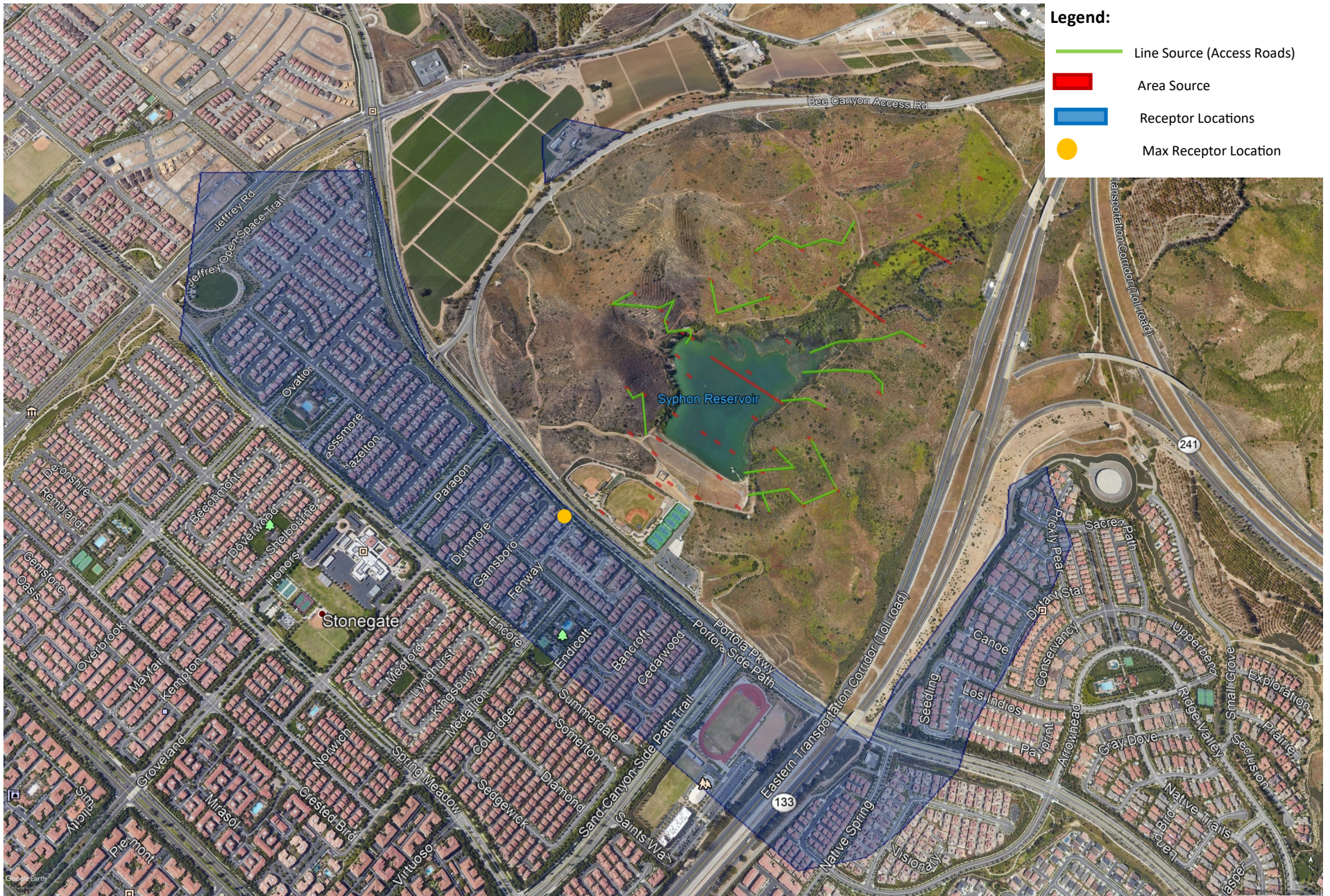
Dose = (Cair X DBR X A X EF X Constant 1)
 Cancer Risk = Dose X CPF x ASF x (ED/AT) X FAH
 Risk per Million = Cancer Risk X Constant 2

Onsite

	Source ID	PM10 (lbs/day)	PM10 (gr/day)	# of Sources	gr/ day/ source	PM10 (gr/sec)
Access Roads	AR	0.7201	328.79217	10	32.87922	0.00091331
Borings	B	0.4712	215.14632	43	5.003403	0.00013898
Test Pits	TP	0.694	316.8751	16	19.80469	0.00055013
Trenching	T	0.694	316.8751	3	105.625	0.00293403

Note: In AERMOD each area source and volume line source was set to 1 g/s therefore the total daily emissions need to be divided by the number of sources in order to accurately account for risk.

	Days	Years
Access Roads	20	0.077
Borings	51	0.196
Test Pits	6	0.023
Trenching	38	0.146



Construction Cancer Risk Summary - 3rd Trimester

Syphon Geotechnical
Construction Cancer Risk Summary - 3rd Trimester

Receptor #	X	Y	Total Risk					Receptor	Max Risk (both Scenarios)
			3rd Tri	AR	B	TP	T	3rd Trimester	Max Risk :
								157	0.1023
								157	0.3090
									Birth to 2
									0.102342
1	432395	3729323	0.005487	0.003425	0.00	0.000105	0.000701		
2	432445	3729323	0.005402	0.003437	0.00	9.55E-05	0.000618		
3	432495	3729323	0.005375	0.003434	0.00	8.94E-05	0.000574		
4	432545	3729323	0.005374	0.003415	0.00	8.58E-05	0.000546		
5	432395	3729373	0.006072	0.00378	0.00	0.000118	0.000744		
6	432445	3729373	0.006015	0.003784	0.00	0.000107	0.000684		
7	432495	3729373	0.005988	0.003779	0.00	0.000101	0.000635		
8	432545	3729373	0.005989	0.003757	0.00	9.7E-05	0.000603		
9	432595	3729373	0.006015	0.003718	0.00	9.57E-05	0.000588		
10	432245	3729423	0.007445	0.004011	0.00	0.000197	0.001235		
11	432295	3729423	0.007186	0.004089	0.00	0.000172	0.001091		
12	432445	3729423	0.006748	0.004207	0.00	0.000122	0.000754		
13	432495	3729423	0.006729	0.004192	0.00	0.000114	0.000706		
14	432545	3729423	0.006732	0.004164	0.00	0.000111	0.00067		
15	432595	3729423	0.006761	0.004115	0.00	0.00011	0.000655		
16	432645	3729423	0.006801	0.00405	0.00	0.000111	0.000654		
17	432195	3729473	0.008835	0.004365	0.00	0.000262	0.00159		
18	432245	3729473	0.008448	0.004467	0.00	0.000228	0.0014		
19	432295	3729473	0.008142	0.004549	0.00	0.000198	0.001231		
20	432345	3729473	0.007939	0.004641	0.00	0.000173	0.001088		
21	432495	3729473	0.007569	0.004691	0.00	0.000132	0.000773		
22	432545	3729473	0.007644	0.004656	0.00	0.000128	0.00075		
23	432595	3729473	0.007634	0.004587	0.00	0.000128	0.000725		
24	432645	3729473	0.00771	0.004508	0.00	0.00013	0.000736		
25	432695	3729473	0.007743	0.004408	0.00	0.000133	0.000753		
26	432145	3729523	0.010676	0.004728	0.00	0.000351	0.00206		

27	432195	3729523	0.010135	0.004885	0.00	0.000309	0.001819
28	432245	3729523	0.009695	0.005031	0.00	0.000269	0.001599
29	432295	3729523	0.009346	0.005138	0.00	0.000232	0.001402
30	432345	3729523	0.009097	0.005222	0.00	0.000201	0.001236
31	432395	3729523	0.00893	0.005302	0.00	0.000178	0.001099
32	432545	3729523	0.008681	0.005238	0.00	0.000151	0.000829
33	432595	3729523	0.008719	0.005154	0.00	0.000151	0.000814
34	432645	3729523	0.008714	0.005024	0.00	0.000153	0.000814
35	432695	3729523	0.008688	0.004876	0.00	0.000157	0.000816
36	432745	3729523	0.008657	0.004712	0.00	0.000161	0.00085
37	432045	3729573	0.013703	0.004814	0.01	0.000503	0.002938
38	432095	3729573	0.013014	0.005054	0.00	0.000463	0.002656
39	432145	3729573	0.012379	0.0053	0.00	0.000419	0.002374
40	432195	3729573	0.01178	0.005528	0.00	0.00037	0.002098
41	432245	3729573	0.011269	0.005715	0.00	0.00032	0.001838
42	432295	3729573	0.010874	0.005863	0.00	0.000275	0.001607
43	432345	3729573	0.010585	0.005966	0.00	0.000238	0.001412
44	432395	3729573	0.010413	0.006044	0.00	0.000211	0.001256
45	432445	3729573	0.010196	0.006134	0.00	0.000193	0.001066
46	432645	3729573	0.01016	0.005729	0.00	0.000186	0.000947
47	432695	3729573	0.010122	0.005544	0.00	0.000189	0.000973
48	432745	3729573	0.010054	0.005343	0.00	0.000192	0.001015
49	431995	3729623	0.016768	0.00507	0.01	0.000627	0.003701
50	432045	3729623	0.016027	0.005378	0.01	0.000597	0.003406
51	432095	3729623	0.01524	0.005678	0.01	0.000555	0.003083
52	432145	3729623	0.014497	0.005975	0.01	0.000503	0.002752
53	432195	3729623	0.013868	0.006333	0.00	0.000451	0.00244
54	432245	3729623	0.013312	0.006591	0.00	0.000389	0.002131
55	432295	3729623	0.012854	0.006779	0.00	0.000332	0.001858
56	432345	3729623	0.012534	0.006929	0.00	0.000286	0.001628
57	432395	3729623	0.012327	0.007079	0.00	0.000252	0.00144
58	432445	3729623	0.012083	0.007151	0.00	0.000232	0.001223
59	432645	3729623	0.011933	0.006578	0.00	0.000228	0.001105
60	432695	3729623	0.011793	0.006315	0.00	0.000231	0.001134

61	432745	3729623	0.011644	0.006048	0.00	0.000232	0.001185
62	432795	3729623	0.011424	0.005759	0.00	0.000232	0.00124
63	431945	3729673	0.020286	0.005236	0.01	0.000743	0.004545
64	431995	3729673	0.019719	0.005643	0.01	0.000738	0.004294
65	432045	3729673	0.018916	0.006029	0.01	0.000714	0.003969
66	432095	3729673	0.018085	0.006432	0.01	0.000674	0.003608
67	432145	3729673	0.017255	0.006825	0.01	0.000617	0.003223
68	432195	3729673	0.016536	0.007224	0.01	0.000549	0.002843
69	432245	3729673	0.016019	0.007725	0.01	0.000485	0.002492
70	432295	3729673	0.015481	0.008055	0.00	0.000409	0.002163
71	432345	3729673	0.015145	0.008282	0.00	0.000351	0.001888
72	432695	3729673	0.014002	0.007308	0.01	0.000286	0.00136
73	432745	3729673	0.013609	0.006905	0.01	0.000283	0.001399
74	432795	3729673	0.013234	0.006523	0.00	0.000279	0.00146
75	432845	3729673	0.012723	0.006109	0.00	0.000274	0.001491
76	431895	3729723	0.024407	0.005381	0.01	0.000848	0.005466
77	431945	3729723	0.02398	0.005805	0.01	0.000863	0.005265
78	431995	3729723	0.023397	0.00629	0.01	0.00087	0.005002
79	432045	3729723	0.022613	0.0068	0.01	0.00086	0.004659
80	432095	3729723	0.021745	0.00733	0.01	0.000826	0.004254
81	432145	3729723	0.020942	0.007905	0.01	0.000773	0.003819
82	432195	3729723	0.020189	0.00847	0.01	0.000696	0.003369
83	432245	3729723	0.019575	0.009019	0.01	0.000607	0.002937
84	432295	3729723	0.019129	0.009699	0.01	0.000521	0.002551
85	432745	3729723	0.016109	0.007984	0.01	0.000349	0.001683
86	432795	3729723	0.015276	0.007371	0.01	0.000336	0.001691
87	432845	3729723	0.014527	0.006826	0.01	0.000324	0.001736
88	431845	3729773	0.028506	0.005427	0.02	0.000921	0.006343
89	431895	3729773	0.028728	0.005901	0.02	0.00096	0.006269
90	431945	3729773	0.028592	0.00644	0.02	0.000997	0.006114
91	431995	3729773	0.028114	0.00704	0.01	0.001027	0.00586
92	432045	3729773	0.027415	0.007702	0.01	0.001039	0.005507
93	432095	3729773	0.026674	0.008447	0.01	0.00103	0.005073
94	432145	3729773	0.025901	0.00924	0.01	0.000984	0.004569

95	432195	3729773	0.025248	0.010097	0.01	0.000906	0.004041
96	432245	3729773	0.024832	0.011151	0.01	0.000815	0.003536
97	432795	3729773	0.017852	0.008433	0.01	0.000405	0.002017
98	432845	3729773	0.016779	0.007738	0.01	0.000385	0.002057
99	432895	3729773	0.015763	0.007115	0.01	0.000366	0.002088
100	431745	3729823	0.030401	0.004932	0.02	0.000907	0.006928
101	431795	3729823	0.031952	0.005387	0.02	0.00096	0.00709
102	431845	3729823	0.033313	0.00591	0.02	0.001019	0.007197
103	431895	3729823	0.034163	0.006485	0.02	0.001079	0.007203
104	431945	3729823	0.034485	0.007146	0.02	0.001144	0.007113
105	431995	3729823	0.034313	0.007903	0.02	0.001207	0.006903
106	432045	3729823	0.033926	0.008785	0.02	0.001264	0.00657
107	432095	3729823	0.033425	0.009797	0.02	0.001297	0.00611
108	432145	3729823	0.032892	0.010945	0.02	0.001286	0.005542
109	432195	3729823	0.032604	0.012411	0.01	0.001239	0.004945
110	432845	3729823	0.019296	0.008734	0.01	0.000454	0.002433
111	432895	3729823	0.017863	0.007923	0.01	0.000426	0.002442
112	432945	3729823	0.016591	0.007224	0.01	0.000402	0.002448
113	431695	3729873	0.031803	0.004818	0.02	0.000914	0.007349
114	431745	3729873	0.034188	0.005289	0.02	0.000974	0.00766
115	431795	3729873	0.036681	0.005829	0.02	0.001042	0.007938
116	431845	3729873	0.039177	0.006458	0.02	0.001121	0.008169
117	431895	3729873	0.041115	0.007141	0.02	0.001202	0.008282
118	431945	3729873	0.04239	0.007956	0.02	0.001299	0.008301
119	431995	3729873	0.042837	0.008909	0.02	0.00141	0.008179
120	432045	3729873	0.043066	0.010049	0.02	0.001531	0.007897
121	432095	3729873	0.043126	0.011394	0.02	0.001642	0.007429
122	432145	3729873	0.043225	0.013161	0.02	0.001734	0.006837
123	432845	3729873	0.022622	0.010088	0.01	0.000543	0.002989
124	432895	3729873	0.020361	0.008905	0.01	0.000497	0.0029
125	432945	3729873	0.01862	0.007995	0.01	0.000464	0.002869
126	431645	3729923	0.032055	0.004652	0.02	0.000905	0.007574
127	431695	3729923	0.034835	0.005113	0.02	0.000965	0.007988
128	431745	3729923	0.038189	0.005674	0.02	0.001039	0.008438

129	431795	3729923	0.041906	0.006313	0.03	0.001121	0.008858
130	431845	3729923	0.045912	0.007031	0.03	0.001211	0.009215
131	431895	3729923	0.050238	0.007892	0.03	0.001322	0.009521
132	431945	3729923	0.05375	0.008883	0.03	0.001454	0.009699
133	431995	3729923	0.055472	0.010078	0.03	0.00162	0.009731
134	432045	3729923	0.057238	0.011494	0.03	0.001823	0.009544
135	432895	3729923	0.02298	0.009896	0.01	0.000577	0.003426
136	432945	3729923	0.020358	0.008555	0.01	0.000524	0.003263
137	432995	3729923	0.018586	0.007678	0.01	0.00049	0.003209
138	431595	3729973	0.031407	0.004445	0.02	0.000885	0.007615
139	431645	3729973	0.034277	0.004886	0.02	0.000943	0.008097
140	431695	3729973	0.037918	0.005439	0.02	0.001016	0.008662
141	431745	3729973	0.042145	0.006079	0.03	0.001098	0.009239
142	431795	3729973	0.047149	0.006816	0.03	0.001189	0.009811
143	431845	3729973	0.053434	0.007687	0.03	0.001296	0.010371
144	431895	3729973	0.061808	0.008736	0.04	0.00143	0.010901
145	431945	3729973	0.07253	0.009966	0.05	0.001594	0.011324
146	431995	3729973	0.079778	0.011429	0.05	0.001809	0.011583
147	432945	3729973	0.022802	0.009479	0.01	0.000606	0.003852
148	432995	3729973	0.020449	0.008327	0.01	0.000559	0.003711
149	431545	3730023	0.030186	0.004215	0.02	0.000858	0.007511
150	431595	3730023	0.033078	0.004642	0.02	0.000916	0.008048
151	431645	3730023	0.036502	0.005149	0.02	0.000982	0.008643
152	431695	3730023	0.040677	0.005762	0.02	0.00106	0.009314
153	431745	3730023	0.045675	0.006485	0.03	0.001147	0.010028
154	431795	3730023	0.051924	0.007349	0.03	0.001246	0.010783
155	431845	3730023	0.060493	0.00842	0.04	0.001369	0.011601
156	431895	3730023	0.073508	0.009691	0.05	0.001514	0.012396
157	431945	3730023	0.102342	0.011222	0.08	0.001697	0.013139
158	432945	3730023	0.02549	0.010478	0.01	0.000704	0.004571
159	432995	3730023	0.022276	0.008908	0.01	0.000633	0.004253
160	431495	3730073	0.028537	0.003963	0.02	0.000824	0.007278
161	431545	3730073	0.031196	0.004351	0.02	0.000878	0.007812
162	431595	3730073	0.034434	0.004824	0.02	0.000941	0.008434

163	431645	3730073	0.038401	0.005404	0.02	0.001017	0.009156
164	431695	3730073	0.043049	0.006086	0.03	0.001098	0.009938
165	431745	3730073	0.048767	0.006916	0.03	0.001191	0.010811
166	431795	3730073	0.056004	0.007933	0.03	0.001298	0.011775
167	431845	3730073	0.065753	0.009198	0.04	0.001423	0.012832
168	431895	3730073	0.080623	0.010834	0.05	0.001582	0.01401
169	432945	3730073	0.027853	0.011256	0.01	0.000805	0.005255
170	432995	3730073	0.024339	0.009571	0.01	0.000723	0.004903
171	431395	3730123	0.02449	0.003394	0.01	0.000738	0.006477
172	431445	3730123	0.026673	0.003706	0.02	0.000786	0.006958
173	431495	3730123	0.029114	0.00406	0.02	0.000838	0.007481
174	431545	3730123	0.031958	0.004476	0.02	0.000894	0.008069
175	431595	3730123	0.035391	0.004982	0.02	0.00096	0.008753
176	431645	3730123	0.03987	0.005641	0.02	0.001044	0.009604
177	431695	3730123	0.044998	0.006407	0.03	0.001131	0.010517
178	431745	3730123	0.051236	0.007344	0.03	0.001228	0.011542
179	431795	3730123	0.059211	0.008534	0.04	0.001339	0.012724
180	431845	3730123	0.069982	0.01011	0.04	0.001475	0.014114
181	432995	3730123	0.026472	0.010191	0.01	0.000823	0.005652
182	431345	3730173	0.022745	0.003168	0.01	0.0007	0.006125
183	431395	3730173	0.024761	0.003456	0.01	0.000747	0.00659
184	431445	3730173	0.027018	0.003782	0.02	0.000797	0.007099
185	431495	3730173	0.029585	0.004158	0.02	0.000851	0.007663
186	431545	3730173	0.032517	0.004594	0.02	0.000908	0.008287
187	431595	3730173	0.036134	0.005136	0.02	0.000977	0.009033
188	431645	3730173	0.040543	0.005806	0.02	0.001056	0.009905
189	431695	3730173	0.046392	0.006701	0.03	0.001158	0.011007
190	431745	3730173	0.053164	0.007766	0.03	0.001261	0.012202
191	431795	3730173	0.061789	0.009148	0.04	0.001378	0.013605
192	431295	3730223	0.021075	0.002959	0.01	0.000663	0.005768
193	431345	3730223	0.022797	0.003207	0.01	0.000704	0.00618
194	431395	3730223	0.024851	0.003504	0.01	0.000752	0.006663
195	431445	3730223	0.027167	0.003844	0.02	0.000804	0.007195
196	431495	3730223	0.029833	0.004241	0.02	0.000861	0.007794

197	431545	3730223	0.032904	0.004707	0.02	0.000922	0.008467
198	431595	3730223	0.036548	0.005269	0.02	0.00099	0.009242
199	431645	3730223	0.041225	0.005998	0.02	0.001075	0.010203
200	431695	3730223	0.046795	0.006891	0.03	0.001167	0.011302
201	431745	3730223	0.054291	0.008122	0.03	0.001285	0.012706
202	431245	3730273	0.019492	0.002765	0.01	0.000627	0.005412
203	431295	3730273	0.021004	0.002984	0.01	0.000665	0.005786
204	431345	3730273	0.022764	0.003242	0.01	0.000708	0.006213
205	431395	3730273	0.024779	0.00354	0.01	0.000755	0.006695
206	431445	3730273	0.027081	0.003887	0.02	0.000807	0.007236
207	431495	3730273	0.029781	0.004298	0.02	0.000865	0.007857
208	431545	3730273	0.032975	0.004793	0.02	0.000931	0.008572
209	431595	3730273	0.036728	0.005388	0.02	0.001002	0.009393
210	431645	3730273	0.041367	0.006139	0.02	0.001086	0.010375
211	431695	3730273	0.04717	0.007105	0.03	0.001184	0.011563
212	431195	3730323	0.018193	0.002608	0.01	0.000598	0.005109
213	431245	3730323	0.019479	0.002798	0.01	0.000631	0.005437
214	431295	3730323	0.020818	0.003	0.01	0.000664	0.005775
215	431345	3730323	0.022547	0.00326	0.01	0.000707	0.006202
216	431395	3730323	0.024537	0.003562	0.01	0.000755	0.006686
217	431445	3730323	0.026814	0.003913	0.01	0.000807	0.00723
218	431495	3730323	0.029488	0.004333	0.02	0.000865	0.007856
219	431545	3730323	0.032637	0.004837	0.02	0.000931	0.008577
220	431595	3730323	0.036402	0.005453	0.02	0.001005	0.009418
221	431645	3730323	0.041071	0.006235	0.02	0.001092	0.010431
222	431145	3730373	0.016799	0.002439	0.01	0.000563	0.004774
223	431195	3730373	0.017978	0.002616	0.01	0.000595	0.00508
224	431245	3730373	0.019282	0.002813	0.01	0.00063	0.005416
225	431295	3730373	0.020583	0.003014	0.01	0.000663	0.005749
226	431345	3730373	0.022208	0.003267	0.01	0.000703	0.006158
227	431395	3730373	0.024136	0.003568	0.01	0.00075	0.006633
228	431445	3730373	0.02636	0.003923	0.01	0.000803	0.007174
229	431495	3730373	0.028954	0.004343	0.02	0.000861	0.007791
230	431545	3730373	0.032023	0.004852	0.02	0.000927	0.008506

231	431595	3730373	0.035761	0.005483	0.02	0.001004	0.009354
232	431095	3730423	0.015511	0.002283	0.01	0.000529	0.004455
233	431145	3730423	0.016536	0.002439	0.01	0.000559	0.004728
234	431195	3730423	0.017663	0.002612	0.01	0.00059	0.005024
235	431245	3730423	0.018918	0.002808	0.01	0.000625	0.005351
236	431295	3730423	0.020177	0.003009	0.01	0.000657	0.005678
237	431345	3730423	0.021754	0.003262	0.01	0.000697	0.006079
238	431395	3730423	0.023607	0.003562	0.01	0.000744	0.006544
239	431445	3730423	0.025746	0.003915	0.01	0.000796	0.00707
240	431495	3730423	0.028235	0.004333	0.02	0.000853	0.00767
241	431545	3730423	0.031177	0.004838	0.02	0.000919	0.008364
242	431595	3730423	0.03526	0.005554	0.02	0.001014	0.009287
243	431045	3730473	0.014352	0.002142	0.01	0.000498	0.004161
244	431095	3730473	0.015256	0.002282	0.01	0.000525	0.004406
245	431145	3730473	0.016205	0.002431	0.01	0.000553	0.004661
246	431195	3730473	0.017281	0.002603	0.01	0.000584	0.004947
247	431245	3730473	0.018498	0.002798	0.01	0.000618	0.005267
248	431295	3730473	0.019858	0.00302	0.01	0.000655	0.005621
249	431345	3730473	0.021212	0.003248	0.01	0.000689	0.005974
250	431395	3730473	0.022969	0.003544	0.01	0.000735	0.006419
251	431445	3730473	0.025007	0.003892	0.01	0.000786	0.006926
252	431495	3730473	0.02734	0.0043	0.01	0.000843	0.007495
253	431545	3730473	0.030513	0.004861	0.02	0.000921	0.008241
254	431045	3730523	0.01406	0.002134	0.01	0.000492	0.004098
255	431095	3730523	0.014894	0.002268	0.01	0.000518	0.004326
256	431145	3730523	0.015832	0.00242	0.01	0.000546	0.00458
257	431195	3730523	0.016853	0.002588	0.01	0.000576	0.004855
258	431245	3730523	0.018004	0.00278	0.01	0.000609	0.005162
259	431295	3730523	0.0193	0.002999	0.01	0.000645	0.005503
260	431345	3730523	0.020748	0.003248	0.01	0.000685	0.005878
261	431395	3730523	0.022234	0.003512	0.01	0.000724	0.006264
262	431445	3730523	0.024126	0.003849	0.01	0.000773	0.006739
263	431495	3730523	0.026293	0.004245	0.01	0.000827	0.007274
264	431545	3730523	0.029299	0.004799	0.02	0.000906	0.007985

265	431045	3730573	0.013656	0.00211	0.01	0.000482	0.004004
266	431095	3730573	0.014504	0.00225	0.01	0.000509	0.004236
267	431145	3730573	0.015391	0.002399	0.01	0.000536	0.004479
268	431195	3730573	0.016382	0.002568	0.01	0.000566	0.004747
269	431245	3730573	0.01746	0.002755	0.01	0.000599	0.005037
270	431295	3730573	0.018688	0.00297	0.01	0.000634	0.005363
271	431345	3730573	0.020051	0.003214	0.01	0.000673	0.005721
272	431395	3730573	0.021578	0.003493	0.01	0.000716	0.006116
273	431445	3730573	0.023156	0.003791	0.01	0.000757	0.006521
274	431495	3730573	0.025403	0.004213	0.01	0.000818	0.007074
275	431045	3730623	0.013344	0.002101	0.01	0.000476	0.003928
276	431095	3730623	0.014095	0.00223	0.01	0.0005	0.004137
277	431145	3730623	0.014923	0.002374	0.01	0.000526	0.004367
278	431195	3730623	0.015838	0.002536	0.01	0.000554	0.004617
279	431245	3730623	0.016882	0.002723	0.01	0.000587	0.0049
280	431295	3730623	0.018015	0.00293	0.01	0.000621	0.005203
281	431345	3730623	0.01929	0.003168	0.01	0.000659	0.00554
282	431395	3730623	0.020727	0.003441	0.01	0.000701	0.005914
283	431445	3730623	0.02216	0.003724	0.01	0.000739	0.006287
284	431495	3730623	0.024349	0.004154	0.01	0.000805	0.006824
285	431045	3730673	0.01296	0.002081	0.01	0.000467	0.003832
286	431095	3730673	0.013659	0.002206	0.01	0.00049	0.004028
287	431145	3730673	0.014433	0.002346	0.01	0.000515	0.004245
288	431195	3730673	0.015288	0.002502	0.01	0.000542	0.00448
289	431245	3730673	0.016231	0.002679	0.01	0.000572	0.004739
290	431295	3730673	0.01732	0.002885	0.01	0.000606	0.00503
291	431345	3730673	0.01849	0.003112	0.01	0.000642	0.005343
292	431395	3730673	0.019806	0.003373	0.01	0.000682	0.005688
293	431445	3730673	0.021305	0.003676	0.01	0.000727	0.006075
294	431045	3730723	0.012559	0.002057	0.01	0.000457	0.003728
295	431095	3730723	0.013214	0.002178	0.01	0.000479	0.003914
296	431145	3730723	0.013931	0.002313	0.01	0.000503	0.004114
297	431195	3730723	0.014721	0.002463	0.01	0.000528	0.004334
298	431245	3730723	0.015587	0.002632	0.01	0.000557	0.004573

299	431295	3730723	0.016568	0.002825	0.01	0.000588	0.004839
300	431345	3730723	0.017678	0.003049	0.01	0.000624	0.005137
301	431395	3730723	0.01889	0.003299	0.01	0.000663	0.005457
302	431445	3730723	0.020227	0.003582	0.01	0.000705	0.005805
303	431045	3730773	0.012136	0.002029	0.01	0.000446	0.003615
304	431095	3730773	0.012756	0.002147	0.01	0.000467	0.003791
305	431145	3730773	0.01342	0.002277	0.01	0.00049	0.003979
306	431195	3730773	0.014146	0.002421	0.01	0.000514	0.004182
307	431245	3730773	0.014945	0.002582	0.01	0.000541	0.004404
308	431295	3730773	0.015826	0.002763	0.01	0.000571	0.004644
309	431345	3730773	0.016836	0.002974	0.01	0.000604	0.004916
310	431395	3730773	0.017957	0.003215	0.01	0.000641	0.005214
311	431445	3730773	0.019167	0.003481	0.01	0.00068	0.005531
312	431045	3730823	0.011709	0.001998	0.01	0.000434	0.003499
313	431095	3730823	0.012288	0.002112	0.01	0.000455	0.003663
314	431145	3730823	0.012908	0.002237	0.01	0.000476	0.003838
315	431195	3730823	0.013575	0.002375	0.01	0.000499	0.004026
316	431245	3730823	0.014308	0.002528	0.01	0.000525	0.004231
317	431295	3730823	0.015113	0.0027	0.01	0.000552	0.004453
318	431345	3730823	0.015999	0.002893	0.01	0.000582	0.004694
319	431395	3730823	0.017045	0.003124	0.01	0.000618	0.00497
320	431445	3730823	0.018157	0.003377	0.01	0.000656	0.005263
321	431045	3730873	0.011281	0.001964	0.01	0.000422	0.003378
322	431095	3730873	0.011816	0.002074	0.01	0.000441	0.003532
323	431145	3730873	0.012395	0.002195	0.01	0.000462	0.003696
324	431195	3730873	0.013012	0.002326	0.01	0.000484	0.00387
325	431245	3730873	0.013682	0.002471	0.01	0.000507	0.004056
326	431295	3730873	0.014417	0.002634	0.01	0.000533	0.004258
327	431345	3730873	0.015221	0.002815	0.01	0.000561	0.004478
328	431395	3730873	0.016116	0.00302	0.01	0.000593	0.004718
329	431445	3730873	0.017166	0.003267	0.01	0.00063	0.004993
330	431836	3730841	0.032327	0.007104	0.02	0.001123	0.008594
331	431836	3730891	0.029209	0.006504	0.01	0.001048	0.007843
332	431886	3730891	0.031838	0.007264	0.02	0.001143	0.008402

333	431836	3730941	0.026572	0.005971	0.01	0.000976	0.007236
334	431886	3730941	0.02872	0.006578	0.01	0.001055	0.007741
335	431936	3730941	0.031103	0.007273	0.01	0.00115	0.008291
336	431886	3730991	0.026047	0.005999	0.01	0.000977	0.007125
337	431936	3730991	0.027973	0.006556	0.01	0.001054	0.007603
338	431986	3730991	0.030044	0.007186	0.01	0.001145	0.008109
339	432036	3730991	0.032054	0.007881	0.01	0.001251	0.008502

Construction Cancer Risk Summary -Birth to 2 years

Syphon Geotechnical
Construction Cancer Risk Summary -Birth to 2 years

Receptor #	Total Risk					Max Risk : Birth to 2 0.30901
	Birth to 2	AR	B	TP	T	
1	0.016567	0.010342	0.00	0.000316	0.002117	
2	0.016309	0.010377	0.00	0.000288	0.001866	
3	0.016229	0.010368	0.00	0.00027	0.001733	
4	0.016226	0.010312	0.00	0.000259	0.00165	
5	0.018335	0.011414	0.00	0.000355	0.002247	
6	0.018162	0.011425	0.00	0.000324	0.002064	
7	0.01808	0.011411	0.00	0.000304	0.001916	
8	0.018083	0.011343	0.00	0.000293	0.001821	
9	0.018161	0.011226	0.00	0.000289	0.001775	
10	0.022478	0.012111	0.01	0.000594	0.003729	
11	0.021698	0.012346	0.01	0.000518	0.003296	
12	0.020374	0.012703	0.01	0.000368	0.002277	
13	0.020318	0.012658	0.01	0.000345	0.002131	
14	0.020327	0.012574	0.01	0.000334	0.002024	
15	0.020414	0.012424	0.01	0.000332	0.001976	
16	0.020535	0.01223	0.01	0.000336	0.001974	
17	0.026675	0.013181	0.01	0.000792	0.004802	
18	0.025507	0.013487	0.01	0.000688	0.004226	
19	0.024585	0.013734	0.01	0.000597	0.003717	
20	0.023972	0.014014	0.01	0.000523	0.003286	
21	0.022854	0.014165	0.01	0.000397	0.002333	
22	0.02308	0.014059	0.01	0.000387	0.002266	
23	0.023051	0.01385	0.01	0.000386	0.00219	
24	0.023281	0.013611	0.01	0.000392	0.002224	
25	0.023378	0.01331	0.01	0.000402	0.002275	
26	0.032235	0.014275	0.01	0.001061	0.00622	

27	0.030602	0.014751	0.01	0.000933	0.005494
28	0.029273	0.015192	0.01	0.000811	0.004827
29	0.028219	0.015513	0.01	0.000699	0.004233
30	0.027468	0.015768	0.01	0.000607	0.003731
31	0.026962	0.016009	0.01	0.000537	0.003318
32	0.02621	0.015815	0.01	0.000455	0.002502
33	0.026327	0.015562	0.01	0.000456	0.002459
34	0.02631	0.01517	0.01	0.000463	0.002457
35	0.026233	0.014724	0.01	0.000474	0.002463
36	0.026139	0.014228	0.01	0.000485	0.002567
37	0.041373	0.014536	0.02	0.001517	0.008872
38	0.039294	0.015259	0.01	0.001398	0.008019
39	0.037376	0.016002	0.01	0.001264	0.007167
40	0.035568	0.016691	0.01	0.001117	0.006335
41	0.034025	0.017256	0.01	0.000967	0.00555
42	0.032833	0.017703	0.01	0.00083	0.004853
43	0.031959	0.018013	0.01	0.000718	0.004263
44	0.031441	0.01825	0.01	0.000636	0.003792
45	0.030785	0.018521	0.01	0.000581	0.003219
46	0.030678	0.017297	0.01	0.00056	0.002859
47	0.030562	0.016741	0.01	0.000571	0.002938
48	0.030357	0.016134	0.01	0.00058	0.003065
49	0.050628	0.015308	0.02	0.001892	0.011174
50	0.048391	0.016239	0.02	0.001804	0.010284
51	0.046016	0.017144	0.02	0.001676	0.009309
52	0.043773	0.018042	0.02	0.00152	0.008309
53	0.041874	0.019123	0.01	0.00136	0.007369
54	0.040195	0.0199	0.01	0.001176	0.006435
55	0.038812	0.020467	0.01	0.001003	0.00561
56	0.037844	0.020921	0.01	0.000864	0.004915
57	0.03722	0.021374	0.01	0.000762	0.004347
58	0.036483	0.021593	0.01	0.000702	0.003692
59	0.03603	0.019861	0.01	0.00069	0.003338
60	0.035607	0.019069	0.01	0.000696	0.003424

61	0.035157	0.018261	0.01	0.0007	0.003578
62	0.034494	0.017388	0.01	0.000701	0.003744
63	0.061253	0.01581	0.03	0.002242	0.013722
64	0.05954	0.017037	0.03	0.00223	0.012964
65	0.057113	0.018205	0.02	0.002155	0.011984
66	0.054604	0.01942	0.02	0.002035	0.010894
67	0.052099	0.020606	0.02	0.001862	0.009732
68	0.049928	0.021813	0.02	0.001659	0.008583
69	0.048366	0.023326	0.02	0.001464	0.007526
70	0.046742	0.024322	0.01	0.001235	0.006531
71	0.045728	0.025007	0.01	0.00106	0.0057
72	0.042278	0.022065	0.02	0.000865	0.004106
73	0.041091	0.02085	0.02	0.000855	0.004223
74	0.039959	0.019695	0.02	0.000843	0.004408
75	0.038417	0.018446	0.01	0.000827	0.004503
76	0.073693	0.016246	0.04	0.002562	0.016504
77	0.072404	0.017527	0.04	0.002605	0.015898
78	0.070644	0.018993	0.03	0.002628	0.015103
79	0.068278	0.020531	0.03	0.002596	0.014067
80	0.065658	0.022133	0.03	0.002495	0.012845
81	0.063231	0.023867	0.03	0.002332	0.011531
82	0.060957	0.025573	0.02	0.002101	0.010171
83	0.059105	0.027232	0.02	0.001833	0.008868
84	0.057758	0.029284	0.02	0.001574	0.007702
85	0.04864	0.024106	0.02	0.001054	0.005081
86	0.046123	0.022256	0.02	0.001014	0.005106
87	0.043863	0.020611	0.02	0.000977	0.005242
88	0.086071	0.016385	0.05	0.002781	0.019151
89	0.086741	0.017816	0.05	0.002898	0.01893
90	0.086331	0.019445	0.05	0.003011	0.018462
91	0.084889	0.021257	0.04	0.0031	0.017695
92	0.082777	0.023255	0.04	0.003138	0.016628
93	0.08054	0.025506	0.04	0.003109	0.015318
94	0.078206	0.027898	0.03	0.002972	0.013797

95	0.076234	0.030487	0.03	0.002735	0.012202
96	0.074977	0.033668	0.03	0.002462	0.010677
97	0.053902	0.025463	0.02	0.001224	0.006091
98	0.050663	0.023364	0.02	0.001161	0.006211
99	0.047596	0.021482	0.02	0.001105	0.006304
100	0.091792	0.01489	0.05	0.002739	0.020917
101	0.096476	0.016267	0.06	0.002899	0.021409
102	0.100585	0.017846	0.06	0.003078	0.02173
103	0.103151	0.01958	0.06	0.003259	0.02175
104	0.104123	0.021578	0.06	0.003453	0.021478
105	0.103606	0.023863	0.06	0.003645	0.020842
106	0.102435	0.026524	0.05	0.003816	0.019837
107	0.100922	0.02958	0.05	0.003917	0.018448
108	0.099314	0.033046	0.05	0.003883	0.016735
109	0.098445	0.037474	0.04	0.00374	0.01493
110	0.058261	0.026371	0.02	0.001372	0.007345
111	0.053936	0.023921	0.02	0.001286	0.007373
112	0.050095	0.021812	0.02	0.001215	0.007393
113	0.096025	0.014546	0.06	0.00276	0.02219
114	0.103227	0.01597	0.06	0.002942	0.023129
115	0.110754	0.017601	0.07	0.003147	0.023969
116	0.118291	0.0195	0.07	0.003386	0.024665
117	0.124143	0.021561	0.07	0.003628	0.025007
118	0.127993	0.024022	0.07	0.003923	0.025065
119	0.129341	0.026901	0.07	0.004258	0.024696
120	0.130033	0.030341	0.07	0.004622	0.023843
121	0.130214	0.034402	0.07	0.004956	0.022431
122	0.130513	0.039738	0.06	0.005235	0.020644
123	0.068305	0.03046	0.03	0.001639	0.009025
124	0.061478	0.026889	0.02	0.001502	0.008757
125	0.056223	0.024139	0.02	0.0014	0.008662
126	0.096785	0.014046	0.06	0.002733	0.022869
127	0.105182	0.015438	0.06	0.002915	0.024119
128	0.115309	0.017132	0.07	0.003138	0.025477

129	0.12653	0.019061	0.08	0.003385	0.026747
130	0.138627	0.021229	0.09	0.003657	0.027825
131	0.151689	0.023828	0.10	0.003993	0.028748
132	0.162292	0.026823	0.10	0.00439	0.029286
133	0.167492	0.03043	0.10	0.004891	0.029382
134	0.172824	0.034706	0.10	0.005504	0.028817
135	0.069385	0.029879	0.03	0.001743	0.010344
136	0.061469	0.025829	0.02	0.001582	0.009851
137	0.056119	0.023183	0.02	0.00148	0.009689
138	0.094829	0.013421	0.06	0.002672	0.022994
139	0.103495	0.014752	0.06	0.002846	0.024448
140	0.114489	0.016423	0.07	0.003069	0.026153
141	0.127252	0.018354	0.08	0.003316	0.027897
142	0.142362	0.020581	0.09	0.00359	0.029624
143	0.161339	0.023209	0.10	0.003914	0.031316
144	0.186622	0.026377	0.12	0.004317	0.032916
145	0.218996	0.030092	0.15	0.004813	0.034191
146	0.240881	0.034508	0.17	0.005462	0.034972
147	0.068847	0.028621	0.03	0.00183	0.01163
148	0.061745	0.025142	0.02	0.001687	0.011206
149	0.091144	0.012726	0.05	0.00259	0.02268
150	0.099875	0.014015	0.06	0.002765	0.024301
151	0.110215	0.015545	0.07	0.002966	0.026097
152	0.122818	0.017399	0.07	0.003201	0.028124
153	0.13791	0.019582	0.08	0.003463	0.030279
154	0.156779	0.02219	0.10	0.003763	0.032559
155	0.182652	0.025422	0.12	0.004134	0.035027
156	0.221948	0.02926	0.15	0.004573	0.037429
157	0.30901	0.033883	0.23	0.005125	0.039672
158	0.076966	0.031637	0.03	0.002126	0.013801
159	0.067259	0.026896	0.03	0.001912	0.012843
160	0.086163	0.011967	0.05	0.002488	0.021976
161	0.094193	0.013137	0.05	0.002651	0.023586
162	0.10397	0.014567	0.06	0.002842	0.025467

163	0.115949	0.016318	0.07	0.00307	0.027645
164	0.129981	0.018376	0.08	0.003315	0.030007
165	0.147247	0.020882	0.09	0.003596	0.032644
166	0.169098	0.023951	0.11	0.003918	0.035552
167	0.198535	0.027772	0.13	0.004296	0.038743
168	0.243433	0.032712	0.16	0.004777	0.042302
169	0.0841	0.033987	0.03	0.00243	0.015866
170	0.073488	0.028899	0.03	0.002182	0.014803
171	0.073944	0.010247	0.04	0.002228	0.019555
172	0.080536	0.01119	0.05	0.002374	0.021009
173	0.087907	0.012258	0.05	0.002529	0.022588
174	0.096494	0.013516	0.06	0.002699	0.024364
175	0.10686	0.015043	0.06	0.0029	0.026428
176	0.120383	0.017032	0.07	0.003152	0.028999
177	0.135867	0.019346	0.08	0.003415	0.031756
178	0.154702	0.022174	0.09	0.003706	0.03485
179	0.178781	0.025767	0.11	0.004043	0.038419
180	0.211303	0.030527	0.13	0.004455	0.042616
181	0.07993	0.030772	0.03	0.002485	0.017066
182	0.068677	0.009566	0.04	0.002113	0.018493
183	0.074764	0.010434	0.04	0.002257	0.019897
184	0.081578	0.011418	0.05	0.002406	0.021434
185	0.089328	0.012554	0.05	0.002569	0.023136
186	0.098183	0.013871	0.06	0.002743	0.02502
187	0.109104	0.015509	0.06	0.002951	0.027273
188	0.122416	0.017529	0.07	0.003188	0.029906
189	0.140076	0.020232	0.08	0.003496	0.033235
190	0.160523	0.023449	0.10	0.003808	0.036842
191	0.186566	0.027621	0.11	0.004161	0.04108
192	0.063634	0.008934	0.04	0.002003	0.017415
193	0.068833	0.009683	0.04	0.002126	0.01866
194	0.075034	0.01058	0.04	0.002272	0.020117
195	0.082029	0.011607	0.05	0.002428	0.021724
196	0.090078	0.012806	0.05	0.002599	0.023534

197	0.099349	0.014211	0.06	0.002784	0.025565
198	0.110351	0.01591	0.06	0.00299	0.027906
199	0.124475	0.01811	0.07	0.003246	0.030806
200	0.141293	0.020807	0.08	0.003523	0.034124
201	0.163925	0.024525	0.10	0.00388	0.038363
202	0.058853	0.008348	0.03	0.001892	0.016342
203	0.06342	0.009011	0.03	0.002007	0.017471
204	0.068733	0.009789	0.04	0.002137	0.01876
205	0.074817	0.01069	0.04	0.002281	0.020216
206	0.081768	0.011735	0.05	0.002437	0.021848
207	0.08992	0.012978	0.05	0.002612	0.023724
208	0.099564	0.014472	0.06	0.00281	0.025882
209	0.110897	0.016269	0.06	0.003025	0.02836
210	0.124904	0.018536	0.07	0.00328	0.031328
211	0.142425	0.021453	0.08	0.003575	0.034913
212	0.054933	0.007876	0.03	0.001805	0.015427
213	0.058815	0.008449	0.03	0.001906	0.016417
214	0.062858	0.009058	0.03	0.002004	0.017437
215	0.068077	0.009842	0.04	0.002134	0.018727
216	0.074088	0.010755	0.04	0.002279	0.020187
217	0.080962	0.011816	0.04	0.002436	0.02183
218	0.089037	0.013084	0.05	0.002613	0.023721
219	0.098544	0.014604	0.06	0.002811	0.025896
220	0.109911	0.016465	0.06	0.003035	0.028437
221	0.124008	0.018827	0.07	0.003298	0.031496
222	0.050722	0.007365	0.03	0.0017	0.014415
223	0.054282	0.007898	0.03	0.001798	0.015339
224	0.058219	0.008494	0.03	0.001903	0.016352
225	0.062148	0.0091	0.03	0.002001	0.017359
226	0.067056	0.009863	0.04	0.002123	0.018594
227	0.072875	0.010774	0.04	0.002265	0.020028
228	0.079592	0.011845	0.04	0.002425	0.02166
229	0.087424	0.013115	0.05	0.002599	0.023524
230	0.096691	0.014649	0.05	0.0028	0.025682

231	0.107976	0.016556	0.06	0.00303	0.028243
232	0.046833	0.006893	0.02	0.001598	0.013453
233	0.049929	0.007365	0.03	0.001687	0.014276
234	0.053331	0.007888	0.03	0.001783	0.015169
235	0.05712	0.008478	0.03	0.001886	0.016156
236	0.060922	0.009086	0.03	0.001983	0.017145
237	0.065683	0.009848	0.04	0.002105	0.018356
238	0.071279	0.010756	0.04	0.002247	0.019758
239	0.077736	0.01182	0.04	0.002402	0.021347
240	0.085252	0.013082	0.05	0.002577	0.023159
241	0.094136	0.014609	0.05	0.002775	0.025255
242	0.106464	0.016768	0.06	0.00306	0.02804
243	0.043336	0.006467	0.02	0.001505	0.012565
244	0.046065	0.006892	0.02	0.001587	0.013303
245	0.04893	0.007341	0.03	0.001669	0.014072
246	0.052179	0.007859	0.03	0.001762	0.014938
247	0.055853	0.008449	0.03	0.001866	0.015904
248	0.059958	0.009118	0.03	0.001977	0.016973
249	0.064046	0.009806	0.03	0.002081	0.018038
250	0.069353	0.010699	0.04	0.002219	0.019382
251	0.075505	0.011751	0.04	0.002374	0.020913
252	0.08255	0.012984	0.04	0.002545	0.022631
253	0.092131	0.014677	0.05	0.00278	0.024882
254	0.042453	0.006444	0.02	0.001486	0.012374
255	0.04497	0.006848	0.02	0.001563	0.013062
256	0.047804	0.007307	0.03	0.001648	0.013828
257	0.050885	0.007814	0.03	0.001738	0.014658
258	0.05436	0.008394	0.03	0.001837	0.015585
259	0.058274	0.009055	0.03	0.001949	0.016615
260	0.062647	0.009807	0.03	0.002069	0.017749
261	0.067133	0.010604	0.04	0.002185	0.018912
262	0.072846	0.011622	0.04	0.002334	0.020348
263	0.079388	0.012818	0.04	0.002498	0.021962
264	0.088465	0.014489	0.05	0.002736	0.024109

265	0.041234	0.006372	0.02	0.001456	0.012089
266	0.043792	0.006795	0.02	0.001537	0.012791
267	0.046472	0.007244	0.02	0.001619	0.013523
268	0.049463	0.007753	0.03	0.00171	0.014334
269	0.052719	0.008317	0.03	0.001807	0.015209
270	0.056427	0.008967	0.03	0.001915	0.016192
271	0.060543	0.009704	0.03	0.002033	0.017274
272	0.065153	0.010546	0.03	0.002161	0.018467
273	0.069917	0.011447	0.04	0.002285	0.019689
274	0.076702	0.012719	0.04	0.002471	0.021359
275	0.040289	0.006343	0.02	0.001437	0.011861
276	0.042557	0.006733	0.02	0.001509	0.012493
277	0.045058	0.007169	0.02	0.001588	0.013184
278	0.047822	0.007658	0.02	0.001674	0.01394
279	0.050974	0.008223	0.03	0.001771	0.014794
280	0.054395	0.008848	0.03	0.001875	0.015708
281	0.058244	0.009565	0.03	0.001989	0.016728
282	0.062584	0.010389	0.03	0.002116	0.017857
283	0.06691	0.011246	0.03	0.002232	0.018984
284	0.073519	0.012541	0.04	0.00243	0.020604
285	0.03913	0.006283	0.02	0.00141	0.011571
286	0.041243	0.00666	0.02	0.001479	0.012162
287	0.043579	0.007082	0.02	0.001554	0.012817
288	0.046161	0.007556	0.02	0.001636	0.013527
289	0.049008	0.008089	0.02	0.001727	0.014309
290	0.052296	0.00871	0.03	0.00183	0.015189
291	0.055828	0.009396	0.03	0.001939	0.016133
292	0.059803	0.010184	0.03	0.002061	0.017176
293	0.064329	0.0111	0.03	0.002196	0.018343
294	0.037921	0.006211	0.02	0.00138	0.011255
295	0.039897	0.006577	0.02	0.001446	0.011817
296	0.042063	0.006984	0.02	0.001518	0.012423
297	0.044449	0.007438	0.02	0.001596	0.013087
298	0.047062	0.007947	0.02	0.001681	0.013808

299	0.050027	0.008531	0.03	0.001777	0.014612
300	0.053377	0.009205	0.03	0.001885	0.01551
301	0.057037	0.00996	0.03	0.002002	0.016476
302	0.061074	0.010816	0.03	0.002128	0.017528
303	0.036644	0.006125	0.02	0.001347	0.010916
304	0.038515	0.006483	0.02	0.001411	0.011446
305	0.040521	0.006874	0.02	0.001479	0.012014
306	0.042713	0.007309	0.02	0.001553	0.012627
307	0.045125	0.007796	0.02	0.001634	0.013297
308	0.047784	0.008342	0.02	0.001723	0.014023
309	0.050833	0.00898	0.03	0.001823	0.014844
310	0.05422	0.009706	0.03	0.001937	0.015742
311	0.057874	0.010509	0.03	0.002055	0.016702
312	0.035355	0.006031	0.02	0.001312	0.010564
313	0.037101	0.006377	0.02	0.001373	0.011061
314	0.038974	0.006755	0.02	0.001439	0.011589
315	0.040988	0.00717	0.02	0.001508	0.012157
316	0.043202	0.007634	0.02	0.001584	0.012774
317	0.045632	0.008152	0.02	0.001666	0.013445
318	0.048307	0.008734	0.02	0.001758	0.014172
319	0.051464	0.009432	0.03	0.001867	0.015007
320	0.054822	0.010197	0.03	0.001982	0.01589
321	0.034062	0.00593	0.02	0.001275	0.010201
322	0.035678	0.006261	0.02	0.001333	0.010664
323	0.037426	0.006626	0.02	0.001394	0.01116
324	0.039288	0.007023	0.02	0.001461	0.011685
325	0.041312	0.007461	0.02	0.001532	0.012247
326	0.04353	0.007952	0.02	0.00161	0.012857
327	0.045959	0.008499	0.02	0.001694	0.013519
328	0.04866	0.00912	0.02	0.00179	0.014245
329	0.051832	0.009863	0.02	0.001903	0.015075
330	0.097609	0.021451	0.05	0.003389	0.025949
331	0.088193	0.019639	0.04	0.003164	0.023682
332	0.096132	0.021934	0.05	0.003451	0.02537

333	0.080233	0.018029	0.04	0.002947	0.021848
334	0.086717	0.019862	0.04	0.003186	0.023374
335	0.093912	0.021961	0.04	0.003471	0.025033
336	0.078646	0.018113	0.04	0.002949	0.021513
337	0.084462	0.019794	0.04	0.003183	0.022957
338	0.090714	0.021698	0.04	0.003458	0.024484
339	0.096784	0.023796	0.04	0.003776	0.025671

Construction Non-Cancer Health Risk Summary

Syphon Geotechnical
Construction Non-Cancer Health Risk Summary

Receptor
157

Max HI
0.0026

Receptor #	Total Risk	AR	B	TP	T
1	0.000222	1.64E-04	2.35E-05	1.67E-05	1.76E-05
2	0.000218	1.64E-04	2.35E-05	1.52E-05	1.55E-05
3	0.000217	1.64E-04	2.39E-05	1.42E-05	1.44E-05
4	0.000216	1.63E-04	2.49E-05	1.37E-05	1.37E-05
5	0.000245	1.81E-04	2.68E-05	1.87E-05	1.87E-05
6	0.000242	1.81E-04	2.70E-05	1.71E-05	1.72E-05
7	0.00024	1.81E-04	2.76E-05	1.60E-05	1.60E-05
8	0.000239	1.80E-04	2.87E-05	1.55E-05	1.52E-05
9	0.000238	1.78E-04	3.02E-05	1.53E-05	1.48E-05
10	0.000292	1.92E-04	3.75E-05	3.13E-05	3.11E-05
11	0.000285	1.95E-04	3.44E-05	2.73E-05	2.75E-05
12	0.000271	2.01E-04	3.12E-05	1.94E-05	1.90E-05
13	0.000269	2.00E-04	3.22E-05	1.82E-05	1.78E-05
14	0.000267	1.99E-04	3.35E-05	1.76E-05	1.69E-05
15	0.000266	1.97E-04	3.53E-05	1.75E-05	1.65E-05
16	0.000265	1.94E-04	3.72E-05	1.77E-05	1.64E-05
17	0.000339	2.09E-04	4.90E-05	4.18E-05	4.00E-05
18	0.000329	2.13E-04	4.41E-05	3.63E-05	3.52E-05
19	0.00032	2.17E-04	4.06E-05	3.15E-05	3.10E-05
20	0.000315	2.22E-04	3.82E-05	2.76E-05	2.74E-05
21	0.000302	2.24E-04	3.70E-05	2.10E-05	1.94E-05
22	0.000301	2.23E-04	3.95E-05	2.04E-05	1.89E-05
23	0.000299	2.19E-04	4.11E-05	2.04E-05	1.82E-05
24	0.000298	2.15E-04	4.38E-05	2.07E-05	1.85E-05
25	0.000297	2.11E-04	4.59E-05	2.12E-05	1.90E-05
26	0.0004	2.26E-04	6.63E-05	5.60E-05	5.18E-05

27	0.000387	2.34E-04	5.85E-05	4.92E-05	4.58E-05
28	0.000376	2.40E-04	5.24E-05	4.28E-05	4.02E-05
29	0.000366	2.46E-04	4.83E-05	3.69E-05	3.53E-05
30	0.000358	2.50E-04	4.57E-05	3.21E-05	3.11E-05
31	0.000353	2.53E-04	4.41E-05	2.83E-05	2.76E-05
32	0.000341	2.50E-04	4.62E-05	2.40E-05	2.08E-05
33	0.00034	2.46E-04	4.87E-05	2.41E-05	2.05E-05
34	0.000336	2.40E-04	5.10E-05	2.44E-05	2.05E-05
35	0.000332	2.33E-04	5.32E-05	2.50E-05	2.05E-05
36	0.000327	2.25E-04	5.50E-05	2.56E-05	2.14E-05
37	0.000486	2.30E-04	1.02E-04	8.01E-05	7.39E-05
38	0.000473	2.42E-04	9.08E-05	7.38E-05	6.68E-05
39	0.00046	2.53E-04	8.03E-05	6.67E-05	5.97E-05
40	0.000447	2.64E-04	7.09E-05	5.89E-05	5.28E-05
41	0.000434	2.73E-04	6.36E-05	5.10E-05	4.62E-05
42	0.000423	2.80E-04	5.86E-05	4.38E-05	4.04E-05
43	0.000414	2.85E-04	5.57E-05	3.79E-05	3.55E-05
44	0.000408	2.89E-04	5.44E-05	3.36E-05	3.16E-05
45	0.000403	2.93E-04	5.25E-05	3.07E-05	2.68E-05
46	0.000389	2.74E-04	6.18E-05	2.96E-05	2.38E-05
47	0.000384	2.65E-04	6.40E-05	3.01E-05	2.45E-05
48	0.000377	2.55E-04	6.57E-05	3.06E-05	2.55E-05
49	0.000573	2.42E-04	1.38E-04	9.98E-05	9.31E-05
50	0.000562	2.57E-04	1.25E-04	9.52E-05	8.57E-05
51	0.000548	2.71E-04	1.11E-04	8.85E-05	7.76E-05
52	0.000534	2.86E-04	9.87E-05	8.02E-05	6.92E-05
53	0.000523	3.03E-04	8.70E-05	7.18E-05	6.14E-05
54	0.000509	3.15E-04	7.87E-05	6.20E-05	5.36E-05
55	0.000496	3.24E-04	7.28E-05	5.29E-05	4.67E-05
56	0.000487	3.31E-04	6.92E-05	4.56E-05	4.09E-05
57	0.000481	3.38E-04	6.67E-05	4.02E-05	3.62E-05
58	0.000475	3.42E-04	6.52E-05	3.70E-05	3.08E-05
59	0.000454	3.14E-04	7.54E-05	3.64E-05	2.78E-05
60	0.000444	3.02E-04	7.71E-05	3.68E-05	2.85E-05

61	0.000434	2.89E-04	7.83E-05	3.70E-05	2.98E-05
62	0.000422	2.75E-04	7.86E-05	3.70E-05	3.12E-05
63	0.000666	2.50E-04	1.83E-04	1.18E-04	1.14E-04
64	0.000665	2.70E-04	1.70E-04	1.18E-04	1.08E-04
65	0.000655	2.88E-04	1.54E-04	1.14E-04	9.98E-05
66	0.000644	3.07E-04	1.38E-04	1.07E-04	9.08E-05
67	0.000629	3.26E-04	1.24E-04	9.83E-05	8.11E-05
68	0.000615	3.45E-04	1.11E-04	8.75E-05	7.15E-05
69	0.000609	3.69E-04	9.96E-05	7.73E-05	6.27E-05
70	0.000596	3.85E-04	9.10E-05	6.51E-05	5.44E-05
71	0.000586	3.96E-04	8.67E-05	5.59E-05	4.75E-05
72	0.000524	3.49E-04	9.46E-05	4.56E-05	3.42E-05
73	0.000504	3.30E-04	9.41E-05	4.51E-05	3.52E-05
74	0.000486	3.12E-04	9.32E-05	4.45E-05	3.67E-05
75	0.000464	2.92E-04	9.09E-05	4.36E-05	3.75E-05
76	0.000768	2.57E-04	2.38E-04	1.35E-04	1.38E-04
77	0.000773	2.77E-04	2.26E-04	1.37E-04	1.32E-04
78	0.000776	3.01E-04	2.11E-04	1.39E-04	1.26E-04
79	0.000772	3.25E-04	1.93E-04	1.37E-04	1.17E-04
80	0.000764	3.50E-04	1.75E-04	1.32E-04	1.07E-04
81	0.000755	3.78E-04	1.58E-04	1.23E-04	9.61E-05
82	0.000744	4.05E-04	1.43E-04	1.11E-04	8.47E-05
83	0.000733	4.31E-04	1.31E-04	9.67E-05	7.39E-05
84	0.00073	4.64E-04	1.19E-04	8.30E-05	6.42E-05
85	0.000594	3.82E-04	1.14E-04	5.56E-05	4.23E-05
86	0.000559	3.52E-04	1.10E-04	5.35E-05	4.25E-05
87	0.000527	3.26E-04	1.06E-04	5.16E-05	4.37E-05
88	0.000862	2.59E-04	2.96E-04	1.47E-04	1.60E-04
89	0.000885	2.82E-04	2.92E-04	1.53E-04	1.58E-04
90	0.000902	3.08E-04	2.82E-04	1.59E-04	1.54E-04
91	0.000913	3.36E-04	2.66E-04	1.64E-04	1.47E-04
92	0.000919	3.68E-04	2.47E-04	1.66E-04	1.39E-04
93	0.000923	4.04E-04	2.27E-04	1.64E-04	1.28E-04
94	0.000922	4.42E-04	2.08E-04	1.57E-04	1.15E-04

95	0.00092	4.83E-04	1.91E-04	1.44E-04	1.02E-04
96	0.000927	5.33E-04	1.75E-04	1.30E-04	8.90E-05
97	0.00065	4.03E-04	1.31E-04	6.46E-05	5.07E-05
98	0.000607	3.70E-04	1.24E-04	6.13E-05	5.17E-05
99	0.000567	3.40E-04	1.16E-04	5.83E-05	5.25E-05
100	0.000885	2.36E-04	3.31E-04	1.45E-04	1.74E-04
101	0.000936	2.57E-04	3.47E-04	1.53E-04	1.78E-04
102	0.000986	2.82E-04	3.60E-04	1.62E-04	1.81E-04
103	0.001027	3.10E-04	3.64E-04	1.72E-04	1.81E-04
104	0.00106	3.42E-04	3.58E-04	1.82E-04	1.79E-04
105	0.001087	3.78E-04	3.43E-04	1.92E-04	1.74E-04
106	0.001111	4.20E-04	3.24E-04	2.01E-04	1.65E-04
107	0.001133	4.68E-04	3.04E-04	2.07E-04	1.54E-04
108	0.001151	5.23E-04	2.83E-04	2.05E-04	1.39E-04
109	0.001178	5.93E-04	2.63E-04	1.97E-04	1.24E-04
110	0.000695	4.17E-04	1.44E-04	7.24E-05	6.12E-05
111	0.000641	3.79E-04	1.33E-04	6.79E-05	6.14E-05
112	0.000593	3.45E-04	1.22E-04	6.41E-05	6.16E-05
113	0.000912	2.30E-04	3.51E-04	1.46E-04	1.85E-04
114	0.000981	2.53E-04	3.80E-04	1.55E-04	1.93E-04
115	0.001054	2.79E-04	4.10E-04	1.66E-04	2.00E-04
116	0.001132	3.09E-04	4.39E-04	1.79E-04	2.05E-04
117	0.0012	3.41E-04	4.59E-04	1.91E-04	2.08E-04
118	0.001262	3.80E-04	4.65E-04	2.07E-04	2.09E-04
119	0.001312	4.26E-04	4.56E-04	2.25E-04	2.06E-04
120	0.001365	4.80E-04	4.42E-04	2.44E-04	1.99E-04
121	0.001418	5.45E-04	4.25E-04	2.62E-04	1.87E-04
122	0.00148	6.29E-04	4.03E-04	2.76E-04	1.72E-04
123	0.000813	4.82E-04	1.69E-04	8.65E-05	7.52E-05
124	0.000729	4.26E-04	1.51E-04	7.93E-05	7.30E-05
125	0.000665	3.82E-04	1.37E-04	7.39E-05	7.22E-05
126	0.000912	2.22E-04	3.55E-04	1.44E-04	1.91E-04
127	0.000988	2.44E-04	3.89E-04	1.54E-04	2.01E-04
128	0.001081	2.71E-04	4.32E-04	1.66E-04	2.12E-04

129	0.001183	3.02E-04	4.80E-04	1.79E-04	2.23E-04
130	0.001294	3.36E-04	5.33E-04	1.93E-04	2.32E-04
131	0.001418	3.77E-04	5.90E-04	2.11E-04	2.40E-04
132	0.001532	4.25E-04	6.32E-04	2.32E-04	2.44E-04
133	0.001623	4.82E-04	6.38E-04	2.58E-04	2.45E-04
134	0.001724	5.49E-04	6.44E-04	2.90E-04	2.40E-04
135	0.000821	4.73E-04	1.70E-04	9.20E-05	8.62E-05
136	0.000725	4.09E-04	1.50E-04	8.35E-05	8.21E-05
137	0.000661	3.67E-04	1.35E-04	7.81E-05	8.07E-05
138	0.000891	2.12E-04	3.46E-04	1.41E-04	1.92E-04
139	0.000969	2.34E-04	3.81E-04	1.50E-04	2.04E-04
140	0.001067	2.60E-04	4.27E-04	1.62E-04	2.18E-04
141	0.00118	2.91E-04	4.82E-04	1.75E-04	2.32E-04
142	0.001312	3.26E-04	5.50E-04	1.89E-04	2.47E-04
143	0.001474	3.67E-04	6.39E-04	2.07E-04	2.61E-04
144	0.001683	4.18E-04	7.64E-04	2.28E-04	2.74E-04
145	0.001946	4.76E-04	9.31E-04	2.54E-04	2.85E-04
146	0.002156	5.46E-04	1.03E-03	2.88E-04	2.91E-04
147	0.000813	4.53E-04	1.66E-04	9.66E-05	9.69E-05
148	0.000728	3.98E-04	1.47E-04	8.90E-05	9.34E-05
149	0.000857	2.01E-04	3.30E-04	1.37E-04	1.89E-04
150	0.000935	2.22E-04	3.65E-04	1.46E-04	2.02E-04
151	0.001027	2.46E-04	4.07E-04	1.57E-04	2.17E-04
152	0.001139	2.75E-04	4.60E-04	1.69E-04	2.34E-04
153	0.00127	3.10E-04	5.25E-04	1.83E-04	2.52E-04
154	0.001431	3.51E-04	6.10E-04	1.99E-04	2.71E-04
155	0.001645	4.02E-04	7.33E-04	2.18E-04	2.92E-04
156	0.001952	4.63E-04	9.35E-04	2.41E-04	3.12E-04
157	0.002567	5.36E-04	1.43E-03	2.70E-04	3.31E-04
158	0.00091	5.01E-04	1.83E-04	1.12E-04	1.15E-04
159	0.000793	4.26E-04	1.59E-04	1.01E-04	1.07E-04
160	0.000813	1.89E-04	3.09E-04	1.31E-04	1.83E-04
161	0.000885	2.08E-04	3.40E-04	1.40E-04	1.97E-04
162	0.000972	2.31E-04	3.79E-04	1.50E-04	2.12E-04

163	0.001078	2.58E-04	4.28E-04	1.62E-04	2.30E-04
164	0.001202	2.91E-04	4.86E-04	1.75E-04	2.50E-04
165	0.001352	3.31E-04	5.59E-04	1.90E-04	2.72E-04
166	0.001538	3.79E-04	6.56E-04	2.07E-04	2.96E-04
167	0.001782	4.40E-04	7.93E-04	2.27E-04	3.23E-04
168	0.002138	5.18E-04	1.02E-03	2.52E-04	3.52E-04
169	0.000996	5.38E-04	1.98E-04	1.28E-04	1.32E-04
170	0.000867	4.57E-04	1.71E-04	1.15E-04	1.23E-04
171	0.000703	1.62E-04	2.60E-04	1.18E-04	1.63E-04
172	0.000763	1.77E-04	2.85E-04	1.25E-04	1.75E-04
173	0.000829	1.94E-04	3.14E-04	1.33E-04	1.88E-04
174	0.000906	2.14E-04	3.47E-04	1.42E-04	2.03E-04
175	0.000999	2.38E-04	3.88E-04	1.53E-04	2.20E-04
176	0.00112	2.70E-04	4.42E-04	1.66E-04	2.42E-04
177	0.001256	3.06E-04	5.05E-04	1.80E-04	2.65E-04
178	0.00142	3.51E-04	5.83E-04	1.96E-04	2.90E-04
179	0.001628	4.08E-04	6.86E-04	2.13E-04	3.20E-04
180	0.001903	4.83E-04	8.30E-04	2.35E-04	3.55E-04
181	0.000944	4.87E-04	1.84E-04	1.31E-04	1.42E-04
182	0.000656	1.51E-04	2.39E-04	1.12E-04	1.54E-04
183	0.000712	1.65E-04	2.62E-04	1.19E-04	1.66E-04
184	0.000774	1.81E-04	2.88E-04	1.27E-04	1.79E-04
185	0.000844	1.99E-04	3.17E-04	1.36E-04	1.93E-04
186	0.000924	2.20E-04	3.51E-04	1.45E-04	2.08E-04
187	0.001022	2.46E-04	3.93E-04	1.56E-04	2.27E-04
188	0.001141	2.77E-04	4.46E-04	1.68E-04	2.49E-04
189	0.001298	3.20E-04	5.16E-04	1.84E-04	2.77E-04
190	0.001478	3.71E-04	5.99E-04	2.01E-04	3.07E-04
191	0.001705	4.37E-04	7.06E-04	2.20E-04	3.42E-04
192	0.000611	1.41E-04	2.19E-04	1.06E-04	1.45E-04
193	0.000659	1.53E-04	2.38E-04	1.12E-04	1.55E-04
194	0.000716	1.67E-04	2.61E-04	1.20E-04	1.68E-04
195	0.00078	1.84E-04	2.87E-04	1.28E-04	1.81E-04
196	0.000853	2.03E-04	3.17E-04	1.37E-04	1.96E-04

197	0.000937	2.25E-04	3.53E-04	1.47E-04	2.13E-04
198	0.001037	2.52E-04	3.94E-04	1.58E-04	2.32E-04
199	0.001164	2.87E-04	4.49E-04	1.71E-04	2.57E-04
200	0.001314	3.29E-04	5.14E-04	1.86E-04	2.84E-04
201	0.001516	3.88E-04	6.03E-04	2.05E-04	3.20E-04
202	0.000568	1.32E-04	2.00E-04	9.98E-05	1.36E-04
203	0.000611	1.43E-04	2.17E-04	1.06E-04	1.46E-04
204	0.00066	1.55E-04	2.36E-04	1.13E-04	1.56E-04
205	0.000716	1.69E-04	2.58E-04	1.20E-04	1.68E-04
206	0.00078	1.86E-04	2.84E-04	1.29E-04	1.82E-04
207	0.000855	2.05E-04	3.14E-04	1.38E-04	1.98E-04
208	0.000943	2.29E-04	3.50E-04	1.48E-04	2.16E-04
209	0.001046	2.58E-04	3.93E-04	1.60E-04	2.36E-04
210	0.001173	2.93E-04	4.45E-04	1.73E-04	2.61E-04
211	0.001331	3.40E-04	5.12E-04	1.89E-04	2.91E-04
212	0.000534	1.25E-04	1.85E-04	9.52E-05	1.29E-04
213	0.00057	1.34E-04	1.99E-04	1.01E-04	1.37E-04
214	0.000608	1.43E-04	2.13E-04	1.06E-04	1.45E-04
215	0.000656	1.56E-04	2.32E-04	1.13E-04	1.56E-04
216	0.000712	1.70E-04	2.54E-04	1.20E-04	1.68E-04
217	0.000776	1.87E-04	2.79E-04	1.29E-04	1.82E-04
218	0.000851	2.07E-04	3.08E-04	1.38E-04	1.98E-04
219	0.000938	2.31E-04	3.43E-04	1.48E-04	2.16E-04
220	0.001042	2.61E-04	3.85E-04	1.60E-04	2.37E-04
221	0.001171	2.98E-04	4.37E-04	1.74E-04	2.62E-04
222	0.000496	1.17E-04	1.69E-04	8.97E-05	1.20E-04
223	0.000529	1.25E-04	1.82E-04	9.49E-05	1.28E-04
224	0.000566	1.34E-04	1.95E-04	1.00E-04	1.36E-04
225	0.000603	1.44E-04	2.09E-04	1.06E-04	1.45E-04
226	0.00065	1.56E-04	2.26E-04	1.12E-04	1.55E-04
227	0.000704	1.71E-04	2.47E-04	1.20E-04	1.67E-04
228	0.000767	1.88E-04	2.71E-04	1.28E-04	1.80E-04
229	0.00084	2.08E-04	2.99E-04	1.37E-04	1.96E-04
230	0.000926	2.32E-04	3.32E-04	1.48E-04	2.14E-04

231	0.001031	2.62E-04	3.73E-04	1.60E-04	2.35E-04
232	0.00046	1.09E-04	1.55E-04	8.43E-05	1.12E-04
233	0.00049	1.17E-04	1.65E-04	8.90E-05	1.19E-04
234	0.000522	1.25E-04	1.77E-04	9.41E-05	1.26E-04
235	0.000558	1.34E-04	1.90E-04	9.95E-05	1.35E-04
236	0.000594	1.44E-04	2.03E-04	1.05E-04	1.43E-04
237	0.000639	1.56E-04	2.20E-04	1.11E-04	1.53E-04
238	0.000693	1.70E-04	2.39E-04	1.19E-04	1.65E-04
239	0.000753	1.87E-04	2.62E-04	1.27E-04	1.78E-04
240	0.000824	2.07E-04	2.88E-04	1.36E-04	1.93E-04
241	0.000908	2.31E-04	3.20E-04	1.46E-04	2.10E-04
242	0.001024	2.65E-04	3.64E-04	1.61E-04	2.34E-04
243	0.000428	1.02E-04	1.42E-04	7.94E-05	1.05E-04
244	0.000454	1.09E-04	1.51E-04	8.37E-05	1.11E-04
245	0.000482	1.16E-04	1.60E-04	8.81E-05	1.17E-04
246	0.000513	1.24E-04	1.71E-04	9.30E-05	1.24E-04
247	0.000549	1.34E-04	1.84E-04	9.84E-05	1.33E-04
248	0.000588	1.44E-04	1.98E-04	1.04E-04	1.41E-04
249	0.000627	1.55E-04	2.12E-04	1.10E-04	1.50E-04
250	0.000678	1.69E-04	2.30E-04	1.17E-04	1.61E-04
251	0.000737	1.86E-04	2.51E-04	1.25E-04	1.74E-04
252	0.000804	2.06E-04	2.76E-04	1.34E-04	1.89E-04
253	0.000895	2.32E-04	3.09E-04	1.47E-04	2.07E-04
254	0.000421	1.02E-04	1.38E-04	7.84E-05	1.03E-04
255	0.000446	1.08E-04	1.46E-04	8.25E-05	1.09E-04
256	0.000473	1.16E-04	1.55E-04	8.70E-05	1.15E-04
257	0.000503	1.24E-04	1.66E-04	9.17E-05	1.22E-04
258	0.000537	1.33E-04	1.77E-04	9.70E-05	1.30E-04
259	0.000575	1.43E-04	1.90E-04	1.03E-04	1.38E-04
260	0.000617	1.55E-04	2.05E-04	1.09E-04	1.48E-04
261	0.000661	1.68E-04	2.20E-04	1.15E-04	1.58E-04
262	0.000716	1.84E-04	2.39E-04	1.23E-04	1.70E-04
263	0.000779	2.03E-04	2.61E-04	1.32E-04	1.83E-04
264	0.000867	2.29E-04	2.93E-04	1.44E-04	2.01E-04

265	0.000411	1.01E-04	1.32E-04	7.68E-05	1.01E-04
266	0.000436	1.08E-04	1.41E-04	8.11E-05	1.07E-04
267	0.000462	1.15E-04	1.50E-04	8.54E-05	1.13E-04
268	0.000492	1.23E-04	1.59E-04	9.02E-05	1.19E-04
269	0.000524	1.32E-04	1.70E-04	9.54E-05	1.27E-04
270	0.00056	1.42E-04	1.82E-04	1.01E-04	1.35E-04
271	0.000601	1.54E-04	1.96E-04	1.07E-04	1.44E-04
272	0.000646	1.67E-04	2.11E-04	1.14E-04	1.54E-04
273	0.000692	1.81E-04	2.27E-04	1.21E-04	1.64E-04
274	0.000759	2.01E-04	2.49E-04	1.30E-04	1.78E-04
275	0.000403	1.00E-04	1.28E-04	7.58E-05	9.88E-05
276	0.000426	1.07E-04	1.35E-04	7.96E-05	1.04E-04
277	0.000451	1.13E-04	1.44E-04	8.38E-05	1.10E-04
278	0.000478	1.21E-04	1.52E-04	8.83E-05	1.16E-04
279	0.000509	1.30E-04	1.63E-04	9.35E-05	1.23E-04
280	0.000543	1.40E-04	1.74E-04	9.89E-05	1.31E-04
281	0.000582	1.51E-04	1.86E-04	1.05E-04	1.39E-04
282	0.000625	1.64E-04	2.00E-04	1.12E-04	1.49E-04
283	0.000668	1.78E-04	2.14E-04	1.18E-04	1.58E-04
284	0.000734	1.99E-04	2.36E-04	1.28E-04	1.72E-04
285	0.000394	9.95E-05	1.23E-04	7.44E-05	9.64E-05
286	0.000415	1.05E-04	1.30E-04	7.80E-05	1.01E-04
287	0.000438	1.12E-04	1.37E-04	8.20E-05	1.07E-04
288	0.000464	1.20E-04	1.46E-04	8.63E-05	1.13E-04
289	0.000493	1.28E-04	1.54E-04	9.11E-05	1.19E-04
290	0.000526	1.38E-04	1.65E-04	9.66E-05	1.27E-04
291	0.000562	1.49E-04	1.76E-04	1.02E-04	1.34E-04
292	0.000602	1.61E-04	1.89E-04	1.09E-04	1.43E-04
293	0.000647	1.76E-04	2.03E-04	1.16E-04	1.53E-04
294	0.000383	9.83E-05	1.18E-04	7.28E-05	9.38E-05
295	0.000403	1.04E-04	1.25E-04	7.63E-05	9.85E-05
296	0.000425	1.11E-04	1.31E-04	8.01E-05	1.04E-04
297	0.00045	1.18E-04	1.39E-04	8.42E-05	1.09E-04
298	0.000476	1.26E-04	1.47E-04	8.87E-05	1.15E-04

299	0.000506	1.35E-04	1.56E-04	9.37E-05	1.22E-04
300	0.000541	1.46E-04	1.66E-04	9.95E-05	1.29E-04
301	0.000578	1.58E-04	1.78E-04	1.06E-04	1.37E-04
302	0.00062	1.71E-04	1.90E-04	1.12E-04	1.46E-04
303	0.000372	9.70E-05	1.13E-04	7.11E-05	9.09E-05
304	0.000391	1.03E-04	1.19E-04	7.45E-05	9.54E-05
305	0.000412	1.09E-04	1.25E-04	7.80E-05	1.00E-04
306	0.000435	1.16E-04	1.32E-04	8.19E-05	1.05E-04
307	0.000459	1.23E-04	1.39E-04	8.62E-05	1.11E-04
308	0.000487	1.32E-04	1.47E-04	9.09E-05	1.17E-04
309	0.000518	1.42E-04	1.56E-04	9.62E-05	1.24E-04
310	0.000554	1.54E-04	1.67E-04	1.02E-04	1.31E-04
311	0.000592	1.66E-04	1.78E-04	1.08E-04	1.39E-04
312	0.000361	9.55E-05	1.08E-04	6.92E-05	8.80E-05
313	0.000379	1.01E-04	1.14E-04	7.25E-05	9.22E-05
314	0.000399	1.07E-04	1.19E-04	7.59E-05	9.66E-05
315	0.000419	1.14E-04	1.25E-04	7.96E-05	1.01E-04
316	0.000443	1.21E-04	1.32E-04	8.36E-05	1.06E-04
317	0.000468	1.29E-04	1.39E-04	8.79E-05	1.12E-04
318	0.000496	1.38E-04	1.47E-04	9.28E-05	1.18E-04
319	0.000529	1.49E-04	1.56E-04	9.85E-05	1.25E-04
320	0.000564	1.61E-04	1.66E-04	1.05E-04	1.32E-04
321	0.00035	9.39E-05	1.03E-04	6.73E-05	8.50E-05
322	0.000366	9.91E-05	1.08E-04	7.03E-05	8.88E-05
323	0.000385	1.05E-04	1.13E-04	7.36E-05	9.30E-05
324	0.000404	1.11E-04	1.19E-04	7.71E-05	9.74E-05
325	0.000426	1.18E-04	1.25E-04	8.08E-05	1.02E-04
326	0.000449	1.26E-04	1.31E-04	8.50E-05	1.07E-04
327	0.000475	1.35E-04	1.38E-04	8.94E-05	1.13E-04
328	0.000503	1.44E-04	1.46E-04	9.45E-05	1.19E-04
329	0.000537	1.56E-04	1.55E-04	1.00E-04	1.26E-04
330	0.001025	3.40E-04	2.91E-04	1.79E-04	2.16E-04
331	0.000934	3.11E-04	2.59E-04	1.67E-04	1.97E-04
332	0.001022	3.47E-04	2.82E-04	1.82E-04	2.11E-04

333	0.000855	2.85E-04	2.32E-04	1.56E-04	1.82E-04
334	0.000927	3.14E-04	2.50E-04	1.68E-04	1.95E-04
335	0.001009	3.48E-04	2.70E-04	1.83E-04	2.09E-04
336	0.000845	2.87E-04	2.24E-04	1.56E-04	1.79E-04
337	0.000912	3.13E-04	2.39E-04	1.68E-04	1.91E-04
338	0.000985	3.43E-04	2.55E-04	1.82E-04	2.04E-04
339	0.00106	3.77E-04	2.70E-04	1.99E-04	2.14E-04

Risk from Access Roads

Syphon Geotechnical
Risk from Access Roads

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
1	0.89623	0.0009	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.43E-09	3.4E-03
2	0.89932	0.0009	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.44E-09	3.4E-03
3	0.89854	0.0009	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.43E-09	3.4E-03
4	0.89366	0.0009	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.42E-09	3.4E-03
5	0.98917	0.0009	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.78E-09	3.8E-03
6	0.99012	0.0009	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.78E-09	3.8E-03
7	0.98887	0.0009	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.78E-09	3.8E-03
8	0.98302	0.0009	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.76E-09	3.8E-03
9	0.9729	0.0009	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.72E-09	3.7E-03
10	1.04954	0.0009	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.08	70	1	4.01E-09	4.0E-03
11	1.06989	0.0009	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.09E-09	4.1E-03
12	1.10089	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.21E-09	4.2E-03
13	1.09694	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.19E-09	4.2E-03
14	1.08965	0.0009	1.0E-03	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.16E-09	4.2E-03
15	1.0767	0.0009	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.11E-09	4.1E-03
16	1.05986	0.0009	9.7E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.05E-09	4.1E-03
17	1.14225	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.37E-09	4.4E-03
18	1.16879	0.0009	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.08	70	1	4.47E-09	4.5E-03
19	1.19022	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.55E-09	4.5E-03
20	1.21445	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.64E-09	4.6E-03
21	1.22754	0.0009	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.08	70	1	4.69E-09	4.7E-03
22	1.21837	0.0009	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.08	70	1	4.66E-09	4.7E-03
23	1.20028	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.59E-09	4.6E-03
24	1.17953	0.0009	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.08	70	1	4.51E-09	4.5E-03
25	1.15347	0.0009	1.1E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.41E-09	4.4E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
26	1.23708	0.0009	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.08	70	1	4.73E-09	4.7E-03
27	1.27833	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.89E-09	4.9E-03
28	1.31657	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.03E-09	5.0E-03
29	1.34439	0.0009	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.14E-09	5.1E-03
30	1.36648	0.0009	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.22E-09	5.2E-03
31	1.38738	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.30E-09	5.3E-03
32	1.37058	0.0009	1.3E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.24E-09	5.2E-03
33	1.34867	0.0009	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.15E-09	5.2E-03
34	1.3147	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.02E-09	5.0E-03
35	1.276	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.88E-09	4.9E-03
36	1.23301	0.0009	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.08	70	1	4.71E-09	4.7E-03
37	1.25973	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.81E-09	4.8E-03
38	1.32235	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.05E-09	5.1E-03
39	1.38673	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.30E-09	5.3E-03
40	1.44644	0.0009	1.3E-03	361	1	0.96	1E-06	4.6E-07	1.1	10	0.08	70	1	5.53E-09	5.5E-03
41	1.49546	0.0009	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.72E-09	5.7E-03
42	1.53414	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.86E-09	5.9E-03
43	1.56102	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.97E-09	6.0E-03
44	1.58156	0.0009	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.04E-09	6.0E-03
45	1.60509	0.0009	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.08	70	1	6.13E-09	6.1E-03
46	1.49903	0.0009	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.73E-09	5.7E-03
47	1.4508	0.0009	1.3E-03	361	1	0.96	1E-06	4.6E-07	1.1	10	0.08	70	1	5.54E-09	5.5E-03
48	1.39821	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.34E-09	5.3E-03
49	1.32665	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.07E-09	5.1E-03
50	1.40732	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.38E-09	5.4E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
51	1.48577	0.0009	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.68E-09	5.7E-03
52	1.56356	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.98E-09	6.0E-03
53	1.65721	0.0009	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.08	70	1	6.33E-09	6.3E-03
54	1.72459	0.0009	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.08	70	1	6.59E-09	6.6E-03
55	1.77372	0.0009	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.08	70	1	6.78E-09	6.8E-03
56	1.81302	0.0009	1.7E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.08	70	1	6.93E-09	6.9E-03
57	1.85233	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.08E-09	7.1E-03
58	1.87125	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.15E-09	7.2E-03
59	1.72123	0.0009	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.58E-09	6.6E-03
60	1.65252	0.0009	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.08	70	1	6.32E-09	6.3E-03
61	1.58256	0.0009	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.05E-09	6.0E-03
62	1.50686	0.0009	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.08	70	1	5.76E-09	5.8E-03
63	1.37016	0.0009	1.3E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.24E-09	5.2E-03
64	1.47648	0.0009	1.3E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.64E-09	5.6E-03
65	1.5777	0.0009	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.03E-09	6.0E-03
66	1.68298	0.0009	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.08	70	1	6.43E-09	6.4E-03
67	1.78579	0.0009	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.08	70	1	6.82E-09	6.8E-03
68	1.89037	0.0009	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.08	70	1	7.22E-09	7.2E-03
69	2.02145	0.0009	1.8E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.73E-09	7.7E-03
70	2.10777	0.0009	1.9E-03	361	1	0.96	1E-06	6.7E-07	1.1	10	0.08	70	1	8.06E-09	8.1E-03
71	2.16712	0.0009	2.0E-03	361	1	0.96	1E-06	6.9E-07	1.1	10	0.08	70	1	8.28E-09	8.3E-03
72	1.91222	0.0009	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.08	70	1	7.31E-09	7.3E-03
73	1.80688	0.0009	1.7E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.08	70	1	6.91E-09	6.9E-03
74	1.70681	0.0009	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.52E-09	6.5E-03
75	1.59853	0.0009	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.08	70	1	6.11E-09	6.1E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor														(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	Consta nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
76	1.4079	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.38E-09	5.4E-03
77	1.51896	0.0009	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.08	70	1	5.80E-09	5.8E-03
78	1.646	0.0009	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.08	70	1	6.29E-09	6.3E-03
79	1.77924	0.0009	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.08	70	1	6.80E-09	6.8E-03
80	1.91806	0.0009	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.08	70	1	7.33E-09	7.3E-03
81	2.06836	0.0009	1.9E-03	361	1	0.96	1E-06	6.5E-07	1.1	10	0.08	70	1	7.90E-09	7.9E-03
82	2.21624	0.0009	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.08	70	1	8.47E-09	8.5E-03
83	2.35994	0.0009	2.2E-03	361	1	0.96	1E-06	7.5E-07	1.1	10	0.08	70	1	9.02E-09	9.0E-03
84	2.53777	0.0009	2.3E-03	361	1	0.96	1E-06	8.0E-07	1.1	10	0.08	70	1	9.70E-09	9.7E-03
85	2.08911	0.0009	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.08	70	1	7.98E-09	8.0E-03
86	1.92878	0.0009	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.08	70	1	7.37E-09	7.4E-03
87	1.78618	0.0009	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.08	70	1	6.83E-09	6.8E-03
88	1.41998	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.43E-09	5.4E-03
89	1.54397	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.90E-09	5.9E-03
90	1.68518	0.0009	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.08	70	1	6.44E-09	6.4E-03
91	1.84215	0.0009	1.7E-03	361	1	0.96	1E-06	5.8E-07	1.1	10	0.08	70	1	7.04E-09	7.0E-03
92	2.01535	0.0009	1.8E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.70E-09	7.7E-03
93	2.21042	0.0009	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.08	70	1	8.45E-09	8.4E-03
94	2.41771	0.0009	2.2E-03	361	1	0.96	1E-06	7.6E-07	1.1	10	0.08	70	1	9.24E-09	9.2E-03
95	2.64208	0.0009	2.4E-03	361	1	0.96	1E-06	8.4E-07	1.1	10	0.08	70	1	1.01E-08	1.0E-02
96	2.91776	0.0009	2.7E-03	361	1	0.96	1E-06	9.2E-07	1.1	10	0.08	70	1	1.12E-08	1.1E-02
97	2.20667	0.0009	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.08	70	1	8.43E-09	8.4E-03
98	2.02476	0.0009	1.8E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.74E-09	7.7E-03
99	1.86168	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.11E-09	7.1E-03
100	1.29042	0.0009	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.08	70	1	4.93E-09	4.9E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
101	1.40969	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.39E-09	5.4E-03
102	1.54656	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.91E-09	5.9E-03
103	1.69681	0.0009	1.5E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.48E-09	6.5E-03
104	1.86999	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.15E-09	7.1E-03
105	2.06798	0.0009	1.9E-03	361	1	0.96	1E-06	6.5E-07	1.1	10	0.08	70	1	7.90E-09	7.9E-03
106	2.29863	0.0009	2.1E-03	361	1	0.96	1E-06	7.3E-07	1.1	10	0.08	70	1	8.78E-09	8.8E-03
107	2.56348	0.0009	2.3E-03	361	1	0.96	1E-06	8.1E-07	1.1	10	0.08	70	1	9.80E-09	9.8E-03
108	2.86382	0.0009	2.6E-03	361	1	0.96	1E-06	9.1E-07	1.1	10	0.08	70	1	1.09E-08	1.1E-02
109	3.24761	0.0009	3.0E-03	361	1	0.96	1E-06	1.0E-06	1.1	10	0.08	70	1	1.24E-08	1.2E-02
110	2.28537	0.0009	2.1E-03	361	1	0.96	1E-06	7.2E-07	1.1	10	0.08	70	1	8.73E-09	8.7E-03
111	2.07308	0.0009	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.08	70	1	7.92E-09	7.9E-03
112	1.89027	0.0009	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.08	70	1	7.22E-09	7.2E-03
113	1.26059	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.82E-09	4.8E-03
114	1.38402	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.29E-09	5.3E-03
115	1.52537	0.0009	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.08	70	1	5.83E-09	5.8E-03
116	1.68988	0.0009	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.08	70	1	6.46E-09	6.5E-03
117	1.86848	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.14E-09	7.1E-03
118	2.08179	0.0009	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.08	70	1	7.96E-09	8.0E-03
119	2.33126	0.0009	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.08	70	1	8.91E-09	8.9E-03
120	2.62939	0.0009	2.4E-03	361	1	0.96	1E-06	8.3E-07	1.1	10	0.08	70	1	1.00E-08	1.0E-02
121	2.98138	0.0009	2.7E-03	361	1	0.96	1E-06	9.4E-07	1.1	10	0.08	70	1	1.14E-08	1.1E-02
122	3.44375	0.0009	3.1E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.08	70	1	1.32E-08	1.3E-02
123	2.6397	0.0009	2.4E-03	361	1	0.96	1E-06	8.3E-07	1.1	10	0.08	70	1	1.01E-08	1.0E-02
124	2.33025	0.0009	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.08	70	1	8.91E-09	8.9E-03
125	2.09191	0.0009	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.08	70	1	7.99E-09	8.0E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
126	1.21721	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.65E-09	4.7E-03
127	1.33786	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.11E-09	5.1E-03
128	1.4847	0.0009	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.67E-09	5.7E-03
129	1.65182	0.0009	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.08	70	1	6.31E-09	6.3E-03
130	1.83972	0.0009	1.7E-03	361	1	0.96	1E-06	5.8E-07	1.1	10	0.08	70	1	7.03E-09	7.0E-03
131	2.06499	0.0009	1.9E-03	361	1	0.96	1E-06	6.5E-07	1.1	10	0.08	70	1	7.89E-09	7.9E-03
132	2.3245	0.0009	2.1E-03	361	1	0.96	1E-06	7.3E-07	1.1	10	0.08	70	1	8.88E-09	8.9E-03
133	2.63709	0.0009	2.4E-03	361	1	0.96	1E-06	8.3E-07	1.1	10	0.08	70	1	1.01E-08	1.0E-02
134	3.00768	0.0009	2.7E-03	361	1	0.96	1E-06	9.5E-07	1.1	10	0.08	70	1	1.15E-08	1.1E-02
135	2.58938	0.0009	2.4E-03	361	1	0.96	1E-06	8.2E-07	1.1	10	0.08	70	1	9.90E-09	9.9E-03
136	2.23843	0.0009	2.0E-03	361	1	0.96	1E-06	7.1E-07	1.1	10	0.08	70	1	8.55E-09	8.6E-03
137	2.00912	0.0009	1.8E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.68E-09	7.7E-03
138	1.16308	0.0009	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.08	70	1	4.44E-09	4.4E-03
139	1.27846	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.89E-09	4.9E-03
140	1.42322	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.44E-09	5.4E-03
141	1.59059	0.0009	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.08E-09	6.1E-03
142	1.78358	0.0009	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.08	70	1	6.82E-09	6.8E-03
143	2.01137	0.0009	1.8E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.69E-09	7.7E-03
144	2.28589	0.0009	2.1E-03	361	1	0.96	1E-06	7.2E-07	1.1	10	0.08	70	1	8.74E-09	8.7E-03
145	2.6078	0.0009	2.4E-03	361	1	0.96	1E-06	8.2E-07	1.1	10	0.08	70	1	9.97E-09	1.0E-02
146	2.99057	0.0009	2.7E-03	361	1	0.96	1E-06	9.5E-07	1.1	10	0.08	70	1	1.14E-08	1.1E-02
147	2.48038	0.0009	2.3E-03	361	1	0.96	1E-06	7.8E-07	1.1	10	0.08	70	1	9.48E-09	9.5E-03
148	2.17881	0.0009	2.0E-03	361	1	0.96	1E-06	6.9E-07	1.1	10	0.08	70	1	8.33E-09	8.3E-03
149	1.1029	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.21E-09	4.2E-03
150	1.21458	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.64E-09	4.6E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
151	1.3472	0.0009	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.08	70	1	5.15E-09	5.1E-03
152	1.50784	0.0009	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.08	70	1	5.76E-09	5.8E-03
153	1.69701	0.0009	1.5E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.49E-09	6.5E-03
154	1.923	0.0009	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.08	70	1	7.35E-09	7.3E-03
155	2.20312	0.0009	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.08	70	1	8.42E-09	8.4E-03
156	2.5357	0.0009	2.3E-03	361	1	0.96	1E-06	8.0E-07	1.1	10	0.08	70	1	9.69E-09	9.7E-03
157	2.9364	0.0009	2.7E-03	361	1	0.96	1E-06	9.3E-07	1.1	10	0.08	70	1	1.12E-08	1.1E-02
158	2.74171	0.0009	2.5E-03	361	1	0.96	1E-06	8.7E-07	1.1	10	0.08	70	1	1.05E-08	1.0E-02
159	2.33086	0.0009	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.08	70	1	8.91E-09	8.9E-03
160	1.03706	0.0009	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.08	70	1	3.96E-09	4.0E-03
161	1.13852	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.35E-09	4.4E-03
162	1.26239	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.82E-09	4.8E-03
163	1.41413	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.40E-09	5.4E-03
164	1.59252	0.0009	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.09E-09	6.1E-03
165	1.80966	0.0009	1.7E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.08	70	1	6.92E-09	6.9E-03
166	2.07568	0.0009	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.08	70	1	7.93E-09	7.9E-03
167	2.4068	0.0009	2.2E-03	361	1	0.96	1E-06	7.6E-07	1.1	10	0.08	70	1	9.20E-09	9.2E-03
168	2.83486	0.0009	2.6E-03	361	1	0.96	1E-06	9.0E-07	1.1	10	0.08	70	1	1.08E-08	1.1E-02
169	2.9454	0.0009	2.7E-03	361	1	0.96	1E-06	9.3E-07	1.1	10	0.08	70	1	1.13E-08	1.1E-02
170	2.50444	0.0009	2.3E-03	361	1	0.96	1E-06	7.9E-07	1.1	10	0.08	70	1	9.57E-09	9.6E-03
171	0.88806	0.0009	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.39E-09	3.4E-03
172	0.96976	0.0009	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.71E-09	3.7E-03
173	1.06227	0.0009	9.7E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.06E-09	4.1E-03
174	1.1713	0.0009	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.08	70	1	4.48E-09	4.5E-03
175	1.30368	0.0009	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.08	70	1	4.98E-09	5.0E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
176	1.47602	0.0009	1.3E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.08	70	1	5.64E-09	5.6E-03
177	1.67658	0.0009	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.08	70	1	6.41E-09	6.4E-03
178	1.92168	0.0009	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.08	70	1	7.34E-09	7.3E-03
179	2.233	0.0009	2.0E-03	361	1	0.96	1E-06	7.1E-07	1.1	10	0.08	70	1	8.53E-09	8.5E-03
180	2.64556	0.0009	2.4E-03	361	1	0.96	1E-06	8.4E-07	1.1	10	0.08	70	1	1.01E-08	1.0E-02
181	2.66676	0.0009	2.4E-03	361	1	0.96	1E-06	8.4E-07	1.1	10	0.08	70	1	1.02E-08	1.0E-02
182	0.82903	0.0009	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.08	70	1	3.17E-09	3.2E-03
183	0.90425	0.0009	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.46E-09	3.5E-03
184	0.98953	0.0009	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.78E-09	3.8E-03
185	1.08792	0.0009	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.16E-09	4.2E-03
186	1.20213	0.0009	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.08	70	1	4.59E-09	4.6E-03
187	1.34404	0.0009	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.08	70	1	5.14E-09	5.1E-03
188	1.51913	0.0009	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.08	70	1	5.81E-09	5.8E-03
189	1.75331	0.0009	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.08	70	1	6.70E-09	6.7E-03
190	2.03217	0.0009	1.9E-03	361	1	0.96	1E-06	6.4E-07	1.1	10	0.08	70	1	7.77E-09	7.8E-03
191	2.39372	0.0009	2.2E-03	361	1	0.96	1E-06	7.6E-07	1.1	10	0.08	70	1	9.15E-09	9.1E-03
192	0.77427	0.0009	7.1E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.08	70	1	2.96E-09	3.0E-03
193	0.83916	0.0009	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.21E-09	3.2E-03
194	0.91691	0.0009	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.50E-09	3.5E-03
195	1.00588	0.0009	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.84E-09	3.8E-03
196	1.10975	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.24E-09	4.2E-03
197	1.23155	0.0009	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.08	70	1	4.71E-09	4.7E-03
198	1.37883	0.0009	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.08	70	1	5.27E-09	5.3E-03
199	1.56944	0.0009	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.00E-09	6.0E-03
200	1.80317	0.0009	1.6E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.08	70	1	6.89E-09	6.9E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
201	2.12536	0.0009	1.9E-03	361	1	0.96	1E-06	6.7E-07	1.1	10	0.08	70	1	8.12E-09	8.1E-03
202	0.72341	0.0009	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.76E-09	2.8E-03
203	0.78094	0.0009	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	2.98E-09	3.0E-03
204	0.84833	0.0009	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.24E-09	3.2E-03
205	0.92642	0.0009	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.54E-09	3.5E-03
206	1.01697	0.0009	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.89E-09	3.9E-03
207	1.1247	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.30E-09	4.3E-03
208	1.25419	0.0009	1.1E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.79E-09	4.8E-03
209	1.40992	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.39E-09	5.4E-03
210	1.60637	0.0009	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.08	70	1	6.14E-09	6.1E-03
211	1.85912	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.10E-09	7.1E-03
212	0.68252	0.0009	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.61E-09	2.6E-03
213	0.7322	0.0009	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.80E-09	2.8E-03
214	0.78501	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.00E-09	3.0E-03
215	0.85294	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.26E-09	3.3E-03
216	0.93207	0.0009	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.56E-09	3.6E-03
217	1.02398	0.0009	9.4E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.91E-09	3.9E-03
218	1.13391	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.33E-09	4.3E-03
219	1.26563	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.84E-09	4.8E-03
220	1.42692	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.45E-09	5.5E-03
221	1.63159	0.0009	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.08	70	1	6.24E-09	6.2E-03
222	0.63826	0.0009	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.44E-09	2.4E-03
223	0.68444	0.0009	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.62E-09	2.6E-03
224	0.73608	0.0009	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.81E-09	2.8E-03
225	0.78864	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.01E-09	3.0E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
226	0.85475	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.27E-09	3.3E-03
227	0.93371	0.0009	8.5E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.08	70	1	3.57E-09	3.6E-03
228	1.02649	0.0009	9.4E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.92E-09	3.9E-03
229	1.13654	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.34E-09	4.3E-03
230	1.26948	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.85E-09	4.9E-03
231	1.43476	0.0009	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.08	70	1	5.48E-09	5.5E-03
232	0.59738	0.0009	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.28E-09	2.3E-03
233	0.63827	0.0009	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.44E-09	2.4E-03
234	0.6836	0.0009	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.61E-09	2.6E-03
235	0.73475	0.0009	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.81E-09	2.8E-03
236	0.78739	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.01E-09	3.0E-03
237	0.85345	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.26E-09	3.3E-03
238	0.93214	0.0009	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.56E-09	3.6E-03
239	1.02431	0.0009	9.4E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.91E-09	3.9E-03
240	1.13375	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.33E-09	4.3E-03
241	1.26602	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.84E-09	4.8E-03
242	1.45318	0.0009	1.3E-03	361	1	0.96	1E-06	4.6E-07	1.1	10	0.08	70	1	5.55E-09	5.6E-03
243	0.56048	0.0009	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.14E-09	2.1E-03
244	0.59724	0.0009	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.28E-09	2.3E-03
245	0.6362	0.0009	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.43E-09	2.4E-03
246	0.68106	0.0009	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.60E-09	2.6E-03
247	0.73219	0.0009	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.80E-09	2.8E-03
248	0.79016	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.02E-09	3.0E-03
249	0.84984	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.25E-09	3.2E-03
250	0.92723	0.0009	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.54E-09	3.5E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
251	1.01839	0.0009	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.89E-09	3.9E-03
252	1.12521	0.0009	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.08	70	1	4.30E-09	4.3E-03
253	1.2719	0.0009	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.86E-09	4.9E-03
254	0.55843	0.0009	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.13E-09	2.1E-03
255	0.59348	0.0009	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.27E-09	2.3E-03
256	0.63321	0.0009	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.42E-09	2.4E-03
257	0.67714	0.0009	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.59E-09	2.6E-03
258	0.72746	0.0009	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.78E-09	2.8E-03
259	0.78471	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.00E-09	3.0E-03
260	0.8499	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.25E-09	3.2E-03
261	0.91897	0.0009	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.51E-09	3.5E-03
262	1.00718	0.0009	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.08	70	1	3.85E-09	3.8E-03
263	1.11081	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.25E-09	4.2E-03
264	1.25561	0.0009	1.1E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.08	70	1	4.80E-09	4.8E-03
265	0.55223	0.0009	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.11E-09	2.1E-03
266	0.58887	0.0009	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.25E-09	2.3E-03
267	0.62778	0.0009	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.40E-09	2.4E-03
268	0.67187	0.0009	6.1E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.57E-09	2.6E-03
269	0.72077	0.0009	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.75E-09	2.8E-03
270	0.77713	0.0009	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	2.97E-09	3.0E-03
271	0.841	0.0009	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.21E-09	3.2E-03
272	0.91391	0.0009	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.49E-09	3.5E-03
273	0.99206	0.0009	9.1E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.79E-09	3.8E-03
274	1.10227	0.0009	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.08	70	1	4.21E-09	4.2E-03
275	0.54971	0.0009	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.10E-09	2.1E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
276	0.58352	0.0009	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.23E-09	2.2E-03
277	0.6213	0.0009	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.37E-09	2.4E-03
278	0.66365	0.0009	6.1E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.54E-09	2.5E-03
279	0.71263	0.0009	6.5E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.72E-09	2.7E-03
280	0.76679	0.0009	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.08	70	1	2.93E-09	2.9E-03
281	0.82892	0.0009	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.08	70	1	3.17E-09	3.2E-03
282	0.90035	0.0009	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.44E-09	3.4E-03
283	0.97456	0.0009	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.08	70	1	3.72E-09	3.7E-03
284	1.08684	0.0009	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.08	70	1	4.15E-09	4.2E-03
285	0.54447	0.0009	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.08E-09	2.1E-03
286	0.57713	0.0009	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.21E-09	2.2E-03
287	0.61377	0.0009	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.35E-09	2.3E-03
288	0.65479	0.0009	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.50E-09	2.5E-03
289	0.70099	0.0009	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.68E-09	2.7E-03
290	0.75484	0.0009	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.08	70	1	2.88E-09	2.9E-03
291	0.81431	0.0009	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.08	70	1	3.11E-09	3.1E-03
292	0.88253	0.0009	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.37E-09	3.4E-03
293	0.96194	0.0009	8.8E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.08	70	1	3.68E-09	3.7E-03
294	0.53823	0.0009	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.06E-09	2.1E-03
295	0.56995	0.0009	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.18E-09	2.2E-03
296	0.60521	0.0009	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.31E-09	2.3E-03
297	0.64457	0.0009	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.46E-09	2.5E-03
298	0.68873	0.0009	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.63E-09	2.6E-03
299	0.73933	0.0009	6.8E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.83E-09	2.8E-03
300	0.79773	0.0009	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.05E-09	3.0E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
301	0.86316	0.0009	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.30E-09	3.3E-03
302	0.93731	0.0009	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.08	70	1	3.58E-09	3.6E-03
303	0.53079	0.0009	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.03E-09	2.0E-03
304	0.56186	0.0009	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.15E-09	2.1E-03
305	0.59571	0.0009	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.28E-09	2.3E-03
306	0.63343	0.0009	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.42E-09	2.4E-03
307	0.67563	0.0009	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.58E-09	2.6E-03
308	0.72297	0.0009	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.76E-09	2.8E-03
309	0.77824	0.0009	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	2.97E-09	3.0E-03
310	0.84115	0.0009	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.21E-09	3.2E-03
311	0.91074	0.0009	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.08	70	1	3.48E-09	3.5E-03
312	0.52269	0.0009	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.00E-09	2.0E-03
313	0.55267	0.0009	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.11E-09	2.1E-03
314	0.58541	0.0009	5.3E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.24E-09	2.2E-03
315	0.62139	0.0009	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.37E-09	2.4E-03
316	0.66157	0.0009	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.08	70	1	2.53E-09	2.5E-03
317	0.70645	0.0009	6.5E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.70E-09	2.7E-03
318	0.75692	0.0009	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.08	70	1	2.89E-09	2.9E-03
319	0.8174	0.0009	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.08	70	1	3.12E-09	3.1E-03
320	0.88369	0.0009	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.08	70	1	3.38E-09	3.4E-03
321	0.51389	0.0009	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.08	70	1	1.96E-09	2.0E-03
322	0.5426	0.0009	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.08	70	1	2.07E-09	2.1E-03
323	0.57423	0.0009	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.08	70	1	2.19E-09	2.2E-03
324	0.60861	0.0009	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.08	70	1	2.33E-09	2.3E-03
325	0.64662	0.0009	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.08	70	1	2.47E-09	2.5E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
326	0.68917	0.0009	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.08	70	1	2.63E-09	2.6E-03
327	0.73656	0.0009	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.08	70	1	2.81E-09	2.8E-03
328	0.79036	0.0009	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.08	70	1	3.02E-09	3.0E-03
329	0.85478	0.0009	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.08	70	1	3.27E-09	3.3E-03
330	1.85899	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.10E-09	7.1E-03
331	1.70199	0.0009	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.50E-09	6.5E-03
332	1.90083	0.0009	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.08	70	1	7.26E-09	7.3E-03
333	1.56244	0.0009	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.08	70	1	5.97E-09	6.0E-03
334	1.72132	0.0009	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.58E-09	6.6E-03
335	1.90319	0.0009	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.08	70	1	7.27E-09	7.3E-03
336	1.56969	0.0009	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.08	70	1	6.00E-09	6.0E-03
337	1.71539	0.0009	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.08	70	1	6.56E-09	6.6E-03
338	1.88035	0.0009	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.08	70	1	7.19E-09	7.2E-03
339	2.06221	0.0009	1.9E-03	361	1	0.96	1E-06	6.5E-07	1.1	10	0.08	70	1	7.88E-09	7.9E-03

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0-2)		MAX	
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(Risk/M ill)		
1	9.1E-04	8.2E-04	1090	1	0.96	1E-06	8.56E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	0.04
2	9.1E-04	8.2E-04	1090	1	0.96	1E-06	8.58E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	
3	9.1E-04	8.2E-04	1090	1	0.96	1E-06	8.58E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	0.03
4	9.1E-04	8.2E-04	1090	1	0.96	1E-06	8.53E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	
5	9.1E-04	9.0E-04	1090	1	0.96	1E-06	9.44E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
6	9.1E-04	9.0E-04	1090	1	0.96	1E-06	9.45E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
7	9.1E-04	9.0E-04	1090	1	0.96	1E-06	9.44E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
8	9.1E-04	9.0E-04	1090	1	0.96	1E-06	9.38E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
9	9.1E-04	8.9E-04	1090	1	0.96	1E-06	9.29E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
10	9.1E-04	9.6E-04	1090	1	0.96	1E-06	1.00E-06	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
11	9.1E-04	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
12	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
13	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
14	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
15	9.1E-04	9.8E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
16	9.1E-04	9.7E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
17	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
18	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.12E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
19	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.14E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
20	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.16E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
21	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.17E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
22	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.16E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
23	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
24	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.13E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
25	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
26	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
27	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
28	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.26E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
29	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.28E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
30	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.30E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
31	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
32	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.31E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
33	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.29E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
34	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.26E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
35	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
36	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
37	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
38	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.26E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
39	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
40	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.38E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
41	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.43E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
42	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.46E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
43	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
44	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.51E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
45	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
46	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.43E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
47	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.38E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
48	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.33E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
49	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.27E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
50	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.34E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
51	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.42E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
52	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
53	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.58E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
54	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.65E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
55	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.69E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
56	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.73E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
57	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.77E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
58	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
59	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.64E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
60	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.58E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
61	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.51E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
62	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.44E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
63	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.31E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
64	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.41E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
65	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.51E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
66	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.61E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
67	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.70E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
68	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.80E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
69	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.93E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
70	9.1E-04	1.9E-03	1090	1	0.96	1E-06	2.01E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
71	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.07E-06	1.1	10	0.08	70	1	2.5E-08	2.5E-02
72	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
73	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.72E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
74	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.63E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
75	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
76	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.34E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
77	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.45E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
78	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.57E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
79	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.70E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
80	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
81	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.97E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
82	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.12E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
83	9.1E-04	2.2E-03	1090	1	0.96	1E-06	2.25E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02
84	9.1E-04	2.3E-03	1090	1	0.96	1E-06	2.42E-06	1.1	10	0.08	70	1	2.9E-08	2.9E-02
85	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.99E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
86	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.84E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
87	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.71E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
88	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
89	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.47E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
90	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.61E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
91	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.76E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
92	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.92E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
93	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.11E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
94	9.1E-04	2.2E-03	1090	1	0.96	1E-06	2.31E-06	1.1	10	0.08	70	1	2.8E-08	2.8E-02
95	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.52E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
96	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.79E-06	1.1	10	0.08	70	1	3.4E-08	3.4E-02
97	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.11E-06	1.1	10	0.08	70	1	2.5E-08	2.5E-02
98	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.93E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
99	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.78E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
100	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
101	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
102	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.48E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
103	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.62E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
104	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
105	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.97E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
106	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.19E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02
107	9.1E-04	2.3E-03	1090	1	0.96	1E-06	2.45E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
108	9.1E-04	2.6E-03	1090	1	0.96	1E-06	2.73E-06	1.1	10	0.08	70	1	3.3E-08	3.3E-02
109	9.1E-04	3.0E-03	1090	1	0.96	1E-06	3.10E-06	1.1	10	0.08	70	1	3.7E-08	3.7E-02
110	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.18E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
111	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.98E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
112	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.80E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
113	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
114	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
115	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.46E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
116	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.61E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
117	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.78E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
118	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.99E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
119	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.23E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02
120	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.51E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
121	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.85E-06	1.1	10	0.08	70	1	3.4E-08	3.4E-02
122	9.1E-04	3.1E-03	1090	1	0.96	1E-06	3.29E-06	1.1	10	0.08	70	1	4.0E-08	4.0E-02
123	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.52E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
124	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.22E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02
125	9.1E-04	1.9E-03	1090	1	0.96	1E-06	2.00E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
126	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.16E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
127	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.28E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
128	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.42E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
129	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.58E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
130	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.76E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
131	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.97E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02
132	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.22E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02
133	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.52E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
134	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.87E-06	1.1	10	0.08	70	1	3.5E-08	3.5E-02
135	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.47E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
136	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.14E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
137	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.92E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
138	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
139	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
140	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
141	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
142	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.70E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
143	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.92E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
144	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.18E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
145	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.49E-06	1.1	10	0.08	70	1	3.0E-08	3.0E-02
146	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.85E-06	1.1	10	0.08	70	1	3.5E-08	3.5E-02
147	9.1E-04	2.3E-03	1090	1	0.96	1E-06	2.37E-06	1.1	10	0.08	70	1	2.9E-08	2.9E-02
148	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.08E-06	1.1	10	0.08	70	1	2.5E-08	2.5E-02
149	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
150	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.16E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
151	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.29E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02	
152	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.44E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02	
153	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.62E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02	
154	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.84E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02	
155	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.10E-06	1.1	10	0.08	70	1	2.5E-08	2.5E-02	
156	9.1E-04	2.3E-03	1090	1	0.96	1E-06	2.42E-06	1.1	10	0.08	70	1	2.9E-08	2.9E-02	
157	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.80E-06	1.1	10	0.08	70	1	3.4E-08	3.4E-02	
158	9.1E-04	2.5E-03	1090	1	0.96	1E-06	2.62E-06	1.1	10	0.08	70	1	3.2E-08	3.2E-02	
159	9.1E-04	2.1E-03	1090	1	0.96	1E-06	2.23E-06	1.1	10	0.08	70	1	2.7E-08	2.7E-02	
160	9.1E-04	9.5E-04	1090	1	0.96	1E-06	9.90E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
161	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
162	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02	
163	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02	
164	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02	
165	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.73E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02	
166	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.98E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02	
167	9.1E-04	2.2E-03	1090	1	0.96	1E-06	2.30E-06	1.1	10	0.08	70	1	2.8E-08	2.8E-02	
168	9.1E-04	2.6E-03	1090	1	0.96	1E-06	2.71E-06	1.1	10	0.08	70	1	3.3E-08	3.3E-02	
169	9.1E-04	2.7E-03	1090	1	0.96	1E-06	2.81E-06	1.1	10	0.08	70	1	3.4E-08	3.4E-02	
170	9.1E-04	2.3E-03	1090	1	0.96	1E-06	2.39E-06	1.1	10	0.08	70	1	2.9E-08	2.9E-02	
171	9.1E-04	8.1E-04	1090	1	0.96	1E-06	8.48E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	
172	9.1E-04	8.9E-04	1090	1	0.96	1E-06	9.26E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
173	9.1E-04	9.7E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.08	70	1	1.2E-08	1.2E-02	
174	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.12E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02	
175	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.24E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02	

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
176	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.41E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
177	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.60E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
178	9.1E-04	1.8E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02
179	9.1E-04	2.0E-03	1090	1	0.96	1E-06	2.13E-06	1.1	10	0.08	70	1	2.6E-08	2.6E-02
180	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.53E-06	1.1	10	0.08	70	1	3.1E-08	3.1E-02
181	9.1E-04	2.4E-03	1090	1	0.96	1E-06	2.55E-06	1.1	10	0.08	70	1	3.1E-08	3.1E-02
182	9.1E-04	7.6E-04	1090	1	0.96	1E-06	7.91E-07	1.1	10	0.08	70	1	9.6E-09	9.6E-03
183	9.1E-04	8.3E-04	1090	1	0.96	1E-06	8.63E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02
184	9.1E-04	9.0E-04	1090	1	0.96	1E-06	9.45E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
185	9.1E-04	9.9E-04	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
186	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
187	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.28E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
188	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.45E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
189	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.67E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02
190	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.94E-06	1.1	10	0.08	70	1	2.3E-08	2.3E-02
191	9.1E-04	2.2E-03	1090	1	0.96	1E-06	2.29E-06	1.1	10	0.08	70	1	2.8E-08	2.8E-02
192	9.1E-04	7.1E-04	1090	1	0.96	1E-06	7.39E-07	1.1	10	0.08	70	1	8.9E-09	8.9E-03
193	9.1E-04	7.7E-04	1090	1	0.96	1E-06	8.01E-07	1.1	10	0.08	70	1	9.7E-09	9.7E-03
194	9.1E-04	8.4E-04	1090	1	0.96	1E-06	8.75E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
195	9.1E-04	9.2E-04	1090	1	0.96	1E-06	9.60E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
196	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
197	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
198	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
199	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.50E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02
200	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.72E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
201	9.1E-04	1.9E-03	1090	1	0.96	1E-06	2.03E-06	1.1	10	0.08	70	1	2.5E-08	2.5E-02
202	9.1E-04	6.6E-04	1090	1	0.96	1E-06	6.91E-07	1.1	10	0.08	70	1	8.3E-09	8.3E-03
203	9.1E-04	7.1E-04	1090	1	0.96	1E-06	7.45E-07	1.1	10	0.08	70	1	9.0E-09	9.0E-03
204	9.1E-04	7.7E-04	1090	1	0.96	1E-06	8.10E-07	1.1	10	0.08	70	1	9.8E-09	9.8E-03
205	9.1E-04	8.5E-04	1090	1	0.96	1E-06	8.84E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
206	9.1E-04	9.3E-04	1090	1	0.96	1E-06	9.71E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
207	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
208	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
209	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
210	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
211	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.77E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02
212	9.1E-04	6.2E-04	1090	1	0.96	1E-06	6.52E-07	1.1	10	0.08	70	1	7.9E-09	7.9E-03
213	9.1E-04	6.7E-04	1090	1	0.96	1E-06	6.99E-07	1.1	10	0.08	70	1	8.4E-09	8.4E-03
214	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.49E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03
215	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.14E-07	1.1	10	0.08	70	1	9.8E-09	9.8E-03
216	9.1E-04	8.5E-04	1090	1	0.96	1E-06	8.90E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
217	9.1E-04	9.4E-04	1090	1	0.96	1E-06	9.77E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
218	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
219	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
220	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.08	70	1	1.6E-08	1.6E-02
221	9.1E-04	1.5E-03	1090	1	0.96	1E-06	1.56E-06	1.1	10	0.08	70	1	1.9E-08	1.9E-02
222	9.1E-04	5.8E-04	1090	1	0.96	1E-06	6.09E-07	1.1	10	0.08	70	1	7.4E-09	7.4E-03
223	9.1E-04	6.3E-04	1090	1	0.96	1E-06	6.53E-07	1.1	10	0.08	70	1	7.9E-09	7.9E-03
224	9.1E-04	6.7E-04	1090	1	0.96	1E-06	7.03E-07	1.1	10	0.08	70	1	8.5E-09	8.5E-03
225	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.53E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
226	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.16E-07	1.1	10	0.08	70	1	9.9E-09	9.9E-03
227	9.1E-04	8.5E-04	1090	1	0.96	1E-06	8.91E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
228	9.1E-04	9.4E-04	1090	1	0.96	1E-06	9.80E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
229	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
230	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
231	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
232	9.1E-04	5.5E-04	1090	1	0.96	1E-06	5.70E-07	1.1	10	0.08	70	1	6.9E-09	6.9E-03
233	9.1E-04	5.8E-04	1090	1	0.96	1E-06	6.09E-07	1.1	10	0.08	70	1	7.4E-09	7.4E-03
234	9.1E-04	6.2E-04	1090	1	0.96	1E-06	6.53E-07	1.1	10	0.08	70	1	7.9E-09	7.9E-03
235	9.1E-04	6.7E-04	1090	1	0.96	1E-06	7.01E-07	1.1	10	0.08	70	1	8.5E-09	8.5E-03
236	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.52E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03
237	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.15E-07	1.1	10	0.08	70	1	9.8E-09	9.8E-03
238	9.1E-04	8.5E-04	1090	1	0.96	1E-06	8.90E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
239	9.1E-04	9.4E-04	1090	1	0.96	1E-06	9.78E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
240	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
241	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
242	9.1E-04	1.3E-03	1090	1	0.96	1E-06	1.39E-06	1.1	10	0.08	70	1	1.7E-08	1.7E-02
243	9.1E-04	5.1E-04	1090	1	0.96	1E-06	5.35E-07	1.1	10	0.08	70	1	6.5E-09	6.5E-03
244	9.1E-04	5.5E-04	1090	1	0.96	1E-06	5.70E-07	1.1	10	0.08	70	1	6.9E-09	6.9E-03
245	9.1E-04	5.8E-04	1090	1	0.96	1E-06	6.07E-07	1.1	10	0.08	70	1	7.3E-09	7.3E-03
246	9.1E-04	6.2E-04	1090	1	0.96	1E-06	6.50E-07	1.1	10	0.08	70	1	7.9E-09	7.9E-03
247	9.1E-04	6.7E-04	1090	1	0.96	1E-06	6.99E-07	1.1	10	0.08	70	1	8.4E-09	8.4E-03
248	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.54E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03
249	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.11E-07	1.1	10	0.08	70	1	9.8E-09	9.8E-03
250	9.1E-04	8.5E-04	1090	1	0.96	1E-06	8.85E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
251	9.1E-04	9.3E-04	1090	1	0.96	1E-06	9.72E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
252	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
253	9.1E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.08	70	1	1.5E-08	1.5E-02
254	9.1E-04	5.1E-04	1090	1	0.96	1E-06	5.33E-07	1.1	10	0.08	70	1	6.4E-09	6.4E-03
255	9.1E-04	5.4E-04	1090	1	0.96	1E-06	5.67E-07	1.1	10	0.08	70	1	6.8E-09	6.8E-03
256	9.1E-04	5.8E-04	1090	1	0.96	1E-06	6.04E-07	1.1	10	0.08	70	1	7.3E-09	7.3E-03
257	9.1E-04	6.2E-04	1090	1	0.96	1E-06	6.46E-07	1.1	10	0.08	70	1	7.8E-09	7.8E-03
258	9.1E-04	6.6E-04	1090	1	0.96	1E-06	6.94E-07	1.1	10	0.08	70	1	8.4E-09	8.4E-03
259	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.49E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03
260	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.11E-07	1.1	10	0.08	70	1	9.8E-09	9.8E-03
261	9.1E-04	8.4E-04	1090	1	0.96	1E-06	8.77E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
262	9.1E-04	9.2E-04	1090	1	0.96	1E-06	9.61E-07	1.1	10	0.08	70	1	1.2E-08	1.2E-02
263	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
264	9.1E-04	1.1E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.08	70	1	1.4E-08	1.4E-02
265	9.1E-04	5.0E-04	1090	1	0.96	1E-06	5.27E-07	1.1	10	0.08	70	1	6.4E-09	6.4E-03
266	9.1E-04	5.4E-04	1090	1	0.96	1E-06	5.62E-07	1.1	10	0.08	70	1	6.8E-09	6.8E-03
267	9.1E-04	5.7E-04	1090	1	0.96	1E-06	5.99E-07	1.1	10	0.08	70	1	7.2E-09	7.2E-03
268	9.1E-04	6.1E-04	1090	1	0.96	1E-06	6.41E-07	1.1	10	0.08	70	1	7.8E-09	7.8E-03
269	9.1E-04	6.6E-04	1090	1	0.96	1E-06	6.88E-07	1.1	10	0.08	70	1	8.3E-09	8.3E-03
270	9.1E-04	7.1E-04	1090	1	0.96	1E-06	7.42E-07	1.1	10	0.08	70	1	9.0E-09	9.0E-03
271	9.1E-04	7.7E-04	1090	1	0.96	1E-06	8.03E-07	1.1	10	0.08	70	1	9.7E-09	9.7E-03
272	9.1E-04	8.3E-04	1090	1	0.96	1E-06	8.72E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
273	9.1E-04	9.1E-04	1090	1	0.96	1E-06	9.47E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
274	9.1E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02
275	9.1E-04	5.0E-04	1090	1	0.96	1E-06	5.25E-07	1.1	10	0.08	70	1	6.3E-09	6.3E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
276	9.1E-04	5.3E-04	1090	1	0.96	1E-06	5.57E-07	1.1	10	0.08	70	1	6.7E-09	6.7E-03	
277	9.1E-04	5.7E-04	1090	1	0.96	1E-06	5.93E-07	1.1	10	0.08	70	1	7.2E-09	7.2E-03	
278	9.1E-04	6.1E-04	1090	1	0.96	1E-06	6.34E-07	1.1	10	0.08	70	1	7.7E-09	7.7E-03	
279	9.1E-04	6.5E-04	1090	1	0.96	1E-06	6.80E-07	1.1	10	0.08	70	1	8.2E-09	8.2E-03	
280	9.1E-04	7.0E-04	1090	1	0.96	1E-06	7.32E-07	1.1	10	0.08	70	1	8.8E-09	8.8E-03	
281	9.1E-04	7.6E-04	1090	1	0.96	1E-06	7.91E-07	1.1	10	0.08	70	1	9.6E-09	9.6E-03	
282	9.1E-04	8.2E-04	1090	1	0.96	1E-06	8.59E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	
283	9.1E-04	8.9E-04	1090	1	0.96	1E-06	9.30E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
284	9.1E-04	9.9E-04	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.08	70	1	1.3E-08	1.3E-02	
285	9.1E-04	5.0E-04	1090	1	0.96	1E-06	5.20E-07	1.1	10	0.08	70	1	6.3E-09	6.3E-03	
286	9.1E-04	5.3E-04	1090	1	0.96	1E-06	5.51E-07	1.1	10	0.08	70	1	6.7E-09	6.7E-03	
287	9.1E-04	5.6E-04	1090	1	0.96	1E-06	5.86E-07	1.1	10	0.08	70	1	7.1E-09	7.1E-03	
288	9.1E-04	6.0E-04	1090	1	0.96	1E-06	6.25E-07	1.1	10	0.08	70	1	7.6E-09	7.6E-03	
289	9.1E-04	6.4E-04	1090	1	0.96	1E-06	6.69E-07	1.1	10	0.08	70	1	8.1E-09	8.1E-03	
290	9.1E-04	6.9E-04	1090	1	0.96	1E-06	7.21E-07	1.1	10	0.08	70	1	8.7E-09	8.7E-03	
291	9.1E-04	7.4E-04	1090	1	0.96	1E-06	7.77E-07	1.1	10	0.08	70	1	9.4E-09	9.4E-03	
292	9.1E-04	8.1E-04	1090	1	0.96	1E-06	8.42E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02	
293	9.1E-04	8.8E-04	1090	1	0.96	1E-06	9.18E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02	
294	9.1E-04	4.9E-04	1090	1	0.96	1E-06	5.14E-07	1.1	10	0.08	70	1	6.2E-09	6.2E-03	
295	9.1E-04	5.2E-04	1090	1	0.96	1E-06	5.44E-07	1.1	10	0.08	70	1	6.6E-09	6.6E-03	
296	9.1E-04	5.5E-04	1090	1	0.96	1E-06	5.78E-07	1.1	10	0.08	70	1	7.0E-09	7.0E-03	
297	9.1E-04	5.9E-04	1090	1	0.96	1E-06	6.15E-07	1.1	10	0.08	70	1	7.4E-09	7.4E-03	
298	9.1E-04	6.3E-04	1090	1	0.96	1E-06	6.57E-07	1.1	10	0.08	70	1	7.9E-09	7.9E-03	
299	9.1E-04	6.8E-04	1090	1	0.96	1E-06	7.06E-07	1.1	10	0.08	70	1	8.5E-09	8.5E-03	
300	9.1E-04	7.3E-04	1090	1	0.96	1E-06	7.62E-07	1.1	10	0.08	70	1	9.2E-09	9.2E-03	

Syphon Geotechnical
Risk from Access Roads

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
301	9.1E-04	7.9E-04	1090	1	0.96	1E-06	8.24E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02
302	9.1E-04	8.6E-04	1090	1	0.96	1E-06	8.95E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
303	9.1E-04	4.8E-04	1090	1	0.96	1E-06	5.07E-07	1.1	10	0.08	70	1	6.1E-09	6.1E-03
304	9.1E-04	5.1E-04	1090	1	0.96	1E-06	5.36E-07	1.1	10	0.08	70	1	6.5E-09	6.5E-03
305	9.1E-04	5.4E-04	1090	1	0.96	1E-06	5.69E-07	1.1	10	0.08	70	1	6.9E-09	6.9E-03
306	9.1E-04	5.8E-04	1090	1	0.96	1E-06	6.05E-07	1.1	10	0.08	70	1	7.3E-09	7.3E-03
307	9.1E-04	6.2E-04	1090	1	0.96	1E-06	6.45E-07	1.1	10	0.08	70	1	7.8E-09	7.8E-03
308	9.1E-04	6.6E-04	1090	1	0.96	1E-06	6.90E-07	1.1	10	0.08	70	1	8.3E-09	8.3E-03
309	9.1E-04	7.1E-04	1090	1	0.96	1E-06	7.43E-07	1.1	10	0.08	70	1	9.0E-09	9.0E-03
310	9.1E-04	7.7E-04	1090	1	0.96	1E-06	8.03E-07	1.1	10	0.08	70	1	9.7E-09	9.7E-03
311	9.1E-04	8.3E-04	1090	1	0.96	1E-06	8.69E-07	1.1	10	0.08	70	1	1.1E-08	1.1E-02
312	9.1E-04	4.8E-04	1090	1	0.96	1E-06	4.99E-07	1.1	10	0.08	70	1	6.0E-09	6.0E-03
313	9.1E-04	5.0E-04	1090	1	0.96	1E-06	5.28E-07	1.1	10	0.08	70	1	6.4E-09	6.4E-03
314	9.1E-04	5.3E-04	1090	1	0.96	1E-06	5.59E-07	1.1	10	0.08	70	1	6.8E-09	6.8E-03
315	9.1E-04	5.7E-04	1090	1	0.96	1E-06	5.93E-07	1.1	10	0.08	70	1	7.2E-09	7.2E-03
316	9.1E-04	6.0E-04	1090	1	0.96	1E-06	6.32E-07	1.1	10	0.08	70	1	7.6E-09	7.6E-03
317	9.1E-04	6.5E-04	1090	1	0.96	1E-06	6.74E-07	1.1	10	0.08	70	1	8.2E-09	8.2E-03
318	9.1E-04	6.9E-04	1090	1	0.96	1E-06	7.23E-07	1.1	10	0.08	70	1	8.7E-09	8.7E-03
319	9.1E-04	7.5E-04	1090	1	0.96	1E-06	7.80E-07	1.1	10	0.08	70	1	9.4E-09	9.4E-03
320	9.1E-04	8.1E-04	1090	1	0.96	1E-06	8.44E-07	1.1	10	0.08	70	1	1.0E-08	1.0E-02
321	9.1E-04	4.7E-04	1090	1	0.96	1E-06	4.91E-07	1.1	10	0.08	70	1	5.9E-09	5.9E-03
322	9.1E-04	5.0E-04	1090	1	0.96	1E-06	5.18E-07	1.1	10	0.08	70	1	6.3E-09	6.3E-03
323	9.1E-04	5.2E-04	1090	1	0.96	1E-06	5.48E-07	1.1	10	0.08	70	1	6.6E-09	6.6E-03
324	9.1E-04	5.6E-04	1090	1	0.96	1E-06	5.81E-07	1.1	10	0.08	70	1	7.0E-09	7.0E-03
325	9.1E-04	5.9E-04	1090	1	0.96	1E-06	6.17E-07	1.1	10	0.08	70	1	7.5E-09	7.5E-03

**Syphon Geotechnical
Risk from Access Roads**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
326	9.1E-04	6.3E-04	1090	1	0.96	1E-06	6.58E-07	1.1	10	0.08	70	1	8.0E-09	8.0E-03	
327	9.1E-04	6.7E-04	1090	1	0.96	1E-06	7.03E-07	1.1	10	0.08	70	1	8.5E-09	8.5E-03	
328	9.1E-04	7.2E-04	1090	1	0.96	1E-06	7.54E-07	1.1	10	0.08	70	1	9.1E-09	9.1E-03	
329	9.1E-04	7.8E-04	1090	1	0.96	1E-06	8.16E-07	1.1	10	0.08	70	1	9.9E-09	9.9E-03	
330	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.77E-06	1.1	10	0.08	70	1	2.1E-08	2.1E-02	
331	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.62E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02	
332	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.81E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02	
333	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02	
334	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.64E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02	
335	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.82E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02	
336	9.1E-04	1.4E-03	1090	1	0.96	1E-06	1.50E-06	1.1	10	0.08	70	1	1.8E-08	1.8E-02	
337	9.1E-04	1.6E-03	1090	1	0.96	1E-06	1.64E-06	1.1	10	0.08	70	1	2.0E-08	2.0E-02	
338	9.1E-04	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.08	70	1	2.2E-08	2.2E-02	
339	9.1E-04	1.9E-03	1090	1	0.96	1E-06	1.97E-06	1.1	10	0.08	70	1	2.4E-08	2.4E-02	

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor

#	Conc	REL	HI	Max
1	8.19E-04	5	1.64E-04	6.29E-04
2	8.21E-04	5	1.64E-04	
3	8.21E-04	5	1.64E-04	
4	8.16E-04	5	1.63E-04	
5	9.03E-04	5	1.81E-04	
6	9.04E-04	5	1.81E-04	
7	9.03E-04	5	1.81E-04	
8	8.98E-04	5	1.80E-04	
9	8.89E-04	5	1.78E-04	
10	9.59E-04	5	1.92E-04	
11	9.77E-04	5	1.95E-04	
12	1.01E-03	5	2.01E-04	
13	1.00E-03	5	2.00E-04	
14	9.95E-04	5	1.99E-04	
15	9.83E-04	5	1.97E-04	
16	9.68E-04	5	1.94E-04	
17	1.04E-03	5	2.09E-04	
18	1.07E-03	5	2.13E-04	
19	1.09E-03	5	2.17E-04	
20	1.11E-03	5	2.22E-04	
21	1.12E-03	5	2.24E-04	
22	1.11E-03	5	2.23E-04	
23	1.10E-03	5	2.19E-04	
24	1.08E-03	5	2.15E-04	
25	1.05E-03	5	2.11E-04	

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor

#	Conc	REL	HI
26	1.13E-03	5	2.26E-04
27	1.17E-03	5	2.34E-04
28	1.20E-03	5	2.40E-04
29	1.23E-03	5	2.46E-04
30	1.25E-03	5	2.50E-04
31	1.27E-03	5	2.53E-04
32	1.25E-03	5	2.50E-04
33	1.23E-03	5	2.46E-04
34	1.20E-03	5	2.40E-04
35	1.17E-03	5	2.33E-04
36	1.13E-03	5	2.25E-04
37	1.15E-03	5	2.30E-04
38	1.21E-03	5	2.42E-04
39	1.27E-03	5	2.53E-04
40	1.32E-03	5	2.64E-04
41	1.37E-03	5	2.73E-04
42	1.40E-03	5	2.80E-04
43	1.43E-03	5	2.85E-04
44	1.44E-03	5	2.89E-04
45	1.47E-03	5	2.93E-04
46	1.37E-03	5	2.74E-04
47	1.33E-03	5	2.65E-04
48	1.28E-03	5	2.55E-04
49	1.21E-03	5	2.42E-04
50	1.29E-03	5	2.57E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor

#	Conc	REL	HI
51	1.36E-03	5	2.71E-04
52	1.43E-03	5	2.86E-04
53	1.51E-03	5	3.03E-04
54	1.58E-03	5	3.15E-04
55	1.62E-03	5	3.24E-04
56	1.66E-03	5	3.31E-04
57	1.69E-03	5	3.38E-04
58	1.71E-03	5	3.42E-04
59	1.57E-03	5	3.14E-04
60	1.51E-03	5	3.02E-04
61	1.45E-03	5	2.89E-04
62	1.38E-03	5	2.75E-04
63	1.25E-03	5	2.50E-04
64	1.35E-03	5	2.70E-04
65	1.44E-03	5	2.88E-04
66	1.54E-03	5	3.07E-04
67	1.63E-03	5	3.26E-04
68	1.73E-03	5	3.45E-04
69	1.85E-03	5	3.69E-04
70	1.93E-03	5	3.85E-04
71	1.98E-03	5	3.96E-04
72	1.75E-03	5	3.49E-04
73	1.65E-03	5	3.30E-04
74	1.56E-03	5	3.12E-04
75	1.46E-03	5	2.92E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
76	1.29E-03	5	2.57E-04
77	1.39E-03	5	2.77E-04
78	1.50E-03	5	3.01E-04
79	1.63E-03	5	3.25E-04
80	1.75E-03	5	3.50E-04
81	1.89E-03	5	3.78E-04
82	2.02E-03	5	4.05E-04
83	2.16E-03	5	4.31E-04
84	2.32E-03	5	4.64E-04
85	1.91E-03	5	3.82E-04
86	1.76E-03	5	3.52E-04
87	1.63E-03	5	3.26E-04
88	1.30E-03	5	2.59E-04
89	1.41E-03	5	2.82E-04
90	1.54E-03	5	3.08E-04
91	1.68E-03	5	3.36E-04
92	1.84E-03	5	3.68E-04
93	2.02E-03	5	4.04E-04
94	2.21E-03	5	4.42E-04
95	2.41E-03	5	4.83E-04
96	2.66E-03	5	5.33E-04
97	2.02E-03	5	4.03E-04
98	1.85E-03	5	3.70E-04
99	1.70E-03	5	3.40E-04
100	1.18E-03	5	2.36E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
101	1.29E-03	5	2.57E-04
102	1.41E-03	5	2.82E-04
103	1.55E-03	5	3.10E-04
104	1.71E-03	5	3.42E-04
105	1.89E-03	5	3.78E-04
106	2.10E-03	5	4.20E-04
107	2.34E-03	5	4.68E-04
108	2.62E-03	5	5.23E-04
109	2.97E-03	5	5.93E-04
110	2.09E-03	5	4.17E-04
111	1.89E-03	5	3.79E-04
112	1.73E-03	5	3.45E-04
113	1.15E-03	5	2.30E-04
114	1.26E-03	5	2.53E-04
115	1.39E-03	5	2.79E-04
116	1.54E-03	5	3.09E-04
117	1.71E-03	5	3.41E-04
118	1.90E-03	5	3.80E-04
119	2.13E-03	5	4.26E-04
120	2.40E-03	5	4.80E-04
121	2.72E-03	5	5.45E-04
122	3.15E-03	5	6.29E-04
123	2.41E-03	5	4.82E-04
124	2.13E-03	5	4.26E-04
125	1.91E-03	5	3.82E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
126	1.11E-03	5	2.22E-04
127	1.22E-03	5	2.44E-04
128	1.36E-03	5	2.71E-04
129	1.51E-03	5	3.02E-04
130	1.68E-03	5	3.36E-04
131	1.89E-03	5	3.77E-04
132	2.12E-03	5	4.25E-04
133	2.41E-03	5	4.82E-04
134	2.75E-03	5	5.49E-04
135	2.36E-03	5	4.73E-04
136	2.04E-03	5	4.09E-04
137	1.83E-03	5	3.67E-04
138	1.06E-03	5	2.12E-04
139	1.17E-03	5	2.34E-04
140	1.30E-03	5	2.60E-04
141	1.45E-03	5	2.91E-04
142	1.63E-03	5	3.26E-04
143	1.84E-03	5	3.67E-04
144	2.09E-03	5	4.18E-04
145	2.38E-03	5	4.76E-04
146	2.73E-03	5	5.46E-04
147	2.27E-03	5	4.53E-04
148	1.99E-03	5	3.98E-04
149	1.01E-03	5	2.01E-04
150	1.11E-03	5	2.22E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor #	Conc	REL	HI
151	1.23E-03	5	2.46E-04
152	1.38E-03	5	2.75E-04
153	1.55E-03	5	3.10E-04
154	1.76E-03	5	3.51E-04
155	2.01E-03	5	4.02E-04
156	2.32E-03	5	4.63E-04
157	2.68E-03	5	5.36E-04
158	2.50E-03	5	5.01E-04
159	2.13E-03	5	4.26E-04
160	9.47E-04	5	1.89E-04
161	1.04E-03	5	2.08E-04
162	1.15E-03	5	2.31E-04
163	1.29E-03	5	2.58E-04
164	1.45E-03	5	2.91E-04
165	1.65E-03	5	3.31E-04
166	1.90E-03	5	3.79E-04
167	2.20E-03	5	4.40E-04
168	2.59E-03	5	5.18E-04
169	2.69E-03	5	5.38E-04
170	2.29E-03	5	4.57E-04
171	8.11E-04	5	1.62E-04
172	8.86E-04	5	1.77E-04
173	9.70E-04	5	1.94E-04
174	1.07E-03	5	2.14E-04
175	1.19E-03	5	2.38E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
176	1.35E-03	5	2.70E-04
177	1.53E-03	5	3.06E-04
178	1.76E-03	5	3.51E-04
179	2.04E-03	5	4.08E-04
180	2.42E-03	5	4.83E-04
181	2.44E-03	5	4.87E-04
182	7.57E-04	5	1.51E-04
183	8.26E-04	5	1.65E-04
184	9.04E-04	5	1.81E-04
185	9.94E-04	5	1.99E-04
186	1.10E-03	5	2.20E-04
187	1.23E-03	5	2.46E-04
188	1.39E-03	5	2.77E-04
189	1.60E-03	5	3.20E-04
190	1.86E-03	5	3.71E-04
191	2.19E-03	5	4.37E-04
192	7.07E-04	5	1.41E-04
193	7.66E-04	5	1.53E-04
194	8.37E-04	5	1.67E-04
195	9.19E-04	5	1.84E-04
196	1.01E-03	5	2.03E-04
197	1.12E-03	5	2.25E-04
198	1.26E-03	5	2.52E-04
199	1.43E-03	5	2.87E-04
200	1.65E-03	5	3.29E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
201	1.94E-03	5	3.88E-04
202	6.61E-04	5	1.32E-04
203	7.13E-04	5	1.43E-04
204	7.75E-04	5	1.55E-04
205	8.46E-04	5	1.69E-04
206	9.29E-04	5	1.86E-04
207	1.03E-03	5	2.05E-04
208	1.15E-03	5	2.29E-04
209	1.29E-03	5	2.58E-04
210	1.47E-03	5	2.93E-04
211	1.70E-03	5	3.40E-04
212	6.23E-04	5	1.25E-04
213	6.69E-04	5	1.34E-04
214	7.17E-04	5	1.43E-04
215	7.79E-04	5	1.56E-04
216	8.51E-04	5	1.70E-04
217	9.35E-04	5	1.87E-04
218	1.04E-03	5	2.07E-04
219	1.16E-03	5	2.31E-04
220	1.30E-03	5	2.61E-04
221	1.49E-03	5	2.98E-04
222	5.83E-04	5	1.17E-04
223	6.25E-04	5	1.25E-04
224	6.72E-04	5	1.34E-04
225	7.20E-04	5	1.44E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
226	7.81E-04	5	1.56E-04
227	8.53E-04	5	1.71E-04
228	9.38E-04	5	1.88E-04
229	1.04E-03	5	2.08E-04
230	1.16E-03	5	2.32E-04
231	1.31E-03	5	2.62E-04
232	5.46E-04	5	1.09E-04
233	5.83E-04	5	1.17E-04
234	6.24E-04	5	1.25E-04
235	6.71E-04	5	1.34E-04
236	7.19E-04	5	1.44E-04
237	7.79E-04	5	1.56E-04
238	8.51E-04	5	1.70E-04
239	9.36E-04	5	1.87E-04
240	1.04E-03	5	2.07E-04
241	1.16E-03	5	2.31E-04
242	1.33E-03	5	2.65E-04
243	5.12E-04	5	1.02E-04
244	5.45E-04	5	1.09E-04
245	5.81E-04	5	1.16E-04
246	6.22E-04	5	1.24E-04
247	6.69E-04	5	1.34E-04
248	7.22E-04	5	1.44E-04
249	7.76E-04	5	1.55E-04
250	8.47E-04	5	1.69E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
251	9.30E-04	5	1.86E-04
252	1.03E-03	5	2.06E-04
253	1.16E-03	5	2.32E-04
254	5.10E-04	5	1.02E-04
255	5.42E-04	5	1.08E-04
256	5.78E-04	5	1.16E-04
257	6.18E-04	5	1.24E-04
258	6.64E-04	5	1.33E-04
259	7.17E-04	5	1.43E-04
260	7.76E-04	5	1.55E-04
261	8.39E-04	5	1.68E-04
262	9.20E-04	5	1.84E-04
263	1.01E-03	5	2.03E-04
264	1.15E-03	5	2.29E-04
265	5.04E-04	5	1.01E-04
266	5.38E-04	5	1.08E-04
267	5.73E-04	5	1.15E-04
268	6.14E-04	5	1.23E-04
269	6.58E-04	5	1.32E-04
270	7.10E-04	5	1.42E-04
271	7.68E-04	5	1.54E-04
272	8.35E-04	5	1.67E-04
273	9.06E-04	5	1.81E-04
274	1.01E-03	5	2.01E-04
275	5.02E-04	5	1.00E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
276	5.33E-04	5	1.07E-04
277	5.67E-04	5	1.13E-04
278	6.06E-04	5	1.21E-04
279	6.51E-04	5	1.30E-04
280	7.00E-04	5	1.40E-04
281	7.57E-04	5	1.51E-04
282	8.22E-04	5	1.64E-04
283	8.90E-04	5	1.78E-04
284	9.93E-04	5	1.99E-04
285	4.97E-04	5	9.95E-05
286	5.27E-04	5	1.05E-04
287	5.61E-04	5	1.12E-04
288	5.98E-04	5	1.20E-04
289	6.40E-04	5	1.28E-04
290	6.89E-04	5	1.38E-04
291	7.44E-04	5	1.49E-04
292	8.06E-04	5	1.61E-04
293	8.79E-04	5	1.76E-04
294	4.92E-04	5	9.83E-05
295	5.21E-04	5	1.04E-04
296	5.53E-04	5	1.11E-04
297	5.89E-04	5	1.18E-04
298	6.29E-04	5	1.26E-04
299	6.75E-04	5	1.35E-04
300	7.29E-04	5	1.46E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
301	7.88E-04	5	1.58E-04
302	8.56E-04	5	1.71E-04
303	4.85E-04	5	9.70E-05
304	5.13E-04	5	1.03E-04
305	5.44E-04	5	1.09E-04
306	5.79E-04	5	1.16E-04
307	6.17E-04	5	1.23E-04
308	6.60E-04	5	1.32E-04
309	7.11E-04	5	1.42E-04
310	7.68E-04	5	1.54E-04
311	8.32E-04	5	1.66E-04
312	4.77E-04	5	9.55E-05
313	5.05E-04	5	1.01E-04
314	5.35E-04	5	1.07E-04
315	5.68E-04	5	1.14E-04
316	6.04E-04	5	1.21E-04
317	6.45E-04	5	1.29E-04
318	6.91E-04	5	1.38E-04
319	7.47E-04	5	1.49E-04
320	8.07E-04	5	1.61E-04
321	4.69E-04	5	9.39E-05
322	4.96E-04	5	9.91E-05
323	5.24E-04	5	1.05E-04
324	5.56E-04	5	1.11E-04
325	5.91E-04	5	1.18E-04

**Syphon Geotechnical
Risk from Access Roads**

Non Cancer Risk

Receptor #	Conc	REL	HI
326	6.29E-04	5	1.26E-04
327	6.73E-04	5	1.35E-04
328	7.22E-04	5	1.44E-04
329	7.81E-04	5	1.56E-04
330	1.70E-03	5	3.40E-04
331	1.55E-03	5	3.11E-04
332	1.74E-03	5	3.47E-04
333	1.43E-03	5	2.85E-04
334	1.57E-03	5	3.14E-04
335	1.74E-03	5	3.48E-04
336	1.43E-03	5	2.87E-04
337	1.57E-03	5	3.13E-04
338	1.72E-03	5	3.43E-04
339	1.88E-03	5	3.77E-04

Risk from Borings

Syphon Geotechnical
Risk from Borings

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
1	0.84695	0.0001	1.2E-04	361	1	0.96	1E-06	4.1E-08	1.1	10	0.20	70	1	1.26E-09	1.3E-03
2	0.84369	0.0001	1.2E-04	361	1	0.96	1E-06	4.1E-08	1.1	10	0.20	70	1	1.25E-09	1.3E-03
3	0.86158	0.0001	1.2E-04	361	1	0.96	1E-06	4.1E-08	1.1	10	0.20	70	1	1.28E-09	1.3E-03
4	0.89444	0.0001	1.2E-04	361	1	0.96	1E-06	4.3E-08	1.1	10	0.20	70	1	1.33E-09	1.3E-03
5	0.96455	0.0001	1.3E-04	361	1	0.96	1E-06	4.6E-08	1.1	10	0.20	70	1	1.43E-09	1.4E-03
6	0.9711	0.0001	1.3E-04	361	1	0.96	1E-06	4.7E-08	1.1	10	0.20	70	1	1.44E-09	1.4E-03
7	0.99353	0.0001	1.4E-04	361	1	0.96	1E-06	4.8E-08	1.1	10	0.20	70	1	1.47E-09	1.5E-03
8	1.03311	0.0001	1.4E-04	361	1	0.96	1E-06	5.0E-08	1.1	10	0.20	70	1	1.53E-09	1.5E-03
9	1.08775	0.0001	1.5E-04	361	1	0.96	1E-06	5.2E-08	1.1	10	0.20	70	1	1.61E-09	1.6E-03
10	1.34998	0.0001	1.9E-04	361	1	0.96	1E-06	6.5E-08	1.1	10	0.20	70	1	2.00E-09	2.0E-03
11	1.23692	0.0001	1.7E-04	361	1	0.96	1E-06	6.0E-08	1.1	10	0.20	70	1	1.83E-09	1.8E-03
12	1.12246	0.0001	1.6E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.20	70	1	1.66E-09	1.7E-03
13	1.15768	0.0001	1.6E-04	361	1	0.96	1E-06	5.6E-08	1.1	10	0.20	70	1	1.72E-09	1.7E-03
14	1.20512	0.0001	1.7E-04	361	1	0.96	1E-06	5.8E-08	1.1	10	0.20	70	1	1.79E-09	1.8E-03
15	1.26888	0.0001	1.8E-04	361	1	0.96	1E-06	6.1E-08	1.1	10	0.20	70	1	1.88E-09	1.9E-03
16	1.33894	0.0001	1.9E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.20	70	1	1.99E-09	2.0E-03
17	1.76439	0.0001	2.5E-04	361	1	0.96	1E-06	8.5E-08	1.1	10	0.20	70	1	2.62E-09	2.6E-03
18	1.58699	0.0001	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.20	70	1	2.35E-09	2.4E-03
19	1.45974	0.0001	2.0E-04	361	1	0.96	1E-06	7.0E-08	1.1	10	0.20	70	1	2.16E-09	2.2E-03
20	1.37328	0.0001	1.9E-04	361	1	0.96	1E-06	6.6E-08	1.1	10	0.20	70	1	2.04E-09	2.0E-03
21	1.33081	0.0001	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.20	70	1	1.97E-09	2.0E-03
22	1.42223	0.0001	2.0E-04	361	1	0.96	1E-06	6.8E-08	1.1	10	0.20	70	1	2.11E-09	2.1E-03
23	1.47956	0.0001	2.1E-04	361	1	0.96	1E-06	7.1E-08	1.1	10	0.20	70	1	2.19E-09	2.2E-03
24	1.57543	0.0001	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.20	70	1	2.34E-09	2.3E-03
25	1.65075	0.0001	2.3E-04	361	1	0.96	1E-06	7.9E-08	1.1	10	0.20	70	1	2.45E-09	2.4E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
26	2.38495	0.0001	3.3E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.54E-09	3.5E-03
27	2.10483	0.0001	2.9E-04	361	1	0.96	1E-06	1.0E-07	1.1	10	0.20	70	1	3.12E-09	3.1E-03
28	1.88558	0.0001	2.6E-04	361	1	0.96	1E-06	9.1E-08	1.1	10	0.20	70	1	2.80E-09	2.8E-03
29	1.73618	0.0001	2.4E-04	361	1	0.96	1E-06	8.4E-08	1.1	10	0.20	70	1	2.57E-09	2.6E-03
30	1.64419	0.0001	2.3E-04	361	1	0.96	1E-06	7.9E-08	1.1	10	0.20	70	1	2.44E-09	2.4E-03
31	1.58516	0.0001	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.20	70	1	2.35E-09	2.4E-03
32	1.66112	0.0001	2.3E-04	361	1	0.96	1E-06	8.0E-08	1.1	10	0.20	70	1	2.46E-09	2.5E-03
33	1.7531	0.0001	2.4E-04	361	1	0.96	1E-06	8.4E-08	1.1	10	0.20	70	1	2.60E-09	2.6E-03
34	1.83576	0.0001	2.6E-04	361	1	0.96	1E-06	8.8E-08	1.1	10	0.20	70	1	2.72E-09	2.7E-03
35	1.91434	0.0001	2.7E-04	361	1	0.96	1E-06	9.2E-08	1.1	10	0.20	70	1	2.84E-09	2.8E-03
36	1.97855	0.0001	2.7E-04	361	1	0.96	1E-06	9.5E-08	1.1	10	0.20	70	1	2.93E-09	2.9E-03
37	3.67335	0.0001	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.20	70	1	5.45E-09	5.4E-03
38	3.26483	0.0001	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	4.84E-09	4.8E-03
39	2.89063	0.0001	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.20	70	1	4.29E-09	4.3E-03
40	2.55172	0.0001	3.5E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.20	70	1	3.78E-09	3.8E-03
41	2.28953	0.0001	3.2E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.40E-09	3.4E-03
42	2.10981	0.0001	2.9E-04	361	1	0.96	1E-06	1.0E-07	1.1	10	0.20	70	1	3.13E-09	3.1E-03
43	2.00243	0.0001	2.8E-04	361	1	0.96	1E-06	9.6E-08	1.1	10	0.20	70	1	2.97E-09	3.0E-03
44	1.95696	0.0001	2.7E-04	361	1	0.96	1E-06	9.4E-08	1.1	10	0.20	70	1	2.90E-09	2.9E-03
45	1.88993	0.0001	2.6E-04	361	1	0.96	1E-06	9.1E-08	1.1	10	0.20	70	1	2.80E-09	2.8E-03
46	2.22462	0.0001	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.30E-09	3.3E-03
47	2.30304	0.0001	3.2E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.42E-09	3.4E-03
48	2.3621	0.0001	3.3E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.50E-09	3.5E-03
49	4.9699	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.37E-09	7.4E-03
50	4.48098	0.0001	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.65E-09	6.6E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
51	3.99445	0.0001	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.20	70	1	5.92E-09	5.9E-03
52	3.55142	0.0001	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.20	70	1	5.27E-09	5.3E-03
53	3.13162	0.0001	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.20	70	1	4.64E-09	4.6E-03
54	2.8327	0.0001	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.20	70	1	4.20E-09	4.2E-03
55	2.61999	0.0001	3.6E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.20	70	1	3.89E-09	3.9E-03
56	2.48893	0.0001	3.5E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.20	70	1	3.69E-09	3.7E-03
57	2.39778	0.0001	3.3E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.20	70	1	3.56E-09	3.6E-03
58	2.34411	0.0001	3.3E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.20	70	1	3.48E-09	3.5E-03
59	2.71151	0.0001	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.20	70	1	4.02E-09	4.0E-03
60	2.7734	0.0001	3.9E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.20	70	1	4.11E-09	4.1E-03
61	2.81786	0.0001	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.20	70	1	4.18E-09	4.2E-03
62	2.8276	0.0001	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.20	70	1	4.19E-09	4.2E-03
63	6.58326	0.0001	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.76E-09	9.8E-03
64	6.09874	0.0001	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	9.04E-09	9.0E-03
65	5.53169	0.0001	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.20E-09	8.2E-03
66	4.97004	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.37E-09	7.4E-03
67	4.44397	0.0001	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.59E-09	6.6E-03
68	3.99149	0.0001	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.20	70	1	5.92E-09	5.9E-03
69	3.58457	0.0001	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.20	70	1	5.32E-09	5.3E-03
70	3.27273	0.0001	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	4.85E-09	4.9E-03
71	3.1179	0.0001	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.20	70	1	4.62E-09	4.6E-03
72	3.404	0.0001	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	5.05E-09	5.0E-03
73	3.38637	0.0001	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	5.02E-09	5.0E-03
74	3.35269	0.0001	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	4.97E-09	5.0E-03
75	3.26988	0.0001	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.20	70	1	4.85E-09	4.8E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
76	8.57182	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.27E-08	1.3E-02
77	8.12327	0.0001	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.20	70	1	1.20E-08	1.2E-02
78	7.57504	0.0001	1.1E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.20	70	1	1.12E-08	1.1E-02
79	6.94187	0.0001	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.03E-08	1.0E-02
80	6.2946	0.0001	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.33E-09	9.3E-03
81	5.695	0.0001	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.45E-09	8.4E-03
82	5.16156	0.0001	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.65E-09	7.7E-03
83	4.72835	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.01E-09	7.0E-03
84	4.28755	0.0001	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.36E-09	6.4E-03
85	4.10901	0.0001	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.09E-09	6.1E-03
86	3.96344	0.0001	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.20	70	1	5.88E-09	5.9E-03
87	3.80395	0.0001	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.20	70	1	5.64E-09	5.6E-03
88	10.66489	0.0001	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.20	70	1	1.58E-08	1.6E-02
89	10.51796	0.0001	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.20	70	1	1.56E-08	1.6E-02
90	10.14208	0.0001	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.20	70	1	1.50E-08	1.5E-02
91	9.56683	0.0001	1.3E-03	361	1	0.96	1E-06	4.6E-07	1.1	10	0.20	70	1	1.42E-08	1.4E-02
92	8.87859	0.0001	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.20	70	1	1.32E-08	1.3E-02
93	8.17543	0.0001	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.20	70	1	1.21E-08	1.2E-02
94	7.49014	0.0001	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.20	70	1	1.11E-08	1.1E-02
95	6.88077	0.0001	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.02E-08	1.0E-02
96	6.29112	0.0001	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.33E-09	9.3E-03
97	4.71763	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.00E-09	7.0E-03
98	4.45043	0.0001	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.60E-09	6.6E-03
99	4.17711	0.0001	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.19E-09	6.2E-03
100	11.89141	0.0001	1.7E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.20	70	1	1.76E-08	1.8E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
101	12.48449	0.0001	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.20	70	1	1.85E-08	1.9E-02
102	12.93782	0.0001	1.8E-03	361	1	0.96	1E-06	6.2E-07	1.1	10	0.20	70	1	1.92E-08	1.9E-02
103	13.07851	0.0001	1.8E-03	361	1	0.96	1E-06	6.3E-07	1.1	10	0.20	70	1	1.94E-08	1.9E-02
104	12.86683	0.0001	1.8E-03	361	1	0.96	1E-06	6.2E-07	1.1	10	0.20	70	1	1.91E-08	1.9E-02
105	12.34017	0.0001	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.20	70	1	1.83E-08	1.8E-02
106	11.67048	0.0001	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.20	70	1	1.73E-08	1.7E-02
107	10.93808	0.0001	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.20	70	1	1.62E-08	1.6E-02
108	10.19505	0.0001	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.20	70	1	1.51E-08	1.5E-02
109	9.44689	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.40E-08	1.4E-02
110	5.17521	0.0001	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.67E-09	7.7E-03
111	4.7693	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.07E-09	7.1E-03
112	4.39426	0.0001	6.1E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.52E-09	6.5E-03
113	12.62453	0.0001	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.20	70	1	1.87E-08	1.9E-02
114	13.66461	0.0001	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.20	70	1	2.03E-08	2.0E-02
115	14.74795	0.0001	2.0E-03	361	1	0.96	1E-06	7.1E-07	1.1	10	0.20	70	1	2.19E-08	2.2E-02
116	15.79835	0.0001	2.2E-03	361	1	0.96	1E-06	7.6E-07	1.1	10	0.20	70	1	2.34E-08	2.3E-02
117	16.51462	0.0001	2.3E-03	361	1	0.96	1E-06	7.9E-07	1.1	10	0.20	70	1	2.45E-08	2.4E-02
118	16.74577	0.0001	2.3E-03	361	1	0.96	1E-06	8.1E-07	1.1	10	0.20	70	1	2.48E-08	2.5E-02
119	16.4116	0.0001	2.3E-03	361	1	0.96	1E-06	7.9E-07	1.1	10	0.20	70	1	2.43E-08	2.4E-02
120	15.90701	0.0001	2.2E-03	361	1	0.96	1E-06	7.7E-07	1.1	10	0.20	70	1	2.36E-08	2.4E-02
121	15.28123	0.0001	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.20	70	1	2.27E-08	2.3E-02
122	14.4932	0.0001	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.20	70	1	2.15E-08	2.1E-02
123	6.07021	0.0001	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	9.00E-09	9.0E-03
124	5.43366	0.0001	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.20	70	1	8.06E-09	8.1E-03
125	4.91804	0.0001	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.29E-09	7.3E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
126	12.76067	0.0001	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.20	70	1	1.89E-08	1.9E-02
127	14.00485	0.0001	1.9E-03	361	1	0.96	1E-06	6.7E-07	1.1	10	0.20	70	1	2.08E-08	2.1E-02
128	15.53499	0.0001	2.2E-03	361	1	0.96	1E-06	7.5E-07	1.1	10	0.20	70	1	2.30E-08	2.3E-02
129	17.27162	0.0001	2.4E-03	361	1	0.96	1E-06	8.3E-07	1.1	10	0.20	70	1	2.56E-08	2.6E-02
130	19.18771	0.0001	2.7E-03	361	1	0.96	1E-06	9.2E-07	1.1	10	0.20	70	1	2.85E-08	2.8E-02
131	21.24315	0.0001	3.0E-03	361	1	0.96	1E-06	1.0E-06	1.1	10	0.20	70	1	3.15E-08	3.2E-02
132	22.73326	0.0001	3.2E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.37E-08	3.4E-02
133	22.95582	0.0001	3.2E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.40E-08	3.4E-02
134	23.18075	0.0001	3.2E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.44E-08	3.4E-02
135	6.12333	0.0001	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	9.08E-09	9.1E-03
136	5.40588	0.0001	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.20	70	1	8.02E-09	8.0E-03
137	4.86113	0.0001	6.8E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.21E-09	7.2E-03
138	12.44896	0.0001	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.20	70	1	1.85E-08	1.8E-02
139	13.72315	0.0001	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.20	70	1	2.04E-08	2.0E-02
140	15.37501	0.0001	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.20	70	1	2.28E-08	2.3E-02
141	17.34932	0.0001	2.4E-03	361	1	0.96	1E-06	8.3E-07	1.1	10	0.20	70	1	2.57E-08	2.6E-02
142	19.77943	0.0001	2.7E-03	361	1	0.96	1E-06	9.5E-07	1.1	10	0.20	70	1	2.93E-08	2.9E-02
143	22.98059	0.0001	3.2E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.41E-08	3.4E-02
144	27.47218	0.0001	3.8E-03	361	1	0.96	1E-06	1.3E-06	1.1	10	0.20	70	1	4.07E-08	4.1E-02
145	33.47708	0.0001	4.7E-03	361	1	0.96	1E-06	1.6E-06	1.1	10	0.20	70	1	4.96E-08	5.0E-02
146	37.05872	0.0001	5.2E-03	361	1	0.96	1E-06	1.8E-06	1.1	10	0.20	70	1	5.50E-08	5.5E-02
147	5.97754	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.86E-09	8.9E-03
148	5.29526	0.0001	7.4E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.85E-09	7.9E-03
149	11.86947	0.0001	1.6E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.20	70	1	1.76E-08	1.8E-02
150	13.13031	0.0001	1.8E-03	361	1	0.96	1E-06	6.3E-07	1.1	10	0.20	70	1	1.95E-08	1.9E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
151	14.65174	0.0001	2.0E-03	361	1	0.96	1E-06	7.0E-07	1.1	10	0.20	70	1	2.17E-08	2.2E-02
152	16.5475	0.0001	2.3E-03	361	1	0.96	1E-06	8.0E-07	1.1	10	0.20	70	1	2.45E-08	2.5E-02
153	18.89047	0.0001	2.6E-03	361	1	0.96	1E-06	9.1E-07	1.1	10	0.20	70	1	2.80E-08	2.8E-02
154	21.94578	0.0001	3.1E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.25E-08	3.3E-02
155	26.36829	0.0001	3.7E-03	361	1	0.96	1E-06	1.3E-06	1.1	10	0.20	70	1	3.91E-08	3.9E-02
156	33.65271	0.0001	4.7E-03	361	1	0.96	1E-06	1.6E-06	1.1	10	0.20	70	1	4.99E-08	5.0E-02
157	51.43908	0.0001	7.1E-03	361	1	0.96	1E-06	2.5E-06	1.1	10	0.20	70	1	7.63E-08	7.6E-02
158	6.56632	0.0001	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.74E-09	9.7E-03
159	5.71924	0.0001	7.9E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.20	70	1	8.48E-09	8.5E-03
160	11.10664	0.0001	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.20	70	1	1.65E-08	1.6E-02
161	12.24247	0.0001	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.20	70	1	1.82E-08	1.8E-02
162	13.64403	0.0001	1.9E-03	361	1	0.96	1E-06	6.6E-07	1.1	10	0.20	70	1	2.02E-08	2.0E-02
163	15.39091	0.0001	2.1E-03	361	1	0.96	1E-06	7.4E-07	1.1	10	0.20	70	1	2.28E-08	2.3E-02
164	17.48283	0.0001	2.4E-03	361	1	0.96	1E-06	8.4E-07	1.1	10	0.20	70	1	2.59E-08	2.6E-02
165	20.1275	0.0001	2.8E-03	361	1	0.96	1E-06	9.7E-07	1.1	10	0.20	70	1	2.98E-08	3.0E-02
166	23.60061	0.0001	3.3E-03	361	1	0.96	1E-06	1.1E-06	1.1	10	0.20	70	1	3.50E-08	3.5E-02
167	28.5242	0.0001	4.0E-03	361	1	0.96	1E-06	1.4E-06	1.1	10	0.20	70	1	4.23E-08	4.2E-02
168	36.54607	0.0001	5.1E-03	361	1	0.96	1E-06	1.8E-06	1.1	10	0.20	70	1	5.42E-08	5.4E-02
169	7.10548	0.0001	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.20	70	1	1.05E-08	1.1E-02
170	6.1647	0.0001	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.14E-09	9.1E-03
171	9.36019	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.39E-08	1.4E-02
172	10.26477	0.0001	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.20	70	1	1.52E-08	1.5E-02
173	11.28542	0.0001	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.20	70	1	1.67E-08	1.7E-02
174	12.48753	0.0001	1.7E-03	361	1	0.96	1E-06	6.0E-07	1.1	10	0.20	70	1	1.85E-08	1.9E-02
175	13.95536	0.0001	1.9E-03	361	1	0.96	1E-06	6.7E-07	1.1	10	0.20	70	1	2.07E-08	2.1E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
176	15.90098	0.0001	2.2E-03	361	1	0.96	1E-06	7.7E-07	1.1	10	0.20	70	1	2.36E-08	2.4E-02
177	18.16768	0.0001	2.5E-03	361	1	0.96	1E-06	8.7E-07	1.1	10	0.20	70	1	2.69E-08	2.7E-02
178	20.98646	0.0001	2.9E-03	361	1	0.96	1E-06	1.0E-06	1.1	10	0.20	70	1	3.11E-08	3.1E-02
179	24.68956	0.0001	3.4E-03	361	1	0.96	1E-06	1.2E-06	1.1	10	0.20	70	1	3.66E-08	3.7E-02
180	29.86012	0.0001	4.2E-03	361	1	0.96	1E-06	1.4E-06	1.1	10	0.20	70	1	4.43E-08	4.4E-02
181	6.61204	0.0001	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.81E-09	9.8E-03
182	8.59894	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.28E-08	1.3E-02
183	9.41907	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.40E-08	1.4E-02
184	10.3446	0.0001	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.20	70	1	1.53E-08	1.5E-02
185	11.40523	0.0001	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.20	70	1	1.69E-08	1.7E-02
186	12.62871	0.0001	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.20	70	1	1.87E-08	1.9E-02
187	14.15258	0.0001	2.0E-03	361	1	0.96	1E-06	6.8E-07	1.1	10	0.20	70	1	2.10E-08	2.1E-02
188	16.03326	0.0001	2.2E-03	361	1	0.96	1E-06	7.7E-07	1.1	10	0.20	70	1	2.38E-08	2.4E-02
189	18.56168	0.0001	2.6E-03	361	1	0.96	1E-06	8.9E-07	1.1	10	0.20	70	1	2.75E-08	2.8E-02
190	21.53414	0.0001	3.0E-03	361	1	0.96	1E-06	1.0E-06	1.1	10	0.20	70	1	3.19E-08	3.2E-02
191	25.39343	0.0001	3.5E-03	361	1	0.96	1E-06	1.2E-06	1.1	10	0.20	70	1	3.77E-08	3.8E-02
192	7.87938	0.0001	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.20	70	1	1.17E-08	1.2E-02
193	8.56779	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.27E-08	1.3E-02
194	9.39422	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.39E-08	1.4E-02
195	10.33339	0.0001	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.20	70	1	1.53E-08	1.5E-02
196	11.4209	0.0001	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.20	70	1	1.69E-08	1.7E-02
197	12.68265	0.0001	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.20	70	1	1.88E-08	1.9E-02
198	14.19143	0.0001	2.0E-03	361	1	0.96	1E-06	6.8E-07	1.1	10	0.20	70	1	2.10E-08	2.1E-02
199	16.14949	0.0001	2.2E-03	361	1	0.96	1E-06	7.8E-07	1.1	10	0.20	70	1	2.39E-08	2.4E-02
200	18.50057	0.0001	2.6E-03	361	1	0.96	1E-06	8.9E-07	1.1	10	0.20	70	1	2.74E-08	2.7E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
201	21.69811	0.0001	3.0E-03	361	1	0.96	1E-06	1.0E-06	1.1	10	0.20	70	1	3.22E-08	3.2E-02
202	7.20716	0.0001	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.20	70	1	1.07E-08	1.1E-02
203	7.80078	0.0001	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.20	70	1	1.16E-08	1.2E-02
204	8.49677	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.26E-08	1.3E-02
205	9.29709	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.38E-08	1.4E-02
206	10.21686	0.0001	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.20	70	1	1.52E-08	1.5E-02
207	11.3019	0.0001	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.20	70	1	1.68E-08	1.7E-02
208	12.59572	0.0001	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.20	70	1	1.87E-08	1.9E-02
209	14.12399	0.0001	2.0E-03	361	1	0.96	1E-06	6.8E-07	1.1	10	0.20	70	1	2.09E-08	2.1E-02
210	16.02608	0.0001	2.2E-03	361	1	0.96	1E-06	7.7E-07	1.1	10	0.20	70	1	2.38E-08	2.4E-02
211	18.42134	0.0001	2.6E-03	361	1	0.96	1E-06	8.9E-07	1.1	10	0.20	70	1	2.73E-08	2.7E-02
212	6.66072	0.0001	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.88E-09	9.9E-03
213	7.1561	0.0001	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.20	70	1	1.06E-08	1.1E-02
214	7.67328	0.0001	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.20	70	1	1.14E-08	1.1E-02
215	8.34676	0.0001	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.20	70	1	1.24E-08	1.2E-02
216	9.12668	0.0001	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.20	70	1	1.35E-08	1.4E-02
217	10.02322	0.0001	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.20	70	1	1.49E-08	1.5E-02
218	11.0812	0.0001	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.20	70	1	1.64E-08	1.6E-02
219	12.3349	0.0001	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.20	70	1	1.83E-08	1.8E-02
220	13.84047	0.0001	1.9E-03	361	1	0.96	1E-06	6.7E-07	1.1	10	0.20	70	1	2.05E-08	2.1E-02
221	15.71953	0.0001	2.2E-03	361	1	0.96	1E-06	7.6E-07	1.1	10	0.20	70	1	2.33E-08	2.3E-02
222	6.08384	0.0001	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	9.02E-09	9.0E-03
223	6.53197	0.0001	9.1E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.20	70	1	9.69E-09	9.7E-03
224	7.02812	0.0001	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.20	70	1	1.04E-08	1.0E-02
225	7.5234	0.0001	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.20	70	1	1.12E-08	1.1E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
226	8.14609	0.0001	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.20	70	1	1.21E-08	1.2E-02
227	8.8902	0.0001	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.20	70	1	1.32E-08	1.3E-02
228	9.75094	0.0001	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.20	70	1	1.45E-08	1.4E-02
229	10.76139	0.0001	1.5E-03	361	1	0.96	1E-06	5.2E-07	1.1	10	0.20	70	1	1.60E-08	1.6E-02
230	11.96164	0.0001	1.7E-03	361	1	0.96	1E-06	5.8E-07	1.1	10	0.20	70	1	1.77E-08	1.8E-02
231	13.43252	0.0001	1.9E-03	361	1	0.96	1E-06	6.5E-07	1.1	10	0.20	70	1	1.99E-08	2.0E-02
232	5.55832	0.0001	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.24E-09	8.2E-03
233	5.9408	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.81E-09	8.8E-03
234	6.36277	0.0001	8.8E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.20	70	1	9.44E-09	9.4E-03
235	6.83398	0.0001	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.01E-08	1.0E-02
236	7.30475	0.0001	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.20	70	1	1.08E-08	1.1E-02
237	7.8999	0.0001	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.20	70	1	1.17E-08	1.2E-02
238	8.60225	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.28E-08	1.3E-02
239	9.4172	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.40E-08	1.4E-02
240	10.36992	0.0001	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.20	70	1	1.54E-08	1.5E-02
241	11.5008	0.0001	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.20	70	1	1.71E-08	1.7E-02
242	13.08589	0.0001	1.8E-03	361	1	0.96	1E-06	6.3E-07	1.1	10	0.20	70	1	1.94E-08	1.9E-02
243	5.09154	0.0001	7.1E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.55E-09	7.6E-03
244	5.42327	0.0001	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.20	70	1	8.04E-09	8.0E-03
245	5.77258	0.0001	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.20	70	1	8.56E-09	8.6E-03
246	6.16841	0.0001	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.15E-09	9.1E-03
247	6.61807	0.0001	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.81E-09	9.8E-03
248	7.12212	0.0001	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.20	70	1	1.06E-08	1.1E-02
249	7.62017	0.0001	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.20	70	1	1.13E-08	1.1E-02
250	8.27507	0.0001	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.20	70	1	1.23E-08	1.2E-02

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
251	9.03725	0.0001	1.3E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.20	70	1	1.34E-08	1.3E-02
252	9.91365	0.0001	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.20	70	1	1.47E-08	1.5E-02
253	11.12013	0.0001	1.5E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.20	70	1	1.65E-08	1.6E-02
254	4.94673	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.34E-09	7.3E-03
255	5.2475	0.0001	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.78E-09	7.8E-03
256	5.58795	0.0001	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.29E-09	8.3E-03
257	5.95739	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.83E-09	8.8E-03
258	6.37445	0.0001	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.20	70	1	9.45E-09	9.5E-03
259	6.84635	0.0001	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.02E-08	1.0E-02
260	7.37473	0.0001	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.20	70	1	1.09E-08	1.1E-02
261	7.91277	0.0001	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.20	70	1	1.17E-08	1.2E-02
262	8.60749	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.28E-08	1.3E-02
263	9.40452	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.39E-08	1.4E-02
264	10.52593	0.0001	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.20	70	1	1.56E-08	1.6E-02
265	4.76068	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.06E-09	7.1E-03
266	5.06253	0.0001	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.51E-09	7.5E-03
267	5.37896	0.0001	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.20	70	1	7.98E-09	8.0E-03
268	5.73208	0.0001	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.20	70	1	8.50E-09	8.5E-03
269	6.11602	0.0001	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	9.07E-09	9.1E-03
270	6.55534	0.0001	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.72E-09	9.7E-03
271	7.0419	0.0001	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.20	70	1	1.04E-08	1.0E-02
272	7.58857	0.0001	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.20	70	1	1.13E-08	1.1E-02
273	8.15044	0.0001	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.20	70	1	1.21E-08	1.2E-02
274	8.96729	0.0001	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.20	70	1	1.33E-08	1.3E-02
275	4.61134	0.0001	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.84E-09	6.8E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
276	4.87358	0.0001	6.8E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.23E-09	7.2E-03
277	5.16257	0.0001	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.66E-09	7.7E-03
278	5.48272	0.0001	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.20	70	1	8.13E-09	8.1E-03
279	5.84791	0.0001	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.20	70	1	8.67E-09	8.7E-03
280	6.24492	0.0001	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.26E-09	9.3E-03
281	6.69127	0.0001	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.20	70	1	9.92E-09	9.9E-03
282	7.19613	0.0001	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.20	70	1	1.07E-08	1.1E-02
283	7.69356	0.0001	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.20	70	1	1.14E-08	1.1E-02
284	8.47394	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.26E-08	1.3E-02
285	4.43683	0.0001	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.58E-09	6.6E-03
286	4.67705	0.0001	6.5E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	6.94E-09	6.9E-03
287	4.94143	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.33E-09	7.3E-03
288	5.23512	0.0001	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.76E-09	7.8E-03
289	5.55704	0.0001	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.24E-09	8.2E-03
290	5.9331	0.0001	8.2E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.80E-09	8.8E-03
291	6.33346	0.0001	8.8E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.20	70	1	9.39E-09	9.4E-03
292	6.78551	0.0001	9.4E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.01E-08	1.0E-02
293	7.30057	0.0001	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.20	70	1	1.08E-08	1.1E-02
294	4.26012	0.0001	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.32E-09	6.3E-03
295	4.47939	0.0001	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.64E-09	6.6E-03
296	4.72085	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.00E-09	7.0E-03
297	4.98661	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.40E-09	7.4E-03
298	5.27637	0.0001	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.82E-09	7.8E-03
299	5.60706	0.0001	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.32E-09	8.3E-03
300	5.98	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.87E-09	8.9E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
301	6.38695	0.0001	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.20	70	1	9.47E-09	9.5E-03
302	6.83422	0.0001	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.20	70	1	1.01E-08	1.0E-02
303	4.07698	0.0001	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.05E-09	6.0E-03
304	4.28229	0.0001	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.35E-09	6.4E-03
305	4.50125	0.0001	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.68E-09	6.7E-03
306	4.73976	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.03E-09	7.0E-03
307	5.00206	0.0001	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.42E-09	7.4E-03
308	5.29185	0.0001	7.4E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.85E-09	7.8E-03
309	5.6248	0.0001	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.34E-09	8.3E-03
310	5.9929	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.89E-09	8.9E-03
311	6.38913	0.0001	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.20	70	1	9.47E-09	9.5E-03
312	3.89657	0.0001	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.20	70	1	5.78E-09	5.8E-03
313	4.08461	0.0001	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.06E-09	6.1E-03
314	4.28608	0.0001	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.36E-09	6.4E-03
315	4.50072	0.0001	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.67E-09	6.7E-03
316	4.73668	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	7.02E-09	7.0E-03
317	4.99562	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.41E-09	7.4E-03
318	5.28005	0.0001	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.83E-09	7.8E-03
319	5.61851	0.0001	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.33E-09	8.3E-03
320	5.97473	0.0001	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.20	70	1	8.86E-09	8.9E-03
321	3.71986	0.0001	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.20	70	1	5.52E-09	5.5E-03
322	3.8903	0.0001	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.20	70	1	5.77E-09	5.8E-03
323	4.0747	0.0001	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.20	70	1	6.04E-09	6.0E-03
324	4.27	0.0001	5.9E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.20	70	1	6.33E-09	6.3E-03
325	4.48258	0.0001	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.20	70	1	6.65E-09	6.6E-03

**Syphon Geotechnical
Risk from Borings**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
326	4.71448	0.0001	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.20	70	1	6.99E-09	7.0E-03
327	4.96831	0.0001	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.20	70	1	7.37E-09	7.4E-03
328	5.24926	0.0001	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.20	70	1	7.78E-09	7.8E-03
329	5.58114	0.0001	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.20	70	1	8.28E-09	8.3E-03
330	10.45618	0.0001	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.20	70	1	1.55E-08	1.6E-02
331	9.31449	0.0001	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.20	70	1	1.38E-08	1.4E-02
332	10.13392	0.0001	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.20	70	1	1.50E-08	1.5E-02
333	8.35429	0.0001	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.20	70	1	1.24E-08	1.2E-02
334	8.99871	0.0001	1.3E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.20	70	1	1.33E-08	1.3E-02
335	9.7029	0.0001	1.3E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.20	70	1	1.44E-08	1.4E-02
336	8.0559	0.0001	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.20	70	1	1.19E-08	1.2E-02
337	8.60453	0.0001	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.20	70	1	1.28E-08	1.3E-02
338	9.17311	0.0001	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.20	70	1	1.36E-08	1.4E-02
339	9.72398	0.0001	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.20	70	1	1.44E-08	1.4E-02

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		II)
1	1.4E-04	1.2E-04	1090	1	0.96	1E-06	1.23E-07	1.1	10	0.20	70	1	3.8E-09	3.8E-03	0.23
2	1.4E-04	1.2E-04	1090	1	0.96	1E-06	1.23E-07	1.1	10	0.20	70	1	3.8E-09	3.8E-03	
3	1.4E-04	1.2E-04	1090	1	0.96	1E-06	1.25E-07	1.1	10	0.20	70	1	3.9E-09	3.9E-03	0.01
4	1.4E-04	1.2E-04	1090	1	0.96	1E-06	1.30E-07	1.1	10	0.20	70	1	4.0E-09	4.0E-03	
5	1.4E-04	1.3E-04	1090	1	0.96	1E-06	1.40E-07	1.1	10	0.20	70	1	4.3E-09	4.3E-03	
6	1.4E-04	1.3E-04	1090	1	0.96	1E-06	1.41E-07	1.1	10	0.20	70	1	4.3E-09	4.3E-03	
7	1.4E-04	1.4E-04	1090	1	0.96	1E-06	1.44E-07	1.1	10	0.20	70	1	4.4E-09	4.4E-03	
8	1.4E-04	1.4E-04	1090	1	0.96	1E-06	1.50E-07	1.1	10	0.20	70	1	4.6E-09	4.6E-03	
9	1.4E-04	1.5E-04	1090	1	0.96	1E-06	1.58E-07	1.1	10	0.20	70	1	4.9E-09	4.9E-03	
10	1.4E-04	1.9E-04	1090	1	0.96	1E-06	1.96E-07	1.1	10	0.20	70	1	6.0E-09	6.0E-03	
11	1.4E-04	1.7E-04	1090	1	0.96	1E-06	1.80E-07	1.1	10	0.20	70	1	5.5E-09	5.5E-03	
12	1.4E-04	1.6E-04	1090	1	0.96	1E-06	1.63E-07	1.1	10	0.20	70	1	5.0E-09	5.0E-03	
13	1.4E-04	1.6E-04	1090	1	0.96	1E-06	1.68E-07	1.1	10	0.20	70	1	5.2E-09	5.2E-03	
14	1.4E-04	1.7E-04	1090	1	0.96	1E-06	1.75E-07	1.1	10	0.20	70	1	5.4E-09	5.4E-03	
15	1.4E-04	1.8E-04	1090	1	0.96	1E-06	1.84E-07	1.1	10	0.20	70	1	5.7E-09	5.7E-03	
16	1.4E-04	1.9E-04	1090	1	0.96	1E-06	1.95E-07	1.1	10	0.20	70	1	6.0E-09	6.0E-03	
17	1.4E-04	2.5E-04	1090	1	0.96	1E-06	2.56E-07	1.1	10	0.20	70	1	7.9E-09	7.9E-03	
18	1.4E-04	2.2E-04	1090	1	0.96	1E-06	2.31E-07	1.1	10	0.20	70	1	7.1E-09	7.1E-03	
19	1.4E-04	2.0E-04	1090	1	0.96	1E-06	2.12E-07	1.1	10	0.20	70	1	6.5E-09	6.5E-03	
20	1.4E-04	1.9E-04	1090	1	0.96	1E-06	1.99E-07	1.1	10	0.20	70	1	6.1E-09	6.1E-03	
21	1.4E-04	1.8E-04	1090	1	0.96	1E-06	1.93E-07	1.1	10	0.20	70	1	6.0E-09	6.0E-03	
22	1.4E-04	2.0E-04	1090	1	0.96	1E-06	2.07E-07	1.1	10	0.20	70	1	6.4E-09	6.4E-03	
23	1.4E-04	2.1E-04	1090	1	0.96	1E-06	2.15E-07	1.1	10	0.20	70	1	6.6E-09	6.6E-03	
24	1.4E-04	2.2E-04	1090	1	0.96	1E-06	2.29E-07	1.1	10	0.20	70	1	7.1E-09	7.1E-03	
25	1.4E-04	2.3E-04	1090	1	0.96	1E-06	2.40E-07	1.1	10	0.20	70	1	7.4E-09	7.4E-03	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) II)		
26	1.4E-04	3.3E-04	1090	1	0.96	1E-06	3.46E-07	1.1	10	0.20	70	1	1.1E-08	1.1E-02	
27	1.4E-04	2.9E-04	1090	1	0.96	1E-06	3.06E-07	1.1	10	0.20	70	1	9.4E-09	9.4E-03	
28	1.4E-04	2.6E-04	1090	1	0.96	1E-06	2.74E-07	1.1	10	0.20	70	1	8.4E-09	8.4E-03	
29	1.4E-04	2.4E-04	1090	1	0.96	1E-06	2.52E-07	1.1	10	0.20	70	1	7.8E-09	7.8E-03	
30	1.4E-04	2.3E-04	1090	1	0.96	1E-06	2.39E-07	1.1	10	0.20	70	1	7.4E-09	7.4E-03	
31	1.4E-04	2.2E-04	1090	1	0.96	1E-06	2.30E-07	1.1	10	0.20	70	1	7.1E-09	7.1E-03	
32	1.4E-04	2.3E-04	1090	1	0.96	1E-06	2.41E-07	1.1	10	0.20	70	1	7.4E-09	7.4E-03	
33	1.4E-04	2.4E-04	1090	1	0.96	1E-06	2.55E-07	1.1	10	0.20	70	1	7.8E-09	7.8E-03	
34	1.4E-04	2.6E-04	1090	1	0.96	1E-06	2.67E-07	1.1	10	0.20	70	1	8.2E-09	8.2E-03	
35	1.4E-04	2.7E-04	1090	1	0.96	1E-06	2.78E-07	1.1	10	0.20	70	1	8.6E-09	8.6E-03	
36	1.4E-04	2.7E-04	1090	1	0.96	1E-06	2.87E-07	1.1	10	0.20	70	1	8.9E-09	8.9E-03	
37	1.4E-04	5.1E-04	1090	1	0.96	1E-06	5.34E-07	1.1	10	0.20	70	1	1.6E-08	1.6E-02	
38	1.4E-04	4.5E-04	1090	1	0.96	1E-06	4.74E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	
39	1.4E-04	4.0E-04	1090	1	0.96	1E-06	4.20E-07	1.1	10	0.20	70	1	1.3E-08	1.3E-02	
40	1.4E-04	3.5E-04	1090	1	0.96	1E-06	3.71E-07	1.1	10	0.20	70	1	1.1E-08	1.1E-02	
41	1.4E-04	3.2E-04	1090	1	0.96	1E-06	3.33E-07	1.1	10	0.20	70	1	1.0E-08	1.0E-02	
42	1.4E-04	2.9E-04	1090	1	0.96	1E-06	3.06E-07	1.1	10	0.20	70	1	9.4E-09	9.4E-03	
43	1.4E-04	2.8E-04	1090	1	0.96	1E-06	2.91E-07	1.1	10	0.20	70	1	9.0E-09	9.0E-03	
44	1.4E-04	2.7E-04	1090	1	0.96	1E-06	2.84E-07	1.1	10	0.20	70	1	8.8E-09	8.8E-03	
45	1.4E-04	2.6E-04	1090	1	0.96	1E-06	2.75E-07	1.1	10	0.20	70	1	8.5E-09	8.5E-03	
46	1.4E-04	3.1E-04	1090	1	0.96	1E-06	3.23E-07	1.1	10	0.20	70	1	1.0E-08	1.0E-02	
47	1.4E-04	3.2E-04	1090	1	0.96	1E-06	3.35E-07	1.1	10	0.20	70	1	1.0E-08	1.0E-02	
48	1.4E-04	3.3E-04	1090	1	0.96	1E-06	3.43E-07	1.1	10	0.20	70	1	1.1E-08	1.1E-02	
49	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.22E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
50	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.51E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
51	1.4E-04	5.6E-04	1090	1	0.96	1E-06	5.80E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
52	1.4E-04	4.9E-04	1090	1	0.96	1E-06	5.16E-07	1.1	10	0.20	70	1	1.6E-08	1.6E-02	
53	1.4E-04	4.4E-04	1090	1	0.96	1E-06	4.55E-07	1.1	10	0.20	70	1	1.4E-08	1.4E-02	
54	1.4E-04	3.9E-04	1090	1	0.96	1E-06	4.11E-07	1.1	10	0.20	70	1	1.3E-08	1.3E-02	
55	1.4E-04	3.6E-04	1090	1	0.96	1E-06	3.81E-07	1.1	10	0.20	70	1	1.2E-08	1.2E-02	
56	1.4E-04	3.5E-04	1090	1	0.96	1E-06	3.62E-07	1.1	10	0.20	70	1	1.1E-08	1.1E-02	
57	1.4E-04	3.3E-04	1090	1	0.96	1E-06	3.48E-07	1.1	10	0.20	70	1	1.1E-08	1.1E-02	
58	1.4E-04	3.3E-04	1090	1	0.96	1E-06	3.41E-07	1.1	10	0.20	70	1	1.0E-08	1.0E-02	
59	1.4E-04	3.8E-04	1090	1	0.96	1E-06	3.94E-07	1.1	10	0.20	70	1	1.2E-08	1.2E-02	
60	1.4E-04	3.9E-04	1090	1	0.96	1E-06	4.03E-07	1.1	10	0.20	70	1	1.2E-08	1.2E-02	
61	1.4E-04	3.9E-04	1090	1	0.96	1E-06	4.09E-07	1.1	10	0.20	70	1	1.3E-08	1.3E-02	
62	1.4E-04	3.9E-04	1090	1	0.96	1E-06	4.11E-07	1.1	10	0.20	70	1	1.3E-08	1.3E-02	
63	1.4E-04	9.1E-04	1090	1	0.96	1E-06	9.56E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
64	1.4E-04	8.5E-04	1090	1	0.96	1E-06	8.86E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
65	1.4E-04	7.7E-04	1090	1	0.96	1E-06	8.04E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
66	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.22E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
67	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.46E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
68	1.4E-04	5.5E-04	1090	1	0.96	1E-06	5.80E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
69	1.4E-04	5.0E-04	1090	1	0.96	1E-06	5.21E-07	1.1	10	0.20	70	1	1.6E-08	1.6E-02	
70	1.4E-04	4.5E-04	1090	1	0.96	1E-06	4.75E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	
71	1.4E-04	4.3E-04	1090	1	0.96	1E-06	4.53E-07	1.1	10	0.20	70	1	1.4E-08	1.4E-02	
72	1.4E-04	4.7E-04	1090	1	0.96	1E-06	4.94E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	
73	1.4E-04	4.7E-04	1090	1	0.96	1E-06	4.92E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	
74	1.4E-04	4.7E-04	1090	1	0.96	1E-06	4.87E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	
75	1.4E-04	4.5E-04	1090	1	0.96	1E-06	4.75E-07	1.1	10	0.20	70	1	1.5E-08	1.5E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
76	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.20	70	1	3.8E-08	3.8E-02	
77	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.20	70	1	3.6E-08	3.6E-02	
78	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
79	1.4E-04	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
80	1.4E-04	8.7E-04	1090	1	0.96	1E-06	9.14E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
81	1.4E-04	7.9E-04	1090	1	0.96	1E-06	8.27E-07	1.1	10	0.20	70	1	2.6E-08	2.6E-02	
82	1.4E-04	7.2E-04	1090	1	0.96	1E-06	7.50E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
83	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.87E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
84	1.4E-04	6.0E-04	1090	1	0.96	1E-06	6.23E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
85	1.4E-04	5.7E-04	1090	1	0.96	1E-06	5.97E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
86	1.4E-04	5.5E-04	1090	1	0.96	1E-06	5.76E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
87	1.4E-04	5.3E-04	1090	1	0.96	1E-06	5.53E-07	1.1	10	0.20	70	1	1.7E-08	1.7E-02	
88	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.55E-06	1.1	10	0.20	70	1	4.8E-08	4.8E-02	
89	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.20	70	1	4.7E-08	4.7E-02	
90	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.47E-06	1.1	10	0.20	70	1	4.5E-08	4.5E-02	
91	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.39E-06	1.1	10	0.20	70	1	4.3E-08	4.3E-02	
92	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.29E-06	1.1	10	0.20	70	1	4.0E-08	4.0E-02	
93	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.19E-06	1.1	10	0.20	70	1	3.7E-08	3.7E-02	
94	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
95	1.4E-04	9.6E-04	1090	1	0.96	1E-06	1.00E-06	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
96	1.4E-04	8.7E-04	1090	1	0.96	1E-06	9.14E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
97	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.85E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
98	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.46E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
99	1.4E-04	5.8E-04	1090	1	0.96	1E-06	6.07E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
100	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.73E-06	1.1	10	0.20	70	1	5.3E-08	5.3E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/Mi 2) II)		MAX	
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH			
101	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.81E-06	1.1	10	0.20	70	1	5.6E-08	5.6E-02	
102	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.88E-06	1.1	10	0.20	70	1	5.8E-08	5.8E-02	
103	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.90E-06	1.1	10	0.20	70	1	5.9E-08	5.9E-02	
104	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.87E-06	1.1	10	0.20	70	1	5.8E-08	5.8E-02	
105	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.20	70	1	5.5E-08	5.5E-02	
106	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.70E-06	1.1	10	0.20	70	1	5.2E-08	5.2E-02	
107	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.59E-06	1.1	10	0.20	70	1	4.9E-08	4.9E-02	
108	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.48E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
109	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
110	1.4E-04	7.2E-04	1090	1	0.96	1E-06	7.52E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
111	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.93E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
112	1.4E-04	6.1E-04	1090	1	0.96	1E-06	6.38E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
113	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.20	70	1	5.7E-08	5.7E-02	
114	1.4E-04	1.9E-03	1090	1	0.96	1E-06	1.99E-06	1.1	10	0.20	70	1	6.1E-08	6.1E-02	
115	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.14E-06	1.1	10	0.20	70	1	6.6E-08	6.6E-02	
116	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.29E-06	1.1	10	0.20	70	1	7.1E-08	7.1E-02	
117	1.4E-04	2.3E-03	1090	1	0.96	1E-06	2.40E-06	1.1	10	0.20	70	1	7.4E-08	7.4E-02	
118	1.4E-04	2.3E-03	1090	1	0.96	1E-06	2.43E-06	1.1	10	0.20	70	1	7.5E-08	7.5E-02	
119	1.4E-04	2.3E-03	1090	1	0.96	1E-06	2.38E-06	1.1	10	0.20	70	1	7.3E-08	7.3E-02	
120	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.31E-06	1.1	10	0.20	70	1	7.1E-08	7.1E-02	
121	1.4E-04	2.1E-03	1090	1	0.96	1E-06	2.22E-06	1.1	10	0.20	70	1	6.8E-08	6.8E-02	
122	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.11E-06	1.1	10	0.20	70	1	6.5E-08	6.5E-02	
123	1.4E-04	8.4E-04	1090	1	0.96	1E-06	8.82E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
124	1.4E-04	7.6E-04	1090	1	0.96	1E-06	7.89E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
125	1.4E-04	6.8E-04	1090	1	0.96	1E-06	7.14E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) II)		
126	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.85E-06	1.1	10	0.20	70	1	5.7E-08	5.7E-02	
127	1.4E-04	1.9E-03	1090	1	0.96	1E-06	2.03E-06	1.1	10	0.20	70	1	6.3E-08	6.3E-02	
128	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.26E-06	1.1	10	0.20	70	1	7.0E-08	7.0E-02	
129	1.4E-04	2.4E-03	1090	1	0.96	1E-06	2.51E-06	1.1	10	0.20	70	1	7.7E-08	7.7E-02	
130	1.4E-04	2.7E-03	1090	1	0.96	1E-06	2.79E-06	1.1	10	0.20	70	1	8.6E-08	8.6E-02	
131	1.4E-04	3.0E-03	1090	1	0.96	1E-06	3.09E-06	1.1	10	0.20	70	1	9.5E-08	9.5E-02	
132	1.4E-04	3.2E-03	1090	1	0.96	1E-06	3.30E-06	1.1	10	0.20	70	1	1.0E-07	1.0E-01	
133	1.4E-04	3.2E-03	1090	1	0.96	1E-06	3.33E-06	1.1	10	0.20	70	1	1.0E-07	1.0E-01	
134	1.4E-04	3.2E-03	1090	1	0.96	1E-06	3.37E-06	1.1	10	0.20	70	1	1.0E-07	1.0E-01	
135	1.4E-04	8.5E-04	1090	1	0.96	1E-06	8.90E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
136	1.4E-04	7.5E-04	1090	1	0.96	1E-06	7.85E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
137	1.4E-04	6.8E-04	1090	1	0.96	1E-06	7.06E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
138	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.81E-06	1.1	10	0.20	70	1	5.6E-08	5.6E-02	
139	1.4E-04	1.9E-03	1090	1	0.96	1E-06	1.99E-06	1.1	10	0.20	70	1	6.1E-08	6.1E-02	
140	1.4E-04	2.1E-03	1090	1	0.96	1E-06	2.23E-06	1.1	10	0.20	70	1	6.9E-08	6.9E-02	
141	1.4E-04	2.4E-03	1090	1	0.96	1E-06	2.52E-06	1.1	10	0.20	70	1	7.8E-08	7.8E-02	
142	1.4E-04	2.7E-03	1090	1	0.96	1E-06	2.87E-06	1.1	10	0.20	70	1	8.9E-08	8.9E-02	
143	1.4E-04	3.2E-03	1090	1	0.96	1E-06	3.34E-06	1.1	10	0.20	70	1	1.0E-07	1.0E-01	
144	1.4E-04	3.8E-03	1090	1	0.96	1E-06	3.99E-06	1.1	10	0.20	70	1	1.2E-07	1.2E-01	
145	1.4E-04	4.7E-03	1090	1	0.96	1E-06	4.86E-06	1.1	10	0.20	70	1	1.5E-07	1.5E-01	
146	1.4E-04	5.2E-03	1090	1	0.96	1E-06	5.38E-06	1.1	10	0.20	70	1	1.7E-07	1.7E-01	
147	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.68E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
148	1.4E-04	7.4E-04	1090	1	0.96	1E-06	7.69E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
149	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.72E-06	1.1	10	0.20	70	1	5.3E-08	5.3E-02	
150	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.91E-06	1.1	10	0.20	70	1	5.9E-08	5.9E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
151	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.13E-06	1.1	10	0.20	70	1	6.6E-08	6.6E-02	
152	1.4E-04	2.3E-03	1090	1	0.96	1E-06	2.40E-06	1.1	10	0.20	70	1	7.4E-08	7.4E-02	
153	1.4E-04	2.6E-03	1090	1	0.96	1E-06	2.74E-06	1.1	10	0.20	70	1	8.5E-08	8.5E-02	
154	1.4E-04	3.1E-03	1090	1	0.96	1E-06	3.19E-06	1.1	10	0.20	70	1	9.8E-08	9.8E-02	
155	1.4E-04	3.7E-03	1090	1	0.96	1E-06	3.83E-06	1.1	10	0.20	70	1	1.2E-07	1.2E-01	
156	1.4E-04	4.7E-03	1090	1	0.96	1E-06	4.89E-06	1.1	10	0.20	70	1	1.5E-07	1.5E-01	
157	1.4E-04	7.1E-03	1090	1	0.96	1E-06	7.47E-06	1.1	10	0.20	70	1	2.3E-07	2.3E-01	
158	1.4E-04	9.1E-04	1090	1	0.96	1E-06	9.54E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
159	1.4E-04	7.9E-04	1090	1	0.96	1E-06	8.31E-07	1.1	10	0.20	70	1	2.6E-08	2.6E-02	
160	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.61E-06	1.1	10	0.20	70	1	5.0E-08	5.0E-02	
161	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.78E-06	1.1	10	0.20	70	1	5.5E-08	5.5E-02	
162	1.4E-04	1.9E-03	1090	1	0.96	1E-06	1.98E-06	1.1	10	0.20	70	1	6.1E-08	6.1E-02	
163	1.4E-04	2.1E-03	1090	1	0.96	1E-06	2.24E-06	1.1	10	0.20	70	1	6.9E-08	6.9E-02	
164	1.4E-04	2.4E-03	1090	1	0.96	1E-06	2.54E-06	1.1	10	0.20	70	1	7.8E-08	7.8E-02	
165	1.4E-04	2.8E-03	1090	1	0.96	1E-06	2.92E-06	1.1	10	0.20	70	1	9.0E-08	9.0E-02	
166	1.4E-04	3.3E-03	1090	1	0.96	1E-06	3.43E-06	1.1	10	0.20	70	1	1.1E-07	1.1E-01	
167	1.4E-04	4.0E-03	1090	1	0.96	1E-06	4.14E-06	1.1	10	0.20	70	1	1.3E-07	1.3E-01	
168	1.4E-04	5.1E-03	1090	1	0.96	1E-06	5.31E-06	1.1	10	0.20	70	1	1.6E-07	1.6E-01	
169	1.4E-04	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
170	1.4E-04	8.6E-04	1090	1	0.96	1E-06	8.96E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
171	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
172	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
173	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.64E-06	1.1	10	0.20	70	1	5.1E-08	5.1E-02	
174	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.81E-06	1.1	10	0.20	70	1	5.6E-08	5.6E-02	
175	1.4E-04	1.9E-03	1090	1	0.96	1E-06	2.03E-06	1.1	10	0.20	70	1	6.2E-08	6.2E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
176	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.31E-06	1.1	10	0.20	70	1	7.1E-08	7.1E-02	
177	1.4E-04	2.5E-03	1090	1	0.96	1E-06	2.64E-06	1.1	10	0.20	70	1	8.1E-08	8.1E-02	
178	1.4E-04	2.9E-03	1090	1	0.96	1E-06	3.05E-06	1.1	10	0.20	70	1	9.4E-08	9.4E-02	
179	1.4E-04	3.4E-03	1090	1	0.96	1E-06	3.59E-06	1.1	10	0.20	70	1	1.1E-07	1.1E-01	
180	1.4E-04	4.2E-03	1090	1	0.96	1E-06	4.34E-06	1.1	10	0.20	70	1	1.3E-07	1.3E-01	
181	1.4E-04	9.2E-04	1090	1	0.96	1E-06	9.61E-07	1.1	10	0.20	70	1	3.0E-08	3.0E-02	
182	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.20	70	1	3.9E-08	3.9E-02	
183	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
184	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.50E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
185	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.66E-06	1.1	10	0.20	70	1	5.1E-08	5.1E-02	
186	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.20	70	1	5.7E-08	5.7E-02	
187	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.06E-06	1.1	10	0.20	70	1	6.3E-08	6.3E-02	
188	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.33E-06	1.1	10	0.20	70	1	7.2E-08	7.2E-02	
189	1.4E-04	2.6E-03	1090	1	0.96	1E-06	2.70E-06	1.1	10	0.20	70	1	8.3E-08	8.3E-02	
190	1.4E-04	3.0E-03	1090	1	0.96	1E-06	3.13E-06	1.1	10	0.20	70	1	9.6E-08	9.6E-02	
191	1.4E-04	3.5E-03	1090	1	0.96	1E-06	3.69E-06	1.1	10	0.20	70	1	1.1E-07	1.1E-01	
192	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.14E-06	1.1	10	0.20	70	1	3.5E-08	3.5E-02	
193	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.24E-06	1.1	10	0.20	70	1	3.8E-08	3.8E-02	
194	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
195	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.50E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
196	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.66E-06	1.1	10	0.20	70	1	5.1E-08	5.1E-02	
197	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.84E-06	1.1	10	0.20	70	1	5.7E-08	5.7E-02	
198	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.06E-06	1.1	10	0.20	70	1	6.4E-08	6.4E-02	
199	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.35E-06	1.1	10	0.20	70	1	7.2E-08	7.2E-02	
200	1.4E-04	2.6E-03	1090	1	0.96	1E-06	2.69E-06	1.1	10	0.20	70	1	8.3E-08	8.3E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
201	1.4E-04	3.0E-03	1090	1	0.96	1E-06	3.15E-06	1.1	10	0.20	70	1	9.7E-08	9.7E-02	
202	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
203	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.13E-06	1.1	10	0.20	70	1	3.5E-08	3.5E-02	
204	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.20	70	1	3.8E-08	3.8E-02	
205	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
206	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.48E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
207	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.64E-06	1.1	10	0.20	70	1	5.1E-08	5.1E-02	
208	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.83E-06	1.1	10	0.20	70	1	5.6E-08	5.6E-02	
209	1.4E-04	2.0E-03	1090	1	0.96	1E-06	2.05E-06	1.1	10	0.20	70	1	6.3E-08	6.3E-02	
210	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.33E-06	1.1	10	0.20	70	1	7.2E-08	7.2E-02	
211	1.4E-04	2.6E-03	1090	1	0.96	1E-06	2.68E-06	1.1	10	0.20	70	1	8.2E-08	8.2E-02	
212	1.4E-04	9.3E-04	1090	1	0.96	1E-06	9.68E-07	1.1	10	0.20	70	1	3.0E-08	3.0E-02	
213	1.4E-04	9.9E-04	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
214	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
215	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.20	70	1	3.7E-08	3.7E-02	
216	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.33E-06	1.1	10	0.20	70	1	4.1E-08	4.1E-02	
217	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.46E-06	1.1	10	0.20	70	1	4.5E-08	4.5E-02	
218	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.61E-06	1.1	10	0.20	70	1	5.0E-08	5.0E-02	
219	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.20	70	1	5.5E-08	5.5E-02	
220	1.4E-04	1.9E-03	1090	1	0.96	1E-06	2.01E-06	1.1	10	0.20	70	1	6.2E-08	6.2E-02	
221	1.4E-04	2.2E-03	1090	1	0.96	1E-06	2.28E-06	1.1	10	0.20	70	1	7.0E-08	7.0E-02	
222	1.4E-04	8.5E-04	1090	1	0.96	1E-06	8.84E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
223	1.4E-04	9.1E-04	1090	1	0.96	1E-06	9.49E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
224	1.4E-04	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
225	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
226	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.20	70	1	3.6E-08	3.6E-02	
227	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.29E-06	1.1	10	0.20	70	1	4.0E-08	4.0E-02	
228	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.42E-06	1.1	10	0.20	70	1	4.4E-08	4.4E-02	
229	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.56E-06	1.1	10	0.20	70	1	4.8E-08	4.8E-02	
230	1.4E-04	1.7E-03	1090	1	0.96	1E-06	1.74E-06	1.1	10	0.20	70	1	5.4E-08	5.4E-02	
231	1.4E-04	1.9E-03	1090	1	0.96	1E-06	1.95E-06	1.1	10	0.20	70	1	6.0E-08	6.0E-02	
232	1.4E-04	7.7E-04	1090	1	0.96	1E-06	8.07E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
233	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.63E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
234	1.4E-04	8.8E-04	1090	1	0.96	1E-06	9.24E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
235	1.4E-04	9.5E-04	1090	1	0.96	1E-06	9.93E-07	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
236	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.20	70	1	3.3E-08	3.3E-02	
237	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.20	70	1	3.5E-08	3.5E-02	
238	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.20	70	1	3.9E-08	3.9E-02	
239	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
240	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.51E-06	1.1	10	0.20	70	1	4.6E-08	4.6E-02	
241	1.4E-04	1.6E-03	1090	1	0.96	1E-06	1.67E-06	1.1	10	0.20	70	1	5.1E-08	5.1E-02	
242	1.4E-04	1.8E-03	1090	1	0.96	1E-06	1.90E-06	1.1	10	0.20	70	1	5.9E-08	5.9E-02	
243	1.4E-04	7.1E-04	1090	1	0.96	1E-06	7.40E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
244	1.4E-04	7.5E-04	1090	1	0.96	1E-06	7.88E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
245	1.4E-04	8.0E-04	1090	1	0.96	1E-06	8.39E-07	1.1	10	0.20	70	1	2.6E-08	2.6E-02	
246	1.4E-04	8.6E-04	1090	1	0.96	1E-06	8.96E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
247	1.4E-04	9.2E-04	1090	1	0.96	1E-06	9.61E-07	1.1	10	0.20	70	1	3.0E-08	3.0E-02	
248	1.4E-04	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
249	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
250	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.20	70	1	3.7E-08	3.7E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
251	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.31E-06	1.1	10	0.20	70	1	4.0E-08	4.0E-02	
252	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.44E-06	1.1	10	0.20	70	1	4.4E-08	4.4E-02	
253	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.62E-06	1.1	10	0.20	70	1	5.0E-08	5.0E-02	
254	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.19E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
255	1.4E-04	7.3E-04	1090	1	0.96	1E-06	7.62E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
256	1.4E-04	7.8E-04	1090	1	0.96	1E-06	8.12E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
257	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.65E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
258	1.4E-04	8.9E-04	1090	1	0.96	1E-06	9.26E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
259	1.4E-04	9.5E-04	1090	1	0.96	1E-06	9.95E-07	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
260	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.20	70	1	3.3E-08	3.3E-02	
261	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.20	70	1	3.5E-08	3.5E-02	
262	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.20	70	1	3.9E-08	3.9E-02	
263	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
264	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.20	70	1	4.7E-08	4.7E-02	
265	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.92E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
266	1.4E-04	7.0E-04	1090	1	0.96	1E-06	7.35E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
267	1.4E-04	7.5E-04	1090	1	0.96	1E-06	7.81E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
268	1.4E-04	8.0E-04	1090	1	0.96	1E-06	8.33E-07	1.1	10	0.20	70	1	2.6E-08	2.6E-02	
269	1.4E-04	8.5E-04	1090	1	0.96	1E-06	8.88E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
270	1.4E-04	9.1E-04	1090	1	0.96	1E-06	9.52E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
271	1.4E-04	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
272	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
273	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.20	70	1	3.6E-08	3.6E-02	
274	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.30E-06	1.1	10	0.20	70	1	4.0E-08	4.0E-02	
275	1.4E-04	6.4E-04	1090	1	0.96	1E-06	6.70E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
276	1.4E-04	6.8E-04	1090	1	0.96	1E-06	7.08E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
277	1.4E-04	7.2E-04	1090	1	0.96	1E-06	7.50E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
278	1.4E-04	7.6E-04	1090	1	0.96	1E-06	7.96E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
279	1.4E-04	8.1E-04	1090	1	0.96	1E-06	8.50E-07	1.1	10	0.20	70	1	2.6E-08	2.6E-02	
280	1.4E-04	8.7E-04	1090	1	0.96	1E-06	9.07E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
281	1.4E-04	9.3E-04	1090	1	0.96	1E-06	9.72E-07	1.1	10	0.20	70	1	3.0E-08	3.0E-02	
282	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.20	70	1	3.2E-08	3.2E-02	
283	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.12E-06	1.1	10	0.20	70	1	3.4E-08	3.4E-02	
284	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.20	70	1	3.8E-08	3.8E-02	
285	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.45E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
286	1.4E-04	6.5E-04	1090	1	0.96	1E-06	6.79E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
287	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.18E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
288	1.4E-04	7.3E-04	1090	1	0.96	1E-06	7.60E-07	1.1	10	0.20	70	1	2.3E-08	2.3E-02	
289	1.4E-04	7.7E-04	1090	1	0.96	1E-06	8.07E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
290	1.4E-04	8.2E-04	1090	1	0.96	1E-06	8.62E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
291	1.4E-04	8.8E-04	1090	1	0.96	1E-06	9.20E-07	1.1	10	0.20	70	1	2.8E-08	2.8E-02	
292	1.4E-04	9.4E-04	1090	1	0.96	1E-06	9.86E-07	1.1	10	0.20	70	1	3.0E-08	3.0E-02	
293	1.4E-04	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.20	70	1	3.3E-08	3.3E-02	
294	1.4E-04	5.9E-04	1090	1	0.96	1E-06	6.19E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
295	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.51E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
296	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.86E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
297	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.24E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
298	1.4E-04	7.3E-04	1090	1	0.96	1E-06	7.66E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
299	1.4E-04	7.8E-04	1090	1	0.96	1E-06	8.15E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
300	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.69E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
301	1.4E-04	8.9E-04	1090	1	0.96	1E-06	9.28E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
302	1.4E-04	9.5E-04	1090	1	0.96	1E-06	9.93E-07	1.1	10	0.20	70	1	3.1E-08	3.1E-02	
303	1.4E-04	5.7E-04	1090	1	0.96	1E-06	5.92E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
304	1.4E-04	6.0E-04	1090	1	0.96	1E-06	6.22E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
305	1.4E-04	6.3E-04	1090	1	0.96	1E-06	6.54E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
306	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.89E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
307	1.4E-04	7.0E-04	1090	1	0.96	1E-06	7.27E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
308	1.4E-04	7.4E-04	1090	1	0.96	1E-06	7.69E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
309	1.4E-04	7.8E-04	1090	1	0.96	1E-06	8.17E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
310	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.71E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
311	1.4E-04	8.9E-04	1090	1	0.96	1E-06	9.28E-07	1.1	10	0.20	70	1	2.9E-08	2.9E-02	
312	1.4E-04	5.4E-04	1090	1	0.96	1E-06	5.66E-07	1.1	10	0.20	70	1	1.7E-08	1.7E-02	
313	1.4E-04	5.7E-04	1090	1	0.96	1E-06	5.93E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
314	1.4E-04	6.0E-04	1090	1	0.96	1E-06	6.23E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
315	1.4E-04	6.3E-04	1090	1	0.96	1E-06	6.54E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	
316	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.88E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
317	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.26E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
318	1.4E-04	7.3E-04	1090	1	0.96	1E-06	7.67E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
319	1.4E-04	7.8E-04	1090	1	0.96	1E-06	8.16E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
320	1.4E-04	8.3E-04	1090	1	0.96	1E-06	8.68E-07	1.1	10	0.20	70	1	2.7E-08	2.7E-02	
321	1.4E-04	5.2E-04	1090	1	0.96	1E-06	5.40E-07	1.1	10	0.20	70	1	1.7E-08	1.7E-02	
322	1.4E-04	5.4E-04	1090	1	0.96	1E-06	5.65E-07	1.1	10	0.20	70	1	1.7E-08	1.7E-02	
323	1.4E-04	5.7E-04	1090	1	0.96	1E-06	5.92E-07	1.1	10	0.20	70	1	1.8E-08	1.8E-02	
324	1.4E-04	5.9E-04	1090	1	0.96	1E-06	6.20E-07	1.1	10	0.20	70	1	1.9E-08	1.9E-02	
325	1.4E-04	6.2E-04	1090	1	0.96	1E-06	6.51E-07	1.1	10	0.20	70	1	2.0E-08	2.0E-02	

**Syphon Geotechnical
Risk from Borings**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/Mi 2) II)		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH			
326	1.4E-04	6.6E-04	1090	1	0.96	1E-06	6.85E-07	1.1	10	0.20	70	1	2.1E-08	2.1E-02	
327	1.4E-04	6.9E-04	1090	1	0.96	1E-06	7.22E-07	1.1	10	0.20	70	1	2.2E-08	2.2E-02	
328	1.4E-04	7.3E-04	1090	1	0.96	1E-06	7.63E-07	1.1	10	0.20	70	1	2.4E-08	2.4E-02	
329	1.4E-04	7.8E-04	1090	1	0.96	1E-06	8.11E-07	1.1	10	0.20	70	1	2.5E-08	2.5E-02	
330	1.4E-04	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.20	70	1	4.7E-08	4.7E-02	
331	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.20	70	1	4.2E-08	4.2E-02	
332	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.47E-06	1.1	10	0.20	70	1	4.5E-08	4.5E-02	
333	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.20	70	1	3.7E-08	3.7E-02	
334	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.31E-06	1.1	10	0.20	70	1	4.0E-08	4.0E-02	
335	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.41E-06	1.1	10	0.20	70	1	4.3E-08	4.3E-02	
336	1.4E-04	1.1E-03	1090	1	0.96	1E-06	1.17E-06	1.1	10	0.20	70	1	3.6E-08	3.6E-02	
337	1.4E-04	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.20	70	1	3.9E-08	3.9E-02	
338	1.4E-04	1.3E-03	1090	1	0.96	1E-06	1.33E-06	1.1	10	0.20	70	1	4.1E-08	4.1E-02	
339	1.4E-04	1.4E-03	1090	1	0.96	1E-06	1.41E-06	1.1	10	0.20	70	1	4.4E-08	4.4E-02	

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor

#	Conc	REL	HI	Max
1	1.18E-04	5	2.35E-05	1.43E-03
2	1.17E-04	5	2.35E-05	
3	1.20E-04	5	2.39E-05	
4	1.24E-04	5	2.49E-05	
5	1.34E-04	5	2.68E-05	
6	1.35E-04	5	2.70E-05	
7	1.38E-04	5	2.76E-05	
8	1.44E-04	5	2.87E-05	
9	1.51E-04	5	3.02E-05	
10	1.88E-04	5	3.75E-05	
11	1.72E-04	5	3.44E-05	
12	1.56E-04	5	3.12E-05	
13	1.61E-04	5	3.22E-05	
14	1.67E-04	5	3.35E-05	
15	1.76E-04	5	3.53E-05	
16	1.86E-04	5	3.72E-05	
17	2.45E-04	5	4.90E-05	
18	2.21E-04	5	4.41E-05	
19	2.03E-04	5	4.06E-05	
20	1.91E-04	5	3.82E-05	
21	1.85E-04	5	3.70E-05	
22	1.98E-04	5	3.95E-05	
23	2.06E-04	5	4.11E-05	
24	2.19E-04	5	4.38E-05	
25	2.29E-04	5	4.59E-05	

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
26	3.31E-04	5	6.63E-05
27	2.93E-04	5	5.85E-05
28	2.62E-04	5	5.24E-05
29	2.41E-04	5	4.83E-05
30	2.29E-04	5	4.57E-05
31	2.20E-04	5	4.41E-05
32	2.31E-04	5	4.62E-05
33	2.44E-04	5	4.87E-05
34	2.55E-04	5	5.10E-05
35	2.66E-04	5	5.32E-05
36	2.75E-04	5	5.50E-05
37	5.11E-04	5	1.02E-04
38	4.54E-04	5	9.08E-05
39	4.02E-04	5	8.03E-05
40	3.55E-04	5	7.09E-05
41	3.18E-04	5	6.36E-05
42	2.93E-04	5	5.86E-05
43	2.78E-04	5	5.57E-05
44	2.72E-04	5	5.44E-05
45	2.63E-04	5	5.25E-05
46	3.09E-04	5	6.18E-05
47	3.20E-04	5	6.40E-05
48	3.28E-04	5	6.57E-05
49	6.91E-04	5	1.38E-04
50	6.23E-04	5	1.25E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
51	5.55E-04	5	1.11E-04
52	4.94E-04	5	9.87E-05
53	4.35E-04	5	8.70E-05
54	3.94E-04	5	7.87E-05
55	3.64E-04	5	7.28E-05
56	3.46E-04	5	6.92E-05
57	3.33E-04	5	6.67E-05
58	3.26E-04	5	6.52E-05
59	3.77E-04	5	7.54E-05
60	3.85E-04	5	7.71E-05
61	3.92E-04	5	7.83E-05
62	3.93E-04	5	7.86E-05
63	9.15E-04	5	1.83E-04
64	8.48E-04	5	1.70E-04
65	7.69E-04	5	1.54E-04
66	6.91E-04	5	1.38E-04
67	6.18E-04	5	1.24E-04
68	5.55E-04	5	1.11E-04
69	4.98E-04	5	9.96E-05
70	4.55E-04	5	9.10E-05
71	4.33E-04	5	8.67E-05
72	4.73E-04	5	9.46E-05
73	4.71E-04	5	9.41E-05
74	4.66E-04	5	9.32E-05
75	4.54E-04	5	9.09E-05

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
76	1.19E-03	5	2.38E-04
77	1.13E-03	5	2.26E-04
78	1.05E-03	5	2.11E-04
79	9.65E-04	5	1.93E-04
80	8.75E-04	5	1.75E-04
81	7.92E-04	5	1.58E-04
82	7.17E-04	5	1.43E-04
83	6.57E-04	5	1.31E-04
84	5.96E-04	5	1.19E-04
85	5.71E-04	5	1.14E-04
86	5.51E-04	5	1.10E-04
87	5.29E-04	5	1.06E-04
88	1.48E-03	5	2.96E-04
89	1.46E-03	5	2.92E-04
90	1.41E-03	5	2.82E-04
91	1.33E-03	5	2.66E-04
92	1.23E-03	5	2.47E-04
93	1.14E-03	5	2.27E-04
94	1.04E-03	5	2.08E-04
95	9.56E-04	5	1.91E-04
96	8.74E-04	5	1.75E-04
97	6.56E-04	5	1.31E-04
98	6.19E-04	5	1.24E-04
99	5.81E-04	5	1.16E-04
100	1.65E-03	5	3.31E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor #	Conc	REL	HI
101	1.74E-03	5	3.47E-04
102	1.80E-03	5	3.60E-04
103	1.82E-03	5	3.64E-04
104	1.79E-03	5	3.58E-04
105	1.72E-03	5	3.43E-04
106	1.62E-03	5	3.24E-04
107	1.52E-03	5	3.04E-04
108	1.42E-03	5	2.83E-04
109	1.31E-03	5	2.63E-04
110	7.19E-04	5	1.44E-04
111	6.63E-04	5	1.33E-04
112	6.11E-04	5	1.22E-04
113	1.75E-03	5	3.51E-04
114	1.90E-03	5	3.80E-04
115	2.05E-03	5	4.10E-04
116	2.20E-03	5	4.39E-04
117	2.30E-03	5	4.59E-04
118	2.33E-03	5	4.65E-04
119	2.28E-03	5	4.56E-04
120	2.21E-03	5	4.42E-04
121	2.12E-03	5	4.25E-04
122	2.01E-03	5	4.03E-04
123	8.44E-04	5	1.69E-04
124	7.55E-04	5	1.51E-04
125	6.84E-04	5	1.37E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
126	1.77E-03	5	3.55E-04
127	1.95E-03	5	3.89E-04
128	2.16E-03	5	4.32E-04
129	2.40E-03	5	4.80E-04
130	2.67E-03	5	5.33E-04
131	2.95E-03	5	5.90E-04
132	3.16E-03	5	6.32E-04
133	3.19E-03	5	6.38E-04
134	3.22E-03	5	6.44E-04
135	8.51E-04	5	1.70E-04
136	7.51E-04	5	1.50E-04
137	6.76E-04	5	1.35E-04
138	1.73E-03	5	3.46E-04
139	1.91E-03	5	3.81E-04
140	2.14E-03	5	4.27E-04
141	2.41E-03	5	4.82E-04
142	2.75E-03	5	5.50E-04
143	3.19E-03	5	6.39E-04
144	3.82E-03	5	7.64E-04
145	4.65E-03	5	9.31E-04
146	5.15E-03	5	1.03E-03
147	8.31E-04	5	1.66E-04
148	7.36E-04	5	1.47E-04
149	1.65E-03	5	3.30E-04
150	1.82E-03	5	3.65E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor #	Conc	REL	HI
151	2.04E-03	5	4.07E-04
152	2.30E-03	5	4.60E-04
153	2.63E-03	5	5.25E-04
154	3.05E-03	5	6.10E-04
155	3.66E-03	5	7.33E-04
156	4.68E-03	5	9.35E-04
157	7.15E-03	5	1.43E-03
158	9.13E-04	5	1.83E-04
159	7.95E-04	5	1.59E-04
160	1.54E-03	5	3.09E-04
161	1.70E-03	5	3.40E-04
162	1.90E-03	5	3.79E-04
163	2.14E-03	5	4.28E-04
164	2.43E-03	5	4.86E-04
165	2.80E-03	5	5.59E-04
166	3.28E-03	5	6.56E-04
167	3.96E-03	5	7.93E-04
168	5.08E-03	5	1.02E-03
169	9.88E-04	5	1.98E-04
170	8.57E-04	5	1.71E-04
171	1.30E-03	5	2.60E-04
172	1.43E-03	5	2.85E-04
173	1.57E-03	5	3.14E-04
174	1.74E-03	5	3.47E-04
175	1.94E-03	5	3.88E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
176	2.21E-03	5	4.42E-04
177	2.53E-03	5	5.05E-04
178	2.92E-03	5	5.83E-04
179	3.43E-03	5	6.86E-04
180	4.15E-03	5	8.30E-04
181	9.19E-04	5	1.84E-04
182	1.20E-03	5	2.39E-04
183	1.31E-03	5	2.62E-04
184	1.44E-03	5	2.88E-04
185	1.59E-03	5	3.17E-04
186	1.76E-03	5	3.51E-04
187	1.97E-03	5	3.93E-04
188	2.23E-03	5	4.46E-04
189	2.58E-03	5	5.16E-04
190	2.99E-03	5	5.99E-04
191	3.53E-03	5	7.06E-04
192	1.10E-03	5	2.19E-04
193	1.19E-03	5	2.38E-04
194	1.31E-03	5	2.61E-04
195	1.44E-03	5	2.87E-04
196	1.59E-03	5	3.17E-04
197	1.76E-03	5	3.53E-04
198	1.97E-03	5	3.94E-04
199	2.24E-03	5	4.49E-04
200	2.57E-03	5	5.14E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
201	3.02E-03	5	6.03E-04
202	1.00E-03	5	2.00E-04
203	1.08E-03	5	2.17E-04
204	1.18E-03	5	2.36E-04
205	1.29E-03	5	2.58E-04
206	1.42E-03	5	2.84E-04
207	1.57E-03	5	3.14E-04
208	1.75E-03	5	3.50E-04
209	1.96E-03	5	3.93E-04
210	2.23E-03	5	4.45E-04
211	2.56E-03	5	5.12E-04
212	9.26E-04	5	1.85E-04
213	9.95E-04	5	1.99E-04
214	1.07E-03	5	2.13E-04
215	1.16E-03	5	2.32E-04
216	1.27E-03	5	2.54E-04
217	1.39E-03	5	2.79E-04
218	1.54E-03	5	3.08E-04
219	1.71E-03	5	3.43E-04
220	1.92E-03	5	3.85E-04
221	2.18E-03	5	4.37E-04
222	8.46E-04	5	1.69E-04
223	9.08E-04	5	1.82E-04
224	9.77E-04	5	1.95E-04
225	1.05E-03	5	2.09E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
226	1.13E-03	5	2.26E-04
227	1.24E-03	5	2.47E-04
228	1.36E-03	5	2.71E-04
229	1.50E-03	5	2.99E-04
230	1.66E-03	5	3.32E-04
231	1.87E-03	5	3.73E-04
232	7.73E-04	5	1.55E-04
233	8.26E-04	5	1.65E-04
234	8.84E-04	5	1.77E-04
235	9.50E-04	5	1.90E-04
236	1.02E-03	5	2.03E-04
237	1.10E-03	5	2.20E-04
238	1.20E-03	5	2.39E-04
239	1.31E-03	5	2.62E-04
240	1.44E-03	5	2.88E-04
241	1.60E-03	5	3.20E-04
242	1.82E-03	5	3.64E-04
243	7.08E-04	5	1.42E-04
244	7.54E-04	5	1.51E-04
245	8.02E-04	5	1.60E-04
246	8.57E-04	5	1.71E-04
247	9.20E-04	5	1.84E-04
248	9.90E-04	5	1.98E-04
249	1.06E-03	5	2.12E-04
250	1.15E-03	5	2.30E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
251	1.26E-03	5	2.51E-04
252	1.38E-03	5	2.76E-04
253	1.55E-03	5	3.09E-04
254	6.88E-04	5	1.38E-04
255	7.29E-04	5	1.46E-04
256	7.77E-04	5	1.55E-04
257	8.28E-04	5	1.66E-04
258	8.86E-04	5	1.77E-04
259	9.52E-04	5	1.90E-04
260	1.02E-03	5	2.05E-04
261	1.10E-03	5	2.20E-04
262	1.20E-03	5	2.39E-04
263	1.31E-03	5	2.61E-04
264	1.46E-03	5	2.93E-04
265	6.62E-04	5	1.32E-04
266	7.04E-04	5	1.41E-04
267	7.48E-04	5	1.50E-04
268	7.97E-04	5	1.59E-04
269	8.50E-04	5	1.70E-04
270	9.11E-04	5	1.82E-04
271	9.79E-04	5	1.96E-04
272	1.05E-03	5	2.11E-04
273	1.13E-03	5	2.27E-04
274	1.25E-03	5	2.49E-04
275	6.41E-04	5	1.28E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
276	6.77E-04	5	1.35E-04
277	7.18E-04	5	1.44E-04
278	7.62E-04	5	1.52E-04
279	8.13E-04	5	1.63E-04
280	8.68E-04	5	1.74E-04
281	9.30E-04	5	1.86E-04
282	1.00E-03	5	2.00E-04
283	1.07E-03	5	2.14E-04
284	1.18E-03	5	2.36E-04
285	6.17E-04	5	1.23E-04
286	6.50E-04	5	1.30E-04
287	6.87E-04	5	1.37E-04
288	7.28E-04	5	1.46E-04
289	7.72E-04	5	1.54E-04
290	8.25E-04	5	1.65E-04
291	8.80E-04	5	1.76E-04
292	9.43E-04	5	1.89E-04
293	1.01E-03	5	2.03E-04
294	5.92E-04	5	1.18E-04
295	6.23E-04	5	1.25E-04
296	6.56E-04	5	1.31E-04
297	6.93E-04	5	1.39E-04
298	7.33E-04	5	1.47E-04
299	7.79E-04	5	1.56E-04
300	8.31E-04	5	1.66E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
301	8.88E-04	5	1.78E-04
302	9.50E-04	5	1.90E-04
303	5.67E-04	5	1.13E-04
304	5.95E-04	5	1.19E-04
305	6.26E-04	5	1.25E-04
306	6.59E-04	5	1.32E-04
307	6.95E-04	5	1.39E-04
308	7.35E-04	5	1.47E-04
309	7.82E-04	5	1.56E-04
310	8.33E-04	5	1.67E-04
311	8.88E-04	5	1.78E-04
312	5.42E-04	5	1.08E-04
313	5.68E-04	5	1.14E-04
314	5.96E-04	5	1.19E-04
315	6.26E-04	5	1.25E-04
316	6.58E-04	5	1.32E-04
317	6.94E-04	5	1.39E-04
318	7.34E-04	5	1.47E-04
319	7.81E-04	5	1.56E-04
320	8.30E-04	5	1.66E-04
321	5.17E-04	5	1.03E-04
322	5.41E-04	5	1.08E-04
323	5.66E-04	5	1.13E-04
324	5.93E-04	5	1.19E-04
325	6.23E-04	5	1.25E-04

**Syphon Geotechnical
Risk from Borings**

Non Cancer Risk

Receptor #	Conc	REL	HI
326	6.55E-04	5	1.31E-04
327	6.91E-04	5	1.38E-04
328	7.30E-04	5	1.46E-04
329	7.76E-04	5	1.55E-04
330	1.45E-03	5	2.91E-04
331	1.29E-03	5	2.59E-04
332	1.41E-03	5	2.82E-04
333	1.16E-03	5	2.32E-04
334	1.25E-03	5	2.50E-04
335	1.35E-03	5	2.70E-04
336	1.12E-03	5	2.24E-04
337	1.20E-03	5	2.39E-04
338	1.27E-03	5	2.55E-04
339	1.35E-03	5	2.70E-04

Risk from Test Pits

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	Consta											(Risk / Mill)		
		g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
1	0.15145	0.0006	8.3E-05	361	1	0.96	1E-06	2.9E-08	1.1	10	0.02	70	1	1.05E-10	1.0E-04
2	0.13833	0.0006	7.6E-05	361	1	0.96	1E-06	2.6E-08	1.1	10	0.02	70	1	9.55E-11	9.6E-05
3	0.12941	0.0006	7.1E-05	361	1	0.96	1E-06	2.5E-08	1.1	10	0.02	70	1	8.94E-11	8.9E-05
4	0.1243	0.0006	6.8E-05	361	1	0.96	1E-06	2.4E-08	1.1	10	0.02	70	1	8.58E-11	8.6E-05
5	0.17041	0.0006	9.4E-05	361	1	0.96	1E-06	3.2E-08	1.1	10	0.02	70	1	1.18E-10	1.2E-04
6	0.15558	0.0006	8.6E-05	361	1	0.96	1E-06	3.0E-08	1.1	10	0.02	70	1	1.07E-10	1.1E-04
7	0.14574	0.0006	8.0E-05	361	1	0.96	1E-06	2.8E-08	1.1	10	0.02	70	1	1.01E-10	1.0E-04
8	0.14049	0.0006	7.7E-05	361	1	0.96	1E-06	2.7E-08	1.1	10	0.02	70	1	9.70E-11	9.7E-05
9	0.13861	0.0006	7.6E-05	361	1	0.96	1E-06	2.6E-08	1.1	10	0.02	70	1	9.57E-11	9.6E-05
10	0.28464	0.0006	1.6E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.02	70	1	1.97E-10	2.0E-04
11	0.24843	0.0006	1.4E-04	361	1	0.96	1E-06	4.7E-08	1.1	10	0.02	70	1	1.72E-10	1.7E-04
12	0.17632	0.0006	9.7E-05	361	1	0.96	1E-06	3.4E-08	1.1	10	0.02	70	1	1.22E-10	1.2E-04
13	0.16558	0.0006	9.1E-05	361	1	0.96	1E-06	3.2E-08	1.1	10	0.02	70	1	1.14E-10	1.1E-04
14	0.16009	0.0006	8.8E-05	361	1	0.96	1E-06	3.0E-08	1.1	10	0.02	70	1	1.11E-10	1.1E-04
15	0.15899	0.0006	8.7E-05	361	1	0.96	1E-06	3.0E-08	1.1	10	0.02	70	1	1.10E-10	1.1E-04
16	0.16096	0.0006	8.9E-05	361	1	0.96	1E-06	3.1E-08	1.1	10	0.02	70	1	1.11E-10	1.1E-04
17	0.37978	0.0006	2.1E-04	361	1	0.96	1E-06	7.2E-08	1.1	10	0.02	70	1	2.62E-10	2.6E-04
18	0.32995	0.0006	1.8E-04	361	1	0.96	1E-06	6.3E-08	1.1	10	0.02	70	1	2.28E-10	2.3E-04
19	0.28631	0.0006	1.6E-04	361	1	0.96	1E-06	5.5E-08	1.1	10	0.02	70	1	1.98E-10	2.0E-04
20	0.25089	0.0006	1.4E-04	361	1	0.96	1E-06	4.8E-08	1.1	10	0.02	70	1	1.73E-10	1.7E-04
21	0.1905	0.0006	1.0E-04	361	1	0.96	1E-06	3.6E-08	1.1	10	0.02	70	1	1.32E-10	1.3E-04
22	0.1856	0.0006	1.0E-04	361	1	0.96	1E-06	3.5E-08	1.1	10	0.02	70	1	1.28E-10	1.3E-04
23	0.18504	0.0006	1.0E-04	361	1	0.96	1E-06	3.5E-08	1.1	10	0.02	70	1	1.28E-10	1.3E-04
24	0.18805	0.0006	1.0E-04	361	1	0.96	1E-06	3.6E-08	1.1	10	0.02	70	1	1.30E-10	1.3E-04
25	0.19273	0.0006	1.1E-04	361	1	0.96	1E-06	3.7E-08	1.1	10	0.02	70	1	1.33E-10	1.3E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
26	0.50893	0.0006	2.8E-04	361	1	0.96	1E-06	9.7E-08	1.1	10	0.02	70	1	3.51E-10	3.5E-04
27	0.44721	0.0006	2.5E-04	361	1	0.96	1E-06	8.5E-08	1.1	10	0.02	70	1	3.09E-10	3.1E-04
28	0.38881	0.0006	2.1E-04	361	1	0.96	1E-06	7.4E-08	1.1	10	0.02	70	1	2.69E-10	2.7E-04
29	0.3354	0.0006	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.02	70	1	2.32E-10	2.3E-04
30	0.29133	0.0006	1.6E-04	361	1	0.96	1E-06	5.5E-08	1.1	10	0.02	70	1	2.01E-10	2.0E-04
31	0.2576	0.0006	1.4E-04	361	1	0.96	1E-06	4.9E-08	1.1	10	0.02	70	1	1.78E-10	1.8E-04
32	0.21801	0.0006	1.2E-04	361	1	0.96	1E-06	4.2E-08	1.1	10	0.02	70	1	1.51E-10	1.5E-04
33	0.21873	0.0006	1.2E-04	361	1	0.96	1E-06	4.2E-08	1.1	10	0.02	70	1	1.51E-10	1.5E-04
34	0.2222	0.0006	1.2E-04	361	1	0.96	1E-06	4.2E-08	1.1	10	0.02	70	1	1.53E-10	1.5E-04
35	0.22721	0.0006	1.2E-04	361	1	0.96	1E-06	4.3E-08	1.1	10	0.02	70	1	1.57E-10	1.6E-04
36	0.2325	0.0006	1.3E-04	361	1	0.96	1E-06	4.4E-08	1.1	10	0.02	70	1	1.61E-10	1.6E-04
37	0.72766	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.03E-10	5.0E-04
38	0.67035	0.0006	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.63E-10	4.6E-04
39	0.60619	0.0006	3.3E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.19E-10	4.2E-04
40	0.53559	0.0006	2.9E-04	361	1	0.96	1E-06	1.0E-07	1.1	10	0.02	70	1	3.70E-10	3.7E-04
41	0.46364	0.0006	2.6E-04	361	1	0.96	1E-06	8.8E-08	1.1	10	0.02	70	1	3.20E-10	3.2E-04
42	0.39812	0.0006	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.02	70	1	2.75E-10	2.7E-04
43	0.3442	0.0006	1.9E-04	361	1	0.96	1E-06	6.6E-08	1.1	10	0.02	70	1	2.38E-10	2.4E-04
44	0.30517	0.0006	1.7E-04	361	1	0.96	1E-06	5.8E-08	1.1	10	0.02	70	1	2.11E-10	2.1E-04
45	0.2788	0.0006	1.5E-04	361	1	0.96	1E-06	5.3E-08	1.1	10	0.02	70	1	1.93E-10	1.9E-04
46	0.26879	0.0006	1.5E-04	361	1	0.96	1E-06	5.1E-08	1.1	10	0.02	70	1	1.86E-10	1.9E-04
47	0.2739	0.0006	1.5E-04	361	1	0.96	1E-06	5.2E-08	1.1	10	0.02	70	1	1.89E-10	1.9E-04
48	0.27839	0.0006	1.5E-04	361	1	0.96	1E-06	5.3E-08	1.1	10	0.02	70	1	1.92E-10	1.9E-04
49	0.9075	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.27E-10	6.3E-04
50	0.8651	0.0006	4.8E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.97E-10	6.0E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
51	0.80401	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.55E-10	5.6E-04
52	0.72883	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.03E-10	5.0E-04
53	0.65245	0.0006	3.6E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.51E-10	4.5E-04
54	0.5639	0.0006	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.02	70	1	3.89E-10	3.9E-04
55	0.48103	0.0006	2.6E-04	361	1	0.96	1E-06	9.2E-08	1.1	10	0.02	70	1	3.32E-10	3.3E-04
56	0.41418	0.0006	2.3E-04	361	1	0.96	1E-06	7.9E-08	1.1	10	0.02	70	1	2.86E-10	2.9E-04
57	0.36542	0.0006	2.0E-04	361	1	0.96	1E-06	7.0E-08	1.1	10	0.02	70	1	2.52E-10	2.5E-04
58	0.3366	0.0006	1.9E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.02	70	1	2.32E-10	2.3E-04
59	0.33067	0.0006	1.8E-04	361	1	0.96	1E-06	6.3E-08	1.1	10	0.02	70	1	2.28E-10	2.3E-04
60	0.33402	0.0006	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.02	70	1	2.31E-10	2.3E-04
61	0.3359	0.0006	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.02	70	1	2.32E-10	2.3E-04
62	0.33622	0.0006	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.02	70	1	2.32E-10	2.3E-04
63	1.07528	0.0006	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.43E-10	7.4E-04
64	1.06926	0.0006	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.38E-10	7.4E-04
65	1.03341	0.0006	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.14E-10	7.1E-04
66	0.97618	0.0006	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.74E-10	6.7E-04
67	0.893	0.0006	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.17E-10	6.2E-04
68	0.79559	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.49E-10	5.5E-04
69	0.7023	0.0006	3.9E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.85E-10	4.9E-04
70	0.59206	0.0006	3.3E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.02	70	1	4.09E-10	4.1E-04
71	0.50831	0.0006	2.8E-04	361	1	0.96	1E-06	9.7E-08	1.1	10	0.02	70	1	3.51E-10	3.5E-04
72	0.41465	0.0006	2.3E-04	361	1	0.96	1E-06	7.9E-08	1.1	10	0.02	70	1	2.86E-10	2.9E-04
73	0.41014	0.0006	2.3E-04	361	1	0.96	1E-06	7.8E-08	1.1	10	0.02	70	1	2.83E-10	2.8E-04
74	0.40428	0.0006	2.2E-04	361	1	0.96	1E-06	7.7E-08	1.1	10	0.02	70	1	2.79E-10	2.8E-04
75	0.39661	0.0006	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.02	70	1	2.74E-10	2.7E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
76	1.22852	0.0006	6.8E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.48E-10	8.5E-04
77	1.24944	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.63E-10	8.6E-04
78	1.26036	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.70E-10	8.7E-04
79	1.24505	0.0006	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.60E-10	8.6E-04
80	1.19641	0.0006	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.26E-10	8.3E-04
81	1.11861	0.0006	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.73E-10	7.7E-04
82	1.00752	0.0006	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.96E-10	7.0E-04
83	0.8793	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.07E-10	6.1E-04
84	0.75466	0.0006	4.2E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.21E-10	5.2E-04
85	0.50532	0.0006	2.8E-04	361	1	0.96	1E-06	9.6E-08	1.1	10	0.02	70	1	3.49E-10	3.5E-04
86	0.48639	0.0006	2.7E-04	361	1	0.96	1E-06	9.3E-08	1.1	10	0.02	70	1	3.36E-10	3.4E-04
87	0.46867	0.0006	2.6E-04	361	1	0.96	1E-06	8.9E-08	1.1	10	0.02	70	1	3.24E-10	3.2E-04
88	1.33355	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.21E-10	9.2E-04
89	1.38996	0.0006	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.60E-10	9.6E-04
90	1.44395	0.0006	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.97E-10	1.0E-03
91	1.48654	0.0006	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.03E-09	1.0E-03
92	1.5051	0.0006	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.04E-09	1.0E-03
93	1.49111	0.0006	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.03E-09	1.0E-03
94	1.42536	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.84E-10	9.8E-04
95	1.31146	0.0006	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.06E-10	9.1E-04
96	1.18077	0.0006	6.5E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.15E-10	8.2E-04
97	0.5871	0.0006	3.2E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.02	70	1	4.05E-10	4.1E-04
98	0.5568	0.0006	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.02	70	1	3.85E-10	3.8E-04
99	0.52999	0.0006	2.9E-04	361	1	0.96	1E-06	1.0E-07	1.1	10	0.02	70	1	3.66E-10	3.7E-04
100	1.31335	0.0006	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.07E-10	9.1E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
101	1.39036	0.0006	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.60E-10	9.6E-04
102	1.47594	0.0006	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.02E-09	1.0E-03
103	1.56306	0.0006	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.08E-09	1.1E-03
104	1.65592	0.0006	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.14E-09	1.1E-03
105	1.74814	0.0006	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.21E-09	1.2E-03
106	1.83015	0.0006	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.02	70	1	1.26E-09	1.3E-03
107	1.87842	0.0006	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.02	70	1	1.30E-09	1.3E-03
108	1.86211	0.0006	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.02	70	1	1.29E-09	1.3E-03
109	1.79369	0.0006	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.02	70	1	1.24E-09	1.2E-03
110	0.65789	0.0006	3.6E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.54E-10	4.5E-04
111	0.6167	0.0006	3.4E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.26E-10	4.3E-04
112	0.58254	0.0006	3.2E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.02	70	1	4.02E-10	4.0E-04
113	1.32342	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.14E-10	9.1E-04
114	1.41095	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.74E-10	9.7E-04
115	1.50915	0.0006	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.04E-09	1.0E-03
116	1.6237	0.0006	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.02	70	1	1.12E-09	1.1E-03
117	1.73982	0.0006	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.20E-09	1.2E-03
118	1.88131	0.0006	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.02	70	1	1.30E-09	1.3E-03
119	2.04193	0.0006	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.02	70	1	1.41E-09	1.4E-03
120	2.2166	0.0006	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.02	70	1	1.53E-09	1.5E-03
121	2.37702	0.0006	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.02	70	1	1.64E-09	1.6E-03
122	2.51049	0.0006	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.02	70	1	1.73E-09	1.7E-03
123	0.78626	0.0006	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.43E-10	5.4E-04
124	0.7203	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.97E-10	5.0E-04
125	0.67129	0.0006	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.64E-10	4.6E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
126	1.31049	0.0006	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.05E-10	9.1E-04
127	1.39793	0.0006	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.65E-10	9.7E-04
128	1.50515	0.0006	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.04E-09	1.0E-03
129	1.62359	0.0006	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.02	70	1	1.12E-09	1.1E-03
130	1.75371	0.0006	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.21E-09	1.2E-03
131	1.91483	0.0006	1.1E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.02	70	1	1.32E-09	1.3E-03
132	2.10546	0.0006	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.02	70	1	1.45E-09	1.5E-03
133	2.34565	0.0006	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.02	70	1	1.62E-09	1.6E-03
134	2.63974	0.0006	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.02	70	1	1.82E-09	1.8E-03
135	0.83613	0.0006	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.77E-10	5.8E-04
136	0.75878	0.0006	4.2E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.24E-10	5.2E-04
137	0.70956	0.0006	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.90E-10	4.9E-04
138	1.28126	0.0006	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.85E-10	8.8E-04
139	1.36507	0.0006	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.43E-10	9.4E-04
140	1.4718	0.0006	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.02E-09	1.0E-03
141	1.59015	0.0006	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.10E-09	1.1E-03
142	1.72171	0.0006	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.19E-09	1.2E-03
143	1.87693	0.0006	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.02	70	1	1.30E-09	1.3E-03
144	2.07035	0.0006	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.02	70	1	1.43E-09	1.4E-03
145	2.30807	0.0006	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.02	70	1	1.59E-09	1.6E-03
146	2.6193	0.0006	1.4E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.02	70	1	1.81E-09	1.8E-03
147	0.8778	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.06E-10	6.1E-04
148	0.80889	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.59E-10	5.6E-04
149	1.24211	0.0006	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.58E-10	8.6E-04
150	1.32605	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.16E-10	9.2E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
151	1.42264	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.82E-10	9.8E-04
152	1.53508	0.0006	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.06E-09	1.1E-03
153	1.66096	0.0006	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.15E-09	1.1E-03
154	1.80479	0.0006	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.02	70	1	1.25E-09	1.2E-03
155	1.98263	0.0006	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.02	70	1	1.37E-09	1.4E-03
156	2.19289	0.0006	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.02	70	1	1.51E-09	1.5E-03
157	2.45798	0.0006	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.02	70	1	1.70E-09	1.7E-03
158	1.0194	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.04E-10	7.0E-04
159	0.91683	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.33E-10	6.3E-04
160	1.19322	0.0006	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.24E-10	8.2E-04
161	1.2714	0.0006	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.78E-10	8.8E-04
162	1.36308	0.0006	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.41E-10	9.4E-04
163	1.47242	0.0006	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.02E-09	1.0E-03
164	1.58974	0.0006	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.10E-09	1.1E-03
165	1.72476	0.0006	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.19E-09	1.2E-03
166	1.87885	0.0006	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.02	70	1	1.30E-09	1.3E-03
167	2.06024	0.0006	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.02	70	1	1.42E-09	1.4E-03
168	2.29077	0.0006	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.02	70	1	1.58E-09	1.6E-03
169	1.16524	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.05E-10	8.0E-04
170	1.04651	0.0006	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.23E-10	7.2E-04
171	1.06873	0.0006	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.38E-10	7.4E-04
172	1.13845	0.0006	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	7.86E-10	7.9E-04
173	1.21289	0.0006	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.38E-10	8.4E-04
174	1.29446	0.0006	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	8.94E-10	8.9E-04
175	1.39076	0.0006	7.7E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.60E-10	9.6E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
176	1.51184	0.0006	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.04E-09	1.0E-03
177	1.63772	0.0006	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.02	70	1	1.13E-09	1.1E-03
178	1.77747	0.0006	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.02	70	1	1.23E-09	1.2E-03
179	1.93898	0.0006	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.02	70	1	1.34E-09	1.3E-03
180	2.13652	0.0006	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.02	70	1	1.48E-09	1.5E-03
181	1.19197	0.0006	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.23E-10	8.2E-04
182	1.0135	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.00E-10	7.0E-04
183	1.08234	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.47E-10	7.5E-04
184	1.15392	0.0006	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	7.97E-10	8.0E-04
185	1.23189	0.0006	6.8E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.51E-10	8.5E-04
186	1.31553	0.0006	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.08E-10	9.1E-04
187	1.41512	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.77E-10	9.8E-04
188	1.5291	0.0006	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.06E-09	1.1E-03
189	1.67663	0.0006	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.16E-09	1.2E-03
190	1.82605	0.0006	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.02	70	1	1.26E-09	1.3E-03
191	1.99552	0.0006	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.02	70	1	1.38E-09	1.4E-03
192	0.96042	0.0006	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.63E-10	6.6E-04
193	1.01969	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.04E-10	7.0E-04
194	1.08961	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.52E-10	7.5E-04
195	1.16453	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.04E-10	8.0E-04
196	1.24638	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.61E-10	8.6E-04
197	1.33508	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.22E-10	9.2E-04
198	1.43381	0.0006	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.90E-10	9.9E-04
199	1.55676	0.0006	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.08E-09	1.1E-03
200	1.68935	0.0006	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.17E-09	1.2E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
201	1.86053	0.0006	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.02	70	1	1.28E-09	1.3E-03
202	0.90739	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.27E-10	6.3E-04
203	0.96269	0.0006	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.65E-10	6.6E-04
204	1.02493	0.0006	5.6E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.08E-10	7.1E-04
205	1.09374	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.55E-10	7.6E-04
206	1.16852	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.07E-10	8.1E-04
207	1.25263	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.65E-10	8.7E-04
208	1.34744	0.0006	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.31E-10	9.3E-04
209	1.45062	0.0006	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.00E-09	1.0E-03
210	1.57306	0.0006	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.09E-09	1.1E-03
211	1.71437	0.0006	9.4E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.02	70	1	1.18E-09	1.2E-03
212	0.86564	0.0006	4.8E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.98E-10	6.0E-04
213	0.91423	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.31E-10	6.3E-04
214	0.96116	0.0006	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.64E-10	6.6E-04
215	1.02326	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.07E-10	7.1E-04
216	1.09275	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.55E-10	7.5E-04
217	1.16802	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.07E-10	8.1E-04
218	1.2532	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.65E-10	8.7E-04
219	1.34807	0.0006	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.31E-10	9.3E-04
220	1.45545	0.0006	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.01E-09	1.0E-03
221	1.5815	0.0006	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.02	70	1	1.09E-09	1.1E-03
222	0.81541	0.0006	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.63E-10	5.6E-04
223	0.86213	0.0006	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.95E-10	6.0E-04
224	0.91265	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.30E-10	6.3E-04
225	0.95955	0.0006	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.63E-10	6.6E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
226	1.01815	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.03E-10	7.0E-04
227	1.08637	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.50E-10	7.5E-04
228	1.16295	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.03E-10	8.0E-04
229	1.24639	0.0006	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.61E-10	8.6E-04
230	1.34273	0.0006	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.02	70	1	9.27E-10	9.3E-04
231	1.45322	0.0006	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.00E-09	1.0E-03
232	0.76647	0.0006	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.29E-10	5.3E-04
233	0.80894	0.0006	4.5E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.59E-10	5.6E-04
234	0.85505	0.0006	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.90E-10	5.9E-04
235	0.90434	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.25E-10	6.2E-04
236	0.95116	0.0006	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.57E-10	6.6E-04
237	1.00956	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.97E-10	7.0E-04
238	1.07747	0.0006	5.9E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.44E-10	7.4E-04
239	1.15212	0.0006	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	7.96E-10	8.0E-04
240	1.23588	0.0006	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.02	70	1	8.53E-10	8.5E-04
241	1.33083	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.19E-10	9.2E-04
242	1.46763	0.0006	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.02	70	1	1.01E-09	1.0E-03
243	0.72167	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.98E-10	5.0E-04
244	0.76089	0.0006	4.2E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.25E-10	5.3E-04
245	0.80035	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.53E-10	5.5E-04
246	0.84496	0.0006	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.84E-10	5.8E-04
247	0.89475	0.0006	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.18E-10	6.2E-04
248	0.9482	0.0006	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.55E-10	6.5E-04
249	0.99818	0.0006	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.89E-10	6.9E-04
250	1.06423	0.0006	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.35E-10	7.3E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
251	1.13875	0.0006	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	7.86E-10	7.9E-04
252	1.22036	0.0006	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.43E-10	8.4E-04
253	1.33318	0.0006	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.21E-10	9.2E-04
254	0.71273	0.0006	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.92E-10	4.9E-04
255	0.74947	0.0006	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.18E-10	5.2E-04
256	0.79029	0.0006	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.46E-10	5.5E-04
257	0.83342	0.0006	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.76E-10	5.8E-04
258	0.88122	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.09E-10	6.1E-04
259	0.93451	0.0006	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.45E-10	6.5E-04
260	0.99219	0.0006	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.85E-10	6.9E-04
261	1.04795	0.0006	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.24E-10	7.2E-04
262	1.1193	0.0006	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.73E-10	7.7E-04
263	1.19779	0.0006	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.27E-10	8.3E-04
264	1.31189	0.0006	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.02	70	1	9.06E-10	9.1E-04
265	0.69832	0.0006	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.82E-10	4.8E-04
266	0.73713	0.0006	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.09E-10	5.1E-04
267	0.77662	0.0006	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.36E-10	5.4E-04
268	0.82001	0.0006	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.66E-10	5.7E-04
269	0.86681	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	5.99E-10	6.0E-04
270	0.91858	0.0006	5.1E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.34E-10	6.3E-04
271	0.97475	0.0006	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.73E-10	6.7E-04
272	1.0364	0.0006	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.16E-10	7.2E-04
273	1.0956	0.0006	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.02	70	1	7.57E-10	7.6E-04
274	1.18512	0.0006	6.5E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.02	70	1	8.18E-10	8.2E-04
275	0.68923	0.0006	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.76E-10	4.8E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
276	0.72372	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.00E-10	5.0E-04
277	0.7617	0.0006	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.26E-10	5.3E-04
278	0.80269	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.54E-10	5.5E-04
279	0.84953	0.0006	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.87E-10	5.9E-04
280	0.89922	0.0006	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.21E-10	6.2E-04
281	0.95403	0.0006	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.59E-10	6.6E-04
282	1.01473	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.01E-10	7.0E-04
283	1.07025	0.0006	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.39E-10	7.4E-04
284	1.16531	0.0006	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.02	70	1	8.05E-10	8.0E-04
285	0.67623	0.0006	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.67E-10	4.7E-04
286	0.70915	0.0006	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.90E-10	4.9E-04
287	0.74536	0.0006	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.15E-10	5.1E-04
288	0.78474	0.0006	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.42E-10	5.4E-04
289	0.8282	0.0006	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.72E-10	5.7E-04
290	0.87778	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.06E-10	6.1E-04
291	0.93006	0.0006	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.42E-10	6.4E-04
292	0.98822	0.0006	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.82E-10	6.8E-04
293	1.05331	0.0006	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.02	70	1	7.27E-10	7.3E-04
294	0.66189	0.0006	3.6E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.57E-10	4.6E-04
295	0.69356	0.0006	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.79E-10	4.8E-04
296	0.72785	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.03E-10	5.0E-04
297	0.76519	0.0006	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.28E-10	5.3E-04
298	0.80609	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.57E-10	5.6E-04
299	0.85206	0.0006	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.88E-10	5.9E-04
300	0.904	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.24E-10	6.2E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
301	0.96025	0.0006	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.63E-10	6.6E-04
302	1.02052	0.0006	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	7.05E-10	7.0E-04
303	0.64598	0.0006	3.6E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.46E-10	4.5E-04
304	0.67666	0.0006	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.67E-10	4.7E-04
305	0.70911	0.0006	3.9E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.90E-10	4.9E-04
306	0.74476	0.0006	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.14E-10	5.1E-04
307	0.78374	0.0006	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.41E-10	5.4E-04
308	0.82624	0.0006	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.71E-10	5.7E-04
309	0.87433	0.0006	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.04E-10	6.0E-04
310	0.92889	0.0006	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.41E-10	6.4E-04
311	0.98536	0.0006	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.02	70	1	6.80E-10	6.8E-04
312	0.62911	0.0006	3.5E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.34E-10	4.3E-04
313	0.65851	0.0006	3.6E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.55E-10	4.5E-04
314	0.68988	0.0006	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.76E-10	4.8E-04
315	0.72311	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	4.99E-10	5.0E-04
316	0.75968	0.0006	4.2E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.25E-10	5.2E-04
317	0.79919	0.0006	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.52E-10	5.5E-04
318	0.84303	0.0006	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.82E-10	5.8E-04
319	0.89541	0.0006	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.18E-10	6.2E-04
320	0.95037	0.0006	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.02	70	1	6.56E-10	6.6E-04
321	0.6116	0.0006	3.4E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.22E-10	4.2E-04
322	0.63913	0.0006	3.5E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.02	70	1	4.41E-10	4.4E-04
323	0.66877	0.0006	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.62E-10	4.6E-04
324	0.70066	0.0006	3.9E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.02	70	1	4.84E-10	4.8E-04
325	0.73465	0.0006	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.02	70	1	5.07E-10	5.1E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
326	0.77213	0.0006	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.33E-10	5.3E-04
327	0.81243	0.0006	4.5E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.02	70	1	5.61E-10	5.6E-04
328	0.85845	0.0006	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.02	70	1	5.93E-10	5.9E-04
329	0.9126	0.0006	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.02	70	1	6.30E-10	6.3E-04
330	1.62547	0.0006	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.02	70	1	1.12E-09	1.1E-03
331	1.5175	0.0006	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.05E-09	1.0E-03
332	1.65518	0.0006	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.14E-09	1.1E-03
333	1.41352	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.76E-10	9.8E-04
334	1.52806	0.0006	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.06E-09	1.1E-03
335	1.66464	0.0006	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.15E-09	1.1E-03
336	1.41412	0.0006	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.02	70	1	9.77E-10	9.8E-04
337	1.52653	0.0006	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.02	70	1	1.05E-09	1.1E-03
338	1.65825	0.0006	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.02	70	1	1.15E-09	1.1E-03
339	1.81083	0.0006	1.0E-03	361	1	0.96	1E-06	3.4E-07	1.1	10	0.02	70	1	1.25E-09	1.3E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX	
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
1	5.5E-04	8.3E-05	1090	1	0.96	1E-06	8.71E-08	1.1	10	0.02	70	1	3.2E-10	3.2E-04	0.01
2	5.5E-04	7.6E-05	1090	1	0.96	1E-06	7.95E-08	1.1	10	0.02	70	1	2.9E-10	2.9E-04	
3	5.5E-04	7.1E-05	1090	1	0.96	1E-06	7.44E-08	1.1	10	0.02	70	1	2.7E-10	2.7E-04	0.00
4	5.5E-04	6.8E-05	1090	1	0.96	1E-06	7.15E-08	1.1	10	0.02	70	1	2.6E-10	2.6E-04	
5	5.5E-04	9.4E-05	1090	1	0.96	1E-06	9.80E-08	1.1	10	0.02	70	1	3.6E-10	3.6E-04	
6	5.5E-04	8.6E-05	1090	1	0.96	1E-06	8.95E-08	1.1	10	0.02	70	1	3.2E-10	3.2E-04	
7	5.5E-04	8.0E-05	1090	1	0.96	1E-06	8.38E-08	1.1	10	0.02	70	1	3.0E-10	3.0E-04	
8	5.5E-04	7.7E-05	1090	1	0.96	1E-06	8.08E-08	1.1	10	0.02	70	1	2.9E-10	2.9E-04	
9	5.5E-04	7.6E-05	1090	1	0.96	1E-06	7.97E-08	1.1	10	0.02	70	1	2.9E-10	2.9E-04	
10	5.5E-04	1.6E-04	1090	1	0.96	1E-06	1.64E-07	1.1	10	0.02	70	1	5.9E-10	5.9E-04	
11	5.5E-04	1.4E-04	1090	1	0.96	1E-06	1.43E-07	1.1	10	0.02	70	1	5.2E-10	5.2E-04	
12	5.5E-04	9.7E-05	1090	1	0.96	1E-06	1.01E-07	1.1	10	0.02	70	1	3.7E-10	3.7E-04	
13	5.5E-04	9.1E-05	1090	1	0.96	1E-06	9.52E-08	1.1	10	0.02	70	1	3.5E-10	3.5E-04	
14	5.5E-04	8.8E-05	1090	1	0.96	1E-06	9.21E-08	1.1	10	0.02	70	1	3.3E-10	3.3E-04	
15	5.5E-04	8.7E-05	1090	1	0.96	1E-06	9.14E-08	1.1	10	0.02	70	1	3.3E-10	3.3E-04	
16	5.5E-04	8.9E-05	1090	1	0.96	1E-06	9.26E-08	1.1	10	0.02	70	1	3.4E-10	3.4E-04	
17	5.5E-04	2.1E-04	1090	1	0.96	1E-06	2.18E-07	1.1	10	0.02	70	1	7.9E-10	7.9E-04	
18	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.90E-07	1.1	10	0.02	70	1	6.9E-10	6.9E-04	
19	5.5E-04	1.6E-04	1090	1	0.96	1E-06	1.65E-07	1.1	10	0.02	70	1	6.0E-10	6.0E-04	
20	5.5E-04	1.4E-04	1090	1	0.96	1E-06	1.44E-07	1.1	10	0.02	70	1	5.2E-10	5.2E-04	
21	5.5E-04	1.0E-04	1090	1	0.96	1E-06	1.10E-07	1.1	10	0.02	70	1	4.0E-10	4.0E-04	
22	5.5E-04	1.0E-04	1090	1	0.96	1E-06	1.07E-07	1.1	10	0.02	70	1	3.9E-10	3.9E-04	
23	5.5E-04	1.0E-04	1090	1	0.96	1E-06	1.06E-07	1.1	10	0.02	70	1	3.9E-10	3.9E-04	
24	5.5E-04	1.0E-04	1090	1	0.96	1E-06	1.08E-07	1.1	10	0.02	70	1	3.9E-10	3.9E-04	
25	5.5E-04	1.1E-04	1090	1	0.96	1E-06	1.11E-07	1.1	10	0.02	70	1	4.0E-10	4.0E-04	

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
26	5.5E-04	2.8E-04	1090	1	0.96	1E-06	2.93E-07	1.1	10	0.02	70	1	1.1E-09	1.1E-03
27	5.5E-04	2.5E-04	1090	1	0.96	1E-06	2.57E-07	1.1	10	0.02	70	1	9.3E-10	9.3E-04
28	5.5E-04	2.1E-04	1090	1	0.96	1E-06	2.24E-07	1.1	10	0.02	70	1	8.1E-10	8.1E-04
29	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.93E-07	1.1	10	0.02	70	1	7.0E-10	7.0E-04
30	5.5E-04	1.6E-04	1090	1	0.96	1E-06	1.68E-07	1.1	10	0.02	70	1	6.1E-10	6.1E-04
31	5.5E-04	1.4E-04	1090	1	0.96	1E-06	1.48E-07	1.1	10	0.02	70	1	5.4E-10	5.4E-04
32	5.5E-04	1.2E-04	1090	1	0.96	1E-06	1.25E-07	1.1	10	0.02	70	1	4.5E-10	4.5E-04
33	5.5E-04	1.2E-04	1090	1	0.96	1E-06	1.26E-07	1.1	10	0.02	70	1	4.6E-10	4.6E-04
34	5.5E-04	1.2E-04	1090	1	0.96	1E-06	1.28E-07	1.1	10	0.02	70	1	4.6E-10	4.6E-04
35	5.5E-04	1.2E-04	1090	1	0.96	1E-06	1.31E-07	1.1	10	0.02	70	1	4.7E-10	4.7E-04
36	5.5E-04	1.3E-04	1090	1	0.96	1E-06	1.34E-07	1.1	10	0.02	70	1	4.8E-10	4.8E-04
37	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.18E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
38	5.5E-04	3.7E-04	1090	1	0.96	1E-06	3.85E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
39	5.5E-04	3.3E-04	1090	1	0.96	1E-06	3.49E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03
40	5.5E-04	2.9E-04	1090	1	0.96	1E-06	3.08E-07	1.1	10	0.02	70	1	1.1E-09	1.1E-03
41	5.5E-04	2.6E-04	1090	1	0.96	1E-06	2.67E-07	1.1	10	0.02	70	1	9.7E-10	9.7E-04
42	5.5E-04	2.2E-04	1090	1	0.96	1E-06	2.29E-07	1.1	10	0.02	70	1	8.3E-10	8.3E-04
43	5.5E-04	1.9E-04	1090	1	0.96	1E-06	1.98E-07	1.1	10	0.02	70	1	7.2E-10	7.2E-04
44	5.5E-04	1.7E-04	1090	1	0.96	1E-06	1.75E-07	1.1	10	0.02	70	1	6.4E-10	6.4E-04
45	5.5E-04	1.5E-04	1090	1	0.96	1E-06	1.60E-07	1.1	10	0.02	70	1	5.8E-10	5.8E-04
46	5.5E-04	1.5E-04	1090	1	0.96	1E-06	1.55E-07	1.1	10	0.02	70	1	5.6E-10	5.6E-04
47	5.5E-04	1.5E-04	1090	1	0.96	1E-06	1.57E-07	1.1	10	0.02	70	1	5.7E-10	5.7E-04
48	5.5E-04	1.5E-04	1090	1	0.96	1E-06	1.60E-07	1.1	10	0.02	70	1	5.8E-10	5.8E-04
49	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.22E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
50	5.5E-04	4.8E-04	1090	1	0.96	1E-06	4.97E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
51	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.62E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
52	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.19E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
53	5.5E-04	3.6E-04	1090	1	0.96	1E-06	3.75E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
54	5.5E-04	3.1E-04	1090	1	0.96	1E-06	3.24E-07	1.1	10	0.02	70	1	1.2E-09	1.2E-03
55	5.5E-04	2.6E-04	1090	1	0.96	1E-06	2.77E-07	1.1	10	0.02	70	1	1.0E-09	1.0E-03
56	5.5E-04	2.3E-04	1090	1	0.96	1E-06	2.38E-07	1.1	10	0.02	70	1	8.6E-10	8.6E-04
57	5.5E-04	2.0E-04	1090	1	0.96	1E-06	2.10E-07	1.1	10	0.02	70	1	7.6E-10	7.6E-04
58	5.5E-04	1.9E-04	1090	1	0.96	1E-06	1.94E-07	1.1	10	0.02	70	1	7.0E-10	7.0E-04
59	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.90E-07	1.1	10	0.02	70	1	6.9E-10	6.9E-04
60	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.92E-07	1.1	10	0.02	70	1	7.0E-10	7.0E-04
61	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.93E-07	1.1	10	0.02	70	1	7.0E-10	7.0E-04
62	5.5E-04	1.8E-04	1090	1	0.96	1E-06	1.93E-07	1.1	10	0.02	70	1	7.0E-10	7.0E-04
63	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.18E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
64	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.15E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
65	5.5E-04	5.7E-04	1090	1	0.96	1E-06	5.94E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
66	5.5E-04	5.4E-04	1090	1	0.96	1E-06	5.61E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
67	5.5E-04	4.9E-04	1090	1	0.96	1E-06	5.13E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
68	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.57E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
69	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.04E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
70	5.5E-04	3.3E-04	1090	1	0.96	1E-06	3.40E-07	1.1	10	0.02	70	1	1.2E-09	1.2E-03
71	5.5E-04	2.8E-04	1090	1	0.96	1E-06	2.92E-07	1.1	10	0.02	70	1	1.1E-09	1.1E-03
72	5.5E-04	2.3E-04	1090	1	0.96	1E-06	2.38E-07	1.1	10	0.02	70	1	8.6E-10	8.6E-04
73	5.5E-04	2.3E-04	1090	1	0.96	1E-06	2.36E-07	1.1	10	0.02	70	1	8.6E-10	8.6E-04
74	5.5E-04	2.2E-04	1090	1	0.96	1E-06	2.32E-07	1.1	10	0.02	70	1	8.4E-10	8.4E-04
75	5.5E-04	2.2E-04	1090	1	0.96	1E-06	2.28E-07	1.1	10	0.02	70	1	8.3E-10	8.3E-04

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
76	5.5E-04	6.8E-04	1090	1	0.96	1E-06	7.06E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
77	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.18E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
78	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.25E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
79	5.5E-04	6.8E-04	1090	1	0.96	1E-06	7.16E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
80	5.5E-04	6.6E-04	1090	1	0.96	1E-06	6.88E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
81	5.5E-04	6.2E-04	1090	1	0.96	1E-06	6.43E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
82	5.5E-04	5.5E-04	1090	1	0.96	1E-06	5.79E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
83	5.5E-04	4.8E-04	1090	1	0.96	1E-06	5.06E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
84	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.34E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
85	5.5E-04	2.8E-04	1090	1	0.96	1E-06	2.91E-07	1.1	10	0.02	70	1	1.1E-09	1.1E-03
86	5.5E-04	2.7E-04	1090	1	0.96	1E-06	2.80E-07	1.1	10	0.02	70	1	1.0E-09	1.0E-03
87	5.5E-04	2.6E-04	1090	1	0.96	1E-06	2.69E-07	1.1	10	0.02	70	1	9.8E-10	9.8E-04
88	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.67E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
89	5.5E-04	7.6E-04	1090	1	0.96	1E-06	7.99E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
90	5.5E-04	7.9E-04	1090	1	0.96	1E-06	8.30E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
91	5.5E-04	8.2E-04	1090	1	0.96	1E-06	8.55E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
92	5.5E-04	8.3E-04	1090	1	0.96	1E-06	8.65E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
93	5.5E-04	8.2E-04	1090	1	0.96	1E-06	8.57E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
94	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.20E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
95	5.5E-04	7.2E-04	1090	1	0.96	1E-06	7.54E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
96	5.5E-04	6.5E-04	1090	1	0.96	1E-06	6.79E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
97	5.5E-04	3.2E-04	1090	1	0.96	1E-06	3.38E-07	1.1	10	0.02	70	1	1.2E-09	1.2E-03
98	5.5E-04	3.1E-04	1090	1	0.96	1E-06	3.20E-07	1.1	10	0.02	70	1	1.2E-09	1.2E-03
99	5.5E-04	2.9E-04	1090	1	0.96	1E-06	3.05E-07	1.1	10	0.02	70	1	1.1E-09	1.1E-03
100	5.5E-04	7.2E-04	1090	1	0.96	1E-06	7.55E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
101	5.5E-04	7.6E-04	1090	1	0.96	1E-06	7.99E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
102	5.5E-04	8.1E-04	1090	1	0.96	1E-06	8.49E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
103	5.5E-04	8.6E-04	1090	1	0.96	1E-06	8.99E-07	1.1	10	0.02	70	1	3.3E-09	3.3E-03
104	5.5E-04	9.1E-04	1090	1	0.96	1E-06	9.52E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
105	5.5E-04	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.02	70	1	3.6E-09	3.6E-03
106	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.02	70	1	3.8E-09	3.8E-03
107	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
108	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
109	5.5E-04	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.02	70	1	3.7E-09	3.7E-03
110	5.5E-04	3.6E-04	1090	1	0.96	1E-06	3.78E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
111	5.5E-04	3.4E-04	1090	1	0.96	1E-06	3.55E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03
112	5.5E-04	3.2E-04	1090	1	0.96	1E-06	3.35E-07	1.1	10	0.02	70	1	1.2E-09	1.2E-03
113	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.61E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
114	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.11E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
115	5.5E-04	8.3E-04	1090	1	0.96	1E-06	8.68E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
116	5.5E-04	8.9E-04	1090	1	0.96	1E-06	9.34E-07	1.1	10	0.02	70	1	3.4E-09	3.4E-03
117	5.5E-04	9.6E-04	1090	1	0.96	1E-06	1.00E-06	1.1	10	0.02	70	1	3.6E-09	3.6E-03
118	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
119	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.17E-06	1.1	10	0.02	70	1	4.3E-09	4.3E-03
120	5.5E-04	1.2E-03	1090	1	0.96	1E-06	1.27E-06	1.1	10	0.02	70	1	4.6E-09	4.6E-03
121	5.5E-04	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.02	70	1	5.0E-09	5.0E-03
122	5.5E-04	1.4E-03	1090	1	0.96	1E-06	1.44E-06	1.1	10	0.02	70	1	5.2E-09	5.2E-03
123	5.5E-04	4.3E-04	1090	1	0.96	1E-06	4.52E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
124	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.14E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
125	5.5E-04	3.7E-04	1090	1	0.96	1E-06	3.86E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
126	5.5E-04	7.2E-04	1090	1	0.96	1E-06	7.54E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
127	5.5E-04	7.7E-04	1090	1	0.96	1E-06	8.04E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
128	5.5E-04	8.3E-04	1090	1	0.96	1E-06	8.65E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
129	5.5E-04	8.9E-04	1090	1	0.96	1E-06	9.34E-07	1.1	10	0.02	70	1	3.4E-09	3.4E-03
130	5.5E-04	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.02	70	1	3.7E-09	3.7E-03
131	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.02	70	1	4.0E-09	4.0E-03
132	5.5E-04	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.02	70	1	4.4E-09	4.4E-03
133	5.5E-04	1.3E-03	1090	1	0.96	1E-06	1.35E-06	1.1	10	0.02	70	1	4.9E-09	4.9E-03
134	5.5E-04	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.02	70	1	5.5E-09	5.5E-03
135	5.5E-04	4.6E-04	1090	1	0.96	1E-06	4.81E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
136	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.36E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
137	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.08E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
138	5.5E-04	7.0E-04	1090	1	0.96	1E-06	7.37E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
139	5.5E-04	7.5E-04	1090	1	0.96	1E-06	7.85E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
140	5.5E-04	8.1E-04	1090	1	0.96	1E-06	8.46E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
141	5.5E-04	8.7E-04	1090	1	0.96	1E-06	9.14E-07	1.1	10	0.02	70	1	3.3E-09	3.3E-03
142	5.5E-04	9.5E-04	1090	1	0.96	1E-06	9.90E-07	1.1	10	0.02	70	1	3.6E-09	3.6E-03
143	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
144	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.19E-06	1.1	10	0.02	70	1	4.3E-09	4.3E-03
145	5.5E-04	1.3E-03	1090	1	0.96	1E-06	1.33E-06	1.1	10	0.02	70	1	4.8E-09	4.8E-03
146	5.5E-04	1.4E-03	1090	1	0.96	1E-06	1.51E-06	1.1	10	0.02	70	1	5.5E-09	5.5E-03
147	5.5E-04	4.8E-04	1090	1	0.96	1E-06	5.05E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
148	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.65E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
149	5.5E-04	6.8E-04	1090	1	0.96	1E-06	7.14E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
150	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.62E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
151	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.18E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
152	5.5E-04	8.4E-04	1090	1	0.96	1E-06	8.83E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
153	5.5E-04	9.1E-04	1090	1	0.96	1E-06	9.55E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
154	5.5E-04	9.9E-04	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.02	70	1	3.8E-09	3.8E-03
155	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.14E-06	1.1	10	0.02	70	1	4.1E-09	4.1E-03
156	5.5E-04	1.2E-03	1090	1	0.96	1E-06	1.26E-06	1.1	10	0.02	70	1	4.6E-09	4.6E-03
157	5.5E-04	1.4E-03	1090	1	0.96	1E-06	1.41E-06	1.1	10	0.02	70	1	5.1E-09	5.1E-03
158	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.86E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
159	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.27E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
160	5.5E-04	6.6E-04	1090	1	0.96	1E-06	6.86E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
161	5.5E-04	7.0E-04	1090	1	0.96	1E-06	7.31E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
162	5.5E-04	7.5E-04	1090	1	0.96	1E-06	7.84E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
163	5.5E-04	8.1E-04	1090	1	0.96	1E-06	8.47E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
164	5.5E-04	8.7E-04	1090	1	0.96	1E-06	9.14E-07	1.1	10	0.02	70	1	3.3E-09	3.3E-03
165	5.5E-04	9.5E-04	1090	1	0.96	1E-06	9.92E-07	1.1	10	0.02	70	1	3.6E-09	3.6E-03
166	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
167	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.18E-06	1.1	10	0.02	70	1	4.3E-09	4.3E-03
168	5.5E-04	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.02	70	1	4.8E-09	4.8E-03
169	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.70E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
170	5.5E-04	5.8E-04	1090	1	0.96	1E-06	6.02E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
171	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.15E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
172	5.5E-04	6.3E-04	1090	1	0.96	1E-06	6.55E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
173	5.5E-04	6.7E-04	1090	1	0.96	1E-06	6.97E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
174	5.5E-04	7.1E-04	1090	1	0.96	1E-06	7.44E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
175	5.5E-04	7.7E-04	1090	1	0.96	1E-06	8.00E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
176	5.5E-04	8.3E-04	1090	1	0.96	1E-06	8.69E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
177	5.5E-04	9.0E-04	1090	1	0.96	1E-06	9.42E-07	1.1	10	0.02	70	1	3.4E-09	3.4E-03
178	5.5E-04	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.02	70	1	3.7E-09	3.7E-03
179	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.02	70	1	4.0E-09	4.0E-03
180	5.5E-04	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.02	70	1	4.5E-09	4.5E-03
181	5.5E-04	6.6E-04	1090	1	0.96	1E-06	6.85E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
182	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.83E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
183	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.22E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
184	5.5E-04	6.3E-04	1090	1	0.96	1E-06	6.64E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
185	5.5E-04	6.8E-04	1090	1	0.96	1E-06	7.08E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
186	5.5E-04	7.2E-04	1090	1	0.96	1E-06	7.56E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
187	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.14E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
188	5.5E-04	8.4E-04	1090	1	0.96	1E-06	8.79E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
189	5.5E-04	9.2E-04	1090	1	0.96	1E-06	9.64E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
190	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.02	70	1	3.8E-09	3.8E-03
191	5.5E-04	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.02	70	1	4.2E-09	4.2E-03
192	5.5E-04	5.3E-04	1090	1	0.96	1E-06	5.52E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
193	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.86E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
194	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.27E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
195	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.70E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
196	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.17E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
197	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.68E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
198	5.5E-04	7.9E-04	1090	1	0.96	1E-06	8.24E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
199	5.5E-04	8.6E-04	1090	1	0.96	1E-06	8.95E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
200	5.5E-04	9.3E-04	1090	1	0.96	1E-06	9.71E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
201	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.02	70	1	3.9E-09	3.9E-03
202	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.22E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
203	5.5E-04	5.3E-04	1090	1	0.96	1E-06	5.54E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
204	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.89E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
205	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.29E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
206	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.72E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
207	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.20E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
208	5.5E-04	7.4E-04	1090	1	0.96	1E-06	7.75E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
209	5.5E-04	8.0E-04	1090	1	0.96	1E-06	8.34E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
210	5.5E-04	8.7E-04	1090	1	0.96	1E-06	9.05E-07	1.1	10	0.02	70	1	3.3E-09	3.3E-03
211	5.5E-04	9.4E-04	1090	1	0.96	1E-06	9.86E-07	1.1	10	0.02	70	1	3.6E-09	3.6E-03
212	5.5E-04	4.8E-04	1090	1	0.96	1E-06	4.98E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
213	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.26E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
214	5.5E-04	5.3E-04	1090	1	0.96	1E-06	5.53E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
215	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.88E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
216	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.28E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
217	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.72E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
218	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.21E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
219	5.5E-04	7.4E-04	1090	1	0.96	1E-06	7.75E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
220	5.5E-04	8.0E-04	1090	1	0.96	1E-06	8.37E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
221	5.5E-04	8.7E-04	1090	1	0.96	1E-06	9.09E-07	1.1	10	0.02	70	1	3.3E-09	3.3E-03
222	5.5E-04	4.5E-04	1090	1	0.96	1E-06	4.69E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
223	5.5E-04	4.7E-04	1090	1	0.96	1E-06	4.96E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
224	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.25E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
225	5.5E-04	5.3E-04	1090	1	0.96	1E-06	5.52E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
226	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.85E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
227	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.25E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
228	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.69E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
229	5.5E-04	6.9E-04	1090	1	0.96	1E-06	7.17E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
230	5.5E-04	7.4E-04	1090	1	0.96	1E-06	7.72E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
231	5.5E-04	8.0E-04	1090	1	0.96	1E-06	8.36E-07	1.1	10	0.02	70	1	3.0E-09	3.0E-03
232	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.41E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
233	5.5E-04	4.5E-04	1090	1	0.96	1E-06	4.65E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
234	5.5E-04	4.7E-04	1090	1	0.96	1E-06	4.92E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
235	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.20E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
236	5.5E-04	5.2E-04	1090	1	0.96	1E-06	5.47E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
237	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.80E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
238	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.20E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
239	5.5E-04	6.3E-04	1090	1	0.96	1E-06	6.62E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
240	5.5E-04	6.8E-04	1090	1	0.96	1E-06	7.11E-07	1.1	10	0.02	70	1	2.6E-09	2.6E-03
241	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.65E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
242	5.5E-04	8.1E-04	1090	1	0.96	1E-06	8.44E-07	1.1	10	0.02	70	1	3.1E-09	3.1E-03
243	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.15E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
244	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.38E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
245	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.60E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
246	5.5E-04	4.6E-04	1090	1	0.96	1E-06	4.86E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
247	5.5E-04	4.9E-04	1090	1	0.96	1E-06	5.14E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
248	5.5E-04	5.2E-04	1090	1	0.96	1E-06	5.45E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
249	5.5E-04	5.5E-04	1090	1	0.96	1E-06	5.74E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
250	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.12E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
251	5.5E-04	6.3E-04	1090	1	0.96	1E-06	6.55E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
252	5.5E-04	6.7E-04	1090	1	0.96	1E-06	7.02E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
253	5.5E-04	7.3E-04	1090	1	0.96	1E-06	7.67E-07	1.1	10	0.02	70	1	2.8E-09	2.8E-03
254	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.10E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
255	5.5E-04	4.1E-04	1090	1	0.96	1E-06	4.31E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
256	5.5E-04	4.3E-04	1090	1	0.96	1E-06	4.54E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
257	5.5E-04	4.6E-04	1090	1	0.96	1E-06	4.79E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
258	5.5E-04	4.8E-04	1090	1	0.96	1E-06	5.07E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
259	5.5E-04	5.1E-04	1090	1	0.96	1E-06	5.37E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
260	5.5E-04	5.5E-04	1090	1	0.96	1E-06	5.71E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
261	5.5E-04	5.8E-04	1090	1	0.96	1E-06	6.03E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
262	5.5E-04	6.2E-04	1090	1	0.96	1E-06	6.44E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
263	5.5E-04	6.6E-04	1090	1	0.96	1E-06	6.89E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
264	5.5E-04	7.2E-04	1090	1	0.96	1E-06	7.54E-07	1.1	10	0.02	70	1	2.7E-09	2.7E-03
265	5.5E-04	3.8E-04	1090	1	0.96	1E-06	4.02E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
266	5.5E-04	4.1E-04	1090	1	0.96	1E-06	4.24E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
267	5.5E-04	4.3E-04	1090	1	0.96	1E-06	4.47E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
268	5.5E-04	4.5E-04	1090	1	0.96	1E-06	4.72E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
269	5.5E-04	4.8E-04	1090	1	0.96	1E-06	4.98E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
270	5.5E-04	5.1E-04	1090	1	0.96	1E-06	5.28E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
271	5.5E-04	5.4E-04	1090	1	0.96	1E-06	5.60E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
272	5.5E-04	5.7E-04	1090	1	0.96	1E-06	5.96E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
273	5.5E-04	6.0E-04	1090	1	0.96	1E-06	6.30E-07	1.1	10	0.02	70	1	2.3E-09	2.3E-03
274	5.5E-04	6.5E-04	1090	1	0.96	1E-06	6.81E-07	1.1	10	0.02	70	1	2.5E-09	2.5E-03
275	5.5E-04	3.8E-04	1090	1	0.96	1E-06	3.96E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
276	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.16E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
277	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.38E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
278	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.62E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
279	5.5E-04	4.7E-04	1090	1	0.96	1E-06	4.88E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
280	5.5E-04	4.9E-04	1090	1	0.96	1E-06	5.17E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
281	5.5E-04	5.2E-04	1090	1	0.96	1E-06	5.49E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03
282	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.83E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
283	5.5E-04	5.9E-04	1090	1	0.96	1E-06	6.15E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
284	5.5E-04	6.4E-04	1090	1	0.96	1E-06	6.70E-07	1.1	10	0.02	70	1	2.4E-09	2.4E-03
285	5.5E-04	3.7E-04	1090	1	0.96	1E-06	3.89E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
286	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.08E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
287	5.5E-04	4.1E-04	1090	1	0.96	1E-06	4.29E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
288	5.5E-04	4.3E-04	1090	1	0.96	1E-06	4.51E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
289	5.5E-04	4.6E-04	1090	1	0.96	1E-06	4.76E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
290	5.5E-04	4.8E-04	1090	1	0.96	1E-06	5.05E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
291	5.5E-04	5.1E-04	1090	1	0.96	1E-06	5.35E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
292	5.5E-04	5.4E-04	1090	1	0.96	1E-06	5.68E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03
293	5.5E-04	5.8E-04	1090	1	0.96	1E-06	6.06E-07	1.1	10	0.02	70	1	2.2E-09	2.2E-03
294	5.5E-04	3.6E-04	1090	1	0.96	1E-06	3.81E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
295	5.5E-04	3.8E-04	1090	1	0.96	1E-06	3.99E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03
296	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.19E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03
297	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.40E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
298	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.64E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
299	5.5E-04	4.7E-04	1090	1	0.96	1E-06	4.90E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
300	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.20E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
301	5.5E-04	5.3E-04	1090	1	0.96	1E-06	5.52E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03	
302	5.5E-04	5.6E-04	1090	1	0.96	1E-06	5.87E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03	
303	5.5E-04	3.6E-04	1090	1	0.96	1E-06	3.71E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03	
304	5.5E-04	3.7E-04	1090	1	0.96	1E-06	3.89E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03	
305	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.08E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03	
306	5.5E-04	4.1E-04	1090	1	0.96	1E-06	4.28E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03	
307	5.5E-04	4.3E-04	1090	1	0.96	1E-06	4.51E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03	
308	5.5E-04	4.5E-04	1090	1	0.96	1E-06	4.75E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03	
309	5.5E-04	4.8E-04	1090	1	0.96	1E-06	5.03E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03	
310	5.5E-04	5.1E-04	1090	1	0.96	1E-06	5.34E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03	
311	5.5E-04	5.4E-04	1090	1	0.96	1E-06	5.67E-07	1.1	10	0.02	70	1	2.1E-09	2.1E-03	
312	5.5E-04	3.5E-04	1090	1	0.96	1E-06	3.62E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03	
313	5.5E-04	3.6E-04	1090	1	0.96	1E-06	3.79E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03	
314	5.5E-04	3.8E-04	1090	1	0.96	1E-06	3.97E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03	
315	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.16E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03	
316	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.37E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03	
317	5.5E-04	4.4E-04	1090	1	0.96	1E-06	4.60E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03	
318	5.5E-04	4.6E-04	1090	1	0.96	1E-06	4.85E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03	
319	5.5E-04	4.9E-04	1090	1	0.96	1E-06	5.15E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03	
320	5.5E-04	5.2E-04	1090	1	0.96	1E-06	5.46E-07	1.1	10	0.02	70	1	2.0E-09	2.0E-03	
321	5.5E-04	3.4E-04	1090	1	0.96	1E-06	3.52E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03	
322	5.5E-04	3.5E-04	1090	1	0.96	1E-06	3.67E-07	1.1	10	0.02	70	1	1.3E-09	1.3E-03	
323	5.5E-04	3.7E-04	1090	1	0.96	1E-06	3.85E-07	1.1	10	0.02	70	1	1.4E-09	1.4E-03	
324	5.5E-04	3.9E-04	1090	1	0.96	1E-06	4.03E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03	
325	5.5E-04	4.0E-04	1090	1	0.96	1E-06	4.22E-07	1.1	10	0.02	70	1	1.5E-09	1.5E-03	

**Syphon Geotechnical
Risk from Test Pits**

Risk from Birth to 2 Years

Receptor	Consta											RISK (0- (Risk/M		MAX
#	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
326	5.5E-04	4.2E-04	1090	1	0.96	1E-06	4.44E-07	1.1	10	0.02	70	1	1.6E-09	1.6E-03
327	5.5E-04	4.5E-04	1090	1	0.96	1E-06	4.67E-07	1.1	10	0.02	70	1	1.7E-09	1.7E-03
328	5.5E-04	4.7E-04	1090	1	0.96	1E-06	4.94E-07	1.1	10	0.02	70	1	1.8E-09	1.8E-03
329	5.5E-04	5.0E-04	1090	1	0.96	1E-06	5.25E-07	1.1	10	0.02	70	1	1.9E-09	1.9E-03
330	5.5E-04	8.9E-04	1090	1	0.96	1E-06	9.35E-07	1.1	10	0.02	70	1	3.4E-09	3.4E-03
331	5.5E-04	8.3E-04	1090	1	0.96	1E-06	8.73E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
332	5.5E-04	9.1E-04	1090	1	0.96	1E-06	9.52E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
333	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.13E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
334	5.5E-04	8.4E-04	1090	1	0.96	1E-06	8.79E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
335	5.5E-04	9.2E-04	1090	1	0.96	1E-06	9.57E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
336	5.5E-04	7.8E-04	1090	1	0.96	1E-06	8.13E-07	1.1	10	0.02	70	1	2.9E-09	2.9E-03
337	5.5E-04	8.4E-04	1090	1	0.96	1E-06	8.78E-07	1.1	10	0.02	70	1	3.2E-09	3.2E-03
338	5.5E-04	9.1E-04	1090	1	0.96	1E-06	9.53E-07	1.1	10	0.02	70	1	3.5E-09	3.5E-03
339	5.5E-04	1.0E-03	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.02	70	1	3.8E-09	3.8E-03

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor

#	Conc	REL	HI	Max
1	8.33E-05	5	1.67E-05	2.90E-04
2	7.61E-05	5	1.52E-05	
3	7.12E-05	5	1.42E-05	
4	6.84E-05	5	1.37E-05	
5	9.37E-05	5	1.87E-05	
6	8.56E-05	5	1.71E-05	
7	8.02E-05	5	1.60E-05	
8	7.73E-05	5	1.55E-05	
9	7.63E-05	5	1.53E-05	
10	1.57E-04	5	3.13E-05	
11	1.37E-04	5	2.73E-05	
12	9.70E-05	5	1.94E-05	
13	9.11E-05	5	1.82E-05	
14	8.81E-05	5	1.76E-05	
15	8.75E-05	5	1.75E-05	
16	8.85E-05	5	1.77E-05	
17	2.09E-04	5	4.18E-05	
18	1.82E-04	5	3.63E-05	
19	1.58E-04	5	3.15E-05	
20	1.38E-04	5	2.76E-05	
21	1.05E-04	5	2.10E-05	
22	1.02E-04	5	2.04E-05	
23	1.02E-04	5	2.04E-05	
24	1.03E-04	5	2.07E-05	
25	1.06E-04	5	2.12E-05	

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor

#	Conc	REL	HI
26	2.80E-04	5	5.60E-05
27	2.46E-04	5	4.92E-05
28	2.14E-04	5	4.28E-05
29	1.85E-04	5	3.69E-05
30	1.60E-04	5	3.21E-05
31	1.42E-04	5	2.83E-05
32	1.20E-04	5	2.40E-05
33	1.20E-04	5	2.41E-05
34	1.22E-04	5	2.44E-05
35	1.25E-04	5	2.50E-05
36	1.28E-04	5	2.56E-05
37	4.00E-04	5	8.01E-05
38	3.69E-04	5	7.38E-05
39	3.33E-04	5	6.67E-05
40	2.95E-04	5	5.89E-05
41	2.55E-04	5	5.10E-05
42	2.19E-04	5	4.38E-05
43	1.89E-04	5	3.79E-05
44	1.68E-04	5	3.36E-05
45	1.53E-04	5	3.07E-05
46	1.48E-04	5	2.96E-05
47	1.51E-04	5	3.01E-05
48	1.53E-04	5	3.06E-05
49	4.99E-04	5	9.98E-05
50	4.76E-04	5	9.52E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
51	4.42E-04	5	8.85E-05
52	4.01E-04	5	8.02E-05
53	3.59E-04	5	7.18E-05
54	3.10E-04	5	6.20E-05
55	2.65E-04	5	5.29E-05
56	2.28E-04	5	4.56E-05
57	2.01E-04	5	4.02E-05
58	1.85E-04	5	3.70E-05
59	1.82E-04	5	3.64E-05
60	1.84E-04	5	3.68E-05
61	1.85E-04	5	3.70E-05
62	1.85E-04	5	3.70E-05
63	5.92E-04	5	1.18E-04
64	5.88E-04	5	1.18E-04
65	5.69E-04	5	1.14E-04
66	5.37E-04	5	1.07E-04
67	4.91E-04	5	9.83E-05
68	4.38E-04	5	8.75E-05
69	3.86E-04	5	7.73E-05
70	3.26E-04	5	6.51E-05
71	2.80E-04	5	5.59E-05
72	2.28E-04	5	4.56E-05
73	2.26E-04	5	4.51E-05
74	2.22E-04	5	4.45E-05
75	2.18E-04	5	4.36E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
76	6.76E-04	5	1.35E-04
77	6.87E-04	5	1.37E-04
78	6.93E-04	5	1.39E-04
79	6.85E-04	5	1.37E-04
80	6.58E-04	5	1.32E-04
81	6.15E-04	5	1.23E-04
82	5.54E-04	5	1.11E-04
83	4.84E-04	5	9.67E-05
84	4.15E-04	5	8.30E-05
85	2.78E-04	5	5.56E-05
86	2.68E-04	5	5.35E-05
87	2.58E-04	5	5.16E-05
88	7.34E-04	5	1.47E-04
89	7.65E-04	5	1.53E-04
90	7.94E-04	5	1.59E-04
91	8.18E-04	5	1.64E-04
92	8.28E-04	5	1.66E-04
93	8.20E-04	5	1.64E-04
94	7.84E-04	5	1.57E-04
95	7.21E-04	5	1.44E-04
96	6.50E-04	5	1.30E-04
97	3.23E-04	5	6.46E-05
98	3.06E-04	5	6.13E-05
99	2.92E-04	5	5.83E-05
100	7.23E-04	5	1.45E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
101	7.65E-04	5	1.53E-04
102	8.12E-04	5	1.62E-04
103	8.60E-04	5	1.72E-04
104	9.11E-04	5	1.82E-04
105	9.62E-04	5	1.92E-04
106	1.01E-03	5	2.01E-04
107	1.03E-03	5	2.07E-04
108	1.02E-03	5	2.05E-04
109	9.87E-04	5	1.97E-04
110	3.62E-04	5	7.24E-05
111	3.39E-04	5	6.79E-05
112	3.20E-04	5	6.41E-05
113	7.28E-04	5	1.46E-04
114	7.76E-04	5	1.55E-04
115	8.30E-04	5	1.66E-04
116	8.93E-04	5	1.79E-04
117	9.57E-04	5	1.91E-04
118	1.03E-03	5	2.07E-04
119	1.12E-03	5	2.25E-04
120	1.22E-03	5	2.44E-04
121	1.31E-03	5	2.62E-04
122	1.38E-03	5	2.76E-04
123	4.33E-04	5	8.65E-05
124	3.96E-04	5	7.93E-05
125	3.69E-04	5	7.39E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
126	7.21E-04	5	1.44E-04
127	7.69E-04	5	1.54E-04
128	8.28E-04	5	1.66E-04
129	8.93E-04	5	1.79E-04
130	9.65E-04	5	1.93E-04
131	1.05E-03	5	2.11E-04
132	1.16E-03	5	2.32E-04
133	1.29E-03	5	2.58E-04
134	1.45E-03	5	2.90E-04
135	4.60E-04	5	9.20E-05
136	4.17E-04	5	8.35E-05
137	3.90E-04	5	7.81E-05
138	7.05E-04	5	1.41E-04
139	7.51E-04	5	1.50E-04
140	8.10E-04	5	1.62E-04
141	8.75E-04	5	1.75E-04
142	9.47E-04	5	1.89E-04
143	1.03E-03	5	2.07E-04
144	1.14E-03	5	2.28E-04
145	1.27E-03	5	2.54E-04
146	1.44E-03	5	2.88E-04
147	4.83E-04	5	9.66E-05
148	4.45E-04	5	8.90E-05
149	6.83E-04	5	1.37E-04
150	7.30E-04	5	1.46E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
151	7.83E-04	5	1.57E-04
152	8.44E-04	5	1.69E-04
153	9.14E-04	5	1.83E-04
154	9.93E-04	5	1.99E-04
155	1.09E-03	5	2.18E-04
156	1.21E-03	5	2.41E-04
157	1.35E-03	5	2.70E-04
158	5.61E-04	5	1.12E-04
159	5.04E-04	5	1.01E-04
160	6.56E-04	5	1.31E-04
161	6.99E-04	5	1.40E-04
162	7.50E-04	5	1.50E-04
163	8.10E-04	5	1.62E-04
164	8.75E-04	5	1.75E-04
165	9.49E-04	5	1.90E-04
166	1.03E-03	5	2.07E-04
167	1.13E-03	5	2.27E-04
168	1.26E-03	5	2.52E-04
169	6.41E-04	5	1.28E-04
170	5.76E-04	5	1.15E-04
171	5.88E-04	5	1.18E-04
172	6.26E-04	5	1.25E-04
173	6.67E-04	5	1.33E-04
174	7.12E-04	5	1.42E-04
175	7.65E-04	5	1.53E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
176	8.32E-04	5	1.66E-04
177	9.01E-04	5	1.80E-04
178	9.78E-04	5	1.96E-04
179	1.07E-03	5	2.13E-04
180	1.18E-03	5	2.35E-04
181	6.56E-04	5	1.31E-04
182	5.58E-04	5	1.12E-04
183	5.95E-04	5	1.19E-04
184	6.35E-04	5	1.27E-04
185	6.78E-04	5	1.36E-04
186	7.24E-04	5	1.45E-04
187	7.79E-04	5	1.56E-04
188	8.41E-04	5	1.68E-04
189	9.22E-04	5	1.84E-04
190	1.00E-03	5	2.01E-04
191	1.10E-03	5	2.20E-04
192	5.28E-04	5	1.06E-04
193	5.61E-04	5	1.12E-04
194	5.99E-04	5	1.20E-04
195	6.41E-04	5	1.28E-04
196	6.86E-04	5	1.37E-04
197	7.34E-04	5	1.47E-04
198	7.89E-04	5	1.58E-04
199	8.56E-04	5	1.71E-04
200	9.29E-04	5	1.86E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
201	1.02E-03	5	2.05E-04
202	4.99E-04	5	9.98E-05
203	5.30E-04	5	1.06E-04
204	5.64E-04	5	1.13E-04
205	6.02E-04	5	1.20E-04
206	6.43E-04	5	1.29E-04
207	6.89E-04	5	1.38E-04
208	7.41E-04	5	1.48E-04
209	7.98E-04	5	1.60E-04
210	8.65E-04	5	1.73E-04
211	9.43E-04	5	1.89E-04
212	4.76E-04	5	9.52E-05
213	5.03E-04	5	1.01E-04
214	5.29E-04	5	1.06E-04
215	5.63E-04	5	1.13E-04
216	6.01E-04	5	1.20E-04
217	6.43E-04	5	1.29E-04
218	6.89E-04	5	1.38E-04
219	7.42E-04	5	1.48E-04
220	8.01E-04	5	1.60E-04
221	8.70E-04	5	1.74E-04
222	4.49E-04	5	8.97E-05
223	4.74E-04	5	9.49E-05
224	5.02E-04	5	1.00E-04
225	5.28E-04	5	1.06E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
226	5.60E-04	5	1.12E-04
227	5.98E-04	5	1.20E-04
228	6.40E-04	5	1.28E-04
229	6.86E-04	5	1.37E-04
230	7.39E-04	5	1.48E-04
231	7.99E-04	5	1.60E-04
232	4.22E-04	5	8.43E-05
233	4.45E-04	5	8.90E-05
234	4.70E-04	5	9.41E-05
235	4.98E-04	5	9.95E-05
236	5.23E-04	5	1.05E-04
237	5.55E-04	5	1.11E-04
238	5.93E-04	5	1.19E-04
239	6.34E-04	5	1.27E-04
240	6.80E-04	5	1.36E-04
241	7.32E-04	5	1.46E-04
242	8.07E-04	5	1.61E-04
243	3.97E-04	5	7.94E-05
244	4.19E-04	5	8.37E-05
245	4.40E-04	5	8.81E-05
246	4.65E-04	5	9.30E-05
247	4.92E-04	5	9.84E-05
248	5.22E-04	5	1.04E-04
249	5.49E-04	5	1.10E-04
250	5.85E-04	5	1.17E-04

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
251	6.26E-04	5	1.25E-04
252	6.71E-04	5	1.34E-04
253	7.33E-04	5	1.47E-04
254	3.92E-04	5	7.84E-05
255	4.12E-04	5	8.25E-05
256	4.35E-04	5	8.70E-05
257	4.58E-04	5	9.17E-05
258	4.85E-04	5	9.70E-05
259	5.14E-04	5	1.03E-04
260	5.46E-04	5	1.09E-04
261	5.77E-04	5	1.15E-04
262	6.16E-04	5	1.23E-04
263	6.59E-04	5	1.32E-04
264	7.22E-04	5	1.44E-04
265	3.84E-04	5	7.68E-05
266	4.06E-04	5	8.11E-05
267	4.27E-04	5	8.54E-05
268	4.51E-04	5	9.02E-05
269	4.77E-04	5	9.54E-05
270	5.05E-04	5	1.01E-04
271	5.36E-04	5	1.07E-04
272	5.70E-04	5	1.14E-04
273	6.03E-04	5	1.21E-04
274	6.52E-04	5	1.30E-04
275	3.79E-04	5	7.58E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
276	3.98E-04	5	7.96E-05
277	4.19E-04	5	8.38E-05
278	4.42E-04	5	8.83E-05
279	4.67E-04	5	9.35E-05
280	4.95E-04	5	9.89E-05
281	5.25E-04	5	1.05E-04
282	5.58E-04	5	1.12E-04
283	5.89E-04	5	1.18E-04
284	6.41E-04	5	1.28E-04
285	3.72E-04	5	7.44E-05
286	3.90E-04	5	7.80E-05
287	4.10E-04	5	8.20E-05
288	4.32E-04	5	8.63E-05
289	4.56E-04	5	9.11E-05
290	4.83E-04	5	9.66E-05
291	5.12E-04	5	1.02E-04
292	5.44E-04	5	1.09E-04
293	5.79E-04	5	1.16E-04
294	3.64E-04	5	7.28E-05
295	3.82E-04	5	7.63E-05
296	4.00E-04	5	8.01E-05
297	4.21E-04	5	8.42E-05
298	4.43E-04	5	8.87E-05
299	4.69E-04	5	9.37E-05
300	4.97E-04	5	9.95E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor #	Conc	REL	HI
301	5.28E-04	5	1.06E-04
302	5.61E-04	5	1.12E-04
303	3.55E-04	5	7.11E-05
304	3.72E-04	5	7.45E-05
305	3.90E-04	5	7.80E-05
306	4.10E-04	5	8.19E-05
307	4.31E-04	5	8.62E-05
308	4.55E-04	5	9.09E-05
309	4.81E-04	5	9.62E-05
310	5.11E-04	5	1.02E-04
311	5.42E-04	5	1.08E-04
312	3.46E-04	5	6.92E-05
313	3.62E-04	5	7.25E-05
314	3.80E-04	5	7.59E-05
315	3.98E-04	5	7.96E-05
316	4.18E-04	5	8.36E-05
317	4.40E-04	5	8.79E-05
318	4.64E-04	5	9.28E-05
319	4.93E-04	5	9.85E-05
320	5.23E-04	5	1.05E-04
321	3.36E-04	5	6.73E-05
322	3.52E-04	5	7.03E-05
323	3.68E-04	5	7.36E-05
324	3.85E-04	5	7.71E-05
325	4.04E-04	5	8.08E-05

**Syphon Geotechnical
Risk from Test Pits**

Non Cancer Risk

Receptor #	Conc	REL	HI
326	4.25E-04	5	8.50E-05
327	4.47E-04	5	8.94E-05
328	4.72E-04	5	9.45E-05
329	5.02E-04	5	1.00E-04
330	8.94E-04	5	1.79E-04
331	8.35E-04	5	1.67E-04
332	9.11E-04	5	1.82E-04
333	7.78E-04	5	1.56E-04
334	8.41E-04	5	1.68E-04
335	9.16E-04	5	1.83E-04
336	7.78E-04	5	1.56E-04
337	8.40E-04	5	1.68E-04
338	9.12E-04	5	1.82E-04
339	9.96E-04	5	1.99E-04

Risk from Trenches

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	Consta											(Risk / Mill)		
		g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
1	0.03006	0.0029	8.8E-05	361	1	0.96	1E-06	3.1E-08	1.1	10	0.15	70	1	7.01E-10	7.0E-04
2	0.02649	0.0029	7.8E-05	361	1	0.96	1E-06	2.7E-08	1.1	10	0.15	70	1	6.18E-10	6.2E-04
3	0.0246	0.0029	7.2E-05	361	1	0.96	1E-06	2.5E-08	1.1	10	0.15	70	1	5.74E-10	5.7E-04
4	0.02342	0.0029	6.9E-05	361	1	0.96	1E-06	2.4E-08	1.1	10	0.15	70	1	5.46E-10	5.5E-04
5	0.0319	0.0029	9.4E-05	361	1	0.96	1E-06	3.2E-08	1.1	10	0.15	70	1	7.44E-10	7.4E-04
6	0.02931	0.0029	8.6E-05	361	1	0.96	1E-06	3.0E-08	1.1	10	0.15	70	1	6.84E-10	6.8E-04
7	0.02721	0.0029	8.0E-05	361	1	0.96	1E-06	2.8E-08	1.1	10	0.15	70	1	6.35E-10	6.3E-04
8	0.02586	0.0029	7.6E-05	361	1	0.96	1E-06	2.6E-08	1.1	10	0.15	70	1	6.03E-10	6.0E-04
9	0.0252	0.0029	7.4E-05	361	1	0.96	1E-06	2.6E-08	1.1	10	0.15	70	1	5.88E-10	5.9E-04
10	0.05295	0.0029	1.6E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.15	70	1	1.24E-09	1.2E-03
11	0.04679	0.0029	1.4E-04	361	1	0.96	1E-06	4.8E-08	1.1	10	0.15	70	1	1.09E-09	1.1E-03
12	0.03233	0.0029	9.5E-05	361	1	0.96	1E-06	3.3E-08	1.1	10	0.15	70	1	7.54E-10	7.5E-04
13	0.03026	0.0029	8.9E-05	361	1	0.96	1E-06	3.1E-08	1.1	10	0.15	70	1	7.06E-10	7.1E-04
14	0.02873	0.0029	8.4E-05	361	1	0.96	1E-06	2.9E-08	1.1	10	0.15	70	1	6.70E-10	6.7E-04
15	0.02806	0.0029	8.2E-05	361	1	0.96	1E-06	2.8E-08	1.1	10	0.15	70	1	6.55E-10	6.5E-04
16	0.02803	0.0029	8.2E-05	361	1	0.96	1E-06	2.8E-08	1.1	10	0.15	70	1	6.54E-10	6.5E-04
17	0.06818	0.0029	2.0E-04	361	1	0.96	1E-06	6.9E-08	1.1	10	0.15	70	1	1.59E-09	1.6E-03
18	0.06	0.0029	1.8E-04	361	1	0.96	1E-06	6.1E-08	1.1	10	0.15	70	1	1.40E-09	1.4E-03
19	0.05278	0.0029	1.5E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.15	70	1	1.23E-09	1.2E-03
20	0.04665	0.0029	1.4E-04	361	1	0.96	1E-06	4.7E-08	1.1	10	0.15	70	1	1.09E-09	1.1E-03
21	0.03313	0.0029	9.7E-05	361	1	0.96	1E-06	3.4E-08	1.1	10	0.15	70	1	7.73E-10	7.7E-04
22	0.03217	0.0029	9.4E-05	361	1	0.96	1E-06	3.3E-08	1.1	10	0.15	70	1	7.50E-10	7.5E-04
23	0.0311	0.0029	9.1E-05	361	1	0.96	1E-06	3.2E-08	1.1	10	0.15	70	1	7.25E-10	7.3E-04
24	0.03157	0.0029	9.3E-05	361	1	0.96	1E-06	3.2E-08	1.1	10	0.15	70	1	7.36E-10	7.4E-04
25	0.0323	0.0029	9.5E-05	361	1	0.96	1E-06	3.3E-08	1.1	10	0.15	70	1	7.53E-10	7.5E-04

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
26	0.08831	0.0029	2.6E-04	361	1	0.96	1E-06	9.0E-08	1.1	10	0.15	70	1	2.06E-09	2.1E-03
27	0.078	0.0029	2.3E-04	361	1	0.96	1E-06	7.9E-08	1.1	10	0.15	70	1	1.82E-09	1.8E-03
28	0.06854	0.0029	2.0E-04	361	1	0.96	1E-06	7.0E-08	1.1	10	0.15	70	1	1.60E-09	1.6E-03
29	0.0601	0.0029	1.8E-04	361	1	0.96	1E-06	6.1E-08	1.1	10	0.15	70	1	1.40E-09	1.4E-03
30	0.05297	0.0029	1.6E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.15	70	1	1.24E-09	1.2E-03
31	0.04711	0.0029	1.4E-04	361	1	0.96	1E-06	4.8E-08	1.1	10	0.15	70	1	1.10E-09	1.1E-03
32	0.03553	0.0029	1.0E-04	361	1	0.96	1E-06	3.6E-08	1.1	10	0.15	70	1	8.29E-10	8.3E-04
33	0.03491	0.0029	1.0E-04	361	1	0.96	1E-06	3.5E-08	1.1	10	0.15	70	1	8.14E-10	8.1E-04
34	0.03488	0.0029	1.0E-04	361	1	0.96	1E-06	3.5E-08	1.1	10	0.15	70	1	8.14E-10	8.1E-04
35	0.03497	0.0029	1.0E-04	361	1	0.96	1E-06	3.6E-08	1.1	10	0.15	70	1	8.16E-10	8.2E-04
36	0.03645	0.0029	1.1E-04	361	1	0.96	1E-06	3.7E-08	1.1	10	0.15	70	1	8.50E-10	8.5E-04
37	0.12596	0.0029	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.15	70	1	2.94E-09	2.9E-03
38	0.11385	0.0029	3.3E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.15	70	1	2.66E-09	2.7E-03
39	0.10176	0.0029	3.0E-04	361	1	0.96	1E-06	1.0E-07	1.1	10	0.15	70	1	2.37E-09	2.4E-03
40	0.08994	0.0029	2.6E-04	361	1	0.96	1E-06	9.1E-08	1.1	10	0.15	70	1	2.10E-09	2.1E-03
41	0.0788	0.0029	2.3E-04	361	1	0.96	1E-06	8.0E-08	1.1	10	0.15	70	1	1.84E-09	1.8E-03
42	0.06891	0.0029	2.0E-04	361	1	0.96	1E-06	7.0E-08	1.1	10	0.15	70	1	1.61E-09	1.6E-03
43	0.06052	0.0029	1.8E-04	361	1	0.96	1E-06	6.1E-08	1.1	10	0.15	70	1	1.41E-09	1.4E-03
44	0.05384	0.0029	1.6E-04	361	1	0.96	1E-06	5.5E-08	1.1	10	0.15	70	1	1.26E-09	1.3E-03
45	0.04571	0.0029	1.3E-04	361	1	0.96	1E-06	4.6E-08	1.1	10	0.15	70	1	1.07E-09	1.1E-03
46	0.04059	0.0029	1.2E-04	361	1	0.96	1E-06	4.1E-08	1.1	10	0.15	70	1	9.47E-10	9.5E-04
47	0.04171	0.0029	1.2E-04	361	1	0.96	1E-06	4.2E-08	1.1	10	0.15	70	1	9.73E-10	9.7E-04
48	0.04352	0.0029	1.3E-04	361	1	0.96	1E-06	4.4E-08	1.1	10	0.15	70	1	1.02E-09	1.0E-03
49	0.15865	0.0029	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.70E-09	3.7E-03
50	0.14601	0.0029	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.41E-09	3.4E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
51	0.13217	0.0029	3.9E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.15	70	1	3.08E-09	3.1E-03
52	0.11797	0.0029	3.5E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.15	70	1	2.75E-09	2.8E-03
53	0.10462	0.0029	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.44E-09	2.4E-03
54	0.09136	0.0029	2.7E-04	361	1	0.96	1E-06	9.3E-08	1.1	10	0.15	70	1	2.13E-09	2.1E-03
55	0.07965	0.0029	2.3E-04	361	1	0.96	1E-06	8.1E-08	1.1	10	0.15	70	1	1.86E-09	1.9E-03
56	0.06978	0.0029	2.0E-04	361	1	0.96	1E-06	7.1E-08	1.1	10	0.15	70	1	1.63E-09	1.6E-03
57	0.06172	0.0029	1.8E-04	361	1	0.96	1E-06	6.3E-08	1.1	10	0.15	70	1	1.44E-09	1.4E-03
58	0.05242	0.0029	1.5E-04	361	1	0.96	1E-06	5.3E-08	1.1	10	0.15	70	1	1.22E-09	1.2E-03
59	0.04739	0.0029	1.4E-04	361	1	0.96	1E-06	4.8E-08	1.1	10	0.15	70	1	1.11E-09	1.1E-03
60	0.04861	0.0029	1.4E-04	361	1	0.96	1E-06	4.9E-08	1.1	10	0.15	70	1	1.13E-09	1.1E-03
61	0.0508	0.0029	1.5E-04	361	1	0.96	1E-06	5.2E-08	1.1	10	0.15	70	1	1.18E-09	1.2E-03
62	0.05316	0.0029	1.6E-04	361	1	0.96	1E-06	5.4E-08	1.1	10	0.15	70	1	1.24E-09	1.2E-03
63	0.19483	0.0029	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.54E-09	4.5E-03
64	0.18407	0.0029	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.29E-09	4.3E-03
65	0.17015	0.0029	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.97E-09	4.0E-03
66	0.15468	0.0029	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.61E-09	3.6E-03
67	0.13817	0.0029	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.15	70	1	3.22E-09	3.2E-03
68	0.12186	0.0029	3.6E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.15	70	1	2.84E-09	2.8E-03
69	0.10685	0.0029	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.49E-09	2.5E-03
70	0.09273	0.0029	2.7E-04	361	1	0.96	1E-06	9.4E-08	1.1	10	0.15	70	1	2.16E-09	2.2E-03
71	0.08093	0.0029	2.4E-04	361	1	0.96	1E-06	8.2E-08	1.1	10	0.15	70	1	1.89E-09	1.9E-03
72	0.0583	0.0029	1.7E-04	361	1	0.96	1E-06	5.9E-08	1.1	10	0.15	70	1	1.36E-09	1.4E-03
73	0.05996	0.0029	1.8E-04	361	1	0.96	1E-06	6.1E-08	1.1	10	0.15	70	1	1.40E-09	1.4E-03
74	0.06259	0.0029	1.8E-04	361	1	0.96	1E-06	6.4E-08	1.1	10	0.15	70	1	1.46E-09	1.5E-03
75	0.06393	0.0029	1.9E-04	361	1	0.96	1E-06	6.5E-08	1.1	10	0.15	70	1	1.49E-09	1.5E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
76	0.23432	0.0029	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.47E-09	5.5E-03
77	0.22572	0.0029	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.27E-09	5.3E-03
78	0.21444	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.00E-09	5.0E-03
79	0.19973	0.0029	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.66E-09	4.7E-03
80	0.18237	0.0029	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.25E-09	4.3E-03
81	0.16372	0.0029	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.82E-09	3.8E-03
82	0.14441	0.0029	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.37E-09	3.4E-03
83	0.12591	0.0029	3.7E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.15	70	1	2.94E-09	2.9E-03
84	0.10936	0.0029	3.2E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.55E-09	2.6E-03
85	0.07214	0.0029	2.1E-04	361	1	0.96	1E-06	7.3E-08	1.1	10	0.15	70	1	1.68E-09	1.7E-03
86	0.07249	0.0029	2.1E-04	361	1	0.96	1E-06	7.4E-08	1.1	10	0.15	70	1	1.69E-09	1.7E-03
87	0.07442	0.0029	2.2E-04	361	1	0.96	1E-06	7.6E-08	1.1	10	0.15	70	1	1.74E-09	1.7E-03
88	0.2719	0.0029	8.0E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.15	70	1	6.34E-09	6.3E-03
89	0.26877	0.0029	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.27E-09	6.3E-03
90	0.26212	0.0029	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.11E-09	6.1E-03
91	0.25123	0.0029	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	5.86E-09	5.9E-03
92	0.23608	0.0029	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.51E-09	5.5E-03
93	0.21748	0.0029	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.07E-09	5.1E-03
94	0.19589	0.0029	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.57E-09	4.6E-03
95	0.17325	0.0029	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.04E-09	4.0E-03
96	0.15159	0.0029	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.54E-09	3.5E-03
97	0.08648	0.0029	2.5E-04	361	1	0.96	1E-06	8.8E-08	1.1	10	0.15	70	1	2.02E-09	2.0E-03
98	0.08818	0.0029	2.6E-04	361	1	0.96	1E-06	9.0E-08	1.1	10	0.15	70	1	2.06E-09	2.1E-03
99	0.08951	0.0029	2.6E-04	361	1	0.96	1E-06	9.1E-08	1.1	10	0.15	70	1	2.09E-09	2.1E-03
100	0.29698	0.0029	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.93E-09	6.9E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
101	0.30396	0.0029	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.09E-09	7.1E-03
102	0.30852	0.0029	9.1E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.20E-09	7.2E-03
103	0.30881	0.0029	9.1E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.20E-09	7.2E-03
104	0.30495	0.0029	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.11E-09	7.1E-03
105	0.29592	0.0029	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.90E-09	6.9E-03
106	0.28165	0.0029	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.57E-09	6.6E-03
107	0.26192	0.0029	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.11E-09	6.1E-03
108	0.2376	0.0029	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.54E-09	5.5E-03
109	0.21197	0.0029	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	4.94E-09	4.9E-03
110	0.10429	0.0029	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.43E-09	2.4E-03
111	0.10468	0.0029	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.44E-09	2.4E-03
112	0.10496	0.0029	3.1E-04	361	1	0.96	1E-06	1.1E-07	1.1	10	0.15	70	1	2.45E-09	2.4E-03
113	0.31506	0.0029	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.35E-09	7.3E-03
114	0.32838	0.0029	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.66E-09	7.7E-03
115	0.34031	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	7.94E-09	7.9E-03
116	0.3502	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.17E-09	8.2E-03
117	0.35505	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.28E-09	8.3E-03
118	0.35588	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.30E-09	8.3E-03
119	0.35064	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.18E-09	8.2E-03
120	0.33853	0.0029	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.90E-09	7.9E-03
121	0.31847	0.0029	9.3E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.43E-09	7.4E-03
122	0.2931	0.0029	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.84E-09	6.8E-03
123	0.12814	0.0029	3.8E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.15	70	1	2.99E-09	3.0E-03
124	0.12433	0.0029	3.6E-04	361	1	0.96	1E-06	1.3E-07	1.1	10	0.15	70	1	2.90E-09	2.9E-03
125	0.12299	0.0029	3.6E-04	361	1	0.96	1E-06	1.2E-07	1.1	10	0.15	70	1	2.87E-09	2.9E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
126	0.32469	0.0029	9.5E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.57E-09	7.6E-03
127	0.34245	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	7.99E-09	8.0E-03
128	0.36172	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.44E-09	8.4E-03
129	0.37975	0.0029	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.15	70	1	8.86E-09	8.9E-03
130	0.39506	0.0029	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.15	70	1	9.22E-09	9.2E-03
131	0.40816	0.0029	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.15	70	1	9.52E-09	9.5E-03
132	0.41581	0.0029	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.15	70	1	9.70E-09	9.7E-03
133	0.41717	0.0029	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.15	70	1	9.73E-09	9.7E-03
134	0.40914	0.0029	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.15	70	1	9.54E-09	9.5E-03
135	0.14687	0.0029	4.3E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.43E-09	3.4E-03
136	0.13987	0.0029	4.1E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.15	70	1	3.26E-09	3.3E-03
137	0.13757	0.0029	4.0E-04	361	1	0.96	1E-06	1.4E-07	1.1	10	0.15	70	1	3.21E-09	3.2E-03
138	0.32647	0.0029	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.62E-09	7.6E-03
139	0.34711	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	8.10E-09	8.1E-03
140	0.37132	0.0029	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.15	70	1	8.66E-09	8.7E-03
141	0.39609	0.0029	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.15	70	1	9.24E-09	9.2E-03
142	0.42061	0.0029	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.15	70	1	9.81E-09	9.8E-03
143	0.44462	0.0029	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.15	70	1	1.04E-08	1.0E-02
144	0.46734	0.0029	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.15	70	1	1.09E-08	1.1E-02
145	0.48545	0.0029	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.15	70	1	1.13E-08	1.1E-02
146	0.49654	0.0029	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.15	70	1	1.16E-08	1.2E-02
147	0.16512	0.0029	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.85E-09	3.9E-03
148	0.1591	0.0029	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.71E-09	3.7E-03
149	0.32201	0.0029	9.4E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.51E-09	7.5E-03
150	0.34503	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	8.05E-09	8.0E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
151	0.37052	0.0029	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.15	70	1	8.64E-09	8.6E-03
152	0.3993	0.0029	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.15	70	1	9.31E-09	9.3E-03
153	0.4299	0.0029	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.15	70	1	1.00E-08	1.0E-02
154	0.46227	0.0029	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.15	70	1	1.08E-08	1.1E-02
155	0.49731	0.0029	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.15	70	1	1.16E-08	1.2E-02
156	0.53142	0.0029	1.6E-03	361	1	0.96	1E-06	5.4E-07	1.1	10	0.15	70	1	1.24E-08	1.2E-02
157	0.56326	0.0029	1.7E-03	361	1	0.96	1E-06	5.7E-07	1.1	10	0.15	70	1	1.31E-08	1.3E-02
158	0.19595	0.0029	5.7E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.57E-09	4.6E-03
159	0.18234	0.0029	5.3E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.25E-09	4.3E-03
160	0.31202	0.0029	9.2E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.28E-09	7.3E-03
161	0.33488	0.0029	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.81E-09	7.8E-03
162	0.36158	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.43E-09	8.4E-03
163	0.3925	0.0029	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.15	70	1	9.16E-09	9.2E-03
164	0.42604	0.0029	1.3E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.15	70	1	9.94E-09	9.9E-03
165	0.46348	0.0029	1.4E-03	361	1	0.96	1E-06	4.7E-07	1.1	10	0.15	70	1	1.08E-08	1.1E-02
166	0.50477	0.0029	1.5E-03	361	1	0.96	1E-06	5.1E-07	1.1	10	0.15	70	1	1.18E-08	1.2E-02
167	0.55008	0.0029	1.6E-03	361	1	0.96	1E-06	5.6E-07	1.1	10	0.15	70	1	1.28E-08	1.3E-02
168	0.60061	0.0029	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.15	70	1	1.40E-08	1.4E-02
169	0.22527	0.0029	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.25E-09	5.3E-03
170	0.21017	0.0029	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.90E-09	4.9E-03
171	0.27765	0.0029	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.15	70	1	6.48E-09	6.5E-03
172	0.29829	0.0029	8.8E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.96E-09	7.0E-03
173	0.3207	0.0029	9.4E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.48E-09	7.5E-03
174	0.34592	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	8.07E-09	8.1E-03
175	0.37523	0.0029	1.1E-03	361	1	0.96	1E-06	3.8E-07	1.1	10	0.15	70	1	8.75E-09	8.8E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
176	0.41173	0.0029	1.2E-03	361	1	0.96	1E-06	4.2E-07	1.1	10	0.15	70	1	9.60E-09	9.6E-03
177	0.45087	0.0029	1.3E-03	361	1	0.96	1E-06	4.6E-07	1.1	10	0.15	70	1	1.05E-08	1.1E-02
178	0.4948	0.0029	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.15	70	1	1.15E-08	1.2E-02
179	0.54547	0.0029	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.15	70	1	1.27E-08	1.3E-02
180	0.60506	0.0029	1.8E-03	361	1	0.96	1E-06	6.1E-07	1.1	10	0.15	70	1	1.41E-08	1.4E-02
181	0.2423	0.0029	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.65E-09	5.7E-03
182	0.26257	0.0029	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.12E-09	6.1E-03
183	0.2825	0.0029	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.59E-09	6.6E-03
184	0.30432	0.0029	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.10E-09	7.1E-03
185	0.32849	0.0029	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.66E-09	7.7E-03
186	0.35524	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.29E-09	8.3E-03
187	0.38722	0.0029	1.1E-03	361	1	0.96	1E-06	3.9E-07	1.1	10	0.15	70	1	9.03E-09	9.0E-03
188	0.42461	0.0029	1.2E-03	361	1	0.96	1E-06	4.3E-07	1.1	10	0.15	70	1	9.90E-09	9.9E-03
189	0.47187	0.0029	1.4E-03	361	1	0.96	1E-06	4.8E-07	1.1	10	0.15	70	1	1.10E-08	1.1E-02
190	0.52309	0.0029	1.5E-03	361	1	0.96	1E-06	5.3E-07	1.1	10	0.15	70	1	1.22E-08	1.2E-02
191	0.58325	0.0029	1.7E-03	361	1	0.96	1E-06	5.9E-07	1.1	10	0.15	70	1	1.36E-08	1.4E-02
192	0.24726	0.0029	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.77E-09	5.8E-03
193	0.26493	0.0029	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.18E-09	6.2E-03
194	0.28562	0.0029	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.66E-09	6.7E-03
195	0.30844	0.0029	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.19E-09	7.2E-03
196	0.33414	0.0029	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.79E-09	7.8E-03
197	0.36297	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.47E-09	8.5E-03
198	0.39621	0.0029	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.15	70	1	9.24E-09	9.2E-03
199	0.43739	0.0029	1.3E-03	361	1	0.96	1E-06	4.4E-07	1.1	10	0.15	70	1	1.02E-08	1.0E-02
200	0.48449	0.0029	1.4E-03	361	1	0.96	1E-06	4.9E-07	1.1	10	0.15	70	1	1.13E-08	1.1E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
201	0.54468	0.0029	1.6E-03	361	1	0.96	1E-06	5.5E-07	1.1	10	0.15	70	1	1.27E-08	1.3E-02
202	0.23202	0.0029	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.41E-09	5.4E-03
203	0.24806	0.0029	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.79E-09	5.8E-03
204	0.26636	0.0029	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.21E-09	6.2E-03
205	0.28703	0.0029	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.70E-09	6.7E-03
206	0.3102	0.0029	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.24E-09	7.2E-03
207	0.33683	0.0029	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.86E-09	7.9E-03
208	0.36748	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.57E-09	8.6E-03
209	0.40266	0.0029	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.15	70	1	9.39E-09	9.4E-03
210	0.44479	0.0029	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.15	70	1	1.04E-08	1.0E-02
211	0.49569	0.0029	1.5E-03	361	1	0.96	1E-06	5.0E-07	1.1	10	0.15	70	1	1.16E-08	1.2E-02
212	0.21904	0.0029	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.11E-09	5.1E-03
213	0.23309	0.0029	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.44E-09	5.4E-03
214	0.24757	0.0029	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.77E-09	5.8E-03
215	0.26589	0.0029	7.8E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.20E-09	6.2E-03
216	0.28662	0.0029	8.4E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.69E-09	6.7E-03
217	0.30994	0.0029	9.1E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.23E-09	7.2E-03
218	0.33679	0.0029	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.86E-09	7.9E-03
219	0.36768	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.58E-09	8.6E-03
220	0.40375	0.0029	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.15	70	1	9.42E-09	9.4E-03
221	0.44718	0.0029	1.3E-03	361	1	0.96	1E-06	4.5E-07	1.1	10	0.15	70	1	1.04E-08	1.0E-02
222	0.20466	0.0029	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.77E-09	4.8E-03
223	0.21778	0.0029	6.4E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.08E-09	5.1E-03
224	0.23217	0.0029	6.8E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.42E-09	5.4E-03
225	0.24647	0.0029	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.75E-09	5.7E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
226	0.264	0.0029	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.16E-09	6.2E-03
227	0.28436	0.0029	8.3E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.63E-09	6.6E-03
228	0.30753	0.0029	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.17E-09	7.2E-03
229	0.33399	0.0029	9.8E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.79E-09	7.8E-03
230	0.36463	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.51E-09	8.5E-03
231	0.40099	0.0029	1.2E-03	361	1	0.96	1E-06	4.1E-07	1.1	10	0.15	70	1	9.35E-09	9.4E-03
232	0.191	0.0029	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.46E-09	4.5E-03
233	0.20269	0.0029	5.9E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.73E-09	4.7E-03
234	0.21537	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.02E-09	5.0E-03
235	0.22938	0.0029	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.35E-09	5.4E-03
236	0.24342	0.0029	7.1E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.68E-09	5.7E-03
237	0.26062	0.0029	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	6.08E-09	6.1E-03
238	0.28053	0.0029	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.15	70	1	6.54E-09	6.5E-03
239	0.30308	0.0029	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.07E-09	7.1E-03
240	0.32882	0.0029	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.67E-09	7.7E-03
241	0.35857	0.0029	1.1E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.36E-09	8.4E-03
242	0.39812	0.0029	1.2E-03	361	1	0.96	1E-06	4.0E-07	1.1	10	0.15	70	1	9.29E-09	9.3E-03
243	0.1784	0.0029	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.16E-09	4.2E-03
244	0.18887	0.0029	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.41E-09	4.4E-03
245	0.1998	0.0029	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.66E-09	4.7E-03
246	0.21209	0.0029	6.2E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	4.95E-09	4.9E-03
247	0.22581	0.0029	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.27E-09	5.3E-03
248	0.24098	0.0029	7.1E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.62E-09	5.6E-03
249	0.2561	0.0029	7.5E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	5.97E-09	6.0E-03
250	0.27518	0.0029	8.1E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.15	70	1	6.42E-09	6.4E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
251	0.29693	0.0029	8.7E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.93E-09	6.9E-03
252	0.32131	0.0029	9.4E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.50E-09	7.5E-03
253	0.35328	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.24E-09	8.2E-03
254	0.17568	0.0029	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.10E-09	4.1E-03
255	0.18546	0.0029	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.33E-09	4.3E-03
256	0.19633	0.0029	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.58E-09	4.6E-03
257	0.20811	0.0029	6.1E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.85E-09	4.9E-03
258	0.22128	0.0029	6.5E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.16E-09	5.2E-03
259	0.2359	0.0029	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.50E-09	5.5E-03
260	0.252	0.0029	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	5.88E-09	5.9E-03
261	0.26852	0.0029	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.26E-09	6.3E-03
262	0.2889	0.0029	8.5E-04	361	1	0.96	1E-06	2.9E-07	1.1	10	0.15	70	1	6.74E-09	6.7E-03
263	0.31182	0.0029	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.27E-09	7.3E-03
264	0.3423	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	7.98E-09	8.0E-03
265	0.17164	0.0029	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	4.00E-09	4.0E-03
266	0.18161	0.0029	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.24E-09	4.2E-03
267	0.192	0.0029	5.6E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.48E-09	4.5E-03
268	0.20351	0.0029	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.75E-09	4.7E-03
269	0.21594	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.04E-09	5.0E-03
270	0.22989	0.0029	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.36E-09	5.4E-03
271	0.24526	0.0029	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.72E-09	5.7E-03
272	0.26219	0.0029	7.7E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.12E-09	6.1E-03
273	0.27955	0.0029	8.2E-04	361	1	0.96	1E-06	2.8E-07	1.1	10	0.15	70	1	6.52E-09	6.5E-03
274	0.30325	0.0029	8.9E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.07E-09	7.1E-03
275	0.1684	0.0029	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.93E-09	3.9E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta						(Risk / Mill)		
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
276	0.17737	0.0029	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.14E-09	4.1E-03
277	0.18719	0.0029	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.37E-09	4.4E-03
278	0.19792	0.0029	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.62E-09	4.6E-03
279	0.21005	0.0029	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.90E-09	4.9E-03
280	0.22303	0.0029	6.5E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.20E-09	5.2E-03
281	0.2375	0.0029	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.54E-09	5.5E-03
282	0.25353	0.0029	7.4E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	5.91E-09	5.9E-03
283	0.26953	0.0029	7.9E-04	361	1	0.96	1E-06	2.7E-07	1.1	10	0.15	70	1	6.29E-09	6.3E-03
284	0.29254	0.0029	8.6E-04	361	1	0.96	1E-06	3.0E-07	1.1	10	0.15	70	1	6.82E-09	6.8E-03
285	0.16428	0.0029	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.83E-09	3.8E-03
286	0.17268	0.0029	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.03E-09	4.0E-03
287	0.18197	0.0029	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.24E-09	4.2E-03
288	0.19206	0.0029	5.6E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.48E-09	4.5E-03
289	0.20316	0.0029	6.0E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.74E-09	4.7E-03
290	0.21565	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.03E-09	5.0E-03
291	0.22906	0.0029	6.7E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.34E-09	5.3E-03
292	0.24386	0.0029	7.2E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.69E-09	5.7E-03
293	0.26043	0.0029	7.6E-04	361	1	0.96	1E-06	2.6E-07	1.1	10	0.15	70	1	6.07E-09	6.1E-03
294	0.1598	0.0029	4.7E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.73E-09	3.7E-03
295	0.16778	0.0029	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.91E-09	3.9E-03
296	0.17638	0.0029	5.2E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.11E-09	4.1E-03
297	0.18581	0.0029	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.33E-09	4.3E-03
298	0.19605	0.0029	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.57E-09	4.6E-03
299	0.20746	0.0029	6.1E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.84E-09	4.8E-03
300	0.22021	0.0029	6.5E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	5.14E-09	5.1E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor #	Conc	g/sec	Cair	DBR	A	EF	Consta							(Risk / Mill)	
							nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	
301	0.23393	0.0029	6.9E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.46E-09	5.5E-03
302	0.24887	0.0029	7.3E-04	361	1	0.96	1E-06	2.5E-07	1.1	10	0.15	70	1	5.81E-09	5.8E-03
303	0.15499	0.0029	4.5E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.62E-09	3.6E-03
304	0.16251	0.0029	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.79E-09	3.8E-03
305	0.17057	0.0029	5.0E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.98E-09	4.0E-03
306	0.17928	0.0029	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.18E-09	4.2E-03
307	0.18879	0.0029	5.5E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.40E-09	4.4E-03
308	0.1991	0.0029	5.8E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.64E-09	4.6E-03
309	0.21075	0.0029	6.2E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.92E-09	4.9E-03
310	0.22351	0.0029	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.21E-09	5.2E-03
311	0.23713	0.0029	7.0E-04	361	1	0.96	1E-06	2.4E-07	1.1	10	0.15	70	1	5.53E-09	5.5E-03
312	0.14999	0.0029	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.50E-09	3.5E-03
313	0.15704	0.0029	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.66E-09	3.7E-03
314	0.16454	0.0029	4.8E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.84E-09	3.8E-03
315	0.17261	0.0029	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.03E-09	4.0E-03
316	0.18137	0.0029	5.3E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.23E-09	4.2E-03
317	0.19089	0.0029	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.45E-09	4.5E-03
318	0.20122	0.0029	5.9E-04	361	1	0.96	1E-06	2.0E-07	1.1	10	0.15	70	1	4.69E-09	4.7E-03
319	0.21307	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	4.97E-09	5.0E-03
320	0.22561	0.0029	6.6E-04	361	1	0.96	1E-06	2.3E-07	1.1	10	0.15	70	1	5.26E-09	5.3E-03
321	0.14483	0.0029	4.2E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.38E-09	3.4E-03
322	0.15141	0.0029	4.4E-04	361	1	0.96	1E-06	1.5E-07	1.1	10	0.15	70	1	3.53E-09	3.5E-03
323	0.15845	0.0029	4.6E-04	361	1	0.96	1E-06	1.6E-07	1.1	10	0.15	70	1	3.70E-09	3.7E-03
324	0.1659	0.0029	4.9E-04	361	1	0.96	1E-06	1.7E-07	1.1	10	0.15	70	1	3.87E-09	3.9E-03
325	0.17389	0.0029	5.1E-04	361	1	0.96	1E-06	1.8E-07	1.1	10	0.15	70	1	4.06E-09	4.1E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from 3rd Trimester

Receptor	Consta													(Risk /	
#	Conc	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	(3rd Tri)	Mill)
326	0.18255	0.0029	5.4E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.26E-09	4.3E-03
327	0.19195	0.0029	5.6E-04	361	1	0.96	1E-06	1.9E-07	1.1	10	0.15	70	1	4.48E-09	4.5E-03
328	0.20225	0.0029	5.9E-04	361	1	0.96	1E-06	2.1E-07	1.1	10	0.15	70	1	4.72E-09	4.7E-03
329	0.21403	0.0029	6.3E-04	361	1	0.96	1E-06	2.2E-07	1.1	10	0.15	70	1	4.99E-09	5.0E-03
330	0.36842	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.59E-09	8.6E-03
331	0.33624	0.0029	9.9E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.84E-09	7.8E-03
332	0.36021	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.40E-09	8.4E-03
333	0.3102	0.0029	9.1E-04	361	1	0.96	1E-06	3.2E-07	1.1	10	0.15	70	1	7.24E-09	7.2E-03
334	0.33187	0.0029	9.7E-04	361	1	0.96	1E-06	3.4E-07	1.1	10	0.15	70	1	7.74E-09	7.7E-03
335	0.35542	0.0029	1.0E-03	361	1	0.96	1E-06	3.6E-07	1.1	10	0.15	70	1	8.29E-09	8.3E-03
336	0.30544	0.0029	9.0E-04	361	1	0.96	1E-06	3.1E-07	1.1	10	0.15	70	1	7.12E-09	7.1E-03
337	0.32594	0.0029	9.6E-04	361	1	0.96	1E-06	3.3E-07	1.1	10	0.15	70	1	7.60E-09	7.6E-03
338	0.34763	0.0029	1.0E-03	361	1	0.96	1E-06	3.5E-07	1.1	10	0.15	70	1	8.11E-09	8.1E-03
339	0.36448	0.0029	1.1E-03	361	1	0.96	1E-06	3.7E-07	1.1	10	0.15	70	1	8.50E-09	8.5E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX	
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
1	2.9E-03	8.8E-05	1090	1	0.96	1E-06	9.22E-08	1.1	10	0.15	70	1	2.1E-09	2.1E-03	0.04
2	2.9E-03	7.8E-05	1090	1	0.96	1E-06	8.12E-08	1.1	10	0.15	70	1	1.9E-09	1.9E-03	
3	2.9E-03	7.2E-05	1090	1	0.96	1E-06	7.54E-08	1.1	10	0.15	70	1	1.7E-09	1.7E-03	0.01
4	2.9E-03	6.9E-05	1090	1	0.96	1E-06	7.18E-08	1.1	10	0.15	70	1	1.6E-09	1.6E-03	
5	2.9E-03	9.4E-05	1090	1	0.96	1E-06	9.78E-08	1.1	10	0.15	70	1	2.2E-09	2.2E-03	0.01
6	2.9E-03	8.6E-05	1090	1	0.96	1E-06	8.99E-08	1.1	10	0.15	70	1	2.1E-09	2.1E-03	
7	2.9E-03	8.0E-05	1090	1	0.96	1E-06	8.34E-08	1.1	10	0.15	70	1	1.9E-09	1.9E-03	0.01
8	2.9E-03	7.6E-05	1090	1	0.96	1E-06	7.93E-08	1.1	10	0.15	70	1	1.8E-09	1.8E-03	
9	2.9E-03	7.4E-05	1090	1	0.96	1E-06	7.73E-08	1.1	10	0.15	70	1	1.8E-09	1.8E-03	0.01
10	2.9E-03	1.6E-04	1090	1	0.96	1E-06	1.62E-07	1.1	10	0.15	70	1	3.7E-09	3.7E-03	
11	2.9E-03	1.4E-04	1090	1	0.96	1E-06	1.43E-07	1.1	10	0.15	70	1	3.3E-09	3.3E-03	0.01
12	2.9E-03	9.5E-05	1090	1	0.96	1E-06	9.91E-08	1.1	10	0.15	70	1	2.3E-09	2.3E-03	
13	2.9E-03	8.9E-05	1090	1	0.96	1E-06	9.28E-08	1.1	10	0.15	70	1	2.1E-09	2.1E-03	0.01
14	2.9E-03	8.4E-05	1090	1	0.96	1E-06	8.81E-08	1.1	10	0.15	70	1	2.0E-09	2.0E-03	
15	2.9E-03	8.2E-05	1090	1	0.96	1E-06	8.61E-08	1.1	10	0.15	70	1	2.0E-09	2.0E-03	0.01
16	2.9E-03	8.2E-05	1090	1	0.96	1E-06	8.60E-08	1.1	10	0.15	70	1	2.0E-09	2.0E-03	
17	2.9E-03	2.0E-04	1090	1	0.96	1E-06	2.09E-07	1.1	10	0.15	70	1	4.8E-09	4.8E-03	0.01
18	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.84E-07	1.1	10	0.15	70	1	4.2E-09	4.2E-03	
19	2.9E-03	1.5E-04	1090	1	0.96	1E-06	1.62E-07	1.1	10	0.15	70	1	3.7E-09	3.7E-03	0.01
20	2.9E-03	1.4E-04	1090	1	0.96	1E-06	1.43E-07	1.1	10	0.15	70	1	3.3E-09	3.3E-03	
21	2.9E-03	9.7E-05	1090	1	0.96	1E-06	1.02E-07	1.1	10	0.15	70	1	2.3E-09	2.3E-03	0.01
22	2.9E-03	9.4E-05	1090	1	0.96	1E-06	9.87E-08	1.1	10	0.15	70	1	2.3E-09	2.3E-03	
23	2.9E-03	9.1E-05	1090	1	0.96	1E-06	9.54E-08	1.1	10	0.15	70	1	2.2E-09	2.2E-03	0.01
24	2.9E-03	9.3E-05	1090	1	0.96	1E-06	9.68E-08	1.1	10	0.15	70	1	2.2E-09	2.2E-03	
25	2.9E-03	9.5E-05	1090	1	0.96	1E-06	9.91E-08	1.1	10	0.15	70	1	2.3E-09	2.3E-03	0.01

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
26	2.9E-03	2.6E-04	1090	1	0.96	1E-06	2.71E-07	1.1	10	0.15	70	1	6.2E-09	6.2E-03
27	2.9E-03	2.3E-04	1090	1	0.96	1E-06	2.39E-07	1.1	10	0.15	70	1	5.5E-09	5.5E-03
28	2.9E-03	2.0E-04	1090	1	0.96	1E-06	2.10E-07	1.1	10	0.15	70	1	4.8E-09	4.8E-03
29	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.84E-07	1.1	10	0.15	70	1	4.2E-09	4.2E-03
30	2.9E-03	1.6E-04	1090	1	0.96	1E-06	1.62E-07	1.1	10	0.15	70	1	3.7E-09	3.7E-03
31	2.9E-03	1.4E-04	1090	1	0.96	1E-06	1.44E-07	1.1	10	0.15	70	1	3.3E-09	3.3E-03
32	2.9E-03	1.0E-04	1090	1	0.96	1E-06	1.09E-07	1.1	10	0.15	70	1	2.5E-09	2.5E-03
33	2.9E-03	1.0E-04	1090	1	0.96	1E-06	1.07E-07	1.1	10	0.15	70	1	2.5E-09	2.5E-03
34	2.9E-03	1.0E-04	1090	1	0.96	1E-06	1.07E-07	1.1	10	0.15	70	1	2.5E-09	2.5E-03
35	2.9E-03	1.0E-04	1090	1	0.96	1E-06	1.07E-07	1.1	10	0.15	70	1	2.5E-09	2.5E-03
36	2.9E-03	1.1E-04	1090	1	0.96	1E-06	1.12E-07	1.1	10	0.15	70	1	2.6E-09	2.6E-03
37	2.9E-03	3.7E-04	1090	1	0.96	1E-06	3.86E-07	1.1	10	0.15	70	1	8.9E-09	8.9E-03
38	2.9E-03	3.3E-04	1090	1	0.96	1E-06	3.49E-07	1.1	10	0.15	70	1	8.0E-09	8.0E-03
39	2.9E-03	3.0E-04	1090	1	0.96	1E-06	3.12E-07	1.1	10	0.15	70	1	7.2E-09	7.2E-03
40	2.9E-03	2.6E-04	1090	1	0.96	1E-06	2.76E-07	1.1	10	0.15	70	1	6.3E-09	6.3E-03
41	2.9E-03	2.3E-04	1090	1	0.96	1E-06	2.42E-07	1.1	10	0.15	70	1	5.6E-09	5.6E-03
42	2.9E-03	2.0E-04	1090	1	0.96	1E-06	2.11E-07	1.1	10	0.15	70	1	4.9E-09	4.9E-03
43	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.86E-07	1.1	10	0.15	70	1	4.3E-09	4.3E-03
44	2.9E-03	1.6E-04	1090	1	0.96	1E-06	1.65E-07	1.1	10	0.15	70	1	3.8E-09	3.8E-03
45	2.9E-03	1.3E-04	1090	1	0.96	1E-06	1.40E-07	1.1	10	0.15	70	1	3.2E-09	3.2E-03
46	2.9E-03	1.2E-04	1090	1	0.96	1E-06	1.24E-07	1.1	10	0.15	70	1	2.9E-09	2.9E-03
47	2.9E-03	1.2E-04	1090	1	0.96	1E-06	1.28E-07	1.1	10	0.15	70	1	2.9E-09	2.9E-03
48	2.9E-03	1.3E-04	1090	1	0.96	1E-06	1.33E-07	1.1	10	0.15	70	1	3.1E-09	3.1E-03
49	2.9E-03	4.7E-04	1090	1	0.96	1E-06	4.87E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
50	2.9E-03	4.3E-04	1090	1	0.96	1E-06	4.48E-07	1.1	10	0.15	70	1	1.0E-08	1.0E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
51	2.9E-03	3.9E-04	1090	1	0.96	1E-06	4.05E-07	1.1	10	0.15	70	1	9.3E-09	9.3E-03	
52	2.9E-03	3.5E-04	1090	1	0.96	1E-06	3.62E-07	1.1	10	0.15	70	1	8.3E-09	8.3E-03	
53	2.9E-03	3.1E-04	1090	1	0.96	1E-06	3.21E-07	1.1	10	0.15	70	1	7.4E-09	7.4E-03	
54	2.9E-03	2.7E-04	1090	1	0.96	1E-06	2.80E-07	1.1	10	0.15	70	1	6.4E-09	6.4E-03	
55	2.9E-03	2.3E-04	1090	1	0.96	1E-06	2.44E-07	1.1	10	0.15	70	1	5.6E-09	5.6E-03	
56	2.9E-03	2.0E-04	1090	1	0.96	1E-06	2.14E-07	1.1	10	0.15	70	1	4.9E-09	4.9E-03	
57	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.89E-07	1.1	10	0.15	70	1	4.3E-09	4.3E-03	
58	2.9E-03	1.5E-04	1090	1	0.96	1E-06	1.61E-07	1.1	10	0.15	70	1	3.7E-09	3.7E-03	
59	2.9E-03	1.4E-04	1090	1	0.96	1E-06	1.45E-07	1.1	10	0.15	70	1	3.3E-09	3.3E-03	
60	2.9E-03	1.4E-04	1090	1	0.96	1E-06	1.49E-07	1.1	10	0.15	70	1	3.4E-09	3.4E-03	
61	2.9E-03	1.5E-04	1090	1	0.96	1E-06	1.56E-07	1.1	10	0.15	70	1	3.6E-09	3.6E-03	
62	2.9E-03	1.6E-04	1090	1	0.96	1E-06	1.63E-07	1.1	10	0.15	70	1	3.7E-09	3.7E-03	
63	2.9E-03	5.7E-04	1090	1	0.96	1E-06	5.97E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
64	2.9E-03	5.4E-04	1090	1	0.96	1E-06	5.64E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
65	2.9E-03	5.0E-04	1090	1	0.96	1E-06	5.22E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
66	2.9E-03	4.5E-04	1090	1	0.96	1E-06	4.74E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02	
67	2.9E-03	4.1E-04	1090	1	0.96	1E-06	4.24E-07	1.1	10	0.15	70	1	9.7E-09	9.7E-03	
68	2.9E-03	3.6E-04	1090	1	0.96	1E-06	3.74E-07	1.1	10	0.15	70	1	8.6E-09	8.6E-03	
69	2.9E-03	3.1E-04	1090	1	0.96	1E-06	3.28E-07	1.1	10	0.15	70	1	7.5E-09	7.5E-03	
70	2.9E-03	2.7E-04	1090	1	0.96	1E-06	2.84E-07	1.1	10	0.15	70	1	6.5E-09	6.5E-03	
71	2.9E-03	2.4E-04	1090	1	0.96	1E-06	2.48E-07	1.1	10	0.15	70	1	5.7E-09	5.7E-03	
72	2.9E-03	1.7E-04	1090	1	0.96	1E-06	1.79E-07	1.1	10	0.15	70	1	4.1E-09	4.1E-03	
73	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.84E-07	1.1	10	0.15	70	1	4.2E-09	4.2E-03	
74	2.9E-03	1.8E-04	1090	1	0.96	1E-06	1.92E-07	1.1	10	0.15	70	1	4.4E-09	4.4E-03	
75	2.9E-03	1.9E-04	1090	1	0.96	1E-06	1.96E-07	1.1	10	0.15	70	1	4.5E-09	4.5E-03	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
76	2.9E-03	6.9E-04	1090	1	0.96	1E-06	7.19E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
77	2.9E-03	6.6E-04	1090	1	0.96	1E-06	6.92E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02	
78	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.58E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
79	2.9E-03	5.9E-04	1090	1	0.96	1E-06	6.13E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
80	2.9E-03	5.4E-04	1090	1	0.96	1E-06	5.59E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
81	2.9E-03	4.8E-04	1090	1	0.96	1E-06	5.02E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
82	2.9E-03	4.2E-04	1090	1	0.96	1E-06	4.43E-07	1.1	10	0.15	70	1	1.0E-08	1.0E-02	
83	2.9E-03	3.7E-04	1090	1	0.96	1E-06	3.86E-07	1.1	10	0.15	70	1	8.9E-09	8.9E-03	
84	2.9E-03	3.2E-04	1090	1	0.96	1E-06	3.35E-07	1.1	10	0.15	70	1	7.7E-09	7.7E-03	
85	2.9E-03	2.1E-04	1090	1	0.96	1E-06	2.21E-07	1.1	10	0.15	70	1	5.1E-09	5.1E-03	
86	2.9E-03	2.1E-04	1090	1	0.96	1E-06	2.22E-07	1.1	10	0.15	70	1	5.1E-09	5.1E-03	
87	2.9E-03	2.2E-04	1090	1	0.96	1E-06	2.28E-07	1.1	10	0.15	70	1	5.2E-09	5.2E-03	
88	2.9E-03	8.0E-04	1090	1	0.96	1E-06	8.34E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02	
89	2.9E-03	7.9E-04	1090	1	0.96	1E-06	8.24E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02	
90	2.9E-03	7.7E-04	1090	1	0.96	1E-06	8.04E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02	
91	2.9E-03	7.4E-04	1090	1	0.96	1E-06	7.70E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02	
92	2.9E-03	6.9E-04	1090	1	0.96	1E-06	7.24E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
93	2.9E-03	6.4E-04	1090	1	0.96	1E-06	6.67E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
94	2.9E-03	5.7E-04	1090	1	0.96	1E-06	6.01E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
95	2.9E-03	5.1E-04	1090	1	0.96	1E-06	5.31E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
96	2.9E-03	4.4E-04	1090	1	0.96	1E-06	4.65E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02	
97	2.9E-03	2.5E-04	1090	1	0.96	1E-06	2.65E-07	1.1	10	0.15	70	1	6.1E-09	6.1E-03	
98	2.9E-03	2.6E-04	1090	1	0.96	1E-06	2.70E-07	1.1	10	0.15	70	1	6.2E-09	6.2E-03	
99	2.9E-03	2.6E-04	1090	1	0.96	1E-06	2.74E-07	1.1	10	0.15	70	1	6.3E-09	6.3E-03	
100	2.9E-03	8.7E-04	1090	1	0.96	1E-06	9.11E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
101	2.9E-03	8.9E-04	1090	1	0.96	1E-06	9.32E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
102	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.46E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
103	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.47E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
104	2.9E-03	8.9E-04	1090	1	0.96	1E-06	9.35E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
105	2.9E-03	8.7E-04	1090	1	0.96	1E-06	9.07E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
106	2.9E-03	8.3E-04	1090	1	0.96	1E-06	8.64E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
107	2.9E-03	7.7E-04	1090	1	0.96	1E-06	8.03E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
108	2.9E-03	7.0E-04	1090	1	0.96	1E-06	7.29E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
109	2.9E-03	6.2E-04	1090	1	0.96	1E-06	6.50E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
110	2.9E-03	3.1E-04	1090	1	0.96	1E-06	3.20E-07	1.1	10	0.15	70	1	7.3E-09	7.3E-03
111	2.9E-03	3.1E-04	1090	1	0.96	1E-06	3.21E-07	1.1	10	0.15	70	1	7.4E-09	7.4E-03
112	2.9E-03	3.1E-04	1090	1	0.96	1E-06	3.22E-07	1.1	10	0.15	70	1	7.4E-09	7.4E-03
113	2.9E-03	9.2E-04	1090	1	0.96	1E-06	9.66E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
114	2.9E-03	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02
115	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
116	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
117	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
118	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
119	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
120	2.9E-03	9.9E-04	1090	1	0.96	1E-06	1.04E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
121	2.9E-03	9.3E-04	1090	1	0.96	1E-06	9.77E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
122	2.9E-03	8.6E-04	1090	1	0.96	1E-06	8.99E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
123	2.9E-03	3.8E-04	1090	1	0.96	1E-06	3.93E-07	1.1	10	0.15	70	1	9.0E-09	9.0E-03
124	2.9E-03	3.6E-04	1090	1	0.96	1E-06	3.81E-07	1.1	10	0.15	70	1	8.8E-09	8.8E-03
125	2.9E-03	3.6E-04	1090	1	0.96	1E-06	3.77E-07	1.1	10	0.15	70	1	8.7E-09	8.7E-03

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
126	2.9E-03	9.5E-04	1090	1	0.96	1E-06	9.96E-07	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
127	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
128	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02	
129	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.16E-06	1.1	10	0.15	70	1	2.7E-08	2.7E-02	
130	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02	
131	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.15	70	1	2.9E-08	2.9E-02	
132	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.28E-06	1.1	10	0.15	70	1	2.9E-08	2.9E-02	
133	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.28E-06	1.1	10	0.15	70	1	2.9E-08	2.9E-02	
134	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.25E-06	1.1	10	0.15	70	1	2.9E-08	2.9E-02	
135	2.9E-03	4.3E-04	1090	1	0.96	1E-06	4.50E-07	1.1	10	0.15	70	1	1.0E-08	1.0E-02	
136	2.9E-03	4.1E-04	1090	1	0.96	1E-06	4.29E-07	1.1	10	0.15	70	1	9.9E-09	9.9E-03	
137	2.9E-03	4.0E-04	1090	1	0.96	1E-06	4.22E-07	1.1	10	0.15	70	1	9.7E-09	9.7E-03	
138	2.9E-03	9.6E-04	1090	1	0.96	1E-06	1.00E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
139	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
140	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.14E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	
141	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.21E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02	
142	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.29E-06	1.1	10	0.15	70	1	3.0E-08	3.0E-02	
143	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.15	70	1	3.1E-08	3.1E-02	
144	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.43E-06	1.1	10	0.15	70	1	3.3E-08	3.3E-02	
145	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.15	70	1	3.4E-08	3.4E-02	
146	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.15	70	1	3.5E-08	3.5E-02	
147	2.9E-03	4.8E-04	1090	1	0.96	1E-06	5.06E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
148	2.9E-03	4.7E-04	1090	1	0.96	1E-06	4.88E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02	
149	2.9E-03	9.4E-04	1090	1	0.96	1E-06	9.87E-07	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
150	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
151	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.14E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	
152	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02	
153	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.32E-06	1.1	10	0.15	70	1	3.0E-08	3.0E-02	
154	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.42E-06	1.1	10	0.15	70	1	3.3E-08	3.3E-02	
155	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.53E-06	1.1	10	0.15	70	1	3.5E-08	3.5E-02	
156	2.9E-03	1.6E-03	1090	1	0.96	1E-06	1.63E-06	1.1	10	0.15	70	1	3.7E-08	3.7E-02	
157	2.9E-03	1.7E-03	1090	1	0.96	1E-06	1.73E-06	1.1	10	0.15	70	1	4.0E-08	4.0E-02	
158	2.9E-03	5.7E-04	1090	1	0.96	1E-06	6.01E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
159	2.9E-03	5.3E-04	1090	1	0.96	1E-06	5.59E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
160	2.9E-03	9.2E-04	1090	1	0.96	1E-06	9.57E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02	
161	2.9E-03	9.8E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
162	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02	
163	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.20E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02	
164	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.31E-06	1.1	10	0.15	70	1	3.0E-08	3.0E-02	
165	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.42E-06	1.1	10	0.15	70	1	3.3E-08	3.3E-02	
166	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.55E-06	1.1	10	0.15	70	1	3.6E-08	3.6E-02	
167	2.9E-03	1.6E-03	1090	1	0.96	1E-06	1.69E-06	1.1	10	0.15	70	1	3.9E-08	3.9E-02	
168	2.9E-03	1.8E-03	1090	1	0.96	1E-06	1.84E-06	1.1	10	0.15	70	1	4.2E-08	4.2E-02	
169	2.9E-03	6.6E-04	1090	1	0.96	1E-06	6.91E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02	
170	2.9E-03	6.2E-04	1090	1	0.96	1E-06	6.45E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
171	2.9E-03	8.1E-04	1090	1	0.96	1E-06	8.51E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02	
172	2.9E-03	8.8E-04	1090	1	0.96	1E-06	9.15E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02	
173	2.9E-03	9.4E-04	1090	1	0.96	1E-06	9.83E-07	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
174	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.06E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
175	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.15E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
176	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.26E-06	1.1	10	0.15	70	1	2.9E-08	2.9E-02	
177	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.38E-06	1.1	10	0.15	70	1	3.2E-08	3.2E-02	
178	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.15	70	1	3.5E-08	3.5E-02	
179	2.9E-03	1.6E-03	1090	1	0.96	1E-06	1.67E-06	1.1	10	0.15	70	1	3.8E-08	3.8E-02	
180	2.9E-03	1.8E-03	1090	1	0.96	1E-06	1.86E-06	1.1	10	0.15	70	1	4.3E-08	4.3E-02	
181	2.9E-03	7.1E-04	1090	1	0.96	1E-06	7.43E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
182	2.9E-03	7.7E-04	1090	1	0.96	1E-06	8.05E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02	
183	2.9E-03	8.3E-04	1090	1	0.96	1E-06	8.66E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02	
184	2.9E-03	8.9E-04	1090	1	0.96	1E-06	9.33E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02	
185	2.9E-03	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
186	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02	
187	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.19E-06	1.1	10	0.15	70	1	2.7E-08	2.7E-02	
188	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.30E-06	1.1	10	0.15	70	1	3.0E-08	3.0E-02	
189	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.45E-06	1.1	10	0.15	70	1	3.3E-08	3.3E-02	
190	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.60E-06	1.1	10	0.15	70	1	3.7E-08	3.7E-02	
191	2.9E-03	1.7E-03	1090	1	0.96	1E-06	1.79E-06	1.1	10	0.15	70	1	4.1E-08	4.1E-02	
192	2.9E-03	7.3E-04	1090	1	0.96	1E-06	7.58E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
193	2.9E-03	7.8E-04	1090	1	0.96	1E-06	8.12E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02	
194	2.9E-03	8.4E-04	1090	1	0.96	1E-06	8.76E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02	
195	2.9E-03	9.0E-04	1090	1	0.96	1E-06	9.46E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02	
196	2.9E-03	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
197	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.11E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	
198	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02	
199	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.34E-06	1.1	10	0.15	70	1	3.1E-08	3.1E-02	
200	2.9E-03	1.4E-03	1090	1	0.96	1E-06	1.49E-06	1.1	10	0.15	70	1	3.4E-08	3.4E-02	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
201	2.9E-03	1.6E-03	1090	1	0.96	1E-06	1.67E-06	1.1	10	0.15	70	1	3.8E-08	3.8E-02
202	2.9E-03	6.8E-04	1090	1	0.96	1E-06	7.12E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
203	2.9E-03	7.3E-04	1090	1	0.96	1E-06	7.61E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
204	2.9E-03	7.8E-04	1090	1	0.96	1E-06	8.17E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02
205	2.9E-03	8.4E-04	1090	1	0.96	1E-06	8.80E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
206	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.51E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
207	2.9E-03	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
208	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.13E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02
209	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02
210	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.36E-06	1.1	10	0.15	70	1	3.1E-08	3.1E-02
211	2.9E-03	1.5E-03	1090	1	0.96	1E-06	1.52E-06	1.1	10	0.15	70	1	3.5E-08	3.5E-02
212	2.9E-03	6.4E-04	1090	1	0.96	1E-06	6.72E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
213	2.9E-03	6.8E-04	1090	1	0.96	1E-06	7.15E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
214	2.9E-03	7.3E-04	1090	1	0.96	1E-06	7.59E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
215	2.9E-03	7.8E-04	1090	1	0.96	1E-06	8.15E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02
216	2.9E-03	8.4E-04	1090	1	0.96	1E-06	8.79E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
217	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.50E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
218	2.9E-03	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
219	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.13E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02
220	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.24E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02
221	2.9E-03	1.3E-03	1090	1	0.96	1E-06	1.37E-06	1.1	10	0.15	70	1	3.1E-08	3.1E-02
222	2.9E-03	6.0E-04	1090	1	0.96	1E-06	6.28E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
223	2.9E-03	6.4E-04	1090	1	0.96	1E-06	6.68E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
224	2.9E-03	6.8E-04	1090	1	0.96	1E-06	7.12E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
225	2.9E-03	7.2E-04	1090	1	0.96	1E-06	7.56E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
226	2.9E-03	7.7E-04	1090	1	0.96	1E-06	8.10E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02
227	2.9E-03	8.3E-04	1090	1	0.96	1E-06	8.72E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
228	2.9E-03	9.0E-04	1090	1	0.96	1E-06	9.43E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
229	2.9E-03	9.8E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
230	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.12E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02
231	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.23E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02
232	2.9E-03	5.6E-04	1090	1	0.96	1E-06	5.86E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
233	2.9E-03	5.9E-04	1090	1	0.96	1E-06	6.22E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
234	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.60E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
235	2.9E-03	6.7E-04	1090	1	0.96	1E-06	7.03E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
236	2.9E-03	7.1E-04	1090	1	0.96	1E-06	7.46E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
237	2.9E-03	7.6E-04	1090	1	0.96	1E-06	7.99E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
238	2.9E-03	8.2E-04	1090	1	0.96	1E-06	8.60E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
239	2.9E-03	8.9E-04	1090	1	0.96	1E-06	9.29E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
240	2.9E-03	9.6E-04	1090	1	0.96	1E-06	1.01E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02
241	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
242	2.9E-03	1.2E-03	1090	1	0.96	1E-06	1.22E-06	1.1	10	0.15	70	1	2.8E-08	2.8E-02
243	2.9E-03	5.2E-04	1090	1	0.96	1E-06	5.47E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
244	2.9E-03	5.5E-04	1090	1	0.96	1E-06	5.79E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
245	2.9E-03	5.9E-04	1090	1	0.96	1E-06	6.13E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
246	2.9E-03	6.2E-04	1090	1	0.96	1E-06	6.50E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
247	2.9E-03	6.6E-04	1090	1	0.96	1E-06	6.92E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
248	2.9E-03	7.1E-04	1090	1	0.96	1E-06	7.39E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
249	2.9E-03	7.5E-04	1090	1	0.96	1E-06	7.85E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
250	2.9E-03	8.1E-04	1090	1	0.96	1E-06	8.44E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
251	2.9E-03	8.7E-04	1090	1	0.96	1E-06	9.11E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
252	2.9E-03	9.4E-04	1090	1	0.96	1E-06	9.85E-07	1.1	10	0.15	70	1	2.3E-08	2.3E-02
253	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.08E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02
254	2.9E-03	5.2E-04	1090	1	0.96	1E-06	5.39E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
255	2.9E-03	5.4E-04	1090	1	0.96	1E-06	5.69E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
256	2.9E-03	5.8E-04	1090	1	0.96	1E-06	6.02E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
257	2.9E-03	6.1E-04	1090	1	0.96	1E-06	6.38E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
258	2.9E-03	6.5E-04	1090	1	0.96	1E-06	6.79E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
259	2.9E-03	6.9E-04	1090	1	0.96	1E-06	7.23E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
260	2.9E-03	7.4E-04	1090	1	0.96	1E-06	7.73E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
261	2.9E-03	7.9E-04	1090	1	0.96	1E-06	8.23E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02
262	2.9E-03	8.5E-04	1090	1	0.96	1E-06	8.86E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
263	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.56E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02
264	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.05E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02
265	2.9E-03	5.0E-04	1090	1	0.96	1E-06	5.26E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
266	2.9E-03	5.3E-04	1090	1	0.96	1E-06	5.57E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
267	2.9E-03	5.6E-04	1090	1	0.96	1E-06	5.89E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
268	2.9E-03	6.0E-04	1090	1	0.96	1E-06	6.24E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
269	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.62E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
270	2.9E-03	6.7E-04	1090	1	0.96	1E-06	7.05E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
271	2.9E-03	7.2E-04	1090	1	0.96	1E-06	7.52E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
272	2.9E-03	7.7E-04	1090	1	0.96	1E-06	8.04E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
273	2.9E-03	8.2E-04	1090	1	0.96	1E-06	8.57E-07	1.1	10	0.15	70	1	2.0E-08	2.0E-02
274	2.9E-03	8.9E-04	1090	1	0.96	1E-06	9.30E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02
275	2.9E-03	4.9E-04	1090	1	0.96	1E-06	5.16E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
276	2.9E-03	5.2E-04	1090	1	0.96	1E-06	5.44E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
277	2.9E-03	5.5E-04	1090	1	0.96	1E-06	5.74E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
278	2.9E-03	5.8E-04	1090	1	0.96	1E-06	6.07E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
279	2.9E-03	6.2E-04	1090	1	0.96	1E-06	6.44E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
280	2.9E-03	6.5E-04	1090	1	0.96	1E-06	6.84E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02	
281	2.9E-03	7.0E-04	1090	1	0.96	1E-06	7.28E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
282	2.9E-03	7.4E-04	1090	1	0.96	1E-06	7.77E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02	
283	2.9E-03	7.9E-04	1090	1	0.96	1E-06	8.27E-07	1.1	10	0.15	70	1	1.9E-08	1.9E-02	
284	2.9E-03	8.6E-04	1090	1	0.96	1E-06	8.97E-07	1.1	10	0.15	70	1	2.1E-08	2.1E-02	
285	2.9E-03	4.8E-04	1090	1	0.96	1E-06	5.04E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
286	2.9E-03	5.1E-04	1090	1	0.96	1E-06	5.30E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
287	2.9E-03	5.3E-04	1090	1	0.96	1E-06	5.58E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
288	2.9E-03	5.6E-04	1090	1	0.96	1E-06	5.89E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
289	2.9E-03	6.0E-04	1090	1	0.96	1E-06	6.23E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
290	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.61E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
291	2.9E-03	6.7E-04	1090	1	0.96	1E-06	7.02E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02	
292	2.9E-03	7.2E-04	1090	1	0.96	1E-06	7.48E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02	
293	2.9E-03	7.6E-04	1090	1	0.96	1E-06	7.99E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02	
294	2.9E-03	4.7E-04	1090	1	0.96	1E-06	4.90E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02	
295	2.9E-03	4.9E-04	1090	1	0.96	1E-06	5.15E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
296	2.9E-03	5.2E-04	1090	1	0.96	1E-06	5.41E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02	
297	2.9E-03	5.5E-04	1090	1	0.96	1E-06	5.70E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
298	2.9E-03	5.8E-04	1090	1	0.96	1E-06	6.01E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
299	2.9E-03	6.1E-04	1090	1	0.96	1E-06	6.36E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
300	2.9E-03	6.5E-04	1090	1	0.96	1E-06	6.75E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02	

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	Consta											RISK (0- (Risk/M		MAX
	g/sec	Cair	DBR	A	EF	nt1	DOSE	CPF	ASF	ED	AT	FAH	2)		ill)
301	2.9E-03	6.9E-04	1090	1	0.96	1E-06	7.17E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
302	2.9E-03	7.3E-04	1090	1	0.96	1E-06	7.63E-07	1.1	10	0.15	70	1	1.8E-08	1.8E-02
303	2.9E-03	4.5E-04	1090	1	0.96	1E-06	4.75E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
304	2.9E-03	4.8E-04	1090	1	0.96	1E-06	4.98E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
305	2.9E-03	5.0E-04	1090	1	0.96	1E-06	5.23E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
306	2.9E-03	5.3E-04	1090	1	0.96	1E-06	5.50E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
307	2.9E-03	5.5E-04	1090	1	0.96	1E-06	5.79E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
308	2.9E-03	5.8E-04	1090	1	0.96	1E-06	6.11E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
309	2.9E-03	6.2E-04	1090	1	0.96	1E-06	6.46E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
310	2.9E-03	6.6E-04	1090	1	0.96	1E-06	6.85E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
311	2.9E-03	7.0E-04	1090	1	0.96	1E-06	7.27E-07	1.1	10	0.15	70	1	1.7E-08	1.7E-02
312	2.9E-03	4.4E-04	1090	1	0.96	1E-06	4.60E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
313	2.9E-03	4.6E-04	1090	1	0.96	1E-06	4.82E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
314	2.9E-03	4.8E-04	1090	1	0.96	1E-06	5.05E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
315	2.9E-03	5.1E-04	1090	1	0.96	1E-06	5.29E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
316	2.9E-03	5.3E-04	1090	1	0.96	1E-06	5.56E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
317	2.9E-03	5.6E-04	1090	1	0.96	1E-06	5.85E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02
318	2.9E-03	5.9E-04	1090	1	0.96	1E-06	6.17E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02
319	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.53E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02
320	2.9E-03	6.6E-04	1090	1	0.96	1E-06	6.92E-07	1.1	10	0.15	70	1	1.6E-08	1.6E-02
321	2.9E-03	4.2E-04	1090	1	0.96	1E-06	4.44E-07	1.1	10	0.15	70	1	1.0E-08	1.0E-02
322	2.9E-03	4.4E-04	1090	1	0.96	1E-06	4.64E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
323	2.9E-03	4.6E-04	1090	1	0.96	1E-06	4.86E-07	1.1	10	0.15	70	1	1.1E-08	1.1E-02
324	2.9E-03	4.9E-04	1090	1	0.96	1E-06	5.09E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02
325	2.9E-03	5.1E-04	1090	1	0.96	1E-06	5.33E-07	1.1	10	0.15	70	1	1.2E-08	1.2E-02

**Syphon Geotechnical
Risk from Trenches**

Risk from Birth to 2 Years

Receptor #	g/sec	Cair	DBR	A	EF	Consta						RISK (0- (Risk/M		MAX	
						nt1	DOSE	CPF	ASF	ED	AT	FAH	2) ill)		
326	2.9E-03	5.4E-04	1090	1	0.96	1E-06	5.60E-07	1.1	10	0.15	70	1	1.3E-08	1.3E-02	
327	2.9E-03	5.6E-04	1090	1	0.96	1E-06	5.89E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
328	2.9E-03	5.9E-04	1090	1	0.96	1E-06	6.20E-07	1.1	10	0.15	70	1	1.4E-08	1.4E-02	
329	2.9E-03	6.3E-04	1090	1	0.96	1E-06	6.56E-07	1.1	10	0.15	70	1	1.5E-08	1.5E-02	
330	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.13E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	
331	2.9E-03	9.9E-04	1090	1	0.96	1E-06	1.03E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
332	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.10E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02	
333	2.9E-03	9.1E-04	1090	1	0.96	1E-06	9.51E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02	
334	2.9E-03	9.7E-04	1090	1	0.96	1E-06	1.02E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
335	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.09E-06	1.1	10	0.15	70	1	2.5E-08	2.5E-02	
336	2.9E-03	9.0E-04	1090	1	0.96	1E-06	9.37E-07	1.1	10	0.15	70	1	2.2E-08	2.2E-02	
337	2.9E-03	9.6E-04	1090	1	0.96	1E-06	1.00E-06	1.1	10	0.15	70	1	2.3E-08	2.3E-02	
338	2.9E-03	1.0E-03	1090	1	0.96	1E-06	1.07E-06	1.1	10	0.15	70	1	2.4E-08	2.4E-02	
339	2.9E-03	1.1E-03	1090	1	0.96	1E-06	1.12E-06	1.1	10	0.15	70	1	2.6E-08	2.6E-02	

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor

#	Conc	REL	HI	Max
1	8.82E-05	5	1.76E-05	3.55E-04
2	7.77E-05	5	1.55E-05	
3	7.22E-05	5	1.44E-05	
4	6.87E-05	5	1.37E-05	
5	9.36E-05	5	1.87E-05	
6	8.60E-05	5	1.72E-05	
7	7.98E-05	5	1.60E-05	
8	7.59E-05	5	1.52E-05	
9	7.39E-05	5	1.48E-05	
10	1.55E-04	5	3.11E-05	
11	1.37E-04	5	2.75E-05	
12	9.49E-05	5	1.90E-05	
13	8.88E-05	5	1.78E-05	
14	8.43E-05	5	1.69E-05	
15	8.23E-05	5	1.65E-05	
16	8.22E-05	5	1.64E-05	
17	2.00E-04	5	4.00E-05	
18	1.76E-04	5	3.52E-05	
19	1.55E-04	5	3.10E-05	
20	1.37E-04	5	2.74E-05	
21	9.72E-05	5	1.94E-05	
22	9.44E-05	5	1.89E-05	
23	9.12E-05	5	1.82E-05	
24	9.26E-05	5	1.85E-05	
25	9.48E-05	5	1.90E-05	

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
26	2.59E-04	5	5.18E-05
27	2.29E-04	5	4.58E-05
28	2.01E-04	5	4.02E-05
29	1.76E-04	5	3.53E-05
30	1.55E-04	5	3.11E-05
31	1.38E-04	5	2.76E-05
32	1.04E-04	5	2.08E-05
33	1.02E-04	5	2.05E-05
34	1.02E-04	5	2.05E-05
35	1.03E-04	5	2.05E-05
36	1.07E-04	5	2.14E-05
37	3.70E-04	5	7.39E-05
38	3.34E-04	5	6.68E-05
39	2.99E-04	5	5.97E-05
40	2.64E-04	5	5.28E-05
41	2.31E-04	5	4.62E-05
42	2.02E-04	5	4.04E-05
43	1.78E-04	5	3.55E-05
44	1.58E-04	5	3.16E-05
45	1.34E-04	5	2.68E-05
46	1.19E-04	5	2.38E-05
47	1.22E-04	5	2.45E-05
48	1.28E-04	5	2.55E-05
49	4.65E-04	5	9.31E-05
50	4.28E-04	5	8.57E-05

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
51	3.88E-04	5	7.76E-05
52	3.46E-04	5	6.92E-05
53	3.07E-04	5	6.14E-05
54	2.68E-04	5	5.36E-05
55	2.34E-04	5	4.67E-05
56	2.05E-04	5	4.09E-05
57	1.81E-04	5	3.62E-05
58	1.54E-04	5	3.08E-05
59	1.39E-04	5	2.78E-05
60	1.43E-04	5	2.85E-05
61	1.49E-04	5	2.98E-05
62	1.56E-04	5	3.12E-05
63	5.72E-04	5	1.14E-04
64	5.40E-04	5	1.08E-04
65	4.99E-04	5	9.98E-05
66	4.54E-04	5	9.08E-05
67	4.05E-04	5	8.11E-05
68	3.58E-04	5	7.15E-05
69	3.14E-04	5	6.27E-05
70	2.72E-04	5	5.44E-05
71	2.37E-04	5	4.75E-05
72	1.71E-04	5	3.42E-05
73	1.76E-04	5	3.52E-05
74	1.84E-04	5	3.67E-05
75	1.88E-04	5	3.75E-05

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
76	6.88E-04	5	1.38E-04
77	6.62E-04	5	1.32E-04
78	6.29E-04	5	1.26E-04
79	5.86E-04	5	1.17E-04
80	5.35E-04	5	1.07E-04
81	4.80E-04	5	9.61E-05
82	4.24E-04	5	8.47E-05
83	3.69E-04	5	7.39E-05
84	3.21E-04	5	6.42E-05
85	2.12E-04	5	4.23E-05
86	2.13E-04	5	4.25E-05
87	2.18E-04	5	4.37E-05
88	7.98E-04	5	1.60E-04
89	7.89E-04	5	1.58E-04
90	7.69E-04	5	1.54E-04
91	7.37E-04	5	1.47E-04
92	6.93E-04	5	1.39E-04
93	6.38E-04	5	1.28E-04
94	5.75E-04	5	1.15E-04
95	5.08E-04	5	1.02E-04
96	4.45E-04	5	8.90E-05
97	2.54E-04	5	5.07E-05
98	2.59E-04	5	5.17E-05
99	2.63E-04	5	5.25E-05
100	8.71E-04	5	1.74E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
101	8.92E-04	5	1.78E-04
102	9.05E-04	5	1.81E-04
103	9.06E-04	5	1.81E-04
104	8.95E-04	5	1.79E-04
105	8.68E-04	5	1.74E-04
106	8.26E-04	5	1.65E-04
107	7.68E-04	5	1.54E-04
108	6.97E-04	5	1.39E-04
109	6.22E-04	5	1.24E-04
110	3.06E-04	5	6.12E-05
111	3.07E-04	5	6.14E-05
112	3.08E-04	5	6.16E-05
113	9.24E-04	5	1.85E-04
114	9.63E-04	5	1.93E-04
115	9.98E-04	5	2.00E-04
116	1.03E-03	5	2.05E-04
117	1.04E-03	5	2.08E-04
118	1.04E-03	5	2.09E-04
119	1.03E-03	5	2.06E-04
120	9.93E-04	5	1.99E-04
121	9.34E-04	5	1.87E-04
122	8.60E-04	5	1.72E-04
123	3.76E-04	5	7.52E-05
124	3.65E-04	5	7.30E-05
125	3.61E-04	5	7.22E-05

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
126	9.53E-04	5	1.91E-04
127	1.00E-03	5	2.01E-04
128	1.06E-03	5	2.12E-04
129	1.11E-03	5	2.23E-04
130	1.16E-03	5	2.32E-04
131	1.20E-03	5	2.40E-04
132	1.22E-03	5	2.44E-04
133	1.22E-03	5	2.45E-04
134	1.20E-03	5	2.40E-04
135	4.31E-04	5	8.62E-05
136	4.10E-04	5	8.21E-05
137	4.04E-04	5	8.07E-05
138	9.58E-04	5	1.92E-04
139	1.02E-03	5	2.04E-04
140	1.09E-03	5	2.18E-04
141	1.16E-03	5	2.32E-04
142	1.23E-03	5	2.47E-04
143	1.30E-03	5	2.61E-04
144	1.37E-03	5	2.74E-04
145	1.42E-03	5	2.85E-04
146	1.46E-03	5	2.91E-04
147	4.84E-04	5	9.69E-05
148	4.67E-04	5	9.34E-05
149	9.45E-04	5	1.89E-04
150	1.01E-03	5	2.02E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor #	Conc	REL	HI
151	1.09E-03	5	2.17E-04
152	1.17E-03	5	2.34E-04
153	1.26E-03	5	2.52E-04
154	1.36E-03	5	2.71E-04
155	1.46E-03	5	2.92E-04
156	1.56E-03	5	3.12E-04
157	1.65E-03	5	3.31E-04
158	5.75E-04	5	1.15E-04
159	5.35E-04	5	1.07E-04
160	9.15E-04	5	1.83E-04
161	9.83E-04	5	1.97E-04
162	1.06E-03	5	2.12E-04
163	1.15E-03	5	2.30E-04
164	1.25E-03	5	2.50E-04
165	1.36E-03	5	2.72E-04
166	1.48E-03	5	2.96E-04
167	1.61E-03	5	3.23E-04
168	1.76E-03	5	3.52E-04
169	6.61E-04	5	1.32E-04
170	6.17E-04	5	1.23E-04
171	8.15E-04	5	1.63E-04
172	8.75E-04	5	1.75E-04
173	9.41E-04	5	1.88E-04
174	1.01E-03	5	2.03E-04
175	1.10E-03	5	2.20E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
176	1.21E-03	5	2.42E-04
177	1.32E-03	5	2.65E-04
178	1.45E-03	5	2.90E-04
179	1.60E-03	5	3.20E-04
180	1.78E-03	5	3.55E-04
181	7.11E-04	5	1.42E-04
182	7.70E-04	5	1.54E-04
183	8.29E-04	5	1.66E-04
184	8.93E-04	5	1.79E-04
185	9.64E-04	5	1.93E-04
186	1.04E-03	5	2.08E-04
187	1.14E-03	5	2.27E-04
188	1.25E-03	5	2.49E-04
189	1.38E-03	5	2.77E-04
190	1.53E-03	5	3.07E-04
191	1.71E-03	5	3.42E-04
192	7.25E-04	5	1.45E-04
193	7.77E-04	5	1.55E-04
194	8.38E-04	5	1.68E-04
195	9.05E-04	5	1.81E-04
196	9.80E-04	5	1.96E-04
197	1.06E-03	5	2.13E-04
198	1.16E-03	5	2.32E-04
199	1.28E-03	5	2.57E-04
200	1.42E-03	5	2.84E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
201	1.60E-03	5	3.20E-04
202	6.81E-04	5	1.36E-04
203	7.28E-04	5	1.46E-04
204	7.82E-04	5	1.56E-04
205	8.42E-04	5	1.68E-04
206	9.10E-04	5	1.82E-04
207	9.88E-04	5	1.98E-04
208	1.08E-03	5	2.16E-04
209	1.18E-03	5	2.36E-04
210	1.31E-03	5	2.61E-04
211	1.45E-03	5	2.91E-04
212	6.43E-04	5	1.29E-04
213	6.84E-04	5	1.37E-04
214	7.26E-04	5	1.45E-04
215	7.80E-04	5	1.56E-04
216	8.41E-04	5	1.68E-04
217	9.09E-04	5	1.82E-04
218	9.88E-04	5	1.98E-04
219	1.08E-03	5	2.16E-04
220	1.18E-03	5	2.37E-04
221	1.31E-03	5	2.62E-04
222	6.00E-04	5	1.20E-04
223	6.39E-04	5	1.28E-04
224	6.81E-04	5	1.36E-04
225	7.23E-04	5	1.45E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
226	7.75E-04	5	1.55E-04
227	8.34E-04	5	1.67E-04
228	9.02E-04	5	1.80E-04
229	9.80E-04	5	1.96E-04
230	1.07E-03	5	2.14E-04
231	1.18E-03	5	2.35E-04
232	5.60E-04	5	1.12E-04
233	5.95E-04	5	1.19E-04
234	6.32E-04	5	1.26E-04
235	6.73E-04	5	1.35E-04
236	7.14E-04	5	1.43E-04
237	7.65E-04	5	1.53E-04
238	8.23E-04	5	1.65E-04
239	8.89E-04	5	1.78E-04
240	9.65E-04	5	1.93E-04
241	1.05E-03	5	2.10E-04
242	1.17E-03	5	2.34E-04
243	5.23E-04	5	1.05E-04
244	5.54E-04	5	1.11E-04
245	5.86E-04	5	1.17E-04
246	6.22E-04	5	1.24E-04
247	6.63E-04	5	1.33E-04
248	7.07E-04	5	1.41E-04
249	7.51E-04	5	1.50E-04
250	8.07E-04	5	1.61E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor #	Conc	REL	HI
251	8.71E-04	5	1.74E-04
252	9.43E-04	5	1.89E-04
253	1.04E-03	5	2.07E-04
254	5.15E-04	5	1.03E-04
255	5.44E-04	5	1.09E-04
256	5.76E-04	5	1.15E-04
257	6.11E-04	5	1.22E-04
258	6.49E-04	5	1.30E-04
259	6.92E-04	5	1.38E-04
260	7.39E-04	5	1.48E-04
261	7.88E-04	5	1.58E-04
262	8.48E-04	5	1.70E-04
263	9.15E-04	5	1.83E-04
264	1.00E-03	5	2.01E-04
265	5.04E-04	5	1.01E-04
266	5.33E-04	5	1.07E-04
267	5.63E-04	5	1.13E-04
268	5.97E-04	5	1.19E-04
269	6.34E-04	5	1.27E-04
270	6.75E-04	5	1.35E-04
271	7.20E-04	5	1.44E-04
272	7.69E-04	5	1.54E-04
273	8.20E-04	5	1.64E-04
274	8.90E-04	5	1.78E-04
275	4.94E-04	5	9.88E-05

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor #	Conc	REL	HI
276	5.20E-04	5	1.04E-04
277	5.49E-04	5	1.10E-04
278	5.81E-04	5	1.16E-04
279	6.16E-04	5	1.23E-04
280	6.54E-04	5	1.31E-04
281	6.97E-04	5	1.39E-04
282	7.44E-04	5	1.49E-04
283	7.91E-04	5	1.58E-04
284	8.58E-04	5	1.72E-04
285	4.82E-04	5	9.64E-05
286	5.07E-04	5	1.01E-04
287	5.34E-04	5	1.07E-04
288	5.64E-04	5	1.13E-04
289	5.96E-04	5	1.19E-04
290	6.33E-04	5	1.27E-04
291	6.72E-04	5	1.34E-04
292	7.15E-04	5	1.43E-04
293	7.64E-04	5	1.53E-04
294	4.69E-04	5	9.38E-05
295	4.92E-04	5	9.85E-05
296	5.18E-04	5	1.04E-04
297	5.45E-04	5	1.09E-04
298	5.75E-04	5	1.15E-04
299	6.09E-04	5	1.22E-04
300	6.46E-04	5	1.29E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor			
#	Conc	REL	HI
301	6.86E-04	5	1.37E-04
302	7.30E-04	5	1.46E-04
303	4.55E-04	5	9.09E-05
304	4.77E-04	5	9.54E-05
305	5.00E-04	5	1.00E-04
306	5.26E-04	5	1.05E-04
307	5.54E-04	5	1.11E-04
308	5.84E-04	5	1.17E-04
309	6.18E-04	5	1.24E-04
310	6.56E-04	5	1.31E-04
311	6.96E-04	5	1.39E-04
312	4.40E-04	5	8.80E-05
313	4.61E-04	5	9.22E-05
314	4.83E-04	5	9.66E-05
315	5.06E-04	5	1.01E-04
316	5.32E-04	5	1.06E-04
317	5.60E-04	5	1.12E-04
318	5.90E-04	5	1.18E-04
319	6.25E-04	5	1.25E-04
320	6.62E-04	5	1.32E-04
321	4.25E-04	5	8.50E-05
322	4.44E-04	5	8.88E-05
323	4.65E-04	5	9.30E-05
324	4.87E-04	5	9.74E-05
325	5.10E-04	5	1.02E-04

**Syphon Geotechnical
Risk from Trenches**

Non Cancer Risk

Receptor #	Conc	REL	HI
326	5.36E-04	5	1.07E-04
327	5.63E-04	5	1.13E-04
328	5.93E-04	5	1.19E-04
329	6.28E-04	5	1.26E-04
330	1.08E-03	5	2.16E-04
331	9.87E-04	5	1.97E-04
332	1.06E-03	5	2.11E-04
333	9.10E-04	5	1.82E-04
334	9.74E-04	5	1.95E-04
335	1.04E-03	5	2.09E-04
336	8.96E-04	5	1.79E-04
337	9.56E-04	5	1.91E-04
338	1.02E-03	5	2.04E-04
339	1.07E-03	5	2.14E-04

AERMOD Output


```

**
*****
**
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.5.0
** Lakes Environmental Software Inc.
** Date: 12/19/2018
** File: C:\Lakes\AERMOD View\AERMOD Projects\Syphon\Syphon.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
TITLEONE C:\Lakes\AERMOD View\AERMOD Projects\Syphon\Syphon.isc
MODELOPT DEFAULT CONC
AVERTIME 24 ANNUAL
URBANOPT 3010232 SCAQMD_Orange_County
POLLUTID PM 10
RUNORNOT RUN
ERRORFIL Syphon.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION B01 AREA 432004.230 3730040.790 96.880
LOCATION B02 AREA 432115.130 3730075.150 99.310
LOCATION B03 AREA 432131.630 3730103.180 100.030
LOCATION B04 AREA 432158.030 3730105.130 100.190
LOCATION B05 AREA 432219.779 3730072.827 101.660
LOCATION B06 AREA 432309.541 3730049.437 112.580
LOCATION B7 AREA 432123.070 3730175.080 108.550
LOCATION B8 AREA 432068.910 3730222.410 117.400
LOCATION B9 AREA 432133.230 3730207.910 117.560
LOCATION B10 AREA 432269.150 3730118.150 117.020
LOCATION B11 AREA 432062.110 3730329.770 153.600
LOCATION B12 AREA 432099.130 3730316.480 139.000
LOCATION B13 AREA 432170.910 3730267.070 112.630
LOCATION B14 AREA 432235.560 3730222.100 106.070
LOCATION B15 AREA 432266.510 3730200.920 106.070
LOCATION B16 AREA 432299.940 3730178.330 106.070
LOCATION B17 AREA 432364.650 3730132.110 119.060
LOCATION B18 AREA 432424.420 3730089.870 141.910
LOCATION B19 AREA 432454.130 3730055.470 153.290
LOCATION B20 AREA 432192.650 3730305.740 110.990
LOCATION B21 AREA 432397.630 3730183.180 123.560
LOCATION B22 AREA 432532.070 3730088.890 154.940
LOCATION B23 AREA 432178.160 3730408.150 110.750
LOCATION B24 AREA 432204.570 3730360.180 108.140
LOCATION B25 AREA 432296.850 3730301.550 106.070
LOCATION B26 AREA 432352.800 3730257.420 106.310
LOCATION B27 AREA 432478.680 3730206.950 146.580
LOCATION B28 AREA 432026.190 3730540.080 149.500
LOCATION B29 AREA 432076.820 3730566.680 151.510
LOCATION B30 AREA 432137.910 3730525.870 138.420
LOCATION B31 AREA 432150.080 3730494.740 129.760
LOCATION B32 AREA 432187.510 3730467.610 115.300
LOCATION B33 AREA 432211.000 3730453.870 111.220
LOCATION B34 AREA 432342.940 3730368.030 106.070
LOCATION B35 AREA 432259.340 3730597.550 136.370
LOCATION B36 AREA 432436.280 3730442.670 112.840
LOCATION B37 AREA 432395.350 3730555.640 122.110
LOCATION B38 AREA 432641.790 3730315.350 141.820
LOCATION B39 AREA 432476.040 3730676.440 143.260
LOCATION B40 AREA 432750.110 3730432.050 145.090
LOCATION B41 AREA 432653.050 3730638.490 122.060
LOCATION B42 AREA 432764.470 3730761.630 132.190
LOCATION B43 AREA 432918.940 3730861.760 145.820
LOCATION TP01 AREA 432270.036 3730057.474 106.400
LOCATION TP02 AREA 432384.330 3730035.190 129.290
LOCATION TP03 AREA 432441.180 3730137.590 127.170
LOCATION TP04 AREA 432523.540 3730276.580 134.010
LOCATION TP05 AREA 432276.800 3730510.800 121.200
LOCATION TP06 AREA 432565.150 3730368.790 125.050
LOCATION TP07 AREA 432371.200 3730667.220 143.200
LOCATION TP08 AREA 432532.140 3730584.750 121.090
LOCATION TP09 AREA 432656.670 3730443.350 125.650
LOCATION TP10 AREA 432577.520 3730687.130 128.780
LOCATION TP11 AREA 432748.490 3730639.900 125.540
LOCATION TP12 AREA 432795.370 3730580.960 135.760
LOCATION TP13 AREA 432648.680 3730773.570 132.130
LOCATION TP14 AREA 432760.560 3730846.030 145.440
LOCATION TP15 AREA 432862.320 3730700.290 133.150
LOCATION TP16 AREA 432952.270 3730926.600 157.010
LOCATION TRENCH3 AREA 432750.050 3730693.570 125.960
LOCATION TRENCH2 AREA 432564.520 3730573.480 118.180
LOCATION TRENCH1 AREA 432260.792 3730401.646 107.370
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** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR1
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 4
** 432111.767, 3730215.571, 116.55, 3.66, 3.40
** 432103.968, 3730313.769, 137.02, 3.66, 3.40
** 432081.989, 3730303.488, 140.71, 3.66, 3.40
** 432068.518, 3730326.531, 150.42, 0.00, 3.40
**
-----
LOCATION L0000001    VOLUME 432111.623 3730217.394 116.60
LOCATION L0000002    VOLUME 432111.044 3730224.686 118.08
LOCATION L0000003    VOLUME 432110.464 3730231.978 119.63
LOCATION L0000004    VOLUME 432109.885 3730239.271 121.18
LOCATION L0000005    VOLUME 432109.306 3730246.563 122.51
LOCATION L0000006    VOLUME 432108.727 3730253.855 124.14
LOCATION L0000007    VOLUME 432108.148 3730261.147 125.87
LOCATION L0000008    VOLUME 432107.569 3730268.440 127.62
LOCATION L0000009    VOLUME 432106.989 3730275.732 129.38
LOCATION L0000010    VOLUME 432106.410 3730283.024 131.12
LOCATION L0000011    VOLUME 432105.831 3730290.316 132.85
LOCATION L0000012    VOLUME 432105.252 3730297.609 134.55
LOCATION L0000013    VOLUME 432104.673 3730304.901 135.99
LOCATION L0000014    VOLUME 432104.093 3730312.193 137.04
LOCATION L0000015    VOLUME 432098.774 3730311.339 138.80
LOCATION L0000016    VOLUME 432092.148 3730308.240 140.53
LOCATION L0000017    VOLUME 432085.522 3730305.141 141.84
LOCATION L0000018    VOLUME 432080.265 3730306.437 143.57
LOCATION L0000019    VOLUME 432076.573 3730312.752 146.14
LOCATION L0000020    VOLUME 432072.882 3730319.067 148.66
LOCATION L0000021    VOLUME 432069.190 3730325.382 150.81
** End of LINE VOLUME Source ID = AR1
**
-----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR2
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 5
** 432340.424, 3730073.769, 116.30, 3.66, 3.40
** 432430.823, 3730087.594, 145.55, 3.66, 3.40
** 432461.310, 3730052.144, 155.81, 3.66, 3.40
** 432540.010, 3730085.467, 150.63, 0.00, 3.40
** 432487.189, 3730203.872, 147.89, 0.00, 3.40
**
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LOCATION L0000022    VOLUME 432342.231 3730074.045 115.78
LOCATION L0000023    VOLUME 432349.463 3730075.151 117.82
LOCATION L0000024    VOLUME 432356.694 3730076.257 118.90
LOCATION L0000025    VOLUME 432363.925 3730077.363 120.78
LOCATION L0000026    VOLUME 432371.156 3730078.469 123.55
LOCATION L0000027    VOLUME 432378.387 3730079.575 125.61
LOCATION L0000028    VOLUME 432385.618 3730080.681 128.15
LOCATION L0000029    VOLUME 432392.849 3730081.787 131.27
LOCATION L0000030    VOLUME 432400.080 3730082.893 133.97
LOCATION L0000031    VOLUME 432407.311 3730083.999 136.78
LOCATION L0000032    VOLUME 432414.543 3730085.104 139.50
LOCATION L0000033    VOLUME 432421.774 3730086.210 141.73
LOCATION L0000034    VOLUME 432429.005 3730087.316 143.36
LOCATION L0000035    VOLUME 432434.393 3730083.442 145.52
LOCATION L0000036    VOLUME 432439.163 3730077.896 147.54
LOCATION L0000037    VOLUME 432443.933 3730072.350 149.49
LOCATION L0000038    VOLUME 432448.703 3730066.803 151.13
LOCATION L0000039    VOLUME 432453.473 3730061.257 153.15
LOCATION L0000040    VOLUME 432458.242 3730055.711 154.49
LOCATION L0000041    VOLUME 432463.714 3730053.162 156.08
LOCATION L0000042    VOLUME 432470.450 3730056.014 157.28
LOCATION L0000043    VOLUME 432477.186 3730058.866 157.83
LOCATION L0000044    VOLUME 432483.923 3730061.718 157.72
LOCATION L0000045    VOLUME 432490.659 3730064.571 157.14
LOCATION L0000046    VOLUME 432497.395 3730067.423 156.97
LOCATION L0000047    VOLUME 432504.131 3730070.275 156.92
LOCATION L0000048    VOLUME 432510.867 3730073.128 156.68
LOCATION L0000049    VOLUME 432517.604 3730075.980 156.28
LOCATION L0000050    VOLUME 432524.340 3730078.832 155.66
LOCATION L0000051    VOLUME 432531.076 3730081.684 154.47
LOCATION L0000052    VOLUME 432537.812 3730084.537 152.85
LOCATION L0000053    VOLUME 432538.003 3730089.968 153.61
LOCATION L0000054    VOLUME 432535.022 3730096.649 154.59
LOCATION L0000055    VOLUME 432532.042 3730103.329 154.22
LOCATION L0000056    VOLUME 432529.062 3730110.010 151.61
LOCATION L0000057    VOLUME 432526.082 3730116.690 148.64
LOCATION L0000058    VOLUME 432523.101 3730123.371 145.48
LOCATION L0000059    VOLUME 432520.121 3730130.051 143.10
LOCATION L0000060    VOLUME 432517.141 3730136.732 141.18
LOCATION L0000061    VOLUME 432514.161 3730143.413 140.00
LOCATION L0000062    VOLUME 432511.180 3730150.093 139.86
LOCATION L0000063    VOLUME 432508.200 3730156.774 140.42
LOCATION L0000064    VOLUME 432505.220 3730163.454 141.56
LOCATION L0000065    VOLUME 432502.239 3730170.135 143.54

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LOCATION L0000066      VOLUME  432499.259 3730176.816 145.54
LOCATION L0000067      VOLUME  432496.279 3730183.496 147.37
LOCATION L0000068      VOLUME  432493.299 3730190.177 148.18
LOCATION L0000069      VOLUME  432490.318 3730196.857 148.57
LOCATION L0000070      VOLUME  432487.338 3730203.538 148.11
** End of LINE VOLUME Source ID = AR2
** -----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR3
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 2
** 432371.266, 3730079.441, 124.24, 3.66, 3.40
** 432387.573, 3730034.773, 130.72, 3.66, 3.40
** -----
LOCATION L0000071      VOLUME  432371.893 3730077.722 123.79
LOCATION L0000072      VOLUME  432374.404 3730070.846 124.62
LOCATION L0000073      VOLUME  432376.914 3730063.970 125.16
LOCATION L0000074      VOLUME  432379.424 3730057.093 125.97
LOCATION L0000075      VOLUME  432381.935 3730050.217 126.90
LOCATION L0000076      VOLUME  432384.445 3730043.341 128.29
LOCATION L0000077      VOLUME  432386.955 3730036.465 129.87
** End of LINE VOLUME Source ID = AR3
** -----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR4
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 4
** 432332.270, 3730124.817, 113.60, 3.66, 3.40
** 432374.102, 3730131.199, 122.26, 3.66, 3.40
** 432444.648, 3730136.516, 129.00, 3.66, 3.40
** 432405.653, 3730181.184, 124.89, 0.00, 3.40
** -----
LOCATION L0000078      VOLUME  432334.079 3730125.093 113.55
LOCATION L0000079      VOLUME  432341.315 3730126.197 114.26
LOCATION L0000080      VOLUME  432348.552 3730127.301 115.64
LOCATION L0000081      VOLUME  432355.788 3730128.405 117.22
LOCATION L0000082      VOLUME  432363.024 3730129.509 118.88
LOCATION L0000083      VOLUME  432370.261 3730130.613 120.91
LOCATION L0000084      VOLUME  432377.526 3730131.457 122.65
LOCATION L0000085      VOLUME  432384.826 3730132.007 124.10
LOCATION L0000086      VOLUME  432392.125 3730132.557 125.00
LOCATION L0000087      VOLUME  432399.424 3730133.107 125.47
LOCATION L0000088      VOLUME  432406.724 3730133.657 125.70
LOCATION L0000089      VOLUME  432414.023 3730134.208 125.82
LOCATION L0000090      VOLUME  432421.322 3730134.758 125.91
LOCATION L0000091      VOLUME  432428.621 3730135.308 126.47
LOCATION L0000092      VOLUME  432435.921 3730135.858 127.04
LOCATION L0000093      VOLUME  432443.220 3730136.408 127.74
LOCATION L0000094      VOLUME  432440.776 3730140.951 126.18
LOCATION L0000095      VOLUME  432435.962 3730146.466 124.74
LOCATION L0000096      VOLUME  432431.148 3730151.980 123.84
LOCATION L0000097      VOLUME  432426.334 3730157.494 123.26
LOCATION L0000098      VOLUME  432421.520 3730163.009 122.93
LOCATION L0000099      VOLUME  432416.706 3730168.523 123.31
LOCATION L0000100      VOLUME  432411.892 3730174.037 123.88
LOCATION L0000101      VOLUME  432407.078 3730179.551 124.48
** End of LINE VOLUME Source ID = AR4
** -----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR5
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 10
** 432204.648, 3730434.655, 109.37, 3.66, 3.40
** 432216.701, 3730453.444, 111.28, 3.66, 3.40
** 432215.992, 3730469.397, 112.36, 3.66, 3.40
** 432195.076, 3730468.333, 113.73, 3.66, 3.40
** 432163.525, 3730464.434, 119.08, 3.66, 3.40
** 432156.081, 3730493.149, 127.76, 3.66, 3.40
** 432177.706, 3730542.071, 130.15, 3.66, 3.40
** 432145.091, 3730525.763, 137.20, 3.66, 3.40
** 432033.067, 3730535.690, 149.06, 3.66, 3.40
** 432082.698, 3730565.114, 150.67, 3.66, 3.40
** -----
LOCATION L0000155      VOLUME  432205.636 3730436.196 109.72
LOCATION L0000156      VOLUME  432209.589 3730442.357 110.02
LOCATION L0000157      VOLUME  432213.541 3730448.518 110.69
LOCATION L0000158      VOLUME  432216.636 3730454.910 111.49
LOCATION L0000159      VOLUME  432216.311 3730462.223 112.23
LOCATION L0000160      VOLUME  432215.853 3730469.390 112.99
LOCATION L0000161      VOLUME  432208.543 3730469.018 112.77

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LOCATION L0000162	VOLUME	432201.232	3730468.647	113.12
LOCATION L0000163	VOLUME	432193.929	3730468.192	114.30
LOCATION L0000164	VOLUME	432186.664	3730467.294	115.37
LOCATION L0000165	VOLUME	432179.400	3730466.396	116.56
LOCATION L0000166	VOLUME	432172.135	3730465.498	118.08
LOCATION L0000167	VOLUME	432164.870	3730464.600	119.46
LOCATION L0000168	VOLUME	432162.028	3730470.208	120.93
LOCATION L0000169	VOLUME	432160.191	3730477.294	122.92
LOCATION L0000170	VOLUME	432158.354	3730484.379	125.14
LOCATION L0000171	VOLUME	432156.517	3730491.465	127.33
LOCATION L0000172	VOLUME	432158.337	3730498.253	128.58
LOCATION L0000173	VOLUME	432161.296	3730504.948	129.41
LOCATION L0000174	VOLUME	432164.256	3730511.643	129.92
LOCATION L0000175	VOLUME	432167.215	3730518.338	130.10
LOCATION L0000176	VOLUME	432170.175	3730525.033	129.95
LOCATION L0000177	VOLUME	432173.134	3730531.729	130.03
LOCATION L0000178	VOLUME	432176.093	3730538.424	129.92
LOCATION L0000179	VOLUME	432174.725	3730540.580	130.46
LOCATION L0000180	VOLUME	432168.178	3730537.307	132.24
LOCATION L0000181	VOLUME	432161.630	3730534.033	133.80
LOCATION L0000182	VOLUME	432155.083	3730530.760	135.32
LOCATION L0000183	VOLUME	432148.536	3730527.486	136.67
LOCATION L0000184	VOLUME	432141.636	3730526.070	137.88
LOCATION L0000185	VOLUME	432134.345	3730526.716	138.98
LOCATION L0000186	VOLUME	432127.053	3730527.362	139.82
LOCATION L0000187	VOLUME	432119.762	3730528.008	140.42
LOCATION L0000188	VOLUME	432112.470	3730528.654	141.01
LOCATION L0000189	VOLUME	432105.179	3730529.300	141.91
LOCATION L0000190	VOLUME	432097.888	3730529.946	142.30
LOCATION L0000191	VOLUME	432090.596	3730530.592	142.93
LOCATION L0000192	VOLUME	432083.305	3730531.238	143.70
LOCATION L0000193	VOLUME	432076.013	3730531.884	144.53
LOCATION L0000194	VOLUME	432068.722	3730532.530	145.37
LOCATION L0000195	VOLUME	432061.430	3730533.176	146.32
LOCATION L0000196	VOLUME	432054.139	3730533.822	147.26
LOCATION L0000197	VOLUME	432046.848	3730534.469	148.14
LOCATION L0000198	VOLUME	432039.556	3730535.115	148.87
LOCATION L0000199	VOLUME	432033.760	3730536.100	149.50
LOCATION L0000200	VOLUME	432040.057	3730539.833	149.37
LOCATION L0000201	VOLUME	432046.353	3730543.566	149.68
LOCATION L0000202	VOLUME	432052.650	3730547.299	150.24
LOCATION L0000203	VOLUME	432058.947	3730551.032	150.50
LOCATION L0000204	VOLUME	432065.243	3730554.765	150.97
LOCATION L0000205	VOLUME	432071.540	3730558.498	151.24
LOCATION L0000206	VOLUME	432077.836	3730562.231	151.12

** End of LINE VOLUME Source ID = AR5

** Line Source Represented by Separated Volume Sources (2W)

** LINE VOLUME Source ID = AR7

** DESCRSRC

** PREFIX

** Length of Side = 3.66

** Configuration = Separated 2W

** Emission Rate = 1.0

** Vertical Dimension = 7.32

** SZINIT = 3.40

** Nodes = 5

** 432473.463, 3730363.096, 112.62, 3.66, 3.40

** 432567.240, 3730368.612, 125.79, 3.66, 3.40

** 432632.162, 3730362.671, 129.84, 3.66, 3.40

** 432655.924, 3730335.514, 139.86, 3.66, 3.40

** 432655.076, 3730309.630, 143.14, 3.66, 3.40

LOCATION L0000207	VOLUME	432475.290	3730363.203	112.68
LOCATION L0000208	VOLUME	432482.597	3730363.633	113.02
LOCATION L0000209	VOLUME	432489.905	3730364.063	113.23
LOCATION L0000210	VOLUME	432497.212	3730364.493	113.64
LOCATION L0000211	VOLUME	432504.519	3730364.923	114.39
LOCATION L0000212	VOLUME	432511.827	3730365.352	115.39
LOCATION L0000213	VOLUME	432519.134	3730365.782	116.58
LOCATION L0000214	VOLUME	432526.442	3730366.212	117.93
LOCATION L0000215	VOLUME	432533.749	3730366.642	119.45
LOCATION L0000216	VOLUME	432541.056	3730367.072	120.98
LOCATION L0000217	VOLUME	432548.364	3730367.502	122.25
LOCATION L0000218	VOLUME	432555.671	3730367.932	123.53
LOCATION L0000219	VOLUME	432562.978	3730368.361	124.78
LOCATION L0000220	VOLUME	432570.278	3730368.334	126.17
LOCATION L0000221	VOLUME	432577.568	3730367.667	127.99
LOCATION L0000222	VOLUME	432584.857	3730367.000	129.47
LOCATION L0000223	VOLUME	432592.147	3730366.333	130.51
LOCATION L0000224	VOLUME	432599.437	3730365.666	131.22
LOCATION L0000225	VOLUME	432606.726	3730364.999	131.67
LOCATION L0000226	VOLUME	432614.016	3730364.332	131.81
LOCATION L0000227	VOLUME	432621.305	3730363.665	131.65
LOCATION L0000228	VOLUME	432628.595	3730362.998	131.41
LOCATION L0000229	VOLUME	432634.623	3730359.858	131.84
LOCATION L0000230	VOLUME	432639.444	3730354.349	133.88
LOCATION L0000231	VOLUME	432644.264	3730348.841	136.04
LOCATION L0000232	VOLUME	432649.084	3730343.332	137.75
LOCATION L0000233	VOLUME	432653.904	3730337.823	139.37
LOCATION L0000234	VOLUME	432655.785	3730331.264	141.13
LOCATION L0000235	VOLUME	432655.545	3730323.948	142.79
LOCATION L0000236	VOLUME	432655.305	3730316.632	143.76

** End of LINE VOLUME Source ID = AR7

** Line Source Represented by Separated Volume Sources (2W)

** LINE VOLUME Source ID = AR8

** DESCRSRC

```

** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 3
** 432265.542, 3730594.355, 136.41, 3.66, 3.40
** 432279.545, 3730510.338, 121.54, 3.66, 3.40
** 432405.571, 3730551.073, 121.59, 3.66, 3.40
**
-----
LOCATION L0000237 VOLUME 432265.843 3730592.549 135.36
LOCATION L0000238 VOLUME 432267.047 3730585.329 133.19
LOCATION L0000239 VOLUME 432268.250 3730578.109 131.85
LOCATION L0000240 VOLUME 432269.453 3730570.888 130.49
LOCATION L0000241 VOLUME 432270.657 3730563.668 129.22
LOCATION L0000242 VOLUME 432271.860 3730556.447 128.12
LOCATION L0000243 VOLUME 432273.064 3730549.227 127.16
LOCATION L0000244 VOLUME 432274.267 3730542.007 126.28
LOCATION L0000245 VOLUME 432275.470 3730534.786 125.43
LOCATION L0000246 VOLUME 432276.674 3730527.566 124.23
LOCATION L0000247 VOLUME 432277.877 3730520.345 123.04
LOCATION L0000248 VOLUME 432279.081 3730513.125 121.88
LOCATION L0000249 VOLUME 432283.822 3730511.720 122.03
LOCATION L0000250 VOLUME 432290.787 3730513.971 122.99
LOCATION L0000251 VOLUME 432297.752 3730516.223 123.87
LOCATION L0000252 VOLUME 432304.717 3730518.474 124.53
LOCATION L0000253 VOLUME 432311.682 3730520.725 124.91
LOCATION L0000254 VOLUME 432318.647 3730522.977 124.94
LOCATION L0000255 VOLUME 432325.613 3730525.228 124.76
LOCATION L0000256 VOLUME 432332.578 3730527.479 124.36
LOCATION L0000257 VOLUME 432339.543 3730529.731 123.67
LOCATION L0000258 VOLUME 432346.508 3730531.982 122.81
LOCATION L0000259 VOLUME 432353.473 3730534.234 121.11
LOCATION L0000260 VOLUME 432360.438 3730536.485 120.39
LOCATION L0000261 VOLUME 432367.404 3730538.736 120.43
LOCATION L0000262 VOLUME 432374.369 3730540.988 120.80
LOCATION L0000263 VOLUME 432381.334 3730543.239 121.26
LOCATION L0000264 VOLUME 432388.299 3730545.490 121.17
LOCATION L0000265 VOLUME 432395.264 3730547.742 121.25
LOCATION L0000266 VOLUME 432402.230 3730549.993 121.36
** End of LINE VOLUME Source ID = AR8
**
-----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR9
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 6
** 432373.322, 3730668.188, 143.56, 3.66, 3.40
** 432424.665, 3730705.104, 139.72, 3.66, 3.40
** 432481.950, 3730677.099, 142.01, 3.66, 3.40
** 432537.537, 3730697.466, 135.44, 3.66, 3.40
** 432580.394, 3730685.161, 128.10, 3.66, 3.40
** 432614.340, 3730744.567, 129.87, 3.66, 3.40
**
-----
LOCATION L0000267 VOLUME 432374.808 3730669.256 144.18
LOCATION L0000268 VOLUME 432380.751 3730673.529 145.61
LOCATION L0000269 VOLUME 432386.694 3730677.802 145.57
LOCATION L0000270 VOLUME 432392.637 3730682.076 144.40
LOCATION L0000271 VOLUME 432398.580 3730686.349 142.64
LOCATION L0000272 VOLUME 432404.524 3730690.622 141.05
LOCATION L0000273 VOLUME 432410.467 3730694.895 139.59
LOCATION L0000274 VOLUME 432416.410 3730699.169 138.48
LOCATION L0000275 VOLUME 432422.353 3730703.442 139.00
LOCATION L0000276 VOLUME 432428.296 3730707.715 139.26
LOCATION L0000277 VOLUME 432434.239 3730711.988 139.83
LOCATION L0000278 VOLUME 432440.182 3730716.261 140.48
LOCATION L0000279 VOLUME 432446.125 3730720.534 141.62
LOCATION L0000280 VOLUME 432452.068 3730724.807 142.69
LOCATION L0000281 VOLUME 432458.011 3730729.080 143.62
LOCATION L0000282 VOLUME 432463.954 3730733.353 144.13
LOCATION L0000283 VOLUME 432469.897 3730737.626 143.36
LOCATION L0000284 VOLUME 432475.840 3730741.899 142.40
LOCATION L0000285 VOLUME 432481.783 3730746.172 141.69
LOCATION L0000286 VOLUME 432487.726 3730750.445 141.10
LOCATION L0000287 VOLUME 432493.669 3730754.718 139.82
LOCATION L0000288 VOLUME 432500.612 3730758.991 137.58
LOCATION L0000289 VOLUME 432506.555 3730763.264 135.87
LOCATION L0000290 VOLUME 432512.498 3730767.537 135.16
LOCATION L0000291 VOLUME 432518.441 3730771.810 135.34
LOCATION L0000292 VOLUME 432524.384 3730776.083 135.53
LOCATION L0000293 VOLUME 432530.327 3730780.356 134.90
LOCATION L0000294 VOLUME 432536.270 3730784.629 134.04
LOCATION L0000295 VOLUME 432542.213 3730788.902 132.90
LOCATION L0000296 VOLUME 432548.156 3730793.175 131.59
LOCATION L0000297 VOLUME 432554.099 3730797.448 130.12
LOCATION L0000298 VOLUME 432560.042 3730801.721 128.38
LOCATION L0000299 VOLUME 432565.985 3730805.994 128.28
LOCATION L0000300 VOLUME 432571.928 3730810.267 128.52
LOCATION L0000301 VOLUME 432577.871 3730814.540 128.86
LOCATION L0000302 VOLUME 432583.814 3730818.813 129.08
LOCATION L0000303 VOLUME 432589.757 3730823.086 129.24
LOCATION L0000304 VOLUME 432595.700 3730827.359 129.11

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LOCATION L0000305      VOLUME  432604.803 3730727.877 128.78
LOCATION L0000306      VOLUME  432608.435 3730734.233 128.73
LOCATION L0000307      VOLUME  432612.067 3730740.588 129.27
** End of LINE VOLUME Source ID = AR9
** -----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR10
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 5
** 432492.982, 3730410.621, 113.47, 3.66, 3.40
** 432560.450, 3730437.777, 115.02, 3.66, 3.40
** 432658.470, 3730443.718, 125.45, 3.66, 3.40
** 432708.541, 3730461.964, 137.50, 3.66, 3.40
** 432757.339, 3730431.413, 145.75, 3.66, 3.40
** -----
LOCATION L0000308      VOLUME  432494.680 3730411.304 113.49
LOCATION L0000309      VOLUME  432501.470 3730414.037 113.41
LOCATION L0000310      VOLUME  432508.261 3730416.770 113.58
LOCATION L0000311      VOLUME  432515.051 3730419.504 113.29
LOCATION L0000312      VOLUME  432521.842 3730422.237 113.50
LOCATION L0000313      VOLUME  432528.633 3730424.970 113.63
LOCATION L0000314      VOLUME  432535.423 3730427.704 113.69
LOCATION L0000315      VOLUME  432542.214 3730430.437 114.19
LOCATION L0000316      VOLUME  432549.004 3730433.170 114.20
LOCATION L0000317      VOLUME  432555.795 3730435.904 114.51
LOCATION L0000318      VOLUME  432562.748 3730437.917 114.94
LOCATION L0000319      VOLUME  432570.054 3730438.360 115.29
LOCATION L0000320      VOLUME  432577.361 3730438.802 115.73
LOCATION L0000321      VOLUME  432584.667 3730439.245 115.84
LOCATION L0000322      VOLUME  432591.974 3730439.688 116.39
LOCATION L0000323      VOLUME  432599.280 3730440.131 116.98
LOCATION L0000324      VOLUME  432606.587 3730440.574 117.45
LOCATION L0000325      VOLUME  432613.894 3730441.016 117.91
LOCATION L0000326      VOLUME  432621.200 3730441.459 118.62
LOCATION L0000327      VOLUME  432628.507 3730441.902 119.84
LOCATION L0000328      VOLUME  432635.813 3730442.345 121.24
LOCATION L0000329      VOLUME  432643.120 3730442.788 122.65
LOCATION L0000330      VOLUME  432650.427 3730443.231 124.19
LOCATION L0000331      VOLUME  432657.733 3730443.673 125.91
LOCATION L0000332      VOLUME  432664.654 3730445.972 127.61
LOCATION L0000333      VOLUME  432671.532 3730448.478 129.39
LOCATION L0000334      VOLUME  432678.409 3730450.984 131.24
LOCATION L0000335      VOLUME  432685.287 3730453.490 132.81
LOCATION L0000336      VOLUME  432692.164 3730455.997 134.48
LOCATION L0000337      VOLUME  432699.042 3730458.503 136.20
LOCATION L0000338      VOLUME  432705.920 3730461.009 137.51
LOCATION L0000339      VOLUME  432712.381 3730459.560 138.99
LOCATION L0000340      VOLUME  432718.585 3730455.676 140.29
LOCATION L0000341      VOLUME  432724.789 3730451.791 141.56
LOCATION L0000342      VOLUME  432730.993 3730447.907 142.71
LOCATION L0000343      VOLUME  432737.198 3730444.022 143.49
LOCATION L0000344      VOLUME  432743.402 3730440.138 144.29
LOCATION L0000345      VOLUME  432749.606 3730436.254 144.97
LOCATION L0000346      VOLUME  432755.811 3730432.369 145.55
** End of LINE VOLUME Source ID = AR10
** -----
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = AR6
** DESCRSRC
** PREFIX
** Length of Side = 3.66
** Configuration = Separated 2W
** Emission Rate = 1.0
** Vertical Dimension = 7.32
** SZINIT = 3.40
** Nodes = 3
** 432421.515, 3730294.184, 112.94, 3.66, 3.40
** 432482.404, 3730299.478, 122.75, 3.66, 3.40
** 432523.437, 3730279.623, 134.09, 3.66, 3.40
** -----
LOCATION L0000347      VOLUME  432423.338 3730294.342 113.21
LOCATION L0000348      VOLUME  432430.631 3730294.976 113.96
LOCATION L0000349      VOLUME  432437.923 3730295.610 115.04
LOCATION L0000350      VOLUME  432445.216 3730296.245 115.86
LOCATION L0000351      VOLUME  432452.508 3730296.879 116.44
LOCATION L0000352      VOLUME  432459.801 3730297.513 117.16
LOCATION L0000353      VOLUME  432467.093 3730298.147 118.35
LOCATION L0000354      VOLUME  432474.386 3730298.781 120.17
LOCATION L0000355      VOLUME  432481.678 3730299.415 122.37
LOCATION L0000356      VOLUME  432488.337 3730296.607 124.65
LOCATION L0000357      VOLUME  432494.926 3730293.419 126.63
LOCATION L0000358      VOLUME  432501.515 3730290.231 128.64
LOCATION L0000359      VOLUME  432508.105 3730287.042 130.86
LOCATION L0000360      VOLUME  432514.694 3730283.854 132.17
LOCATION L0000361      VOLUME  432521.283 3730280.666 132.88
** End of LINE VOLUME Source ID = AR6
** Source Parameters **
SRCPARAM B01      0.0107497984      3.658      15.250      6.100      40.000
SRCPARAM B02      0.0107497984      3.658      15.250      6.100      40.000      0.000
SRCPARAM B03      0.0107497984      3.658      15.250      6.100      40.000      0.000
SRCPARAM B04      0.0107497984      3.658      15.250      6.100      40.000      0.000
SRCPARAM B05      0.0107497984      3.658      15.250      6.100      40.000      0.000

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SRCGROUP AR      L0000360 L0000361
SRCGROUP B      B01 B02 B03 B04 B05 B06 B10 B11 B12 B13 B14 B15 B16
SRCGROUP B      B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29
SRCGROUP B      B30 B31 B32 B33 B34 B35 B36 B37 B38 B39 B40 B41 B42
SRCGROUP B      B43 B7 B8 B9
SRCGROUP Trench TRENCH3 TRENCH2 TRENCH1
SRCGROUP TP      TP01 TP02 TP03 TP04 TP05 TP06 TP07 TP08 TP09 TP10 TP11
SRCGROUP TP      TP12 TP13 TP14 TP15 TP16
SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED Syphon.rou
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE MSVJ_V9_ADJU\MSVJ_v9.SFC
  PROFFILE MSVJ_V9_ADJU\MSVJ_v9.PFL
  SURFDATA 93184 2011
  UAIRDATA 3190 2011
  SITEDATA 99999 2011
  PROFBASE 170.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 24 ALL 1ST Syphon.AD\24H1GALL.PLT 31
  PLOTFILE 24 AR 1ST Syphon.AD\24H1G001.PLT 32
  PLOTFILE 24 B 1ST Syphon.AD\24H1G002.PLT 33
  PLOTFILE 24 Trench 1ST Syphon.AD\24H1G003.PLT 34
  PLOTFILE 24 TP 1ST Syphon.AD\24H1G004.PLT 35
  PLOTFILE ANNUAL ALL Syphon.AD\AN00GALL.PLT 36
  PLOTFILE ANNUAL AR Syphon.AD\AN00G001.PLT 37
  PLOTFILE ANNUAL B Syphon.AD\AN00G002.PLT 38
  PLOTFILE ANNUAL Trench Syphon.AD\AN00G003.PLT 39
  PLOTFILE ANNUAL TP Syphon.AD\AN00G004.PLT 40
  SUMMFILE Syphon.sum
OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of          0 Fatal Error Message(s)
A Total of          2 Warning Message(s)
A Total of          0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186  5717      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used      0.50
ME W187  5717      MEOPEN: ADJ_U*Option for Low Winds used in AERMET

*****
*** SETUP Finishes Successfully ***
*****

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*** MODELOPTs:   RegDEFAULT CONC ELEV URBAN ADJ_U*

-----
***          MODEL SETUP OPTIONS SUMMARY          ***
-----

**Model Is Setup For Calculation of Average CONCentration Values.

  -- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT = F
**Model Uses NO WET DEPLETION.  WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 370 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 3010232.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
ADJ_U* - Use ADJ_U* BETA option for SBL in AERMET
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 370 Source(s); 5 Source Group(s); and 339 Receptor(s)

with: 0 POINT(s), including
      0 POINTCAP(s) and 0 POINTHOR(s)
and: 308 VOLUME source(s)
and: 62 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                    m for Missing Hours
                                                    b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 170.00 ; Decay Coef. = 0.000 ; Rot. Angle =
0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 4.0 MB of RAM.

**Detailed Error/Message File: Syphon.err
**File for Summary of Results: Syphon.sum

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000001	0	0.47619E-01	432111.6	3730217.4	116.6	3.66	3.40	3.40	YES	HRDOW	
L0000002	0	0.47619E-01	432111.0	3730224.7	118.1	3.66	3.40	3.40	YES	HRDOW	
L0000003	0	0.47619E-01	432110.5	3730232.0	119.6	3.66	3.40	3.40	YES	HRDOW	
L0000004	0	0.47619E-01	432109.9	3730239.3	121.2	3.66	3.40	3.40	YES	HRDOW	
L0000005	0	0.47619E-01	432109.3	3730246.6	122.5	3.66	3.40	3.40	YES	HRDOW	
L0000006	0	0.47619E-01	432108.7	3730253.9	124.1	3.66	3.40	3.40	YES	HRDOW	
L0000007	0	0.47619E-01	432108.1	3730261.1	125.9	3.66	3.40	3.40	YES	HRDOW	
L0000008	0	0.47619E-01	432107.6	3730268.4	127.6	3.66	3.40	3.40	YES	HRDOW	
L0000009	0	0.47619E-01	432107.0	3730275.7	129.4	3.66	3.40	3.40	YES	HRDOW	
L0000010	0	0.47619E-01	432106.4	3730283.0	131.1	3.66	3.40	3.40	YES	HRDOW	
L0000011	0	0.47619E-01	432105.8	3730290.3	132.9	3.66	3.40	3.40	YES	HRDOW	
L0000012	0	0.47619E-01	432105.3	3730297.6	134.6	3.66	3.40	3.40	YES	HRDOW	
L0000013	0	0.47619E-01	432104.7	3730304.9	136.0	3.66	3.40	3.40	YES	HRDOW	
L0000014	0	0.47619E-01	432104.1	3730312.2	137.0	3.66	3.40	3.40	YES	HRDOW	
L0000015	0	0.47619E-01	432098.8	3730311.3	138.8	3.66	3.40	3.40	YES	HRDOW	
L0000016	0	0.47619E-01	432092.1	3730308.2	140.5	3.66	3.40	3.40	YES	HRDOW	
L0000017	0	0.47619E-01	432085.5	3730305.1	141.8	3.66	3.40	3.40	YES	HRDOW	
L0000018	0	0.47619E-01	432080.3	3730306.4	143.6	3.19	3.40	3.40	YES	HRDOW	
L0000019	0	0.47619E-01	432076.6	3730312.8	146.1	2.19	3.40	3.40	YES	HRDOW	
L0000020	0	0.47619E-01	432072.9	3730319.1	148.7	1.18	3.40	3.40	YES	HRDOW	
L0000021	0	0.47619E-01	432069.2	3730325.4	150.8	0.18	3.40	3.40	YES	HRDOW	
L0000022	0	0.20408E-01	432342.2	3730074.0	115.8	3.66	3.40	3.40	YES	HRDOW	
L0000023	0	0.20408E-01	432349.5	3730075.2	117.8	3.66	3.40	3.40	YES	HRDOW	
L0000024	0	0.20408E-01	432356.7	3730076.3	118.9	3.66	3.40	3.40	YES	HRDOW	
L0000025	0	0.20408E-01	432363.9	3730077.4	120.8	3.66	3.40	3.40	YES	HRDOW	
L0000026	0	0.20408E-01	432371.2	3730078.5	123.5	3.66	3.40	3.40	YES	HRDOW	
L0000027	0	0.20408E-01	432378.4	3730079.6	125.6	3.66	3.40	3.40	YES	HRDOW	
L0000028	0	0.20408E-01	432385.6	3730080.7	128.2	3.66	3.40	3.40	YES	HRDOW	
L0000029	0	0.20408E-01	432392.8	3730081.8	131.3	3.66	3.40	3.40	YES	HRDOW	
L0000030	0	0.20408E-01	432400.1	3730082.9	134.0	3.66	3.40	3.40	YES	HRDOW	
L0000031	0	0.20408E-01	432407.3	3730084.0	136.8	3.66	3.40	3.40	YES	HRDOW	
L0000032	0	0.20408E-01	432414.5	3730085.1	139.5	3.66	3.40	3.40	YES	HRDOW	
L0000033	0	0.20408E-01	432421.8	3730086.2	141.7	3.66	3.40	3.40	YES	HRDOW	
L0000034	0	0.20408E-01	432429.0	3730087.3	143.4	3.66	3.40	3.40	YES	HRDOW	
L0000035	0	0.20408E-01	432434.4	3730083.4	145.5	3.66	3.40	3.40	YES	HRDOW	
L0000036	0	0.20408E-01	432439.2	3730077.9	147.5	3.66	3.40	3.40	YES	HRDOW	
L0000037	0	0.20408E-01	432443.9	3730072.3	149.5	3.66	3.40	3.40	YES	HRDOW	
L0000038	0	0.20408E-01	432448.7	3730066.8	151.1	3.66	3.40	3.40	YES	HRDOW	
L0000039	0	0.20408E-01	432453.5	3730061.3	153.2	3.66	3.40	3.40	YES	HRDOW	
L0000040	0	0.20408E-01	432458.2	3730055.7	154.5	3.66	3.40	3.40	YES	HRDOW	

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000041	0	0.20408E-01	432463.7	3730053.2	156.1	3.55	3.40	3.40	YES	HRDOW	
L0000042	0	0.20408E-01	432470.5	3730056.0	157.3	3.23	3.40	3.40	YES	HRDOW	
L0000043	0	0.20408E-01	432477.2	3730058.9	157.8	2.92	3.40	3.40	YES	HRDOW	
L0000044	0	0.20408E-01	432483.9	3730061.7	157.7	2.61	3.40	3.40	YES	HRDOW	
L0000045	0	0.20408E-01	432490.7	3730064.6	157.1	2.29	3.40	3.40	YES	HRDOW	
L0000046	0	0.20408E-01	432497.4	3730067.4	157.0	1.98	3.40	3.40	YES	HRDOW	
L0000047	0	0.20408E-01	432504.1	3730070.3	156.9	1.67	3.40	3.40	YES	HRDOW	
L0000048	0	0.20408E-01	432510.9	3730073.1	156.7	1.35	3.40	3.40	YES	HRDOW	
L0000049	0	0.20408E-01	432517.6	3730076.0	156.3	1.04	3.40	3.40	YES	HRDOW	
L0000050	0	0.20408E-01	432524.3	3730078.8	155.7	0.73	3.40	3.40	YES	HRDOW	
L0000051	0	0.20408E-01	432531.1	3730081.7	154.5	0.42	3.40	3.40	YES	HRDOW	
L0000052	0	0.20408E-01	432537.8	3730084.5	152.9	0.10	3.40	3.40	YES	HRDOW	
L0000053	0	0.20408E-01	432538.0	3730090.0	153.6	0.00	3.40	3.40	YES	HRDOW	
L0000054	0	0.20408E-01	432535.0	3730096.6	154.6	0.00	3.40	3.40	YES	HRDOW	
L0000055	0	0.20408E-01	432532.0	3730103.3	154.2	0.00	3.40	3.40	YES	HRDOW	
L0000056	0	0.20408E-01	432529.1	3730110.0	151.6	0.00	3.40	3.40	YES	HRDOW	
L0000057	0	0.20408E-01	432526.1	3730116.7	148.6	0.00	3.40	3.40	YES	HRDOW	
L0000058	0	0.20408E-01	432523.1	3730123.4	145.5	0.00	3.40	3.40	YES	HRDOW	
L0000059	0	0.20408E-01	432520.1	3730130.1	143.1	0.00	3.40	3.40	YES	HRDOW	
L0000060	0	0.20408E-01	432517.1	3730136.7	141.2	0.00	3.40	3.40	YES	HRDOW	
L0000061	0	0.20408E-01	432514.2	3730143.4	140.0	0.00	3.40	3.40	YES	HRDOW	
L0000062	0	0.20408E-01	432511.2	3730150.1	139.9	0.00	3.40	3.40	YES	HRDOW	
L0000063	0	0.20408E-01	432508.2	3730156.8	140.4	0.00	3.40	3.40	YES	HRDOW	
L0000064	0	0.20408E-01	432505.2	3730163.5	141.6	0.00	3.40	3.40	YES	HRDOW	
L0000065	0	0.20408E-01	432502.2	3730170.1	143.5	0.00	3.40	3.40	YES	HRDOW	
L0000066	0	0.20408E-01	432499.3	3730176.8	145.5	0.00	3.40	3.40	YES	HRDOW	
L0000067	0	0.20408E-01	432496.3	3730183.5	147.4	0.00	3.40	3.40	YES	HRDOW	
L0000068	0	0.20408E-01	432493.3	3730190.2	148.2	0.00	3.40	3.40	YES	HRDOW	
L0000069	0	0.20408E-01	432490.3	3730196.9	148.6	0.00	3.40	3.40	YES	HRDOW	
L0000070	0	0.20408E-01	432487.3	3730203.5	148.1	0.00	3.40	3.40	YES	HRDOW	
L0000071	0	0.14286E+00	432371.9	3730077.7	123.8	3.66	3.40	3.40	YES	HRDOW	
L0000072	0	0.14286E+00	432374.4	3730070.8	124.6	3.66	3.40	3.40	YES	HRDOW	
L0000073	0	0.14286E+00	432376.9	3730064.0	125.2	3.66	3.40	3.40	YES	HRDOW	
L0000074	0	0.14286E+00	432379.4	3730057.1	126.0	3.66	3.40	3.40	YES	HRDOW	
L0000075	0	0.14286E+00	432381.9	3730050.2	126.9	3.66	3.40	3.40	YES	HRDOW	
L0000076	0	0.14286E+00	432384.4	3730043.3	128.3	3.66	3.40	3.40	YES	HRDOW	
L0000077	0	0.14286E+00	432387.0	3730036.5	129.9	3.66	3.40	3.40	YES	HRDOW	
L0000078	0	0.41667E-01	432334.1	3730125.1	113.5	3.66	3.40	3.40	YES	HRDOW	
L0000079	0	0.41667E-01	432341.3	3730126.2	114.3	3.66	3.40	3.40	YES	HRDOW	
L0000080	0	0.41667E-01	432348.6	3730127.3	115.6	3.66	3.40	3.40	YES	HRDOW	

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 *** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000081	0	0.41667E-01	432355.8	3730128.4	117.2	3.66	3.40	3.40	YES	HRDOW
L0000082	0	0.41667E-01	432363.0	3730129.5	118.9	3.66	3.40	3.40	YES	HRDOW
L0000083	0	0.41667E-01	432370.3	3730130.6	120.9	3.66	3.40	3.40	YES	HRDOW
L0000084	0	0.41667E-01	432377.5	3730131.5	122.6	3.66	3.40	3.40	YES	HRDOW
L0000085	0	0.41667E-01	432384.8	3730132.0	124.1	3.66	3.40	3.40	YES	HRDOW
L0000086	0	0.41667E-01	432392.1	3730132.6	125.0	3.66	3.40	3.40	YES	HRDOW
L0000087	0	0.41667E-01	432399.4	3730133.1	125.5	3.66	3.40	3.40	YES	HRDOW
L0000088	0	0.41667E-01	432406.7	3730133.7	125.7	3.66	3.40	3.40	YES	HRDOW
L0000089	0	0.41667E-01	432414.0	3730134.2	125.8	3.66	3.40	3.40	YES	HRDOW
L0000090	0	0.41667E-01	432421.3	3730134.8	125.9	3.66	3.40	3.40	YES	HRDOW
L0000091	0	0.41667E-01	432428.6	3730135.3	126.5	3.66	3.40	3.40	YES	HRDOW
L0000092	0	0.41667E-01	432435.9	3730135.9	127.0	3.66	3.40	3.40	YES	HRDOW
L0000093	0	0.41667E-01	432443.2	3730136.4	127.7	3.66	3.40	3.40	YES	HRDOW
L0000094	0	0.41667E-01	432440.8	3730141.0	126.2	3.29	3.40	3.40	YES	HRDOW
L0000095	0	0.41667E-01	432436.0	3730146.5	124.7	2.84	3.40	3.40	YES	HRDOW
L0000096	0	0.41667E-01	432431.1	3730152.0	123.8	2.39	3.40	3.40	YES	HRDOW
L0000097	0	0.41667E-01	432426.3	3730157.5	123.3	1.94	3.40	3.40	YES	HRDOW
L0000098	0	0.41667E-01	432421.5	3730163.0	122.9	1.49	3.40	3.40	YES	HRDOW
L0000099	0	0.41667E-01	432416.7	3730168.5	123.3	1.04	3.40	3.40	YES	HRDOW
L0000100	0	0.41667E-01	432411.9	3730174.0	123.9	0.59	3.40	3.40	YES	HRDOW
L0000101	0	0.41667E-01	432407.1	3730179.6	124.5	0.13	3.40	3.40	YES	HRDOW
L0000155	0	0.19231E-01	432205.6	3730436.2	109.7	3.66	3.40	3.40	YES	HRDOW
L0000156	0	0.19231E-01	432209.6	3730442.4	110.0	3.66	3.40	3.40	YES	HRDOW
L0000157	0	0.19231E-01	432213.5	3730448.5	110.7	3.66	3.40	3.40	YES	HRDOW
L0000158	0	0.19231E-01	432216.6	3730454.9	111.5	3.66	3.40	3.40	YES	HRDOW
L0000159	0	0.19231E-01	432216.3	3730462.2	112.2	3.66	3.40	3.40	YES	HRDOW
L0000160	0	0.19231E-01	432215.9	3730469.4	113.0	3.66	3.40	3.40	YES	HRDOW
L0000161	0	0.19231E-01	432208.5	3730469.0	112.8	3.66	3.40	3.40	YES	HRDOW
L0000162	0	0.19231E-01	432201.2	3730468.6	113.1	3.66	3.40	3.40	YES	HRDOW
L0000163	0	0.19231E-01	432193.9	3730468.2	114.3	3.66	3.40	3.40	YES	HRDOW
L0000164	0	0.19231E-01	432186.7	3730467.3	115.4	3.66	3.40	3.40	YES	HRDOW
L0000165	0	0.19231E-01	432179.4	3730466.4	116.6	3.66	3.40	3.40	YES	HRDOW
L0000166	0	0.19231E-01	432172.1	3730465.5	118.1	3.66	3.40	3.40	YES	HRDOW
L0000167	0	0.19231E-01	432164.9	3730464.6	119.5	3.66	3.40	3.40	YES	HRDOW
L0000168	0	0.19231E-01	432162.0	3730470.2	120.9	3.66	3.40	3.40	YES	HRDOW
L0000169	0	0.19231E-01	432160.2	3730477.3	122.9	3.66	3.40	3.40	YES	HRDOW
L0000170	0	0.19231E-01	432158.4	3730484.4	125.1	3.66	3.40	3.40	YES	HRDOW
L0000171	0	0.19231E-01	432156.5	3730491.5	127.3	3.66	3.40	3.40	YES	HRDOW
L0000172	0	0.19231E-01	432158.3	3730498.3	128.6	3.66	3.40	3.40	YES	HRDOW
L0000173	0	0.19231E-01	432161.3	3730504.9	129.4	3.66	3.40	3.40	YES	HRDOW

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 *** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000174	0	0.19231E-01	432164.3	3730511.6	129.9	3.66	3.40	3.40	YES	HRDOW	
L0000175	0	0.19231E-01	432167.2	3730518.3	130.1	3.66	3.40	3.40	YES	HRDOW	
L0000176	0	0.19231E-01	432170.2	3730525.0	130.0	3.66	3.40	3.40	YES	HRDOW	
L0000177	0	0.19231E-01	432173.1	3730531.7	130.0	3.66	3.40	3.40	YES	HRDOW	
L0000178	0	0.19231E-01	432176.1	3730538.4	129.9	3.66	3.40	3.40	YES	HRDOW	
L0000179	0	0.19231E-01	432174.7	3730540.6	130.5	3.66	3.40	3.40	YES	HRDOW	
L0000180	0	0.19231E-01	432168.2	3730537.3	132.2	3.66	3.40	3.40	YES	HRDOW	
L0000181	0	0.19231E-01	432161.6	3730534.0	133.8	3.66	3.40	3.40	YES	HRDOW	
L0000182	0	0.19231E-01	432155.1	3730530.8	135.3	3.66	3.40	3.40	YES	HRDOW	
L0000183	0	0.19231E-01	432148.5	3730527.5	136.7	3.66	3.40	3.40	YES	HRDOW	
L0000184	0	0.19231E-01	432141.6	3730526.1	137.9	3.66	3.40	3.40	YES	HRDOW	
L0000185	0	0.19231E-01	432134.3	3730526.7	139.0	3.66	3.40	3.40	YES	HRDOW	
L0000186	0	0.19231E-01	432127.1	3730527.4	139.8	3.66	3.40	3.40	YES	HRDOW	
L0000187	0	0.19231E-01	432119.8	3730528.0	140.4	3.66	3.40	3.40	YES	HRDOW	
L0000188	0	0.19231E-01	432112.5	3730528.7	141.0	3.66	3.40	3.40	YES	HRDOW	
L0000189	0	0.19231E-01	432105.2	3730529.3	141.9	3.66	3.40	3.40	YES	HRDOW	
L0000190	0	0.19231E-01	432097.9	3730529.9	142.3	3.66	3.40	3.40	YES	HRDOW	
L0000191	0	0.19231E-01	432090.6	3730530.6	142.9	3.66	3.40	3.40	YES	HRDOW	
L0000192	0	0.19231E-01	432083.3	3730531.2	143.7	3.66	3.40	3.40	YES	HRDOW	
L0000193	0	0.19231E-01	432076.0	3730531.9	144.5	3.66	3.40	3.40	YES	HRDOW	
L0000194	0	0.19231E-01	432068.7	3730532.5	145.4	3.66	3.40	3.40	YES	HRDOW	
L0000195	0	0.19231E-01	432061.4	3730533.2	146.3	3.66	3.40	3.40	YES	HRDOW	
L0000196	0	0.19231E-01	432054.1	3730533.8	147.3	3.66	3.40	3.40	YES	HRDOW	
L0000197	0	0.19231E-01	432046.8	3730534.5	148.1	3.66	3.40	3.40	YES	HRDOW	
L0000198	0	0.19231E-01	432039.6	3730535.1	148.9	3.66	3.40	3.40	YES	HRDOW	
L0000199	0	0.19231E-01	432033.8	3730536.1	149.5	3.66	3.40	3.40	YES	HRDOW	
L0000200	0	0.19231E-01	432040.1	3730539.8	149.4	3.66	3.40	3.40	YES	HRDOW	
L0000201	0	0.19231E-01	432046.4	3730543.6	149.7	3.66	3.40	3.40	YES	HRDOW	
L0000202	0	0.19231E-01	432052.6	3730547.3	150.2	3.66	3.40	3.40	YES	HRDOW	
L0000203	0	0.19231E-01	432058.9	3730551.0	150.5	3.66	3.40	3.40	YES	HRDOW	
L0000204	0	0.19231E-01	432065.2	3730554.8	151.0	3.66	3.40	3.40	YES	HRDOW	
L0000205	0	0.19231E-01	432071.5	3730558.5	151.2	3.66	3.40	3.40	YES	HRDOW	
L0000206	0	0.19231E-01	432077.8	3730562.2	151.1	3.66	3.40	3.40	YES	HRDOW	
L0000207	0	0.33333E-01	432475.3	3730363.2	112.7	3.66	3.40	3.40	YES	HRDOW	
L0000208	0	0.33333E-01	432482.6	3730363.6	113.0	3.66	3.40	3.40	YES	HRDOW	
L0000209	0	0.33333E-01	432489.9	3730364.1	113.2	3.66	3.40	3.40	YES	HRDOW	
L0000210	0	0.33333E-01	432497.2	3730364.5	113.6	3.66	3.40	3.40	YES	HRDOW	
L0000211	0	0.33333E-01	432504.5	3730364.9	114.4	3.66	3.40	3.40	YES	HRDOW	
L0000212	0	0.33333E-01	432511.8	3730365.4	115.4	3.66	3.40	3.40	YES	HRDOW	
L0000213	0	0.33333E-01	432519.1	3730365.8	116.6	3.66	3.40	3.40	YES	HRDOW	

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000214	0	0.33333E-01	432526.4	3730366.2	117.9	3.66	3.40	3.40	YES	HRDOW	
L0000215	0	0.33333E-01	432533.7	3730366.6	119.5	3.66	3.40	3.40	YES	HRDOW	
L0000216	0	0.33333E-01	432541.1	3730367.1	121.0	3.66	3.40	3.40	YES	HRDOW	
L0000217	0	0.33333E-01	432548.4	3730367.5	122.2	3.66	3.40	3.40	YES	HRDOW	
L0000218	0	0.33333E-01	432555.7	3730367.9	123.5	3.66	3.40	3.40	YES	HRDOW	
L0000219	0	0.33333E-01	432563.0	3730368.4	124.8	3.66	3.40	3.40	YES	HRDOW	
L0000220	0	0.33333E-01	432570.3	3730368.3	126.2	3.66	3.40	3.40	YES	HRDOW	
L0000221	0	0.33333E-01	432577.6	3730367.7	128.0	3.66	3.40	3.40	YES	HRDOW	
L0000222	0	0.33333E-01	432584.9	3730367.0	129.5	3.66	3.40	3.40	YES	HRDOW	
L0000223	0	0.33333E-01	432592.1	3730366.3	130.5	3.66	3.40	3.40	YES	HRDOW	
L0000224	0	0.33333E-01	432599.4	3730365.7	131.2	3.66	3.40	3.40	YES	HRDOW	
L0000225	0	0.33333E-01	432606.7	3730365.0	131.7	3.66	3.40	3.40	YES	HRDOW	
L0000226	0	0.33333E-01	432614.0	3730364.3	131.8	3.66	3.40	3.40	YES	HRDOW	
L0000227	0	0.33333E-01	432621.3	3730363.7	131.7	3.66	3.40	3.40	YES	HRDOW	
L0000228	0	0.33333E-01	432628.6	3730363.0	131.4	3.66	3.40	3.40	YES	HRDOW	
L0000229	0	0.33333E-01	432634.6	3730359.9	131.8	3.66	3.40	3.40	YES	HRDOW	
L0000230	0	0.33333E-01	432639.4	3730354.3	133.9	3.66	3.40	3.40	YES	HRDOW	
L0000231	0	0.33333E-01	432644.3	3730348.8	136.0	3.66	3.40	3.40	YES	HRDOW	
L0000232	0	0.33333E-01	432649.1	3730343.3	137.8	3.66	3.40	3.40	YES	HRDOW	
L0000233	0	0.33333E-01	432653.9	3730337.8	139.4	3.66	3.40	3.40	YES	HRDOW	
L0000234	0	0.33333E-01	432655.8	3730331.3	141.1	3.66	3.40	3.40	YES	HRDOW	
L0000235	0	0.33333E-01	432655.5	3730323.9	142.8	3.66	3.40	3.40	YES	HRDOW	
L0000236	0	0.33333E-01	432655.3	3730316.6	143.8	3.66	3.40	3.40	YES	HRDOW	
L0000237	0	0.33333E-01	432265.8	3730592.5	135.4	3.66	3.40	3.40	YES	HRDOW	
L0000238	0	0.33333E-01	432267.0	3730585.3	133.2	3.66	3.40	3.40	YES	HRDOW	
L0000239	0	0.33333E-01	432268.2	3730578.1	131.9	3.66	3.40	3.40	YES	HRDOW	
L0000240	0	0.33333E-01	432269.5	3730570.9	130.5	3.66	3.40	3.40	YES	HRDOW	
L0000241	0	0.33333E-01	432270.7	3730563.7	129.2	3.66	3.40	3.40	YES	HRDOW	
L0000242	0	0.33333E-01	432271.9	3730556.4	128.1	3.66	3.40	3.40	YES	HRDOW	
L0000243	0	0.33333E-01	432273.1	3730549.2	127.2	3.66	3.40	3.40	YES	HRDOW	
L0000244	0	0.33333E-01	432274.3	3730542.0	126.3	3.66	3.40	3.40	YES	HRDOW	
L0000245	0	0.33333E-01	432275.5	3730534.8	125.4	3.66	3.40	3.40	YES	HRDOW	
L0000246	0	0.33333E-01	432276.7	3730527.6	124.2	3.66	3.40	3.40	YES	HRDOW	
L0000247	0	0.33333E-01	432277.9	3730520.3	123.0	3.66	3.40	3.40	YES	HRDOW	
L0000248	0	0.33333E-01	432279.1	3730513.1	121.9	3.66	3.40	3.40	YES	HRDOW	
L0000249	0	0.33333E-01	432283.8	3730511.7	122.0	3.66	3.40	3.40	YES	HRDOW	
L0000250	0	0.33333E-01	432290.8	3730514.0	123.0	3.66	3.40	3.40	YES	HRDOW	
L0000251	0	0.33333E-01	432297.8	3730516.2	123.9	3.66	3.40	3.40	YES	HRDOW	
L0000252	0	0.33333E-01	432304.7	3730518.5	124.5	3.66	3.40	3.40	YES	HRDOW	
L0000253	0	0.33333E-01	432311.7	3730520.7	124.9	3.66	3.40	3.40	YES	HRDOW	

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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000254	0	0.33333E-01	432318.6	3730523.0	124.9	3.66	3.40	3.40	YES	HRDOW	
L0000255	0	0.33333E-01	432325.6	3730525.2	124.8	3.66	3.40	3.40	YES	HRDOW	
L0000256	0	0.33333E-01	432332.6	3730527.5	124.4	3.66	3.40	3.40	YES	HRDOW	
L0000257	0	0.33333E-01	432339.5	3730529.7	123.7	3.66	3.40	3.40	YES	HRDOW	
L0000258	0	0.33333E-01	432346.5	3730532.0	122.8	3.66	3.40	3.40	YES	HRDOW	
L0000259	0	0.33333E-01	432353.5	3730534.2	121.1	3.66	3.40	3.40	YES	HRDOW	
L0000260	0	0.33333E-01	432360.4	3730536.5	120.4	3.66	3.40	3.40	YES	HRDOW	
L0000261	0	0.33333E-01	432367.4	3730538.7	120.4	3.66	3.40	3.40	YES	HRDOW	
L0000262	0	0.33333E-01	432374.4	3730541.0	120.8	3.66	3.40	3.40	YES	HRDOW	
L0000263	0	0.33333E-01	432381.3	3730543.2	121.3	3.66	3.40	3.40	YES	HRDOW	
L0000264	0	0.33333E-01	432388.3	3730545.5	121.2	3.66	3.40	3.40	YES	HRDOW	
L0000265	0	0.33333E-01	432395.3	3730547.7	121.2	3.66	3.40	3.40	YES	HRDOW	
L0000266	0	0.33333E-01	432402.2	3730550.0	121.4	3.66	3.40	3.40	YES	HRDOW	
L0000267	0	0.24390E-01	432374.8	3730669.3	144.2	3.66	3.40	3.40	YES	HRDOW	
L0000268	0	0.24390E-01	432380.8	3730673.5	145.6	3.66	3.40	3.40	YES	HRDOW	
L0000269	0	0.24390E-01	432386.7	3730677.8	145.6	3.66	3.40	3.40	YES	HRDOW	
L0000270	0	0.24390E-01	432392.6	3730682.1	144.4	3.66	3.40	3.40	YES	HRDOW	
L0000271	0	0.24390E-01	432398.6	3730686.3	142.6	3.66	3.40	3.40	YES	HRDOW	
L0000272	0	0.24390E-01	432404.5	3730690.6	141.1	3.66	3.40	3.40	YES	HRDOW	
L0000273	0	0.24390E-01	432410.5	3730694.9	139.6	3.66	3.40	3.40	YES	HRDOW	
L0000274	0	0.24390E-01	432416.4	3730699.2	138.5	3.66	3.40	3.40	YES	HRDOW	
L0000275	0	0.24390E-01	432422.4	3730703.4	139.0	3.66	3.40	3.40	YES	HRDOW	
L0000276	0	0.24390E-01	432428.7	3730703.1	139.3	3.66	3.40	3.40	YES	HRDOW	
L0000277	0	0.24390E-01	432435.3	3730699.9	139.8	3.66	3.40	3.40	YES	HRDOW	
L0000278	0	0.24390E-01	432441.8	3730696.7	140.5	3.66	3.40	3.40	YES	HRDOW	
L0000279	0	0.24390E-01	432448.4	3730693.5	141.6	3.66	3.40	3.40	YES	HRDOW	
L0000280	0	0.24390E-01	432455.0	3730690.3	142.7	3.66	3.40	3.40	YES	HRDOW	
L0000281	0	0.24390E-01	432461.6	3730687.1	143.6	3.66	3.40	3.40	YES	HRDOW	
L0000282	0	0.24390E-01	432468.1	3730683.8	144.1	3.66	3.40	3.40	YES	HRDOW	
L0000283	0	0.24390E-01	432474.7	3730680.6	143.4	3.66	3.40	3.40	YES	HRDOW	
L0000284	0	0.24390E-01	432481.3	3730677.4	142.4	3.66	3.40	3.40	YES	HRDOW	
L0000285	0	0.24390E-01	432488.1	3730679.4	141.7	3.66	3.40	3.40	YES	HRDOW	
L0000286	0	0.24390E-01	432495.0	3730681.9	141.1	3.66	3.40	3.40	YES	HRDOW	
L0000287	0	0.24390E-01	432501.9	3730684.4	139.8	3.66	3.40	3.40	YES	HRDOW	
L0000288	0	0.24390E-01	432508.8	3730686.9	137.6	3.66	3.40	3.40	YES	HRDOW	
L0000289	0	0.24390E-01	432515.6	3730689.4	135.9	3.66	3.40	3.40	YES	HRDOW	
L0000290	0	0.24390E-01	432522.5	3730692.0	135.2	3.66	3.40	3.40	YES	HRDOW	
L0000291	0	0.24390E-01	432529.4	3730694.5	135.3	3.66	3.40	3.40	YES	HRDOW	
L0000292	0	0.24390E-01	432536.2	3730697.0	135.5	3.66	3.40	3.40	YES	HRDOW	
L0000293	0	0.24390E-01	432543.3	3730695.8	134.9	3.66	3.40	3.40	YES	HRDOW	

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 *** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000294	0	0.24390E-01	432550.3	3730693.8	134.0	3.66	3.40	3.40	YES	HRDOW	
L0000295	0	0.24390E-01	432557.3	3730691.8	132.9	3.66	3.40	3.40	YES	HRDOW	
L0000296	0	0.24390E-01	432564.4	3730689.8	131.6	3.66	3.40	3.40	YES	HRDOW	
L0000297	0	0.24390E-01	432571.4	3730687.7	130.1	3.66	3.40	3.40	YES	HRDOW	
L0000298	0	0.24390E-01	432578.4	3730685.7	128.4	3.66	3.40	3.40	YES	HRDOW	
L0000299	0	0.24390E-01	432583.0	3730689.7	128.3	3.66	3.40	3.40	YES	HRDOW	
L0000300	0	0.24390E-01	432586.6	3730696.1	128.5	3.66	3.40	3.40	YES	HRDOW	
L0000301	0	0.24390E-01	432590.3	3730702.5	128.9	3.66	3.40	3.40	YES	HRDOW	
L0000302	0	0.24390E-01	432593.9	3730708.8	129.1	3.66	3.40	3.40	YES	HRDOW	
L0000303	0	0.24390E-01	432597.5	3730715.2	129.2	3.66	3.40	3.40	YES	HRDOW	
L0000304	0	0.24390E-01	432601.2	3730721.5	129.1	3.66	3.40	3.40	YES	HRDOW	
L0000305	0	0.24390E-01	432604.8	3730727.9	128.8	3.66	3.40	3.40	YES	HRDOW	
L0000306	0	0.24390E-01	432608.4	3730734.2	128.7	3.66	3.40	3.40	YES	HRDOW	
L0000307	0	0.24390E-01	432612.1	3730740.6	129.3	3.66	3.40	3.40	YES	HRDOW	
L0000308	0	0.25641E-01	432494.7	3730411.3	113.5	3.66	3.40	3.40	YES	HRDOW	
L0000309	0	0.25641E-01	432501.5	3730414.0	113.4	3.66	3.40	3.40	YES	HRDOW	
L0000310	0	0.25641E-01	432508.3	3730416.8	113.6	3.66	3.40	3.40	YES	HRDOW	
L0000311	0	0.25641E-01	432515.1	3730419.5	113.3	3.66	3.40	3.40	YES	HRDOW	
L0000312	0	0.25641E-01	432521.8	3730422.2	113.5	3.66	3.40	3.40	YES	HRDOW	
L0000313	0	0.25641E-01	432528.6	3730425.0	113.6	3.66	3.40	3.40	YES	HRDOW	
L0000314	0	0.25641E-01	432535.4	3730427.7	113.7	3.66	3.40	3.40	YES	HRDOW	
L0000315	0	0.25641E-01	432542.2	3730430.4	114.2	3.66	3.40	3.40	YES	HRDOW	
L0000316	0	0.25641E-01	432549.0	3730433.2	114.2	3.66	3.40	3.40	YES	HRDOW	
L0000317	0	0.25641E-01	432555.8	3730435.9	114.5	3.66	3.40	3.40	YES	HRDOW	
L0000318	0	0.25641E-01	432562.7	3730437.9	114.9	3.66	3.40	3.40	YES	HRDOW	
L0000319	0	0.25641E-01	432570.1	3730438.4	115.3	3.66	3.40	3.40	YES	HRDOW	
L0000320	0	0.25641E-01	432577.4	3730438.8	115.7	3.66	3.40	3.40	YES	HRDOW	
L0000321	0	0.25641E-01	432584.7	3730439.2	115.8	3.66	3.40	3.40	YES	HRDOW	
L0000322	0	0.25641E-01	432592.0	3730439.7	116.4	3.66	3.40	3.40	YES	HRDOW	
L0000323	0	0.25641E-01	432599.3	3730440.1	117.0	3.66	3.40	3.40	YES	HRDOW	
L0000324	0	0.25641E-01	432606.6	3730440.6	117.5	3.66	3.40	3.40	YES	HRDOW	
L0000325	0	0.25641E-01	432613.9	3730441.0	117.9	3.66	3.40	3.40	YES	HRDOW	
L0000326	0	0.25641E-01	432621.2	3730441.5	118.6	3.66	3.40	3.40	YES	HRDOW	
L0000327	0	0.25641E-01	432628.5	3730441.9	119.8	3.66	3.40	3.40	YES	HRDOW	
L0000328	0	0.25641E-01	432635.8	3730442.3	121.2	3.66	3.40	3.40	YES	HRDOW	
L0000329	0	0.25641E-01	432643.1	3730442.8	122.6	3.66	3.40	3.40	YES	HRDOW	
L0000330	0	0.25641E-01	432650.4	3730443.2	124.2	3.66	3.40	3.40	YES	HRDOW	
L0000331	0	0.25641E-01	432657.7	3730443.7	125.9	3.66	3.40	3.40	YES	HRDOW	
L0000332	0	0.25641E-01	432664.7	3730444.0	127.6	3.66	3.40	3.40	YES	HRDOW	
L0000333	0	0.25641E-01	432671.5	3730444.5	129.4	3.66	3.40	3.40	YES	HRDOW	

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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR	VARY BY
L0000334	0	0.25641E-01	432678.4	3730451.0	131.2	3.66	3.40	3.40	YES	HRDOW	
L0000335	0	0.25641E-01	432685.3	3730453.5	132.8	3.66	3.40	3.40	YES	HRDOW	
L0000336	0	0.25641E-01	432692.2	3730456.0	134.5	3.66	3.40	3.40	YES	HRDOW	
L0000337	0	0.25641E-01	432699.0	3730458.5	136.2	3.66	3.40	3.40	YES	HRDOW	
L0000338	0	0.25641E-01	432705.9	3730461.0	137.5	3.66	3.40	3.40	YES	HRDOW	
L0000339	0	0.25641E-01	432712.4	3730459.6	139.0	3.66	3.40	3.40	YES	HRDOW	
L0000340	0	0.25641E-01	432718.6	3730455.7	140.3	3.66	3.40	3.40	YES	HRDOW	
L0000341	0	0.25641E-01	432724.8	3730451.8	141.6	3.66	3.40	3.40	YES	HRDOW	
L0000342	0	0.25641E-01	432731.0	3730447.9	142.7	3.66	3.40	3.40	YES	HRDOW	
L0000343	0	0.25641E-01	432737.2	3730444.0	143.5	3.66	3.40	3.40	YES	HRDOW	
L0000344	0	0.25641E-01	432743.4	3730440.1	144.3	3.66	3.40	3.40	YES	HRDOW	
L0000345	0	0.25641E-01	432749.6	3730436.3	145.0	3.66	3.40	3.40	YES	HRDOW	
L0000346	0	0.25641E-01	432755.8	3730432.4	145.6	3.66	3.40	3.40	YES	HRDOW	
L0000347	0	0.66667E-01	432423.3	3730294.3	113.2	3.66	3.40	3.40	YES	HRDOW	
L0000348	0	0.66667E-01	432430.6	3730295.0	114.0	3.66	3.40	3.40	YES	HRDOW	
L0000349	0	0.66667E-01	432437.9	3730295.6	115.0	3.66	3.40	3.40	YES	HRDOW	
L0000350	0	0.66667E-01	432445.2	3730296.2	115.9	3.66	3.40	3.40	YES	HRDOW	
L0000351	0	0.66667E-01	432452.5	3730296.9	116.4	3.66	3.40	3.40	YES	HRDOW	
L0000352	0	0.66667E-01	432459.8	3730297.5	117.2	3.66	3.40	3.40	YES	HRDOW	
L0000353	0	0.66667E-01	432467.1	3730298.1	118.3	3.66	3.40	3.40	YES	HRDOW	
L0000354	0	0.66667E-01	432474.4	3730298.8	120.2	3.66	3.40	3.40	YES	HRDOW	
L0000355	0	0.66667E-01	432481.7	3730299.4	122.4	3.66	3.40	3.40	YES	HRDOW	
L0000356	0	0.66667E-01	432488.3	3730296.6	124.6	3.66	3.40	3.40	YES	HRDOW	
L0000357	0	0.66667E-01	432494.9	3730293.4	126.6	3.66	3.40	3.40	YES	HRDOW	
L0000358	0	0.66667E-01	432501.5	3730290.2	128.6	3.66	3.40	3.40	YES	HRDOW	
L0000359	0	0.66667E-01	432508.1	3730287.0	130.9	3.66	3.40	3.40	YES	HRDOW	
L0000360	0	0.66667E-01	432514.7	3730283.9	132.2	3.66	3.40	3.40	YES	HRDOW	
L0000361	0	0.66667E-01	432521.3	3730280.7	132.9	3.66	3.40	3.40	YES	HRDOW	

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*** AREA SOURCE DATA ***

EMISSION RATE SOURCE SCALAR VARY ID BY	NUMBER PART.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X Y		BASE ELEV.	RELEASE HEIGHT	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE
B01 HRDOW	0	0.10750E-01	432004.2	3730040.8	96.9	3.66	15.25	6.10	40.00	0.00	YES
B02 HRDOW	0	0.10750E-01	432115.1	3730075.1	99.3	3.66	15.25	6.10	40.00	0.00	YES
B03 HRDOW	0	0.10750E-01	432131.6	3730103.2	100.0	3.66	15.25	6.10	40.00	0.00	YES
B04 HRDOW	0	0.10750E-01	432158.0	3730105.1	100.2	3.66	15.25	6.10	40.00	0.00	YES
B05 HRDOW	0	0.10750E-01	432219.8	3730072.8	101.7	3.66	15.25	6.10	40.00	0.00	YES
B06 HRDOW	0	0.10750E-01	432309.5	3730049.4	112.6	3.66	15.25	6.10	40.00	0.00	YES
B07 HRDOW	0	0.10750E-01	432123.1	3730175.1	108.5	3.66	15.25	6.10	40.00	0.00	YES
B08 HRDOW	0	0.10750E-01	432068.9	3730222.4	117.4	3.66	15.25	6.10	40.00	0.00	YES
B09 HRDOW	0	0.10750E-01	432133.2	3730207.9	117.6	3.66	15.25	6.10	40.00	0.00	YES
B10 HRDOW	0	0.10750E-01	432269.1	3730118.1	117.0	3.66	15.25	6.10	40.00	0.00	YES
B11 HRDOW	0	0.10750E-01	432062.1	3730329.8	153.6	3.66	15.25	6.10	40.00	0.00	YES
B12 HRDOW	0	0.10750E-01	432099.1	3730316.5	139.0	3.66	15.25	6.10	40.00	0.00	YES
B13 HRDOW	0	0.10750E-01	432170.9	3730267.1	112.6	3.66	15.25	6.10	40.00	0.00	YES
B14 HRDOW	0	0.10750E-01	432235.6	3730222.1	106.1	3.66	15.25	6.10	40.00	0.00	YES
B15 HRDOW	0	0.10750E-01	432266.5	3730200.9	106.1	3.66	15.25	6.10	40.00	0.00	YES
B16 HRDOW	0	0.10750E-01	432299.9	3730178.3	106.1	3.66	15.25	6.10	40.00	0.00	YES
B17 HRDOW	0	0.10750E-01	432364.6	3730132.1	119.1	3.66	15.25	6.10	40.00	0.00	YES
B18 HRDOW	0	0.10750E-01	432424.4	3730089.9	141.9	3.66	15.25	6.10	40.00	0.00	YES
B19 HRDOW	0	0.10750E-01	432454.1	3730055.5	153.3	3.66	15.25	6.10	40.00	0.00	YES
B20 HRDOW	0	0.10750E-01	432192.6	3730305.7	111.0	3.66	15.25	6.10	40.00	0.00	YES
B21 HRDOW	0	0.10750E-01	432397.6	3730183.2	123.6	3.66	15.25	6.10	40.00	0.00	YES
B22 HRDOW	0	0.10750E-01	432532.1	3730088.9	154.9	3.66	15.25	6.10	40.00	0.00	YES
B23 HRDOW	0	0.10750E-01	432178.2	3730408.1	110.8	3.66	15.25	6.10	40.00	0.00	YES
B24 HRDOW	0	0.10750E-01	432204.6	3730360.2	108.1	3.66	15.25	6.10	40.00	0.00	YES
B25 HRDOW	0	0.10750E-01	432296.8	3730301.5	106.1	3.66	15.25	6.10	40.00	0.00	YES
B26 HRDOW	0	0.10750E-01	432352.8	3730257.4	106.3	3.66	15.25	6.10	40.00	0.00	YES
B27 HRDOW	0	0.10750E-01	432478.7	3730206.9	146.6	3.66	15.25	6.10	40.00	0.00	YES
B28 HRDOW	0	0.10750E-01	432026.2	3730540.1	149.5	3.66	15.25	6.10	40.00	0.00	YES
B29 HRDOW	0	0.10750E-01	432076.8	3730566.7	151.5	3.66	15.25	6.10	40.00	0.00	YES
B30 HRDOW	0	0.10750E-01	432137.9	3730525.9	138.4	3.66	15.25	6.10	40.00	0.00	YES
B31 HRDOW	0	0.10750E-01	432150.1	3730494.7	129.8	3.66	15.25	6.10	40.00	0.00	YES
B32 HRDOW	0	0.10750E-01	432187.5	3730467.6	115.3	3.66	15.25	6.10	40.00	0.00	YES
B33 HRDOW	0	0.10750E-01	432211.0	3730453.9	111.2	3.66	15.25	6.10	40.00	0.00	YES
B34 HRDOW	0	0.10750E-01	432342.9	3730368.0	106.1	3.66	15.25	6.10	40.00	0.00	YES
B35 HRDOW	0	0.10750E-01	432259.3	3730597.5	136.4	3.66	15.25	6.10	40.00	0.00	YES
B36 HRDOW	0	0.10750E-01	432436.3	3730442.7	112.8	3.66	15.25	6.10	40.00	0.00	YES
B37 HRDOW	0	0.10750E-01	432395.3	3730555.6	122.1	3.66	15.25	6.10	40.00	0.00	YES
B38 HRDOW	0	0.10750E-01	432641.8	3730315.3	141.8	3.66	15.25	6.10	40.00	0.00	YES
B39 HRDOW	0	0.10750E-01	432476.0	3730676.4	143.3	3.66	15.25	6.10	40.00	0.00	YES

B40
HRDOW

0 0.10750E-01 432750.1 3730432.0 145.1 3.66 15.25 6.10 40.00 0.00 YES

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*** AREA SOURCE DATA ***

EMISSION RATE SOURCE SCALAR VARY ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE
B41 HRDOW	0	0.10750E-01	432653.0	3730638.5	122.1	3.66	15.25	6.10	40.00	0.00	YES
B42 HRDOW	0	0.10750E-01	432764.5	3730761.6	132.2	3.66	15.25	6.10	40.00	0.00	YES
B43 HRDOW	0	0.10750E-01	432918.9	3730861.8	145.8	3.66	15.25	6.10	40.00	0.00	YES
TP01 HRDOW	0	0.26874E-01	432270.0	3730057.5	106.4	3.66	6.10	3.05	40.00	0.00	YES
TP02 HRDOW	0	0.26874E-01	432384.3	3730035.2	129.3	3.66	6.10	3.05	40.00	0.00	YES
TP03 HRDOW	0	0.26874E-01	432441.2	3730137.6	127.2	3.66	6.10	3.05	40.00	0.00	YES
TP04 HRDOW	0	0.26874E-01	432523.5	3730276.6	134.0	3.66	6.10	3.05	40.00	0.00	YES
TP05 HRDOW	0	0.26874E-01	432276.8	3730510.8	121.2	3.66	6.10	3.05	40.00	0.00	YES
TP06 HRDOW	0	0.26874E-01	432565.1	3730368.8	125.0	3.66	6.10	3.05	40.00	0.00	YES
TP07 HRDOW	0	0.26874E-01	432371.2	3730667.2	143.2	3.66	6.10	3.05	40.00	0.00	YES
TP08 HRDOW	0	0.26874E-01	432532.1	3730584.8	121.1	3.66	6.10	3.05	40.00	0.00	YES
TP09 HRDOW	0	0.26874E-01	432656.7	3730443.3	125.6	3.66	6.10	3.05	40.00	0.00	YES
TP10 HRDOW	0	0.26874E-01	432577.5	3730687.1	128.8	3.66	6.10	3.05	40.00	0.00	YES
TP11 HRDOW	0	0.26874E-01	432748.5	3730639.9	125.5	3.66	6.10	3.05	40.00	0.00	YES
TP12 HRDOW	0	0.26874E-01	432795.4	3730581.0	135.8	3.66	6.10	3.05	40.00	0.00	YES
TP13 HRDOW	0	0.26874E-01	432648.7	3730773.6	132.1	3.66	6.10	3.05	40.00	0.00	YES
TP14 HRDOW	0	0.26874E-01	432760.6	3730846.0	145.4	3.66	6.10	3.05	40.00	0.00	YES
TP15 HRDOW	0	0.26874E-01	432862.3	3730700.3	133.2	3.66	6.10	3.05	40.00	0.00	YES
TP16 HRDOW	0	0.26874E-01	432952.3	3730926.6	157.0	3.66	6.10	3.05	40.00	0.00	YES
TRENCH3 HRDOW	0	0.65313E-03	432750.0	3730693.6	126.0	3.66	108.20	6.10	35.00	0.00	YES
TRENCH2 HRDOW	0	0.65313E-03	432564.5	3730573.5	118.2	3.66	138.68	6.10	40.00	0.00	YES
TRENCH1 HRDOW	0	0.65313E-03	432260.8	3730401.6	107.4	3.66	201.17	6.10	35.00	0.00	YES

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID -----	SOURCE IDs -----							
AR	L0000001	L0000002	L0000003	L0000004	L0000005	L0000006	L0000007	,
L0000008	,							
	L0000009	L0000010	L0000011	L0000012	L0000013	L0000014	L0000015	,
L0000016	,							
	L0000017	L0000018	L0000019	L0000020	L0000021	L0000022	L0000023	,
L0000024	,							
	L0000025	L0000026	L0000027	L0000028	L0000029	L0000030	L0000031	,
L0000032	,							
	L0000033	L0000034	L0000035	L0000036	L0000037	L0000038	L0000039	,
L0000040	,							
	L0000041	L0000042	L0000043	L0000044	L0000045	L0000046	L0000047	,
L0000048	,							
	L0000049	L0000050	L0000051	L0000052	L0000053	L0000054	L0000055	,
L0000056	,							
	L0000057	L0000058	L0000059	L0000060	L0000061	L0000062	L0000063	,
L0000064	,							
	L0000065	L0000066	L0000067	L0000068	L0000069	L0000070	L0000071	,
L0000072	,							
	L0000073	L0000074	L0000075	L0000076	L0000077	L0000078	L0000079	,
L0000080	,							
	L0000081	L0000082	L0000083	L0000084	L0000085	L0000086	L0000087	,
L0000088	,							
	L0000089	L0000090	L0000091	L0000092	L0000093	L0000094	L0000095	,
L0000096	,							
	L0000097	L0000098	L0000099	L0000100	L0000101	L0000155	L0000156	,
L0000157	,							
	L0000158	L0000159	L0000160	L0000161	L0000162	L0000163	L0000164	,
L0000165	,							
	L0000166	L0000167	L0000168	L0000169	L0000170	L0000171	L0000172	,
L0000173	,							
	L0000174	L0000175	L0000176	L0000177	L0000178	L0000179	L0000180	,
L0000181	,							
	L0000182	L0000183	L0000184	L0000185	L0000186	L0000187	L0000188	,
L0000189	,							
	L0000190	L0000191	L0000192	L0000193	L0000194	L0000195	L0000196	,
L0000197	,							
	L0000198	L0000199	L0000200	L0000201	L0000202	L0000203	L0000204	,
L0000205	,							
	L0000206	L0000207	L0000208	L0000209	L0000210	L0000211	L0000212	,
L0000213	,							

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID -----	SOURCE IDs -----							
L0000221	L0000214	L0000215	L0000216	L0000217	L0000218	L0000219	L0000220	
L0000229	L0000222	L0000223	L0000224	L0000225	L0000226	L0000227	L0000228	
L0000237	L0000230	L0000231	L0000232	L0000233	L0000234	L0000235	L0000236	
L0000245	L0000238	L0000239	L0000240	L0000241	L0000242	L0000243	L0000244	
L0000253	L0000246	L0000247	L0000248	L0000249	L0000250	L0000251	L0000252	
L0000261	L0000254	L0000255	L0000256	L0000257	L0000258	L0000259	L0000260	
L0000269	L0000262	L0000263	L0000264	L0000265	L0000266	L0000267	L0000268	
L0000277	L0000270	L0000271	L0000272	L0000273	L0000274	L0000275	L0000276	
L0000285	L0000278	L0000279	L0000280	L0000281	L0000282	L0000283	L0000284	
L0000293	L0000286	L0000287	L0000288	L0000289	L0000290	L0000291	L0000292	
L0000301	L0000294	L0000295	L0000296	L0000297	L0000298	L0000299	L0000300	
L0000309	L0000302	L0000303	L0000304	L0000305	L0000306	L0000307	L0000308	
L0000317	L0000310	L0000311	L0000312	L0000313	L0000314	L0000315	L0000316	
L0000325	L0000318	L0000319	L0000320	L0000321	L0000322	L0000323	L0000324	
L0000333	L0000326	L0000327	L0000328	L0000329	L0000330	L0000331	L0000332	
L0000341	L0000334	L0000335	L0000336	L0000337	L0000338	L0000339	L0000340	
L0000349	L0000342	L0000343	L0000344	L0000345	L0000346	L0000347	L0000348	
L0000357	L0000350	L0000351	L0000352	L0000353	L0000354	L0000355	L0000356	
	L0000358	L0000359	L0000360	L0000361				
B B8	B01	B02	B03	B04	B05	B06	B7	

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
-----	-----							
B16	B9	B10	B11	B12	B13	B14	B15	
B24	B17	B18	B19	B20	B21	B22	B23	
B32	B25	B26	B27	B28	B29	B30	B31	
B40	B33	B34	B35	B36	B37	B38	B39	
TRENCH	TRENCH3	TRENCH2	TRENCH1					
TP08	TP01	TP02	TP03	TP04	TP05	TP06	TP07	
TP16	TP09	TP10	TP11	TP12	TP13	TP14	TP15	
ALL B8	B01	B02	B03	B04	B05	B06	B7	
B16	B9	B10	B11	B12	B13	B14	B15	
B24	B17	B18	B19	B20	B21	B22	B23	
B32	B25	B26	B27	B28	B29	B30	B31	
B40	B33	B34	B35	B36	B37	B38	B39	
TP05	B41	B42	B43	TP01	TP02	TP03	TP04	
TP13	TP06	TP07	TP08	TP09	TP10	TP11	TP12	
L0000002	TP14	TP15	TP16	TRENCH3	TRENCH2	TRENCH1	L0000001	
L0000010	L0000003	L0000004	L0000005	L0000006	L0000007	L0000008	L0000009	
L0000018	L0000011	L0000012	L0000013	L0000014	L0000015	L0000016	L0000017	
L0000026	L0000019	L0000020	L0000021	L0000022	L0000023	L0000024	L0000025	
L0000034	L0000027	L0000028	L0000029	L0000030	L0000031	L0000032	L0000033	

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID -----	SOURCE IDs -----							
L0000042	L0000035	L0000036	L0000037	L0000038	L0000039	L0000040	L0000041	
L0000050	L0000043	L0000044	L0000045	L0000046	L0000047	L0000048	L0000049	
L0000058	L0000051	L0000052	L0000053	L0000054	L0000055	L0000056	L0000057	
L0000066	L0000059	L0000060	L0000061	L0000062	L0000063	L0000064	L0000065	
L0000074	L0000067	L0000068	L0000069	L0000070	L0000071	L0000072	L0000073	
L0000082	L0000075	L0000076	L0000077	L0000078	L0000079	L0000080	L0000081	
L0000090	L0000083	L0000084	L0000085	L0000086	L0000087	L0000088	L0000089	
L0000098	L0000091	L0000092	L0000093	L0000094	L0000095	L0000096	L0000097	
L0000159	L0000099	L0000100	L0000101	L0000155	L0000156	L0000157	L0000158	
L0000167	L0000160	L0000161	L0000162	L0000163	L0000164	L0000165	L0000166	
L0000175	L0000168	L0000169	L0000170	L0000171	L0000172	L0000173	L0000174	
L0000183	L0000176	L0000177	L0000178	L0000179	L0000180	L0000181	L0000182	
L0000191	L0000184	L0000185	L0000186	L0000187	L0000188	L0000189	L0000190	
L0000199	L0000192	L0000193	L0000194	L0000195	L0000196	L0000197	L0000198	
L0000207	L0000200	L0000201	L0000202	L0000203	L0000204	L0000205	L0000206	
L0000215	L0000208	L0000209	L0000210	L0000211	L0000212	L0000213	L0000214	
L0000223	L0000216	L0000217	L0000218	L0000219	L0000220	L0000221	L0000222	
L0000231	L0000224	L0000225	L0000226	L0000227	L0000228	L0000229	L0000230	
L0000239	L0000232	L0000233	L0000234	L0000235	L0000236	L0000237	L0000238	
L0000247	L0000240	L0000241	L0000242	L0000243	L0000244	L0000245	L0000246	

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID -----	SOURCE IDs -----							
L0000255	L0000248	L0000249	L0000250	L0000251	L0000252	L0000253	L0000254	,
L0000263	L0000256	L0000257	L0000258	L0000259	L0000260	L0000261	L0000262	,
L0000271	L0000264	L0000265	L0000266	L0000267	L0000268	L0000269	L0000270	,
L0000279	L0000272	L0000273	L0000274	L0000275	L0000276	L0000277	L0000278	,
L0000287	L0000280	L0000281	L0000282	L0000283	L0000284	L0000285	L0000286	,
L0000295	L0000288	L0000289	L0000290	L0000291	L0000292	L0000293	L0000294	,
L0000303	L0000296	L0000297	L0000298	L0000299	L0000300	L0000301	L0000302	,
L0000311	L0000304	L0000305	L0000306	L0000307	L0000308	L0000309	L0000310	,
L0000319	L0000312	L0000313	L0000314	L0000315	L0000316	L0000317	L0000318	,
L0000327	L0000320	L0000321	L0000322	L0000323	L0000324	L0000325	L0000326	,
L0000335	L0000328	L0000329	L0000330	L0000331	L0000332	L0000333	L0000334	,
L0000343	L0000336	L0000337	L0000338	L0000339	L0000340	L0000341	L0000342	,
L0000351	L0000344	L0000345	L0000346	L0000347	L0000348	L0000349	L0000350	,
L0000359	L0000352	L0000353	L0000354	L0000355	L0000356	L0000357	L0000358	,
	L0000360	L0000361						,

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*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----							
B7	3010232.	B01	, B02	, B03	, B04	, B05	, B06	,	
B8	,								
B16	B9	, B10	, B11	, B12	, B13	, B14	, B15	,	
B24	B17	, B18	, B19	, B20	, B21	, B22	, B23	,	
B32	B25	, B26	, B27	, B28	, B29	, B30	, B31	,	
B40	B33	, B34	, B35	, B36	, B37	, B38	, B39	,	
TP05	B41	, B42	, B43	, TP01	, TP02	, TP03	, TP04	,	
TP13	TP06	, TP07	, TP08	, TP09	, TP10	, TP11	, TP12	,	
L0000002	TP14	, TP15	, TP16	, TRENCH3	, TRENCH2	, TRENCH1	, L0000001	,	
L0000010	L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008	, L0000009	,	
L0000018	L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	, L0000017	,	
L0000026	L0000019	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	, L0000025	,	
L0000034	L0000027	, L0000028	, L0000029	, L0000030	, L0000031	, L0000032	, L0000033	,	
L0000042	L0000035	, L0000036	, L0000037	, L0000038	, L0000039	, L0000040	, L0000041	,	
L0000050	L0000043	, L0000044	, L0000045	, L0000046	, L0000047	, L0000048	, L0000049	,	
L0000058	L0000051	, L0000052	, L0000053	, L0000054	, L0000055	, L0000056	, L0000057	,	
L0000066	L0000059	, L0000060	, L0000061	, L0000062	, L0000063	, L0000064	, L0000065	,	
L0000074	L0000067	, L0000068	, L0000069	, L0000070	, L0000071	, L0000072	, L0000073	,	
L0000082	L0000075	, L0000076	, L0000077	, L0000078	, L0000079	, L0000080	, L0000081	,	
L0000090	L0000083	, L0000084	, L0000085	, L0000086	, L0000087	, L0000088	, L0000089	,	
L0000098	L0000091	, L0000092	, L0000093	, L0000094	, L0000095	, L0000096	, L0000097	,	

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*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs						
-----	-----	-----	-----	-----	-----	-----	-----	-----
L0000159	L0000099	L0000100	L0000101	L0000155	L0000156	L0000157	L0000158	,
L0000167	L0000160	L0000161	L0000162	L0000163	L0000164	L0000165	L0000166	,
L0000175	L0000168	L0000169	L0000170	L0000171	L0000172	L0000173	L0000174	,
L0000183	L0000176	L0000177	L0000178	L0000179	L0000180	L0000181	L0000182	,
L0000191	L0000184	L0000185	L0000186	L0000187	L0000188	L0000189	L0000190	,
L0000199	L0000192	L0000193	L0000194	L0000195	L0000196	L0000197	L0000198	,
L0000207	L0000200	L0000201	L0000202	L0000203	L0000204	L0000205	L0000206	,
L0000215	L0000208	L0000209	L0000210	L0000211	L0000212	L0000213	L0000214	,
L0000223	L0000216	L0000217	L0000218	L0000219	L0000220	L0000221	L0000222	,
L0000231	L0000224	L0000225	L0000226	L0000227	L0000228	L0000229	L0000230	,
L0000239	L0000232	L0000233	L0000234	L0000235	L0000236	L0000237	L0000238	,
L0000247	L0000240	L0000241	L0000242	L0000243	L0000244	L0000245	L0000246	,
L0000255	L0000248	L0000249	L0000250	L0000251	L0000252	L0000253	L0000254	,
L0000263	L0000256	L0000257	L0000258	L0000259	L0000260	L0000261	L0000262	,
L0000271	L0000264	L0000265	L0000266	L0000267	L0000268	L0000269	L0000270	,
L0000279	L0000272	L0000273	L0000274	L0000275	L0000276	L0000277	L0000278	,
L0000287	L0000280	L0000281	L0000282	L0000283	L0000284	L0000285	L0000286	,
L0000295	L0000288	L0000289	L0000290	L0000291	L0000292	L0000293	L0000294	,
L0000303	L0000296	L0000297	L0000298	L0000299	L0000300	L0000301	L0000302	,
L0000311	L0000304	L0000305	L0000306	L0000307	L0000308	L0000309	L0000310	,

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----	-----	-----	-----	-----	-----	-----	
L0000319	,	L0000312	, L0000313	, L0000314	, L0000315	, L0000316	, L0000317	, L0000318	,
L0000327	,	L0000320	, L0000321	, L0000322	, L0000323	, L0000324	, L0000325	, L0000326	,
L0000335	,	L0000328	, L0000329	, L0000330	, L0000331	, L0000332	, L0000333	, L0000334	,
L0000343	,	L0000336	, L0000337	, L0000338	, L0000339	, L0000340	, L0000341	, L0000342	,
L0000351	,	L0000344	, L0000345	, L0000346	, L0000347	, L0000348	, L0000349	, L0000350	,
L0000359	,	L0000352	, L0000353	, L0000354	, L0000355	, L0000356	, L0000357	, L0000358	,
		L0000360	, L0000361	,					

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B01		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B02		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B03		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B04		; SOURCE TYPE = AREA													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR		

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01		
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00
24	.0000E+00														
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B05		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B06		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B7		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B8		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B9		; SOURCE TYPE = AREA													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR		

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01		
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B10		; SOURCE TYPE = AREA													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR		

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01		
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00
24	.0000E+00														
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B11		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B12		; SOURCE TYPE = AREA													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR		

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01		
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00
24	.0000E+00														
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B13		; SOURCE TYPE = AREA													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B14		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B15		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B16		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B17		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B18		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B19		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B20		; SOURCE TYPE = AREA													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B21		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B22		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B23		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B24		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B25		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B26		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B27		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B28		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B29		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B30		; SOURCE TYPE = AREA :																	
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR				

DAY OF WEEK = WEEKDAY																			
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01				
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01	17	.0000E+00		
18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00						
DAY OF WEEK = SATURDAY																			
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00		
10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00
20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00										
DAY OF WEEK = SUNDAY																			
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00	9	.0000E+00		
10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00
20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00										

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B31		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B32		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B33		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B34		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B35		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B36		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B37		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B38		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B39		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B40		; SOURCE TYPE = AREA :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B41		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B42		; SOURCE TYPE = AREA													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR		

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01		
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = B43		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP01		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP02		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP03		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP04		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP05		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP06		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP07		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP08		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP09		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP10		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP11		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP12		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP13		; SOURCE TYPE = AREA											
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP14		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP15		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TP16		; SOURCE TYPE = AREA											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TRENCH3		; SOURCE TYPE = AREA		:		:		:		:		:		:	
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TRENCH2		; SOURCE TYPE = AREA		:		:		:		:		:		:	
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = TRENCH1		; SOURCE TYPE = AREA		:		:		:		:		:		:	
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000001		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000002		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000003 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000004 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000005 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000006 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000007 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000008 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000009 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000010		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000011 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000012		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000013		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000014 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000015 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000016 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000017 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000018		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000019		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000020		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000021 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000022		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000023 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000024 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000025 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000026 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000027 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000028		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000029		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000030		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000031 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000032 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000033 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000034 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000035 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000036 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000037 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	17	18	19	20	21	22
16	17	18	19	20	21	22	23	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.1000E+01	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000038 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000039 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000040 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000041		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000042 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000043 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000044 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000045 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000046 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000047		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000048 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000049		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000050		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000051 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000052		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000053 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000054		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000055 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000056 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000057 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000058 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000059 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000060 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000061		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000062		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000063 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000064 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000065 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000066 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000067 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000068		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000069 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000070 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000071 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000072 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000073 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000074 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000075 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000076 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000077 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000078 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000079 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000080		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000081		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000082 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000083 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000084 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000085 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000086		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000087 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000088 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000089		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000090		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000091 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000092		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000093 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000094 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000095 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000096 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000097 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000098 ; SOURCE TYPE = VOLUME :														
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DAY OF WEEK = WEEKDAY														
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY														
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY														
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000099		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000100 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000101 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000155		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000156 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000157 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000158 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000159 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000160		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000161		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000162		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000163		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000164		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000165		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000166 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000167 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000168 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000169 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000170		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000171		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000172		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000173		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000174 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000175 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000176 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000177 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000178 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000179		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000180 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000181 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000182		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000183		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000184 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000185 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000186 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000187 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000188 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000189 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000190 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000191 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000192 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000193		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000194		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000195		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000196 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000197		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000198 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000199 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000200		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000201 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.1000E+01	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000202		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000203		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000204 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000205 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000206 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000207 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000208		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000209 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000210		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000211		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000212		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000213 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000214 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000215 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000216 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000217 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000218		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000219		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000220 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000221		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000222 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000223 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000224 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000225 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000226 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000227 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000228		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000229		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000230		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000231		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000232 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000233 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.1000E+01	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000234 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000235 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000236 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000237 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000238		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000239 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000240		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000241 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000242		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000243 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.1000E+01	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000244 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000245		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000246 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000247 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000248		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000249 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000250		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000251		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000252		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000253		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000254 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000255 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000256 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000257 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000258		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000259		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000260		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000261		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000262 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000263 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000264 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000265		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000266 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000267 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000268		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000269		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000270		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000271 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000272		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000273		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000274 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000275		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000276 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

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SOURCE ID = L0000277    ; SOURCE TYPE = VOLUME    :
  HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR
SCALAR
-----
                                DAY OF WEEK = WEEKDAY
  1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .1000E+01
8 .1000E+01
  9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01    13 .1000E+01    14 .1000E+01    15 .1000E+01
16 .1000E+01
  17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00    21 .0000E+00    22 .0000E+00    23 .0000E+00
24 .0000E+00
                                DAY OF WEEK = SATURDAY
  1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00
8 .0000E+00
  9 .0000E+00    10 .0000E+00    11 .0000E+00    12 .0000E+00    13 .0000E+00    14 .0000E+00    15 .0000E+00
16 .0000E+00
  17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00    21 .0000E+00    22 .0000E+00    23 .0000E+00
24 .0000E+00
                                DAY OF WEEK = SUNDAY
  1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00
8 .0000E+00
  9 .0000E+00    10 .0000E+00    11 .0000E+00    12 .0000E+00    13 .0000E+00    14 .0000E+00    15 .0000E+00
16 .0000E+00
  17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00    21 .0000E+00    22 .0000E+00    23 .0000E+00
24 .0000E+00
  
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000278 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000279		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000280		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000281 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000282		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000283 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000284 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000285 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000286		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000287 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000288		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000289 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	17	18	19	20	21	22
16	17	18	19	20	21	22	23	16	17	18	19	20	21

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000290		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000291 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000292		; SOURCE TYPE = VOLUME													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000293 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000294 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000295 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000296		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000297		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000298		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000299 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	17	18	19	20	21	22	23	24					

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000300		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000301 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000302		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000303		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000304		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000305 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000306		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000307 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000308		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000309		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000310		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000311 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000312 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000313		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000314		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000315		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000316		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000317 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000318		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000319 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
16	17	18	19	20	21	22	23	24	1	2	3	4	5
8	9	10	11	12	13	14	15	16	17	18	19	20	21
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000320		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000321		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000322 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000323 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000324 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000325 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000326		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000327 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000328		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000329		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000330		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000331 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000332 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000333 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000334 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000335 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000336 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24						

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000337 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000338 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6
17	18	19	20	21	22	23	24	1	2	3	4	5	6
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000339 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000340		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000341 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000342		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000343		; SOURCE TYPE = VOLUME											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000344		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000345		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000346		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000347 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000348		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SATURDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00	DAY OF WEEK = SUNDAY											
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000349 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000350		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000351 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14

DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000352		; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000353 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
17	18	19	20	21	22	23	24	17	18	19	20	21	22
17	18	19	20	21	22	23	24	17	18	19	20	21	22

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000354 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000355 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DAY OF WEEK = WEEKDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01	.1000E+01
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SATURDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
DAY OF WEEK = SUNDAY													
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000356 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000357 ; SOURCE TYPE = VOLUME :													
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000358		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000359		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000360		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000361		; SOURCE TYPE = VOLUME :											
SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR	SCALAR

DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.1000E+01
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
24	.0000E+00												

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, Z-ELEV, ZHILL, ZFLAG)
 (METERS)

(432395.0, 3729323.0, 112.0, 112.0, 0.0);	(432445.0, 3729323.0, 113.9, 113.9, 0.0);
(432495.0, 3729323.0, 115.7, 115.7, 0.0);	(432545.0, 3729323.0, 116.4, 116.4, 0.0);
(432395.0, 3729373.0, 113.7, 120.9, 0.0);	(432445.0, 3729373.0, 113.5, 122.8, 0.0);
(432495.0, 3729373.0, 115.0, 115.0, 0.0);	(432545.0, 3729373.0, 116.1, 116.1, 0.0);
(432595.0, 3729373.0, 116.3, 116.3, 0.0);	(432245.0, 3729423.0, 106.0, 120.6, 0.0);
(432295.0, 3729423.0, 108.2, 122.7, 0.0);	(432445.0, 3729423.0, 115.0, 126.5, 0.0);
(432495.0, 3729423.0, 114.7, 127.7, 0.0);	(432545.0, 3729423.0, 116.1, 127.0, 0.0);
(432595.0, 3729423.0, 116.4, 117.7, 0.0);	(432645.0, 3729423.0, 116.8, 116.8, 0.0);
(432195.0, 3729473.0, 105.8, 105.8, 0.0);	(432245.0, 3729473.0, 106.1, 150.5, 0.0);
(432295.0, 3729473.0, 106.4, 151.6, 0.0);	(432345.0, 3729473.0, 110.5, 150.5, 0.0);
(432495.0, 3729473.0, 120.5, 127.0, 0.0);	(432545.0, 3729473.0, 116.2, 149.7, 0.0);
(432595.0, 3729473.0, 119.5, 119.7, 0.0);	(432645.0, 3729473.0, 116.7, 124.5, 0.0);
(432695.0, 3729473.0, 117.0, 126.8, 0.0);	(432145.0, 3729523.0, 104.9, 104.9, 0.0);
(432195.0, 3729523.0, 105.8, 151.6, 0.0);	(432245.0, 3729523.0, 107.4, 151.6, 0.0);
(432295.0, 3729523.0, 107.4, 151.6, 0.0);	(432345.0, 3729523.0, 108.1, 151.6, 0.0);
(432395.0, 3729523.0, 111.8, 151.6, 0.0);	(432545.0, 3729523.0, 121.7, 130.6, 0.0);
(432595.0, 3729523.0, 121.4, 132.1, 0.0);	(432645.0, 3729523.0, 123.0, 123.0, 0.0);
(432695.0, 3729523.0, 124.0, 124.0, 0.0);	(432745.0, 3729523.0, 125.2, 126.7, 0.0);
(432045.0, 3729573.0, 99.5, 99.5, 0.0);	(432095.0, 3729573.0, 101.1, 151.6, 0.0);
(432145.0, 3729573.0, 104.0, 151.6, 0.0);	(432195.0, 3729573.0, 106.5, 151.6, 0.0);
(432245.0, 3729573.0, 107.4, 151.6, 0.0);	(432295.0, 3729573.0, 107.7, 151.6, 0.0);
(432345.0, 3729573.0, 107.4, 158.5, 0.0);	(432395.0, 3729573.0, 108.8, 158.5, 0.0);
(432445.0, 3729573.0, 118.6, 151.6, 0.0);	(432645.0, 3729573.0, 120.5, 150.5, 0.0);
(432695.0, 3729573.0, 121.3, 135.7, 0.0);	(432745.0, 3729573.0, 121.9, 121.9, 0.0);
(431995.0, 3729623.0, 98.9, 98.9, 0.0);	(432045.0, 3729623.0, 100.3, 151.6, 0.0);
(432095.0, 3729623.0, 100.9, 151.6, 0.0);	(432145.0, 3729623.0, 101.7, 158.5, 0.0);
(432195.0, 3729623.0, 107.8, 151.6, 0.0);	(432245.0, 3729623.0, 108.5, 158.5, 0.0);
(432295.0, 3729623.0, 107.4, 158.5, 0.0);	(432345.0, 3729623.0, 107.5, 158.5, 0.0);
(432395.0, 3729623.0, 111.7, 158.5, 0.0);	(432445.0, 3729623.0, 118.6, 151.6, 0.0);
(432645.0, 3729623.0, 120.1, 151.6, 0.0);	(432695.0, 3729623.0, 121.8, 150.5, 0.0);
(432745.0, 3729623.0, 122.1, 138.8, 0.0);	(432795.0, 3729623.0, 123.1, 223.5, 0.0);
(431945.0, 3729673.0, 96.0, 99.3, 0.0);	(431995.0, 3729673.0, 99.5, 99.5, 0.0);
(432045.0, 3729673.0, 100.0, 158.5, 0.0);	(432095.0, 3729673.0, 100.8, 158.5, 0.0);
(432145.0, 3729673.0, 100.9, 158.5, 0.0);	(432195.0, 3729673.0, 102.0, 158.5, 0.0);
(432245.0, 3729673.0, 110.0, 158.5, 0.0);	(432295.0, 3729673.0, 111.6, 158.5, 0.0);
(432345.0, 3729673.0, 111.7, 158.5, 0.0);	(432695.0, 3729673.0, 119.0, 223.5, 0.0);
(432745.0, 3729673.0, 122.4, 223.5, 0.0);	(432795.0, 3729673.0, 123.0, 223.5, 0.0);
(432845.0, 3729673.0, 125.2, 223.5, 0.0);	(431895.0, 3729723.0, 97.3, 97.3, 0.0);
(431945.0, 3729723.0, 97.4, 98.8, 0.0);	(431995.0, 3729723.0, 99.1, 158.5, 0.0);
(432045.0, 3729723.0, 99.8, 158.5, 0.0);	(432095.0, 3729723.0, 100.0, 158.5, 0.0);
(432145.0, 3729723.0, 101.3, 158.5, 0.0);	(432195.0, 3729723.0, 101.9, 158.5, 0.0);
(432245.0, 3729723.0, 103.0, 161.2, 0.0);	(432295.0, 3729723.0, 111.7, 158.5, 0.0);
(432745.0, 3729723.0, 120.8, 223.5, 0.0);	(432795.0, 3729723.0, 125.7, 223.5, 0.0);

(432845.0, 3729723.0,	127.4,	223.5,	0.0);	(431845.0, 3729773.0,	97.0,	160.7,
0.0);						
(431895.0, 3729773.0,	97.1,	160.7,	0.0);	(431945.0, 3729773.0,	98.0,	160.7,
0.0);						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, Z-ELEV, ZHILL, ZFLAG)
 (METERS)

(431995.0, 3729773.0, 98.8, 160.7, 0.0);	(432045.0, 3729773.0, 99.3, 160.7, 0.0);
(432095.0, 3729773.0, 100.4, 158.5, 0.0);	(432145.0, 3729773.0, 100.9, 159.2, 0.0);
(432195.0, 3729773.0, 102.1, 161.2, 0.0);	(432245.0, 3729773.0, 109.1, 158.5, 0.0);
(432795.0, 3729773.0, 126.3, 223.5, 0.0);	(432845.0, 3729773.0, 127.3, 223.5, 0.0);
(432895.0, 3729773.0, 127.9, 228.7, 0.0);	(431745.0, 3729823.0, 94.6, 160.7, 0.0);
(431795.0, 3729823.0, 95.6, 160.7, 0.0);	(431845.0, 3729823.0, 97.1, 160.7, 0.0);
(431895.0, 3729823.0, 97.3, 160.7, 0.0);	(431945.0, 3729823.0, 97.9, 160.7, 0.0);
(431995.0, 3729823.0, 98.5, 160.7, 0.0);	(432045.0, 3729823.0, 99.7, 160.7, 0.0);
(432095.0, 3729823.0, 100.7, 160.7, 0.0);	(432145.0, 3729823.0, 101.3, 161.2, 0.0);
(432195.0, 3729823.0, 106.3, 161.2, 0.0);	(432845.0, 3729823.0, 128.5, 228.7, 0.0);
(432895.0, 3729823.0, 129.2, 228.7, 0.0);	(432945.0, 3729823.0, 129.4, 228.7, 0.0);
(431695.0, 3729873.0, 93.7, 160.7, 0.0);	(431745.0, 3729873.0, 95.0, 160.7, 0.0);
(431795.0, 3729873.0, 96.3, 160.7, 0.0);	(431845.0, 3729873.0, 98.1, 160.7, 0.0);
(431895.0, 3729873.0, 97.5, 160.7, 0.0);	(431945.0, 3729873.0, 98.2, 160.7, 0.0);
(431995.0, 3729873.0, 98.9, 160.7, 0.0);	(432045.0, 3729873.0, 100.0, 160.7, 0.0);
(432095.0, 3729873.0, 100.3, 161.2, 0.0);	(432145.0, 3729873.0, 103.6, 161.2, 0.0);
(432845.0, 3729873.0, 124.4, 228.7, 0.0);	(432895.0, 3729873.0, 128.6, 228.7, 0.0);
(432945.0, 3729873.0, 129.4, 228.7, 0.0);	(431645.0, 3729923.0, 92.7, 160.7, 0.0);
(431695.0, 3729923.0, 93.1, 160.7, 0.0);	(431745.0, 3729923.0, 95.6, 160.7, 0.0);
(431795.0, 3729923.0, 97.1, 160.7, 0.0);	(431845.0, 3729923.0, 97.2, 160.7, 0.0);
(431895.0, 3729923.0, 98.4, 160.7, 0.0);	(431945.0, 3729923.0, 98.6, 160.7, 0.0);
(431995.0, 3729923.0, 99.5, 160.7, 0.0);	(432045.0, 3729923.0, 99.5, 160.7, 0.0);
(432895.0, 3729923.0, 129.4, 228.7, 0.0);	(432945.0, 3729923.0, 133.6, 228.7, 0.0);
(432995.0, 3729923.0, 133.5, 228.7, 0.0);	(431595.0, 3729973.0, 91.8, 160.7, 0.0);
(431645.0, 3729973.0, 91.5, 160.7, 0.0);	(431695.0, 3729973.0, 94.2, 160.7, 0.0);
(431745.0, 3729973.0, 96.1, 160.7, 0.0);	(431795.0, 3729973.0, 96.8, 160.7, 0.0);
(431845.0, 3729973.0, 97.4, 160.7, 0.0);	(431895.0, 3729973.0, 98.7, 160.7, 0.0);
(431945.0, 3729973.0, 99.1, 160.7, 0.0);	(431995.0, 3729973.0, 99.2, 160.7, 0.0);
(432945.0, 3729973.0, 132.3, 228.7, 0.0);	(432995.0, 3729973.0, 133.7, 228.7, 0.0);
(431545.0, 3730023.0, 91.7, 160.7, 0.0);	(431595.0, 3730023.0, 92.1, 160.7, 0.0);
(431645.0, 3730023.0, 92.9, 160.7, 0.0);	(431695.0, 3730023.0, 94.6, 160.7, 0.0);
(431745.0, 3730023.0, 95.6, 160.7, 0.0);	(431795.0, 3730023.0, 96.2, 160.7, 0.0);
(431845.0, 3730023.0, 97.8, 160.7, 0.0);	(431895.0, 3730023.0, 98.2, 160.7, 0.0);
(431945.0, 3730023.0, 98.3, 160.7, 0.0);	(432945.0, 3730023.0, 130.5, 247.4, 0.0);
(432995.0, 3730023.0, 134.9, 228.7, 0.0);	(431495.0, 3730073.0, 91.1, 160.7, 0.0);
(431545.0, 3730073.0, 90.7, 160.7, 0.0);	(431595.0, 3730073.0, 91.9, 160.7, 0.0);
(431645.0, 3730073.0, 94.2, 160.7, 0.0);	(431695.0, 3730073.0, 95.3, 160.7, 0.0);
(431745.0, 3730073.0, 96.2, 160.7, 0.0);	(431795.0, 3730073.0, 96.8, 160.7, 0.0);
(431845.0, 3730073.0, 97.2, 160.7, 0.0);	(431895.0, 3730073.0, 98.8, 160.7, 0.0);
(432945.0, 3730073.0, 131.9, 247.4, 0.0);	(432995.0, 3730073.0, 134.9, 247.4, 0.0);
(431395.0, 3730123.0, 89.3, 160.7, 0.0);	(431445.0, 3730123.0, 90.4, 160.7, 0.0);
(431495.0, 3730123.0, 90.2, 160.7, 0.0);	(431545.0, 3730123.0, 90.0, 160.7, 0.0);
(431595.0, 3730123.0, 90.8, 160.7, 0.0);	(431645.0, 3730123.0, 95.2, 160.7, 0.0);

(431695.0, 3730123.0,	96.6,	160.7,	0.0);	(431745.0, 3730123.0,	97.1,	160.7,
0.0);						
(431795.0, 3730123.0,	97.7,	160.7,	0.0);	(431845.0, 3730123.0,	99.3,	160.7,
0.0);						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, Z-ELEV, ZHILL, ZFLAG)
 (METERS)

(432995.0, 3730123.0, 135.4, 247.4, 0.0);	(431345.0, 3730173.0, 87.8, 160.7, 0.0);
(431395.0, 3730173.0, 89.9, 160.7, 0.0);	(431445.0, 3730173.0, 90.9, 160.7, 0.0);
(431495.0, 3730173.0, 91.1, 160.7, 0.0);	(431545.0, 3730173.0, 90.4, 160.7, 0.0);
(431595.0, 3730173.0, 91.3, 160.7, 0.0);	(431645.0, 3730173.0, 92.7, 160.7, 0.0);
(431695.0, 3730173.0, 97.9, 160.7, 0.0);	(431745.0, 3730173.0, 99.1, 160.7, 0.0);
(431795.0, 3730173.0, 99.9, 160.7, 0.0);	(431295.0, 3730223.0, 87.2, 160.7, 0.0);
(431345.0, 3730223.0, 88.1, 160.7, 0.0);	(431395.0, 3730223.0, 90.3, 160.7, 0.0);
(431445.0, 3730223.0, 91.6, 160.7, 0.0);	(431495.0, 3730223.0, 92.3, 160.7, 0.0);
(431545.0, 3730223.0, 92.2, 160.7, 0.0);	(431595.0, 3730223.0, 92.2, 160.7, 0.0);
(431645.0, 3730223.0, 94.6, 160.7, 0.0);	(431695.0, 3730223.0, 95.7, 160.7, 0.0);
(431745.0, 3730223.0, 100.3, 160.7, 0.0);	(431245.0, 3730273.0, 87.2, 93.9, 0.0);
(431295.0, 3730273.0, 88.0, 160.7, 0.0);	(431345.0, 3730273.0, 89.5, 160.7, 0.0);
(431395.0, 3730273.0, 90.8, 160.7, 0.0);	(431445.0, 3730273.0, 91.8, 160.7, 0.0);
(431495.0, 3730273.0, 92.8, 160.7, 0.0);	(431545.0, 3730273.0, 93.9, 160.7, 0.0);
(431595.0, 3730273.0, 94.4, 160.7, 0.0);	(431645.0, 3730273.0, 95.8, 160.7, 0.0);
(431695.0, 3730273.0, 97.9, 173.8, 0.0);	(431195.0, 3730323.0, 92.5, 92.5, 0.0);
(431245.0, 3730323.0, 91.8, 93.9, 0.0);	(431295.0, 3730323.0, 88.6, 160.7, 0.0);
(431345.0, 3730323.0, 89.9, 160.7, 0.0);	(431395.0, 3730323.0, 91.3, 160.7, 0.0);
(431445.0, 3730323.0, 92.1, 160.7, 0.0);	(431495.0, 3730323.0, 93.3, 160.7, 0.0);
(431545.0, 3730323.0, 94.2, 160.7, 0.0);	(431595.0, 3730323.0, 95.2, 173.3, 0.0);
(431645.0, 3730323.0, 97.1, 173.8, 0.0);	(431145.0, 3730373.0, 92.5, 92.5, 0.0);
(431195.0, 3730373.0, 93.7, 93.7, 0.0);	(431245.0, 3730373.0, 94.3, 94.3, 0.0);
(431295.0, 3730373.0, 90.6, 94.7, 0.0);	(431345.0, 3730373.0, 90.5, 160.7, 0.0);
(431395.0, 3730373.0, 91.6, 160.7, 0.0);	(431445.0, 3730373.0, 92.6, 160.7, 0.0);
(431495.0, 3730373.0, 93.5, 160.7, 0.0);	(431545.0, 3730373.0, 94.5, 160.7, 0.0);
(431595.0, 3730373.0, 96.2, 173.8, 0.0);	(431095.0, 3730423.0, 92.4, 92.4, 0.0);
(431145.0, 3730423.0, 93.6, 93.6, 0.0);	(431195.0, 3730423.0, 94.2, 94.2, 0.0);
(431245.0, 3730423.0, 94.5, 94.5, 0.0);	(431295.0, 3730423.0, 91.0, 95.5, 0.0);
(431345.0, 3730423.0, 91.0, 160.7, 0.0);	(431395.0, 3730423.0, 92.1, 160.7, 0.0);
(431445.0, 3730423.0, 93.1, 160.7, 0.0);	(431495.0, 3730423.0, 93.9, 160.7, 0.0);
(431545.0, 3730423.0, 94.9, 173.8, 0.0);	(431595.0, 3730423.0, 103.8, 160.7, 0.0);
(431045.0, 3730473.0, 92.8, 92.8, 0.0);	(431095.0, 3730473.0, 94.5, 94.5, 0.0);
(431145.0, 3730473.0, 94.1, 94.1, 0.0);	(431195.0, 3730473.0, 94.6, 94.6, 0.0);
(431245.0, 3730473.0, 95.4, 95.4, 0.0);	(431295.0, 3730473.0, 95.8, 95.8, 0.0);
(431345.0, 3730473.0, 92.0, 160.7, 0.0);	(431395.0, 3730473.0, 92.8, 160.7, 0.0);
(431445.0, 3730473.0, 93.9, 160.7, 0.0);	(431495.0, 3730473.0, 94.3, 173.8, 0.0);
(431545.0, 3730473.0, 101.5, 160.7, 0.0);	(431045.0, 3730523.0, 93.8, 93.8, 0.0);
(431095.0, 3730523.0, 94.2, 94.2, 0.0);	(431145.0, 3730523.0, 95.1, 95.1, 0.0);
(431195.0, 3730523.0, 95.3, 95.3, 0.0);	(431245.0, 3730523.0, 96.0, 96.0, 0.0);
(431295.0, 3730523.0, 96.7, 96.7, 0.0);	(431345.0, 3730523.0, 96.9, 96.9, 0.0);
(431395.0, 3730523.0, 93.6, 160.7, 0.0);	(431445.0, 3730523.0, 94.2, 160.7, 0.0);
(431495.0, 3730523.0, 94.5, 173.8, 0.0);	(431545.0, 3730523.0, 102.7, 160.7, 0.0);
(431045.0, 3730573.0, 91.3, 93.8, 0.0);	(431095.0, 3730573.0, 94.2, 94.2, 0.0);

(431145.0, 3730573.0,	95.0,	95.0,	0.0);	(431195.0, 3730573.0,	96.2,	96.2,
0.0);						
(431245.0, 3730573.0,	96.7,	96.7,	0.0);	(431295.0, 3730573.0,	97.6,	97.6,
0.0);						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, Z-ELEV, ZHILL, ZFLAG)
 (METERS)

(431345.0, 3730573.0, 98.1, 98.1, 0.0);	(431395.0, 3730573.0, 98.1, 98.1, 0.0);
(431445.0, 3730573.0, 94.7, 160.7, 0.0);	(431495.0, 3730573.0, 99.7, 160.7, 0.0);
(431045.0, 3730623.0, 94.0, 94.0, 0.0);	(431095.0, 3730623.0, 94.5, 94.5, 0.0);
(431145.0, 3730623.0, 95.2, 95.2, 0.0);	(431195.0, 3730623.0, 95.8, 95.8, 0.0);
(431245.0, 3730623.0, 97.6, 97.6, 0.0);	(431295.0, 3730623.0, 98.2, 98.2, 0.0);
(431345.0, 3730623.0, 99.0, 99.0, 0.0);	(431395.0, 3730623.0, 99.7, 99.7, 0.0);
(431445.0, 3730623.0, 95.8, 173.3, 0.0);	(431495.0, 3730623.0, 104.3, 104.3, 0.0);
(431045.0, 3730673.0, 94.6, 94.6, 0.0);	(431095.0, 3730673.0, 94.9, 94.9, 0.0);
(431145.0, 3730673.0, 95.5, 95.5, 0.0);	(431195.0, 3730673.0, 96.1, 96.1, 0.0);
(431245.0, 3730673.0, 96.9, 96.9, 0.0);	(431295.0, 3730673.0, 99.0, 99.0, 0.0);
(431345.0, 3730673.0, 99.7, 99.7, 0.0);	(431395.0, 3730673.0, 100.4, 100.4, 0.0);
(431445.0, 3730673.0, 101.5, 101.5, 0.0);	(431045.0, 3730723.0, 95.2, 95.2, 0.0);
(431095.0, 3730723.0, 95.5, 95.5, 0.0);	(431145.0, 3730723.0, 95.8, 95.8, 0.0);
(431195.0, 3730723.0, 96.3, 96.3, 0.0);	(431245.0, 3730723.0, 97.0, 97.0, 0.0);
(431295.0, 3730723.0, 98.3, 98.3, 0.0);	(431345.0, 3730723.0, 100.4, 100.4, 0.0);
(431395.0, 3730723.0, 101.6, 101.6, 0.0);	(431445.0, 3730723.0, 102.2, 102.2, 0.0);
(431045.0, 3730773.0, 95.1, 95.1, 0.0);	(431095.0, 3730773.0, 96.0, 96.0, 0.0);
(431145.0, 3730773.0, 96.3, 96.3, 0.0);	(431195.0, 3730773.0, 96.7, 96.7, 0.0);
(431245.0, 3730773.0, 97.3, 97.3, 0.0);	(431295.0, 3730773.0, 97.9, 97.9, 0.0);
(431345.0, 3730773.0, 100.0, 100.0, 0.0);	(431395.0, 3730773.0, 102.2, 102.2, 0.0);
(431445.0, 3730773.0, 102.8, 102.8, 0.0);	(431045.0, 3730823.0, 95.1, 95.1, 0.0);
(431095.0, 3730823.0, 96.1, 96.1, 0.0);	(431145.0, 3730823.0, 96.7, 96.7, 0.0);
(431195.0, 3730823.0, 97.1, 97.1, 0.0);	(431245.0, 3730823.0, 97.7, 97.7, 0.0);
(431295.0, 3730823.0, 98.3, 98.3, 0.0);	(431345.0, 3730823.0, 99.0, 99.0, 0.0);
(431395.0, 3730823.0, 102.4, 102.4, 0.0);	(431445.0, 3730823.0, 104.0, 104.0, 0.0);
(431045.0, 3730873.0, 94.9, 94.9, 0.0);	(431095.0, 3730873.0, 95.9, 95.9, 0.0);
(431145.0, 3730873.0, 96.9, 96.9, 0.0);	(431195.0, 3730873.0, 97.5, 97.5, 0.0);
(431245.0, 3730873.0, 97.9, 97.9, 0.0);	(431295.0, 3730873.0, 98.7, 98.7, 0.0);
(431345.0, 3730873.0, 99.4, 99.4, 0.0);	(431395.0, 3730873.0, 100.6, 103.8, 0.0);
(431445.0, 3730873.0, 104.6, 104.6, 0.0);	(431836.0, 3730841.0, 112.1, 173.8, 0.0);
(431836.0, 3730891.0, 112.8, 173.8, 0.0);	(431886.0, 3730891.0, 116.0, 173.8, 0.0);
(431836.0, 3730941.0, 113.5, 173.8, 0.0);	(431886.0, 3730941.0, 114.8, 173.8, 0.0);
(431936.0, 3730941.0, 117.6, 173.8, 0.0);	(431886.0, 3730991.0, 115.3, 173.8, 0.0);
(431936.0, 3730991.0, 116.7, 173.8, 0.0);	(431986.0, 3730991.0, 119.7, 173.8, 0.0);
(432036.0, 3730991.0, 124.6, 173.8, 0.0);	

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: MSVJ_V9_ADJU\MSVJ_v9.SFC Met Version:
 16216
 Profile file: MSVJ_V9_ADJU\MSVJ_v9.PFL
 Surface format: FREE
 Profile format: FREE
 Surface station no.: 93184 Upper air station no.: 3190
 Name: UNKNOWN Name: UNKNOWN
 Year: 2011 Year: 2011

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
11	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	1.30	54.	9.1	999.0	-9.0		
11	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	190.	9.1	999.0	-9.0		
11	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	133.	9.1	999.0	-9.0		
11	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	999.00	999.	-9.0	999.0	-9.0		
11	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	999.00	999.	-9.0	999.0	-9.0		
11	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	151.	9.1	999.0	-9.0		
11	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	42.	9.1	999.0	-9.0		
11	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.53	0.90	28.	9.1	999.0	-9.0		
11	01	01	1	09	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.31	0.90	95.	9.1	999.0	-9.0		
11	01	01	1	10	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.24	0.90	211.	9.1	999.0	-9.0		
11	01	01	1	11	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.21	1.30	258.	9.1	999.0	-9.0		
11	01	01	1	12	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.20	1.30	268.	9.1	999.0	-9.0		
11	01	01	1	13	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.20	1.30	220.	9.1	999.0	-9.0		
11	01	01	1	14	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.21	1.30	247.	9.1	999.0	-9.0		
11	01	01	1	15	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.25	1.30	249.	9.1	999.0	-9.0		
11	01	01	1	16	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.33	2.20	209.	9.1	999.0	-9.0		
11	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	0.61	1.30	196.	9.1	999.0	-9.0		
11	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	132.	9.1	999.0	-9.0		
11	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	91.	9.1	999.0	-9.0		
11	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	67.	9.1	999.0	-9.0		
11	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	72.	9.1	999.0	-9.0		
11	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	65.	9.1	999.0	-9.0		
11	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	61.	9.1	999.0	-9.0		
11	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.29	2.80	2.80	1.00	0.90	41.	9.1	999.0	-9.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB	TMP	sigmaA	sigmaW	sigmaV
11	01	01	01	5.5	0	-999.	-99.00	-999.0	99.0	-99.00	-99.00	-99.00
11	01	01	01	9.1	1	54.	1.30	-999.0	99.0	-99.00	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432395.00	3729323.00	0.89623	432445.00	3729323.00	0.89932
432495.00	3729323.00	0.89854	432545.00	3729323.00	0.89366
432395.00	3729373.00	0.98917	432445.00	3729373.00	0.99012
432495.00	3729373.00	0.98887	432545.00	3729373.00	0.98302
432595.00	3729373.00	0.97290	432245.00	3729423.00	1.04954
432295.00	3729423.00	1.06989	432445.00	3729423.00	1.10089
432495.00	3729423.00	1.09694	432545.00	3729423.00	1.08965
432595.00	3729423.00	1.07670	432645.00	3729423.00	1.05986
432195.00	3729473.00	1.14225	432245.00	3729473.00	1.16879
432295.00	3729473.00	1.19022	432345.00	3729473.00	1.21445
432495.00	3729473.00	1.22754	432545.00	3729473.00	1.21837
432595.00	3729473.00	1.20028	432645.00	3729473.00	1.17953
432695.00	3729473.00	1.15347	432145.00	3729523.00	1.23708
432195.00	3729523.00	1.27833	432245.00	3729523.00	1.31657
432295.00	3729523.00	1.34439	432345.00	3729523.00	1.36648
432395.00	3729523.00	1.38738	432545.00	3729523.00	1.37058
432595.00	3729523.00	1.34867	432645.00	3729523.00	1.31470
432695.00	3729523.00	1.27600	432745.00	3729523.00	1.23301
432045.00	3729573.00	1.25973	432095.00	3729573.00	1.32235
432145.00	3729573.00	1.38673	432195.00	3729573.00	1.44644
432245.00	3729573.00	1.49546	432295.00	3729573.00	1.53414
432345.00	3729573.00	1.56102	432395.00	3729573.00	1.58156
432445.00	3729573.00	1.60509	432645.00	3729573.00	1.49903
432695.00	3729573.00	1.45080	432745.00	3729573.00	1.39821
431995.00	3729623.00	1.32665	432045.00	3729623.00	1.40732
432095.00	3729623.00	1.48577	432145.00	3729623.00	1.56356
432195.00	3729623.00	1.65721	432245.00	3729623.00	1.72459
432295.00	3729623.00	1.77372	432345.00	3729623.00	1.81302
432395.00	3729623.00	1.85233	432445.00	3729623.00	1.87125
432645.00	3729623.00	1.72123	432695.00	3729623.00	1.65252
432745.00	3729623.00	1.58256	432795.00	3729623.00	1.50686
431945.00	3729673.00	1.37016	431995.00	3729673.00	1.47648
432045.00	3729673.00	1.57770	432095.00	3729673.00	1.68298
432145.00	3729673.00	1.78579	432195.00	3729673.00	1.89037
432245.00	3729673.00	2.02145	432295.00	3729673.00	2.10777
432345.00	3729673.00	2.16712	432695.00	3729673.00	1.91222
432745.00	3729673.00	1.80688	432795.00	3729673.00	1.70681
432845.00	3729673.00	1.59853	431895.00	3729723.00	1.40790
431945.00	3729723.00	1.51896	431995.00	3729723.00	1.64600
432045.00	3729723.00	1.77924	432095.00	3729723.00	1.91806

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432145.00	3729723.00	2.06836	432195.00	3729723.00	2.21624
432245.00	3729723.00	2.35994	432295.00	3729723.00	2.53777
432745.00	3729723.00	2.08911	432795.00	3729723.00	1.92878
432845.00	3729723.00	1.78618	431845.00	3729773.00	1.41998
431895.00	3729773.00	1.54397	431945.00	3729773.00	1.68518
431995.00	3729773.00	1.84215	432045.00	3729773.00	2.01535
432095.00	3729773.00	2.21042	432145.00	3729773.00	2.41771
432195.00	3729773.00	2.64208	432245.00	3729773.00	2.91776
432795.00	3729773.00	2.20667	432845.00	3729773.00	2.02476
432895.00	3729773.00	1.86168	431745.00	3729823.00	1.29042
431795.00	3729823.00	1.40969	431845.00	3729823.00	1.54656
431895.00	3729823.00	1.69681	431945.00	3729823.00	1.86999
431995.00	3729823.00	2.06798	432045.00	3729823.00	2.29863
432095.00	3729823.00	2.56348	432145.00	3729823.00	2.86382
432195.00	3729823.00	3.24761	432845.00	3729823.00	2.28537
432895.00	3729823.00	2.07308	432945.00	3729823.00	1.89027
431695.00	3729873.00	1.26059	431745.00	3729873.00	1.38402
431795.00	3729873.00	1.52537	431845.00	3729873.00	1.68988
431895.00	3729873.00	1.86848	431945.00	3729873.00	2.08179
431995.00	3729873.00	2.33126	432045.00	3729873.00	2.62939
432095.00	3729873.00	2.98138	432145.00	3729873.00	3.44375
432845.00	3729873.00	2.63970	432895.00	3729873.00	2.33025
432945.00	3729873.00	2.09191	431645.00	3729923.00	1.21721
431695.00	3729923.00	1.33786	431745.00	3729923.00	1.48470
431795.00	3729923.00	1.65182	431845.00	3729923.00	1.83972
431895.00	3729923.00	2.06499	431945.00	3729923.00	2.32450
431995.00	3729923.00	2.63709	432045.00	3729923.00	3.00768
432895.00	3729923.00	2.58938	432945.00	3729923.00	2.23843
432995.00	3729923.00	2.00912	431595.00	3729973.00	1.16308
431645.00	3729973.00	1.27846	431695.00	3729973.00	1.42322
431745.00	3729973.00	1.59059	431795.00	3729973.00	1.78358
431845.00	3729973.00	2.01137	431895.00	3729973.00	2.28589
431945.00	3729973.00	2.60780	431995.00	3729973.00	2.99057
432945.00	3729973.00	2.48038	432995.00	3729973.00	2.17881
431545.00	3730023.00	1.10290	431595.00	3730023.00	1.21458
431645.00	3730023.00	1.34720	431695.00	3730023.00	1.50784
431745.00	3730023.00	1.69701	431795.00	3730023.00	1.92300
431845.00	3730023.00	2.20312	431895.00	3730023.00	2.53570
431945.00	3730023.00	2.93640	432945.00	3730023.00	2.74171
432995.00	3730023.00	2.33086	431495.00	3730073.00	1.03706

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730073.00	1.13852	431595.00	3730073.00	1.26239
431645.00	3730073.00	1.41413	431695.00	3730073.00	1.59252
431745.00	3730073.00	1.80966	431795.00	3730073.00	2.07568
431845.00	3730073.00	2.40680	431895.00	3730073.00	2.83486
432945.00	3730073.00	2.94540	432995.00	3730073.00	2.50444
431395.00	3730123.00	0.88806	431445.00	3730123.00	0.96976
431495.00	3730123.00	1.06227	431545.00	3730123.00	1.17130
431595.00	3730123.00	1.30368	431645.00	3730123.00	1.47602
431695.00	3730123.00	1.67658	431745.00	3730123.00	1.92168
431795.00	3730123.00	2.23300	431845.00	3730123.00	2.64556
432995.00	3730123.00	2.66676	431345.00	3730173.00	0.82903
431395.00	3730173.00	0.90425	431445.00	3730173.00	0.98953
431495.00	3730173.00	1.08792	431545.00	3730173.00	1.20213
431595.00	3730173.00	1.34404	431645.00	3730173.00	1.51913
431695.00	3730173.00	1.75331	431745.00	3730173.00	2.03217
431795.00	3730173.00	2.39372	431295.00	3730223.00	0.77427
431345.00	3730223.00	0.83916	431395.00	3730223.00	0.91691
431445.00	3730223.00	1.00588	431495.00	3730223.00	1.10975
431545.00	3730223.00	1.23155	431595.00	3730223.00	1.37883
431645.00	3730223.00	1.56944	431695.00	3730223.00	1.80317
431745.00	3730223.00	2.12536	431245.00	3730273.00	0.72341
431295.00	3730273.00	0.78094	431345.00	3730273.00	0.84833
431395.00	3730273.00	0.92642	431445.00	3730273.00	1.01697
431495.00	3730273.00	1.12470	431545.00	3730273.00	1.25419
431595.00	3730273.00	1.40992	431645.00	3730273.00	1.60637
431695.00	3730273.00	1.85912	431195.00	3730323.00	0.68252
431245.00	3730323.00	0.73220	431295.00	3730323.00	0.78501
431345.00	3730323.00	0.85294	431395.00	3730323.00	0.93207
431445.00	3730323.00	1.02398	431495.00	3730323.00	1.13391
431545.00	3730323.00	1.26563	431595.00	3730323.00	1.42692
431645.00	3730323.00	1.63159	431145.00	3730373.00	0.63826
431195.00	3730373.00	0.68444	431245.00	3730373.00	0.73608
431295.00	3730373.00	0.78864	431345.00	3730373.00	0.85475
431395.00	3730373.00	0.93371	431445.00	3730373.00	1.02649
431495.00	3730373.00	1.13654	431545.00	3730373.00	1.26948
431595.00	3730373.00	1.43476	431095.00	3730423.00	0.59738
431145.00	3730423.00	0.63827	431195.00	3730423.00	0.68360
431245.00	3730423.00	0.73475	431295.00	3730423.00	0.78739
431345.00	3730423.00	0.85345	431395.00	3730423.00	0.93214
431445.00	3730423.00	1.02431	431495.00	3730423.00	1.13375

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730423.00	1.26602	431595.00	3730423.00	1.45318
431045.00	3730473.00	0.56048	431095.00	3730473.00	0.59724
431145.00	3730473.00	0.63620	431195.00	3730473.00	0.68106
431245.00	3730473.00	0.73219	431295.00	3730473.00	0.79016
431345.00	3730473.00	0.84984	431395.00	3730473.00	0.92723
431445.00	3730473.00	1.01839	431495.00	3730473.00	1.12521
431545.00	3730473.00	1.27190	431045.00	3730523.00	0.55843
431095.00	3730523.00	0.59348	431145.00	3730523.00	0.63321
431195.00	3730523.00	0.67714	431245.00	3730523.00	0.72746
431295.00	3730523.00	0.78471	431345.00	3730523.00	0.84990
431395.00	3730523.00	0.91897	431445.00	3730523.00	1.00718
431495.00	3730523.00	1.11081	431545.00	3730523.00	1.25561
431045.00	3730573.00	0.55223	431095.00	3730573.00	0.58887
431145.00	3730573.00	0.62778	431195.00	3730573.00	0.67187
431245.00	3730573.00	0.72077	431295.00	3730573.00	0.77713
431345.00	3730573.00	0.84100	431395.00	3730573.00	0.91391
431445.00	3730573.00	0.99206	431495.00	3730573.00	1.10227
431045.00	3730623.00	0.54971	431095.00	3730623.00	0.58352
431145.00	3730623.00	0.62130	431195.00	3730623.00	0.66365
431245.00	3730623.00	0.71263	431295.00	3730623.00	0.76679
431345.00	3730623.00	0.82892	431395.00	3730623.00	0.90035
431445.00	3730623.00	0.97456	431495.00	3730623.00	1.08684
431045.00	3730673.00	0.54447	431095.00	3730673.00	0.57713
431145.00	3730673.00	0.61377	431195.00	3730673.00	0.65479
431245.00	3730673.00	0.70099	431295.00	3730673.00	0.75484
431345.00	3730673.00	0.81431	431395.00	3730673.00	0.88253
431445.00	3730673.00	0.96194	431045.00	3730723.00	0.53823
431095.00	3730723.00	0.56995	431145.00	3730723.00	0.60521
431195.00	3730723.00	0.64457	431245.00	3730723.00	0.68873
431295.00	3730723.00	0.73933	431345.00	3730723.00	0.79773
431395.00	3730723.00	0.86316	431445.00	3730723.00	0.93731
431045.00	3730773.00	0.53079	431095.00	3730773.00	0.56186
431145.00	3730773.00	0.59571	431195.00	3730773.00	0.63343
431245.00	3730773.00	0.67563	431295.00	3730773.00	0.72297
431345.00	3730773.00	0.77824	431395.00	3730773.00	0.84115
431445.00	3730773.00	0.91074	431045.00	3730823.00	0.52269
431095.00	3730823.00	0.55267	431145.00	3730823.00	0.58541
431195.00	3730823.00	0.62139	431245.00	3730823.00	0.66157
431295.00	3730823.00	0.70645	431345.00	3730823.00	0.75692
431395.00	3730823.00	0.81740	431445.00	3730823.00	0.88369

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **						
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
431045.00	3730873.00	0.51389	431095.00	3730873.00	0.54260	
431145.00	3730873.00	0.57423	431195.00	3730873.00	0.60861	
431245.00	3730873.00	0.64662	431295.00	3730873.00	0.68917	
431345.00	3730873.00	0.73656	431395.00	3730873.00	0.79036	
431445.00	3730873.00	0.85478	431836.00	3730841.00	1.85899	
431836.00	3730891.00	1.70199	431886.00	3730891.00	1.90083	
431836.00	3730941.00	1.56244	431886.00	3730941.00	1.72132	
431936.00	3730941.00	1.90319	431886.00	3730991.00	1.56969	
431936.00	3730991.00	1.71539	431986.00	3730991.00	1.88035	
432036.00	3730991.00	2.06221				

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432395.00	3729323.00	0.84695	432445.00	3729323.00	0.84369
432495.00	3729323.00	0.86158	432545.00	3729323.00	0.89444
432395.00	3729373.00	0.96455	432445.00	3729373.00	0.97110
432495.00	3729373.00	0.99353	432545.00	3729373.00	1.03311
432595.00	3729373.00	1.08775	432245.00	3729423.00	1.34998
432295.00	3729423.00	1.23692	432445.00	3729423.00	1.12246
432495.00	3729423.00	1.15768	432545.00	3729423.00	1.20512
432595.00	3729423.00	1.26888	432645.00	3729423.00	1.33894
432195.00	3729473.00	1.76439	432245.00	3729473.00	1.58699
432295.00	3729473.00	1.45974	432345.00	3729473.00	1.37328
432495.00	3729473.00	1.33081	432545.00	3729473.00	1.42223
432595.00	3729473.00	1.47956	432645.00	3729473.00	1.57543
432695.00	3729473.00	1.65075	432145.00	3729523.00	2.38495
432195.00	3729523.00	2.10483	432245.00	3729523.00	1.88558
432295.00	3729523.00	1.73618	432345.00	3729523.00	1.64419
432395.00	3729523.00	1.58516	432545.00	3729523.00	1.66112
432595.00	3729523.00	1.75310	432645.00	3729523.00	1.83576
432695.00	3729523.00	1.91434	432745.00	3729523.00	1.97855
432045.00	3729573.00	3.67335	432095.00	3729573.00	3.26483
432145.00	3729573.00	2.89063	432195.00	3729573.00	2.55172
432245.00	3729573.00	2.28953	432295.00	3729573.00	2.10981
432345.00	3729573.00	2.00243	432395.00	3729573.00	1.95696
432445.00	3729573.00	1.88993	432645.00	3729573.00	2.22462
432695.00	3729573.00	2.30304	432745.00	3729573.00	2.36210
431995.00	3729623.00	4.96990	432045.00	3729623.00	4.48098
432095.00	3729623.00	3.99445	432145.00	3729623.00	3.55142
432195.00	3729623.00	3.13162	432245.00	3729623.00	2.83270
432295.00	3729623.00	2.61999	432345.00	3729623.00	2.48893
432395.00	3729623.00	2.39778	432445.00	3729623.00	2.34411
432645.00	3729623.00	2.71151	432695.00	3729623.00	2.77340
432745.00	3729623.00	2.81786	432795.00	3729623.00	2.82760
431945.00	3729673.00	6.58326	431995.00	3729673.00	6.09874
432045.00	3729673.00	5.53169	432095.00	3729673.00	4.97004
432145.00	3729673.00	4.44397	432195.00	3729673.00	3.99149
432245.00	3729673.00	3.58457	432295.00	3729673.00	3.27273
432345.00	3729673.00	3.11790	432695.00	3729673.00	3.40400
432745.00	3729673.00	3.38637	432795.00	3729673.00	3.35269
432845.00	3729673.00	3.26988	431895.00	3729723.00	8.57182
431945.00	3729723.00	8.12327	431995.00	3729723.00	7.57504
432045.00	3729723.00	6.94187	432095.00	3729723.00	6.29460

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: B ***

INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,

B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,

B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,

B21 , B22 , B23 , B24 , B25 , B26 , B27 ,

B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432145.00	3729723.00	5.69500	432195.00	3729723.00	5.16156
432245.00	3729723.00	4.72835	432295.00	3729723.00	4.28755
432745.00	3729723.00	4.10901	432795.00	3729723.00	3.96344
432845.00	3729723.00	3.80395	431845.00	3729773.00	10.66489
431895.00	3729773.00	10.51796	431945.00	3729773.00	10.14208
431995.00	3729773.00	9.56683	432045.00	3729773.00	8.87859
432095.00	3729773.00	8.17543	432145.00	3729773.00	7.49014
432195.00	3729773.00	6.88077	432245.00	3729773.00	6.29112
432795.00	3729773.00	4.71763	432845.00	3729773.00	4.45043
432895.00	3729773.00	4.17711	431745.00	3729823.00	11.89141
431795.00	3729823.00	12.48449	431845.00	3729823.00	12.93782
431895.00	3729823.00	13.07851	431945.00	3729823.00	12.86683
431995.00	3729823.00	12.34017	432045.00	3729823.00	11.67048
432095.00	3729823.00	10.93808	432145.00	3729823.00	10.19505
432195.00	3729823.00	9.44689	432845.00	3729823.00	5.17521
432895.00	3729823.00	4.76930	432945.00	3729823.00	4.39426
431695.00	3729873.00	12.62453	431745.00	3729873.00	13.66461
431795.00	3729873.00	14.74795	431845.00	3729873.00	15.79835
431895.00	3729873.00	16.51462	431945.00	3729873.00	16.74577
431995.00	3729873.00	16.41160	432045.00	3729873.00	15.90701
432095.00	3729873.00	15.28123	432145.00	3729873.00	14.49320
432845.00	3729873.00	6.07021	432895.00	3729873.00	5.43366
432945.00	3729873.00	4.91804	431645.00	3729923.00	12.76067
431695.00	3729923.00	14.00485	431745.00	3729923.00	15.53499
431795.00	3729923.00	17.27162	431845.00	3729923.00	19.18771
431895.00	3729923.00	21.24315	431945.00	3729923.00	22.73326
431995.00	3729923.00	22.95582	432045.00	3729923.00	23.18075
432895.00	3729923.00	6.12333	432945.00	3729923.00	5.40588
432995.00	3729923.00	4.86113	431595.00	3729973.00	12.44896
431645.00	3729973.00	13.72315	431695.00	3729973.00	15.37501
431745.00	3729973.00	17.34932	431795.00	3729973.00	19.77943
431845.00	3729973.00	22.98059	431895.00	3729973.00	27.47218
431945.00	3729973.00	33.47708	431995.00	3729973.00	37.05872
432945.00	3729973.00	5.97754	432995.00	3729973.00	5.29526
431545.00	3730023.00	11.86947	431595.00	3730023.00	13.13031
431645.00	3730023.00	14.65174	431695.00	3730023.00	16.54750
431745.00	3730023.00	18.89047	431795.00	3730023.00	21.94578
431845.00	3730023.00	26.36829	431895.00	3730023.00	33.65271
431945.00	3730023.00	51.43908	432945.00	3730023.00	6.56632
432995.00	3730023.00	5.71924	431495.00	3730073.00	11.10664

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)		Y-COORD (M)	CONC
431545.00	3730073.00	12.24247	431595.00	3730073.00	13.64403		
431645.00	3730073.00	15.39091	431695.00	3730073.00	17.48283		
431745.00	3730073.00	20.12750	431795.00	3730073.00	23.60061		
431845.00	3730073.00	28.52420	431895.00	3730073.00	36.54607		
432945.00	3730073.00	7.10548	432995.00	3730073.00	6.16470		
431395.00	3730123.00	9.36019	431445.00	3730123.00	10.26477		
431495.00	3730123.00	11.28542	431545.00	3730123.00	12.48753		
431595.00	3730123.00	13.95536	431645.00	3730123.00	15.90098		
431695.00	3730123.00	18.16768	431745.00	3730123.00	20.98646		
431795.00	3730123.00	24.68956	431845.00	3730123.00	29.86012		
432995.00	3730123.00	6.61204	431345.00	3730173.00	8.59894		
431395.00	3730173.00	9.41907	431445.00	3730173.00	10.34460		
431495.00	3730173.00	11.40523	431545.00	3730173.00	12.62871		
431595.00	3730173.00	14.15258	431645.00	3730173.00	16.03326		
431695.00	3730173.00	18.56168	431745.00	3730173.00	21.53414		
431795.00	3730173.00	25.39343	431295.00	3730223.00	7.87938		
431345.00	3730223.00	8.56779	431395.00	3730223.00	9.39422		
431445.00	3730223.00	10.33339	431495.00	3730223.00	11.42090		
431545.00	3730223.00	12.68265	431595.00	3730223.00	14.19143		
431645.00	3730223.00	16.14949	431695.00	3730223.00	18.50057		
431745.00	3730223.00	21.69811	431245.00	3730273.00	7.20716		
431295.00	3730273.00	7.80078	431345.00	3730273.00	8.49677		
431395.00	3730273.00	9.29709	431445.00	3730273.00	10.21686		
431495.00	3730273.00	11.30190	431545.00	3730273.00	12.59572		
431595.00	3730273.00	14.12399	431645.00	3730273.00	16.02608		
431695.00	3730273.00	18.42134	431195.00	3730323.00	6.66072		
431245.00	3730323.00	7.15610	431295.00	3730323.00	7.67328		
431345.00	3730323.00	8.34676	431395.00	3730323.00	9.12668		
431445.00	3730323.00	10.02322	431495.00	3730323.00	11.08120		
431545.00	3730323.00	12.33490	431595.00	3730323.00	13.84047		
431645.00	3730323.00	15.71953	431145.00	3730373.00	6.08384		
431195.00	3730373.00	6.53197	431245.00	3730373.00	7.02812		
431295.00	3730373.00	7.52340	431345.00	3730373.00	8.14609		
431395.00	3730373.00	8.89020	431445.00	3730373.00	9.75094		
431495.00	3730373.00	10.76139	431545.00	3730373.00	11.96164		
431595.00	3730373.00	13.43252	431095.00	3730423.00	5.55832		
431145.00	3730423.00	5.94080	431195.00	3730423.00	6.36277		
431245.00	3730423.00	6.83398	431295.00	3730423.00	7.30475		
431345.00	3730423.00	7.89990	431395.00	3730423.00	8.60225		
431445.00	3730423.00	9.41720	431495.00	3730423.00	10.36992		

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*
 *** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730423.00	11.50080	431595.00	3730423.00	13.08589
431045.00	3730473.00	5.09154	431095.00	3730473.00	5.42327
431145.00	3730473.00	5.77258	431195.00	3730473.00	6.16841
431245.00	3730473.00	6.61807	431295.00	3730473.00	7.12212
431345.00	3730473.00	7.62017	431395.00	3730473.00	8.27507
431445.00	3730473.00	9.03725	431495.00	3730473.00	9.91365
431545.00	3730473.00	11.12013	431045.00	3730523.00	4.94673
431095.00	3730523.00	5.24750	431145.00	3730523.00	5.58795
431195.00	3730523.00	5.95739	431245.00	3730523.00	6.37445
431295.00	3730523.00	6.84635	431345.00	3730523.00	7.37473
431395.00	3730523.00	7.91277	431445.00	3730523.00	8.60749
431495.00	3730523.00	9.40452	431545.00	3730523.00	10.52593
431045.00	3730573.00	4.76068	431095.00	3730573.00	5.06253
431145.00	3730573.00	5.37896	431195.00	3730573.00	5.73208
431245.00	3730573.00	6.11602	431295.00	3730573.00	6.55534
431345.00	3730573.00	7.04190	431395.00	3730573.00	7.58857
431445.00	3730573.00	8.15044	431495.00	3730573.00	8.96729
431045.00	3730623.00	4.61134	431095.00	3730623.00	4.87358
431145.00	3730623.00	5.16257	431195.00	3730623.00	5.48272
431245.00	3730623.00	5.84791	431295.00	3730623.00	6.24492
431345.00	3730623.00	6.69127	431395.00	3730623.00	7.19613
431445.00	3730623.00	7.69356	431495.00	3730623.00	8.47394
431045.00	3730673.00	4.43683	431095.00	3730673.00	4.67705
431145.00	3730673.00	4.94143	431195.00	3730673.00	5.23512
431245.00	3730673.00	5.55704	431295.00	3730673.00	5.93310
431345.00	3730673.00	6.33346	431395.00	3730673.00	6.78551
431445.00	3730673.00	7.30057	431045.00	3730723.00	4.26012
431095.00	3730723.00	4.47939	431145.00	3730723.00	4.72085
431195.00	3730723.00	4.98661	431245.00	3730723.00	5.27637
431295.00	3730723.00	5.60706	431345.00	3730723.00	5.98000
431395.00	3730723.00	6.38695	431445.00	3730723.00	6.83422
431045.00	3730773.00	4.07698	431095.00	3730773.00	4.28229
431145.00	3730773.00	4.50125	431195.00	3730773.00	4.73976
431245.00	3730773.00	5.00206	431295.00	3730773.00	5.29185
431345.00	3730773.00	5.62480	431395.00	3730773.00	5.99290
431445.00	3730773.00	6.38913	431045.00	3730823.00	3.89657
431095.00	3730823.00	4.08461	431145.00	3730823.00	4.28608
431195.00	3730823.00	4.50072	431245.00	3730823.00	4.73668
431295.00	3730823.00	4.99562	431345.00	3730823.00	5.28005
431395.00	3730823.00	5.61851	431445.00	3730823.00	5.97473

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **						
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
431045.00	3730873.00	3.71986	431095.00	3730873.00	3.89030	
431145.00	3730873.00	4.07470	431195.00	3730873.00	4.27000	
431245.00	3730873.00	4.48258	431295.00	3730873.00	4.71448	
431345.00	3730873.00	4.96831	431395.00	3730873.00	5.24926	
431445.00	3730873.00	5.58114	431836.00	3730841.00	10.45618	
431836.00	3730891.00	9.31449	431886.00	3730891.00	10.13392	
431836.00	3730941.00	8.35429	431886.00	3730941.00	8.99871	
431936.00	3730941.00	9.70290	431886.00	3730991.00	8.05590	
431936.00	3730991.00	8.60453	431986.00	3730991.00	9.17311	
432036.00	3730991.00	9.72398				

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432395.00	3729323.00	0.03006	432445.00	3729323.00	0.02649
432495.00	3729323.00	0.02460	432545.00	3729323.00	0.02342
432395.00	3729373.00	0.03190	432445.00	3729373.00	0.02931
432495.00	3729373.00	0.02721	432545.00	3729373.00	0.02586
432595.00	3729373.00	0.02520	432245.00	3729423.00	0.05295
432295.00	3729423.00	0.04679	432445.00	3729423.00	0.03233
432495.00	3729423.00	0.03026	432545.00	3729423.00	0.02873
432595.00	3729423.00	0.02806	432645.00	3729423.00	0.02803
432195.00	3729473.00	0.06818	432245.00	3729473.00	0.06000
432295.00	3729473.00	0.05278	432345.00	3729473.00	0.04665
432495.00	3729473.00	0.03313	432545.00	3729473.00	0.03217
432595.00	3729473.00	0.03110	432645.00	3729473.00	0.03157
432695.00	3729473.00	0.03230	432145.00	3729523.00	0.08831
432195.00	3729523.00	0.07800	432245.00	3729523.00	0.06854
432295.00	3729523.00	0.06010	432345.00	3729523.00	0.05297
432395.00	3729523.00	0.04711	432545.00	3729523.00	0.03553
432595.00	3729523.00	0.03491	432645.00	3729523.00	0.03488
432695.00	3729523.00	0.03497	432745.00	3729523.00	0.03645
432045.00	3729573.00	0.12596	432095.00	3729573.00	0.11385
432145.00	3729573.00	0.10176	432195.00	3729573.00	0.08994
432245.00	3729573.00	0.07880	432295.00	3729573.00	0.06891
432345.00	3729573.00	0.06052	432395.00	3729573.00	0.05384
432445.00	3729573.00	0.04571	432645.00	3729573.00	0.04059
432695.00	3729573.00	0.04171	432745.00	3729573.00	0.04352
431995.00	3729623.00	0.15865	432045.00	3729623.00	0.14601
432095.00	3729623.00	0.13217	432145.00	3729623.00	0.11797
432195.00	3729623.00	0.10462	432245.00	3729623.00	0.09136
432295.00	3729623.00	0.07965	432345.00	3729623.00	0.06978
432395.00	3729623.00	0.06172	432445.00	3729623.00	0.05242
432645.00	3729623.00	0.04739	432695.00	3729623.00	0.04861
432745.00	3729623.00	0.05080	432795.00	3729623.00	0.05316
431945.00	3729673.00	0.19483	431995.00	3729673.00	0.18407
432045.00	3729673.00	0.17015	432095.00	3729673.00	0.15468
432145.00	3729673.00	0.13817	432195.00	3729673.00	0.12186
432245.00	3729673.00	0.10685	432295.00	3729673.00	0.09273
432345.00	3729673.00	0.08093	432695.00	3729673.00	0.05830
432745.00	3729673.00	0.05996	432795.00	3729673.00	0.06259
432845.00	3729673.00	0.06393	431895.00	3729723.00	0.23432
431945.00	3729723.00	0.22572	431995.00	3729723.00	0.21444
432045.00	3729723.00	0.19973	432095.00	3729723.00	0.18237

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432145.00	3729723.00	0.16372	432195.00	3729723.00	0.14441
432245.00	3729723.00	0.12591	432295.00	3729723.00	0.10936
432745.00	3729723.00	0.07214	432795.00	3729723.00	0.07249
432845.00	3729723.00	0.07442	431845.00	3729773.00	0.27190
431895.00	3729773.00	0.26877	431945.00	3729773.00	0.26212
431995.00	3729773.00	0.25123	432045.00	3729773.00	0.23608
432095.00	3729773.00	0.21748	432145.00	3729773.00	0.19589
432195.00	3729773.00	0.17325	432245.00	3729773.00	0.15159
432795.00	3729773.00	0.08648	432845.00	3729773.00	0.08818
432895.00	3729773.00	0.08951	431745.00	3729823.00	0.29698
431795.00	3729823.00	0.30396	431845.00	3729823.00	0.30852
431895.00	3729823.00	0.30881	431945.00	3729823.00	0.30495
431995.00	3729823.00	0.29592	432045.00	3729823.00	0.28165
432095.00	3729823.00	0.26192	432145.00	3729823.00	0.23760
432195.00	3729823.00	0.21197	432845.00	3729823.00	0.10429
432895.00	3729823.00	0.10468	432945.00	3729823.00	0.10496
431695.00	3729873.00	0.31506	431745.00	3729873.00	0.32838
431795.00	3729873.00	0.34031	431845.00	3729873.00	0.35020
431895.00	3729873.00	0.35505	431945.00	3729873.00	0.35588
431995.00	3729873.00	0.35064	432045.00	3729873.00	0.33853
432095.00	3729873.00	0.31847	432145.00	3729873.00	0.29310
432845.00	3729873.00	0.12814	432895.00	3729873.00	0.12433
432945.00	3729873.00	0.12299	431645.00	3729923.00	0.32469
431695.00	3729923.00	0.34245	431745.00	3729923.00	0.36172
431795.00	3729923.00	0.37975	431845.00	3729923.00	0.39506
431895.00	3729923.00	0.40816	431945.00	3729923.00	0.41581
431995.00	3729923.00	0.41717	432045.00	3729923.00	0.40914
432895.00	3729923.00	0.14687	432945.00	3729923.00	0.13987
432995.00	3729923.00	0.13757	431595.00	3729973.00	0.32647
431645.00	3729973.00	0.34711	431695.00	3729973.00	0.37132
431745.00	3729973.00	0.39609	431795.00	3729973.00	0.42061
431845.00	3729973.00	0.44462	431895.00	3729973.00	0.46734
431945.00	3729973.00	0.48545	431995.00	3729973.00	0.49654
432945.00	3729973.00	0.16512	432995.00	3729973.00	0.15910
431545.00	3730023.00	0.32201	431595.00	3730023.00	0.34503
431645.00	3730023.00	0.37052	431695.00	3730023.00	0.39930
431745.00	3730023.00	0.42990	431795.00	3730023.00	0.46227
431845.00	3730023.00	0.49731	431895.00	3730023.00	0.53142
431945.00	3730023.00	0.56326	432945.00	3730023.00	0.19595
432995.00	3730023.00	0.18234	431495.00	3730073.00	0.31202

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730073.00	0.33488	431595.00	3730073.00	0.36158
431645.00	3730073.00	0.39250	431695.00	3730073.00	0.42604
431745.00	3730073.00	0.46348	431795.00	3730073.00	0.50477
431845.00	3730073.00	0.55008	431895.00	3730073.00	0.60061
432945.00	3730073.00	0.22527	432995.00	3730073.00	0.21017
431395.00	3730123.00	0.27765	431445.00	3730123.00	0.29829
431495.00	3730123.00	0.32070	431545.00	3730123.00	0.34592
431595.00	3730123.00	0.37523	431645.00	3730123.00	0.41173
431695.00	3730123.00	0.45087	431745.00	3730123.00	0.49480
431795.00	3730123.00	0.54547	431845.00	3730123.00	0.60506
432995.00	3730123.00	0.24230	431345.00	3730173.00	0.26257
431395.00	3730173.00	0.28250	431445.00	3730173.00	0.30432
431495.00	3730173.00	0.32849	431545.00	3730173.00	0.35524
431595.00	3730173.00	0.38722	431645.00	3730173.00	0.42461
431695.00	3730173.00	0.47187	431745.00	3730173.00	0.52309
431795.00	3730173.00	0.58325	431295.00	3730223.00	0.24726
431345.00	3730223.00	0.26493	431395.00	3730223.00	0.28562
431445.00	3730223.00	0.30844	431495.00	3730223.00	0.33414
431545.00	3730223.00	0.36297	431595.00	3730223.00	0.39621
431645.00	3730223.00	0.43739	431695.00	3730223.00	0.48449
431745.00	3730223.00	0.54468	431245.00	3730273.00	0.23202
431295.00	3730273.00	0.24806	431345.00	3730273.00	0.26636
431395.00	3730273.00	0.28703	431445.00	3730273.00	0.31020
431495.00	3730273.00	0.33683	431545.00	3730273.00	0.36748
431595.00	3730273.00	0.40266	431645.00	3730273.00	0.44479
431695.00	3730273.00	0.49569	431195.00	3730323.00	0.21904
431245.00	3730323.00	0.23309	431295.00	3730323.00	0.24757
431345.00	3730323.00	0.26589	431395.00	3730323.00	0.28662
431445.00	3730323.00	0.30994	431495.00	3730323.00	0.33679
431545.00	3730323.00	0.36768	431595.00	3730323.00	0.40375
431645.00	3730323.00	0.44718	431145.00	3730373.00	0.20466
431195.00	3730373.00	0.21778	431245.00	3730373.00	0.23217
431295.00	3730373.00	0.24647	431345.00	3730373.00	0.26400
431395.00	3730373.00	0.28436	431445.00	3730373.00	0.30753
431495.00	3730373.00	0.33399	431545.00	3730373.00	0.36463
431595.00	3730373.00	0.40099	431095.00	3730423.00	0.19100
431145.00	3730423.00	0.20269	431195.00	3730423.00	0.21537
431245.00	3730423.00	0.22938	431295.00	3730423.00	0.24342
431345.00	3730423.00	0.26062	431395.00	3730423.00	0.28053
431445.00	3730423.00	0.30308	431495.00	3730423.00	0.32882

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730423.00	0.35857	431595.00	3730423.00	0.39812
431045.00	3730473.00	0.17840	431095.00	3730473.00	0.18887
431145.00	3730473.00	0.19980	431195.00	3730473.00	0.21209
431245.00	3730473.00	0.22581	431295.00	3730473.00	0.24098
431345.00	3730473.00	0.25610	431395.00	3730473.00	0.27518
431445.00	3730473.00	0.29693	431495.00	3730473.00	0.32131
431545.00	3730473.00	0.35328	431045.00	3730523.00	0.17568
431095.00	3730523.00	0.18546	431145.00	3730523.00	0.19633
431195.00	3730523.00	0.20811	431245.00	3730523.00	0.22128
431295.00	3730523.00	0.23590	431345.00	3730523.00	0.25200
431395.00	3730523.00	0.26852	431445.00	3730523.00	0.28890
431495.00	3730523.00	0.31182	431545.00	3730523.00	0.34230
431045.00	3730573.00	0.17164	431095.00	3730573.00	0.18161
431145.00	3730573.00	0.19200	431195.00	3730573.00	0.20351
431245.00	3730573.00	0.21594	431295.00	3730573.00	0.22989
431345.00	3730573.00	0.24526	431395.00	3730573.00	0.26219
431445.00	3730573.00	0.27955	431495.00	3730573.00	0.30325
431045.00	3730623.00	0.16840	431095.00	3730623.00	0.17737
431145.00	3730623.00	0.18719	431195.00	3730623.00	0.19792
431245.00	3730623.00	0.21005	431295.00	3730623.00	0.22303
431345.00	3730623.00	0.23750	431395.00	3730623.00	0.25353
431445.00	3730623.00	0.26953	431495.00	3730623.00	0.29254
431045.00	3730673.00	0.16428	431095.00	3730673.00	0.17268
431145.00	3730673.00	0.18197	431195.00	3730673.00	0.19206
431245.00	3730673.00	0.20316	431295.00	3730673.00	0.21565
431345.00	3730673.00	0.22906	431395.00	3730673.00	0.24386
431445.00	3730673.00	0.26043	431045.00	3730723.00	0.15980
431095.00	3730723.00	0.16778	431145.00	3730723.00	0.17638
431195.00	3730723.00	0.18581	431245.00	3730723.00	0.19605
431295.00	3730723.00	0.20746	431345.00	3730723.00	0.22021
431395.00	3730723.00	0.23393	431445.00	3730723.00	0.24887
431045.00	3730773.00	0.15499	431095.00	3730773.00	0.16251
431145.00	3730773.00	0.17057	431195.00	3730773.00	0.17928
431245.00	3730773.00	0.18879	431295.00	3730773.00	0.19910
431345.00	3730773.00	0.21075	431395.00	3730773.00	0.22351
431445.00	3730773.00	0.23713	431045.00	3730823.00	0.14999
431095.00	3730823.00	0.15704	431145.00	3730823.00	0.16454
431195.00	3730823.00	0.17261	431245.00	3730823.00	0.18137
431295.00	3730823.00	0.19089	431345.00	3730823.00	0.20122
431395.00	3730823.00	0.21307	431445.00	3730823.00	0.22561

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431045.00	3730873.00	0.14483	431095.00	3730873.00	0.15141
431145.00	3730873.00	0.15845	431195.00	3730873.00	0.16590
431245.00	3730873.00	0.17389	431295.00	3730873.00	0.18255
431345.00	3730873.00	0.19195	431395.00	3730873.00	0.20225
431445.00	3730873.00	0.21403	431836.00	3730841.00	0.36842
431836.00	3730891.00	0.33624	431886.00	3730891.00	0.36021
431836.00	3730941.00	0.31020	431886.00	3730941.00	0.33187
431936.00	3730941.00	0.35542	431886.00	3730991.00	0.30544
431936.00	3730991.00	0.32594	431986.00	3730991.00	0.34763
432036.00	3730991.00	0.36448			

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **					
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432395.00	3729323.00	0.15145	432445.00	3729323.00	0.13833
432495.00	3729323.00	0.12941	432545.00	3729323.00	0.12430
432395.00	3729373.00	0.17041	432445.00	3729373.00	0.15558
432495.00	3729373.00	0.14574	432545.00	3729373.00	0.14049
432595.00	3729373.00	0.13861	432245.00	3729423.00	0.28464
432295.00	3729423.00	0.24843	432445.00	3729423.00	0.17632
432495.00	3729423.00	0.16558	432545.00	3729423.00	0.16009
432595.00	3729423.00	0.15899	432645.00	3729423.00	0.16096
432195.00	3729473.00	0.37978	432245.00	3729473.00	0.32995
432295.00	3729473.00	0.28631	432345.00	3729473.00	0.25089
432495.00	3729473.00	0.19050	432545.00	3729473.00	0.18560
432595.00	3729473.00	0.18504	432645.00	3729473.00	0.18805
432695.00	3729473.00	0.19273	432145.00	3729523.00	0.50893
432195.00	3729523.00	0.44721	432245.00	3729523.00	0.38881
432295.00	3729523.00	0.33540	432345.00	3729523.00	0.29133
432395.00	3729523.00	0.25760	432545.00	3729523.00	0.21801
432595.00	3729523.00	0.21873	432645.00	3729523.00	0.22220
432695.00	3729523.00	0.22721	432745.00	3729523.00	0.23250
432045.00	3729573.00	0.72766	432095.00	3729573.00	0.67035
432145.00	3729573.00	0.60619	432195.00	3729573.00	0.53559
432245.00	3729573.00	0.46364	432295.00	3729573.00	0.39812
432345.00	3729573.00	0.34420	432395.00	3729573.00	0.30517
432445.00	3729573.00	0.27880	432645.00	3729573.00	0.26879
432695.00	3729573.00	0.27390	432745.00	3729573.00	0.27839
431995.00	3729623.00	0.90750	432045.00	3729623.00	0.86510
432095.00	3729623.00	0.80401	432145.00	3729623.00	0.72883
432195.00	3729623.00	0.65245	432245.00	3729623.00	0.56390
432295.00	3729623.00	0.48103	432345.00	3729623.00	0.41418
432395.00	3729623.00	0.36542	432445.00	3729623.00	0.33660
432645.00	3729623.00	0.33067	432695.00	3729623.00	0.33402
432745.00	3729623.00	0.33590	432795.00	3729623.00	0.33622
431945.00	3729673.00	1.07528	431995.00	3729673.00	1.06926
432045.00	3729673.00	1.03341	432095.00	3729673.00	0.97618
432145.00	3729673.00	0.89300	432195.00	3729673.00	0.79559
432245.00	3729673.00	0.70230	432295.00	3729673.00	0.59206
432345.00	3729673.00	0.50831	432695.00	3729673.00	0.41465
432745.00	3729673.00	0.41014	432795.00	3729673.00	0.40428
432845.00	3729673.00	0.39661	431895.00	3729723.00	1.22852
431945.00	3729723.00	1.24944	431995.00	3729723.00	1.26036
432045.00	3729723.00	1.24505	432095.00	3729723.00	1.19641

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432145.00	3729723.00	1.11861	432195.00	3729723.00	1.00752
432245.00	3729723.00	0.87930	432295.00	3729723.00	0.75466
432745.00	3729723.00	0.50532	432795.00	3729723.00	0.48639
432845.00	3729723.00	0.46867	431845.00	3729773.00	1.33355
431895.00	3729773.00	1.38996	431945.00	3729773.00	1.44395
431995.00	3729773.00	1.48654	432045.00	3729773.00	1.50510
432095.00	3729773.00	1.49111	432145.00	3729773.00	1.42536
432195.00	3729773.00	1.31146	432245.00	3729773.00	1.18077
432795.00	3729773.00	0.58710	432845.00	3729773.00	0.55680
432895.00	3729773.00	0.52999	431745.00	3729823.00	1.31335
431795.00	3729823.00	1.39036	431845.00	3729823.00	1.47594
431895.00	3729823.00	1.56306	431945.00	3729823.00	1.65592
431995.00	3729823.00	1.74814	432045.00	3729823.00	1.83015
432095.00	3729823.00	1.87842	432145.00	3729823.00	1.86211
432195.00	3729823.00	1.79369	432845.00	3729823.00	0.65789
432895.00	3729823.00	0.61670	432945.00	3729823.00	0.58254
431695.00	3729873.00	1.32342	431745.00	3729873.00	1.41095
431795.00	3729873.00	1.50915	431845.00	3729873.00	1.62370
431895.00	3729873.00	1.73982	431945.00	3729873.00	1.88131
431995.00	3729873.00	2.04193	432045.00	3729873.00	2.21660
432095.00	3729873.00	2.37702	432145.00	3729873.00	2.51049
432845.00	3729873.00	0.78626	432895.00	3729873.00	0.72030
432945.00	3729873.00	0.67129	431645.00	3729923.00	1.31049
431695.00	3729923.00	1.39793	431745.00	3729923.00	1.50515
431795.00	3729923.00	1.62359	431845.00	3729923.00	1.75371
431895.00	3729923.00	1.91483	431945.00	3729923.00	2.10546
431995.00	3729923.00	2.34565	432045.00	3729923.00	2.63974
432895.00	3729923.00	0.83613	432945.00	3729923.00	0.75878
432995.00	3729923.00	0.70956	431595.00	3729973.00	1.28126
431645.00	3729973.00	1.36507	431695.00	3729973.00	1.47180
431745.00	3729973.00	1.59015	431795.00	3729973.00	1.72171
431845.00	3729973.00	1.87693	431895.00	3729973.00	2.07035
431945.00	3729973.00	2.30807	431995.00	3729973.00	2.61930
432945.00	3729973.00	0.87780	432995.00	3729973.00	0.80889
431545.00	3730023.00	1.24211	431595.00	3730023.00	1.32605
431645.00	3730023.00	1.42264	431695.00	3730023.00	1.53508
431745.00	3730023.00	1.66096	431795.00	3730023.00	1.80479
431845.00	3730023.00	1.98263	431895.00	3730023.00	2.19289
431945.00	3730023.00	2.45798	432945.00	3730023.00	1.01940
432995.00	3730023.00	0.91683	431495.00	3730073.00	1.19322

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730073.00	1.27140	431595.00	3730073.00	1.36308
431645.00	3730073.00	1.47242	431695.00	3730073.00	1.58974
431745.00	3730073.00	1.72476	431795.00	3730073.00	1.87885
431845.00	3730073.00	2.06024	431895.00	3730073.00	2.29077
432945.00	3730073.00	1.16524	432995.00	3730073.00	1.04651
431395.00	3730123.00	1.06873	431445.00	3730123.00	1.13845
431495.00	3730123.00	1.21289	431545.00	3730123.00	1.29446
431595.00	3730123.00	1.39076	431645.00	3730123.00	1.51184
431695.00	3730123.00	1.63772	431745.00	3730123.00	1.77747
431795.00	3730123.00	1.93898	431845.00	3730123.00	2.13652
432995.00	3730123.00	1.19197	431345.00	3730173.00	1.01350
431395.00	3730173.00	1.08234	431445.00	3730173.00	1.15392
431495.00	3730173.00	1.23189	431545.00	3730173.00	1.31553
431595.00	3730173.00	1.41512	431645.00	3730173.00	1.52910
431695.00	3730173.00	1.67663	431745.00	3730173.00	1.82605
431795.00	3730173.00	1.99552	431295.00	3730223.00	0.96042
431345.00	3730223.00	1.01969	431395.00	3730223.00	1.08961
431445.00	3730223.00	1.16453	431495.00	3730223.00	1.24638
431545.00	3730223.00	1.33508	431595.00	3730223.00	1.43381
431645.00	3730223.00	1.55676	431695.00	3730223.00	1.68935
431745.00	3730223.00	1.86053	431245.00	3730273.00	0.90739
431295.00	3730273.00	0.96269	431345.00	3730273.00	1.02493
431395.00	3730273.00	1.09374	431445.00	3730273.00	1.16852
431495.00	3730273.00	1.25263	431545.00	3730273.00	1.34744
431595.00	3730273.00	1.45062	431645.00	3730273.00	1.57306
431695.00	3730273.00	1.71437	431195.00	3730323.00	0.86564
431245.00	3730323.00	0.91423	431295.00	3730323.00	0.96116
431345.00	3730323.00	1.02326	431395.00	3730323.00	1.09275
431445.00	3730323.00	1.16802	431495.00	3730323.00	1.25320
431545.00	3730323.00	1.34807	431595.00	3730323.00	1.45545
431645.00	3730323.00	1.58150	431145.00	3730373.00	0.81541
431195.00	3730373.00	0.86213	431245.00	3730373.00	0.91265
431295.00	3730373.00	0.95955	431345.00	3730373.00	1.01815
431395.00	3730373.00	1.08637	431445.00	3730373.00	1.16295
431495.00	3730373.00	1.24639	431545.00	3730373.00	1.34273
431595.00	3730373.00	1.45322	431095.00	3730423.00	0.76647
431145.00	3730423.00	0.80894	431195.00	3730423.00	0.85505
431245.00	3730423.00	0.90434	431295.00	3730423.00	0.95116
431345.00	3730423.00	1.00956	431395.00	3730423.00	1.07747
431445.00	3730423.00	1.15212	431495.00	3730423.00	1.23588

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10			IN MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC	
431545.00	3730423.00	1.33083	431595.00	3730423.00	1.46763	
431045.00	3730473.00	0.72167	431095.00	3730473.00	0.76089	
431145.00	3730473.00	0.80035	431195.00	3730473.00	0.84496	
431245.00	3730473.00	0.89475	431295.00	3730473.00	0.94820	
431345.00	3730473.00	0.99818	431395.00	3730473.00	1.06423	
431445.00	3730473.00	1.13875	431495.00	3730473.00	1.22036	
431545.00	3730473.00	1.33318	431045.00	3730523.00	0.71273	
431095.00	3730523.00	0.74947	431145.00	3730523.00	0.79029	
431195.00	3730523.00	0.83342	431245.00	3730523.00	0.88122	
431295.00	3730523.00	0.93451	431345.00	3730523.00	0.99219	
431395.00	3730523.00	1.04795	431445.00	3730523.00	1.11930	
431495.00	3730523.00	1.19779	431545.00	3730523.00	1.31189	
431045.00	3730573.00	0.69832	431095.00	3730573.00	0.73713	
431145.00	3730573.00	0.77662	431195.00	3730573.00	0.82001	
431245.00	3730573.00	0.86681	431295.00	3730573.00	0.91858	
431345.00	3730573.00	0.97475	431395.00	3730573.00	1.03640	
431445.00	3730573.00	1.09560	431495.00	3730573.00	1.18512	
431045.00	3730623.00	0.68923	431095.00	3730623.00	0.72372	
431145.00	3730623.00	0.76170	431195.00	3730623.00	0.80269	
431245.00	3730623.00	0.84953	431295.00	3730623.00	0.89922	
431345.00	3730623.00	0.95403	431395.00	3730623.00	1.01473	
431445.00	3730623.00	1.07025	431495.00	3730623.00	1.16531	
431045.00	3730673.00	0.67623	431095.00	3730673.00	0.70915	
431145.00	3730673.00	0.74536	431195.00	3730673.00	0.78474	
431245.00	3730673.00	0.82820	431295.00	3730673.00	0.87778	
431345.00	3730673.00	0.93006	431395.00	3730673.00	0.98822	
431445.00	3730673.00	1.05331	431045.00	3730723.00	0.66189	
431095.00	3730723.00	0.69356	431145.00	3730723.00	0.72785	
431195.00	3730723.00	0.76519	431245.00	3730723.00	0.80609	
431295.00	3730723.00	0.85206	431345.00	3730723.00	0.90400	
431395.00	3730723.00	0.96025	431445.00	3730723.00	1.02052	
431045.00	3730773.00	0.64598	431095.00	3730773.00	0.67666	
431145.00	3730773.00	0.70911	431195.00	3730773.00	0.74476	
431245.00	3730773.00	0.78374	431295.00	3730773.00	0.82624	
431345.00	3730773.00	0.87433	431395.00	3730773.00	0.92889	
431445.00	3730773.00	0.98536	431045.00	3730823.00	0.62911	
431095.00	3730823.00	0.65851	431145.00	3730823.00	0.68988	
431195.00	3730823.00	0.72311	431245.00	3730823.00	0.75968	
431295.00	3730823.00	0.79919	431345.00	3730823.00	0.84303	
431395.00	3730823.00	0.89541	431445.00	3730823.00	0.95037	

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431045.00	3730873.00	0.61160	431095.00	3730873.00	0.63913
431145.00	3730873.00	0.66877	431195.00	3730873.00	0.70066
431245.00	3730873.00	0.73465	431295.00	3730873.00	0.77213
431345.00	3730873.00	0.81243	431395.00	3730873.00	0.85845
431445.00	3730873.00	0.91260	431836.00	3730841.00	1.62547
431836.00	3730891.00	1.51750	431886.00	3730891.00	1.65518
431836.00	3730941.00	1.41352	431886.00	3730941.00	1.52806
431936.00	3730941.00	1.66464	431886.00	3730991.00	1.41412
431936.00	3730991.00	1.52653	431986.00	3730991.00	1.65825
432036.00	3730991.00	1.81083			

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

		** CONC OF PM_10 IN MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432395.00	3729323.00	1.92469	432445.00	3729323.00	1.90782
432495.00	3729323.00	1.91414	432545.00	3729323.00	1.93582
432395.00	3729373.00	2.15602	432445.00	3729373.00	2.14610
432495.00	3729373.00	2.15535	432545.00	3729373.00	2.18248
432595.00	3729373.00	2.22447	432245.00	3729423.00	2.73712
432295.00	3729423.00	2.60203	432445.00	3729423.00	2.43201
432495.00	3729423.00	2.45047	432545.00	3729423.00	2.48359
432595.00	3729423.00	2.53263	432645.00	3729423.00	2.58780
432195.00	3729473.00	3.35461	432245.00	3729473.00	3.14573
432295.00	3729473.00	2.98905	432345.00	3729473.00	2.88527
432495.00	3729473.00	2.78198	432545.00	3729473.00	2.85837
432595.00	3729473.00	2.89597	432645.00	3729473.00	2.97459
432695.00	3729473.00	3.02925	432145.00	3729523.00	4.21927
432195.00	3729523.00	3.90838	432245.00	3729523.00	3.65951
432295.00	3729523.00	3.47607	432345.00	3729523.00	3.35498
432395.00	3729523.00	3.27226	432545.00	3729523.00	3.28525
432595.00	3729523.00	3.35540	432645.00	3729523.00	3.40753
432695.00	3729523.00	3.45251	432745.00	3729523.00	3.48051
432045.00	3729573.00	5.78669	432095.00	3729573.00	5.37138
432145.00	3729573.00	4.98531	432195.00	3729573.00	4.62368
432245.00	3729573.00	4.32743	432295.00	3729573.00	4.11099
432345.00	3729573.00	3.96818	432395.00	3729573.00	3.89753
432445.00	3729573.00	3.81954	432645.00	3729573.00	4.03304
432695.00	3729573.00	4.06945	432745.00	3729573.00	4.08222
431995.00	3729623.00	7.36270	432045.00	3729623.00	6.89941
432095.00	3729623.00	6.41640	432145.00	3729623.00	5.96179
432195.00	3729623.00	5.54590	432245.00	3729623.00	5.21254
432295.00	3729623.00	4.95439	432345.00	3729623.00	4.78591
432395.00	3729623.00	4.67726	432445.00	3729623.00	4.60438
432645.00	3729623.00	4.81081	432695.00	3729623.00	4.80855
432745.00	3729623.00	4.78713	432795.00	3729623.00	4.72385
431945.00	3729673.00	9.22352	431995.00	3729673.00	8.82855
432045.00	3729673.00	8.31295	432095.00	3729673.00	7.78389
432145.00	3729673.00	7.26092	432195.00	3729673.00	6.79931
432245.00	3729673.00	6.41517	432295.00	3729673.00	6.06528
432345.00	3729673.00	5.87425	432695.00	3729673.00	5.78916
432745.00	3729673.00	5.66336	432795.00	3729673.00	5.52637
432845.00	3729673.00	5.32894	431895.00	3729723.00	11.44255
431945.00	3729723.00	11.11739	431995.00	3729723.00	10.69583
432045.00	3729723.00	10.16589	432095.00	3729723.00	9.59144

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*
 *** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
432145.00	3729723.00	9.04569	432195.00	3729723.00	8.52972
432245.00	3729723.00	8.09350	432295.00	3729723.00	7.68934
432745.00	3729723.00	6.77558	432795.00	3729723.00	6.45110
432845.00	3729723.00	6.13323	431845.00	3729773.00	13.69031
431895.00	3729773.00	13.72066	431945.00	3729773.00	13.53333
431995.00	3729773.00	13.14675	432045.00	3729773.00	12.63512
432095.00	3729773.00	12.09444	432145.00	3729773.00	11.52909
432195.00	3729773.00	11.00756	432245.00	3729773.00	10.54124
432795.00	3729773.00	7.59788	432845.00	3729773.00	7.12017
432895.00	3729773.00	6.65829	431745.00	3729823.00	14.79216
431795.00	3729823.00	15.58850	431845.00	3729823.00	16.26884
431895.00	3729823.00	16.64719	431945.00	3729823.00	16.69769
431995.00	3729823.00	16.45221	432045.00	3729823.00	16.08090
432095.00	3729823.00	15.64190	432145.00	3729823.00	15.15858
432195.00	3729823.00	14.70017	432845.00	3729823.00	8.22276
432895.00	3729823.00	7.56377	432945.00	3729823.00	6.97202
431695.00	3729873.00	15.52360	431745.00	3729873.00	16.78795
431795.00	3729873.00	18.12279	431845.00	3729873.00	19.46213
431895.00	3729873.00	20.47798	431945.00	3729873.00	21.06475
431995.00	3729873.00	21.13543	432045.00	3729873.00	21.09153
432095.00	3729873.00	20.95809	432145.00	3729873.00	20.74054
432845.00	3729873.00	9.62431	432895.00	3729873.00	8.60854
432945.00	3729873.00	7.80423	431645.00	3729923.00	15.61307
431695.00	3729923.00	17.08308	431745.00	3729923.00	18.88656
431795.00	3729923.00	20.92677	431845.00	3729923.00	23.17619
431895.00	3729923.00	25.63113	431945.00	3729923.00	27.57903
431995.00	3729923.00	28.35572	432045.00	3729923.00	29.23732
432895.00	3729923.00	9.69571	432945.00	3729923.00	8.54295
432995.00	3729923.00	7.71737	431595.00	3729973.00	15.21977
431645.00	3729973.00	16.71379	431695.00	3729973.00	18.64134
431745.00	3729973.00	20.92614	431795.00	3729973.00	23.70534
431845.00	3729973.00	27.31350	431895.00	3729973.00	32.29576
431945.00	3729973.00	38.87840	431995.00	3729973.00	43.16512
432945.00	3729973.00	9.50083	432995.00	3729973.00	8.44207
431545.00	3730023.00	14.53649	431595.00	3730023.00	16.01597
431645.00	3730023.00	17.79210	431695.00	3730023.00	19.98972
431745.00	3730023.00	22.67833	431795.00	3730023.00	26.13584
431845.00	3730023.00	31.05135	431895.00	3730023.00	38.91271
431945.00	3730023.00	57.39673	432945.00	3730023.00	10.52338
432995.00	3730023.00	9.14928	431495.00	3730073.00	13.64894

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)	CONC	X-COORD (M)		Y-COORD (M)	CONC
431545.00	3730073.00	14.98727	431595.00	3730073.00	16.63108		
431645.00	3730073.00	18.66996	431695.00	3730073.00	21.09112		
431745.00	3730073.00	24.12540	431795.00	3730073.00	28.05991		
431845.00	3730073.00	33.54132	431895.00	3730073.00	42.27231		
432945.00	3730073.00	11.44140	432995.00	3730073.00	9.92581		
431395.00	3730123.00	11.59463	431445.00	3730123.00	12.67127		
431495.00	3730123.00	13.88128	431545.00	3730123.00	15.29922		
431595.00	3730123.00	17.02503	431645.00	3730123.00	19.30056		
431695.00	3730123.00	21.93285	431745.00	3730123.00	25.18041		
431795.00	3730123.00	29.40701	431845.00	3730123.00	35.24726		
432995.00	3730123.00	10.71306	431345.00	3730173.00	10.70403		
431395.00	3730173.00	11.68816	431445.00	3730173.00	12.79238		
431495.00	3730173.00	14.05353	431545.00	3730173.00	15.50160		
431595.00	3730173.00	17.29895	431645.00	3730173.00	19.50610		
431695.00	3730173.00	22.46349	431745.00	3730173.00	25.91545		
431795.00	3730173.00	30.36592	431295.00	3730223.00	9.86134		
431345.00	3730223.00	10.69157	431395.00	3730223.00	11.68635		
431445.00	3730223.00	12.81224	431495.00	3730223.00	14.11117		
431545.00	3730223.00	15.61224	431595.00	3730223.00	17.40028		
431645.00	3730223.00	19.71308	431695.00	3730223.00	22.47758		
431745.00	3730223.00	26.22868	431245.00	3730273.00	9.06998		
431295.00	3730273.00	9.79247	431345.00	3730273.00	10.63638		
431395.00	3730273.00	11.60428	431445.00	3730273.00	12.71256		
431495.00	3730273.00	14.01607	431545.00	3730273.00	15.56484		
431595.00	3730273.00	17.38719	431645.00	3730273.00	19.65030		
431695.00	3730273.00	22.49051	431195.00	3730323.00	8.42793		
431245.00	3730323.00	9.03562	431295.00	3730323.00	9.66701		
431345.00	3730323.00	10.48885	431395.00	3730323.00	11.43812		
431445.00	3730323.00	12.52515	431495.00	3730323.00	13.80510		
431545.00	3730323.00	15.31629	431595.00	3730323.00	17.12659		
431645.00	3730323.00	19.37980	431145.00	3730373.00	7.74217		
431195.00	3730373.00	8.29633	431245.00	3730373.00	8.90903		
431295.00	3730373.00	9.51806	431345.00	3730373.00	10.28299		
431395.00	3730373.00	11.19464	431445.00	3730373.00	12.24792		
431495.00	3730373.00	13.47832	431545.00	3730373.00	14.93847		
431595.00	3730373.00	16.72149	431095.00	3730423.00	7.11318		
431145.00	3730423.00	7.59069	431195.00	3730423.00	8.11679		
431245.00	3730423.00	8.70245	431295.00	3730423.00	9.28672		
431345.00	3730423.00	10.02354	431395.00	3730423.00	10.89240		
431445.00	3730423.00	11.89671	431495.00	3730423.00	13.06837		

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*
 *** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3		**	
X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431545.00	3730423.00	14.45622	431595.00	3730423.00	16.40482
431045.00	3730473.00	6.55210	431095.00	3730473.00	6.97027
431145.00	3730473.00	7.40893	431195.00	3730473.00	7.90652
431245.00	3730473.00	8.47083	431295.00	3730473.00	9.10147
431345.00	3730473.00	9.72429	431395.00	3730473.00	10.54172
431445.00	3730473.00	11.49133	431495.00	3730473.00	12.58054
431545.00	3730473.00	14.07848	431045.00	3730523.00	6.39357
431095.00	3730523.00	6.77591	431145.00	3730523.00	7.20777
431195.00	3730523.00	7.67605	431245.00	3730523.00	8.20442
431295.00	3730523.00	8.80148	431345.00	3730523.00	9.46882
431395.00	3730523.00	10.14821	431445.00	3730523.00	11.02287
431495.00	3730523.00	12.02495	431545.00	3730523.00	13.43573
431045.00	3730573.00	6.18287	431095.00	3730573.00	6.57014
431145.00	3730573.00	6.97536	431195.00	3730573.00	7.42746
431245.00	3730573.00	7.91954	431295.00	3730573.00	8.48093
431345.00	3730573.00	9.10291	431395.00	3730573.00	9.80108
431445.00	3730573.00	10.51766	431495.00	3730573.00	11.55794
431045.00	3730623.00	6.01868	431095.00	3730623.00	6.35818
431145.00	3730623.00	6.73277	431195.00	3730623.00	7.14698
431245.00	3730623.00	7.62012	431295.00	3730623.00	8.13395
431345.00	3730623.00	8.71173	431395.00	3730623.00	9.36475
431445.00	3730623.00	10.00790	431495.00	3730623.00	11.01863
431045.00	3730673.00	5.82181	431095.00	3730673.00	6.13601
431145.00	3730673.00	6.48252	431195.00	3730673.00	6.86670
431245.00	3730673.00	7.28939	431295.00	3730673.00	7.78137
431345.00	3730673.00	8.30689	431395.00	3730673.00	8.90012
431445.00	3730673.00	9.57625	431045.00	3730723.00	5.62005
431095.00	3730723.00	5.91068	431145.00	3730723.00	6.23030
431195.00	3730723.00	6.58218	431245.00	3730723.00	6.96725
431295.00	3730723.00	7.40591	431345.00	3730723.00	7.90194
431395.00	3730723.00	8.44428	431445.00	3730723.00	9.04092
431045.00	3730773.00	5.40874	431095.00	3730773.00	5.68331
431145.00	3730773.00	5.97664	431195.00	3730773.00	6.29723
431245.00	3730773.00	6.65021	431295.00	3730773.00	7.04016
431345.00	3730773.00	7.48812	431395.00	3730773.00	7.98646
431445.00	3730773.00	8.52237	431045.00	3730823.00	5.19836
431095.00	3730823.00	5.45284	431145.00	3730823.00	5.72591
431195.00	3730823.00	6.01783	431245.00	3730823.00	6.33929
431295.00	3730823.00	6.69215	431345.00	3730823.00	7.08122
431395.00	3730823.00	7.54439	431445.00	3730823.00	8.03439

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
431045.00	3730873.00	4.99018	431095.00	3730873.00	5.22344
431145.00	3730873.00	5.47616	431195.00	3730873.00	5.74518
431245.00	3730873.00	6.03773	431295.00	3730873.00	6.35832
431345.00	3730873.00	6.70925	431395.00	3730873.00	7.10032
431445.00	3730873.00	7.56255	431836.00	3730841.00	14.30905
431836.00	3730891.00	12.87022	431886.00	3730891.00	14.05014
431836.00	3730941.00	11.64044	431886.00	3730941.00	12.57996
431936.00	3730941.00	13.62615	431886.00	3730991.00	11.34515
431936.00	3730991.00	12.17238	431986.00	3730991.00	13.05934
432036.00	3730991.00	13.96151			

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(M)	(M)	(M)	(M)
432395.00	3729323.00	4.02970	(16122124)	432445.00	3729323.00	4.21748	
(16122124)							
432495.00	3729323.00	4.36852	(16122124)	432545.00	3729323.00	4.46148	
(16122124)							
432395.00	3729373.00	4.42504	(16122124)	432445.00	3729373.00	4.61581	
(16122124)							
432495.00	3729373.00	4.77497	(16122124)	432545.00	3729373.00	4.86467	
(16122124)							
432595.00	3729373.00	4.86812	(16122124)	432245.00	3729423.00	4.44087m	
(13123124)							
432295.00	3729423.00	4.52043m	(13123124)	432445.00	3729423.00	5.09906	
(16122124)							
432495.00	3729423.00	5.25547	(16122124)	432545.00	3729423.00	5.33855	
(16122124)							
432595.00	3729423.00	5.31580	(16122124)	432645.00	3729423.00	5.33820	
(16122024)							
432195.00	3729473.00	4.80012m	(13123124)	432245.00	3729473.00	4.90511m	
(13123124)							
432295.00	3729473.00	4.98627m	(13123124)	432345.00	3729473.00	5.13840	
(16122124)							
432495.00	3729473.00	5.79400	(16122124)	432545.00	3729473.00	5.89993	
(16122124)							
432595.00	3729473.00	5.85364	(16102824)	432645.00	3729473.00	5.99489	
(16122024)							
432695.00	3729473.00	6.06687c	(16121424)	432145.00	3729523.00	5.21593m	
(14012924)							
432195.00	3729523.00	5.32001m	(13123124)	432245.00	3729523.00	5.47193m	
(13123124)							
432295.00	3729523.00	5.57681m	(13123124)	432345.00	3729523.00	5.73917	
(16122124)							
432395.00	3729523.00	6.08076	(16122124)	432545.00	3729523.00	6.48776	
(16122124)							
432595.00	3729523.00	6.68482	(16102824)	432645.00	3729523.00	6.77817c	
(16121424)							
432695.00	3729523.00	6.82141c	(16121424)	432745.00	3729523.00	6.83630	
(16120924)							
432045.00	3729573.00	6.74416	(16120224)	432095.00	3729573.00	6.61934	
(16120224)							
432145.00	3729573.00	6.22572	(16120224)	432195.00	3729573.00	5.97826m	
(14012924)							
432245.00	3729573.00	6.14130m	(13123124)	432295.00	3729573.00	6.28779m	
(13123124)							
432345.00	3729573.00	6.50708	(16122124)	432395.00	3729573.00	6.87147	
(16122124)							
432445.00	3729573.00	7.23178	(16122124)	432645.00	3729573.00	7.74056c	
(16121424)							
432695.00	3729573.00	7.72748c	(16121424)	432745.00	3729573.00	7.82877	
(16120924)							
431995.00	3729623.00	7.40180m	(14123124)	432045.00	3729623.00	7.60390	
(16120224)							
432095.00	3729623.00	7.69922	(16120224)	432145.00	3729623.00	7.41748	
(16120224)							
432195.00	3729623.00	6.88709	(16120224)	432245.00	3729623.00	6.98065m	
(13123124)							
432295.00	3729623.00	7.16390m	(13123124)	432345.00	3729623.00	7.49810	
(16122124)							
432395.00	3729623.00	7.98038	(16122124)	432445.00	3729623.00	8.33679	
(16122124)							
432645.00	3729623.00	8.89566c	(16121424)	432695.00	3729623.00	8.94669	
(16120924)							
432745.00	3729623.00	8.94383	(16120924)	432795.00	3729623.00	8.79356	
(16120924)							
431945.00	3729673.00	8.27170m	(14123124)	431995.00	3729673.00	8.59521m	
(14123124)							
432045.00	3729673.00	8.60500m	(14123124)	432095.00	3729673.00	8.82524	
(16120224)							
432145.00	3729673.00	8.82838	(16120224)	432195.00	3729673.00	8.31307	
(16120224)							
432245.00	3729673.00	8.10823m	(14012924)	432295.00	3729673.00	8.45380	
(16110224)							
432345.00	3729673.00	8.89799	(16122124)	432695.00	3729673.00	10.40749	
(16120924)							

432745.00 (16120924)	3729673.00	10.20440 (16120924)	432795.00	3729673.00	9.85210
432845.00 (14123124)	3729673.00	9.34575 (16120924)	431895.00	3729723.00	8.77886m
431945.00 (14123124)	3729723.00	9.27128m (14123124)	431995.00	3729723.00	9.79872m
432045.00 (14123124)	3729723.00	10.14623m (14123124)	432095.00	3729723.00	10.14489m

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)	
432145.00	3729723.00	10.41779	(16120224)	432195.00	3729723.00	10.27060	
(16120224)							
432245.00	3729723.00	9.31758m	(14012924)	432295.00	3729723.00	10.16226	
(16110224)							
432745.00	3729723.00	11.60770	(16120924)	432795.00	3729723.00	10.93235	
(16120924)							
432845.00	3729723.00	10.08231	(16120924)	431845.00	3729773.00	8.96875m	
(14123124)							
431895.00	3729773.00	9.54346m	(14123124)	431945.00	3729773.00	10.23545m	
(14123124)							
431995.00	3729773.00	11.00239m	(14123124)	432045.00	3729773.00	11.74277m	
(14123124)							
432095.00	3729773.00	12.30880m	(14123124)	432145.00	3729773.00	12.31775m	
(14123124)							
432195.00	3729773.00	12.57734	(16120224)	432245.00	3729773.00	12.48156	
(16120224)							
432795.00	3729773.00	11.98710	(16120924)	432845.00	3729773.00	10.71383	
(16120824)							
432895.00	3729773.00	9.86433	(16120824)	431745.00	3729823.00	8.43005m	
(14123124)							
431795.00	3729823.00	9.01872m	(14123124)	431845.00	3729823.00	9.65026m	
(14123124)							
431895.00	3729823.00	10.30871m	(14123124)	431945.00	3729823.00	11.12471m	
(14123124)							
431995.00	3729823.00	12.13654m	(14123124)	432045.00	3729823.00	13.36490m	
(14123124)							
432095.00	3729823.00	14.61403m	(14123124)	432145.00	3729823.00	15.49151m	
(14123124)							
432195.00	3729823.00	15.94022m	(14123124)	432845.00	3729823.00	11.84298	
(16120824)							
432895.00	3729823.00	10.70536	(16011924)	432945.00	3729823.00	9.87871	
(16011924)							
431695.00	3729873.00	8.20805m	(14123124)	431745.00	3729873.00	8.93002m	
(14123124)							
431795.00	3729873.00	9.64467m	(14123124)	431845.00	3729873.00	10.38535m	
(14123124)							
431895.00	3729873.00	11.07921m	(14123124)	431945.00	3729873.00	11.97560m	
(14123124)							
431995.00	3729873.00	13.16213m	(14123124)	432045.00	3729873.00	14.78913m	
(14123124)							
432095.00	3729873.00	16.76139m	(14123124)	432145.00	3729873.00	19.20411m	
(14123124)							
432845.00	3729873.00	13.17616	(16011924)	432895.00	3729873.00	11.80126	
(16011924)							
432945.00	3729873.00	10.60131	(16011924)	431645.00	3729923.00	7.66386m	
(14123124)							
431695.00	3729923.00	8.48596m	(14123124)	431745.00	3729923.00	9.39670m	
(14123124)							
431795.00	3729923.00	10.27525m	(14123124)	431845.00	3729923.00	11.06791m	
(14123124)							
431895.00	3729923.00	11.90652m	(14123124)	431945.00	3729923.00	12.79502m	
(14123124)							
431995.00	3729923.00	14.01553m	(14123124)	432045.00	3729923.00	15.75751m	
(14123124)							
432895.00	3729923.00	12.44544	(16011924)	432945.00	3729923.00	10.77228m	
(13123124)							
432995.00	3729923.00	9.71991m	(13123124)	431595.00	3729973.00	6.84899m	
(14123124)							
431645.00	3729973.00	7.69090m	(14123124)	431695.00	3729973.00	8.70573m	
(14123124)							
431745.00	3729973.00	9.77292m	(14123124)	431795.00	3729973.00	10.82373m	
(14123124)							
431845.00	3729973.00	11.82931m	(14123124)	431895.00	3729973.00	12.79470m	
(14123124)							
431945.00	3729973.00	13.67949m	(14123124)	431995.00	3729973.00	14.69054m	
(14123124)							
432945.00	3729973.00	11.68576m	(13123124)	432995.00	3729973.00	10.34060m	
(13123124)							
431545.00	3730023.00	5.91669m	(14123124)	431595.00	3730023.00	6.72098m	
(14123124)							
431645.00	3730023.00	7.65886m	(14123124)	431695.00	3730023.00	8.76083m	
(14123124)							

431745.00 (14123124)	3730023.00	9.97315m (14123124)	431795.00	3730023.00	11.26159m
431845.00 (14123124)	3730023.00	12.61574m (14123124)	431895.00	3730023.00	13.79862m
431945.00 (13123124)	3730023.00	14.73846m (14123124)	432945.00	3730023.00	12.60439m
432995.00 (14123124)	3730023.00	10.80744m (13123124)	431495.00	3730073.00	4.96452m

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730073.00	5.64479m	(14123124)	431595.00	3730073.00	6.47542m	
(14123124)							
431645.00	3730073.00	7.48976m	(14123124)	431695.00	3730073.00	8.65559m	
(14123124)							
431745.00	3730073.00	10.02085m	(14123124)	431795.00	3730073.00	11.57533m	
(14123124)							
431845.00	3730073.00	13.27305m	(14123124)	431895.00	3730073.00	15.05825m	
(14123124)							
432945.00	3730073.00	13.19504m	(13123124)	432995.00	3730073.00	11.35108m	
(13123124)							
431395.00	3730123.00	4.20300	(16020524)	431445.00	3730123.00	4.56372	
(16020524)							
431495.00	3730123.00	4.95941	(16020524)	431545.00	3730123.00	5.41014	
(16020524)							
431595.00	3730123.00	6.11416m	(14123124)	431645.00	3730123.00	7.17853m	
(14123124)							
431695.00	3730123.00	8.39888m	(14123124)	431745.00	3730123.00	9.85101m	
(14123124)							
431795.00	3730123.00	11.62838m	(14123124)	431845.00	3730123.00	13.85388m	
(14123124)							
432995.00	3730123.00	12.39256	(14120524)	431345.00	3730173.00	3.91504	
(16020524)							
431395.00	3730173.00	4.26135	(16020524)	431445.00	3730173.00	4.64500	
(16020524)							
431495.00	3730173.00	5.07512	(16020524)	431545.00	3730173.00	5.55672	
(16020524)							
431595.00	3730173.00	6.13811	(16020524)	431645.00	3730173.00	6.83105	
(16020524)							
431695.00	3730173.00	7.97134m	(14123124)	431745.00	3730173.00	9.48160m	
(14123124)							
431795.00	3730173.00	11.39011m	(14123124)	431295.00	3730223.00	3.63658	
(11111824)							
431345.00	3730223.00	3.91108	(16020524)	431395.00	3730223.00	4.27055	
(16020524)							
431445.00	3730223.00	4.67329	(16020524)	431495.00	3730223.00	5.13142	
(16020524)							
431545.00	3730223.00	5.65130	(16020524)	431595.00	3730223.00	6.25791	
(16020524)							
431645.00	3730223.00	7.02550	(16020524)	431695.00	3730223.00	7.92267	
(16020524)							
431745.00	3730223.00	9.14161	(16020524)	431245.00	3730273.00	3.52127m	
(14120224)							
431295.00	3730273.00	3.76766m	(14120224)	431345.00	3730273.00	4.05140m	
(14120224)							
431395.00	3730273.00	4.37238m	(14120224)	431445.00	3730273.00	4.73583m	
(14120224)							
431495.00	3730273.00	5.15732m	(14120224)	431545.00	3730273.00	5.66195	
(16020524)							
431595.00	3730273.00	6.30081	(16020524)	431645.00	3730273.00	7.07990	
(16020524)							
431695.00	3730273.00	8.04630	(16020524)	431195.00	3730323.00	3.42192m	
(14120224)							
431245.00	3730323.00	3.63296m	(14120224)	431295.00	3730323.00	3.84317m	
(14120224)							
431345.00	3730323.00	4.12199m	(14120224)	431395.00	3730323.00	4.43975m	
(14120224)							
431445.00	3730323.00	4.79983m	(14120224)	431495.00	3730323.00	5.22131m	
(14120224)							
431545.00	3730323.00	5.71151m	(14120224)	431595.00	3730323.00	6.29622m	
(14120224)							
431645.00	3730323.00	7.03047m	(14120224)	431145.00	3730373.00	3.22825m	
(14120224)							
431195.00	3730373.00	3.42639m	(14120224)	431245.00	3730373.00	3.64138m	
(14120224)							
431295.00	3730373.00	3.83964m	(14120224)	431345.00	3730373.00	4.09514m	
(14120224)							
431395.00	3730373.00	4.39677m	(14120224)	431445.00	3730373.00	4.74207m	
(14120224)							
431495.00	3730373.00	5.13744m	(14120224)	431545.00	3730373.00	5.59826m	
(14120224)							
431595.00	3730373.00	6.15524m	(14120224)	431095.00	3730423.00	3.01447m	
(14120224)							

431145.00 (14120224)	3730423.00	3.18838m (14120224)	431195.00	3730423.00	3.37568m
431245.00 (14120224)	3730423.00	3.58149m (14120224)	431295.00	3730423.00	3.77378m
431345.00 (14120224)	3730423.00	4.02126m (14120224)	431395.00	3730423.00	4.31170m
431445.00 (14120224)	3730423.00	4.64085m (14120224)	431495.00	3730423.00	5.01723m

1ST HIGHEST
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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730423.00	5.45479m	(14120224)	431595.00	3730423.00	6.12419m	
(14120224)							
431045.00	3730473.00	2.80260m	(14120224)	431095.00	3730473.00	2.96049m	
(14120224)							
431145.00	3730473.00	3.12162m	(14120224)	431195.00	3730473.00	3.30627m	
(14120224)							
431245.00	3730473.00	3.51402m	(14120224)	431295.00	3730473.00	3.74412m	
(14120224)							
431345.00	3730473.00	3.95954m	(14120224)	431395.00	3730473.00	4.25482m	
(14120224)							
431445.00	3730473.00	4.59754m	(14120224)	431495.00	3730473.00	4.98910m	
(14120224)							
431545.00	3730473.00	5.56767m	(14120224)	431045.00	3730523.00	2.72579m	
(14120224)							
431095.00	3730523.00	2.87450m	(14120224)	431145.00	3730523.00	3.04355m	
(14120224)							
431195.00	3730523.00	3.22800m	(14120224)	431245.00	3730523.00	3.43962m	
(14120224)							
431295.00	3730523.00	3.67894m	(14120224)	431345.00	3730523.00	3.94892m	
(14120224)							
431395.00	3730523.00	4.21978m	(14120224)	431445.00	3730523.00	4.58431m	
(14120224)							
431495.00	3730523.00	5.01304m	(14120224)	431545.00	3730523.00	5.66917m	
(14120224)							
431045.00	3730573.00	2.60297m	(14120224)	431095.00	3730573.00	2.76129m	
(14120224)							
431145.00	3730573.00	2.92677m	(14120224)	431195.00	3730573.00	3.11555m	
(14120224)							
431245.00	3730573.00	3.32391m	(14120224)	431295.00	3730573.00	3.56627m	
(14120224)							
431345.00	3730573.00	3.84058m	(14120224)	431395.00	3730573.00	4.15389m	
(14120224)							
431445.00	3730573.00	4.47572m	(14120224)	431495.00	3730573.00	4.98252m	
(14120224)							
431045.00	3730623.00	2.46532m	(14120224)	431095.00	3730623.00	2.60674	
(11120524)							
431145.00	3730623.00	2.80397	(11120524)	431195.00	3730623.00	3.01860	
(11120524)							
431245.00	3730623.00	3.25807	(11120524)	431295.00	3730623.00	3.51258	
(11120524)							
431345.00	3730623.00	3.79184	(11120524)	431395.00	3730623.00	4.09784	
(11120524)							
431445.00	3730623.00	4.46937m	(12012324)	431495.00	3730623.00	5.07301m	
(12012324)							
431045.00	3730673.00	2.47190	(11120524)	431095.00	3730673.00	2.64147	
(11120524)							
431145.00	3730673.00	2.82525	(11120524)	431195.00	3730673.00	3.02347	
(11120524)							
431245.00	3730673.00	3.23794	(11120524)	431295.00	3730673.00	3.49528m	
(12012324)							
431345.00	3730673.00	3.81198m	(12012324)	431395.00	3730673.00	4.18290m	
(12012324)							
431445.00	3730673.00	4.62304m	(12012324)	431045.00	3730723.00	2.48120	
(11120524)							
431095.00	3730723.00	2.63866m	(12012324)	431145.00	3730723.00	2.82226m	
(12012324)							
431195.00	3730723.00	3.03152m	(12012324)	431245.00	3730723.00	3.27170m	
(12012324)							
431295.00	3730723.00	3.55415m	(12012324)	431345.00	3730723.00	3.88831m	
(12012324)							
431395.00	3730723.00	4.26846m	(12012324)	431445.00	3730723.00	4.70492m	
(12012324)							
431045.00	3730773.00	2.51580m	(12012324)	431095.00	3730773.00	2.68526m	
(12012324)							
431145.00	3730773.00	2.87308m	(12012324)	431195.00	3730773.00	3.08695m	
(12012324)							
431245.00	3730773.00	3.33129m	(12012324)	431295.00	3730773.00	3.61125m	
(12012324)							
431345.00	3730773.00	3.94571m	(12012324)	431395.00	3730773.00	4.33256m	
(12012324)							
431445.00	3730773.00	4.76419m	(12012324)	431045.00	3730823.00	2.55597m	
(12012324)							

431095.00 (12012324)	3730823.00	2.72965m (12012324)	431145.00	3730823.00	2.92275m
431195.00 (12012324)	3730823.00	3.13867m (12012324)	431245.00	3730823.00	3.38429m
431295.00 (12012324)	3730823.00	3.66338m (12012324)	431345.00	3730823.00	3.98246m
431395.00 (12012324)	3730823.00	4.37185m (12012324)	431445.00	3730823.00	4.80198m

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: AR ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 ,
 L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 ,
 L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 ,
 L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 ,
 L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431045.00	3730873.00	2.59400m	(12012324)	431095.00	3730873.00	2.76922m	(12012324)
431145.00	3730873.00	2.96552m	(12012324)	431195.00	3730873.00	3.18188m	(12012324)
431245.00	3730873.00	3.42453m	(12012324)	431295.00	3730873.00	3.70011m	(12012324)
431345.00	3730873.00	4.01156m	(12012324)	431395.00	3730873.00	4.36990m	(12012324)
431445.00	3730873.00	4.80393m	(12012324)	431836.00	3730841.00	10.66126m	(12012324)
431836.00	3730891.00	9.82154m	(12012324)	431886.00	3730891.00	10.64577m	(12012324)
431836.00	3730941.00	9.00808m	(12012324)	431886.00	3730941.00	9.56869m	(12012324)
431936.00	3730941.00	10.11009m	(12012324)	431886.00	3730991.00	8.65462m	(12012324)
431936.00	3730991.00	9.02835m	(12012324)	431986.00	3730991.00	9.52397m	(12012324)
432036.00	3730991.00	10.31521	(11121924)				

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)				(YYMMDDHH)			
(11012624)	432395.00	3729323.00	63.68653	(11012624)	432445.00	3729323.00	69.80685
(11012624)	432495.00	3729323.00	73.96862	(11012624)	432545.00	3729323.00	76.61188
(11012624)	432395.00	3729373.00	70.61446	(11012624)	432445.00	3729373.00	75.60071
(11012624)	432495.00	3729373.00	79.97151	(11012624)	432545.00	3729373.00	81.59118
(16011924)	432595.00	3729373.00	80.51920	(11012624)	432245.00	3729423.00	68.75285
(11012624)	432295.00	3729423.00	61.23087	(16011924)	432445.00	3729423.00	83.52147
(11012624)	432495.00	3729423.00	86.06937	(11012624)	432545.00	3729423.00	87.33663
(11012624)	432595.00	3729423.00	85.22209	(11012624)	432645.00	3729423.00	80.92611
(16011924)	432195.00	3729473.00	82.09462	(16011924)	432245.00	3729473.00	74.90542
(11012624)	432295.00	3729473.00	67.20955	(11012624)	432345.00	3729473.00	77.46310
(11012624)	432495.00	3729473.00	98.12174	(11012624)	432545.00	3729473.00	93.44823
(11012624)	432595.00	3729473.00	92.47070	(11012624)	432645.00	3729473.00	84.19621
(16011924)	432695.00	3729473.00	77.16650	(11012624)	432145.00	3729523.00	95.62301
(16011924)	432195.00	3729523.00	89.73816	(16011924)	432245.00	3729523.00	81.74165
(11012624)	432295.00	3729523.00	75.67843	(11012624)	432345.00	3729523.00	85.06553
(11012624)	432395.00	3729523.00	93.49993	(11012624)	432545.00	3729523.00	104.28860
(11012624)	432595.00	3729523.00	98.22053	(11012624)	432645.00	3729523.00	90.61402
(16121324)	432695.00	3729523.00	80.18627	(11012624)	432745.00	3729523.00	81.14456
(16011924)	432045.00	3729573.00	107.63826	(16011924)	432095.00	3729573.00	108.15719
(16011924)	432145.00	3729573.00	104.77940	(16011924)	432195.00	3729573.00	98.61369
(11012624)	432245.00	3729573.00	90.04644	(16011924)	432295.00	3729573.00	85.64799
(11012624)	432345.00	3729573.00	94.66923	(11012624)	432395.00	3729573.00	101.29687
(11012624)	432445.00	3729573.00	113.58832	(11012624)	432645.00	3729573.00	92.45323
(16121324)	432695.00	3729573.00	89.62614	(16121324)	432745.00	3729573.00	93.65146
(12010524)	431995.00	3729623.00	123.74451	(12010524)	432045.00	3729623.00	120.03777
(16011924)	432095.00	3729623.00	118.51353	(16011924)	432145.00	3729623.00	116.12751
(16011924)	432195.00	3729623.00	109.51486	(16011924)	432245.00	3729623.00	99.67315
(11012624)	432295.00	3729623.00	96.43624	(11012624)	432345.00	3729623.00	105.96204
(11012624)	432395.00	3729623.00	114.62519	(11012624)	432445.00	3729623.00	124.49816
(16121324)	432645.00	3729623.00	99.36699	(16121324)	432695.00	3729623.00	104.31430
(16121324)	432745.00	3729623.00	107.09477	(16121324)	432795.00	3729623.00	108.13064
(12010524)	431945.00	3729673.00	133.86123	(12010524)	431995.00	3729673.00	137.24936
(16011924)	432045.00	3729673.00	134.55351	(12010524)	432095.00	3729673.00	131.13035
(16011924)	432145.00	3729673.00	128.67255	(16011924)	432195.00	3729673.00	122.05018
(11012624)	432245.00	3729673.00	111.24260	(16011924)	432295.00	3729673.00	110.07009
(16121324)	432345.00	3729673.00	121.59813	(11012624)	432695.00	3729673.00	120.85892

432745.00	3729673.00	122.29665	(16121324)	432795.00	3729673.00	120.86708
(16121324)						
432845.00	3729673.00	117.90957	(16121324)	431895.00	3729723.00	135.20697
(12010524)						
431945.00	3729723.00	146.39535	(12010524)	431995.00	3729723.00	152.50083
(12010524)						
432045.00	3729723.00	151.73713	(12010524)	432095.00	3729723.00	145.69435
(16011924)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)	
432145.00	3729723.00	144.55481	(16011924)	432195.00	3729723.00	137.78312	
(16011924)							
432245.00	3729723.00	127.94262	(16011924)	432295.00	3729723.00	126.43253	
(11012624)							
432745.00	3729723.00	137.52593	(16121324)	432795.00	3729723.00	134.28348	
(16121324)							
432845.00	3729723.00	127.89038	(16121324)	431845.00	3729773.00	143.95631	
(11121524)							
431895.00	3729773.00	146.73763m	(12011124)	431945.00	3729773.00	159.91959	
(12010524)							
431995.00	3729773.00	170.03700	(12010524)	432045.00	3729773.00	172.05078	
(12010524)							
432095.00	3729773.00	167.13165	(12010524)	432145.00	3729773.00	163.71257	
(16011924)							
432195.00	3729773.00	157.61547	(16011924)	432245.00	3729773.00	144.46900	
(16011924)							
432795.00	3729773.00	146.16513	(16121324)	432845.00	3729773.00	134.99514	
(16121324)							
432895.00	3729773.00	123.75948	(16121324)	431745.00	3729823.00	140.13597m	
(16021124)							
431795.00	3729823.00	147.94533m	(16021124)	431845.00	3729823.00	160.67528	
(11121524)							
431895.00	3729823.00	168.46656	(11121524)	431945.00	3729823.00	175.04756m	
(12011124)							
431995.00	3729823.00	190.99622	(12010524)	432045.00	3729823.00	197.48333	
(12010524)							
432095.00	3729823.00	195.03952	(12010524)	432145.00	3729823.00	189.53681	
(16011924)							
432195.00	3729823.00	181.71882	(16011924)	432845.00	3729823.00	138.69753	
(16121324)							
432895.00	3729823.00	125.00640	(16121324)	432945.00	3729823.00	112.00736	
(16121324)							
431695.00	3729873.00	146.93546m	(13123124)	431745.00	3729873.00	157.20992m	
(13123124)							
431795.00	3729873.00	166.96734m	(13123124)	431845.00	3729873.00	176.10602	
(11121524)							
431895.00	3729873.00	193.77151	(11121524)	431945.00	3729873.00	202.47340	
(11121524)							
431995.00	3729873.00	217.54187	(12010524)	432045.00	3729873.00	230.17369	
(12010524)							
432095.00	3729873.00	232.35501	(12010524)	432145.00	3729873.00	224.93702	
(16011924)							
432845.00	3729873.00	139.26503	(16121324)	432895.00	3729873.00	122.22820	
(16121324)							
432945.00	3729873.00	108.23101	(16121324)	431645.00	3729923.00	143.30818m	
(13123124)							
431695.00	3729923.00	156.63826m	(13123124)	431745.00	3729923.00	172.31102m	
(13123124)							
431795.00	3729923.00	189.49600m	(13123124)	431845.00	3729923.00	207.19546m	
(13123124)							
431895.00	3729923.00	224.72988m	(13123124)	431945.00	3729923.00	247.26791	
(11121524)							
431995.00	3729923.00	258.64826m	(12011124)	432045.00	3729923.00	276.93345	
(12010524)							
432895.00	3729923.00	117.43937	(16121324)	432945.00	3729923.00	101.21623	
(16121324)							
432995.00	3729923.00	88.76297	(16121324)	431595.00	3729973.00	131.63496m	
(13123124)							
431645.00	3729973.00	144.93443m	(13123124)	431695.00	3729973.00	161.78569m	
(13123124)							
431745.00	3729973.00	181.35308m	(13123124)	431795.00	3729973.00	204.36359m	
(13123124)							
431845.00	3729973.00	233.53754m	(13123124)	431895.00	3729973.00	273.08553m	
(13123124)							
431945.00	3729973.00	324.68488m	(13123124)	431995.00	3729973.00	359.65890	
(11121524)							
432945.00	3729973.00	102.09655	(14020724)	432995.00	3729973.00	94.03657	
(14020724)							
431545.00	3730023.00	115.78476m	(13123124)	431595.00	3730023.00	128.40752m	
(13123124)							
431645.00	3730023.00	143.12781m	(13123124)	431695.00	3730023.00	160.75441m	
(13123124)							

431745.00 (13123124)	3730023.00	181.50960m (13123124)	431795.00	3730023.00	207.73629m
431845.00 (13123124)	3730023.00	243.36041m (13123124)	431895.00	3730023.00	296.66562m
431945.00 (14020724)	3730023.00	410.78709m (13123124)	432945.00	3730023.00	108.81769
432995.00 (14120524)	3730023.00	99.63009 (14020724)	431495.00	3730073.00	103.13225

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730073.00	110.91908	(14120524)	431595.00	3730073.00	121.71273m	
(13123124)							
431645.00	3730073.00	137.05428m	(13123124)	431695.00	3730073.00	154.54469m	
(13123124)							
431745.00	3730073.00	175.44210m	(13123124)	431795.00	3730073.00	200.73691m	
(13123124)							
431845.00	3730073.00	232.80208m	(13123124)	431895.00	3730073.00	275.78140m	
(13123124)							
432945.00	3730073.00	112.73492	(14020724)	432995.00	3730073.00	103.46949	
(14020724)							
431395.00	3730123.00	87.10487	(14120524)	431445.00	3730123.00	93.91974	
(14120524)							
431495.00	3730123.00	101.05422	(14120524)	431545.00	3730123.00	109.03904	
(14120524)							
431595.00	3730123.00	118.31086	(14120524)	431645.00	3730123.00	130.18688	
(14120524)							
431695.00	3730123.00	144.65698m	(13123124)	431745.00	3730123.00	164.48155m	
(13123124)							
431795.00	3730123.00	188.54285m	(13123124)	431845.00	3730123.00	218.64318m	
(13123124)							
432995.00	3730123.00	105.30310	(14020724)	431345.00	3730173.00	84.39811	
(16120724)							
431395.00	3730173.00	90.14813	(16120724)	431445.00	3730173.00	96.55811	
(16120724)							
431495.00	3730173.00	103.79939	(16120724)	431545.00	3730173.00	111.27116	
(16120724)							
431595.00	3730173.00	120.69298	(16120724)	431645.00	3730173.00	131.97760	
(16120724)							
431695.00	3730173.00	146.30739	(16120724)	431745.00	3730173.00	161.76610	
(16120724)							
431795.00	3730173.00	180.29233	(16120724)	431295.00	3730223.00	85.64715	
(16120724)							
431345.00	3730223.00	91.11441	(16120724)	431395.00	3730223.00	97.12854	
(16120724)							
431445.00	3730223.00	103.96679	(16120724)	431495.00	3730223.00	111.45540	
(16120724)							
431545.00	3730223.00	119.69538	(16120724)	431595.00	3730223.00	129.02781	
(16120724)							
431645.00	3730223.00	140.51544	(16120724)	431695.00	3730223.00	153.58244	
(16120724)							
431745.00	3730223.00	170.54384	(16120724)	431245.00	3730273.00	84.87478	
(16120724)							
431295.00	3730273.00	89.71422	(16120724)	431345.00	3730273.00	95.17793	
(16120724)							
431395.00	3730273.00	101.14364	(16120724)	431445.00	3730273.00	107.71783	
(16120724)							
431495.00	3730273.00	115.09808	(16120724)	431545.00	3730273.00	123.41024	
(16120724)							
431595.00	3730273.00	132.65386	(16120724)	431645.00	3730273.00	143.33700	
(16120724)							
431695.00	3730273.00	155.79960	(16120724)	431195.00	3730323.00	83.13302	
(16120724)							
431245.00	3730323.00	87.12470	(16120724)	431295.00	3730323.00	91.23790	
(16120724)							
431345.00	3730323.00	96.34831	(16120724)	431395.00	3730323.00	102.07320	
(16120724)							
431445.00	3730323.00	108.23587	(16120724)	431495.00	3730323.00	114.96607	
(16120724)							
431545.00	3730323.00	122.76915	(16120724)	431595.00	3730323.00	131.24183	
(16120724)							
431645.00	3730323.00	140.97215	(16120724)	431145.00	3730373.00	78.86276	
(16120724)							
431195.00	3730373.00	82.62094	(16120724)	431245.00	3730373.00	86.96707	
(16120724)							
431295.00	3730373.00	90.56162	(16120724)	431345.00	3730373.00	95.11906	
(16120724)							
431395.00	3730373.00	100.32570	(16120724)	431445.00	3730373.00	105.95378	
(16120724)							
431495.00	3730373.00	111.99594	(16120724)	431545.00	3730373.00	118.77654	
(16120724)							
431595.00	3730373.00	126.38463	(16120724)	431095.00	3730423.00	73.81792	
(16120724)							

431145.00	3730423.00	77.06302	(16120724)	431195.00	3730423.00	80.67626
(16120724)						
431245.00	3730423.00	83.92765	(16120724)	431295.00	3730423.00	87.67608
(16120724)						
431345.00	3730423.00	91.53211	(16120724)	431395.00	3730423.00	96.12219
(16120724)						
431445.00	3730423.00	101.44212	(16120724)	431495.00	3730423.00	106.67982
(16120724)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3		**		
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						
431545.00	3730423.00	112.81385	(16120724)	431595.00	3730423.00	123.40522m
(11013124)						
431045.00	3730473.00	68.14709	(16120724)	431095.00	3730473.00	70.92940
(16120724)						
431145.00	3730473.00	73.42336	(16120724)	431195.00	3730473.00	76.53289
(16120724)						
431245.00	3730473.00	79.82922	(16120724)	431295.00	3730473.00	83.34529
(16120724)						
431345.00	3730473.00	86.05452	(16120724)	431395.00	3730473.00	90.43532
(16120724)						
431445.00	3730473.00	94.67354	(16120724)	431495.00	3730473.00	100.65271m
(11013124)						
431545.00	3730473.00	110.10633m	(11013124)	431045.00	3730523.00	64.01419
(16120724)						
431095.00	3730523.00	66.40457	(16120724)	431145.00	3730523.00	68.83884
(16120724)						
431195.00	3730523.00	71.38319	(16120724)	431245.00	3730523.00	74.15345
(16120724)						
431295.00	3730523.00	77.10207	(16120724)	431345.00	3730523.00	80.06325
(16120724)						
431395.00	3730523.00	84.23060m	(11013124)	431445.00	3730523.00	89.75874m
(11013124)						
431495.00	3730523.00	95.79065m	(11013124)	431545.00	3730523.00	103.96374m
(11013124)						
431045.00	3730573.00	58.85657	(16120724)	431095.00	3730573.00	60.99219
(16120724)						
431145.00	3730573.00	62.95425	(16120724)	431195.00	3730573.00	65.19431
(16120724)						
431245.00	3730573.00	68.38256m	(11013124)	431295.00	3730573.00	72.13426m
(11013124)						
431345.00	3730573.00	76.27887m	(11013124)	431395.00	3730573.00	80.49353m
(11013124)						
431445.00	3730573.00	86.58116	(11022324)	431495.00	3730573.00	94.53734
(11022324)						
431045.00	3730623.00	53.76439	(11020824)	431095.00	3730623.00	55.93871m
(11013124)						
431145.00	3730623.00	58.67313m	(11013124)	431195.00	3730623.00	61.61557
(11022324)						
431245.00	3730623.00	66.28754	(11022324)	431295.00	3730623.00	71.56870
(11022324)						
431345.00	3730623.00	76.94884	(11022324)	431395.00	3730623.00	82.68779
(11022324)						
431445.00	3730623.00	88.22343	(11022324)	431495.00	3730623.00	95.91728
(11022324)						
431045.00	3730673.00	52.19702	(11022324)	431095.00	3730673.00	56.12693
(11022324)						
431145.00	3730673.00	59.63444	(11022324)	431195.00	3730673.00	64.02525
(11022324)						
431245.00	3730673.00	68.25043	(11022324)	431295.00	3730673.00	73.24954
(11022324)						
431345.00	3730673.00	77.97868	(11022324)	431395.00	3730673.00	83.24454
(11022324)						
431445.00	3730673.00	88.64614	(11022324)	431045.00	3730723.00	54.43128
(11022324)						
431095.00	3730723.00	57.76452	(11022324)	431145.00	3730723.00	61.36010
(11022324)						
431195.00	3730723.00	65.26773	(11022324)	431245.00	3730723.00	68.81559
(11022324)						
431295.00	3730723.00	73.31013	(11022324)	431345.00	3730723.00	77.51740
(11022324)						
431395.00	3730723.00	81.97606	(11022324)	431445.00	3730723.00	86.23506
(11022324)						
431045.00	3730773.00	55.53569	(11022324)	431095.00	3730773.00	58.71832
(11022324)						
431145.00	3730773.00	61.92457	(11022324)	431195.00	3730773.00	65.26998
(11022324)						
431245.00	3730773.00	68.58900	(11022324)	431295.00	3730773.00	72.18151
(11022324)						
431345.00	3730773.00	75.67833	(11022324)	431395.00	3730773.00	79.22964
(11022324)						
431445.00	3730773.00	85.08978b	(12013024)	431045.00	3730823.00	55.94528
(11022324)						

431095.00	3730823.00	58.61377	(11022324)	431145.00	3730823.00	61.46923
(11022324)						
431195.00	3730823.00	64.17611	(11022324)	431245.00	3730823.00	66.85808
(11022324)						
431295.00	3730823.00	69.67397	(11022324)	431345.00	3730823.00	72.34735
(11022324)						
431395.00	3730823.00	79.74791b	(12013024)	431445.00	3730823.00	88.32138b
(12013024)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: B ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)			
(11022324)	431045.00	3730873.00	55.44475	(11022324)	431095.00	3730873.00	57.89572
(11022324)	431145.00	3730873.00	60.16550	(11022324)	431195.00	3730873.00	62.36401
(11022324)	431245.00	3730873.00	64.39961	(11022324)	431295.00	3730873.00	67.89767b
(12013024)	431345.00	3730873.00	74.71802b	(12013024)	431395.00	3730873.00	81.74798b
(12013024)	431445.00	3730873.00	89.33430b	(12013024)	431836.00	3730841.00	144.30832b
(12013024)	431836.00	3730891.00	126.03529b	(12013024)	431886.00	3730891.00	130.09422
(16122324)	431836.00	3730941.00	113.10745	(11122224)	431886.00	3730941.00	123.94579
(16122324)	431936.00	3730941.00	143.68161	(16122324)	431886.00	3730991.00	118.22165
(16122324)	431936.00	3730991.00	133.03673	(16122324)	431986.00	3730991.00	145.46979
(16122324)	432036.00	3730991.00	153.30958	(16122324)			

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10		IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)		X-COORD (M)	Y-COORD (M)		
432395.00	3729323.00	2.16188	(16011924)	432445.00	3729323.00	1.92573			
432495.00	3729323.00	1.68044	(14122524)	432545.00	3729323.00	1.77190			
432395.00	3729373.00	2.28294	(16011924)	432445.00	3729373.00	2.05231			
432495.00	3729373.00	1.78955	(16011924)	432545.00	3729373.00	1.94751			
432595.00	3729373.00	2.22258	(11012624)	432245.00	3729423.00	2.85207			
432295.00	3729423.00	2.77224	(16011924)	432445.00	3729423.00	2.16795			
432495.00	3729423.00	1.91007	(16011924)	432545.00	3729423.00	2.14447			
432595.00	3729423.00	2.44179	(11012624)	432645.00	3729423.00	2.66519			
432195.00	3729473.00	3.08477	(16011924)	432245.00	3729473.00	3.05956			
432295.00	3729473.00	2.96914	(16011924)	432345.00	3729473.00	2.83612			
432495.00	3729473.00	2.16564	(14122524)	432545.00	3729473.00	2.38501			
432595.00	3729473.00	2.75462	(11012624)	432645.00	3729473.00	2.90425			
432695.00	3729473.00	3.01347	(11012624)	432145.00	3729523.00	3.46045			
432195.00	3729523.00	3.30283	(16011924)	432245.00	3729523.00	3.28937			
432295.00	3729523.00	3.20369	(16011924)	432345.00	3729523.00	3.05339			
432395.00	3729523.00	2.85583	(16011924)	432545.00	3729523.00	2.72960			
432595.00	3729523.00	3.06146	(11012624)	432645.00	3729523.00	3.28377			
432695.00	3729523.00	3.34101	(11012624)	432745.00	3729523.00	3.35694			
432045.00	3729573.00	3.86906	(12010524)	432095.00	3729573.00	3.87614			
432145.00	3729573.00	3.77818	(12010524)	432195.00	3729573.00	3.57528			
432245.00	3729573.00	3.54753	(16011924)	432295.00	3729573.00	3.46098			
432345.00	3729573.00	3.30158	(16011924)	432395.00	3729573.00	3.08388			
432445.00	3729573.00	2.60462	(16011924)	432645.00	3729573.00	3.54777			
432695.00	3729573.00	3.57539	(11012624)	432745.00	3729573.00	3.48334			
431995.00	3729623.00	3.96115	(12010524)	432045.00	3729623.00	4.13533			
432095.00	3729623.00	4.19308	(12010524)	432145.00	3729623.00	4.12391			
432195.00	3729623.00	3.95047	(12010524)	432245.00	3729623.00	3.84045			
432295.00	3729623.00	3.75857	(16011924)	432345.00	3729623.00	3.58450			
432395.00	3729623.00	3.34607	(16011924)	432445.00	3729623.00	2.80336			
432645.00	3729623.00	3.86241	(11012624)	432695.00	3729623.00	3.83159			
432745.00	3729623.00	3.63794	(11012624)	432795.00	3729623.00	3.37415			
431945.00	3729673.00	3.78582	(12010524)	431995.00	3729673.00	4.15198			
432045.00	3729673.00	4.40442	(12010524)	432095.00	3729673.00	4.53480			
432145.00	3729673.00	4.51273	(12010524)	432195.00	3729673.00	4.34857			
432245.00	3729673.00	4.17307	(16011924)	432295.00	3729673.00	4.10328			
432345.00	3729673.00	3.91755	(16011924)	432695.00	3729673.00	3.99234			
432745.00	3729673.00	3.77085	(11012624)	432795.00	3729673.00	3.41761			
432845.00	3729673.00	3.28170	(11012624)	431895.00	3729723.00	4.08318			
431945.00	3729723.00	4.02053	(11121524)	431995.00	3729723.00	4.32053			
432045.00	3729723.00	4.67623	(12010524)	432095.00	3729723.00	4.89427			

(12010524)

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10		IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)					
432145.00	3729723.00	4.95359	(12010524)	432195.00	3729723.00	4.82781			
(12010524)									
432245.00	3729723.00	4.53061	(12010524)	432295.00	3729723.00	4.49465			
(16011924)									
432745.00	3729723.00	3.84106	(11012624)	432795.00	3729723.00	3.60315			
(11012624)									
432845.00	3729723.00	3.29636	(11012624)	431845.00	3729773.00	4.32389			
(11121524)									
431895.00	3729773.00	4.48056	(11121524)	431945.00	3729773.00	4.52081			
(11121524)									
431995.00	3729773.00	4.46336	(12010524)	432045.00	3729773.00	4.94144			
(12010524)									
432095.00	3729773.00	5.28438	(12010524)	432145.00	3729773.00	5.43650			
(12010524)									
432195.00	3729773.00	5.37927	(12010524)	432245.00	3729773.00	5.12766			
(12010524)									
432795.00	3729773.00	3.59568	(11012624)	432845.00	3729773.00	3.38790			
(16121324)									
432895.00	3729773.00	3.50117	(16121324)	431745.00	3729823.00	4.45132m			
(16021124)									
431795.00	3729823.00	4.56658m	(16021124)	431845.00	3729823.00	4.60617m			
(16021124)									
431895.00	3729823.00	4.85529	(11121524)	431945.00	3729823.00	5.02429			
(11121524)									
431995.00	3729823.00	5.03545	(11121524)	432045.00	3729823.00	5.18949			
(12010524)									
432095.00	3729823.00	5.68636	(12010524)	432145.00	3729823.00	5.97616			
(12010524)									
432195.00	3729823.00	6.04680	(12010524)	432845.00	3729823.00	3.88633			
(16121324)									
432895.00	3729823.00	3.96450	(16121324)	432945.00	3729823.00	4.01186			
(16121324)									
431695.00	3729873.00	4.45756m	(16021124)	431745.00	3729873.00	4.73455m			
(16021124)									
431795.00	3729873.00	4.96557m	(16021124)	431845.00	3729873.00	5.13386m			
(16021124)									
431895.00	3729873.00	5.18206m	(16021124)	431945.00	3729873.00	5.51136			
(11121524)									
431995.00	3729873.00	5.68842	(11121524)	432045.00	3729873.00	5.65664			
(11121524)									
432095.00	3729873.00	6.08348	(12010524)	432145.00	3729873.00	6.58806			
(12010524)									
432845.00	3729873.00	4.53932	(16121324)	432895.00	3729873.00	4.51440			
(16121324)									
432945.00	3729873.00	4.50976	(16121324)	431645.00	3729923.00	4.43921			
(16012024)									
431695.00	3729923.00	4.64980	(16012024)	431745.00	3729923.00	4.92750m			
(16021124)									
431795.00	3729923.00	5.28829m	(16021124)	431845.00	3729923.00	5.58472m			
(16021124)									
431895.00	3729923.00	5.81002m	(16021124)	431945.00	3729923.00	5.94504			
(11121524)									
431995.00	3729923.00	6.33746	(11121524)	432045.00	3729923.00	6.51013			
(11121524)									
432895.00	3729923.00	5.06698	(16121324)	432945.00	3729923.00	4.92787			
(16121324)									
432995.00	3729923.00	4.89946	(16121324)	431595.00	3729973.00	4.32066m			
(13123124)									
431645.00	3729973.00	4.61194	(16012024)	431695.00	3729973.00	4.94213			
(16012024)									
431745.00	3729973.00	5.24875	(16012024)	431795.00	3729973.00	5.50959			
(16012024)									
431845.00	3729973.00	5.94205m	(16021124)	431895.00	3729973.00	6.35989m			
(16021124)									
431945.00	3729973.00	6.66887m	(16021124)	431995.00	3729973.00	6.92499			
(11121524)									
432945.00	3729973.00	5.41509	(16121324)	432995.00	3729973.00	5.23911			
(16121324)									
431545.00	3730023.00	4.05788m	(13123124)	431595.00	3730023.00	4.39840m			
(13123124)									
431645.00	3730023.00	4.76754m	(13123124)	431695.00	3730023.00	5.17033m			
(13123124)									
431745.00	3730023.00	5.58059m	(13123124)	431795.00	3730023.00	5.98851m			
(13123124)									
431845.00	3730023.00	6.39748m	(13123124)	431895.00	3730023.00	6.75460m			
(16021124)									
431945.00	3730023.00	7.31759m	(16021124)	432945.00	3730023.00	5.76279			
(16121324)									
432995.00	3730023.00	5.34924	(16121324)	431495.00	3730073.00	3.64700m			

(13123124)

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10		IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)		X-COORD (M)	Y-COORD (M)		
(13123124)	431545.00	3730073.00	3.98565m	(13123124)	431595.00	3730073.00	4.37407m		
(13123124)	431645.00	3730073.00	4.81471m	(13123124)	431695.00	3730073.00	5.28498m		
(13123124)	431745.00	3730073.00	5.80032m	(13123124)	431795.00	3730073.00	6.35031m		
(13123124)	431845.00	3730073.00	6.92384m	(13123124)	431895.00	3730073.00	7.52258m		
(16121324)	432945.00	3730073.00	5.80674	(16121324)	432995.00	3730073.00	5.40071		
(14120524)	431395.00	3730123.00	3.31598	(14120524)	431445.00	3730123.00	3.52502		
(14120524)	431495.00	3730123.00	3.74322	(14120524)	431545.00	3730123.00	3.97944		
(13123124)	431595.00	3730123.00	4.23476	(14120524)	431645.00	3730123.00	4.71339m		
(13123124)	431695.00	3730123.00	5.24805m	(13123124)	431745.00	3730123.00	5.84547m		
(13123124)	431795.00	3730123.00	6.51982m	(13123124)	431845.00	3730123.00	7.29150m		
(14120524)	432995.00	3730123.00	5.48794	(16121324)	431345.00	3730173.00	3.09787		
(14120524)	431395.00	3730173.00	3.31698	(14120524)	431445.00	3730173.00	3.55693		
(14120524)	431495.00	3730173.00	3.81185	(14120524)	431545.00	3730173.00	4.09043		
(14120524)	431595.00	3730173.00	4.39932	(14120524)	431645.00	3730173.00	4.75442		
(13123124)	431695.00	3730173.00	5.16591	(14120524)	431745.00	3730173.00	5.69190m		
(16020924)	431795.00	3730173.00	6.46021m	(13123124)	431295.00	3730223.00	2.82040		
(14120524)	431345.00	3730223.00	3.00204	(14120524)	431395.00	3730223.00	3.22859		
(14120524)	431445.00	3730223.00	3.47978	(14120524)	431495.00	3730223.00	3.75883		
(14120524)	431545.00	3730223.00	4.06156	(14120524)	431595.00	3730223.00	4.41739		
(14120524)	431645.00	3730223.00	4.81522	(14120524)	431695.00	3730223.00	5.27749		
(16020924)	431745.00	3730223.00	5.81908	(14120524)	431245.00	3730273.00	2.65112		
(16020924)	431295.00	3730273.00	2.80563	(16020924)	431345.00	3730273.00	2.97993		
(16020924)	431395.00	3730273.00	3.17399	(16020924)	431445.00	3730273.00	3.38559		
(14120524)	431495.00	3730273.00	3.62097	(16020924)	431545.00	3730273.00	3.89992		
(14120524)	431595.00	3730273.00	4.25862	(14120524)	431645.00	3730273.00	4.67583		
(16120724)	431695.00	3730273.00	5.16579	(14120524)	431195.00	3730323.00	2.52684		
(16120724)	431245.00	3730323.00	2.65566	(16120724)	431295.00	3730323.00	2.78631		
(16120724)	431345.00	3730323.00	2.95205	(16120724)	431395.00	3730323.00	3.13153		
(16120724)	431445.00	3730323.00	3.32784	(16120724)	431495.00	3730323.00	3.55493		
(16020924)	431545.00	3730323.00	3.81701	(16020924)	431595.00	3730323.00	4.12877		
(16120724)	431645.00	3730323.00	4.49303	(16020924)	431145.00	3730373.00	2.66698		
(16120724)	431195.00	3730373.00	2.81030	(16120724)	431245.00	3730373.00	2.96474		
(16120724)	431295.00	3730373.00	3.11391	(16120724)	431345.00	3730373.00	3.29745		
(16120724)	431395.00	3730373.00	3.50745	(16120724)	431445.00	3730373.00	3.74110		
(16120724)	431495.00	3730373.00	4.00150	(16120724)	431545.00	3730373.00	4.29831		
(16120724)	431595.00	3730373.00	4.64367	(16120724)	431095.00	3730423.00	2.72452		
(16120724)	431145.00	3730423.00	2.86440	(16120724)	431195.00	3730423.00	3.01565		
(16120724)	431245.00	3730423.00	3.17791	(16120724)	431295.00	3730423.00	3.34125		
(16120724)	431345.00	3730423.00	3.53516	(16120724)	431395.00	3730423.00	3.75920		
(16120724)	431445.00	3730423.00	4.00749	(16120724)	431495.00	3730423.00	4.28523		

(16120724)

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10		IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)		X-COORD (M)	Y-COORD (M)		
(16120724)	431545.00	3730423.00	4.59896	(16120724)	431595.00	3730423.00	4.99816		
(16120724)	431045.00	3730473.00	2.70951	(16120724)	431095.00	3730473.00	2.84347		
(16120724)	431145.00	3730473.00	2.98189	(16120724)	431195.00	3730473.00	3.13406		
(16120724)	431245.00	3730473.00	3.29748	(16120724)	431295.00	3730473.00	3.47878		
(16120724)	431345.00	3730473.00	3.65873	(16120724)	431395.00	3730473.00	3.87489		
(16120724)	431445.00	3730473.00	4.11602	(16120724)	431495.00	3730473.00	4.38004		
(16120724)	431545.00	3730473.00	4.70948	(16120724)	431045.00	3730523.00	2.75467		
(16120724)	431095.00	3730523.00	2.87854	(16120724)	431145.00	3730523.00	3.01344		
(16120724)	431195.00	3730523.00	3.15470	(16120724)	431245.00	3730523.00	3.31486		
(16120724)	431295.00	3730523.00	3.48318	(16120724)	431345.00	3730523.00	3.66338		
(16120724)	431395.00	3730523.00	3.84865	(16120724)	431445.00	3730523.00	4.06486		
(16120724)	431495.00	3730523.00	4.29303	(16120724)	431545.00	3730523.00	4.58989		
(16120724)	431045.00	3730573.00	2.71985	(16120724)	431095.00	3730573.00	2.83750		
(16120724)	431145.00	3730573.00	2.96462	(16120724)	431195.00	3730573.00	3.09433		
(16120724)	431245.00	3730573.00	3.23130	(16120724)	431295.00	3730573.00	3.38221		
(16120724)	431345.00	3730573.00	3.54300	(16120724)	431395.00	3730573.00	3.70907		
(16120724)	431445.00	3730573.00	3.87471	(16120724)	431495.00	3730573.00	4.08294		
(16120724)	431045.00	3730623.00	2.63543	(16120724)	431095.00	3730623.00	2.73357		
(16120724)	431145.00	3730623.00	2.84092	(16120724)	431195.00	3730623.00	2.95232		
(16120724)	431245.00	3730623.00	3.07577	(16120724)	431295.00	3730623.00	3.19868		
(16120724)	431345.00	3730623.00	3.32857	(16120724)	431395.00	3730623.00	3.46640		
(16120724)	431445.00	3730623.00	3.58763	(16120724)	431495.00	3730623.00	3.76265		
(16120724)	431045.00	3730673.00	2.49267	(16120724)	431095.00	3730673.00	2.57630		
(16120724)	431145.00	3730673.00	2.66631	(16120724)	431195.00	3730673.00	2.75209		
(16120724)	431245.00	3730673.00	2.84770	(16120724)	431295.00	3730673.00	2.94699		
(16120724)	431345.00	3730673.00	3.04734	(16120724)	431395.00	3730673.00	3.15507		
(16120724)	431445.00	3730673.00	3.25152	(16120724)	431045.00	3730723.00	2.31268		
(16120724)	431095.00	3730723.00	2.37784	(16120724)	431145.00	3730723.00	2.44219		
(16120724)	431195.00	3730723.00	2.51419	(16120724)	431245.00	3730723.00	2.58016		
(16120724)	431295.00	3730723.00	2.65752	(16120724)	431345.00	3730723.00	2.72973		
(16120724)	431395.00	3730723.00	2.82162	(11020824)	431445.00	3730723.00	2.91220		
(11020824)	431045.00	3730773.00	2.10257	(16120724)	431095.00	3730773.00	2.15501		
(11020824)	431145.00	3730773.00	2.21433	(11020824)	431195.00	3730773.00	2.27537		
(11020824)	431245.00	3730773.00	2.33475	(11020824)	431295.00	3730773.00	2.39706		
(11020824)	431345.00	3730773.00	2.46681	(11020824)	431395.00	3730773.00	2.58829		
(11022324)	431445.00	3730773.00	2.78691	(11022324)	431045.00	3730823.00	1.92404		
(11020824)	431095.00	3730823.00	1.97203	(11020824)	431145.00	3730823.00	2.01258		
(11020824)	431195.00	3730823.00	2.05986	(11020824)	431245.00	3730823.00	2.17166		
(11022324)	431295.00	3730823.00	2.32743	(11022324)	431345.00	3730823.00	2.49158		
(11022324)	431395.00	3730823.00	2.66676	(11022324)	431445.00	3730823.00	2.85199		

(11022324)

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TRENCH ***
 INCLUDING SOURCE(S): TRENCH3 , TRENCH2 , TRENCH1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10		IN MICROGRAMS/M**3		CONC
(YYMMDDHH)				(YYMMDDHH)				
431045.00	3730873.00	1.74786	(11022324)	431095.00	3730873.00	1.86512		
(11022324)								
431145.00	3730873.00	1.98588	(11022324)	431195.00	3730873.00	2.11949		
(11022324)								
431245.00	3730873.00	2.25170	(11022324)	431295.00	3730873.00	2.39519		
(11022324)								
431345.00	3730873.00	2.54445	(11022324)	431395.00	3730873.00	2.69725		
(11022324)								
431445.00	3730873.00	2.85752	(11022324)	431836.00	3730841.00	4.62948b		
(12013024)								
431836.00	3730891.00	4.50561b	(12013024)	431886.00	3730891.00	4.85189b		
(12013024)								
431836.00	3730941.00	4.35016b	(12013024)	431886.00	3730941.00	4.61704b		
(12013024)								
431936.00	3730941.00	4.88078	(11122224)	431886.00	3730991.00	4.44858b		
(12013024)								
431936.00	3730991.00	4.63195b	(12013024)	431986.00	3730991.00	4.85312b		
(12013024)								
432036.00	3730991.00	4.94174b	(12013024)					

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		**	
(YYMMDDHH)	(YYMMDDHH)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	
432395.00	3729323.00	10.24938	(16011924)	432445.00	3729323.00	9.44786	
(16011924)							
432495.00	3729323.00	8.51072	(16011924)	432545.00	3729323.00	7.74244	
(16011924)							
432395.00	3729373.00	11.00503	(16011924)	432445.00	3729373.00	10.11854	
(16011924)							
432495.00	3729373.00	9.15810	(16011924)	432545.00	3729373.00	8.24997	
(11012624)							
432595.00	3729373.00	8.81009	(11012624)	432245.00	3729423.00	13.49533	
(16011924)							
432295.00	3729423.00	13.28801	(16011924)	432445.00	3729423.00	10.89083	
(16011924)							
432495.00	3729423.00	9.79610	(16011924)	432545.00	3729423.00	8.97099	
(11012624)							
432595.00	3729423.00	9.68860	(11012624)	432645.00	3729423.00	10.00578	
(11012624)							
432195.00	3729473.00	15.09569	(12010524)	432245.00	3729473.00	14.51732	
(16011924)							
432295.00	3729473.00	14.39048	(16011924)	432345.00	3729473.00	13.91556	
(16011924)							
432495.00	3729473.00	10.56093	(16011924)	432545.00	3729473.00	9.92366	
(11012624)							
432595.00	3729473.00	10.59996	(11012624)	432645.00	3729473.00	10.84971	
(11012624)							
432695.00	3729473.00	10.91406	(11012624)	432145.00	3729523.00	17.20294	
(12010524)							
432195.00	3729523.00	16.74174	(12010524)	432245.00	3729523.00	15.86256	
(16011924)							
432295.00	3729523.00	15.57083	(16011924)	432345.00	3729523.00	15.11336	
(16011924)							
432395.00	3729523.00	13.98216	(16011924)	432545.00	3729523.00	11.16563	
(11012624)							
432595.00	3729523.00	11.52530	(11012624)	432645.00	3729523.00	11.59989	
(11012624)							
432695.00	3729523.00	11.64833	(11012624)	432745.00	3729523.00	11.43684	
(11012624)							
432045.00	3729573.00	17.20861	(12010524)	432095.00	3729573.00	18.20116	
(12010524)							
432145.00	3729573.00	18.72351	(12010524)	432195.00	3729573.00	18.53814	
(12010524)							
432245.00	3729573.00	17.59524	(12010524)	432295.00	3729573.00	17.19454	
(16011924)							
432345.00	3729573.00	16.49796	(16011924)	432395.00	3729573.00	15.41056	
(16011924)							
432445.00	3729573.00	13.91247	(16011924)	432645.00	3729573.00	12.42634	
(11012624)							
432695.00	3729573.00	12.28124	(11012624)	432745.00	3729573.00	12.04413	
(11012624)							
431995.00	3729623.00	16.19412	(12010524)	432045.00	3729623.00	17.97443	
(12010524)							
432095.00	3729623.00	19.45253	(12010524)	432145.00	3729623.00	20.30716	
(12010524)							
432195.00	3729623.00	20.59738	(12010524)	432245.00	3729623.00	19.91168	
(12010524)							
432295.00	3729623.00	18.86796	(16011924)	432345.00	3729623.00	18.11181	
(16011924)							
432395.00	3729623.00	16.71684	(16011924)	432445.00	3729623.00	15.13249	
(16011924)							
432645.00	3729623.00	13.22105	(11012624)	432695.00	3729623.00	12.98070	
(11012624)							
432745.00	3729623.00	12.68766	(11012624)	432795.00	3729623.00	12.45489	
(11012624)							
431945.00	3729673.00	17.03878	(11121524)	431995.00	3729673.00	17.58304	
(11121524)							
432045.00	3729673.00	18.53510	(12010524)	432095.00	3729673.00	20.67093	
(12010524)							
432145.00	3729673.00	22.12219	(12010524)	432195.00	3729673.00	22.63900	
(12010524)							
432245.00	3729673.00	22.53256	(12010524)	432295.00	3729673.00	21.08792	
(16011924)							
432345.00	3729673.00	20.14766	(16011924)	432695.00	3729673.00	13.77052	
(11012624)							
432745.00	3729673.00	13.47693	(11012624)	432795.00	3729673.00	13.06409	
(11012624)							
432845.00	3729673.00	12.71952	(11012624)	431895.00	3729723.00	17.05875	
(11012624)							

(11121524)							
431945.00	3729723.00	18.34233	(11121524)	431995.00	3729723.00	19.30726	
(11121524)							
432045.00	3729723.00	19.93236	(11121524)	432095.00	3729723.00	21.66510	
(12010524)							

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10		IN MICROGRAMS/M**3				**
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC
(YYMMDDHH)						
432145.00	3729723.00	23.90463	(12010524)	432195.00	3729723.00	25.26470
(12010524)						
432245.00	3729723.00	25.22098	(12010524)	432295.00	3729723.00	24.00120
(12010524)						
432745.00	3729723.00	14.11278	(11012624)	432795.00	3729723.00	13.83436
(16121324)						
432845.00	3729723.00	13.66012	(11012624)	431845.00	3729773.00	17.28340m
(16021124)						
431895.00	3729773.00	17.95199m	(16021124)	431945.00	3729773.00	19.21078
(11121524)						
431995.00	3729773.00	20.97976	(11121524)	432045.00	3729773.00	22.26049
(11121524)						
432095.00	3729773.00	23.01784	(11121524)	432145.00	3729773.00	25.72700
(12010524)						
432195.00	3729773.00	28.27166	(12010524)	432245.00	3729773.00	29.57891
(12010524)						
432795.00	3729773.00	15.27269	(16121324)	432845.00	3729773.00	14.91796
(16121324)						
432895.00	3729773.00	14.37604	(16121324)	431745.00	3729823.00	15.96784m
(13123124)						
431795.00	3729823.00	16.80633m	(13123124)	431845.00	3729823.00	17.88407m
(16021124)						
431895.00	3729823.00	19.07719m	(16021124)	431945.00	3729823.00	20.27761m
(16021124)						
431995.00	3729823.00	21.99743	(11121524)	432045.00	3729823.00	24.32166
(11121524)						
432095.00	3729823.00	26.34627	(11121524)	432145.00	3729823.00	27.56310m
(12011124)						
432195.00	3729823.00	31.99875	(12010524)	432845.00	3729823.00	15.81655
(16121324)						
432895.00	3729823.00	15.42429	(16121324)	432945.00	3729823.00	15.05095
(16121324)						
431695.00	3729873.00	15.86277m	(13123124)	431745.00	3729873.00	16.83238m
(13123124)						
431795.00	3729873.00	17.78137m	(13123124)	431845.00	3729873.00	18.87575m
(13123124)						
431895.00	3729873.00	20.05299m	(13123124)	431945.00	3729873.00	21.46935m
(13123124)						
431995.00	3729873.00	23.22805m	(16021124)	432045.00	3729873.00	25.70902
(11121524)						
432095.00	3729873.00	29.36326	(11121524)	432145.00	3729873.00	32.91825
(11121524)						
432845.00	3729873.00	17.03155	(16121324)	432895.00	3729873.00	16.31898
(16121324)						
432945.00	3729873.00	15.95296	(16121324)	431645.00	3729923.00	15.22462m
(13123124)						
431695.00	3729923.00	16.18998m	(13123124)	431745.00	3729923.00	17.15469m
(13123124)						
431795.00	3729923.00	18.38163m	(13123124)	431845.00	3729923.00	19.62942m
(13123124)						
431895.00	3729923.00	21.27677m	(13123124)	431945.00	3729923.00	23.06172m
(13123124)						
431995.00	3729923.00	25.33806m	(13123124)	432045.00	3729923.00	28.16797m
(13123124)						
432895.00	3729923.00	17.52776	(16121324)	432945.00	3729923.00	17.11036
(16121324)						
432995.00	3729923.00	16.83572	(16121324)	431595.00	3729973.00	14.29389m
(13123124)						
431645.00	3729973.00	15.16912m	(13123124)	431695.00	3729973.00	16.21632m
(13123124)						
431745.00	3729973.00	17.39324m	(13123124)	431795.00	3729973.00	18.52019m
(13123124)						
431845.00	3729973.00	19.88625m	(13123124)	431895.00	3729973.00	21.52576m
(13123124)						
431945.00	3729973.00	23.64097m	(13123124)	431995.00	3729973.00	26.30636m
(13123124)						
432945.00	3729973.00	18.29125	(16121324)	432995.00	3729973.00	18.04472
(16121324)						
431545.00	3730023.00	13.30173m	(13123124)	431595.00	3730023.00	14.13463m
(13123124)						
431645.00	3730023.00	15.10466m	(13123124)	431695.00	3730023.00	16.26496m
(13123124)						
431745.00	3730023.00	17.23052m	(13123124)	431795.00	3730023.00	18.32194m
(13123124)						
431845.00	3730023.00	19.76909m	(13123124)	431895.00	3730023.00	21.29632m

(13123124)						
431945.00	3730023.00	23.09173m	(13123124)	432945.00	3730023.00	20.09583
(16121324)						
432995.00	3730023.00	19.14648	(16121324)	431495.00	3730073.00	12.15160m
(13123124)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730073.00	13.01269m	(13123124)	431595.00	3730073.00	13.82653m	
(13123124)							
431645.00	3730073.00	14.91754m	(13123124)	431695.00	3730073.00	15.92567m	
(13123124)							
431745.00	3730073.00	16.96980m	(13123124)	431795.00	3730073.00	18.11349m	
(13123124)							
431845.00	3730073.00	19.31310m	(13123124)	431895.00	3730073.00	20.82060m	
(13123124)							
432945.00	3730073.00	21.85225	(16121324)	432995.00	3730073.00	20.94356	
(16121324)							
431395.00	3730123.00	10.53161	(14120524)	431445.00	3730123.00	10.97089	
(14120524)							
431495.00	3730123.00	11.72031m	(13123124)	431545.00	3730123.00	12.57563m	
(13123124)							
431595.00	3730123.00	13.45225m	(13123124)	431645.00	3730123.00	14.53396m	
(13123124)							
431695.00	3730123.00	15.61003m	(13123124)	431745.00	3730123.00	16.76696m	
(13123124)							
431795.00	3730123.00	17.83018m	(13123124)	431845.00	3730123.00	19.00808m	
(13123124)							
432995.00	3730123.00	22.92556	(16121324)	431345.00	3730173.00	10.20570	
(14120524)							
431395.00	3730173.00	10.69027	(14120524)	431445.00	3730173.00	11.12099	
(14120524)							
431495.00	3730173.00	11.58615	(14120524)	431545.00	3730173.00	12.07602m	
(13123124)							
431595.00	3730173.00	13.01280m	(13123124)	431645.00	3730173.00	14.08194m	
(13123124)							
431695.00	3730173.00	15.26579m	(13123124)	431745.00	3730173.00	16.39335m	
(13123124)							
431795.00	3730173.00	17.59088m	(13123124)	431295.00	3730223.00	9.68029	
(14120524)							
431345.00	3730223.00	10.13700	(14120524)	431395.00	3730223.00	10.67089	
(14120524)							
431445.00	3730223.00	11.24827	(14120524)	431495.00	3730223.00	11.67814	
(14120524)							
431545.00	3730223.00	12.24241	(14120524)	431595.00	3730223.00	12.81933	
(14120524)							
431645.00	3730223.00	13.54605m	(13123124)	431695.00	3730223.00	14.67623m	
(13123124)							
431745.00	3730223.00	16.09204m	(13123124)	431245.00	3730273.00	8.97786	
(14120524)							
431295.00	3730273.00	9.50550	(14120524)	431345.00	3730273.00	9.99782	
(14120524)							
431395.00	3730273.00	10.50028	(14120524)	431445.00	3730273.00	11.11386	
(14120524)							
431495.00	3730273.00	11.73245	(14120524)	431545.00	3730273.00	12.26106	
(14120524)							
431595.00	3730273.00	13.07842	(14120524)	431645.00	3730273.00	13.68009	
(14120524)							
431695.00	3730273.00	14.36264	(14120524)	431195.00	3730323.00	8.52414	
(16020924)							
431245.00	3730323.00	8.82332	(16020924)	431295.00	3730323.00	9.17880	
(16020924)							
431345.00	3730323.00	9.65874	(14120524)	431395.00	3730323.00	10.26177	
(14120524)							
431445.00	3730323.00	10.89385	(14120524)	431495.00	3730323.00	11.48274	
(14120524)							
431545.00	3730323.00	12.26884	(14120524)	431595.00	3730323.00	12.92936	
(14120524)							
431645.00	3730323.00	13.78295	(14120524)	431145.00	3730373.00	8.13019	
(16120724)							
431195.00	3730373.00	8.37435	(16020924)	431245.00	3730373.00	8.78611	
(16020924)							
431295.00	3730373.00	9.02884	(16020924)	431345.00	3730373.00	9.45600	
(16020924)							
431395.00	3730373.00	9.88632	(16020924)	431445.00	3730373.00	10.43538	
(14120524)							
431495.00	3730373.00	11.12370	(14120524)	431545.00	3730373.00	11.87315	
(14120524)							
431595.00	3730373.00	12.73601	(14120524)	431095.00	3730423.00	8.30610	
(16120724)							
431145.00	3730423.00	8.63491	(16120724)	431195.00	3730423.00	8.91933	
(16120724)							
431245.00	3730423.00	9.24596	(16120724)	431295.00	3730423.00	9.44861	

(16120724)							
431345.00	3730423.00	9.74548	(16120724)	431395.00	3730423.00	10.05598	
(16120724)							
431445.00	3730423.00	10.46220	(13010924)	431495.00	3730423.00	11.02311	
(13010924)							

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730423.00	11.56245	(13010924)	431595.00	3730423.00	12.39992	
(14120524)							
431045.00	3730473.00	8.51361	(16120724)	431095.00	3730473.00	8.77952	
(16120724)							
431145.00	3730473.00	9.00365	(16120724)	431195.00	3730473.00	9.32088	
(16120724)							
431245.00	3730473.00	9.69562	(16120724)	431295.00	3730473.00	10.04523	
(16120724)							
431345.00	3730473.00	10.32794	(16120724)	431395.00	3730473.00	10.68886	
(16120724)							
431445.00	3730473.00	11.17071	(16120724)	431495.00	3730473.00	11.61218	
(16120724)							
431545.00	3730473.00	12.18439	(16120724)	431045.00	3730523.00	8.73570	
(16120724)							
431095.00	3730523.00	9.02975	(16120724)	431145.00	3730523.00	9.39094	
(16120724)							
431195.00	3730523.00	9.68360	(16120724)	431245.00	3730523.00	10.07398	
(16120724)							
431295.00	3730523.00	10.48455	(16120724)	431345.00	3730523.00	10.87852	
(16120724)							
431395.00	3730523.00	11.30884	(16120724)	431445.00	3730523.00	11.74667	
(16120724)							
431495.00	3730523.00	12.20824	(16120724)	431545.00	3730523.00	13.04880	
(16120724)							
431045.00	3730573.00	8.92282	(16120724)	431095.00	3730573.00	9.31605	
(16120724)							
431145.00	3730573.00	9.66982	(16120724)	431195.00	3730573.00	10.00772	
(16120724)							
431245.00	3730573.00	10.38227	(16120724)	431295.00	3730573.00	10.86673	
(16120724)							
431345.00	3730573.00	11.22704	(16120724)	431395.00	3730573.00	11.73587	
(16120724)							
431445.00	3730573.00	12.18508	(16120724)	431495.00	3730573.00	12.90799	
(16120724)							
431045.00	3730623.00	9.13011	(16120724)	431095.00	3730623.00	9.46587	
(16120724)							
431145.00	3730623.00	9.82178	(16120724)	431195.00	3730623.00	10.16381	
(16120724)							
431245.00	3730623.00	10.61443	(16120724)	431295.00	3730623.00	11.01565	
(16120724)							
431345.00	3730623.00	11.51263	(16120724)	431395.00	3730623.00	12.02477	
(16120724)							
431445.00	3730623.00	12.43215	(16120724)	431495.00	3730623.00	13.24962	
(16120724)							
431045.00	3730673.00	9.13156	(16120724)	431095.00	3730673.00	9.43913	
(16120724)							
431145.00	3730673.00	9.83912	(16120724)	431195.00	3730673.00	10.16003	
(16120724)							
431245.00	3730673.00	10.57140	(16120724)	431295.00	3730673.00	11.06417	
(16120724)							
431345.00	3730673.00	11.50862	(16120724)	431395.00	3730673.00	11.99918	
(16120724)							
431445.00	3730673.00	12.54321	(16120724)	431045.00	3730723.00	9.01772	
(16120724)							
431095.00	3730723.00	9.29226	(16120724)	431145.00	3730723.00	9.62922	
(16120724)							
431195.00	3730723.00	9.95930	(16120724)	431245.00	3730723.00	10.37822	
(16120724)							
431295.00	3730723.00	10.70872	(16120724)	431345.00	3730723.00	11.25574	
(16120724)							
431395.00	3730723.00	11.73029	(16120724)	431445.00	3730723.00	12.25312	
(16120724)							
431045.00	3730773.00	8.74055	(16120724)	431095.00	3730773.00	9.02384	
(16120724)							
431145.00	3730773.00	9.29109	(16120724)	431195.00	3730773.00	9.64470	
(16120724)							
431245.00	3730773.00	9.96232	(16120724)	431295.00	3730773.00	10.30923	
(16120724)							
431345.00	3730773.00	10.72591	(16120724)	431395.00	3730773.00	11.22018	
(16120724)							
431445.00	3730773.00	11.66582	(16120724)	431045.00	3730823.00	8.29654	
(16120724)							
431095.00	3730823.00	8.54438	(16120724)	431145.00	3730823.00	8.80264	
(16120724)							
431195.00	3730823.00	9.08704	(16120724)	431245.00	3730823.00	9.42436	
(16120724)							

(16120724)							
431295.00	3730823.00	9.67694	(16120724)	431345.00	3730823.00	10.05030	
(16120724)							
431395.00	3730823.00	10.39360	(16120724)	431445.00	3730823.00	10.87315	
(16120724)							

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: TP ***
 INCLUDING SOURCE(S): TP01 , TP02 , TP03 , TP04 ,
 TP05 , TP06 , TP07 , TP08 , TP09 , TP10 , TP11 , TP12 ,
 TP13 , TP14 , TP15 , TP16 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀		IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)					(YYMMDDHH)				
431045.00	3730873.00	7.78850	(16120724)	431095.00	3730873.00	7.95004			
(16120724)									
431145.00	3730873.00	8.20510	(16120724)	431195.00	3730873.00	8.45197			
(16120724)									
431245.00	3730873.00	8.70087	(16120724)	431295.00	3730873.00	8.92707			
(16120724)									
431345.00	3730873.00	9.16645	(16120724)	431395.00	3730873.00	9.49226			
(16120724)									
431445.00	3730873.00	9.90237	(16120724)	431836.00	3730841.00	15.35304			
(11022324)									
431836.00	3730891.00	15.37154	(11022324)	431886.00	3730891.00	16.29732			
(11022324)									
431836.00	3730941.00	14.97232b	(12013024)	431886.00	3730941.00	16.64175b			
(12013024)									
431936.00	3730941.00	18.33021b	(12013024)	431886.00	3730991.00	16.79675b			
(12013024)									
431936.00	3730991.00	18.38035b	(12013024)	431986.00	3730991.00	19.98079b			
(12013024)									
432036.00	3730991.00	21.60810b	(12013024)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)				(YYMMDDHH)			
(11012624)	432395.00	3729323.00	71.72960	(11012624)	432445.00	3729323.00	79.10301
(11012624)	432495.00	3729323.00	84.58172	(11012624)	432545.00	3729323.00	88.37116
(11012624)	432395.00	3729373.00	79.45418	(11012624)	432445.00	3729373.00	85.86065
(11012624)	432495.00	3729373.00	91.64733	(11012624)	432545.00	3729373.00	94.48995
(16011924)	432595.00	3729373.00	94.20733	(11012624)	432245.00	3729423.00	88.55347
(11012624)	432295.00	3729423.00	80.81186	(16011924)	432445.00	3729423.00	94.98035
(11012624)	432495.00	3729423.00	98.90732	(11012624)	432545.00	3729423.00	101.42421
(11012624)	432595.00	3729423.00	100.26735	(11012624)	432645.00	3729423.00	96.44186
(16011924)	432195.00	3729473.00	103.24551	(16011924)	432245.00	3729473.00	96.28448
(11012624)	432295.00	3729473.00	87.96055	(16011924)	432345.00	3729473.00	86.62512
(11012624)	432495.00	3729473.00	112.74697	(11012624)	432545.00	3729473.00	109.04852
(11012624)	432595.00	3729473.00	109.05611	(11012624)	432645.00	3729473.00	101.08069
(16011924)	432695.00	3729473.00	94.12327	(11012624)	432145.00	3729523.00	117.54429
(16011924)	432195.00	3729523.00	112.59489	(16011924)	432245.00	3729523.00	105.12075
(11012624)	432295.00	3729523.00	95.86667	(16011924)	432345.00	3729523.00	95.21789
(11012624)	432395.00	3729523.00	105.87672	(11012624)	432545.00	3729523.00	121.90092
(11012624)	432595.00	3729523.00	116.42300	(11012624)	432645.00	3729523.00	109.04078
(16121324)	432695.00	3729523.00	98.69909	(11012624)	432745.00	3729523.00	95.19616
(16011924)	432045.00	3729573.00	132.67882	(12010524)	432095.00	3729573.00	129.75837
(16011924)	432145.00	3729573.00	128.24275	(16011924)	432195.00	3729573.00	123.38546
(16011924)	432245.00	3729573.00	115.52142	(16011924)	432295.00	3729573.00	105.64336
(11012624)	432345.00	3729573.00	106.10339	(11012624)	432395.00	3729573.00	114.80881
(11012624)	432445.00	3729573.00	130.26614	(11012624)	432645.00	3729573.00	112.31431
(16121324)	432695.00	3729573.00	105.01496	(16121324)	432745.00	3729573.00	110.04325
(12010524)	431995.00	3729623.00	148.44712	(12010524)	432045.00	3729623.00	147.00767
(16011924)	432095.00	3729623.00	141.37907	(16011924)	432145.00	3729623.00	141.11633
(16011924)	432195.00	3729623.00	136.44840	(16011924)	432245.00	3729623.00	127.74914
(11012624)	432295.00	3729623.00	116.99273	(16011924)	432345.00	3729623.00	118.96379
(11012624)	432395.00	3729623.00	130.72890	(11012624)	432445.00	3729623.00	143.51000
(16121324)	432645.00	3729623.00	116.51815	(16121324)	432695.00	3729623.00	122.56254
(16121324)	432745.00	3729623.00	126.29682	(16121324)	432795.00	3729623.00	127.84837
(12010524)	431945.00	3729673.00	156.07565	(12010524)	431995.00	3729673.00	162.64900
(12010524)	432045.00	3729673.00	162.80640	(12010524)	432095.00	3729673.00	158.29311
(16011924)	432145.00	3729673.00	155.44987	(16011924)	432195.00	3729673.00	151.10843
(16011924)	432245.00	3729673.00	142.32459	(16011924)	432295.00	3729673.00	131.56994
(16121324)	432345.00	3729673.00	137.32803	(11012624)	432695.00	3729673.00	142.69244

432745.00	3729673.00	144.65498	(16121324)	432795.00	3729673.00	143.36768
(16121324)						
432845.00	3729673.00	140.48080	(16121324)	431895.00	3729723.00	156.02025m
(12011124)						
431945.00	3729723.00	168.65820	(12010524)	431995.00	3729723.00	178.24344
(12010524)						
432045.00	3729723.00	181.08811	(12010524)	432095.00	3729723.00	177.97498
(12010524)						

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)							
432145.00	3729723.00	173.30557	(16011924)	432195.00	3729723.00	169.67559	
(16011924)							
432245.00	3729723.00	161.99483	(16011924)	432295.00	3729723.00	149.25182	
(16011924)							
432745.00	3729723.00	163.32666	(16121324)	432795.00	3729723.00	159.85461	
(16121324)							
432845.00	3729723.00	152.81869	(16121324)	431845.00	3729773.00	169.16782	
(11121524)							
431895.00	3729773.00	172.35806	(11121524)	431945.00	3729773.00	181.79555	
(12010524)							
431995.00	3729773.00	195.80718	(12010524)	432045.00	3729773.00	202.14926	
(12010524)							
432095.00	3729773.00	201.87737	(12010524)	432145.00	3729773.00	195.14530	
(12010524)							
432195.00	3729773.00	192.74027	(16011924)	432245.00	3729773.00	183.61033	
(16011924)							
432795.00	3729773.00	174.68564	(16121324)	432845.00	3729773.00	162.48673	
(16121324)							
432895.00	3729773.00	149.97903	(16121324)	431745.00	3729823.00	164.49848m	
(16021124)							
431795.00	3729823.00	173.73358m	(16021124)	431845.00	3729823.00	186.49368	
(11121524)							
431895.00	3729823.00	196.77147	(11121524)	431945.00	3729823.00	201.94940m	
(12011124)							
431995.00	3729823.00	216.58089	(12010524)	432045.00	3729823.00	228.09985	
(12010524)							
432095.00	3729823.00	231.34175	(12010524)	432145.00	3729823.00	227.42659	
(12010524)							
432195.00	3729823.00	221.20722	(16011924)	432845.00	3729823.00	168.33683	
(16121324)							
432895.00	3729823.00	153.31736	(16121324)	432945.00	3729823.00	139.14319	
(16121324)							
431695.00	3729873.00	172.12251m	(13123124)	431745.00	3729873.00	183.92378m	
(13123124)							
431795.00	3729873.00	195.19728m	(13123124)	431845.00	3729873.00	204.97258m	
(13123124)							
431895.00	3729873.00	222.70105	(11121524)	431945.00	3729873.00	234.49824	
(11121524)							
431995.00	3729873.00	244.75383m	(12011124)	432045.00	3729873.00	260.62627	
(12010524)							
432095.00	3729873.00	269.62714	(12010524)	432145.00	3729873.00	270.61504	
(12010524)							
432845.00	3729873.00	171.22440	(16121324)	432895.00	3729873.00	152.50259	
(16121324)							
432945.00	3729873.00	137.27916	(16121324)	431645.00	3729923.00	167.83552m	
(13123124)							
431695.00	3729923.00	182.78710m	(13123124)	431745.00	3729923.00	200.16388m	
(13123124)							
431795.00	3729923.00	219.33422m	(13123124)	431845.00	3729923.00	239.03049m	
(13123124)							
431895.00	3729923.00	259.01968m	(13123124)	431945.00	3729923.00	280.22932	
(11121524)							
431995.00	3729923.00	290.09548m	(12011124)	432045.00	3729923.00	306.45523	
(12010524)							
432895.00	3729923.00	150.20634	(16121324)	432945.00	3729923.00	132.86154	
(16121324)							
432995.00	3729923.00	119.28748	(16121324)	431595.00	3729973.00	154.94427m	
(13123124)							
431645.00	3729973.00	169.82906m	(13123124)	431695.00	3729973.00	188.57585m	
(13123124)							
431745.00	3729973.00	210.22812m	(13123124)	431795.00	3729973.00	235.32154m	
(13123124)							
431845.00	3729973.00	266.89168m	(13123124)	431895.00	3729973.00	309.20425m	
(13123124)							
431945.00	3729973.00	364.07285m	(13123124)	431995.00	3729973.00	397.36860	
(11121524)							
432945.00	3729973.00	127.54010	(16121324)	432995.00	3729973.00	114.32134	
(16121324)							
431545.00	3730023.00	137.59476m	(13123124)	431595.00	3730023.00	151.80166m	
(13123124)							
431645.00	3730023.00	168.34155m	(13123124)	431695.00	3730023.00	188.10675m	
(13123124)							

431745.00 (13123124)	3730023.00	210.90393m (13123124)	431795.00	3730023.00	239.42158m
431845.00 (13123124)	3730023.00	277.88111m (13123124)	431895.00	3730023.00	334.20092m
431945.00 (14020724)	3730023.00	451.72984m (13123124)	432945.00	3730023.00	132.11352
432995.00 (14120524)	3730023.00	121.37790 (14020724)	431495.00	3730073.00	121.11447

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)	(YYMMDDHH)
431545.00	3730073.00	130.48802m	(13123124)	431595.00	3730073.00	144.92427m	
(13123124)							
431645.00	3730073.00	162.34600m	(13123124)	431695.00	3730073.00	181.94322m	
(13123124)							
431745.00	3730073.00	205.15677m	(13123124)	431795.00	3730073.00	233.06177m	
(13123124)							
431845.00	3730073.00	268.02507m	(13123124)	431895.00	3730073.00	314.55567m	
(13123124)							
432945.00	3730073.00	138.48365	(14020724)	432995.00	3730073.00	127.54859	
(14020724)							
431395.00	3730123.00	103.79512	(14120524)	431445.00	3730123.00	111.50860	
(14120524)							
431495.00	3730123.00	119.57837	(14120524)	431545.00	3730123.00	128.52478	
(14120524)							
431595.00	3730123.00	138.89427	(14120524)	431645.00	3730123.00	152.66089m	
(13123124)							
431695.00	3730123.00	171.97427m	(13123124)	431745.00	3730123.00	194.39699m	
(13123124)							
431795.00	3730123.00	221.25001m	(13123124)	431845.00	3730123.00	254.68072m	
(13123124)							
432995.00	3730123.00	131.81630	(14020724)	431345.00	3730173.00	95.59151	
(16120724)							
431395.00	3730173.00	101.96651	(16120724)	431445.00	3730173.00	109.06601	
(16120724)							
431495.00	3730173.00	117.08688	(16120724)	431545.00	3730173.00	125.23986	
(16120724)							
431595.00	3730173.00	135.68316	(16120724)	431645.00	3730173.00	148.07210	
(16120724)							
431695.00	3730173.00	163.80659	(16120724)	431745.00	3730173.00	181.33952m	
(13123124)							
431795.00	3730173.00	207.65665m	(13123124)	431295.00	3730223.00	97.36672	
(16120724)							
431345.00	3730223.00	103.40679	(16120724)	431395.00	3730223.00	110.01508	
(16120724)							
431445.00	3730223.00	117.60247	(16120724)	431495.00	3730223.00	125.88847	
(16120724)							
431545.00	3730223.00	134.91719	(16120724)	431595.00	3730223.00	145.27345	
(16120724)							
431645.00	3730223.00	157.80567	(16120724)	431695.00	3730223.00	172.30888	
(16120724)							
431745.00	3730223.00	190.96452	(16120724)	431245.00	3730273.00	96.99786	
(16120724)							
431295.00	3730273.00	102.43755	(16120724)	431345.00	3730273.00	108.60825	
(16120724)							
431395.00	3730273.00	115.12261	(16120724)	431445.00	3730273.00	122.49850	
(16120724)							
431495.00	3730273.00	130.66625	(16120724)	431545.00	3730273.00	139.89119	
(16120724)							
431595.00	3730273.00	150.20226	(16120724)	431645.00	3730273.00	162.08372	
(16120724)							
431695.00	3730273.00	175.88479	(16120724)	431195.00	3730323.00	95.72899	
(16120724)							
431245.00	3730323.00	100.27425	(16120724)	431295.00	3730323.00	104.87254	
(16120724)							
431345.00	3730323.00	110.62156	(16120724)	431395.00	3730323.00	117.09798	
(16120724)							
431445.00	3730323.00	124.08783	(16120724)	431495.00	3730323.00	131.62890	
(16120724)							
431545.00	3730323.00	140.46335	(16120724)	431595.00	3730323.00	149.98030	
(16120724)							
431645.00	3730323.00	161.01518	(16120724)	431145.00	3730373.00	91.68686	
(16120724)							
431195.00	3730373.00	95.95698	(16120724)	431245.00	3730373.00	101.00949	
(16120724)							
431295.00	3730373.00	105.08795	(16120724)	431345.00	3730373.00	110.36485	
(16120724)							
431395.00	3730373.00	116.33288	(16120724)	431445.00	3730373.00	122.70811	
(16120724)							
431495.00	3730373.00	129.75906	(16120724)	431545.00	3730373.00	137.54481	
(16120724)							
431595.00	3730373.00	146.41336	(16120724)	431095.00	3730423.00	86.73978	
(16120724)							

431145.00	3730423.00	90.58764	(16120724)	431195.00	3730423.00	94.78452
(16120724)						
431245.00	3730423.00	98.69078	(16120724)	431295.00	3730423.00	102.97437
(16120724)						
431345.00	3730423.00	107.53162	(16120724)	431395.00	3730423.00	112.90484
(16120724)						
431445.00	3730423.00	119.11859	(16120724)	431495.00	3730423.00	125.36267
(16120724)						

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM_10 IN MICROGRAMS/M**3		CONC	
(YYMMDDHH)				(YYMMDDHH)			
(11013124)	431545.00	3730423.00	132.68676	(16120724)	431595.00	3730423.00	144.05833m
(16120724)	431045.00	3730473.00	81.13789	(16120724)	431095.00	3730473.00	84.44077
(16120724)	431145.00	3730473.00	87.42515	(16120724)	431195.00	3730473.00	91.15030
(16120724)	431245.00	3730473.00	95.15041	(16120724)	431295.00	3730473.00	99.38379
(16120724)	431345.00	3730473.00	102.74501	(16120724)	431395.00	3730473.00	107.94680
(16120724)	431445.00	3730473.00	113.19216	(16120724)	431495.00	3730473.00	119.07111
(16120724)	431545.00	3730473.00	129.70252m	(11013124)	431045.00	3730523.00	77.26294
(16120724)	431095.00	3730523.00	80.18639	(16120724)	431145.00	3730523.00	83.24661
(16120724)	431195.00	3730523.00	86.36780	(16120724)	431245.00	3730523.00	89.85122
(16120724)	431295.00	3730523.00	93.56242	(16120724)	431345.00	3730523.00	97.30505
(16120724)	431395.00	3730523.00	100.93347	(16120724)	431445.00	3730523.00	106.83913m
(11013124)	431495.00	3730523.00	114.01994m	(11013124)	431545.00	3730523.00	123.86067m
(16120724)	431045.00	3730573.00	72.23509	(16120724)	431095.00	3730573.00	75.00103
(16120724)	431145.00	3730573.00	77.57083	(16120724)	431195.00	3730573.00	80.42139
(11013124)	431245.00	3730573.00	83.11948	(16120724)	431295.00	3730573.00	86.63149m
(11013124)	431345.00	3730573.00	91.55801m	(11013124)	431395.00	3730573.00	96.74071m
(11013124)	431445.00	3730573.00	101.95360m	(11013124)	431495.00	3730573.00	109.02740m
(16120724)	431045.00	3730623.00	66.99266	(16120724)	431095.00	3730623.00	68.82553
(11013124)	431145.00	3730623.00	71.06169	(16120724)	431195.00	3730623.00	74.46676m
(11013124)	431245.00	3730623.00	78.55045m	(11013124)	431295.00	3730623.00	82.39893m
(11022324)	431345.00	3730623.00	87.51160	(11022324)	431395.00	3730623.00	94.11995
(11022324)	431445.00	3730623.00	100.45524	(11022324)	431495.00	3730623.00	109.37519
(11013124)	431045.00	3730673.00	62.02875m	(11013124)	431095.00	3730673.00	64.80819m
(11022324)	431145.00	3730673.00	68.17685	(11022324)	431195.00	3730673.00	73.18238
(11022324)	431245.00	3730673.00	78.00629	(11022324)	431295.00	3730673.00	83.74623
(11022324)	431345.00	3730673.00	89.23430	(11022324)	431395.00	3730673.00	95.40639
(11022324)	431445.00	3730673.00	101.70395	(11022324)	431045.00	3730723.00	62.49488
(11022324)	431095.00	3730723.00	66.33889	(11022324)	431145.00	3730723.00	70.47559
(11022324)	431195.00	3730723.00	74.99430	(11022324)	431245.00	3730723.00	79.21510
(11022324)	431295.00	3730723.00	84.43248	(11022324)	431345.00	3730723.00	89.38897
(11022324)	431395.00	3730723.00	94.77446	(11022324)	431445.00	3730723.00	99.95365
(11022324)	431045.00	3730773.00	64.05973	(11022324)	431095.00	3730773.00	67.83251
(11022324)	431145.00	3730773.00	71.60198	(11022324)	431195.00	3730773.00	75.55945
(11022324)	431245.00	3730773.00	79.50477	(11022324)	431295.00	3730773.00	83.86639
(11022324)	431345.00	3730773.00	88.06780	(11022324)	431395.00	3730773.00	92.57465
(11022324)	431445.00	3730773.00	96.73830	(11022324)	431045.00	3730823.00	64.98465

431095.00	3730823.00	68.17157	(11022324)	431145.00	3730823.00	71.60903
(11022324)						
431195.00	3730823.00	74.94144	(11022324)	431245.00	3730823.00	78.30191
(11022324)						
431295.00	3730823.00	81.79156	(11022324)	431345.00	3730823.00	85.22421
(11022324)						
431395.00	3730823.00	88.88021	(11022324)	431445.00	3730823.00	98.47898b
(12013024)						

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*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): B01 , B02 , B03 , B04 ,
 B05 , B06 , B7 , B8 , B9 , B10 , B11 , B12 ,
 B13 , B14 , B15 , B16 , B17 , B18 , B19 , B20 ,
 B21 , B22 , B23 , B24 , B25 , B26 , B27 ,
 B28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC OF PM ₁₀ IN MICROGRAMS/M ³		CONC	
(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)		(YYMMDDHH)	
(11022324)	431045.00	(11022324)	3730873.00	(11022324)	64.89377	(11022324)	67.85364
(11022324)	431145.00	(11022324)	3730873.00	(11022324)	70.71600	(11022324)	73.52830
(11022324)	431245.00	(11022324)	3730873.00	(11022324)	76.20847	(11022324)	78.98219
(12013024)	431345.00	(12013024)	3730873.00	(12013024)	83.49944b	(12013024)	91.52337b
(12013024)	431445.00	(12013024)	3730873.00	(12013024)	100.15655b	(12013024)	169.09080b
(12013024)	431836.00	(12013024)	3730891.00	(12013024)	151.04058b	(12013024)	151.94662b
(16122324)	431836.00	(16122324)	3730941.00	(16122324)	134.91306b	(16122324)	137.79282
(16122324)	431936.00	(16122324)	3730941.00	(16122324)	160.70766	(16122324)	132.21934
(16122324)	431936.00	(16122324)	3730991.00	(16122324)	150.00111	(16122324)	166.01735
(16122324)	432036.00	(16122324)	3730991.00	(16122324)	177.93258	(16122324)	

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF PM₁₀ IN MICROGRAMS/M³ **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
AR	1ST HIGHEST VALUE IS	3.44375 AT (432145.00, 3729873.00,	103.60, 161.25,	0.00)	DC
	2ND HIGHEST VALUE IS	3.24761 AT (432195.00, 3729823.00,	106.31, 161.25,	0.00)	DC
	3RD HIGHEST VALUE IS	3.00768 AT (432045.00, 3729923.00,	99.49, 160.66,	0.00)	DC
	4TH HIGHEST VALUE IS	2.99057 AT (431995.00, 3729973.00,	99.19, 160.66,	0.00)	DC
	5TH HIGHEST VALUE IS	2.98138 AT (432095.00, 3729873.00,	100.35, 161.25,	0.00)	DC
	6TH HIGHEST VALUE IS	2.94540 AT (432945.00, 3730073.00,	131.90, 247.44,	0.00)	DC
	7TH HIGHEST VALUE IS	2.93640 AT (431945.00, 3730023.00,	98.31, 160.66,	0.00)	DC
	8TH HIGHEST VALUE IS	2.91776 AT (432245.00, 3729773.00,	109.09, 158.46,	0.00)	DC
	9TH HIGHEST VALUE IS	2.86382 AT (432145.00, 3729823.00,	101.32, 161.25,	0.00)	DC
	10TH HIGHEST VALUE IS	2.83486 AT (431895.00, 3730073.00,	98.85, 160.66,	0.00)	DC
B	1ST HIGHEST VALUE IS	51.43908 AT (431945.00, 3730023.00,	98.31, 160.66,	0.00)	DC
	2ND HIGHEST VALUE IS	37.05872 AT (431995.00, 3729973.00,	99.19, 160.66,	0.00)	DC
	3RD HIGHEST VALUE IS	36.54607 AT (431895.00, 3730073.00,	98.85, 160.66,	0.00)	DC
	4TH HIGHEST VALUE IS	33.65271 AT (431895.00, 3730023.00,	98.25, 160.66,	0.00)	DC
	5TH HIGHEST VALUE IS	33.47708 AT (431945.00, 3729973.00,	99.11, 160.66,	0.00)	DC
	6TH HIGHEST VALUE IS	29.86012 AT (431845.00, 3730123.00,	99.35, 160.66,	0.00)	DC
	7TH HIGHEST VALUE IS	28.52420 AT (431845.00, 3730073.00,	97.20, 160.66,	0.00)	DC
	8TH HIGHEST VALUE IS	27.47218 AT (431895.00, 3729973.00,	98.67, 160.66,	0.00)	DC
	9TH HIGHEST VALUE IS	26.36829 AT (431845.00, 3730023.00,	97.84, 160.66,	0.00)	DC
	10TH HIGHEST VALUE IS	25.39343 AT (431795.00, 3730173.00,	99.92, 160.66,	0.00)	DC
TRENCH	1ST HIGHEST VALUE IS	0.60506 AT (431845.00, 3730123.00,	99.35, 160.66,	0.00)	DC
	2ND HIGHEST VALUE IS	0.60061 AT (431895.00, 3730073.00,	98.85, 160.66,	0.00)	DC
	3RD HIGHEST VALUE IS	0.58325 AT (431795.00, 3730173.00,	99.92, 160.66,	0.00)	DC
	4TH HIGHEST VALUE IS	0.56326 AT (431945.00, 3730023.00,	98.31, 160.66,	0.00)	DC
	5TH HIGHEST VALUE IS	0.55008 AT (431845.00, 3730073.00,	97.20, 160.66,	0.00)	DC
	6TH HIGHEST VALUE IS	0.54547 AT (431795.00, 3730123.00,	97.68, 160.66,	0.00)	DC
	7TH HIGHEST VALUE IS	0.54468 AT (431745.00, 3730223.00,	100.35, 160.66,	0.00)	DC
	8TH HIGHEST VALUE IS	0.53142 AT (431895.00, 3730023.00,	98.25, 160.66,	0.00)	DC
	9TH HIGHEST VALUE IS	0.52309 AT (431745.00, 3730173.00,	99.09, 160.66,	0.00)	DC
	10TH HIGHEST VALUE IS	0.50477 AT (431795.00, 3730073.00,	96.78, 160.66,	0.00)	DC
TP	1ST HIGHEST VALUE IS	2.63974 AT (432045.00, 3729923.00,	99.49, 160.66,	0.00)	DC
	2ND HIGHEST VALUE IS	2.61930 AT (431995.00, 3729973.00,	99.19, 160.66,	0.00)	DC
	3RD HIGHEST VALUE IS	2.51049 AT (432145.00, 3729873.00,	103.60, 161.25,	0.00)	DC
	4TH HIGHEST VALUE IS	2.45798 AT (431945.00, 3730023.00,	98.31, 160.66,	0.00)	DC
	5TH HIGHEST VALUE IS	2.37702 AT (432095.00, 3729873.00,	100.35, 161.25,	0.00)	DC
	6TH HIGHEST VALUE IS	2.34565 AT (431995.00, 3729923.00,	99.49, 160.66,	0.00)	DC
	7TH HIGHEST VALUE IS	2.30807 AT (431945.00, 3729973.00,	99.11, 160.66,	0.00)	DC
	8TH HIGHEST VALUE IS	2.29077 AT (431895.00, 3730073.00,	98.85, 160.66,	0.00)	DC
	9TH HIGHEST VALUE IS	2.21660 AT (432045.00, 3729873.00,	100.00, 160.66,	0.00)	DC
	10TH HIGHEST VALUE IS	2.19289 AT (431895.00, 3730023.00,	98.25, 160.66,	0.00)	DC

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*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 57.39673 AT (431945.00, 3730023.00,	98.31, 160.66,	0.00)	DC
	2ND HIGHEST VALUE IS 43.16512 AT (431995.00, 3729973.00,	99.19, 160.66,	0.00)	DC
	3RD HIGHEST VALUE IS 42.27231 AT (431895.00, 3730073.00,	98.85, 160.66,	0.00)	DC
	4TH HIGHEST VALUE IS 38.91271 AT (431895.00, 3730023.00,	98.25, 160.66,	0.00)	DC
	5TH HIGHEST VALUE IS 38.87840 AT (431945.00, 3729973.00,	99.11, 160.66,	0.00)	DC
	6TH HIGHEST VALUE IS 35.24726 AT (431845.00, 3730123.00,	99.35, 160.66,	0.00)	DC
	7TH HIGHEST VALUE IS 33.54132 AT (431845.00, 3730073.00,	97.20, 160.66,	0.00)	DC
	8TH HIGHEST VALUE IS 32.29576 AT (431895.00, 3729973.00,	98.67, 160.66,	0.00)	DC
	9TH HIGHEST VALUE IS 31.05135 AT (431845.00, 3730023.00,	97.84, 160.66,	0.00)	DC
	10TH HIGHEST VALUE IS 30.36592 AT (431795.00, 3730173.00,	99.92, 160.66,	0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

NETWORK				DATE						
GROUP ID	TYPE	GRID-ID	AVERAGE CONC	(YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)				OF

AR	HIGH	1ST HIGH VALUE IS	19.20411m	ON 14123124:	AT (	432145.00, 3729873.00,	103.60,	161.25,	0.00)	
DC										
B	HIGH	1ST HIGH VALUE IS	410.78709m	ON 13123124:	AT (	431945.00, 3730023.00,	98.31,	160.66,	0.00)	
DC										
TRENCH	HIGH	1ST HIGH VALUE IS	7.52258m	ON 13123124:	AT (	431895.00, 3730073.00,	98.85,	160.66,	0.00)	
DC										
TP	HIGH	1ST HIGH VALUE IS	32.91825	ON 11121524:	AT (	432145.00, 3729873.00,	103.60,	161.25,	0.00)	
DC										
ALL	HIGH	1ST HIGH VALUE IS	451.72984m	ON 13123124:	AT (431945.00, 3730023.00,	98.31,	160.66,	0.00)	
DC										

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 868 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 15 Calm Hours Identified

A Total of 853 Missing Hours Identified (1.95 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 5717 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 5717 MEOPEN: ADJ_U* Option for Low Winds used in AERMET
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 16010101
MX W450 35065 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap

*** AERMOD Finishes Successfully ***

GHG Appendix

Assumptions

Syphon Geotechnical Assumptions

The Syphon Reservoir Geotechnical Investigations Project (Project), is intended to provide details about the geologic/seismic and geotechnical baseline conditions at Syphon Reservoir. The analysis will only study the environmental impacts from the geotechnical investigations and does not include any permanent development. As the activities are more closely associated with construction activities (soil movement, excavation, boreholes), the analysis is structured as a "construction only" project and does not include any operational analysis.

CalEEMod Inputs (Non-Default information only)

Project Location	
County	Orange County
Air District	SCAQMD
Climate Zone	8
Operational Year	2020 <i>No Operation activities added because required by model</i>
Utility Provider	Southern California Edison
Source Receptor Area (SCAQMD)	19 Saddleback Valley

	Base	2015 ¹	2020 ¹	2030
CO2 intensity	702.4363	531.7443	411.6277	351.2182
% renewable	0%	24.30%	41.40%	50.00%

Land Use	Building SQFT	Building KFS	(seat/ room/ space)	Acres	CalEEMod Land Use Type
Disinfection and FC facilities	0	0	-	4	City Park

Note: 28 acres is total project area. Analysis uses 4 acres because that is the anticipated area of grading/ground disturbance and therefore the area from which fugitive dust would be emitted.

Acreage Determination

	ft	ft	sqft	Area of disturbance		Acres
				#	Total sqft	
Boring:	20	50	1,000	43	43,000	0.99
Pit:	20	50	1,000	16	16,000	0.37
Access Road:	12					1.89
Trench:	20	50	1,000	38	38,000	0.87
Total:						4

Notes:

- 1 area of disturbance is the graded area for each activity.
- 2 # for boring and pit area actual number of locations.
- 3 # for Access road is 1 as the square footage takes into account the total length of access roads.
- 4 # of trenches is the number of trenches that will be dug assuming each trench is 50 feet in length and there is 1,900 feet of trenches.

Construction Schedule

Phases / Activity	Project Schedule			Modeled Schedule		CalEEMod Source
	# of Locations	Total # Days	Days per location	Start (month/date/year)	Finish (month/date/year)	
Access Road	2 ^{2,3}	20	0.10	1/1/2019	1/28/2019	Site Preparation
Borings	43	51	1.19	1/29/2019	4/9/2019	Grading
Test Pits	16	6	0.38	1/29/2019	2/5/2019	Grading
Trenches	38	38	1.00	1/29/2019	3/21/2019	Grading
Seismic/Electrical Surveys	9	10	1.11	1/29/2019	2/11/2019	Site Preparation
Soil Sample Transport Modeled as 1 day delivery only						

Notes:

1. Construction would occur 5 days per week.
2. Access roads are number of acres graded, not number of roads. Days are days per acre.
3. There are 2 types of access roads. Bulldozed access roads, totaling 6,891.13 ft and disturbing 1.89 acres. These roads are accounted for in the modeling. Drive & Crush access routes total 7,177.39 ft and 1.98 acres. As there is no grading and only have vehicles driving over the roadways, they are not included in the modeling.

Construction Equipment

Access Road

Phase Type Site Preparation

<u>Soil Import/Export</u>		0 Cubic/yards of soil import			
		0 cubic/yards soil export			
		0 trucks			
	X	Soils balanced onsite			
<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Rubber Tired Dozer	1	8	Default	Default	Rubber Tired Dozer
Water Truck	1	0	Default	Default	Modeled as part of Borings.

Borings

Phase Type Grading Equipment per location

<u>Soil Import/Export</u>		0 Cubic/yards of soil import			
		0 cubic/yards soil export			
		0 trucks			
	X	Soils balanced onsite			
<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Drill Rig	1	8	Default	Default	Drill Rig
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Support Truck	2	2	Default	Default	Off Highway Truck
Water Truck	1	4	Default	Default	Off Highway Truck
Pick-up Trucks	5	2	Not modeled as they are gasoline		

Test Pits

Phase Type Grading

Equipment per location

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
X Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Excavator	1	8	Default	Default	Excavator
Backhoes	1	8	Default	Default	Backhoes
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Water Truck	1	0	Default	Default	Modeled as part of Trenching
Support Truck	2	2	Default	Default	Off Highway Truck
Pick-up Trucks	1	2	Not modeled as they are gasoline		

Trenches

Phase Type Grading

Equipment per location

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
X Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Excavator	1	8	Default	Default	Excavator
Backhoes	1	8	Default	Default	Backhoes
Rubber Tired Dozer	1	2	Default	Default	Rubber Tired Dozer
Support Truck	2	2	Default	Default	Off Highway Truck
Pick-up Trucks	1	2	Not modeled as they are gasoline		
Water Truck	1	4	Default	Default	Off Highway Truck

Seismic/Electrical Surveys

Phase Type Site Preparation

Soil Import/Export 0 Cubic/yards of soil import
0 cubic/yards soil export
0 trucks
0 Soils balanced onsite

<u>Equipment Type</u>	<u>#</u>	<u>Hrs/day</u>	<u>HP</u>	<u>LF</u>	<u>CalEEMod Title</u>
Pick-up Trucks	1	2	Not modeled as they are gasoline		

Maximum Daily Activity

	Borings	Test Pits	Trenches	Seismic Surveys	Total
Number:	2	2	1	1	
Equipment:					
Drill Rig	2	0	0	0	2
Rubber Tired Dozer	1	0	0	0	1
Tractors/Loaders/Backhoes	0	2	1	0	3
Excavator	0	2	1	0	3
Support Truck	4	4	2	0	10
Water Truck	1	0	1	0	2
Pick-up Trucks	10	0	0	0	10

Notes

- 1 Dozer and water trucks assume to move between locations as needed.
- 2 Assumes pick-up trucks also move between sites as needed.

Construction Trips and Vehicle Miles Traveled

Phase Name	# Workers	Worker		Vendor		Haul	
		# Trips	VMT/Trip	# Trips	VMT/Trip	# Trucks	VMT/Trip
Access Road	2	5	30	0	default	4	default
Borings	12	27	30	0	default	0	default
Test Pits	9	20	30	0	default	0	default
Trenches	9	20	30	0	default	0	default
Seismic Surveys	2	5	30	0	default	0	default
Sampling Deliveries & Breakdown	0	0	30	2	20	0	default
Max Daily	46	104	30	0	default	4	default

Note:

- 1 All trips indicated in this table are one-way trips
- 2 Boring and Trenches contain the workers for driving the water truck
- 3 Worker trips is determined by the number of persons times 2.25 trips per person (assumes some offsite travel for lunch etc). As a conservative analysis it assumes all employees drive separately to the site.
- 4 Workers are per activity (ex 1 boring location)
- 5 Haul trucks are for bringing in and hauling off equipment.

Worker Assumptions

Employees per individual activity

Water Truck	1 per truck	Support Truck	1 per truck
Bulldozer	1 per grader	Sampling	2 per location
Excavator	1 per excavator	Seismic Surveys	2 per location
Drill Rig	2 per drill rig	Geo-logging	1 per location
Backhoe	1 per backhoe		

Employees per Activity

Access Roads:	2 Bulldozer only, 1 water truck
Boring:	12 1 drill rig, 1 dozer, 1 water truck, 2 support trucks, 2 samplers, 1 geo-logger, 5 pick-up trucks
Test Pit:	9 1 excavator, 1 backhoe, 1 dozer, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Trench:	9 1 excavator, 1 backhoe, 1 dozer, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Survey:	2 one location at a time
Sample Transport:	1 driver - one time only

Max Daily

	#	Employees per
Borings:	2	22 2 drill rigs, 1 dozer, 1 water truck, 4 support trucks, 4 samplers, 2 geo-logger, 8 pick-up trucks
Test Pits:	2	14 2 excavators, 2 backhoes, 4 support trucks, 4 samplers, 2 geo-loggers
Trenches:	1	8 1 excavator, 1 backhoe, 2 support trucks, 2 samplers, 1 geo-logger, 1 water truck
Surveys:	1	2 2 surveyors

Unmitigated CalEEMod GHG Output - Summary

Syphon Geotechnical
Unmitigated CalEEMod GHG Output - Summary

CalEEMod 2016.3.2

Title: Syphon Geotechnical

Date: 12/20/2018

Unmitigated Construction Emissions - Max Annual

	MT CO ₂ e				Total
	Onsite	Hauling	Vendor	Worker	
Access Road	13.74	0.16	0.00	0.99	14.89
Borings	48.43	0.00	0.00	13.65	62.08
Test Pits	6.41	0.00	0.00	1.19	7.60
Trenches	40.61	0.00	0.00	7.53	48.15
Seismic Surveys	0.00	0.00	0.00	0.50	0.50
Sampling Deliveries & Breakdown	0.00	0.16	0.06	0.00	0.22
<i>Project Total</i>					<i>133</i>
<i>Amortized Construction</i>					<i>4</i>

CalEEMod Output

Syphon Geotechnical - Orange County, Annual

**Syphon Geotechnical
Orange County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	411.63	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - See Assumptions

Off-road Equipment - see assumptions - personel only no heavy duty equipment

Off-road Equipment - See assumptions - onroad truck only, no equipment

Off-road Equipment - See Assumptions

Trips and VMT - See Assumptions

Vehicle Trips - No Operational

Energy Use -

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	8.00	38.00
tblConstructionPhase	NumDays	8.00	51.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	8.00	38.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	230.00	1.00
tblConstructionPhase	PhaseEndDate	2/1/2019	3/12/2019
tblConstructionPhase	PhaseEndDate	1/22/2019	1/28/2019
tblConstructionPhase	PhaseStartDate	1/23/2019	1/1/2019
tblConstructionPhase	PhaseStartDate	1/16/2019	1/1/2019
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	AcresOfGrading	0.00	3.00

tblGrading	AcresOfGrading	0.00	19.00
tblGrading	AcresOfGrading	0.00	19.00
tblOffRoadEquipment	HorsePower	402.00	168.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	411.63
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	VendorTripNumber	29.00	2.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripLength	14.70	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	27.00
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	0.00	5.00
tblTripsAndVMT	WorkerTripNumber	53.00	104.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

-Emission Summary Not Used

3.0 Construction Detail

-Mitigated Emissions for Onsite Fugitive Dust Only

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Access Road	Site Preparation	1/1/2019	1/28/2019	5	20	
2	Borings	Grading	1/1/2019	3/12/2019	5	51	
3	Test Pits	Grading	1/1/2019	1/8/2019	5	6	
4	Trenches	Grading	1/1/2019	2/21/2019	5	38	
5	Surveys	Site Preparation	1/1/2019	1/14/2019	5	10	
6	Sample Delivery	Building Construction	3/1/2019	3/1/2019	5	1	
7	Maximum Daily	Grading	1/1/2019	1/1/2019	5	38	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Sample Delivery	Cranes	0	7.00	231	0.29
Test Pits	Excavators	1	8.00	158	0.38
Trenches	Excavators	1	8.00	158	0.38
Sample Delivery	Forklifts	0	8.00	89	0.20
Sample Delivery	Generator Sets	0	8.00	84	0.74
Test Pits	Graders	0	8.00	187	0.41
Borings	Excavators	0	8.00	158	0.38
Trenches	Graders	0	8.00	187	0.41
Test Pits	Rubber Tired Dozers	1	2.00	247	0.40
Trenches	Rubber Tired Dozers	1	2.00	247	0.40

Borings	Rubber Tired Dozers	1	2.00	247	0.40
Surveys	Rubber Tired Dozers	0	8.00	247	0.40
Sample Delivery	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Borings	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Test Pits	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Borings	Graders	0	8.00	187	0.41
Trenches	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Rubber Tired Dozers	1	8.00	247	0.40
Surveys	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Sample Delivery	Welders	0	8.00	46	0.45
Access Road	Off-Highway Trucks	1	4.00	402	0.38
Borings	Bore/Drill Rigs	1	8.00	221	0.50
Borings	Off-Highway Trucks	2	2.00	402	0.38
Borings	Off-Highway Trucks	1	4.00	168	0.40
Test Pits	Off-Highway Trucks	1	4.00	402	0.38
Test Pits	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	2	2.00	402	0.38
Trenches	Off-Highway Trucks	1	4.00	402	0.38
Maximum Daily	Excavators	3	8.00	158	0.38
Maximum Daily	Graders	0	8.00	187	0.41
Maximum Daily	Rubber Tired Dozers	1	8.00	247	0.40
Maximum Daily	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Maximum Daily	Bore/Drill Rigs	2	8.00	221	0.50
Maximum Daily	Off-Highway Trucks	10	2.00	402	0.38
Maximum Daily	Off-Highway Trucks	2	4.00	402	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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Sample Delivery	0	0.00	2.00	4.00	30.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Access Road	2	5.00	0.00	4.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Borings	5	27.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Test Pits	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenches	6	20.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Surveys	0	5.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maximum Daily	21	104.00	0.00	0.00	30.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Access Road - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0602	0.0000	0.0602	0.0331	0.0000	0.0331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1569	0.0629	1.5000e-004		7.2000e-003	7.2000e-003		6.6300e-003	6.6300e-003	0.0000	13.6310	13.6310	4.3100e-003	0.0000	13.7389
Total	0.0149	0.1569	0.0629	1.5000e-004	0.0602	7.2000e-003	0.0674	0.0331	6.6300e-003	0.0397	0.0000	13.6310	13.6310	4.3100e-003	0.0000	13.7389

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.1000e-004	1.5000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1555	0.1555	2.0000e-005	0.0000	0.1559
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.9000e-004	3.2200e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9908	0.9908	2.0000e-005	0.0000	0.9914
Total	4.0000e-004	9.0000e-004	3.3700e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1700e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	1.1463	1.1463	4.0000e-005	0.0000	1.1473

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0235	0.0000	0.0235	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7200e-003	0.0718	0.0805	1.5000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	13.6310	13.6310	4.3100e-003	0.0000	13.7388
Total	3.7200e-003	0.0718	0.0805	1.5000e-004	0.0235	2.7200e-003	0.0262	0.0129	2.7200e-003	0.0156	0.0000	13.6310	13.6310	4.3100e-003	0.0000	13.7388

Mitigated Construction Off-Site

3.3 Borings - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0405	0.0000	0.0405	0.0213	0.0000	0.0213	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0283	0.3055	0.1812	5.4000e-004		0.0120	0.0120		0.0111	0.0111	0.0000	48.0511	48.0511	0.0152	0.0000	48.4312
Total	0.0283	0.3055	0.1812	5.4000e-004	0.0405	0.0120	0.0525	0.0213	0.0111	0.0324	0.0000	48.0511	48.0511	0.0152	0.0000	48.4312

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1900e-003	4.0500e-003	0.0443	1.5000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1900e-003	0.0000	13.6432	13.6432	3.2000e-004	0.0000	13.6513
Total	5.1900e-003	4.0500e-003	0.0443	1.5000e-004	0.0154	1.0000e-004	0.0155	4.0900e-003	9.0000e-005	4.1900e-003	0.0000	13.6432	13.6432	3.2000e-004	0.0000	13.6513

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	8.3200e-003	0.0000	8.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.2558	0.3033	5.4000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	48.0510	48.0510	0.0152	0.0000	48.4311
Total	0.0132	0.2558	0.3033	5.4000e-004	0.0158	0.0101	0.0259	8.3200e-003	0.0101	0.0184	0.0000	48.0510	48.0510	0.0152	0.0000	48.4311

Mitigated Construction Off-Site

3.4 Test Pits - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1100e-003	0.0000	6.1100e-003	2.6500e-003	0.0000	2.6500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4600e-003	0.0457	0.0319	7.0000e-005		2.0800e-003	2.0800e-003		1.9200e-003	1.9200e-003	0.0000	6.3623	6.3623	2.0100e-003	0.0000	6.4127
Total	4.4600e-003	0.0457	0.0319	7.0000e-005	6.1100e-003	2.0800e-003	8.1900e-003	2.6500e-003	1.9200e-003	4.5700e-003	0.0000	6.3623	6.3623	2.0100e-003	0.0000	6.4127

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.5000e-004	3.8600e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.1890	1.1890	3.0000e-005	0.0000	1.1897
Total	4.5000e-004	3.5000e-004	3.8600e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.1890	1.1890	3.0000e-005	0.0000	1.1897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3800e-003	0.0000	2.3800e-003	1.0400e-003	0.0000	1.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0344	0.0432	7.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	6.3623	6.3623	2.0100e-003	0.0000	6.4127
Total	1.7400e-003	0.0344	0.0432	7.0000e-005	2.3800e-003	1.5500e-003	3.9300e-003	1.0400e-003	1.5500e-003	2.5900e-003	0.0000	6.3623	6.3623	2.0100e-003	0.0000	6.4127

Mitigated Construction Off-Site

3.5 Trenches - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0387	0.0000	0.0387	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0283	0.2893	0.2020	4.5000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	40.2948	40.2948	0.0128	0.0000	40.6135
Total	0.0283	0.2893	0.2020	4.5000e-004	0.0387	0.0132	0.0519	0.0168	0.0121	0.0289	0.0000	40.2948	40.2948	0.0128	0.0000	40.6135

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8600e-003	2.2400e-003	0.0244	8.0000e-005	8.5100e-003	6.0000e-005	8.5700e-003	2.2600e-003	5.0000e-005	2.3100e-003	0.0000	7.5300	7.5300	1.8000e-004	0.0000	7.5345
Total	2.8600e-003	2.2400e-003	0.0244	8.0000e-005	8.5100e-003	6.0000e-005	8.5700e-003	2.2600e-003	5.0000e-005	2.3100e-003	0.0000	7.5300	7.5300	1.8000e-004	0.0000	7.5345

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	6.5600e-003	0.0000	6.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.2176	0.2736	4.5000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003	0.0000	40.2947	40.2947	0.0128	0.0000	40.6134
Total	0.0110	0.2176	0.2736	4.5000e-004	0.0151	9.8000e-003	0.0249	6.5600e-003	9.8000e-003	0.0164	0.0000	40.2947	40.2947	0.0128	0.0000	40.6134

Mitigated Construction Off-Site

3.6 Surveys - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.5000e-004	1.6100e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4954	0.4954	1.0000e-005	0.0000	0.4957
Total	1.9000e-004	1.5000e-004	1.6100e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4954	0.4954	1.0000e-005	0.0000	0.4957

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

3.7 Sample Delivery - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.1000e-004	1.5000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1555	0.1555	2.0000e-005	0.0000	0.1559
Vendor	1.0000e-005	2.2000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0622	0.0622	0.0000	0.0000	0.0623
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.0000e-005	8.3000e-004	2.1000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2177	0.2177	2.0000e-005	0.0000	0.2183

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

3.8 Maximum Daily - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2800e-003	0.0000	3.2800e-003	1.6800e-003	0.0000	1.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8300e-003	0.0298	0.0196	5.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	4.4148	4.4148	1.4000e-003	0.0000	4.4497
Total	2.8300e-003	0.0298	0.0196	5.0000e-005	3.2800e-003	1.2800e-003	4.5600e-003	1.6800e-003	1.1800e-003	2.8600e-003	0.0000	4.4148	4.4148	1.4000e-003	0.0000	4.4497

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	3.1000e-004	3.3400e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1700e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0304	1.0304	2.0000e-005	0.0000	1.0310
Total	3.9000e-004	3.1000e-004	3.3400e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1700e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0304	1.0304	2.0000e-005	0.0000	1.0310

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2800e-003	0.0000	1.2800e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	0.0238	0.0290	5.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	4.4148	4.4148	1.4000e-003	0.0000	4.4497
Total	1.2100e-003	0.0238	0.0290	5.0000e-005	1.2800e-003	1.0200e-003	2.3000e-003	6.6000e-004	1.0200e-003	1.6800e-003	0.0000	4.4148	4.4148	1.4000e-003	0.0000	4.4497

Mitigated Construction Off-Site

4.0 Operational Detail - Mobile

-No Operational Emissions

Energy Appendix

Energy Summary

Syphon Geotechnical Energy Summary

Construction Fuel Consumption Summary

	gallons	
Year	Diesel	Gas
2019	10,784	2,684
Total	10,784	2,684
Annual Aver	5,392	1,342

*Note: Mitigated and unmitigated construction emissions of CO₂ are identical

State Usage (2017)^{1,2}	3,089,833,627	15,540,154,774
Project % State	0.0002%	0.0000%
Orange County Usage³	1,236,000,000	54,000,000
Project % County	0.0004%	0.0025%

Construction	Total Gallons	Annual	
Onsite Equipment	10,747	5,374	diesel
Haul Trucks	31	15	diesel
Vendor Trucks	6	3	diesel
Worker Trips	2,684	1,342	gasoline

Assumptions

Gasoline

19.6 pounds of CO₂ per gallon of gasoline⁴

0.45 kg = 1 pound

8.89 Kg of CO₂ per gallon of Gasoline

Diesel

22.4 pounds of CO₂ per gallon of diesel fuel⁴

0.45 kg = 1 pound

10.16 Kg of CO₂ per gallon of Gasoline

Construction diesel gasoline Used for trucks (haul and vendor) and off-road equipment worker vehicles
*Mitigated and unmitigated emissions will be the same as vehicle use does not change.
Operation diesel gasoline Majority of trucks and buses remaining vehicle mix
LCFS & Pavley assumed for on-road vehicles after year 2011

Sources:

- 1 CEC. 2018a. Gasoline Fuel Data, Facts and Statistics. Taxable Diesel Sales in California. Available: http://www.energy.ca.gov/almanac/transportation_data/gasoline/. Accessed December 2018.
- 2 CEC. 2018b. Diesel Fuel Data, Facts and Statistics. Taxable Diesel Sales in California. Available: http://www.energy.ca.gov/almanac/transportation_data/diesel.html. Accessed December 2018.
- 3 CEC 2018c. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. 2010-2017 CEC-A15 Results and Analysis.xls. Available: https://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed December 2018.
- 4 U.S. Energy 2017: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>

Fuel Conversion - Construction

Syphon Geotechnical Fuel Conversion - Construction

	Total CO ₂ MT/yr	Fuel Type	Factor KGCO ₂ /gal	Gallons	Total Diesel (gal)	Total Gas (gal)
<i>Access Road</i>						
Off-road	13.74	diesel	10.16	1,352.19		
Haul	0.16	diesel	10.16	15.34		
Vendor	0.00	diesel	10.16	0.00		
Worker	0.99	gasoline	8.89	111.51	1,367.54	111.51
<i>Borings</i>						
Off-road	48.43	diesel	10.16	4,766.63		
Haul	0.00	diesel	10.16	0.00		
Vendor	0.00	diesel	10.16	0.00		
Worker	13.65	gasoline	8.89	1,535.51	4,766.63	1,535.51
<i>Test Pits</i>						
Off-road	6.41	diesel	10.16	631.14		
Haul	0.00	diesel	10.16	0.00		
Vendor	0.00	diesel	10.16	0.00		
Worker	1.19	gasoline	8.89	133.82	631.14	133.82
<i>Trenches</i>						
Off-road	40.61	diesel	10.16	3,997.21		
Haul	0.00	diesel	10.16	0.00		
Vendor	0.00	diesel	10.16	0.00		
Worker	7.53	gasoline	8.89	847.49	3,997.21	847.49
<i>Seismic Surveys</i>						
Off-road	0.00	diesel	10.16	0.00		
Haul	0.00	diesel	10.16	0.00		
Vendor	0.00	diesel	10.16	0.00		
Worker	0.50	gasoline	8.89	55.76	0.00	55.76
<i>Sampling Deliveries & Breakdown</i>						
Off-road	0.00	diesel	10.16	0.00		
Haul	0.16	diesel	10.16	15.34		
Vendor	0.06	diesel	10.16	6.13		
Worker	0.00	gasoline	8.89	0.00	21.48	0.00

Appendix BIO
Syphon Reservoir Geotechnical
Investigations Project
Biological Resources
Technical Report



SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

Biological Resources Technical Report

Prepared for
Irvine Ranch Water District

February 2019



SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

Biological Resources Technical Report

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Irvine Ranch Water District

February 2019



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SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT

Biological Resources Technical Report

1.0 Introduction

This report presents the findings of a biological resources assessment conducted by Environmental Science Associates (ESA) for the Syphon Reservoir Geotechnical Investigations Project (Project) within an approximately 265-acre study area (“study area”) located in unincorporated Orange County, California. The proposed geotechnical investigations are outlined in the Geotechnical Investigations Work Plan (HDR 2018) and are intended to provide details about the geologic and geotechnical baseline conditions at Syphon Reservoir, which is an existing recycled water storage reservoir. This work is necessary in order to inform the design of an enlarged reservoir, which will provide the IRWD service area with a more reliable water supply.

This report documents the results of a literature review, biological surveys, and describes the environmental setting of the study area, including plant communities, habitats, and special-status biological resources that have been documented on-site or have the potential to occur on-site. In addition, the report includes an analysis of potential direct or indirect project-related construction impacts to special-status biological resources within the context of applicable environmental regulations, and provides recommendations to mitigate these effects. The purpose of this study is to satisfy the requirements of the California Environmental Quality Act (CEQA), and to supplement subsequent regulatory applications pursuant to Sections 404 and 401 of the Clean Water Act (CWA) and Section 1602 of the California Fish and Game Code (FGC).

1.1 Project Location

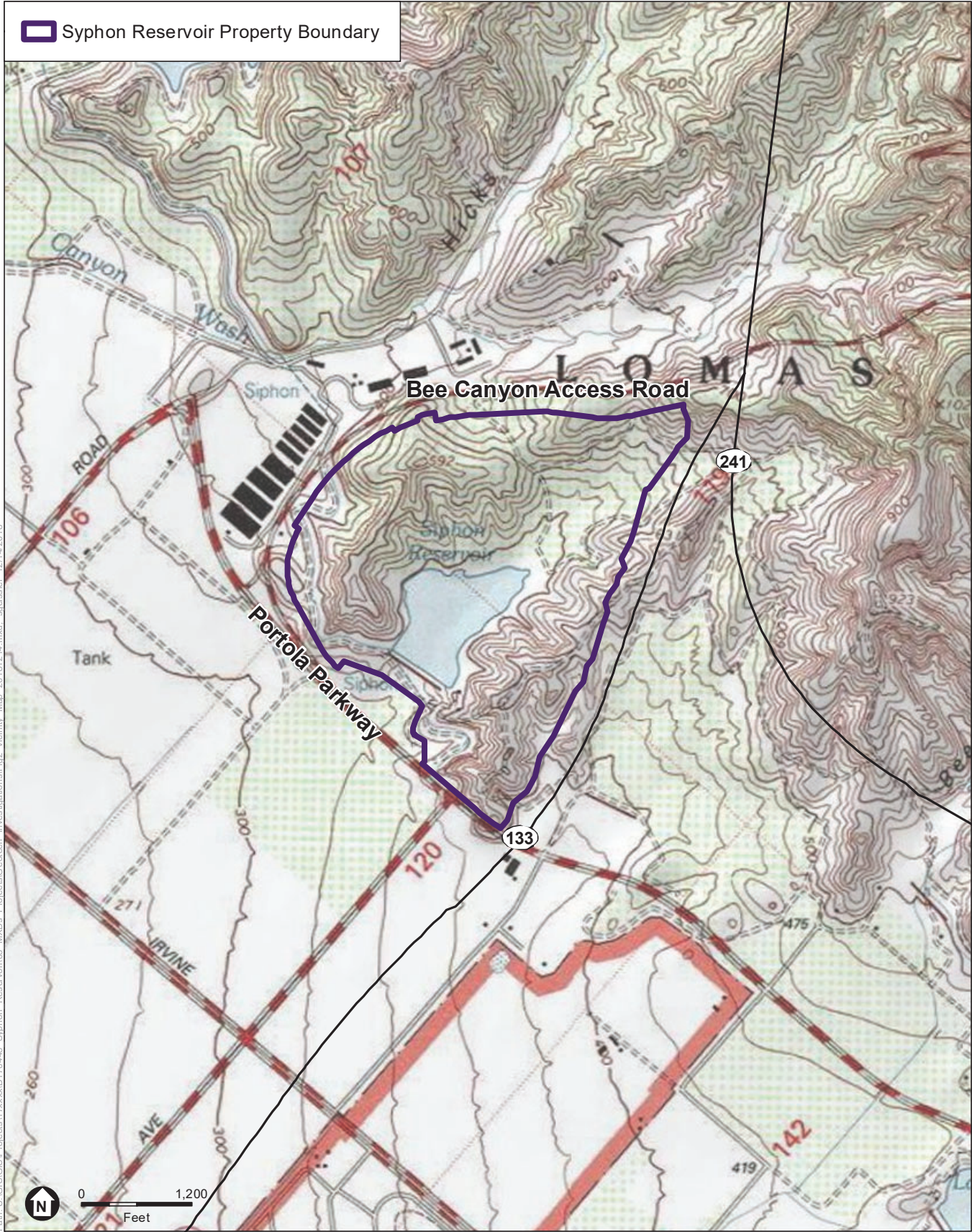
The study area is located in central Orange County in southern California (**Figure 1**). Specifically, the study area is located on the northeast side of Portola Parkway between Bee Canyon Access Road and State Route 133 (SR-133) (**Figure 2**). IRWD owns the majority of the property bounded by these thoroughfares. The Crean Lutheran High School’s recreation facilities are located between Portola Parkway and the toe of the existing dam. Residential neighborhoods are located on the southwest side of Portola Parkway. The ground surrounding the reservoir, which dominates the Syphon site, is hilly with ridgelines and terraced slopes. Ground surface elevations at the site range from approximately 319 feet above sea level at Portola Parkway immediately below the existing reservoir to approximately 675 feet above sea level in the northeast corner of the study area.



SOURCE: ESRI, 2016; OC LAFCO, 2018

Syphon Reservoir Geotechnical Investigations Project

Figure 1
Regional Map



SOURCE: ESRI, 2016; El Toro USGS 7.5 minute Quadrangle

Siphon Reservoir Geotechnical Investigations Project

Figure 2
Vicinity Map



1.2 Project Background

IRWD is an independent special district serving central Orange County to provide drinking water, reliable wastewater collection and treatment, recycled water and urban runoff treatment to approximately 403,000 residents. IRWD has a diverse water supply that includes local groundwater, recycled water, imported water, and local surface water. Approximately 54 percent of the IRWD water supply comes from 27 local groundwater wells in the Orange County Groundwater Basin; approximately 19 percent of the District's water supply is imported from the Metropolitan Water District of Southern California (MWD); and roughly 25 percent of the District's water demands are met with recycled water. IRWD produces recycled water at its Michelson Water Recycling Plant located in Irvine and its Los Alisos Water Recycling Plant located in Lake Forest. This recycled water is provided to customers primarily for irrigation of public landscaping such as street medians, parks and golf courses as well as agricultural. It is also used in industrial processes such as mixing concrete, office building uses such as toilet flushing and cooling towers as well as for firefighting. When recycled water production exceeds seasonal demands, excess recycled water can be stored at Syphon Reservoir, as well as other recycled water storage reservoirs operated by IRWD, including San Joaquin, Rattlesnake, and Sand Canyon Reservoirs.

IRWD acquired Syphon Reservoir in 2010 from the Irvine Company (TIC). Multiple studies and activities have occurred within the study area to support use of the reservoir to store and distribute recycled water. In 2012, IRWD prepared the Syphon Reservoir Expansion Engineering Feasibility Study (GEI 2012), which provided baseline geotechnical information for the study area. This study was limited in the location and number of borings conducted due to requirements to remain within existing roadways on-site and to avoid vegetation disturbance. In 2013, IRWD implemented the Syphon Reservoir Interim Facilities Project, which included minor improvements to integrate the reservoir into IRWD's recycled water system. In 2016, IRWD conducted a dry lakebed geotechnical exploration to obtain information on the extent and character of sediments that have accumulated in the reservoir over time (GEI 2016). While IRWD's existing recycled water storage reservoirs provide storage for recycled water, once the storage reservoirs are full to capacity in winter months, recycled water supplies are either diverted to Orange County Sanitation District (OCSD) or discharged to the ocean. Under such conditions, IRWD is left short of recycled water to meet its demands and must then purchase supplemental imported water from MWD to meet the summer demands of IRWD's recycled water customers. Based on projected demands and supplies, IRWD estimates that it will need an additional 3,200 acre-feet (AF) of recycled water seasonal storage capacity in 2020 and about 4,500 AF by the year 2030.

The Syphon Reservoir Improvement Project is intended to store additional recycled water to meet the seasonal demand of recycled water customers and to enhance IRWD's water supply reliability by increasing the existing recycled water seasonal storage capacity at Syphon Reservoir, which will allow the storage of additional recycled water produced at the water recycling plants during periods of low demand (winter months) for use during periods of high demand (summer months). This would be accomplished by replacing the existing engineered earthen embankment dam at Syphon Reservoir with a new and larger engineered dam that would meet and exceed the latest state and federal safety standards. The expansion of the reservoir's storage capacity from the

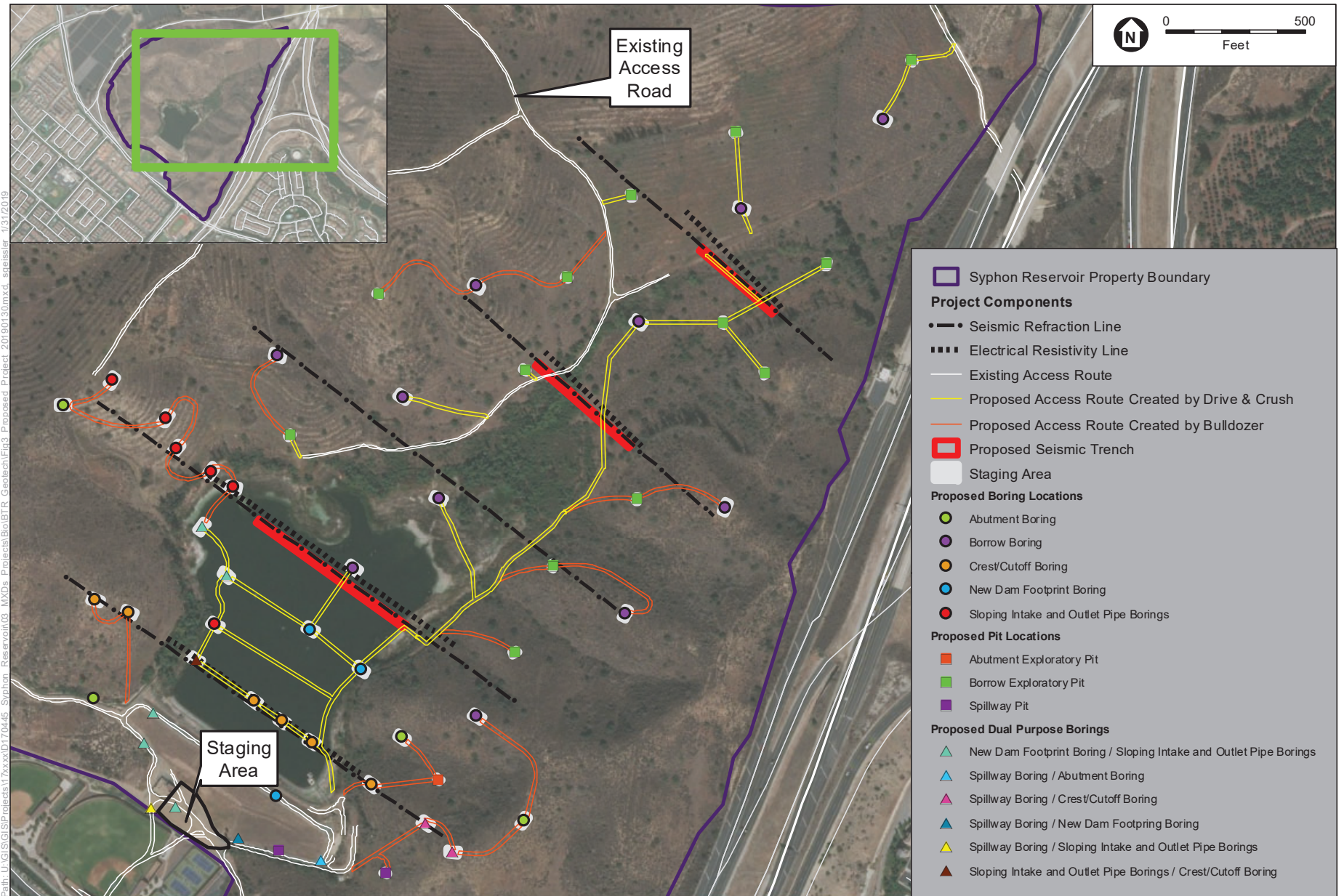
current 500 AF to approximately 5,000 AF would help IRWD become more self-sufficient by reducing its dependence on costly and less reliable imported water during summer months, and would increase the use of recycled water for public landscaping, agricultural, business and industrial uses. Increased use of recycled water for these purposes will make more drinking water available to the region to better withstand future water shortages. The Syphon Reservoir Improvement Project will improve IRWD's water supply reliability, reduce diversions of wastewater to OCSO, and reduce discharges of recycled water to the ocean that could otherwise be used by IRWD customers to meet demands. However, before the Syphon Reservoir Improvement Project can be implemented to expand the reservoir, implementation of the Syphon Reservoir Geotechnical Investigations Project is necessary to characterize the geologic and geotechnical conditions that will inform design of the proposed new engineered dam and reservoir expansion.

A large portion of the study area was previously used by the Transportation Corridor Agencies (TCA) for mitigation lands for impacts associated with the Eastern Transportation Corridor Project (Dudek 2012). When IRWD acquired Syphon Reservoir from TIC, the Conveyance Agreement included a Grant Deed with use restrictions to provide for the conservation of biological resources associated with that mitigation. The Grant Deed includes provisions to "install, maintain, repair and replace improvements to enhance the safety or capacity of the Reservoir Facilities," that are "subject to receipt of approvals from applicable governmental agencies." However, coordination with the third-party beneficiaries of the Grant Deed (i.e., TCA and U.S. Fish and Wildlife Service [USFWS]) is required. Preliminary coordination with USFWS was initiated in 2018 and is on-going.

1.3 Project Description

The Project would implement geotechnical investigations to evaluate geologic and seismic conditions at the embankment dam, spillway, outlet, and borrow sites.¹ Additionally, geotechnical explorations would occur to verify the characteristics of the Center Valley Fault, which previously has been documented as inactive (GEI 2012). The Project would use a combination of exploratory test pits, borings, and geophysical surveys to characterize the subsurface conditions of the soil at each exploration location. The general locations of the proposed explorations are shown on **Figure 3**. In general, the exploration points were selected based on location of the proposed engineered dam and reservoir improvements, access considerations, avoidance of environmentally sensitive areas, and correspondence with IRWD. These locations may be modified by the subsurface exploration subcontractor as needed in the field to respond to exploration plan revisions as well as unexpected field conditions, including to avoid trees and rare plants if feasible. In addition, to reduce the potential for the spread of weed seeds during the project, all heavy equipment proposed for use on-site would be cleaned (including wheels, tracks, undercarriages, and bumpers, as applicable) before delivery to the project site.

¹ An embankment dam is an earthen dam built by compacting successive layers of earth, using the most impervious materials to form a core and placing more permeable substances on the inner and outer sides. A spillway is a structure provided to control the release of flows from behind a dam such that the dam does not overtop. An outlet is a device used to regulate flow from a dam. A borrow site is an excavated area where material has been dug for use as fill material at another location.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 3
Proposed Project

In total, the following activities are proposed as part of the Project:

- Approximately 53 borings;
- Approximately 16 exploratory test pits;
- Approximately three (3) fault evaluation trenches totaling up to about 1,900 feet;
- Approximately five (5) seismic refraction survey lines totaling up to about 7,400 feet; and
- Approximately four (4) electrical resistivity survey lines totaling up to about 2,900 feet.

Table 1 summarizes the activities proposed for the borings and exploratory test pits.

**TABLE 1
BORINGS AND EXPLORATORY TEST PITS**

Exploration Area	Approximate Number	Approximate Depth (feet below ground surface)
Embankment Dam Explorations		
Crest/Cutoff Boring	8	100-270
Abutment Boring	6	50-100
New Footprint Boring	9	50-120
Abutment Exploratory Pit	1	10-20
Spillway and Outlet Explorations		
Spillway Boring	4	25-180
Sloping Intake and Outlet Pipe Boring	15	25-180
Spillway Exploratory Pit	2	10-20
Borrow Investigations		
Borrow Boring	11	30-70
Borrow Exploratory Pit	13	10-20

Access to many of the test locations will be through the use of existing access roads. For test locations that are not accessible using existing access roads, temporary access roads would be provided with some grading. For each exploration, a graded work pad would be installed with room to navigate required equipment. The graded work pad for the borings would be approximately 20 by 50 feet, and the pad for test pits would be approximately 10 by 20 feet. All temporary access roads would be approximately 12 feet wide. Samples of subsurface materials would be collected from the exploratory test pits and borings for examination and laboratory testing.

Prior to the start of geotechnical exploration activities, the reservoir would be drained, and sufficient time would be required to allow the reservoir bottom to dry out, so that borings, test pits, and trenches could be implemented on dry land. IRWD conducts draining of the reservoir as part of its routine operations. The recycled water currently in the reservoir would be drained through the existing pipeline infrastructure and used to meet IRWD customer demands.

1.3.1 Dam Explorations

Explorations are needed to characterize the subsurface conditions along the crest of the proposed engineered dam, at the right and left abutments of the proposed dam, and in the new foundation footprint area. The proposed engineered dam will be an earthen embankment, which is an earthen dam built by compacting successive layers of earth, using the more impervious materials to form a core and placing more permeable materials on the upstream and downstream sides. The explorations proposed at the engineered dam include approximately 23 borings and one abutment exploratory test pit. Borings could be drilled at depths ranging from approximately 50 to 270 feet below ground surface (bgs). The test pit would be excavated to an approximate depth of 10 to 20 feet or until excavation refusal² is encountered.

1.3.2 Spillway and Outlet Explorations

Geotechnical explorations are needed to characterize the conditions at the outlet of the dam and associated sloping intake area, along the outlet pipeline, at the spillway foundation area, and along the spillway pipeline. The explorations proposed as part of the spillway and outlet explorations include approximately 21 borings and two spillway exploratory pits. Borings would be drilled at depths ranging from approximately 25 to 180 feet bgs. The test pits would be excavated to an approximate depth of 15 to 20 feet or until excavation refusal is encountered.

1.3.3 Borrow Investigations

Material to construct the new proposed engineered dam will need to be extracted or borrowed from existing locations at the Project site. Areas of potential borrow locations need to be evaluated to provide detailed engineering characteristics of potential embankment materials, including strength parameters, seepage characteristics, and shrinkage potential. Explorations for the borrow areas include approximately 11 borings and approximately 13 test pits. Borings could be drilled at depths ranging from approximately 30 to 70 feet bgs. The test pits would be excavated to an approximate depth of 10 to 20 feet or until excavation refusal is encountered.

1.3.4 Fault and Bedrock Profile Investigations

Geotechnical explorations would evaluate alluvium and bedrock materials on the Project site and characterize the previously-documented inactive Center Valley Fault, which runs through the Project site. Explorations would include seismic refraction and electrical resistivity lines along with a series of fault trenches to characterize the fault along various traverse lines across the Project site.

² Soil refusal is very hard soil or rock material that is encountered during excavation. Further excavation below the point of refusal is typically prevented by friction and cannot be conducted without stronger equipment.

Approximately five seismic refraction survey lines would be conducted laterally across the reservoir bottom to evaluate bedrock conditions and to further evaluate the location of the Center Valley Fault. The seismic refraction survey lines would range in distance from 1,000 to 1,800 feet. Approximately four electrical resistivity survey lines would be conducted to further evaluate fault characteristics, especially the fault location in relation to the Silverado and Vaqueros/Sespe Formations. The electrical resistivity survey lines would be conducted adjacent and parallel to some of the seismic refraction lines and would range from approximately 500 to 1,000 feet in length. Both the seismic refraction survey lines and the electrical resistivity survey lines would involve minimal ground disturbance by temporarily inserting probes several inches into the ground, and would not result in greater than one foot of disturbance bgs.

Approximately three fault trenches would be excavated ranging in depth from 15 to 20 feet. The trenches would be excavated in approximately 30- to 50-foot long segments along the lines, for a total excavation length ranging from approximately 500 to 900 feet. The trenches would evaluate the alluvium and bedrock for evidence of faults in order to provide an exact location of the fault as well as its age and latest activity.

1.3.5 Piezometers

Backfilling of all borings is planned with the exception of approximately 17 core borings that would be completed as piezometers, which monitor the pressure or depth of groundwater. Piezometers are instruments that can be used to monitor depth to groundwater. The piezometers would be temporarily used during the Syphon Reservoir Improvement Project design process to collect information about groundwater levels below the reservoir. The piezometer filter and slotted pipe section would target the underlying aquifer.

1.3.6 Staging Area

The initial staging area would be located within the existing disturbed area at the toe of the dam slope. As the geotechnical investigations move toward the back of the reservoir area, equipment may also be staged within the dried bed of the existing reservoir. These areas would already be disturbed.

1.3.7 Site Access

All equipment and materials would be transported to the site on public highways and local roads using standard transport equipment. Primary access to the Project site would be provided along existing access roads from Portola Parkway. Additional site access may be provided from Bee Canyon Road. The equipment would be off-loaded on-site at the staging area located below the toe of the existing engineered dam and then mobilized to each drilling or trenching location. Traffic control is not anticipated to be required.

Within the Project site, temporary access to each exploratory drilling or trenching location would be created either by the “drive and crush”³ method, which involves driving over vegetation so as to limit vegetation disturbance, or by grading a 12-foot wide dirt patch using a bulldozer.

1.4 Project Implementation

Activities associated with implementation of the geotechnical exploration program would require the following equipment to be used on-site: one or two drill rigs; one water truck; one or two support trucks, one backhoe; one excavator; one bulldozer; and five pick-up trucks. Actual equipment numbers may vary from day-to-day exploration. All equipment, with possible exception of the pick-up trucks, would be diesel powered and would be anticipated to be used on-site for the duration of the geotechnical investigation activities. An average of approximately eight construction workers would be required on-site at any given time to implement the Project.

During the exploration program, soil to be tested would be stored in appropriate containers, bags and core boxes within a secured container on-site in an undisturbed area. Drill cuttings would be contained at each drill site and then spread within the previously cleared drill rig pad. All other soil excavated would be stockpiled adjacent to each excavation and used as backfill once each exploration activity is completed. All test pits, trenches, borings and soil stockpiles would be covered at the end of each work day if not filled on the same day.

1.5 Schedule

The geotechnical investigations would occur over an approximate seven-month period from Fall 2019 through Spring 2020 but could be longer if weather restricts exploration work. This includes site preparation, access road improvements, boring and trenching, and site restoration. Weather permitting, the Project activities would involve the following durations:

- Access Road Improvements would require approximately 20 days. Access road improvements would occur prior to drilling activities. Once initial roads are graded to access the initial boring locations, the remaining access roads would be graded concurrent with explorations.
- Borings would require approximately 51 days;
- Test pits would require approximately 6 days;
- Fault trenches would require approximately 38 days; and
- Seismic refraction and electrical resistivity lines would require approximately 10 days.

If the Project is implemented consecutively such that only one exploration activity is conducted at a time (with no concurrent work and no gaps), a minimum of approximately 105 days are needed. Alternatively, Project implementation may involve simultaneous exploration activities, which for example could include simultaneous drilling of 2 borings, excavation of 2 test pits, 1 fault trench

³ “Drive and crush” involves less disturbance than blading off the surface material and avoids substantially modifying the landscape. The vehicle carrying the drilling equipment drives over the existing vegetation, and vegetation is crushed but not cut or removed. Soil may be slightly compacted, but no surface soil (topsoil) is removed. Vegetation in the access path may be damaged and even destroyed, but the topsoil and seed bank remains in place. Some crushed vegetation is expected to simply re-sprout from root crowns after disturbance.

and construction of 2,500 feet of access roads. Under this scenario, Project implementation may require less than 105 days since equipment would be operating simultaneously. These numbers would be subject to change dependent on weather, field conditions and scheduling requirements.

2.0 Methodology

2.1 Literature Review

Relevant literature resources were reviewed prior to conducting field surveys to determine if special-status biological resources occur within the study area or the surrounding vicinity. The California Natural Diversity Database (CNDDDB), a California Department of Fish and Wildlife (CDFW) species account database, was queried for information regarding known observations of special-status species and habitats within the study area and vicinity, which included the following U.S. Geological Survey (USGS) topographic quadrangles: Orange, Black Star Canyon, Corona South, Tustin, El Toro, Santiago Peak, Laguna Beach, San Juan Capistrano, and Canada Gobernadora (CDFW 2018a). Species data provided by the USFWS Information for Planning and Consultation (IPaC) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were also reviewed (USFWS 2018a, CNPS 2018). Other data sources reviewed included USFWS critical habitat maps (USFWS 2018b), National Wetland Inventory maps (USFWS 2018c), the United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (2018), eBird (2012), current and historical aerial photographs (Google Earth 2018), and regional flora and fauna field guides to assist in the identification of species and suitable habitats.

Additional literature sources included the following references:

- *Syphon Reservoir Expansion Engineering Feasibility Study – Geotechnical Data Report* (GEI 2012)
- *Preliminary Draft Syphon Reservoir Environmental Regulatory Evaluation* (Dudek 2012)

A list of all relevant references reviewed is included in Section 7.0.

2.2 General Biological Surveys

A general biological survey, habitat assessment, and vegetation mapping to document natural communities and existing conditions on the study area was conducted by ESA biologists Maile Tanaka and Tommy Molioo on April 24 and 25, 2018, and by Maile Tanaka on April 26, 2018. Prior to the field visit, ESA reviewed the *Syphon Reservoir Environmental Regulatory Evaluation Preliminary Draft*, which included a reconnaissance-level vegetation map previously prepared by Dudek in January 2011 (Dudek 2012). This information was reviewed in conjunction with recent aeriels available on Google Earth. Natural communities were then verified directly in the field, and from vantage points using binoculars for areas with limited accessibility, based on the presence of dominant plant species observed on-site following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018b) and *Methods Used to Survey the Vegetation of Orange County Parks and Open*

Space Areas and The Irvine Company Property (Jones & Stokes 1993). Natural communities were mapped directly in the field utilizing a 200-scale (1" = 200') aerial photograph.

Natural community classifications and descriptions follow *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009), and comparable names used in the Orange County Habitat Classification System (OCHCS) for the same communities were included in natural community descriptions. After completing the fieldwork, the natural community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

An inventory of all plant and wildlife species observed was compiled during the field surveys. Plant species observed during surveys were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy followed Baldwin et al. (2012). Common plant names, when not available from Baldwin, were taken from Calflora (2018). Wildlife species were identified during the field reconnaissance by sight and call or other evidence of presence, such as tracks, nests, scat, and remains, and with use of binoculars and taxonomic keys where appropriate. Vertebrate taxonomy followed Crother (2018), CalHerps (2018), and Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union for birds (AOU 2018), and Kaufman et al. (2004) for mammals. Because common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter.

During the surveys, a habitat evaluation was also conducted to determine the potential for each habitat area to support native species. Special attention was paid to habitats having the potential to support special-status biological resources (e.g., special-status plant and wildlife species and sensitive natural communities). Aerial photography and global positioning system (GPS) technology was used to accurately locate and map any sensitive biological resources encountered. However, no focused protocol surveys were conducted during the general biological surveys.

In addition, the evaluation of potential wildlife habitat linkages (i.e., wildlife movement corridors) within or through the study area and immediate vicinity was based on the conditions documented during the field surveys, as well as information compiled from literature and analysis of physical barriers observed on aerial photographs. This information was used to identify whether the study area and immediate vicinity could function as an important wildlife movement corridor connecting large open space areas in the vicinity of the study area.

2.3 Jurisdictional Delineation

ESA conducted a jurisdictional delineation to identify features within the study area that are potentially subject to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction and regulatory authority.

Prior to the field survey, ESA reviewed available background information pertaining to Syphon Reservoir and its geography and topography. The following resources were also reviewed prior to the field surveys:

- Color aerial photography for vegetative, topographic, and hydrologic features (Google Earth 2018);

- *El Toro, California 7.5-minute topographic quadrangle map* (USGS 1968);
- *Web Soil Survey*, queried to determine the soils mapped in the study area (NRCS 2018);
- *Hydric Soils List of California* (NRCS 2016);
- *National Wetlands Inventory* (USFWS 2018c);
- *Preliminary Draft Syphon Reservoir Environmental Regulatory Evaluation* (Dudek 2012); and
- *Habitat Classification System, Natural Resources, Geographic Information System (GIS) Project* (Gray and Bramlet 1992).

Site maps were generated with available aerial photographs, and potentially jurisdictional features were identified and marked with lines and GPS coordinates to assist in field verification.

ESA biologists May Lau and Tommy Molioo conducted a site visit on April 24, 2018, to evaluate potentially jurisdictional features within the study area. The limits of potential jurisdictional features were recorded in the field within accessible areas using aerial maps and a hand-held GPS with sub-foot accuracy. Vegetation communities were described using *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). The delineation used the “Routine Determination Method” as described in the *1987 Corps of Engineers Wetland Delineation Manual*, hereafter called the “1987 Manual” (Environmental Laboratory 1987). The 1987 Manual was used in conjunction with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, hereafter called the “Arid West Supplement” (USACE 2008a). For areas where the 1987 Manual and the Arid West Supplement differ, the Arid West Supplement was followed. Wetlands and waters were classified using commonly accepted habitat types; however, the Cowardin classification of each feature type was noted (Cowardin et al. 1979).

All features, including data points, wetland boundaries, and channels were recorded using a GPS unit (Trimble GeoXT) with real-time differential correction and an instrument-rated mapping accuracy of +/- 1 meter, or were delineated on aerial photography using GIS software (ArcGIS 10.2) and site-specific topographic data and aerial imagery.

In the office, data from data points and wetland boundaries were downloaded from the GPS unit and mapped using GIS software on an overlay of topographic contours and geo-referenced aerial photography. GPS-determined wetland boundaries and data points were visually confirmed. Acreage of wetland and waters of the U.S. polygons, and the length of linear features were determined using ArcGIS.

2.3.1 Wetlands

Three positive wetland parameters must normally be present for an area to be considered a wetland: 1) a dominance of wetland vegetation, 2) presence of hydric soils, and 3) presence of wetland hydrology. Presence or absence of positive indicators for wetland vegetation, soils and hydrology was assessed per the 1987 Manual and Arid West Supplement guidelines. Data points were taken within suspected wetlands and a paired point was taken (where applicable) in nearby

uplands. Data points were recorded on Arid West wetland determination data forms. Data forms are provided in the *Preliminary Jurisdictional Delineation Report* included in **Appendix A**.

At each data point, a visual assessment of the dominant plant species within a 6-foot radius was made. Dominant species were assessed using the recommended “50/20” rule per the Arid West Supplement. Plants were identified to species using the *Jepson Manual* (Baldwin et al. 2012). The *Arid West 2016 Regional Wetland Plant List* was used to determine the wetland indicator status of all plants (Lichvar et al. 2016). Hydric soils were identified using soil indicators presented in the Arid West Supplement (USACE 2008b) and the *Field Indicators of Hydric Soils in the United States* (NRCS 2010). Soils at each data point were characterized by color, texture, organic matter accumulation, and the presence or absence of hydric soil indicators. The coloration of the soil samples, matrix, and mottles is assessed using the *Munsell Soil Color Charts* (Munsell 2000). Presence of wetland hydrology was determined at each data point by presence of one or more of the primary and/or secondary indicators, per guidance of the Arid West Supplement.

2.3.2 Waters of the U.S.

Federal jurisdiction over a non-wetland waters of the U.S. extends to the ordinary high-water mark (OHWM), defined in 33 C.F.R. § 328.3 as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris. In the Arid West region of the United States, waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic ordinary high-water (OHW) delineations are associated with the commonly occurring ephemeral/intermittent channel forms that dominate the Arid West landscape. Delineation methods were completed in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010).

2.3.3 Waters of the State

Waters of the State were delineated using the same methodology as waters of the U.S.

2.3.4 Lakes, Streams, and Associated Vegetation

Potential CDFW-jurisdiction includes lakes, streams, and associated vegetation, which was delineated by the top of the bank of a lake or stream, and the outer dripline of riparian vegetation or wetlands supported by the lake or stream.

2.4 Special-Status Species Surveys

2.4.1 Special-Status Plant Surveys

ESA biologists Maile Tanaka, Julie Stout, Alanna Sullivan, and Dale Hameister conducted focused special-status plant surveys on May 8, 11, and August 10, 2018. Surveys were conducted using wandering transects, with special attention paid to areas of suitable habitat. Any observed plant species were recorded in the field, and the locations of any special-status plants observed were collected using a GPS unit.

2.4.2 Special-Status Wildlife Surveys

No focused protocol surveys were conducted; however, an inventory of all plant and wildlife species observed was compiled during the field surveys, including special-status wildlife species that were observed on-site. This analysis relies to a substantial extent on biological resources data collected from recent surveys conducted by ESA in 2018 and previous documentation of biological resources within the study area (Dudek 2012). In addition, focused protocol presence/absence surveys for coastal California gnatcatcher (*Polioptila californica*) were conducted by Dudek in 2011.

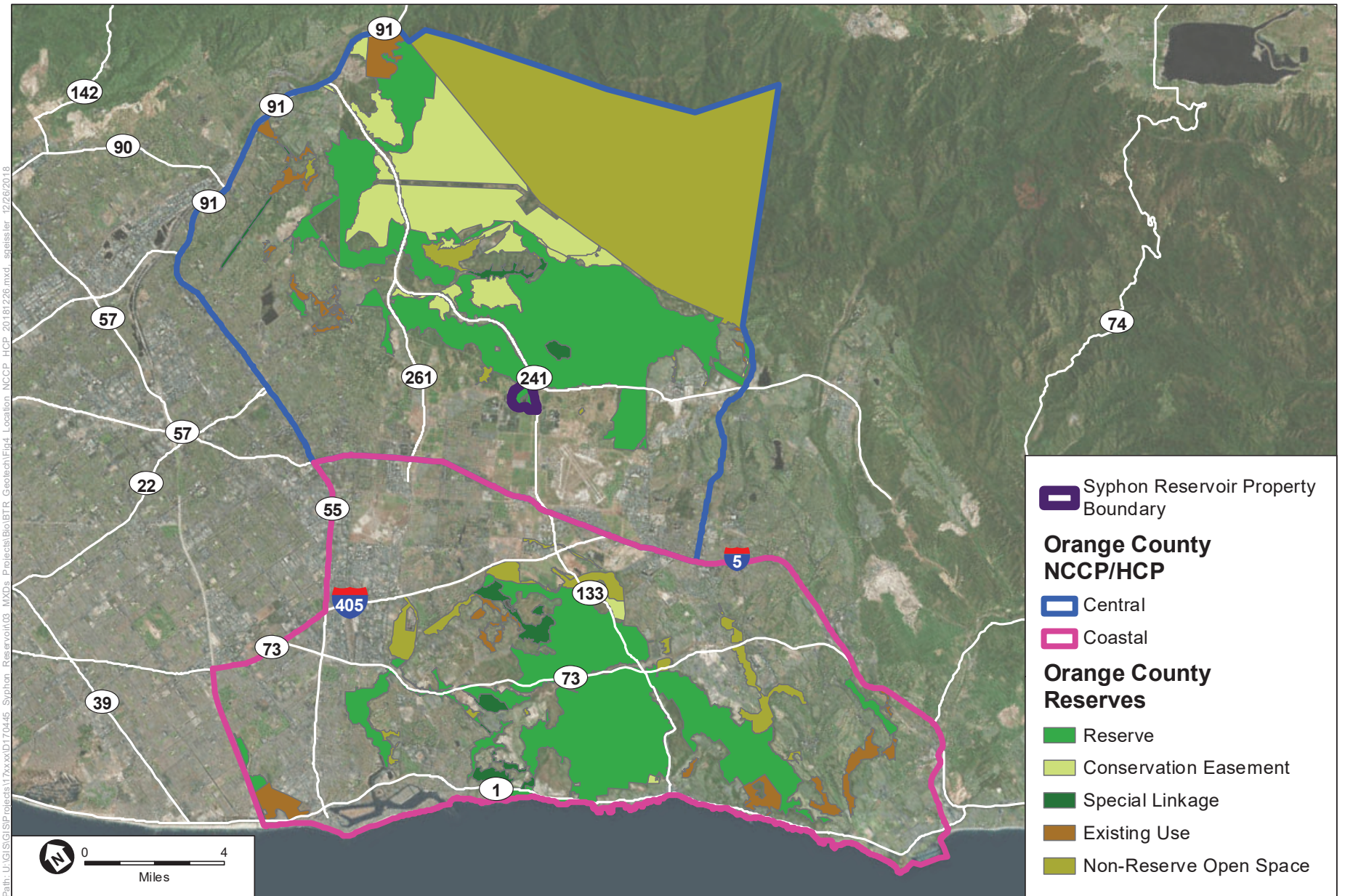
3.0 Environmental Setting

3.1 Regional Setting

The study area is located within central Orange County. It is within the Central Subregion of the County of Orange Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), and is located with the NCCP/HCP Reserve (**Figure 4**). Significant regional geographic features around the area include the Santa Ana Mountains to the northeast, the Tustin plain and the City of Irvine to the north and southwest. The study area is within the Newport Bay watershed. The climate in the region is Mediterranean, with dry summers and moderately wet winters; however, the region has experienced severe drought conditions in recent years.

The study area was previously part of the Irvine Ranch and was subject to disturbance in the 1940s for planting of orchards and construction of the reservoir to provide irrigation for agricultural uses. In the 1970s, agriculture was expanded within the eastern and northern portions of the study area, mainly for citrus orchards. Following construction of the dam, impounded water accumulated from direct runoff from the Highline Canal. Currently, within the study area, a portion of the Highline Canal conveys periodic recycled water overflows from IRWD's Rattlesnake Reservoir into Syphon Reservoir. The Highline Canal located southwest of the Syphon Reservoir was historically used for irrigation but has been abandoned. Additionally, a culvert inlet in the northeast portion of the study area conveys stormwater runoff from a portion of the open space area east of the reservoir (under SR-133 and SR-241), and multiple culverts within the study area drain the upland portions of the reservoir. The central drainage supports riparian habitat and conveys intermittent flow through the center of the study area to the reservoir. With the exception of limited seasonal inflows from rain events, IRWD controls all flows in and out of the reservoir, as part of their recycled water storage and management. The reservoir currently drains through a series of underground pipes that convey flows through a strainer and chlorination facility, before getting distributed to customers through IRWD's recycled water system.

Between 1995 and 2000, approximately 102 acres of the study area were preserved and 112 acres were restored to native coastal sage scrub habitat as mitigation for the TCA Eastern Transportation Corridor Project's impacts to coastal California gnatcatcher. Restoration activities involved removal of orchard trees, native coastal sage scrub planting, temporary irrigation, and monitoring. The revegetation was successfully completed in accordance with regulatory requirements and supported mature coastal sage scrub suitable for California gnatcatcher (Dudek 2012).



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 4
Study Area Location within NCCP/HCP

Since completion of the restoration program in 2000, on-site management of biological resources was limited to annual cowbird trapping (which is required in perpetuity) and few additional studies, including a cactus transplantation and subsequent cactus wren monitoring in the northwest portion of the property. In October 2007, the entire study area burned in the Santiago Fire and is currently in post-fire succession (Dudek 2012). The study area currently supports native vegetation communities, restored coastal sage scrub, and some disturbed communities.

3.2 Topography

The study area is characterized by steep topography of rolling hills, ridgelines, terraced slopes (from previous agricultural activities) surrounding the reservoir in the center of the study area. Within the study area, elevations range from 326 to 654 feet (99 to 200 meters) above mean sea level.

3.3 Soils

Based on review of the NRCS *Web Soil Survey* (2018), the study area contains 16 soil series (**Figure 5**). The following is a brief description of mapped soils within the study area.

3.3.1 Alo Clay

Alo clay, 15 to 30 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of clay in the first 22 inches, and weathered bedrock from 22 to 59 inches. Alo clay loam is not considered hydric by the NRCS.

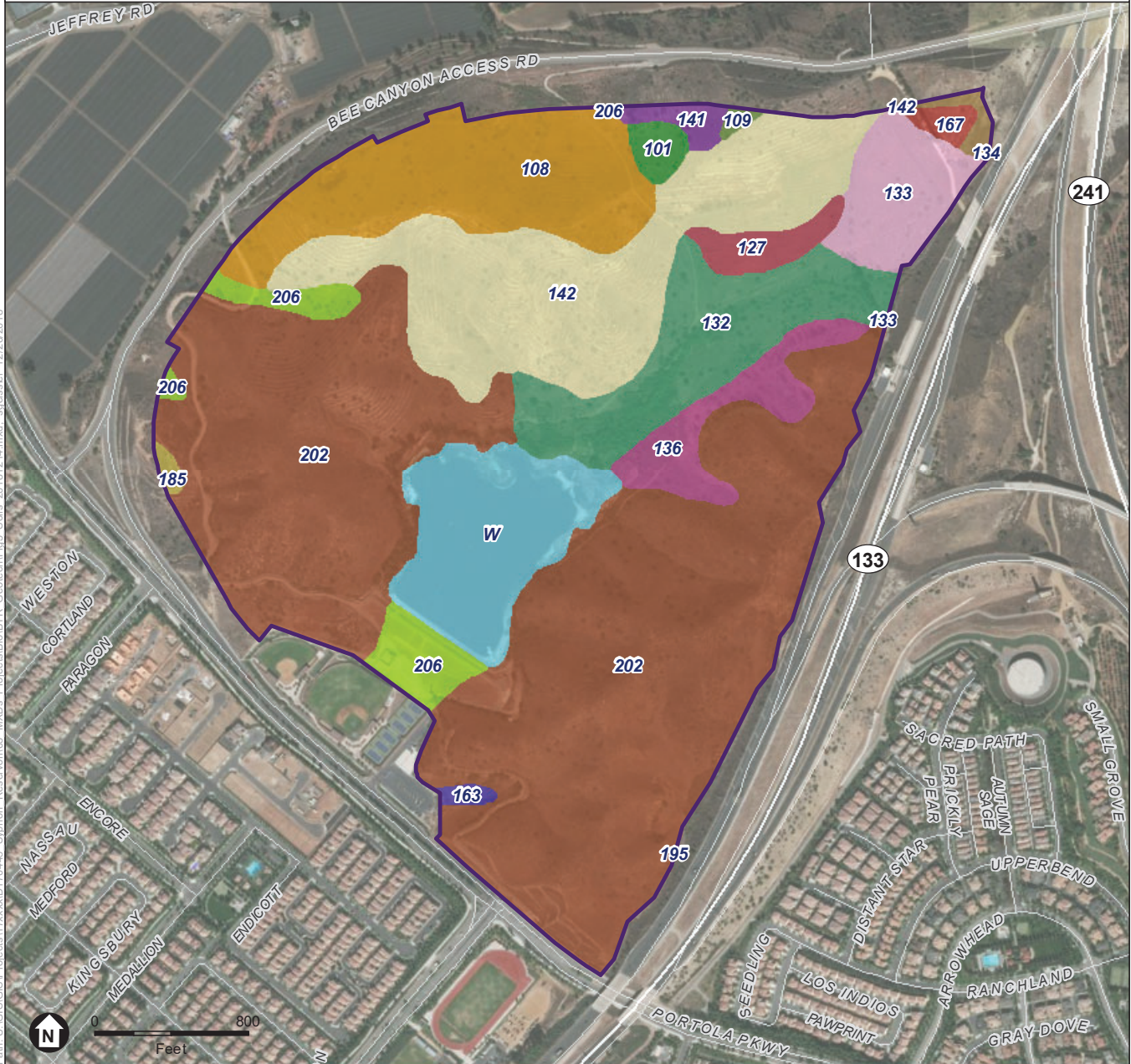
3.3.2 Anaheim Clay Loam

Anaheim clay loam, 15 to 30 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of clay loam in the first 26 inches, and weathered bedrock from 26 to 59 inches. Anaheim clay loam is not considered hydric by the NRCS.

Anaheim clay loam, 30 to 50 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of clay loam in the first 26 inches, and bedrock from 26 to 59 inches. Anaheim clay loam is not considered hydric by the NRCS.

3.3.3 Bosanko Clay

Bosanko clay, 15 to 30 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is slightly alkaline to moderately acidic. The profile consists of clay in the first 31 inches, and weathered bedrock from 31 to 59 inches. Bosanko clay is not considered hydric by the NRCS.



SOURCE: ESRI, 2016; USDA, 2018

Syphon Reservoir Geotechnical Investigations Project

Figure 5
Soils



3.3.4 Botella Clay Loam

Botella clay loam, 2 to 9 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is slightly alkaline to moderately acidic. The profile consists of clay loam in the first 8 inches, silty clay loam between 8 and 35 inches, and clay loam from 35 to 66 inches. Botella clay loam is not considered hydric by the NRCS.

Botella clay loam, 9 to 15 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of clay loam in the first 8 inches, silty clay loam between 8 and 35 inches, and sandy clay loam from 35 to 66 inches. Botella clay loam is not considered hydric by the NRCS.

3.3.5 Calleguas Clay Loam

Calleguas clay loam, 50 to 75 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of clay loam in the first 11 inches, very channery clay loam between 11 and 15 inches, and bedrock from 15 to 42 inches. Calleguas clay loam is not considered hydric by the NRCS.

3.3.6 Capistrano Sandy Loam

Capistrano sandy loam, 9 to 15 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is neutral to medium acidic. The profile consists of sandy loam in the first 27 inches and fine sandy loam between 27 and 65 inches. Capistrano sandy loam is not considered hydric by the NRCS.

3.3.7 Cieneba Sandy Loam

Cieneba sandy loam, 15 to 30 percent slopes, is a somewhat excessively-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of sandy loam in the first 17 inches, and weathered bedrock from 17 to 59 inches. Cieneba sandy loam is not considered hydric by the NRCS.

Cieneba sandy loam, 30 to 75 percent slopes, is a somewhat excessively drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is neutral to strongly acidic. The profile consists of sandy loam in the first 17 inches and weathered bedrock between 17 and 59 inches. Cieneba sandy loam is not considered hydric by the NRCS.

3.3.8 Metz Loamy Sand

Metz loamy sand is a somewhat excessively-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of loamy sand in the first 17 inches, and stratified sand to fine sandy loam from 17 to 63 inches. Metz loamy sand is not considered hydric by the NRCS.

3.3.9 Mocho Loam

Mocho loam, 2 to 9 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of loam in the first 60 inches. Mocho loam is not considered hydric by the NRCS.

3.3.10 Pits

Pits consists of concave igneous, metamorphic, and sedimentary rock. The profile consists of extremely gravelly coarse sand in the first 6 inches, and extremely gravelly sand, extremely gravelly coarse sand, or very gravelly coarse sand from 6 to 60 inches. Pits is not considered hydric by the NRCS.

3.3.11 San Emigdio Fine Sandy Loam

San Emigdio fine sandy loam, 2 to 9 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of fine sandy loam in the first 7 inches, and stratified gravelly loamy coarse sand to fine sandy loam from 7 to 61 inches. San Emigdio fine sandy loam is not considered hydric by the NRCS.

3.3.12 Soper Gravelly Loam

Soper gravelly loam, 30 to 50 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is mildly alkaline to slightly acidic. The profile consists of gravelly loam in the first 8 inches, gravelly clay loam between 8 and 29 inches, and bedrock from 29 to 79 inches. Soper gravelly loam is not considered hydric by the NRCS.

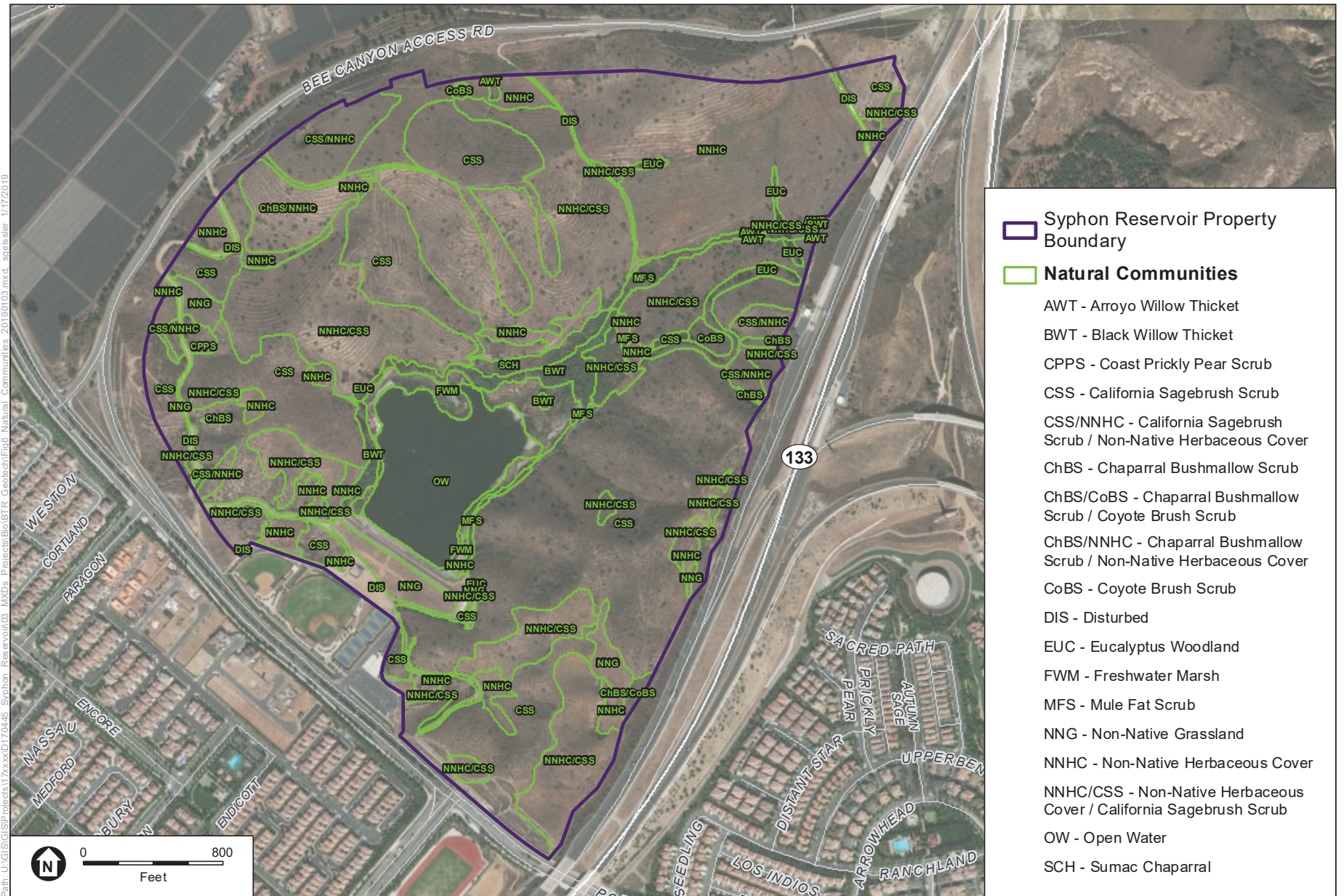
3.3.13 Sorrento Loam

Sorrento loam, 0 to 2 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The profile consists of loam in the first 12 inches, silty clay loam between 12 and 62 inches, and sandy loam from 62 to 72 inches. Sorrento loam is not considered hydric by the NRCS.

3.4 Natural Communities

The study area is dominated by California sagebrush alliance and non-native herbaceous cover/California sagebrush alliance (i.e., communities intermixed with both native and non-native species) in the upland areas, and arroyo willow thicket within the riparian areas immediately adjacent to open water within the reservoir.

Natural communities are mapped in **Figure 6**. The natural communities are described below according to the *Methods Used to Survey the Vegetation of Orange County Parks and Open Space Areas and The Irvine Company Property* (Jones & Stokes Associates 1993), *Orange County Habitat Classification System* (Gray and Bramlet 1992) and California natural alliances described in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Acreages of each natural community in the study area are summarized in **Table 2**. Alternate names for communities are indicated in parentheses. Natural communities considered a sensitive natural community by CDFW as listed in the California Natural Community List (CDFW 2018c) are also identified.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 6
Natural Communities



TABLE 2
NATURAL COMMUNITIES

Natural Community	Acres	State Rank¹
Arroyo Willow Thicket*	0.24	S4
Black Willow Thicket*	4.13	S3
Mule Fat Scrub	2.25	S4
Freshwater Marsh	5.87	S4
Coyote Brush Scrub**	0.91	S5
Chaparral Bushmallow Scrub**	0.45	S4
Chaparral Bushmallow Scrub/Coyote Brush Scrub**	0.49	S4/S5
Chaparral Bushmallow Scrub/Non-Native Herbaceous Cover**	4.72	S4/None
Sumac Chaparral	1.63	S4
California Sagebrush Scrub**	91.74	S5
California Sagebrush Scrub**/Non-Native Herbaceous Cover	7.86	S5/None
Coast Prickly Pear Scrub*	0.69	S3
Eucalyptus Woodland	2.78	None
Non-Native Grassland	5.27	None
Non-Native Herbaceous Cover	44.16	None
Non-Native Herbaceous Cover/California Sagebrush Scrub**	71.70	None/S5
Open Water	13.93	None
Disturbed	6.92	None
Total	265.74	

* Asterisk indicates that an alliance/association is considered sensitive by CDFW.

** Double asterisk indicates that an alliance/association that is a covered habitat type under the NCCP/HCP and is therefore considered a sensitive natural community.

¹ CDFW state rank denotes the rarity of a natural type within the state as follows:

S1 = Critically Imperiled – At very high risk of extirpation due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.

S2 = Imperiled – At high risk of extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.

S3 = Vulnerable – At moderate risk of extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

S4 = Apparently Secure – At a fairly low risk of extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

S5 = Secure - At very low or no risk of extirpation due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

3.4.1 Arroyo Willow Thicket

Arroyo willow thicket (i.e., *Salix lasiolepis* Shrubland Alliance or Arroyo Willow Riparian Forest [OCHCS 7.6]) is characterized by a canopy cover dominated by mature arroyo willow (*Salix lasiolepis*) with an understory of smaller willows, and variable herbaceous layer. This alliance is typically found within stream banks and benches, slope seeps, and stringers along drainages (Sawyer et al. 2009). A total of 0.24 acre of arroyo willow thicket occurs primarily within the northern and northeastern portions of the study area.

Arroyo willow thicket is considered a sensitive natural community by CDFW (61.201.01 – *Salix lasiolepis*) (CDFW 2018c).

3.4.2 Black Willow Thicket

Black willow thicket (i.e., *Salix gooddingii* Woodland Alliance or Black Willow Riparian Forest [OCHCS 7.7]) is characterized by a canopy cover dominated by mature black willow (*Salix gooddingii*) with an understory of smaller willows, mule fat (*Baccharis salicifolia*), and variable herbaceous layer. This alliance is typically found on terraces along large rivers, canyons, and along rocky floodplains of small, intermittent streams, seeps, and springs (Sawyer et al. 2009). Species associated with this alliance include native arroyo willow and non-native tamarisk (*Tamarix ramosissima*) and red gum (*Eucalyptus camaldulensis*). A total of 4.13 acres of black willow thicket were mapped around the northern and northeastern perimeter of the reservoir within the center of the study area.

Black willow thicket is considered a sensitive natural community by CDFW (61.211.01 – *Salix gooddingii*) (CDFW 2018c).

3.4.3 Mule Fat Scrub

Mule fat scrub (i.e., mulefat thickets [*Baccharis salicifolia* Shrubland Alliance]; OCHCS 7.3) is characterized by large shrub cover dominated by mule fat and variable herbaceous layer. This alliance is typically found within canyon bottoms, floodplains, lake margins, and stream channels with soils of mixed alluvium (Sawyer et al. 2009). Species associated with this alliance include native black willow, California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), cocklebur (*Xanthium strumarium*), and non-native Spanish false fleabane (*Pulicaria paludosa*), and black mustard (*Brassica nigra*). A total of 2.25 acres of black willow thicket were mapped around the northern and northeastern perimeter of the reservoir within the center of the study area.

Mule fat scrub is not considered a sensitive natural community by CDFW (63.510.01 – *Baccharis salicifolia*) (CDFW 2018c).

3.4.4 Freshwater Marsh

Freshwater marsh (i.e., California Bulrush Marsh [*Schoenoplectus californicus* Herbaceous Alliance]; OCHCS 6.4) is characterized by a dominance of dense stands of California bulrush (*Schoenoplectus californicus*) in the herbaceous layer. This alliance is typically found within freshwater or brackish marshes, shores, bars, and channels of river mouth estuaries, within areas with soils that have a high organic contents and are poorly aerated (Sawyer et al. 2009). Dried cattails (*Typha* sp.) were also observed within this alliance. A total of 5.87 acres of freshwater marsh occur around the northern and northeastern perimeter of the reservoir in the center of the study area.

Freshwater marsh is not considered a sensitive natural community by CDFW (52.114.02 – *Schoenoplectus californicus*) (CDFW 2018c).

3.4.5 Coyote Brush Scrub

Coyote brush scrub (i.e., *Baccharis pilularis* Shrubland Alliance; Coyote Brush [OCHCS 2.3.9]) is characterized by a dominance of coyote brush (*Baccharis pilularis*) in the shrub layer. This

alliance is typically found within river mouths, stream sides, terraces, open slopes, and ridges, within variable soils (Sawyer et al. 2009). A total of 0.91 acre of coyote brush scrub were mapped around the northern and northeastern portions of the study area.

Coyote brush scrub is not considered a sensitive natural community by CDFW (32.060.23 – *Baccharis pilularis*) (CDFW 2018c).

3.4.6 Chaparral Bushmallow Scrub

Chaparral bushmallow scrub (i.e., bush mallow scrub [*Malacothamnus fasciculatus* Shrubland Alliance]; Bush Mallow [OCHCS 2.3.11]) is dominated by chaparral bushmallow (*Malacothamnus fasciculatus*) in the shrub layer. This alliance is typically found within gentle to very steep slopes of variable aspect within loam or clay soils (Sawyer et al. 2009). Species associated with this alliance include native laurel sumac, California brittlebush (*Encelia californica*), California matchweed (*Gutierrezia californica*), giant wild rye (*Elymus condensatus*), and non-native short-podded mustard (*Hirschfeldia incana*). A total of 0.45 acre of chaparral bushmallow scrub was mapped around the northeastern and western portions of the study area.

Chaparral bushmallow scrub is not considered a sensitive natural community by CDFW (45.450.01 – *Malacothamnus fasciculatus*) (CDFW 2018c).

3.4.7 Chaparral Bushmallow Scrub/Coyote Brush Scrub

Chaparral bushmallow scrub/coyote brush scrub (OCHCS 2.3.11/2.3.9) is characterized by a shrub layer with a dominance of chaparral bushmallow and a sub-dominance of coyote brush. A total of 0.49 acre of chaparral bushmallow scrub/coyote brush scrub was mapped in the southern portion of the study area.

Chaparral bushmallow scrub/coyote brush scrub is not considered a sensitive natural community by CDFW (45.450.01 – *Malacothamnus fasciculatus*/32.060.23 – *Baccharis pilularis*) (CDFW 2018c).

3.4.8 Chaparral Bushmallow Scrub/Non-Native Herbaceous Cover

Chaparral bushmallow scrub/non-native herbaceous cover (OCHCS 2.3.11; *Brassica (nigra)* and Other Mustards [Semi-Natural Herbaceous Stand]; Ruderal [OCHCS 4.6]) is characterized by a shrub layer with a dominance of chaparral bushmallow and a sub-dominance of non-native herbaceous cover. A total of 4.72 acres of chaparral bushmallow scrub/non-native herbaceous cover were mapped in the western portion of the study area.

Chaparral bushmallow scrub/non-native herbaceous cover is not considered a sensitive natural community by CDFW (45.450.01 – *Malacothamnus fasciculatus*) (CDFW 2018c).

3.4.9 Sumac Chaparral

Sumac chaparral (i.e., *Malosma laurina* Shrubland Alliance; Toyon-Sumac [OCHCS 3.12]) is characterized by large shrub cover dominated by laurel sumac with a variable understory of

coastal sage scrub species and/or herbaceous grassy layer. This alliance is typically found on slopes, which are often steep, within soils that are shallow and fine-textured (Sawyer et al. 2009). Species associated with this alliance include native California sagebrush. A total of 1.63 acres of sumac chaparral were mapped throughout the eastern portion of the study area.

Sumac chaparral is not considered a sensitive natural community by CDFW (45.455.01 – *Malosma laurina*) (CDFW 2018c).

3.4.10 California Sagebrush Scrub

California sagebrush scrub (i.e., *Artemisia californica* Shrubland Alliance; Sagebrush [OCHCS 2.3.6]) is characterized by a dominance of by California sagebrush intermixed with coastal sage scrub species and a variable herbaceous layer. This alliance is typically found on slopes that are usually steep and rarely flooded within soils that are alluvial or colluvial derived shallow (Sawyer et al. 2009). Species associated with this alliance include native California buckwheat (*Eriogonum fasciculatum*), laurel sumac, California brittle bush, California matchweed, deerweed (*Acmispon glaber*), lemonadeberry (*Rhus integrifolia*), chaparral bushmallow, coast live oak (*Quercus agrifolia*), toyon (*Heteromeles arbutifolia*), Island false bindweed (*Calystegia macrostegia*), foothill needlegrass (*Stipa lepida*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), soap plant (*Chlorogalum pomeridianum*), prickly pear (*Opuntia littoralis*), common goldenstar (*Bloomeria crocea*), false rosinweed (*Osmadenia tenella*), California plantain (*Plantago erecta*), and Ladies' tobacco (*Pseudognaphalium californicum*), and non-native black mustard, foxtail chess (*Bromus madritensis*), Mexican fan palm (*Washingtonia robusta*), giant yucca (*Yucca gigantea*), oleander (*Nerium oleander*), Chinese elm (*Ulmus parvifolia*), and fountaingrass (*Pennisetum setaceum*). A total of 91.74 acres of California sagebrush scrub occurs throughout the study area.

California sagebrush scrub is not considered a sensitive natural community by CDFW (32.010.01 – *Artemisia californica*) (CDFW 2018c). However, this alliance is recognized as a covered habitat type within the Central & Coastal NCCP/HCP, and is therefore considered a sensitive natural community.

3.4.11 California Sagebrush Scrub/Non-Native Herbaceous Cover

California sagebrush scrub/non-native herbaceous cover (i.e., *Artemisia californica* Shrubland Alliance; Sagebrush [OCHCS 2.3.6]; *Brassica (nigra)* and Other Mustards [Semi-Natural Herbaceous Stand]; Ruderal [OCHCS 4.6]) is characterized by a dominance of California sagebrush intermixed with a sub-dominance of non-native herbaceous cover primarily comprised of black mustard. Species associated with this alliance include native California buckwheat, chaparral bushmallow, fascicled tarweed (*Deinandra fasciculata*), black sage, prickly pear, splendid mariposa lily (*Calochortus spendens*), wishbone bush (*Mirabilis laevis*), golden yarrow (*Eriophyllum confertiflorum*), and non-native tocalote (*Centaurea melitensis*), slender oat (*Avena barbata*), Australian saltbush (*Atriplex semibaccata*). A total of 7.86 acres of California sagebrush scrub/non-native herbaceous cover occurs throughout the study area.

California sagebrush scrub/non-native herbaceous cover is not considered a sensitive natural community by CDFW (32.010.01 – *Artemisia californica*) (CDFW 2018c). However, this alliance is recognized as a covered habitat type within the Central & Coastal NCCP/HCP, and is therefore considered a sensitive natural community.

3.4.12 Coast Prickly Pear Scrub

Coast prickly pear scrub (i.e., *Opuntia littoralis* Shrubland Alliance; Southern Cactus [OCHCS 2.4]) is characterized by a dominance of by prickly pear intermixed with coastal sage scrub species. This alliance is typically found on south-facing slopes within soils that are shallow loams and clays that may be rocky (Sawyer et al. 2009). Species associated with this alliance include native laurel sumac, lemonadeberry, California sagebrush, California buckwheat, deerweed, blue elderberry (*Sambucus nigra* ssp. *caerulea*), and non-native fountaingrass and tree tobacco (*Nicotiana glauca*). A total of 0.69 acre of coast prickly pear scrub occurs within the western portion of the study area.

Coast prickly pear scrub is considered a sensitive natural community by CDFW (32.150.02 – *Opuntia littoralis* – mixed coastal sage scrub) (CDFW 2018c).

3.4.13 Eucalyptus Woodland

Eucalyptus woodland (i.e., eucalyptus groves [*Eucalyptus* Semi-Natural Woodland Stands]; Ornamental Landscaping [OCHCS 15.5]) is dominated of by planted rows of gum trees. Associated species include native coyote brush and laurel sumac. A total of 2.78 acres of eucalyptus woodland occurs within the central and northeastern portion of the study area.

Eucalyptus woodland is not considered a sensitive natural community by CDFW (CDFW 2018c).

3.4.14 Non-Native Grassland

Non-native grassland (i.e., *Bromus madritensis* [Semi-Natural Herbaceous Stands]; Annual [OCHCS 4.1]) is dominated of by foxtail chess with a mix of non-native and native grasses and forbs. Species associated with this alliance include native telegraph weed (*Heterotheca grandiflora*), Island false bindweed, California buckwheat, deerweed, Menzies' goldenbush (*Isocoma menziesii* var. *menziesii*), blue elderberry, prickly pear, fiddleneck (*Amsinckia* sp.), and non-native red-stemmed filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), castor bean (*Ricinus communis*), and fountaingrass. A total of 5.27 acres of non-native grassland occurs within the southern portion of the study area.

Non-native grassland is not considered a sensitive natural community by CDFW (CDFW 2018c).

3.4.15 Non-Native Herbaceous Cover

Non-native herbaceous cover (i.e., *Brassica (nigra)* and Other Mustards [Semi-Natural Herbaceous Stand]; Ruderal [OCHCS 4.6]) is characterized by a dominance of by black mustard. This alliance is typically associated with fallow fields, grasslands, roadsides, disturbed scrublands, riparian areas, and waste places (Sawyer et al. 2009). Species associated with this alliance include native telegraph weed, laurel sumac, fasciated tarweed, Our Lord's candle

(*Hesperoyucca whipplei*), foothill needlegrass, mule fat, western prickly pear (*Opuntia occidentalis*), and non-native foxtail chess, Peruvian pepper (*Schinus molle*), ripgut brome (*Bromus diandrus*), horehound (*Marrubium vulgare*), and tuna cactus (*Opuntia ficus-indica*). A total of 44.16 acres of non-native herbaceous cover coast occurs throughout the study area.

Non-native herbaceous cover is not considered a sensitive natural community by CDFW (CDFW 2018c).

3.4.16 Non-Native Herbaceous Cover/California Sagebrush Scrub

Non-native herbaceous cover/California sagebrush scrub (i.e., *Brassica (nigra)* and Other Mustards [Semi-Natural Herbaceous Stand]; Ruderal [OCHCS 4.6]; *Artemisia californica* Shrubland Alliance; Sagebrush [OCHCS 2.3.6]) is dominated by black mustard with a sub-dominance of intermixed coastal sage scrub species. A total of 71.70 acres of non-native herbaceous cover/California sagebrush scrub coast occurs throughout the study area.

Non-native herbaceous cover/California sagebrush scrub is not considered a sensitive natural community by CDFW (CDFW 2018c). Although California sagebrush scrub is recognized as a covered habitat type within the Central & Coastal NCCP/HCP and is considered a sensitive natural community, this non-native herbaceous cover/California sagebrush scrub community is predominantly disturbed and dominated by non-native herbaceous cover; thus, it is not considered a sensitive natural community.

3.4.17 Open Water

Open water (OCHCS 12.2) consists of the reservoir, and natural present within this area is negligible. A total of 13.93 acres of open water occurs within the study area.

Open water is not considered a sensitive natural community by CDFW (CDFW 2018c).

3.4.18 Disturbed

Disturbed (i.e., Disturbed or Barren [OCHCS 16.1]) includes lands that have been significantly disturbed as the result of human activity, and natural present in these areas is negligible. Associated species include non-native foxtail chess, short-podded mustard, yellow sweetclover (*Melilotus officinalis*), Mexican sprangletop (*Leptochloa fusca* ssp. *uninervia*), fountaingrass, tree tobacco, red-stemmed filaree, and Mediterranean grass (*Schismus barbatus*). Disturbed areas within the study area include unpaved dirt trails for access around the perimeter of the reservoir and the earthen dam. A total of 6.92 acres of disturbed areas occur within the study area.

Disturbed areas are not considered a sensitive natural community by CDFW (CDFW 2018c).

3.5 Jurisdictional Resources

The USACE issued an Approved Jurisdictional Determination letter (**Appendix B**), which confirmed that waters of the U.S. do not occur within the study area since Syphon Reservoir is an intrastate isolated water with no apparent interstate or foreign commerce connection (USACE 2018). Thus, the study area only includes features subject to the jurisdiction of the State (i.e., RWQCB wetlands and non-wetland waters of the State, and CDFW lakes, streams, and associated vegetation). **Table 3** and **Figures 7A and 7B** identify and quantify the areas regulated by the RWQCB and CDFW within the study area.

3.5.1 RWQCB Wetlands and Waters of the State

Wetlands

The freshwater wetlands within the study area are largely dominated by native plant species including California bulrush (OBL⁴), black willow (FACW⁵), and yellow sweetclover (*Melilotus officinalis*, FACU⁶). This habitat also supports a range of non-native plant species including seaside heliotrope (*Heliotropium curassavicum*, FACU), spiny cocklebur (*Xanthium strumarium*, FAC), short podded mustard (UPL⁷), and telegraph weed (UPL). The wetlands occur along the margins of Syphon Reservoir (Figure 7A). Although not mapped as hydric soils according to NRCS, hydric soil indicators were observed in the wetlands include the presence of muck, hydrogen sulfide, depleted below dark surface, redox dark surface, and sandy gleyed matrix. The wetland areas generally had very silty loam, clay soils, while sandy soils were encountered at one soil pit. Indicators of wetland hydrology include a high water table, saturation, biotic crust, and hydrogen sulfide odor.

Waters of the State

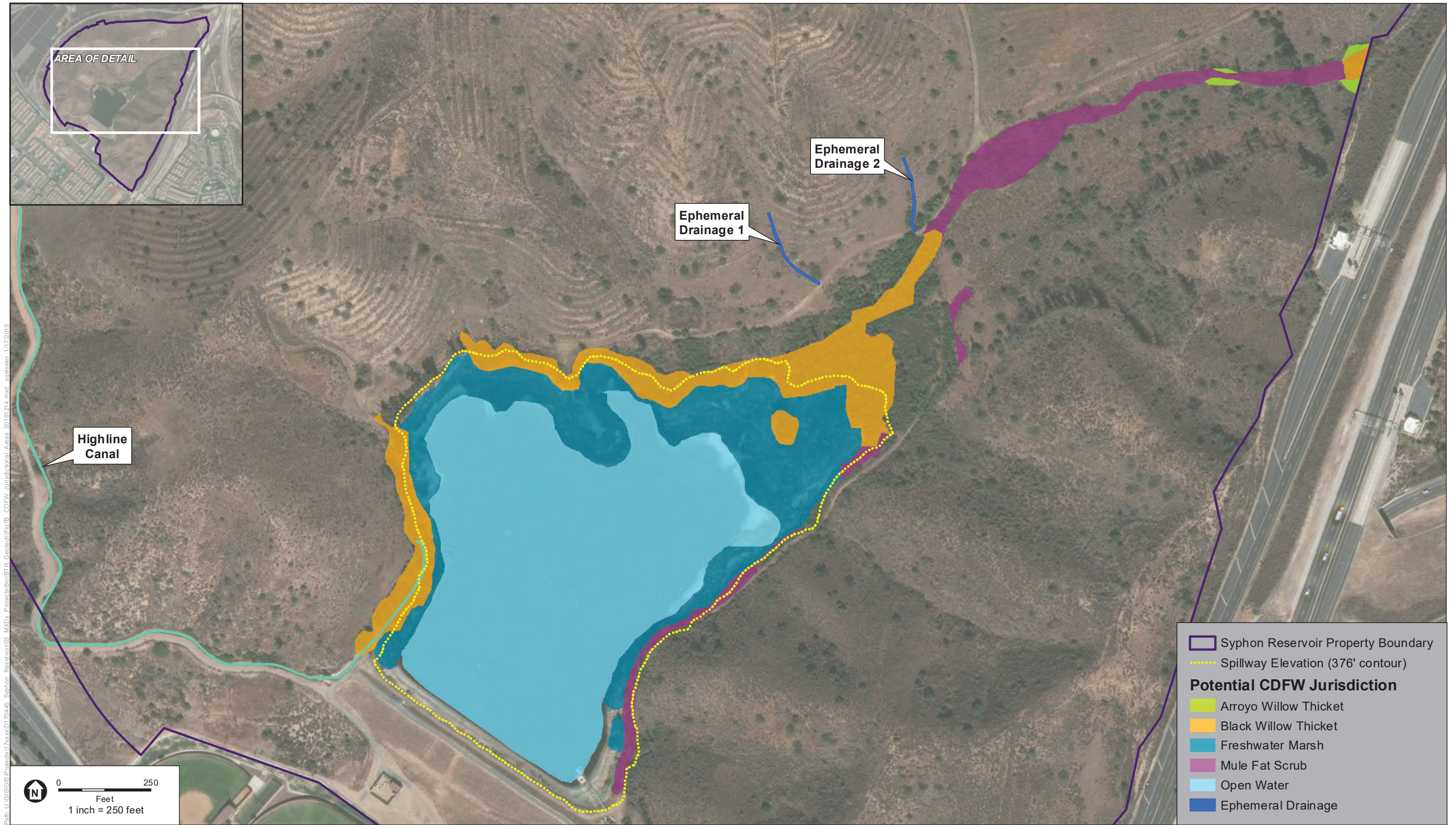
The OHWM of the reservoir was determined to be along the edge of the reservoir where surface water was observed at the time of the delineation, or based on physical characteristics of water fluctuation, such as downed emergent vegetation (Figure 7A). The water surface elevation of the reservoir is influenced by IRWD's management of the recycled water system. The reservoir functions as a seasonal recycled water storage facility; as such, the reservoir includes areas where open water persists throughout the year at a minimum water surface elevation but fluctuates seasonally up to a maximum water surface elevation based on demands for recycled water. The reservoir captures runoff from adjacent areas, including a primary drainage in the central portion of the study area that supports intermittent flows and riparian vegetation north of the reservoir and wetlands. However, there was no OHWM observed in this central drainage and the primary drainage was not mapped as potential waters of the State.

⁴ OBL – obligate. Plant species with this wetland indicator status occur almost always under natural conditions in wetlands.

⁵ FACW – facultative wetland. Plant species with this wetland indicator status usually occur in wetlands but are occasionally found in non-wetlands.

⁶ FACU – facultative upland. Plant species with this wetland indicator status usually occur in non-wetlands but are occasionally found in wetlands.

⁷ UPL – upland. Plant species with this wetland indicator status occur in wetlands in another region, but occur almost always under natural conditions in non-wetlands in the Arid West Region.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 7B
CDFW Jurisdictional Areas

In addition, two ephemeral drainages (Ephemeral Drainage 1 and Ephemeral Drainage 2) were mapped north of the reservoir. These drainages convey stormwater runoff from upland areas to the central drainage via a culvert under the existing dirt road that runs along the west and north sides of the reservoir. The OHWM was an average of two feet wide, based on evidence of shelving. Ephemeral Drainage 1 supports a mix of non-native herbaceous cover and California sagebrush scrub, while Ephemeral Drainage 2 supports a mix of non-native herbaceous cover, California sagebrush scrub, and laurel sumac scrub. No surface water was observed in either drainage.

3.5.2 CDFW Lakes, Streams, and Associated Vegetation

Areas within CDFW jurisdiction typically refer to streambeds and associated wetland or riparian vegetation. Within the study area, the potential extent of CDFW limits was taken to the outer edge of the overhanging riparian or wetland vegetation adjacent to the reservoir, and to the top of bank for the ephemeral drainages (Figure 7B). Therefore, as shown in Table 3, approximately 26.49 acres of the study area could be subject to CDFW jurisdiction.

TABLE 3
POTENTIALLY JURISDICTIONAL AREAS

Jurisdiction Types	Acres
RWQCB Wetlands	4.33
RWQCB Non-Wetland Waters of the State	13.95
CDFW Lakes, Streams, and Associated Vegetation	26.49

SOURCE: ESA, 2018

3.6 Plant Species

The study area currently supports native vegetation communities, restored coastal sage scrub, and disturbed communities. A compendium of the plant species observed within the study area is included in **Appendix C**. Special-status plant species are discussed in Section 3.8.2.

3.7 Wildlife Species

The upland and riparian communities within the study area provides suitable habitat for a variety of wildlife species. A number of wildlife species, including reptiles, birds, and mammals, were observed within the study area. A compendium of the wildlife species observed within the study area is included in **Appendix C**. Special-status wildlife species are discussed in Section 3.8.2.

3.8 Special-Status Biological Resources

3.8.1 Sensitive Natural Communities

Sensitive natural communities are designated as such by various resource agencies, such as the CDFW, or in local policies and regulations. These communities are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or

distribution, and may be considered threatened enough to warrant some level of protection. Sensitive natural communities include those that are identified in the CDFW *List of California Natural Communities* (CDFW 2018c). The CDFW state rank denotes the rarity and endangerment of a vegetation type within the state as described below, with S1 through S3 considered to be a sensitive natural community by CDFW.

State Conservation Rank

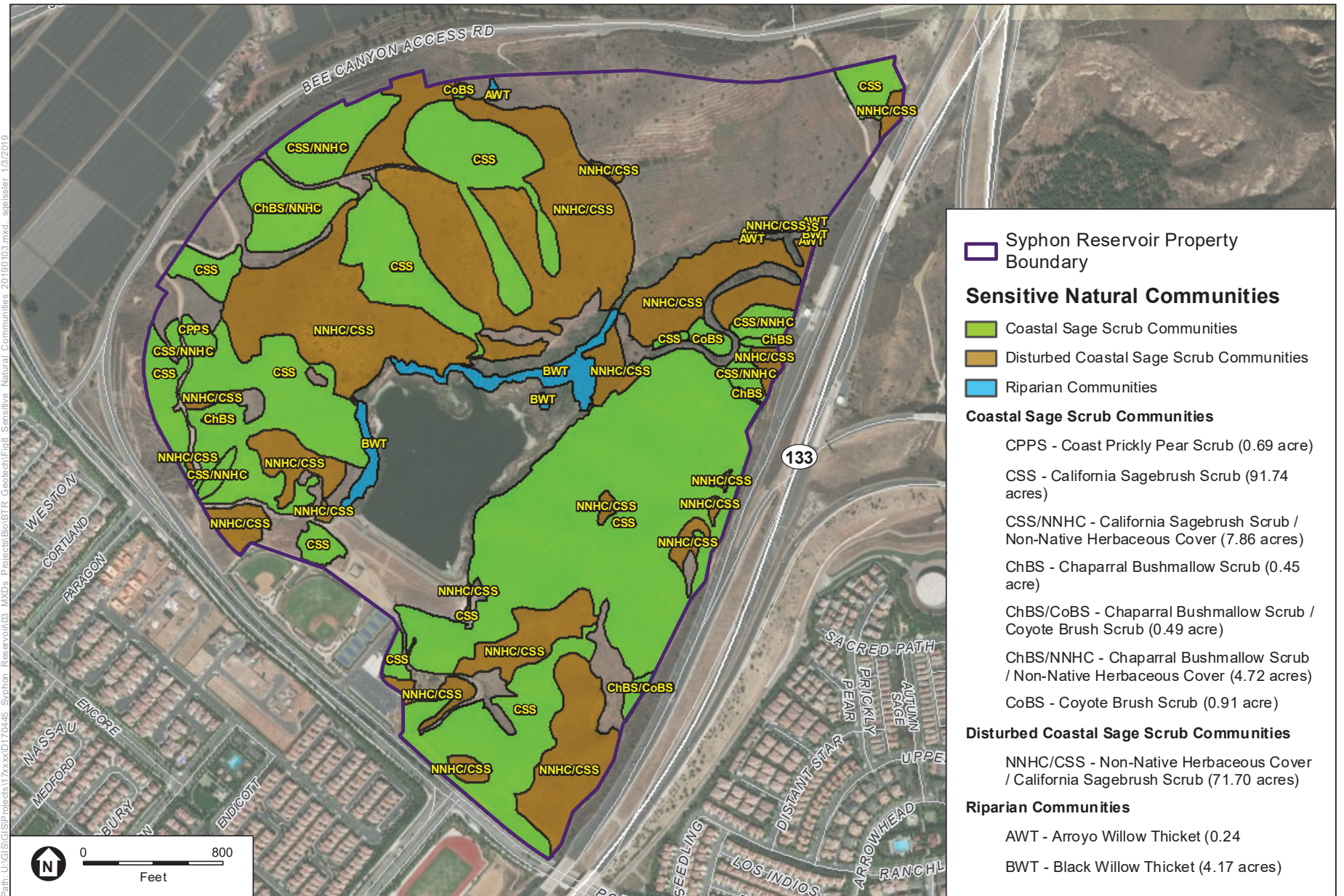
- S1** = Critically Imperiled – At very high risk of extirpation due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- S2** = Imperiled – At high risk of extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- S3** = Vulnerable – At moderate risk of extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- S4** = Apparently Secure – At a fairly low risk of extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- S5** = Secure - At very low or no risk of extirpation due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

Based on the state ranks, ten sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub (**Figure 8**).

3.8.2 Special-Status Species

“Special-status” species are plants and animals that are listed under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA), as well as species protected under other regulations and species that are considered sufficiently rare or sensitive by the scientific community to be considered rare. Special-status species are categorized as follows:

- Species listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under CESA or FESA.
- Species protected under the federal Bald and Golden Eagle Protection Act.
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines § 15380).
- Plants listed as rare under the California Native Plant Protection Act (NPPA; Fish and Game Code § 1900 et seq.).



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 8
Sensitive Natural Communities



- Plants considered by the CNPS to be rare (California Rare Plant Ranks [CRPR] 1A, 1B, 2A, and 2B) in California.
- Species covered under an adopted Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP).
- CDFW Special Animals wildlife species of special concern.
- Wildlife fully protected in California (California Fish and Game Code § 3511, 4700, and 5050).

Based on the literature review and field reconnaissance, special-status species were evaluated for their potential to occur within the study area or immediate vicinity, using the following definitions:

Unlikely: The study area or immediate vicinity do not support suitable habitat for a particular species, and therefore the species is unlikely to occur within the study area.

Low Potential: The study area or immediate vicinity only provide low-quality or very limited habitat for a particular species. In addition, the study area may lie outside the known geographic or elevational range for a particular species.

Moderate Potential: The study area or immediate vicinity provide suitable habitat for a particular species. However, the habitat or substrate may be limited or the desired vegetation assemblage or density is less than ideal.

High Potential: The study area or immediate vicinity provides high-quality suitable habitat conditions for a particular species. Additionally, known populations of the species may occur in the study area or immediate vicinity.

Present: The species was observed within the study area during relevant biological surveys or other project visits.

Based on the database search results, a list of potentially occurring special-status species was developed and evaluated for the study area. Special-status species with potential to occur were defined as having a geographic range and habitat requirement similar to those found within the study area or immediate vicinity.

3.8.2.1 Special-Status Plant Species

Of the 56 special-status plant species considered for their potential to occur within the study area, 38 species are unlikely to occur and 15 species were assessed as having low potential to occur because the study area is outside of the known elevation range for these species and/or lacks suitable habitat to support these species. None of the special-status plant species with a low potential to occur were observed during focused surveys conducted in 2018. Species determined to be unlikely or to have a low potential to occur are included in **Appendix D**. These species are not discussed further in this analysis.

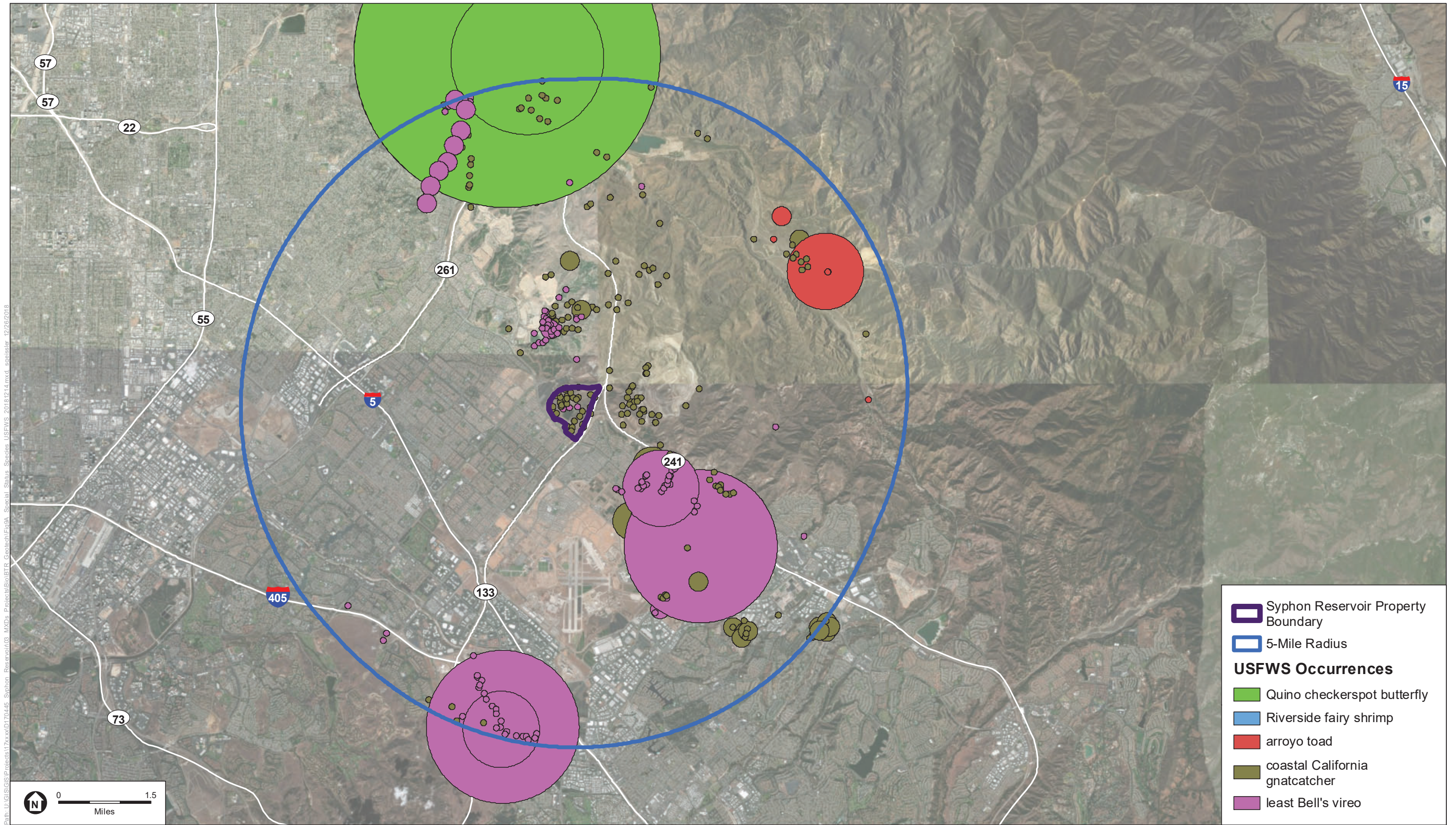
Two special-status plant species, Catalina mariposa lily (*Calochortus catalinae*) (CRPR 4.2, NCCP/HCP Covered) and San Diego County viguiera (*Bahiopsis laciniata*) (CRPR 4.3), were observed within the study area during focused surveys in spring 2018. Dried fruits and stems of a

mariposa lily species (*Calochortus* sp.) were observed on-site during special-status plant surveys conducted in spring 2018. Although no live specimens were observed, it was presumed to be Catalina mariposa lily based on fruit shape. Approximately 83 individuals (i.e., 13 individual dried lilies and a patch of approximately 70 dried lilies) were observed on-site. This species was also observed on-site during previous surveys by Harmsworth Associates in 1998 (Dudek 2012). San Diego County viguiera did not come up in the CNDDDB and CNPS database search as a plant with potential to occur; however, one individual was observed on-site in the easternmost portion of the study area. In addition, one special-status plant species, intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), has a moderate potential to occur; however, this species was not observed during focused surveys in spring 2018. Appendix D provides details of each of these species, their habitat, and their potential to occur within the study area. Special-status species occurrences from the USFWS and CNDDDB occurrences databases within the vicinity of the study area are shown in **Figures 9A and 9B**. Special-status species observed on-site are shown in **Figure 10**.

3.8.2.2 Special-Status Wildlife Species

Of the 68 special-status wildlife species considered for their potential to occur within the study area, 38 species are unlikely to occur and 12 species were assessed as having low potential to occur because the study area lacks suitable habitat to support these species and/or is outside of the known range for these species. Species determined to be unlikely or to have a low potential to occur are included in **Appendix D**. It should be noted that coastal cactus wren (*Campylorhynchus brunneicapillus cousei*) (SC, NCCP/HCP Covered Species) was previously observed on-site in 1999 in the CNDDDB and around 2000, prior to the 2007 Santiago Fire (Dudek 2012). However, there are currently very limited, isolated cactus plants on-site so this species has a low potential to occur due to presence of a negligible amount of cacti-dominated vegetation on-site or within the immediate vicinity. These species are not discussed further in this analysis.

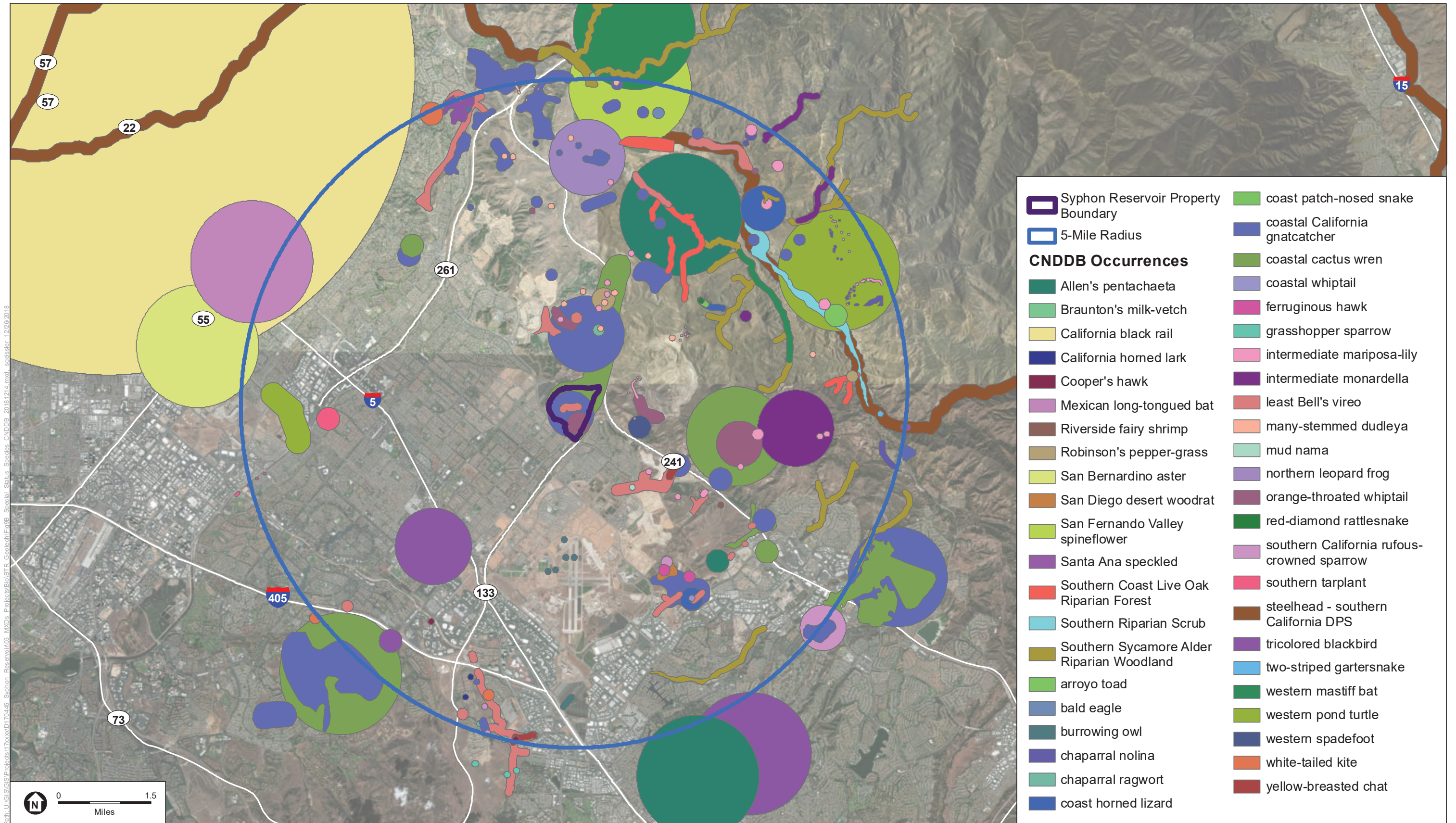
Three special-status species were observed within the study area during 2018 surveys, including coastal California gnatcatcher (*Polioptila californica californica*) (Federally Threatened [FT], Species of Special Concern [SC], NCCP/HCP Covered Species), yellow warbler (*Setophaga petechia*) (SC), and least Bell's vireo (*Vireo bellii pusillus*) (Federally Endangered [FE], State Endangered [SE], NCCP/HCP Conditionally Covered Species). In addition, coastal cactus wren and nine other special-status species have been observed within the study area during previous surveys or from occurrences documented in the CNDDDB, including orange-throated whiptail (*Aspidoscelis hyperythra*) (NCCP/HCP Covered Species), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) (NCCP/HCP Covered Species), grasshopper sparrow (*Ammodramus savannarum*) (SC), red-shouldered hawk (*Buteo lineatus*) (NCCP/HCP Covered Species), northern harrier (*Circus cyaneus*) (SC, NCCP/HCP Covered Species), white-tailed kite (*Elanus leucurus*) (State Fully Protected [FP]), prairie falcon (*Falco mexicanus*) (NCCP/HCP Conditionally Covered Species), American peregrine falcon (*Falco peregrinus anatum*) (FP, NCCP/HCP Covered Species), and coyote (*Canis latrans*) (NCCP/HCP Covered Species) (Dudek 2012).



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 9A
Special-Status Species Occurrences (USFWS)

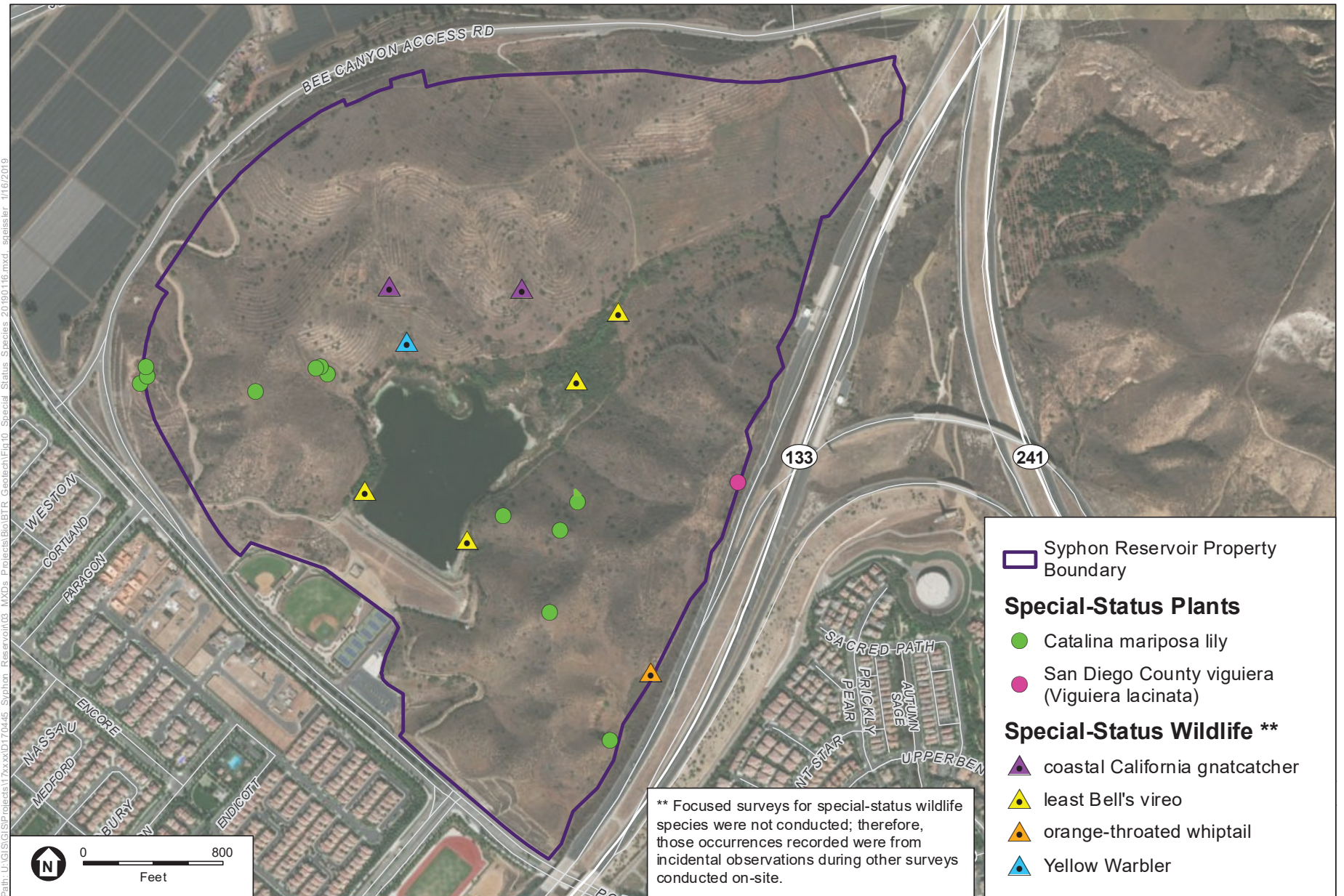


SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 9B
Special-Status Species Occurrences (CNDDB)





SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 10
Special-Status Species Observed Within the Study Area in 2018

In addition, one special-status species, sharp-shinned hawk (*Accipiter striatus*) (NCCP/HCP Covered Species), has a high potential to occur. Three special-status species, coastal whiptail (*Aspidoscelis tigris stejnegeri*) (SC, NCCP/HCP Covered Species), yellow-breasted chat (*Icteria virens*) (SC), San Diego desert woodrat (*Neotoma lepida intermedia*) (SC, NCCP/HCP Covered Species), have a moderate potential to occur. Two special-status species, western spadefoot (*Spea hammondi*) (SC, NCCP/HCP Covered Species) and southwestern willow flycatcher (*Empidonax traillii extimus*) (FE, SE, NCCP/HCP Conditionally Covered), have a low-to-moderate potential to occur.

Appendix D provides details of each of these species, their habitat, and their potential to occur within the study area. Special-status species occurrences from the USFWS and CNDDDB occurrences databases within the vicinity of the study area are shown in Figures 9A and 9B. Special-status species observed on-site are shown in Figure 10.

3.9 Critical Habitat

Under the FESA, to the extent feasible, the USFWS is required to designate critical habitat for endangered and threatened species. Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. This federally designated habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. These habitat areas require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Critical habitat designation includes all suitable habitat, occupied or not, essential to the survival and recovery of the species.

The study area does not occur within any USFWS-designated critical habitat areas (USFWS 2018b). The nearest critical habitat is for coastal California gnatcatcher approximately 2 miles to the southeast.

3.10 Wildlife Movement

Effective wildlife movement is essential for dispersal, genetic exchange, migration, foraging, and breeding. Wildlife movement corridors or habitat linkages are linear habitat features that connect blocks of habitat that are otherwise disconnected. Functional wildlife movement corridors are especially important in highly fragmented habitat, such as developed or agricultural areas. Wildlife movement corridors are generally used by terrestrial animals, although they may also be important for aquatic species, avian dispersal, and as avenues for genetic exchange in plants. On a regional scale, movement corridors can include bird flyways, such as wetland areas that provide essential habitat to be used as a stopover for several days during migration.

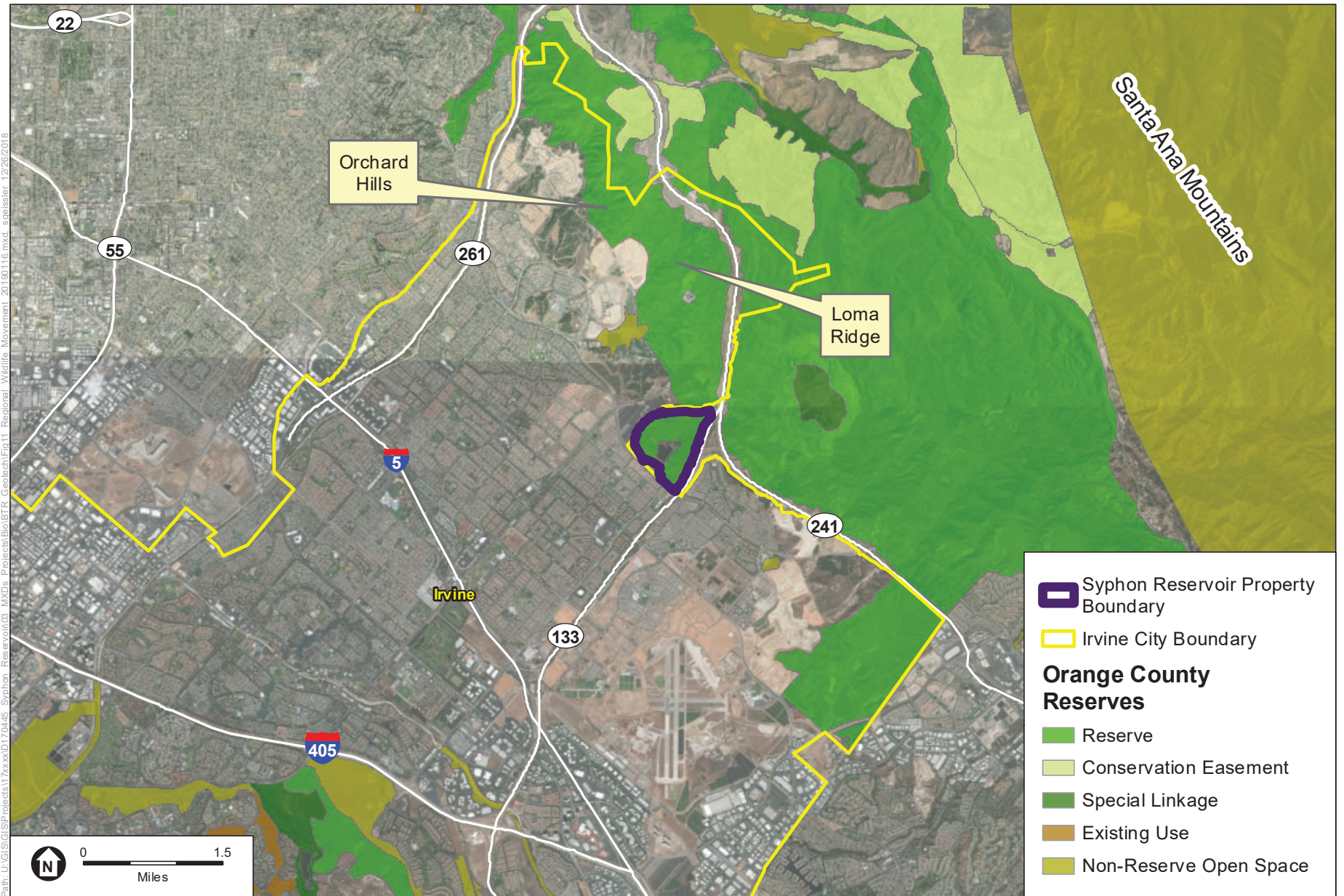
The study area lies within central Orange County between the City of Irvine and the foothills of the Santa Ana Mountains. The study area is not identified as a Missing Linkage in the *South Coast Missing Linkages* report (South Coast Wildlands 2008). However, the study area is identified as a Small Natural Area in the California Essential Habitat Connectivity Project (CEHC). CEHC is a CDFW and California Department of Transportation (CalTrans) project that

ran a statewide assessment of essential habitat connectivity using spatial analyses and modeling techniques to identify large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife.

The study area is located within the Central Subregion of the County of Orange NCCP/HCP, and the majority is located within the NCCP/HCP Reserve (i.e., the central portion of the reservoir is excluded from the Reserve) (**Figure 11**). Although the study area is bordered by dense residential development to the southwest and southeast, as well as the Eastern Transportation Corridor 133 Toll Road to the southeast, it is contiguous to agricultural and undeveloped areas along Loma Ridge in the Orchard Hills to the north. Additionally, the study area includes upland and riparian habitat that provides important resources for wildlife, such as foraging habitat, nesting and den sites, and cover. Although movement would not occur through the study area to the west or south, the study area is on the edge of a larger contiguous block of habitat that would be used for regional wildlife movement (e.g., dispersal habitat for coastal California gnatcatcher within this region). The reservoir is also an important regional water source that attracts a number of avian species. Thus, from a regional perspective, the study area functions as a part of a wildlife movement corridor.

On a local scale, the study area provides live-in habitat for a variety of invertebrate, fish, amphibian, reptile, bird, and mammal species, and movement habitat for invertebrate, reptile, bird, and mammal species. Immediately surrounding the study area, the City of Irvine is located to the south, and human activity and dense development within these residential and commercial areas do not provide suitable habitat or resources for most native wildlife, with the exception of a few wide-ranging species that are adapted to urban environments (e.g., raccoon, skunk, coyote, some birds). In addition, the 133 Toll Road and Bee Canyon Landfill Access Road, which is frequented by trucks hauling trash to the landfill, are hazards to wildlife. However, the study area is undeveloped, contains natural habitats, and wildlife movement is not restricted within the study area or to and from other undeveloped and agricultural areas to the north with the exception of a chain-link fence around the perimeter of the property. Thus, although some wildlife movement (e.g., more secretive wildlife that require larger home ranges, such as mountain lion and deer) may be deterred by the human activity and development nearby, these barriers to movement (e.g., development and roads) would not preclude wildlife from moving through the study area or the surrounding region.

In summary, the study area supports live-in and movement habitat for species on a local scale, and likely functions to facilitate wildlife movement for a number of species on a regional scale.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 11
Regional Wildlife Movement

4.0 Regulatory Framework

The following provides a general description of the applicable regulatory requirements for the project, including federal, state, and local policies and guidelines.

4.1 Federal

4.1.1 Endangered Species Act (USC, Title 16, § 1531 through 1543)

The FESA and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. In addition, the FESA defines species as threatened or endangered and provides regulatory protection for listed species. The FESA also provides a program for the conservation and recovery of threatened and endangered species as well as the conservation of designated critical habitat that USFWS determines is required for the survival and recovery of these listed species.

Section 7 of the FESA requires federal agencies, in consultation with and assistance from the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering the FESA. Regulations governing interagency cooperation under Section 7 are found in CCR Title 50, Part 402. The opinion issued at the conclusion of consultation will include a statement authorizing “take” (to harass, harm, pursue, hunt, wound, kill, etc.) that may occur incidental to an otherwise legal activity.

Section 9 lists those actions that are prohibited under the FESA. Although take of a listed species is prohibited, it is allowed when it is incidental to an otherwise legal activity. Section 9 prohibits take of listed species of fish, wildlife, and plants without special exemption. The definition of “harm” includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. “Harass” is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 10 provides a means whereby a nonfederal action with the potential to result in take of a listed species can be allowed under an incidental take permit. Application procedures are found at 50 CFR 13 and 17 for species under the jurisdiction of USFWS and 50 CFR 217, 220, and 222 for species under the jurisdiction of NMFS. Further details about the regional NCCP/HCP are discussed in Section 4.3.1 below.

4.1.2 Migratory Bird Treaty Act (16 USC 703 through 711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms, or implements, a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding

season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

4.1.3 Federal Clean Water Act (33 USC 1251 through 1376)

The USACE regulates “discharge of dredged or fill material” into “waters” of the United States, which includes tidal waters, interstate waters, and "all other waters, interstate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce or which are tributaries to waters subject to the ebb and flow of the tide" (33 C.F.R. 328.3(a)), pursuant to provisions of Section 404 of the CWA. The CWA also excludes certain features from this regulation, including “wastewater recycling facility constructed on dry land” (see 33 CFR §230.3 (o)(2)(vii)).

The USACE takes jurisdiction within rivers and streams to the OHWM, determined by erosion, the deposition of vegetation or debris, and changes in vegetation or soil characteristics. However, if there is no federal nexus to navigable waters, these waters are considered “isolated” and thus not subject to their jurisdiction.

The USACE and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining CWA jurisdiction over waters of the United States following the Rapanos decision. The EPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court’s decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the EPA and USACE to determine CWA Jurisdiction over the project and to complete the “significant nexus test” as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in point (B) on the next page, the significant nexus test would take into account physical indicators of flow (evidence of an OHWM), if a hydrologic connection to a “traditional navigable water” (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and EPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical and biological integrity of the downstream TNW.

Rapanos Key Points Summary

(A) The USACE and EPA will assert jurisdiction over the following waters:

- TNWs
- Wetlands adjacent to TNW
- Non-navigable tributaries of TNWs that are relatively permanent
- Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)

- Wetlands that directly abut such tributaries
- (B) The USACE and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:
- Non-navigable tributaries that are not relatively permanent
 - Wetlands adjacent to non-navigable tributaries that are not relatively permanent
 - Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary
- (C) The USACE and EPA generally will not assert jurisdiction over the following features:
- Swales or erosion features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
 - Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

4.2 State

4.2.1 California Endangered Species Act (California Fish and Game Code § 2050 et seq.)

The CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is “consistent” with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project operator would have to apply for a take permit under Section 2081(b). Further details about the regional NCCP/HCP are discussed in Section 4.3.1 below.

4.2.2 California State Fish and Game Code § 1600 et seq.

CDFW is responsible for protecting and conserving fish and wildlife resources, and the habitats upon which they depend. Under Section 1600 of the California Fish and Game Code, CDFW administers the Lake and Streambed Alteration (LSA) Program and regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake (which typically include reservoirs), which supports fish or wildlife.

Applicants proposing changes to such regulated water resources must submit a Lake or Streambed Alteration Notification to CDFW for such projects. CDFW will then determine if the proposed activity may substantially adversely affect an existing fish or wildlife resource and will issue a final agreement for the applicant’s signature that includes reasonable measures necessary to protect the resource. Preliminary notification to, and project review by CDFW may occur during or after the CEQA environmental review process but prior to project implementation.

4.2.3 California State Fish and Game Code §§ 2080 and 2081

Section 2080 of the California Fish and Game Code states that “No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act.” Pursuant to Section 2081 of the code, CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through Incidental Take permits or Memoranda of Understanding if the take is incidental to an otherwise lawful activity, impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by CDFW, which makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Since the NCCP/HCP provides coverage for take of some State-listed species, there would not be a need for an additional 2081 permit process unless a project does not comply with NCCP/HCP requirements and may result in take of a State-listed species or if a State-listed species not covered by the NCCP/HCP were to result in take. Further details about the regional NCCP/HCP are discussed in Section 4.3.1 below.

4.2.4 California State Fish and Game Code §§ 3503 and 3503.5

Under these sections of the California Fish and Game Code, the project operator is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds protected by the MBTA; or the taking of any nongame bird pursuant to California Fish and Game Code Section 3800.

4.2.5 California Environmental Quality Act Guidelines, § 15380

Although threatened and endangered species are protected by specific federal and state statutes, State CEQA Guidelines § 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected and requires

findings of significance if there would be substantial losses. Natural communities listed by CNDDDB as sensitive are considered by CDFW to be significant resources and fall under the State CEQA Guidelines for addressing impacts. Local planning documents such as General Plans often identify these resources as well.

4.2.6 California Water Quality Control Act (Porter-Cologne California Water Code Section 13260)

The State Water Resources Control Board (SWRCB) and the RWQCB (together “Boards”) are the principal State agencies with primary responsibility for the coordination and control of water quality. The Boards regulate activities pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In the Porter-Cologne, the Legislature declared that the “State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation...” (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies (e.g., CDFW) have the ability to enforce certain water quality provisions in state law.

4.3 Local

4.3.1 County of Orange Central & Coastal Subregion NCCP/HCP

In 1996, the Orange County Central & Coastal Subregion NCCP/HCP, a comprehensive natural resources conservation and management plan for central and coastal Orange County, was adopted. The purpose of the NCCP/HCP was to create a multiple-species and multiple-habitat reserve system and to implement a long-term conservation program on a subregional level to primarily protect coastal sage scrub and the species that use this habitat, while allowing for social and economic uses compatible with the protection of these resources.

The NCCP/HCP was prepared in cooperation with the UFSWS and CDFW, who are the agencies responsible for implementing the FESA and CESA, respectively. Implementation of the NCCP/HCP in accordance with the terms of the Implementation Agreement allows for the conservation of large, diverse areas of natural habitat, including habitat for the coastal California gnatcatcher and other federally-listed species; provides for the conservation, protection, and management of three “Target Species” and 36 “Identified Species” and their habitats; and satisfies federal and state mitigation requirements for designated development.

IRWD and County of Orange, among others, are participating landowners of the Central & Coastal NCCP/HCP. As a participating landowner that contributed significant funding toward land acquisition, management, and the implementation of the NCCP/HCP Reserve System, IRWD was allotted 60 acres of Incidental Take Credits from within the NCCP/HCP Reserve and 27 acres of Incidental Take Credits outside of the NCCP/HCP Reserve (i.e., non-Reserve lands) for impacts to coastal sage scrub communities (Dudek 2012). An additional 9 acres of Incidental Take Credits from within the NCCP/HCP Reserve were acquired with IRWD's consolidation with Santiago County Water District (SCWD). For participating landowners, development activities and uses that are addressed by the NCCP/HCP are considered fully mitigated under the NCCP Act, FESA, and CESA for impacts to habitat occupied by listed and other species "identified" by the NCCP/HCP and Implementation Agreement. Satisfactory implementation of the NCCP/HCP under the terms of the Implementation Agreement means that no additional mitigation is required of the participating landowners for impacts to "identified" species and their habitat, or for species residing in specified non-coastal sage scrub habitats, or covered habitats.

The NCCP/HCP included provisions for IRWD to build a future reservoir "as a permitted use within the Reserve System" (R.J. Meade Consulting 1996a). At the time that the NCCP/HCP was prepared, IRWD was studying four alternative seasonal recycled water storage reservoirs, all of which were located within the subregional Reserve System, though only one reservoir would ultimately be needed. Since the exact location had not been determined, IRWD did not ask for specific authorization for Incidental Take as a part of the NCCP/HCP. However, the need for a future reservoir was identified as "a permitted use within the Reserve System in the event that public health, safety, and welfare require such a facility in the future. At the time such a facility is needed, IRWD will review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the Incidental Take associated with the new reservoir" (R.J. Meade Consulting 1996a).

5.0 Potential Effects

This section describes the potential effects of the proposed project (Figure 3) on biological resources that may occur as a result of project implementation, including net ecological benefits. Direct, indirect, temporary, and/or permanent effects to biological resources may occur as a result of project implementation, as defined below:

- **Direct Effects:** Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct effect. Examples include loss of individual species and/or their associated plant communities, diversion of surface water flows, and encroachment into wetlands. Under the FESA, direct effects are defined as the immediate effects of a project on a species or its habitat, including construction noise disturbance, sedimentation, or habitat loss.
- **Indirect Effects:** Biological resources may also be affected in an indirect manner as a result of project-related activities. Under the FESA, indirect effects are defined as those effects that are caused by, or would result from, a proposed project but occur later in time and are reasonably certain to occur [50 C.F.R. §402-02]. An example of indirect effects may include irrigation runoff from a developed area into surrounding natural vegetation. Indirect effects could also include increased wildfire frequency as a result of power line failures.

- **Temporary Effects:** Any effects to biological resources that are considered reversible can be viewed as temporary. Examples include the generation of fugitive dust during construction activities.
- **Permanent Effects:** All effects that result in the irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area with native vegetation, such that the native vegetation is permanently removed and replaced with a developed structure.

A project is generally considered to have a significant effect if it proposes or results in any of the conditions described in the significance thresholds discussed below (in italics), absent specific evidence to the contrary. Conversely, if a project does not propose or result in any of the following conditions, it would generally not be considered to have a significant effect on biological resources, absent specific evidence of such an effect. These significance thresholds are taken from Appendix G of the State CEQA Guidelines.

5.1 Special-Status Species

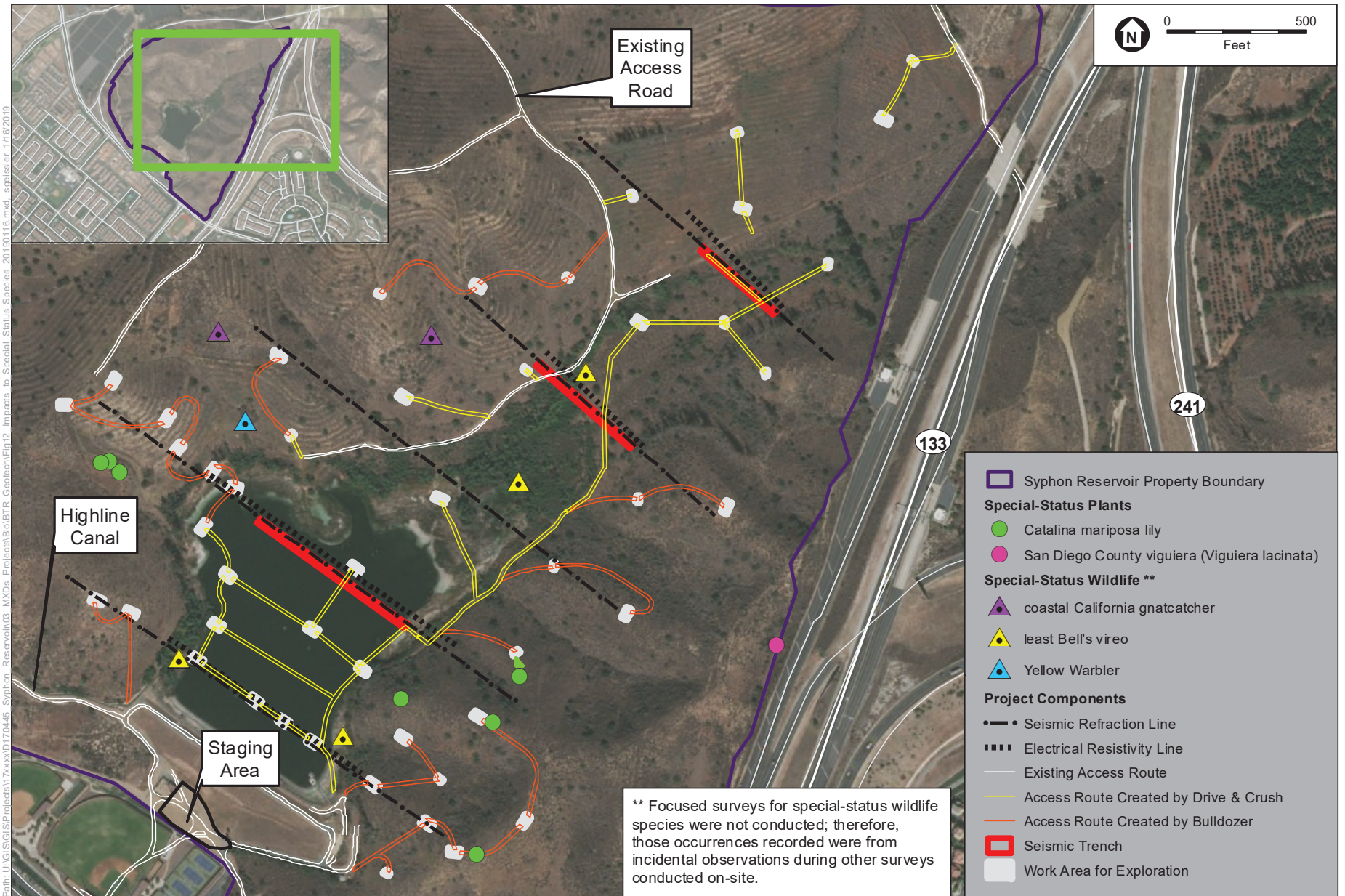
5.1.1 Significance Threshold

The project would have an adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

5.1.2 Analysis of Project Effects

The study area is not within any USFWS-designated Critical Habitat for any special-status plant or wildlife species.

Two special-status plant species, Catalina mariposa lily (CRPR 4.2, NCCP/HCP Covered) and San Diego County viguiera (CRPR 4.3), were observed within the study area during focused surveys in spring 2018. Although the project will avoid most of these special-status plants, two individual Catalina mariposa lilies may be impacted during construction (shown in **Figure 12**). Regardless, impacts to two individuals would not threaten the existence of the species or the population, and would not be significant. Additionally, Catalina mariposa lily is a covered species under the NCCP/HCP, and thus this species is considered conserved within the NCCP/HCP region since the NCCP/HCP Reserve provides for the regional conservation for covered species. Although the majority of the study area is within the NCCP/HCP Reserve and potential impacts to any Catalina mariposa lily would occur within the Reserve, at the time that the NCCP/HCP was prepared the NCCP/HCP included provisions for IRWD to build a future reservoir, and the proposed project is in support of the future Syphon Reservoir Improvement Project, which is “a permitted use within the Reserve System” (R.J. Meade Consulting 1996a). Thus, even with potential impacts to this species within the Reserve, this species is considered adequately covered under the NCCP/HCP. Therefore, impacts to Catalina mariposa lily are less than significant, and no mitigation is required.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 12
Impacts to Special-Status Species

One individual San Diego County viguiera plant was observed on-site in the easternmost portion of the study area; however, the project would not impact this species, and no mitigation is required.

Special-status wildlife species observed within the study area, or having a low-to-moderate, moderate, or high potential to occur, include the NCCP/HCP Covered Species of coastal California gnatcatcher, orange-throated whiptail, southern California rufous-crowned sparrow, red-shouldered hawk, northern harrier, American peregrine falcon, coyote, sharp-shinned hawk, coastal whiptail, San Diego desert woodrat, and western spadefoot. The NCCP/HCP Conditionally Covered Species least Bell's vireo, prairie falcon and southwestern willow flycatcher were also either observed or with the potential to occur, as were the non-NCCP/HCP covered species of yellow warbler, grasshopper sparrow, white-tailed kite, and yellow-breasted chat.

The coastal California gnatcatcher, orange-throated whiptail, southern California rufous-crowned sparrow, red-shouldered hawk, northern harrier, prairie falcon⁸, American peregrine falcon, coyote, sharp-shinned hawk, coastal whiptail, San Diego desert woodrat, and western spadefoot, as covered species under the NCCP/HCP, are considered conserved within the NCCP/HCP region. As previously mentioned, although the majority of the study area is within the NCCP/HCP Reserve and potential impacts to NCCP/HCP Covered Species may occur within the Reserve, the NCCP/HCP included provisions for IRWD to build a future reservoir, and the proposed project is in support of the future Syphon Reservoir Improvement Project, which is "a permitted use within the Reserve System" (R.J. Meade Consulting 1996a). Thus, even with potential impacts to these Covered Species within the Reserve, these species are considered adequately covered under the NCCP/HCP. Therefore, impacts to these special-status species are less than significant, and no mitigation is required.

The least Bell's vireo and southwestern willow flycatcher are both federal and state endangered and NCCP/HCP Conditionally Covered species. The conditional coverage for these species specify that "impacts to major occurrences outside the reserve must not have significant long-term conservation value and that provision is made for any other appropriate mitigation" (R.J. Meade Consulting 1996a). Since the majority of the study area is within the Reserve and is an area of significant long-term conservation value, these species are not covered by the NCCP/HCP. Both species are found in riparian habitat. The project would temporarily drain the reservoir, which may be used for foraging and provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations⁹ after the project's geotechnical investigations are completed, and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary

⁸ Prairie falcon is a conditionally covered under the NCCP/HCP. Planned activities are authorized if the habitat is more than one-half mile from an active or historically active nesting site, and this species is currently not known to nest within Orange County, and have not occurred within the county for over a decade (CDFW 2018a, Catino-Davenport 2019).

⁹ The water surface elevation at Syphon Reservoir fluctuates on a regular basis depending on recycled water supply and demand. "Normal operations" means that Syphon Reservoir is typically filled to capacity during wet (winter) months when recycled water supply exceeds demand, and drawdown typically occurs during dry (summer) months when recycled water demand exceeds supply. Riparian habitat adjacent to the reservoir has established despite these fluctuations.

impacts to these special-status species associated with draining the reservoir are not expected to be significant. The proposed geotechnical investigations would also temporarily impact 0.36 acre of riparian communities (including 0.02 acre of black willow thicket, 0.08 acre of mule fat scrub, and 0.26 acre of freshwater marsh) by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. Although impacts are temporary, the removal of habitat and potential disturbance to these special-status bird species would be potentially significant. Implementation of mitigation measures MM BIO-1 and MM BIO-2, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

The yellow warbler, grasshopper sparrow, and yellow-breasted chat are species of special concern, and white-tailed kite is a state fully protected species. The yellow warbler and yellow-breasted chat would be found in riparian habitat; the grasshopper sparrow favors native grasslands on rolling hills with a mix of grasses, forbs, and scattered shrubs; and the white-tailed kite would be found in grasslands, meadows, or marshes for foraging next to deciduous woodland with dense-topped trees for nesting and perching. The project would temporarily drain the reservoir, which may be used for foraging and provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project’s geotechnical investigations are completed, and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to these riparian-associated special-status species resulting from draining the reservoir are not expected to be significant. The proposed geotechnical investigations would also temporarily impact 6.42 acres of natural communities, including 0.36 acre of riparian communities (i.e., black willow thicket, mule fat scrub, and freshwater marsh) that provide the preferred habitat for these special-status species (although no non-native grasslands will be impacted), by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the “drive and crush” method. With 259.32 acres of natural areas remaining available within the approximately 265-acre study area that will be avoided by the proposed project, including 12.13 acres of riparian habitat (i.e., arroyo willow thicket, black willow thicket, mule fat scrub, and freshwater marsh) and 5.27 acres of non-native grasslands, as well as natural areas within the surrounding vicinity, potential impacts to foraging and/or nesting habitat for these species are not expected to threaten regional populations. Direct impacts would also be avoided as these species are mobile and would be expected to fly away from the construction area, if present. However, if construction and maintenance work cannot be scheduled outside of nesting season, impacts to nesting special-status bird species, would be potentially significant. Implementation of mitigation measure MM BIO-2, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

With implementation of Mitigation Measures MM BIO-1 and MM BIO-2, impacts to special-status species would be less than significant.

5.2 Riparian Habitat or Sensitive Natural Communities

5.2.1 Significance Threshold

The project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

5.2.2 Analysis of Project Effects

Ten sensitive natural communities occur within the study area: arroyo willow thicket, black willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coast prickly pear scrub, and non-native herbaceous cover/California sagebrush scrub.

The project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat (e.g., black willow thicket), in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project's geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to sensitive natural riparian communities resulting from draining the reservoir are not expected to be significant. The proposed project would temporarily impact 4.05 acres of sensitive natural communities, including 0.02 acre of black willow thicket, 2.02 acres of California sagebrush scrub, and 2.01 acres of non-native herbaceous cover/California sagebrush scrub, by boring, trenching, and creating access routes using a bulldozer or by creating access routes using the "drive and crush" method. **Table 4** summarizes the permanent and temporary impacts on sensitive natural communities from the proposed project (shown in **Figure 13**). The project would avoid 178.88 acres of sensitive natural communities (including 4.11 acres of black willow thicket, 89.72 acres of California sagebrush scrub, 69.69 acres of non-native herbaceous cover/California sagebrush scrub, and all of the arroyo willow thicket, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/coyote brush scrub, chaparral bushmallow scrub/non-native herbaceous cover, California sagebrush scrub/non-native herbaceous cover, and coast prickly pear scrub on-site) within the study area. It is anticipated that access routes created by the "drive and crush" method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the "drive and crush" access routes would be "self-mitigating." However, temporary impacts to sensitive natural communities that would result from boring, trenching, and creating access routes using a bulldozer would be significant. Implementation of mitigation measure MM BIO-3, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

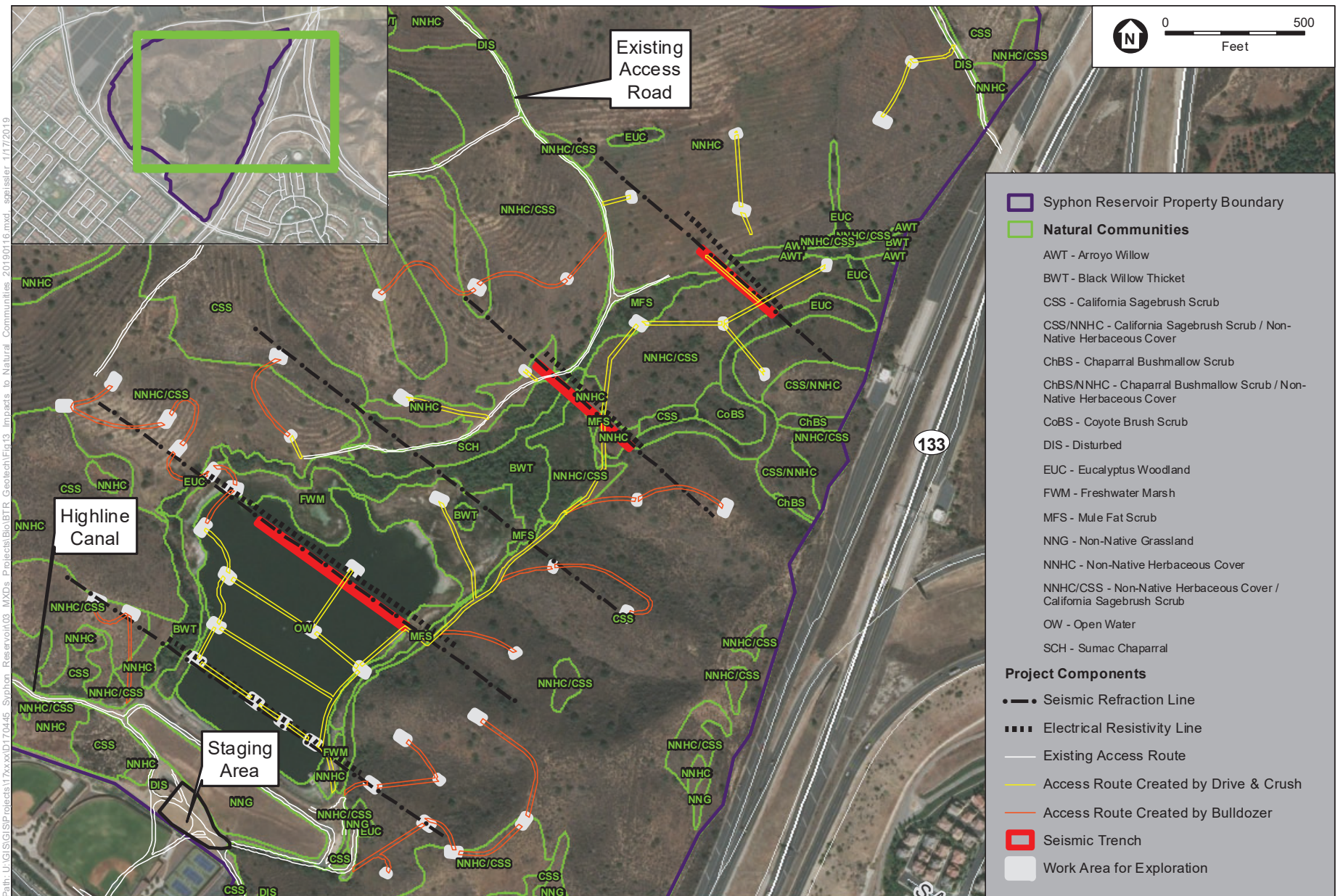
**TABLE 4
IMPACTS TO NATURAL COMMUNITIES**

Natural Community	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)***	Total Impacts (Acres)***	Avoided (Acres)
Arroyo Willow Thicket*	0.24	-	-	-	0.24
Black Willow Thicket*	4.13	-	0.02	0.02	4.11
Mule Fat Scrub	2.25	-	0.08 (0.05)	0.08 (0.05)	2.17
Freshwater Marsh	5.87	-	0.26 (0.13)	0.26 (0.13)	5.61
Coyote Brush Scrub**	0.91	-	-	-	0.91
Chaparral Bushmallow Scrub**	0.45	-	-	-	0.45
Chaparral Bushmallow Scrub/Coyote Brush Scrub**	0.49	-	-	-	0.49
Chaparral Bushmallow Scrub/Non-Native Herbaceous Cover**	4.72	-	-	-	4.72
Sumac Chaparral	1.63	-	0.03	0.03	1.60
California Sagebrush Scrub**	91.74	-	2.02 (0.22)	2.02 (0.22)	89.72
California Sagebrush Scrub**/Non-Native Herbaceous Cover	7.86	-	-	-	7.86
Coast Prickly Pear Scrub*	0.69	-	-	-	0.69
Eucalyptus Woodland	2.78	-	0.05 (0.01)	0.05 (0.01)	2.73
Non-Native Grassland	5.27	-	-	-	5.27
Non-Native Herbaceous Cover	44.16	-	0.67 (0.41)	0.67 (0.41)	43.49
Non-Native Herbaceous Cover/California Sagebrush Scrub**	71.70	-	2.01 (0.44)	2.01 (0.44)	69.69
Open Water	13.93	-	1.26 (0.72)	1.26 (0.72)	12.67
Disturbed	6.92	-	0.02	0.02	6.90
Total	265.74	0.0	6.42 (1.98)	6.42 (1.98)	259.32

* Asterisk indicates that an alliance/association is considered sensitive by CDFW.

** Double asterisk indicates that an alliance/association that is a covered habitat type under the NCCP/HCP and is therefore considered a sensitive natural community.

*** Acreage in parentheses indicate impacts from access routes created by the "drive and crush" method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally..



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 13
Impacts to Natural Communities

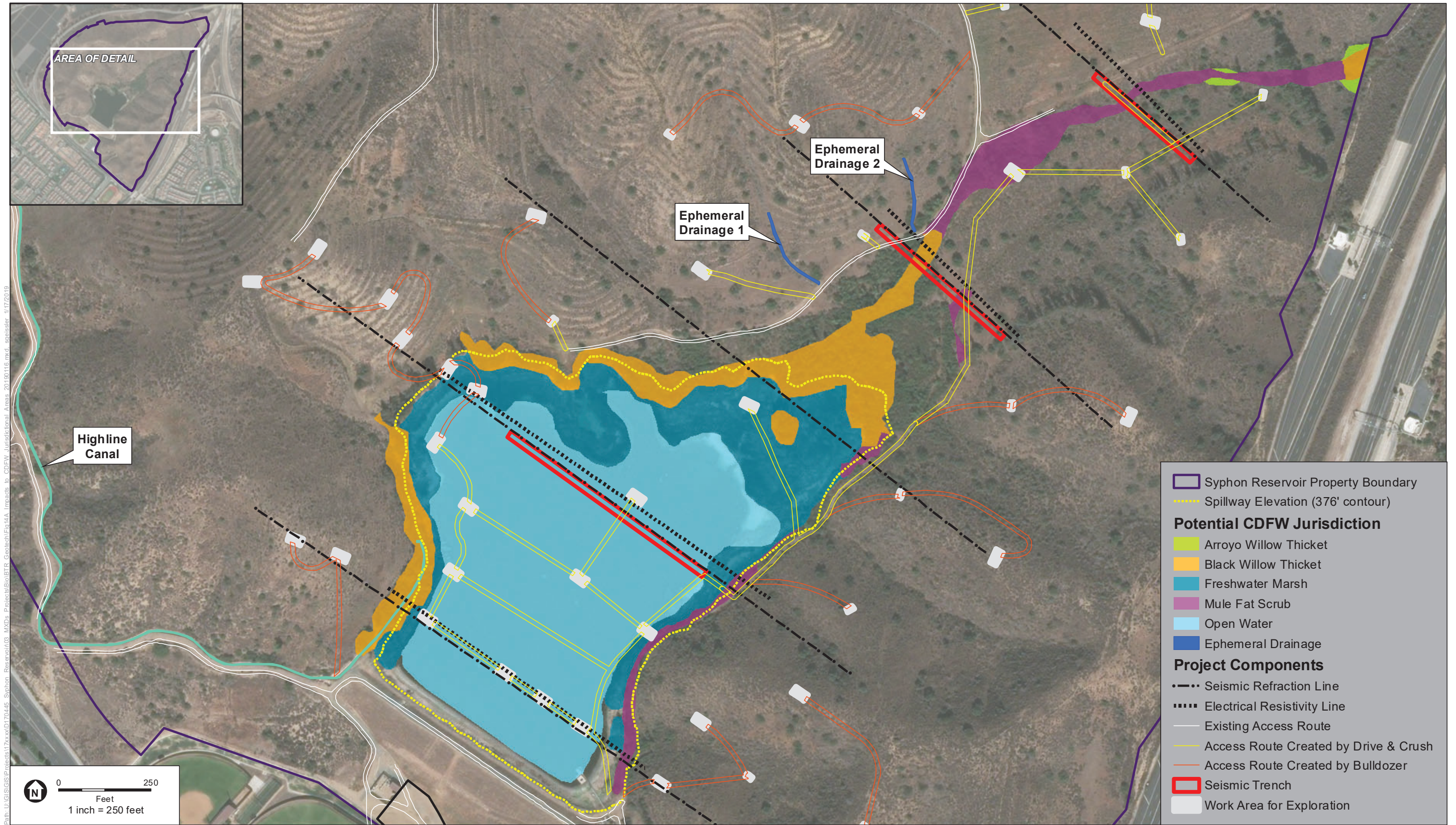
In addition, a large portion of the study area supports riparian habitat, which is considered CDFW jurisdictional lakes, streams, and associated vegetation. The project would temporarily drain the reservoir, which provides hydrology to support the riparian habitat, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project's geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to CDFW jurisdictional riparian habitat resulting from draining the reservoir are not expected to be significant. The proposed project would also temporarily impact 1.60 acres of CDFW jurisdictional lakes, streams, and associated vegetation. **Table 5** summarizes the temporary impacts on CDFW jurisdictional riparian habitat from the proposed project (shown in **Figure 14A**). The project would avoid 24.89 acres of CDFW jurisdictional lakes, streams, and associated vegetation within the study area. As mentioned above, it is anticipated access routes created by the "drive and crush" method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the "drive and crush" access routes would be "self-mitigating". However, temporary impacts to CDFW jurisdictional riparian habitat that could result from boring, trenching, and creating access routes using a bulldozer could be significant. Implementation of mitigation measure MM BIO-4, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

TABLE 5
IMPACTS TO CDFW POTENTIALLY JURISDICTIONAL AREAS

Jurisdiction Types	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)*	Total Impacts (Acres)*	Avoided (Acres)
CDFW Lakes, Streams, and Associated Vegetation	26.49	-	1.60 (0.90)	1.60 (0.90)	24.89
Total	26.49	0.0	1.60 (0.90)	1.60 (0.90)	24.89

* Acreage in parentheses indicate impacts from access routes created by the "drive and crush" method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally.

With implementation of Mitigation Measures MM BIO-3 and MM BIO-4, impacts to sensitive natural communities and riparian habitat would be less than significant.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 14A
Impacts to CDFW Jurisdictional Areas

5.3 Jurisdictional Wetlands

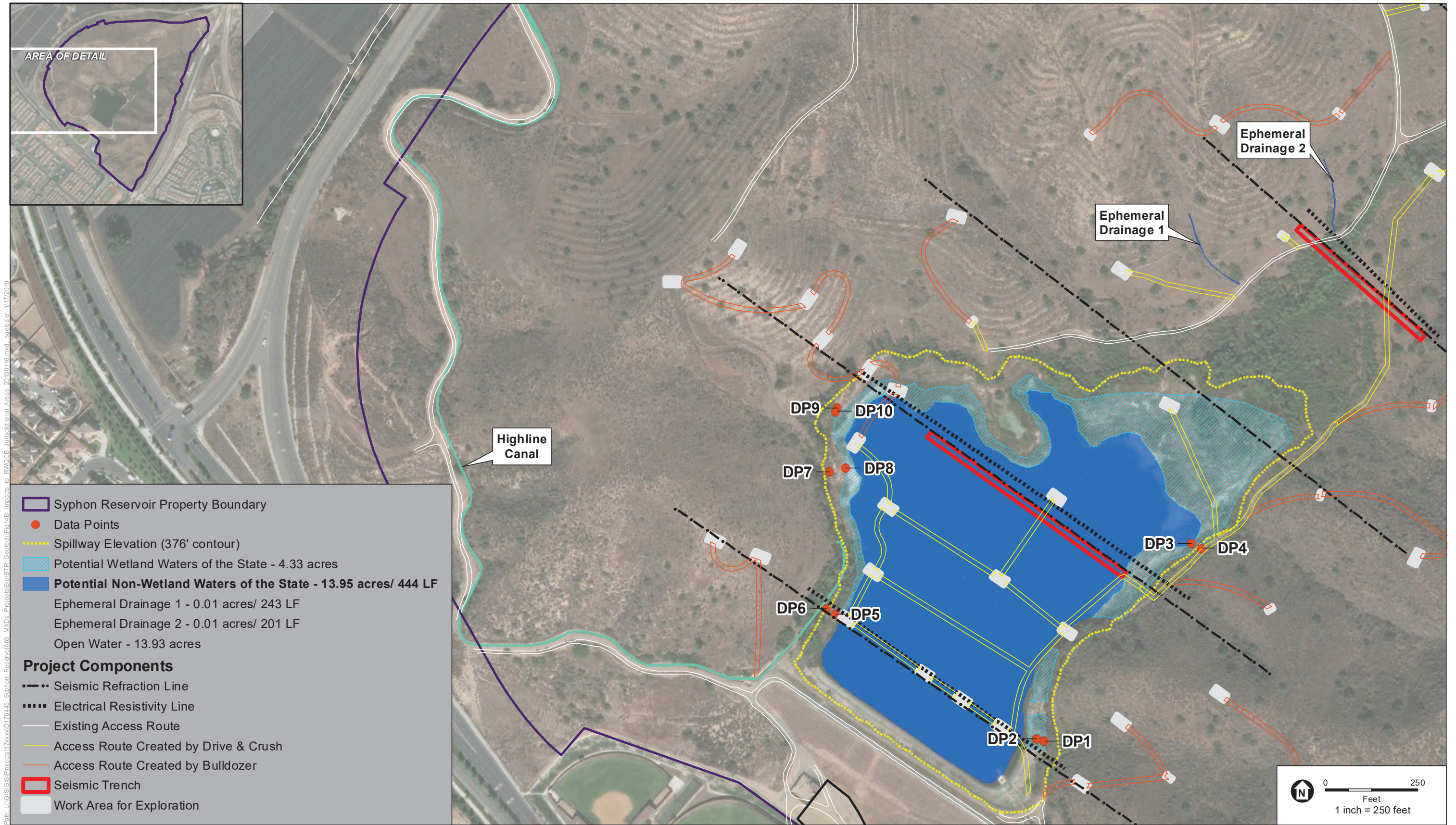
5.3.1 Significance Threshold

The project would not have a substantial adverse effect on federal- or state-protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

5.3.2 Analysis of Project Effects

Based on coordination with the USACE, the USACE issued an Approved Jurisdictional Determination letter (Appendix B), which confirmed that waters of the U.S. do not occur within the study area since Syphon Reservoir is an intrastate isolated water with no apparent interstate or foreign commerce connection (USACE 2018). The CWA also excludes certain features from this regulation, including “wastewater recycling facility constructed on dry land” (see 33 CFR §230.3 (o)(2)(vii)). Thus, jurisdictional features identified are only subject to the jurisdiction of the State (i.e., wetlands and non-wetland waters of the State [discussed in this section below], and CDFW lakes, streams, and associated vegetation [previously discussed in Section 5.2 above]).

The project would temporarily drain the reservoir in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project’s geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts to wetland and non-wetland waters of the State resulting from draining the reservoir are not expected to be significant. The proposed project would temporarily impact 1.43 acres of wetlands and waters of the State (0.17 acre of wetlands, 1.26 acres of non-wetland waters of the State). **Table 6** summarizes the temporary impacts on wetlands and waters of the State from the proposed project (shown in **Figure 14B**). The project would avoid 4.16 acres of wetlands and 12.69 acres of waters of the State within the study area. It is anticipated access routes created by the “drive and crush” method would temporarily crush vegetation for a short duration, and it is expected that any crushed vegetation would reestablish and regrow naturally. Therefore, temporary impacts from the “drive and crush” access routes would be “self-mitigating”. However, temporary impacts to wetlands and waters of the State that would result from boring, trenching, and creating access routes using a bulldozer would be significant. Implementation of mitigation measure MM BIO-5, prescribed in Section 6.0 below, would reduce impacts to a less than significant level. In addition, it should be noted that based on consultation with RWQCB, a Waste Discharge Requirement (WDR) will not be required for this project, since the reservoir is used for recycled water storage, so RWQCB understands that it is in IRWD’s best interest to maintain water quality during construction.



SOURCE: ESRI, 2016

Syphon Reservoir Geotechnical Investigations Project

Figure 14B
Impacts to RWQCB Jurisdictional Areas

TABLE 6
IMPACTS TO RWQCB POTENTIALLY JURISDICTIONAL AREAS

Jurisdiction Types	Existing (Acres)	Permanent Impacts (Acres)	Temporary Impacts (Acres)*	Total Impacts (Acres)*	Avoided (Acres)
Wetland Waters of the State	4.33	-	0.17 (0.12)	0.17 (0.12)	4.16
Non-Wetland Waters of the State	13.95	-	1.26 (0.72)	1.26 (0.72)	12.69
Total	18.28	0.0	1.43 (0.84)	1.43 (0.84)	16.85

* Acreage in parentheses indicate impacts from access routes created by the "drive and crush" method, which would temporarily crush vegetation for a short duration; it is expected that any crushed vegetation would reestablish and regrow naturally.

With implementation of Mitigation Measure MM BIO-5, impacts to wetlands and waters would be less than significant.

5.4 Wildlife Movement and Nursery Sites

5.4.1 Significance Threshold

The project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

5.4.2 Analysis of Project Effects

Although movement would not occur through the study area to the west or south, the study area is on the edge of a larger contiguous block of habitat that would be used for regional wildlife movement (e.g., dispersal habitat for coastal California gnatcatcher within this region). The reservoir is also an important regional water source that attracts a number of avian species and supports habitat for migrating birds. Thus, the study area functions as a part of a wildlife movement corridor from a regional perspective, as well as provides live-in and movement habitat for a variety of species on a local scale.

The project would temporarily impact 6.42 acres of natural communities to conduct geotechnical investigations to evaluate geologic and seismic conditions on-site. However, the project would avoid 259.32 acres of natural communities, and the temporarily impacted areas would not inhibit movement of wildlife that could use the study area. The project would temporarily drain the reservoir, which is used by a number of birds and other wildlife for water supply and foraging, in order to dry out the bottom for the geotechnical work; however, the reservoir will return to normal operations after the project's geotechnical investigations are completed and IRWD already conducts draining of the reservoir as part of its current operations. Therefore, temporary impacts associated with draining the reservoir are not expected to be significant. Thus, impacts to regional and local wildlife movement are less than significant, and no mitigation is required.

Nesting activity typically occurs from February 15 to August 31 (or January 15 to June 31 for raptors). Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code

Section 3503. Any potential impacts to songbird and/or raptor nests would be considered potentially significant. Implementation of mitigation measure MM BIO-2, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

With implementation of Mitigation Measures MM BIO-2, impacts to wildlife movement and nursery sites would be less than significant.

5.5 Local Policies, Ordinances, and Adopted Plans

5.5.1 Significance Threshold

The project would not conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.5.2 Analysis of Project Effects

The study area is within the Central Subregion of the County of Orange NCCP/HCP, and is located with the NCCP/HCP Reserve. IRWD is participating landowner of the Central & Coastal Subregion NCCP/HCP. The NCCP/HCP included provisions for IRWD to build a future reservoir “as a permitted use within the Reserve System” (R.J. Meade Consulting 1996a). At the time that the NCCP/HCP was prepared, IRWD was studying four alternative seasonal reclaimed water storage reservoirs, all of which were located within the subregional Reserve System, though only one reservoir would ultimately be needed. Since the exact location had not been determined, IRWD did not ask for specific authorization for Incidental Take as a part of the NCCP/HCP. However, the need for a future reservoir was identified as “a permitted use within the Reserve System in the event that public health, safety, and welfare require such a facility in the future. At the time such a facility is needed, IRWD will review the plans with appropriate agencies and propose a specific mitigation plan or pay fees adequate to mitigate the Incidental Take associated with the new reservoir” (R.J. Meade Consulting 1996a).

The proposed project (i.e., the Syphon Reservoir Geotechnical Investigations Project) is in support of the future Syphon Reservoir Improvement Project, which is a permitted use within the Reserve System. Compliance with specific conditions required for NCCP/HCP conditionally covered species (i.e., least Bell’s vireo and southwestern willow flycatcher) are discussed in Section 5.1. However, the removal of coastal sage scrub communities would be considered potentially significant. Implementation of mitigation measure MM BIO-6, prescribed in Section 6.0 below, would reduce impacts to a less than significant level.

With implementation of Mitigation Measures MM BIO-6, the project would not conflict with the provisions of any local policies or ordinances protecting biological resources or any adopted NCCP/HCPs.

6.0 Mitigation Measures

To minimize and avoid significant impacts to sensitive biological resources as a result of project implementation, the following mitigation measures are recommended.

6.1 Measures to Mitigate Potentially Significant Impacts to Special-Status Species

MM BIO-1: IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to special-status species:

- a. Areas where temporary impacts occur would be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the project site has returned to pre-project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (i.e., since the larger future project will re-impact most of the same areas impacted in this project) may be used to offset impacts to special-status species associated with the Syphon Reservoir Geotechnical Investigations Project. Mitigation may include, but is not limited to:
 - a. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio.
 - b. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable, as determined acceptable by the USFWS and CDFW.

MM BIO-2: Impacts to nesting birds, including white-tailed kite, would be avoided by conducting all construction activities outside of the bird nesting season (i.e., work should occur September 1 to February 14, or July 1 to January 14 for raptors). If bird nesting season cannot be avoided, the following measures would be followed:

- a. Prior to work during the bird nesting season (February 15 to August 31, or January 15 to June 31 for raptors), a qualified biologist should conduct a pre-construction survey of all suitable habitat for the presence of nesting birds no more than 7 days prior to construction and/or maintenance activities. The results of the pre-construction survey would be valid for 7 days; if vegetation removal activities do not commence within 7 days following the survey, a new pre-construction nesting bird survey should be conducted before these activities begin again.
- b. If any active nests are found during a pre-construction nesting bird survey, a buffer of 300 feet (500 feet for raptors), or as determined appropriate by the qualified biologist (based on species-specific tolerances and site-specific conditions) in consultation with IRWD, would be delineated, flagged, and avoided until the nesting cycle is

complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). The qualified biologist may also recommend other measures to minimize disturbances to the nest, which may include, but are not limited to, erection of sound barriers (e.g., noise blankets), erection of visual barriers (e.g., hay bales), or full-time monitoring by a qualified biologist.

6.2 Measures to Mitigate Potentially Significant Impacts to Riparian Habitat and Sensitive Natural Communities

MM BIO-3: IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to sensitive natural communities:

- a. Areas where temporary impacts occur to sensitive natural communities (black willow thicket, California sagebrush scrub, and non-native herbaceous cover/California sagebrush scrub) would be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the project site has returned to pre-project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with locally indigenous species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (i.e., since the larger future project will re-impact most of the same areas impacted in this project) may be used to offset impacts to sensitive natural communities associated with the Syphon Reservoir Geotechnical Investigations Project. Mitigation may include, but is not limited to:
 1. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) for permanent impacts to coastal sage scrub (California sagebrush scrub and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio.
 2. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing sensitive natural communities or comparable, as determined acceptable by the USFWS and CDFW.

MM BIO-4: IRWD shall obtain a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW or obtain a “No Effect” letter from CDFW. One, or a combination, of the following would be incorporated into the permitting, subject to approval by CDFW:

- a. Areas where temporary impacts occur to CDFW jurisdictional lakes, streams, and associated vegetation would be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the project site has returned to pre-project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local

species, and would include performance standards, success criteria, maintenance, and future monitoring.

- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (i.e., since the larger future project will re-impact most of the same areas impacted in this project) may be used to offset impacts to CDFW jurisdictional riparian habitat associated with the Syphon Reservoir Geotechnical Investigations Project. Mitigation may include, but is not limited to:
 1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing CDFW riparian habitat or comparable, as determined acceptable by the CDFW.

6.3 Measures to Mitigate Potentially Significant Impacts to Jurisdictional Wetlands

MM BIO-5: IRWD shall implement one, or a combination, of the following measures to mitigate temporary impacts to RWQCB jurisdictional wetlands and “waters of the State:”

- a. Areas where temporary impacts occur to RWQCB jurisdictional wetlands and “waters of the State” shall be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated) no longer than one-year after the temporary impacts occur, and will be monitored for three years, or until a qualified biologist determines that the project site has returned to pre-project conditions. For any areas where plants are not reestablished via natural recruitment (e.g., which is anticipated in the temporarily impacted access route areas where the “drive and crush” method is used), a revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.
- b. Alternatively, mitigation proposed for impacts within the footprint of the future Syphon Reservoir Improvement Project (i.e., since the larger future project will re-impact most of the same areas impacted in this project) may be used to offset impacts to RWQCB jurisdictional wetlands and “waters of the State” associated with the Syphon Reservoir Geotechnical Investigations Project. Mitigation may include, but is not limited to:
 1. On- and/or off-site land acquisition, preservation, creation, restoration, and/or enhancement containing wetlands and waters or comparable, as determined acceptable by the RWQCB/CDFW.

6.4 Measures to Mitigate Potential Conflicts with the NCCP/HCP

MM BIO-6: IRWD will implement the following:

- a. In accordance with the NCCP/HCP, certain construction-related mitigation measures are required to minimize impacts to the coastal California gnatcatcher and other coastal sage scrub species. The removal of coastal sage scrub communities will be conducted in compliance with the NCCP/HCP’s Construction Related Minimization Measures:

1. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15).
2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.
3. A monitoring biologist, acceptable to USFWS/CDFW, will be on-site during any clearing of coastal sage scrub. IRWD will advise USFWS/CDFW at least seven calendar days (and preferably fourteen calendar days) prior to the clearing of any habitat occupied by Identified Species¹⁰ to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.
4. Following the completion of initial grading/earth moving activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.
5. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle/equipment transportation routes and staging areas will be restricted to a minimum number during construction consisted with project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.

¹⁰ NCCP/HCP Identified Species that occur, or have potential to occur, on-site include the following: coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, coastal western whiptail, red-diamond rattlesnake, coast horned lizard, western spadefoot, northern harrier, sharp-shinned hawk, prairie falcon, American peregrine falcon, red-shouldered hawk, southern California rufous-crowned sparrow, San Diego desert woodrat, gray fox, and coyote.

6. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.

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APPENDIX A
**Preliminary Jurisdictional
Delineation Report**

Final

Syphon Reservoir Improvement Project

Preliminary Jurisdictional Delineation Report

Prepared for
Irvine Ranch Water District

July 2018



Final

Syphon Reservoir Improvement Project

Preliminary Jurisdictional Delineation Report

Prepared for
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July 2018

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Section 1

Introduction

1.1 Introduction and Purpose

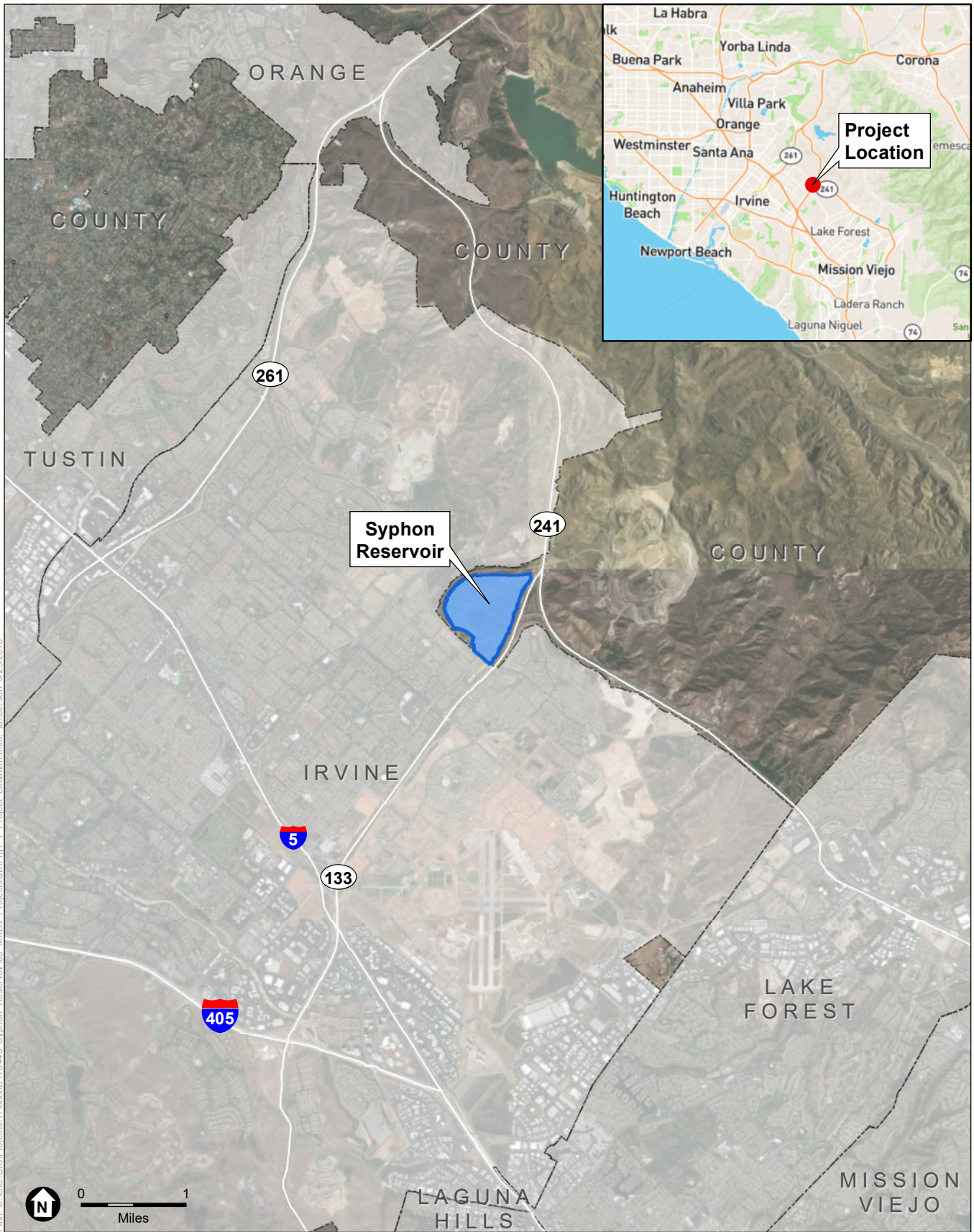
Environmental Science Associates (ESA) conducted a jurisdictional delineation for the Irvine Ranch Water District's (IRWD) Syphon Reservoir Improvement Project (project). The study area includes approximately 266 acres of the Syphon Reservoir property, including 241 acres of deed-restricted parcels within the Central and Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) reserve boundary. The purpose of conducting a jurisdictional delineation in the study area was to determine the location and size of the areas defined as waters of the United States, waters of the State, and habitats subject to the California Department of the Fish and Wildlife's (CDFW) jurisdiction. The collected data will be used to determine which jurisdictional regulations apply and to calculate project impacts to jurisdictional waters and habitat during the permitting process. The results from this analysis will be used to prepare any necessary permits from the regulatory agencies.

IRWD is seeking to expand the recycled water storage capacity of Syphon Reservoir to meet the demand of its recycled water customers, enhance IRWD's water supply reliability, and reduce the need for imported water. The total storage capacity of Syphon Reservoir would be expanded from 500 acre-feet to approximately 5,000 acre-feet by raising the existing dam. In addition to an expanded dam footprint and inundation level up to the 456-foot elevation, the project would include infrastructure facilities constructed between the toe of the new dam and the IRWD property boundary, as well as roadways in order to connect the reservoir with the recycled water system.

1.2 Study Area Location

Syphon Reservoir is located in the northern portion of Irvine, California, within IRWD's service area, within Orange County, California, as shown on **Figure 1-1**. Syphon Reservoir is a 60-year-old facility historically used to store irrigation water supplies. Currently, the reservoir functions as a seasonal storage facility within the IRWD recycled water system.

The study area is within the El Toro U.S. Geological Survey 7.5-minute quadrangle map and within the land grant Lomas de Santiago (**Figure 1-2**). Coordinates for the study area are: 33°43'0.10"N, 117°43'20.83"W for the northeast corner and 33°42'41.00"N, 117°44'7.85"W for the southwest corner.



SOURCE: ESRI, 2016; OC LAFCO, 2018

IRWD Syphon Reservoir

Figure 1-1
Project Location



Section 2

Environmental Setting

2.1 Wetland Delineation Study Area

The 266-acre study area was historically part of the Irvine Ranch and was initially subject to disturbance in the 1940s for construction of the reservoir to provide irrigation for agricultural lands. Irvine Ranch Water District purchased the reservoir and surrounding land in 2010 for the purpose of storing recycled water. In 2014, IRWD completed a project which integrated the existing capacity of the reservoir into its recycled water system as a small storage facility for recycled water, with the intent of increasing storage capacity in the future. Syphon Reservoir is currently a recycled water storage reservoir surrounded by sensitive upland, wetland, and riparian vegetation communities. The IRWD property surrounding the reservoir has been the subject of previous habitat restoration and mitigation activity as part of state and federal regulatory approvals and is within the reserve boundary of the NCCP/HCP. Consistency with the NCCP/HCP is discussed in Syphon Reservoir Environmental Regulatory Evaluation Preliminary Draft (Dudek, 2012).

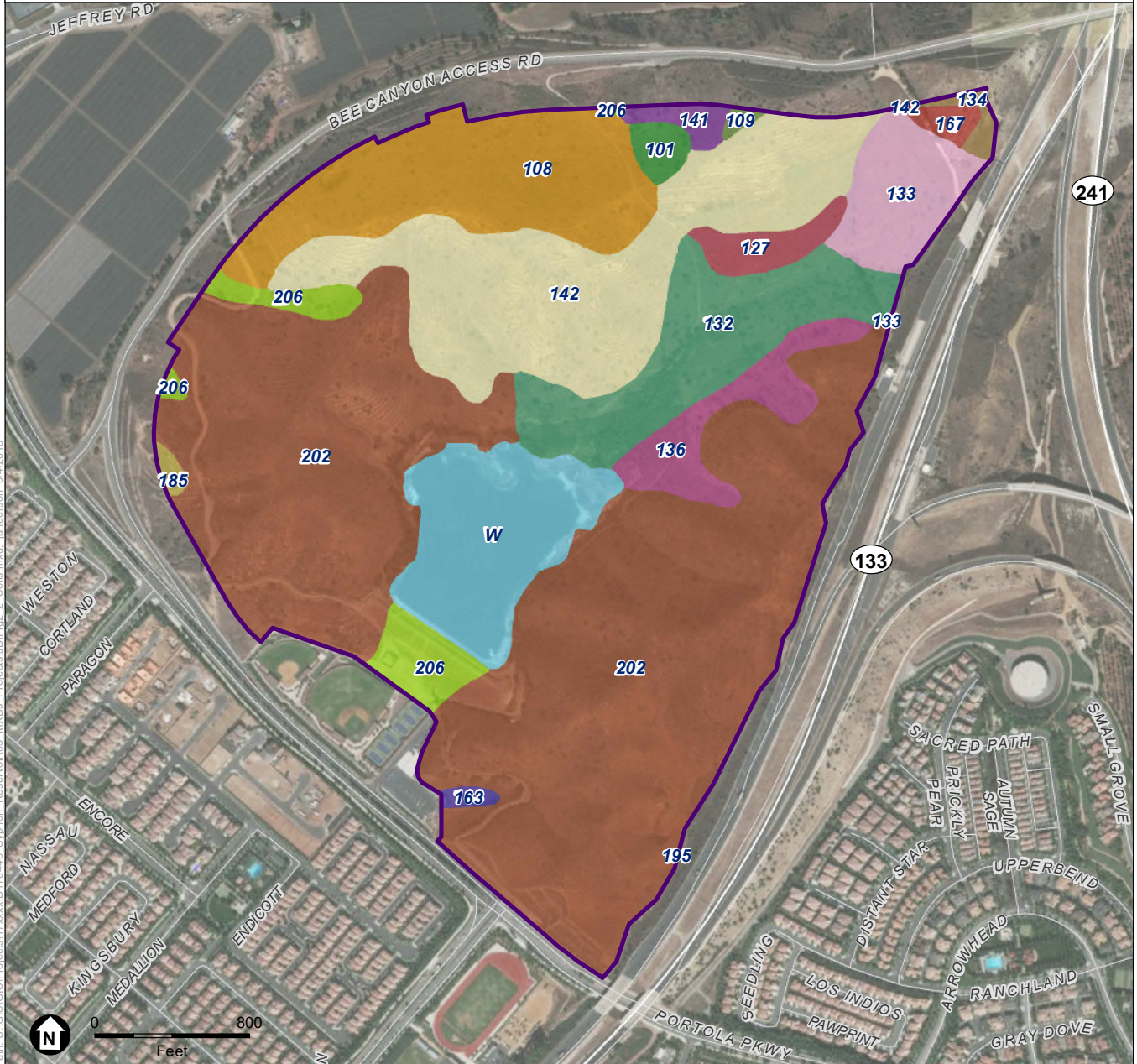
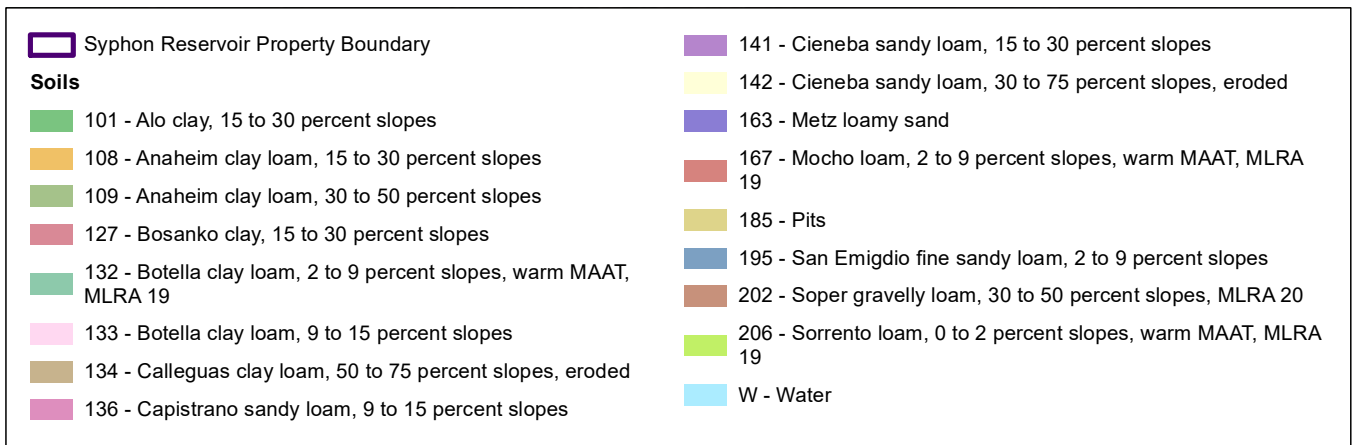
2.2 Soils

Based on review of the Natural Resources Conservation Services (NRCS) web soil survey, the study area contains 16 soil series (**Figure 2-1**) (NRCS, 2017). The following is a brief description of mapped soils within the study area underlain by potential waters of the U.S.:

Soper gravelly loam, 30 to 50 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is mildly alkaline to slightly acidic. The profile consists of gravelly loam in the first 8 inches, gravelly clay loam between 8 and 29 inches, and bedrock from 29 to 79 inches. Soper gravelly loam is not considered hydric by the Natural Resources Conservation Service (NRCS) (NRCS, 2016).

Botella clay loam, 2 to 9 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is slightly alkaline to moderately acidic. The profile consists of clay loam in the first 8 inches, silty clay loam between 8 and 35 inches, and clay loam from 35 to 66 inches. Botella clay loam is not considered hydric by the NRCS (NRCS, 2016).

Cieneba sandy loam, 30 to 75 percent slopes, is a somewhat excessively drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is neutral to strongly acidic. The profile consists of sandy loam in the first 17 inches and weathered bedrock between 17 and 59 inches. Cieneba sandy loam is not considered hydric by the NRCS (NRCS, 2016).



SOURCE: ESRI, 2016; USDA, 2018

IRWD Syphon Reservoir

Figure 2-1
Soils



Capistrano sandy loam, 9 to 15 percent slopes, is a well-drained soil that is unlikely to pond or flood with an average depth of over 80 inches to the water table. The soil is neutral to medium acidic. The profile consists of sandy loam in the first 27 inches and fine sandy loam between 27 and 65 inches. Capistrano sandy loam is not considered hydric by the NRCS (NRCS, 2016).

2.3 Hydrology

Syphon Reservoir's total basin area is approximately 205 acres within the central drainage and reservoir area. A culvert inlet in the northeast portion of the study area conveys stormwater runoff from a portion of the open space area east of the reservoir (under SR-133 and SR-241). The central drainage supports riparian habitat and conveys intermittent flow through the center of the study area to the reservoir. In addition, multiple culverts within the study area drain the upland portions of the reservoir.

With the exception of limited seasonal inflows from rain events, IRWD controls all flows in and out of the reservoir, as part of their recycled water storage and management. Following construction of the dam in the 1940s, impounded water accumulated from direct runoff from the Highline Canal. Currently, within the study area, a portion of the Highline Canal conveys periodic recycled water overflows from IRWD's Rattlesnake Reservoir into Syphon Reservoir. The Highline Canal located southwest of the Syphon Reservoir was historically used for irrigation but has been abandoned. The reservoir currently drains through a series of underground pipes that convey flows through a strainer and chlorination facility, before getting distributed to customers through IRWD's recycled water system.

2.4 Vegetation Communities

The study area is dominated by California sagebrush alliance and non-native herbaceous cover/California sagebrush alliance (i.e., communities intermixed with both native and non-native species) in the upland areas, and arroyo willow thicket within the riparian areas immediately adjacent to open water within the reservoir. Vegetation communities are mapped in **Figure 2-2**.

Acreages of each vegetation community in the study area are summarized in **Table 2-1**, and are listed according to the Orange County Habitat Classification System (Gray and Bramlet, 1992) and California vegetation alliances (Sawyer et al., 2009). Vegetation communities considered a special-status vegetation community by CDFW as listed in the California Natural Community List (CDFW, 2018) are also identified with an asterisk. Vegetation communities that are habitat type under the Central and Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and also considered a special-status vegetation community are identified with a double asterisk.

**TABLE 2-1
VEGETATION COMMUNITIES**

Vegetation Community	Acres	State Rank¹
Arroyo Willow Thicket*	0.24	S4
Black Willow Thicket*	6.28	S3
Mule Fat Scrub	2.55	S4
Freshwater Marsh	6.62	S4
Coyote Brush Scrub	0.90	S5
Chaparral Bushmallow Scrub	0.45	S4
Chaparral Bushmallow Scrub/Coyote Brush Scrub	0.49	S4/S5
Chaparral Bushmallow Scrub/Non-Native Herbaceous Cover	4.72	S4/None
Laurel Sumac Scrub	9.20	S4
Lemonadeberry Scrub*	0.15	S3
California Sagebrush Scrub**	85.50	S5
California Sagebrush Scrub**/Non-Native Herbaceous Cover	7.86	S5/None
Coast Prickly Pear Scrub*	0.69	S3
Eucalyptus Woodland	2.78	None
Non-Native Grassland	5.27	None
Non-Native Herbaceous Cover	44.27	None
Non-Native Herbaceous Cover/California Sagebrush Scrub	66.61	None/S5
Non-Native Herbaceous Cover/Laurel Sumac Scrub	1.02	None/S4
Open Water	13.21	None
Disturbed	6.93	None
Grand Total	265.74	

* Asterisk indicates that an alliance/association is considered special-status by CDFW.

** Double asterisk indicates that an alliance/association that is a covered habitat type under the NCCP/HCP and is therefore considered a special-status vegetation community.

¹ CDFW state rank denotes the rarity of a vegetation type within the state as follows:

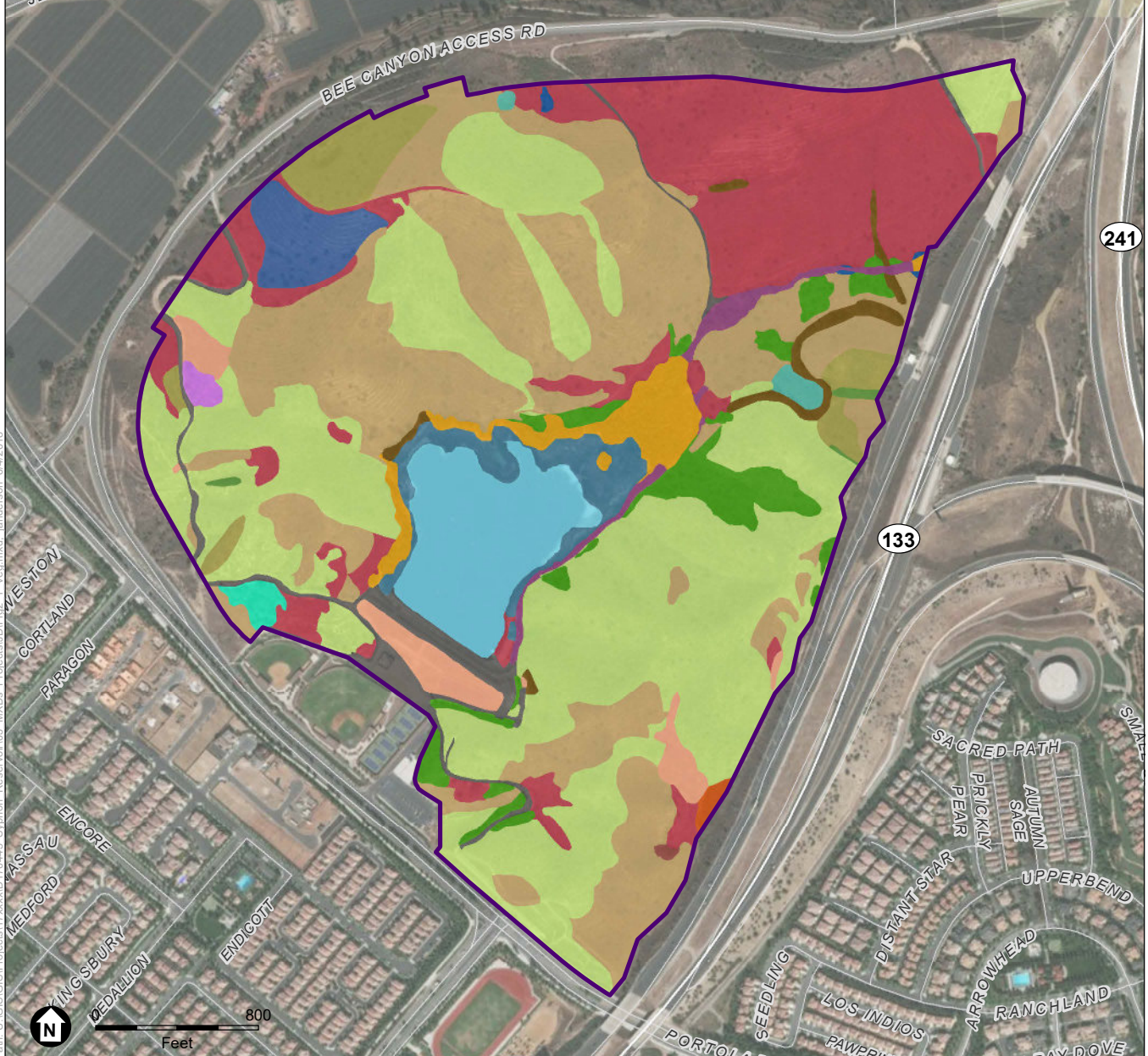
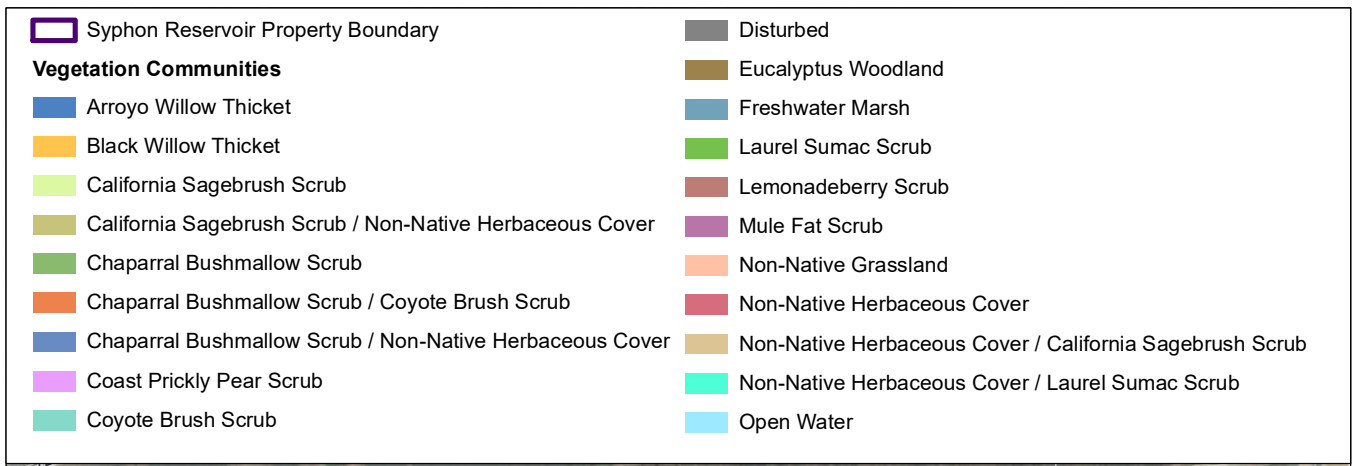
S1 = Critically Imperiled – At very high risk of extirpation due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.

S2 = Imperiled – At high risk of extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.

S3 = Vulnerable – At moderate risk of extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

S4 = Apparently Secure – At a fairly low risk of extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

S5 = Secure - At very low or no risk of extirpation due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.



SOURCE: ESRI, 2016

IRWD Syphon Reservoir

Figure 2-2
Vegetation Communities



Section 3

Regulatory Framework

3.1 Waters of the U.S.

The U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the United States (waters of the U.S.) following the 2008 Rapanos decision. The EPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court’s decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the EPA and the USACE to determine CWA jurisdiction over the project and to complete the “significant nexus test” as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in point (B) below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark [OHWM]), if a hydrologic connection to a Traditionally Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and EPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical, and biological integrity of the downstream TNW.

Based on the 2003 joint legal memorandum signed by General Counsels of EPA and the Department of the Army regarding the Supreme Court’s decision in *Solid Waste Agency of Northern Cook County vs. United States Army Corps of Engineers*, 531 U.S. 159 (2001) (‘SWANCC’), geographically isolated waters, including wetlands, are generally not considered to be jurisdictional under the CWA because they lack links to interstate commerce. However, for each specific request for isolated waters (i.e., approved jurisdictional determination), the USACE and EPA will need to make a case by case determination on the jurisdictional status of the resource.

Rapanos Key Points Summary

- (A) The USACE and EPA will assert jurisdiction over the following waters:
- TNWs.
 - Wetlands adjacent to TNW.

- Non-navigable tributaries of TNWs that are relatively permanent.
 - Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
 - Wetlands that directly abut such tributaries.
- (B) The USACE and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:
- Non-navigable tributaries that are not relatively permanent.
 - Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
 - Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.
- (C) The USACE and EPA generally will not assert jurisdiction over the following features:
- Swales or erosion features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).
 - Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

3.2 Waters of the State

Most projects involving water bodies or drainages are regulated by the Regional Water Quality Control Board (RWQCB), the principal State agency overseeing water quality of the State at the local/regional level. The study area is located within the jurisdiction of the Santa Ana RWQCB. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

Absent any federal jurisdiction pursuant to Section 404 of the CWA, the RWQCB regulates discharges under the Porter-Cologne Water Quality Control Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for non-point source discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Porter-Cologne Water Quality Control Act applies to the project since grading, filling, and other construction-related activities could affect the water quality of waters of the State.

3.3 Lakes, Streams, and Associated Vegetation

Pursuant to Division 2, Chapter 6, Section 1602 of the Fish and Game Code, California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake which supports fish or wildlife. A notification of a Lake or Streambed Alteration Agreement must be submitted to CDFW for “any activity” that may substantially change the bed, channel, or bank of any river, stream, or lake.” In addition, CDFW has jurisdiction over wetland and riparian habitats associated with watercourses. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement (LSAA).

Section 4

Methodology

4.1 Database and Literature Review

Prior to conducting the jurisdictional delineation, ESA conducted a review of available background information pertaining to Syphon Reservoir, geography, and topography. The following resources were also reviewed or used prior to the field surveys:

Natural Resources Conservation Service's (NRCS) *Web Soil Survey*, queried to determine the soils mapped in the study area (NRCS, 2017);

Hydric Soils List of California, 2016 (2018);

El Toro, CA USGS 7.5-minute topographic quadrangle maps;

Color aerial photography for vegetative, topographic, and hydrologic features (Google Earth, 2017);

The National Wetlands Inventory (U.S. Department of the Interior, 2018); and

Preliminary Draft Syphon Reservoir Environmental Regulatory Evaluation (Dudek, 2012).

Habitat Classification System, Natural Resources, Geographic Information System (GIS) Project (Gray and Bramlet, 1992).

Site maps were generated with available aerial photographs, and potentially jurisdictional features were identified and marked with lines and global positioning system (GPS) coordinates to assist in field verification.

4.2 Field Survey Methods

ESA biologists May Lau and Tommy Molioo conducted a site visit on April 24, 2018, to evaluate potentially jurisdictional features within the study area. The limits of potential jurisdictional features were recorded in the field within accessible areas using aerial maps and a hand-held GPS with sub-foot accuracy. Vegetation communities were described using *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009).

Delineating Waters of the U.S.

The delineation used the “Routine Determination Method” as described in the *1987 Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), hereafter called the “1987 Manual.” The 1987 Manual was used in conjunction with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers, 2008), hereafter called the “Arid West Supplement.” For areas where the 1987 Manual and the Arid West Supplement differ, the Arid West Supplement was followed. Wetlands and waters were classified using commonly accepted habitat types; however, the Cowardin classification (Cowardin et al., 1979) of each feature type is noted in the discussion in Chapter 5.

Wetlands

To determine the extent of potential jurisdictional wetlands on a project site, the Corps of Engineers *Wetlands Delineation Manual* (USACE, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE, 2008b) was used as a guide for identifying wetland characteristics.

Three positive wetland parameters must normally be present for an area to be considered a wetland: 1) a dominance of wetland vegetation, 2) presence of hydric soils, and 3) presence of wetland hydrology. Presence or absence of positive indicators for wetland vegetation, soils and hydrology was assessed per the 1987 Manual and Arid West Supplement guidelines. Data points were taken within suspected wetlands and a paired point was taken (where applicable) in nearby uplands. Data points were recorded on Arid West wetland determination data forms. Data forms are provided in **Appendix A**.

At each data point, a visual assessment of the dominant plant species within a 6-foot radius was made. Dominant species were assessed using the recommended “50/20” rule per the Arid West Supplement. Plants were identified to species using the *The Jepson manual: Vascular plants of California, second edition* (Baldwin et al., 2012). The *Arid West 2016 Regional Wetland Plant List* (Lichvar et al., 2016) was used to determine the wetland indicator status of all plants. Hydric soils were identified using soil indicators presented in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b) and the *Field Indicators of Hydric Soils in the United States, Version 7.0, 2010* (NRCS 2010). Soils at each data point were characterized by color, texture, organic matter accumulation, and the presence or absence of hydric soil indicators. The coloration of the soil samples, matrix, and mottles is assessed using the *Munsell Soil Color Charts* (Munsell, 2000). Presence of wetland hydrology was determined at each data point by presence of one or more of the primary and/or secondary indicators, per guidance of the Arid West Supplement.

Other Waters of the U.S.

Federal jurisdiction over a non-wetland waters of the U.S. extends to the ordinary high-water mark (OHWM), defined in 33 C.F.R. § 328.3 as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the

presence of litter and debris. In the Arid West region of the United States, waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic ordinary high-water (OHW) delineations are associated with the commonly occurring ephemeral/intermittent channel forms that dominate the Arid West landscape. Delineation methods were completed in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE, 2008a), and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE, 2010).

Delineating Waters of the State

Waters of the State have been delineated using the same methodology as waters of the U.S.

Delineating Lakes, Streams, and Associated Vegetation

Potential CDFW-jurisdictional waters were delineated by the top of the bank of a stream, and the outer dripline of riparian vegetation or wetlands supported by the lake or stream.

4.3 Mapping and Acreage Calculations

All features, including data points, wetland boundaries, and channels were recorded using a GPS unit (Trimble GeoXT) with real-time differential correction and an instrument-rated mapping accuracy of +/- 1 meter, or were delineated on aerial photography using Geographic Information System (GIS) software (ArcGIS 10.2) and site-specific topographic data and aerial imagery.

In the office, data from data points and wetland boundaries were downloaded from the GPS unit and mapped using GIS software on an overlay of topographic contours and geo-referenced aerial photography. GPS-determined wetland boundaries and data points were visually confirmed. Acreage of wetland and waters of the U.S. polygons, and the length of linear features were determined using ArcGIS.

Section 5

Results and Conclusions

The results of the database/literature review and jurisdictional delineation are discussed in this section. Representative photographs from the field delineation are located in **Appendix B**.

This jurisdictional delineation identified 18.28 acres of potentially jurisdictional waters of the U.S., subject to jurisdiction under Section 404 of the CWA. Potentially jurisdictional features include 4.33 acres of wetlands and 13.95 acres of other waters of the U.S. Potentially jurisdictional features within the study area include Syphon Reservoir, riverine and wetland habitats. **Table 5-1** provides the total extent of potentially jurisdictional wetlands and waters of the U.S. within the study area. Potentially jurisdictional features are depicted in detailed maps provided in **Figure 5-1** and **Figure 5-2**. Each type of wetland and other waters is described in greater detail in Section 5.1.

TABLE 5-1
POTENTIALLY JURISDICTIONAL WATERS OF THE U.S. IN THE STUDY AREA

Feature Type	Cowardin Classification	Extent	
		Linear feet	Area (acres)
Wetland Waters of the U.S.			
Wetlands	Palustrine emergent wetlands (semipermanently flooded)	N/A	4.33
Total Wetlands			4.33
Other Waters of the U.S.			
Reservoir	Palustrine (diked/impounded, permanently flooded)	N/A	13.93
Drainage 1	Riverine (ephemeral)	243	0.01
Drainage 2	Riverine (ephemeral)	201	0.01
Total Other Waters		444	13.95
Total Waters of the U.S./State		444	18.28

NOTE: Area subtotals subject to rounding.

5.1 Potentially Jurisdictional Wetlands

The following is a discussion of those areas identified to be potentially jurisdictional wetland waters of the U.S., based upon observations or inferences of wetland hydrology, soils, and vegetation.

Wetlands

The freshwater wetlands within the study area are classified as *Palustrine Emergent Wetlands, Semipermanently Flooded* according to the Cowardin classification system (Cowardin et al., 1979). These are areas that become at least partially inundated all year, support facultative (or wetter) annual plants, and are located along the edges of the reservoir. Data points that correspond with freshwater wetland are DP2, DP3, DP5, DP8, and DP10. Corresponding upland points are DP1, DP4, DP6, DP7, and DP9.

The wetlands are largely dominated by native plant species including California bulrush (*Schoenoplectus californicus*, OBL¹), black willow (*Salix gooddingii*, FACW²), and yellow sweet clover (*melilotus officinalis*, FACU³). This habitat also supports a range of non-native plant species including seaside heliotrope (*Heliotropium curassavicum*, FACU), spiny cocklebur (*Xanthium spinosum*, FACU), short podded mustard (*Hirschfeldia incana*, UPL⁴), and telegraph weed (*Heterotheca grandiflora*, UPL).

The wetlands occur along the margins of Syphon Reservoir (see Figures 2-2 and 5-1). Although not mapped as hydric soils according to NRCS, hydric soil indicators observed in the wetlands include the presence of muck (A9), hydrogen sulfide (A4), depleted below dark surface (A11), redox dark surface (F6), and sandy gleyed matrix (S4). The wetland areas generally had very silty loam, clay soils, while sandy soils were encountered at DP8. Indicators of wetland hydrology include a high water table (A2), saturation (A3), biotic crust (B12), and hydrogen sulfide odor (C1).

5.2 Potentially Jurisdictional Other Waters of the U.S.

Following is a discussion of those areas identified to be potentially jurisdictional waters of the U.S., based upon observations or inferences of wetland hydrology, soils, and vegetation.

-
- ¹ OBL – obligate. Plant species with this wetland indicator status occur almost always under natural conditions in wetlands.
 - ² FACW – facultative wetland. Plant species with this wetland indicator status usually occur in wetlands but are occasionally found in non-wetlands.
 - ³ FACU – facultative upland. Plant species with this wetland indicator status usually occur in non-wetlands but are occasionally found in wetlands.
 - ⁴ UPL – upland. Plant species with this wetland indicator status occur in wetlands in another region, but occur almost always under natural conditions in non-wetlands in the Arid West Region.

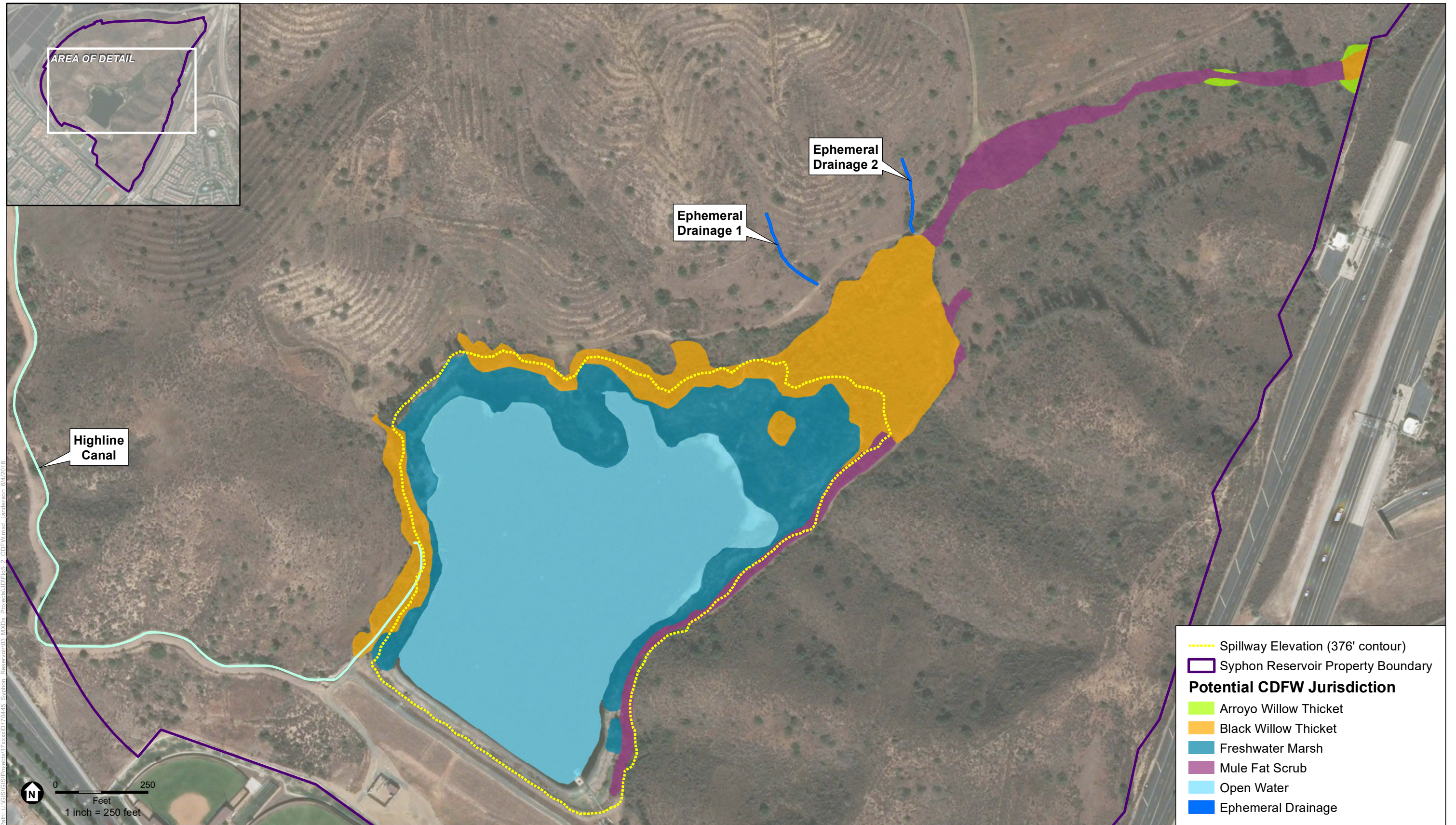


Path: U:\GIS\GIS\Projects\17xxxx\170445_Syphon_Reservoir\103_MXD\Projects\170445_Syphon_Reservoir.mxd - JPL - 7/9/2018

SOURCE: ESRI, 2016

IRWD Syphon Reservoir

Figure 5-1
Jurisdictional Delineation Map
Potential Waters of the U.S./State



SOURCE: ESRI, 2016

IRWD Syphon Reservoir

Figure 5-2
Jurisdictional Delineation Map – Potential CDFW Jurisdiction

Reservoir

Syphon Reservoir is considered *Lacustrine* habitat according to the Cowardin classification system (Cowardin et al., 1979). Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. The OHWM of the reservoir was determined to be along the edge of the reservoir where surface water was observed at the time of the delineation, or based on physical characteristics of water fluctuation such as downed emergent vegetation. The water surface elevation of the reservoir is influenced by IRWD's management of the recycled water system. The reservoir functions as a seasonal recycled water storage facility; as such, the reservoir includes areas where open water persists throughout the year at a minimum water surface elevation but fluctuates seasonally up to a maximum water surface elevation based on demands for recycled water. The reservoir captures runoff from adjacent areas, including a primary drainage in the central portion of the study area that supports intermittent flows and riparian vegetation north of the reservoir and wetlands shown in **Figure 5-1**. However, there was no OHWM observed in this central drainage and the primary drainage was not mapped as potential other waters of the U.S.

Ephemeral Drainages

Two ephemeral drainages (Nos. 1 and 2) are considered *Riverine* habitat according to the Cowardin classification system (Cowardin et al., 1979). Riverine habitats include rivers, streams, and creeks, and can occur in association with many terrestrial habitats. Riverine habitats are also found contiguous to lacustrine and fresh emergent wetland habitats. Both ephemeral drainages were mapped north of the reservoir (Figure 5-1). These drainages convey stormwater runoff from upland areas to the central drainage via a culvert under the existing dirt road that runs along the west and north sides of the reservoir. The OHWM was an average of two feet wide, based on evidence of shelving. Ephemeral Drainage 1 supports a mix of non-native herbaceous cover and California sagebrush scrub, while Ephemeral Drainage 2 supports a mix of non-native herbaceous cover, California sagebrush scrub, and laurel sumac scrub. No surface water was observed in either drainage.

5.3 Potentially Jurisdictional Section 1602 Lakes, Streams and Associated Vegetation

Areas within CDFW jurisdiction typically refer to streambeds and associated wetland or riparian vegetation. Within the study area, the potential extent of CDFW limits was taken to the outer edge of the overhanging riparian or wetland vegetation adjacent to the reservoir, and to the top of bank for the ephemeral drainages (**Figure 5-2**). Therefore, as shown in **Table 5-2**, approximately 27.26 acres of the study area could be subject to CDFW jurisdiction.

**TABLE 5-2
SUMMARY OF SECTION 1602 LAKES, STREAMS, AND ASSOCIATED VEGETATION**

Feature	Stream/Riparian Limits Acres	Length (feet)	Average Stream Width	Vegetation/Habitat Type
Syphon Reservoir	13.93	N/A	N/A	Open water
Riparian	8.93	N/A	N/A	Blackwillow thicket, arroyo willow thicket, mulefat scrub
Freshwater Marsh	4.33	N/A	N/A	Freshwater marsh
Ephemeral Drainage 1	0.04	243	7	Non-native herbaceous cover/California sagebrush scrub
Ephemeral Drainage 2	0.03	201	7	Non-native herbaceous cover/California sagebrush scrub, and laurel sumac scrub
Totals:	27.26	444	N/A	

5.4 Jurisdictional Analysis

The following analysis discusses the delineated water features within the study area and which regulatory agencies could require approvals/permits prior to impacts. This includes wetland and riparian vegetation, Syphon Reservoir, and the two ephemeral drainages within the study area.

Wetlands

The wetlands within the study area are fringe wetlands associated with the reservoir. These wetlands are isolated from downstream waters of the U.S. and lack hydrologic connectivity to interstate commerce. As discussed in Section 3.1 above, geographically isolated waters, including wetlands, are generally not considered to be jurisdictional under the CWA because they lack links to interstate commerce. However, for each specific request for isolated waters (i.e., approved jurisdictional determination), the USACE and EPA will need to make a case by case determination on the jurisdictional status of the resource, which would dictate the appropriate permitting requirements.

Other Waters of the U.S.

As previously discussed, the reservoir currently drains through a series of underground pipes that convey flows through the strainer and chlorination facility, before being distributed to customers through IRWD's recycled water system. As such, the waters within Syphon Reservoir and the two ephemeral drainages do not exhibit hydrologic connectivity to downstream waters of the U.S. or the Pacific Ocean (TNW), and are considered isolated waters. As discussed in Section 3.1 above, geographically isolated waters, including wetlands, are generally not considered to be jurisdictional under the CWA because they lack links to interstate commerce. However, for each specific request for isolated waters (i.e., approved jurisdictional determination), the USACE and EPA will need to make a case by case determination on the jurisdictional status of the resource, which would dictate the appropriate permitting requirements.

Waters of the State

All areas mapped as potential waters of the U.S./State are regulated by the Santa Ana RWQCB pursuant to the Porter-Cologne Water Quality Control Act. Assuming the USACE and EPA will determine absence of federal jurisdiction (waters of the U.S.) onsite, a WDR and/or a WDR amendment will be required from the RWQCB for the project.

Lakes, Streams, and Associated Vegetation

Within the study area, Syphon Reservoir, wetland and riparian vegetation, and the two ephemeral drainages could be subject to CDFW jurisdiction. A Streambed Alteration Agreement (SAA) will be required from the CDFW per Section 1602 of the Fish and Game Code.

5.5 Conclusions

Based on the jurisdictional analysis presented in Section 5.4 above, it is presumed that there are no waters of the U.S. within the study area. A total of 18.28 acres of potentially jurisdictional wetlands and other waters of the State occur within the 266-acre study area, consisting of 4.33 acres of wetlands and 13.95 acres of other waters. A total of 27.26 acres of lakes, streams and associated vegetation occur within the study area that are potentially subject to Section 1602 of the Fish and Game Code.

This report documents the wetland boundary delineation and best professional judgment of ESA investigators. All conclusions presented for waters of the U.S. should be considered preliminary and subject to change pending official review and preliminary jurisdictional determination in writing by the USACE. All conclusions presented for Section 1602 lakes, streams and associated vegetation should be considered preliminary and subject to change pending official review by the CDFW.

Section 6

Supplemental Information

6.1 Directions to the Study Area

From Los Angeles, take Interstate 5 South for approximately 31 miles. Use the right 2 lanes to take exit 96B to merge onto CA-133 North toward Santa Margarita. Take exit 12 for Irvine Boulevard and turn left onto Irvine Boulevard. Turn right onto Sand Canyon Avenue and use the left 2 lanes to turn left onto Portola Parkway. Syphon Reservoir will be on your right behind the Crean Lutheran High Athletic Complex.

6.2 Project Applicant Contact Information

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6.3 Field Delineator Contact Information

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(213) 599-4300
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Section 7

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Appendix A

Field Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Imire, OC Sampling Date: 4/24/18
 Applicant/Owner: IKWD State: _____ Sampling Point: 1
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: <u>Eastern edge of reservoir south</u>			

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum	<u>30'</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
1.	<u>Salix godingii</u>	<u>1</u>	<u>Y</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
2.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
3.					
4.					
<u>1</u> = Total Cover					
Sapling/Shrub Stratum	<u>15'</u>				Prevalence Index worksheet:
1.	<u>Schoenoplectus californicus</u>	<u>70</u>	<u>Y</u>	<u>OBL</u>	Total % Cover of: _____ Multiply by: _____
2.	<u>Baccharis salicifolia</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	OBL species <u>70</u> x 1 = <u>70</u>
3.					FACW species <u>1</u> x 2 = <u>2</u>
4.					FAC species <u>6</u> x 3 = <u>18</u>
5.					FACU species <u>29</u> x 4 = <u>116</u>
<u>75</u> = Total Cover					UPL species _____ x 5 = _____
Herb Stratum	<u>5'</u>				Column Totals: <u>106</u> (A) <u>206</u> (B)
1.	<u>Heliotropium curassavicum</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = <u>1.94</u>
2.	<u>Melilotus officinalis</u>	<u>14</u>	<u>Y</u>	<u>FACU</u>	
3.	<u>Artemisia douglasiana</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
4.					
5.					
6.					
7.					
8.					
<u>30</u> = Total Cover					
Woody Vine Stratum	_____				
1.					
2.					
_____ = Total Cover					
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____					Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks:					

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Inline, OC Sampling Date: 4/24/18
 Applicant/Owner: FRWD State: _____ Sampling Point: 2
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>SMITH</u>
Remarks: <u>wetland adjacent to water line, eastern edge of reservoir</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix goodingii</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>5</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Schoenoplectus californicus</u>	<u>95</u>	<u>Y</u>	<u>OBL</u>	
2. _____	_____	_____	_____	
<u>95</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____		
Remarks: _____				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Franklin, OC Sampling Date: 4/24/18
 Applicant/Owner: FRWD State: _____ Sampling Point: 3
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Northeastern edge of reservoir</u>	

VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30'</u>)				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
1. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet:
1. <u>Schoenoplectus californicus</u>	<u>85</u>	<u>Y</u>	<u>OBL</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Xanthium spinosum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	OBL species <u>85</u> x 1 = <u>85</u>
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species <u>15</u> x 4 = <u>60</u>
<u>90</u> = Total Cover				UPL species _____ x 5 = _____
Herb Stratum (Plot size: <u>5'</u>)				Column Totals: <u>100</u> (A) <u>145</u> (B)
1. <u>melilotus officinalis</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = <u>1.45</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>10</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____				___ Dominance Test is >50%
2. _____				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹
				___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				___ Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____ Remarks: _____				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Imire, OC Sampling Date: 4/28/18
 Applicant/Owner: FRWD State: _____ Sampling Point: 4
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): 5
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>northeastern edge of reservoir</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Rhus lobata</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Malosma laurina</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
4. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>15'</u>) <u>15</u> = Total Cover				Prevalence Index worksheet:
1. <u>Malosma laurina</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	Total % Cover of: _____ Multiply by: _____ OBL species <u>50</u> x 1 = <u>50</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species <u>40</u> x 4 = <u>160</u> UPL species <u>20</u> x 5 = <u>100</u> Column Totals: <u>110</u> (A) <u>310</u> (B)
2. _____	_____	_____	_____	Prevalence Index = B/A = <u>2.8</u>
3. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5'</u>) _____ = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. <u>Melilotus officinalis</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Xanthium spinosum</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
3. <u>Schoenoplectis californicus</u>	<u>50</u>	<u>Y</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) _____ = Total Cover				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: wetland scrub sp.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 4/2	100					loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: rock
Depth (inches): 4

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphers City/County: Imperial, OC Sampling Date: 4/24/18
 Applicant/Owner: IRWD State: _____ Sampling Point: 5
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Southwest edge of reservoir</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix gooddingii</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>) <u>25</u> = Total Cover				
1. <u>Schoenoplectus californicus</u>	<u>75</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. _____				
3. _____				
Herb Stratum (Plot size: _____) <u>75</u> = Total Cover				
1. _____				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Woody Vine Stratum (Plot size: _____) _____ = Total Cover				
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks: _____

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2								organic layer
2-6	10YR4/1	100					Silty loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input checked="" type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: hard rock
 Depth (inches): about 6

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): 2

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Imperial Sampling Date: 4/24/18
 Applicant/Owner: ICWD State: CA Sampling Point: 6
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (if no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: <u>Southwest edge of reservoir</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>salix goodenii</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC <u>3</u> (A)
2. <u>malosma laurina</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	
3. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
4. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC <u>75</u> (A/B)
Sapling/Shrub Stratum (Plot size: <u>15'</u>) <u>64.5</u> = Total Cover				
1. <u>Baccharis salicifolia</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Xanthium spinosum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5'</u>) <u>55</u> = Total Cover				
1. <u>Schoenoplectus californicus</u>	<u>80</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0' _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Heliotropium curassavicum</u>	<u>2</u>	<u>N</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) <u>82</u> = Total Cover				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover % Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks: <u>Pit between bulrush + mulefat</u>				

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/2	90	10YR 5/8	10	C	PL	clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: rock

Depth (inches): 12

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required, check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County Imperial, OC Sampling Date: 4/24/18
 Applicant/Owner: FRWD State CA Sampling Point: 7
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: <u>western edge of reservoir</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix goodenii</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size <u>15'</u>) <u>30</u> = Total Cover				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
Herb Stratum (Plot size <u>5'</u>) _____ = Total Cover				
1. <u>milifolius officinalis</u>	<u>2</u>	<u>N</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bromus madritensis</u>	<u>1</u>	<u>N</u>	<u>UPL</u>	
3. <u>Schoenoplectus californicus</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) <u>43</u> = Total Cover				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>27</u> % Cover of Biotic Crust _____				
Remarks: _____				

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 5/3	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Ermine, OC Sampling Date: 4/24/18
 Applicant/Owner: FRUD State: _____ Sampling Point: 8
 Investigator(s): MLJ TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%) _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (if no, explain in Remarks.)
 Are Vegetation _____, Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>western edge of reservoir; disturbed soils (ie, stakes in ground)</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
= Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schoenoplectus americanus</u>	<u>70</u>	<u>Y</u>	<u>OBL</u>	
2. <u>Heliotropium sp. curassavicum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
3. <u>Hirschfeldia incana</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	
4. <u>Heterotheca grandiflora</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	
5. _____				
6. _____				
7. _____				
8. _____				
<u>79</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>25</u>	% Cover of Biotic Crust _____			
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks:				

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	gray	4/100	100%				sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input checked="" type="checkbox"/> Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: rock

Depth (inches): 10

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): 2

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site Syphon City/County Imperial, CA Sampling Date: 4/24/18
 Applicant/Owner FICWD State CA Sampling Point: 9
 Investigator(s) ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%) _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Northwestern edge of reservoir</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Eucalyptus globulus</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>30</u> x 1 = <u>30</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>30</u> (A) <u>155</u> (B) Prevalence Index = B/A = <u>2.8</u>
<u>25</u> = Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Schoenoplectus californicus</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>30</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>70</u>	% Cover of Biotic Crust _____			
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks:				

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	2.5YR5/2	100					sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: Fill
 Depth (inches): 6

Hydric Soil Present? Yes No

Remarks: Fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Syphon City/County: Imire, OC Sampling Date: 4/24/18
 Applicant/Owner: IRWD State: _____ Sampling Point: 10
 Investigator(s): ML, TM Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%) _____
 Subregion (LRR): _____ Lat _____ Long _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____	
Remarks: <u>Northwestern edge of reservoir by eucalyptus woodland</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>schweplectus californicus</u>	<u>60</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>60</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>40</u>	% Cover of Biotic Crust _____			
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks:				

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	5Y 4/2	98	5YR 5/8	2	C	PL	Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Vernal Pools (F9)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ~~_____~~ N/A

Depth (inches): ~~_____~~

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B

Representative Photographs



Photograph 1-Photo facing south across open water habitat in Syphon Reservoir.



Photograph 2-Photo facing west at Data Point 3. This sample met all 3 wetland criteria to be considered a USACE wetland.



Photograph 3-Photograph facing east at Data Point 4. DP4 is an upland sample that supports hydrophytic vegetation, but lacks both hydric soils and wetland hydrology.



Photograph 4-Photograph facing west at Data Point 6. DP6 is an upland sample that supports hydrophytic vegetation and hydric soils, but lacks wetland hydrology.



Photograph 5-Photo facing north at Data Point 8. This sample met all 3 wetland criteria to be considered a USACE wetland. Note the high water table in the soil pit.



Photograph 6- Photo facing southeast at Data Point 10. This sample met all 3 wetland criteria to be considered a USACE wetland.



Photograph 7- Photo facing north from dirt access road at Ephemeral Drainage 1.



Photograph 8- Photo facing south at the head of Ephemeral Drainage 2.



Photograph 9-Photo facing north along the central drainage's riparian corridor. Note no ordinary high water mark or bed or bank features.



Photograph 10-Photo west along the abandoned Highland Canal located in the southwest portion of the study area.

APPENDIX B
Approved Jurisdictional
Determination



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, LOS ANGELES DISTRICT
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CA 90017

December 17, 2018

SUBJECT: Approved Jurisdictional Determination

Jo Ann Corey
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Dear Ms. Corey:

I am responding to your request (File No. SPL-2018-00528-MY) dated August 9, 2018, for an approved Department of the Army jurisdictional determination (JD) for the Syphon Reservoir Improvement Project (lat. 34.710547°N, long. -117.731105°W) located near the city of Irvine, Orange County, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined waters of the United States do not occur on the project site. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form(s).

The aquatic resource identified as Syphon Reservoir in project documentation you provided is an intrastate isolated water with no apparent interstate or foreign commerce connection. As such, this aquatic resource is not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Clean Water Act. Other federal, state, and local laws may apply to your activities. In particular, you may need authorization from the California State Water Resources Control Board, the California Department of Fish and Wildlife, and/or the U.S. Fish and Wildlife Service.

This letter includes an approved jurisdictional determination for the Syphon Reservoir Improvement project site. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within

B-1137

60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division, CESPDPDS-O, 2042B
1455 Market Street
San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **January 29, 2018**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at (213) 452-3411 or via e-mail at Miriam.Yemane@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

FARRAR.CORICE.J
EAN.1251907028

Digitally signed by
FARRAR.CORICE.JEAN.1251907028
DN: c=US, o=U.S. Government, ou=DoD,
ou=PKI, ou=USA,
cn=FARRAR.CORICE.JEAN.1251907028
Date: 2018.12.17 13:51:26 -08'00'

Corice Farrar.
Chief, South Coast Branch
Regulatory Division
Los Angeles District

Enclosure(s)

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Jo Ann Corey		File Number: SPL-2018-00528-MY	Date: December 17, 2018
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT:** You may accept or appeal the permit
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.
- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

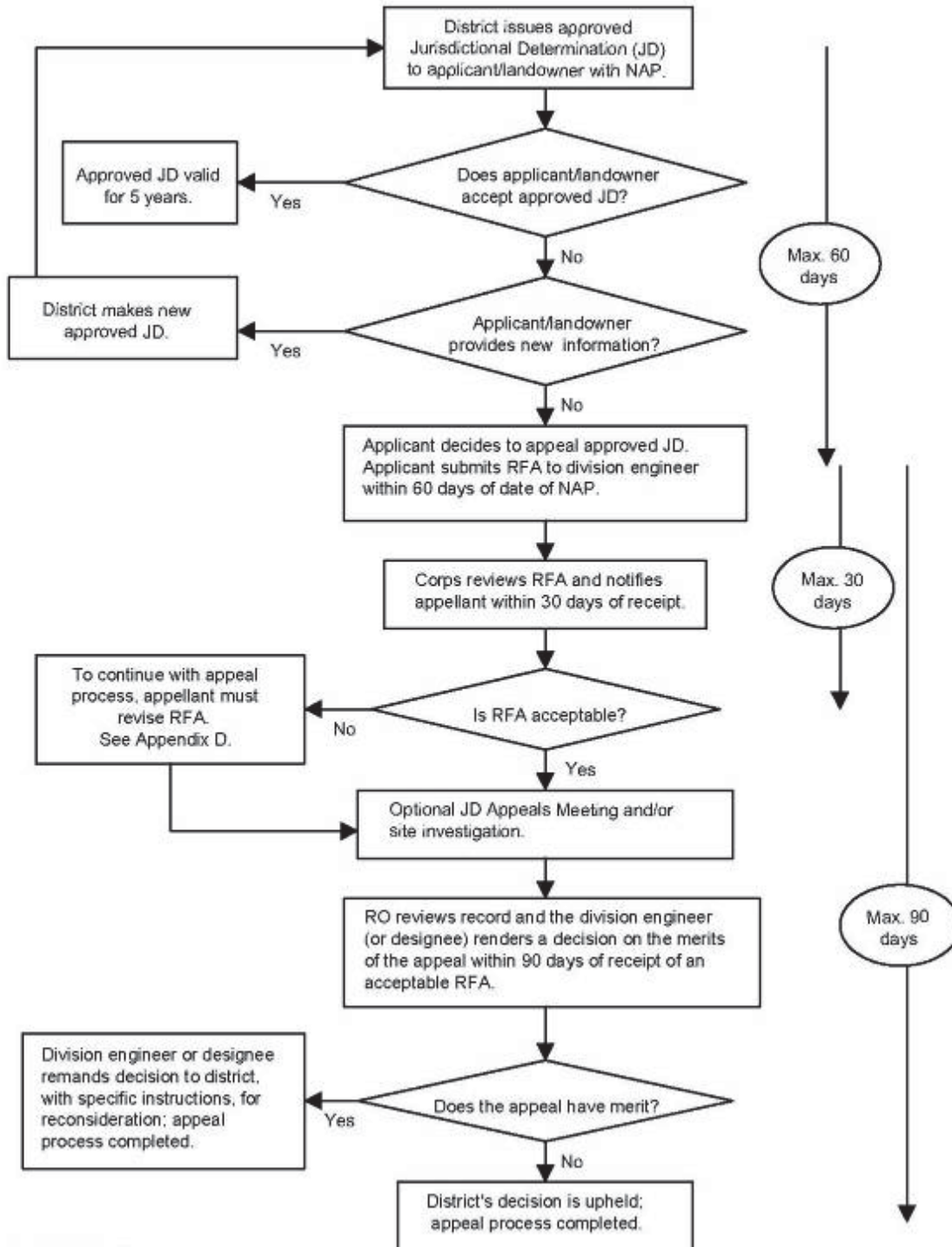
If you have questions regarding this decision and/or the appeal process you may contact:
 Miriam Yemane
 U.S. Army Corps of Engineers
 Los Angeles District
 915 Wilshire Boulevard., Suite 930
 Los Angeles, CA 90017
 Phone: (213) 452-3411
 Email: Miriam.Yemane@usace.army.mil

If you only have questions regarding the appeal process you may also contact: Thomas J. Cavanaugh
 Administrative Appeal Review Officer,
 U.S. Army Corps of Engineers
 South Pacific Division
 1455 Market Street, 2052B
 San Francisco, California 94103-1399
 Phone: (415) 503-6574
 Fax: (415) 503-6646
 Email: thomas.j.cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

<hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> Signature of appellant or agent.	Date:	Telephone number:
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Administrative Appeal Process for Approved Jurisdictional Determinations



Appendix C

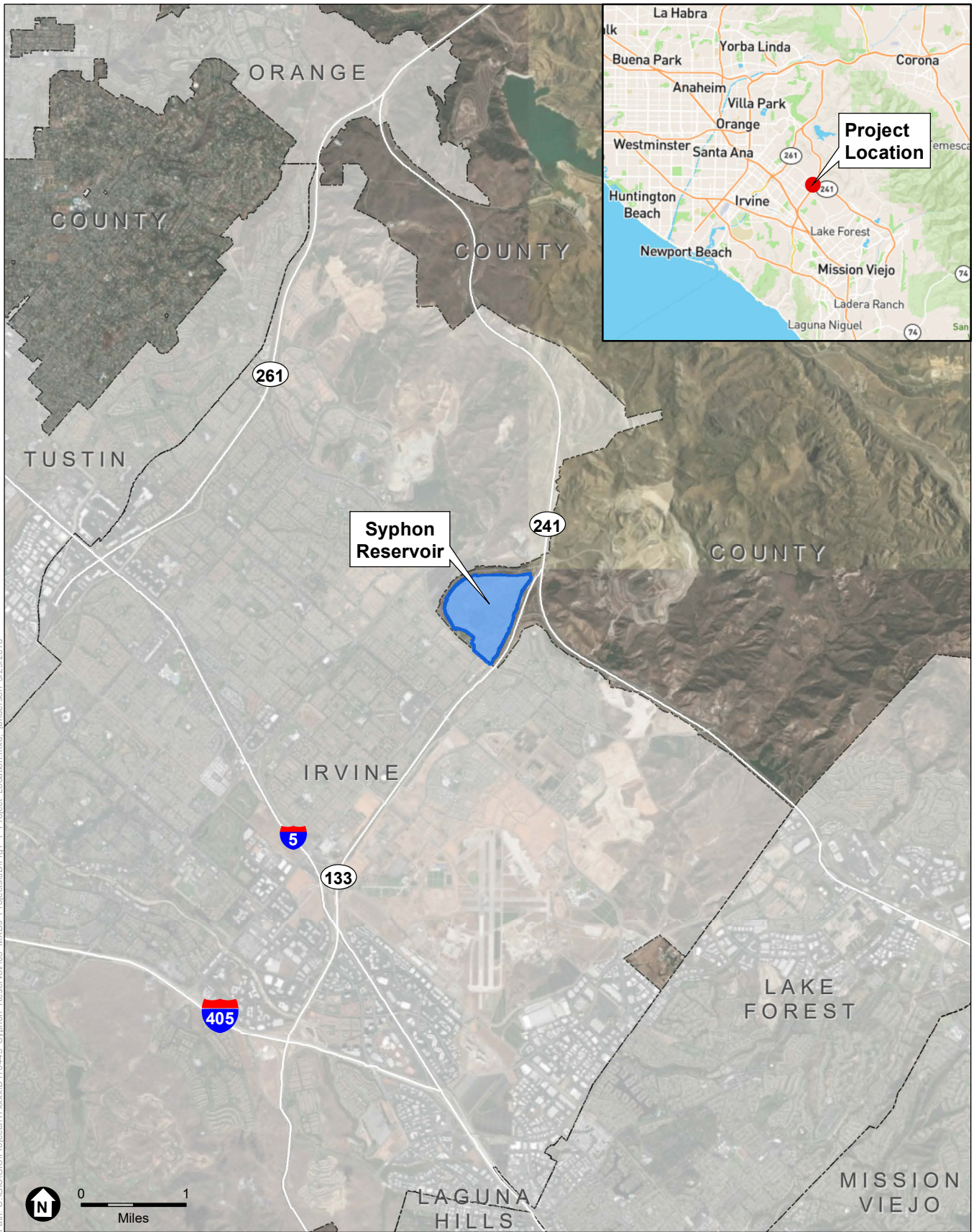
§ 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA*. The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal*. The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable*. An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

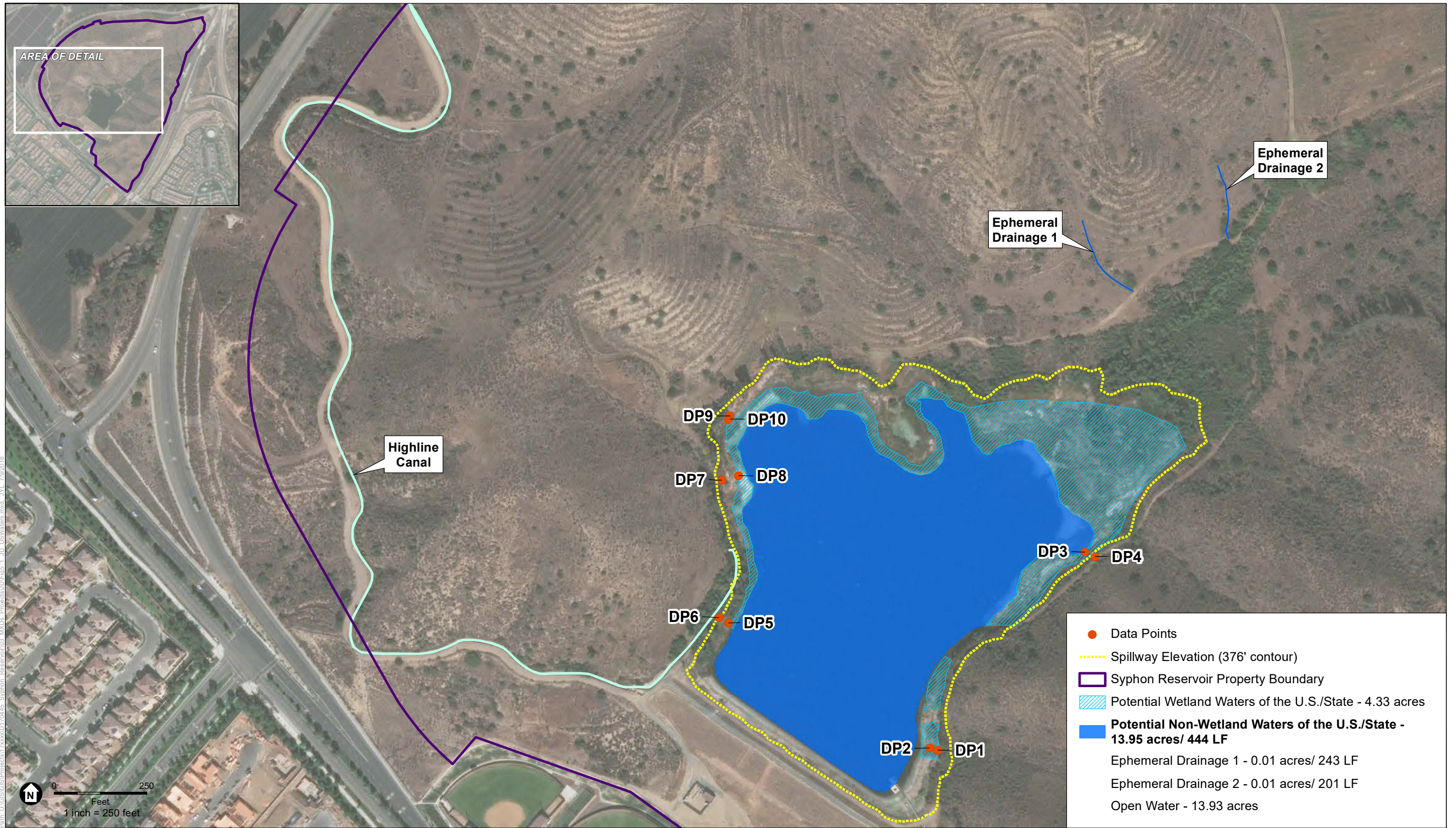
- (1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;
- (2) Any site-specific matter that has been the subject of a final decision of the Federal courts;
- (3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;
- (4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j)));
- (5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;
- (6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;
- (7) A previously approved JD that has been superseded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;
- (8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;
- (9) A preliminary JD; or
- (10) A JD associated with unauthorized activities except as provided in §331.11.



SOURCE: ESRI, 2016; OC LAFCO, 2018

IRWD Syphon Reservoir

Figure 1-1
Project Location

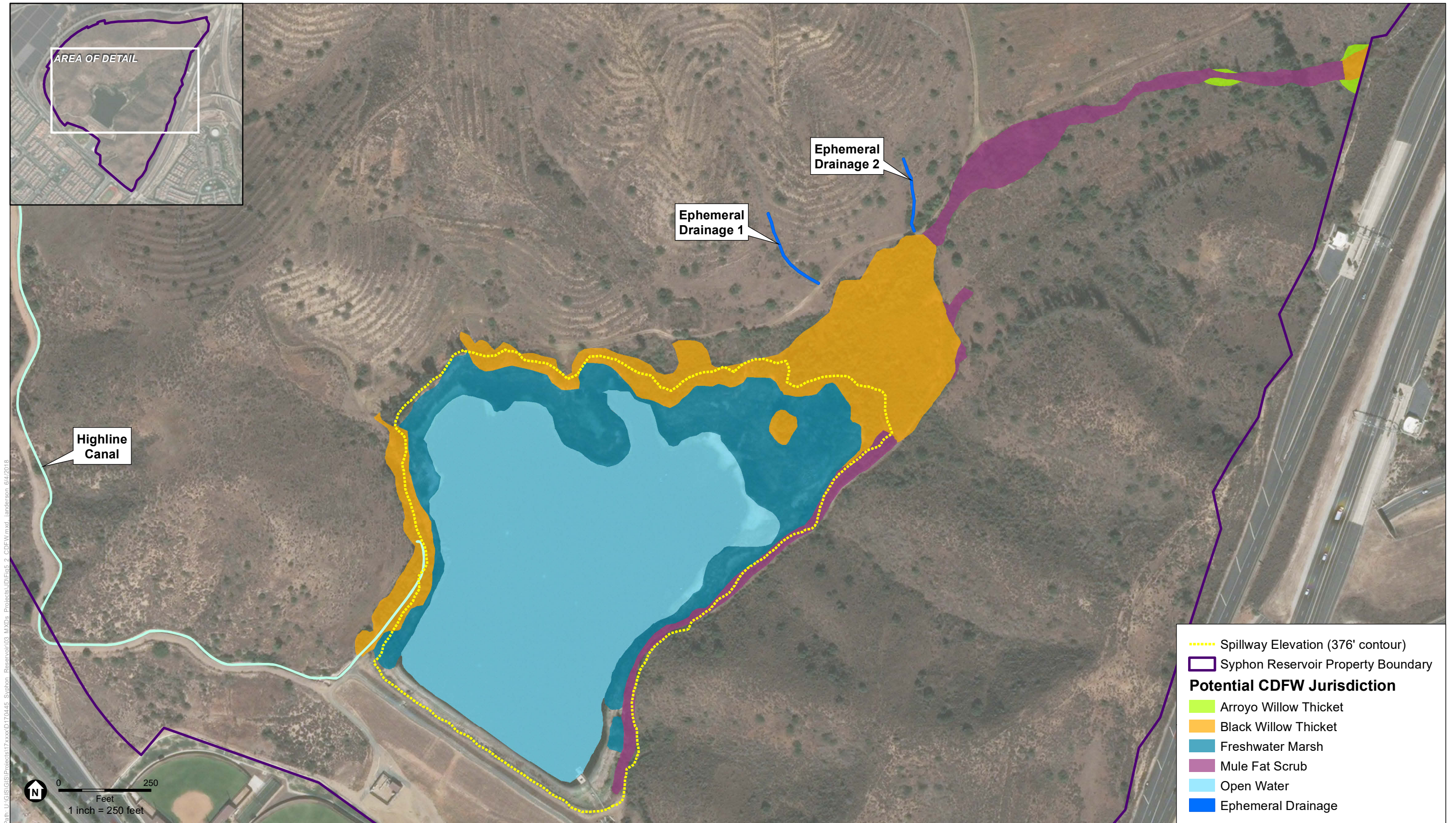


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SOURCE: ESRI, 2016

IRWD Syphon Reservoir

Figure 3
Jurisdictional Delineation Map
Potential Waters of the U.S./State



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SOURCE: ESRI, 2016

IRWD Syphon Reservoir

Figure 4

Jurisdictional Delineation Map – Potential CDFW Jurisdiction



APPENDIX C
Plant and Wildlife Species
Compendia

Appendix C: Plant and Wildlife Species Compendia

Scientific Name	Common Name	Special Status
EUDICOTS		
Adoxaceae - Muskroot Family		
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	blue elderberry	
Anacardiaceae - Sumac or Cashew Family		
<i>Malosma laurina</i>	laurel sumac	
<i>Rhus integrifolia</i>	lemonadeberry	
<i>Schinus molle</i>	Peruvian pepper	
Apocynaceae - Dogbane Family		
<i>Funastrum cynanchoides</i> var. <i>hartwegii</i>	climbing milkweed	
* <i>Nerium oleander</i>	oleander	
Asteraceae - Sunflower Family		
<i>Anaphalis margaritacea</i>	western pearly everlasting	
<i>Artemisia californica</i>	California sagebrush	
<i>Baccharis pilularis</i>	coyote brush	
<i>Baccharis salicifolia</i>	mule fat	
<i>Bahiopsis laciniata</i>	San Diego County viguiera	CRPR 4.3
* <i>Centaurea melitensis</i>	totalote	
* <i>Cynara cardunculus</i>	cardoan	
<i>Deinandra fasciculata</i>	fascicled tarweed	
<i>Eclipta prostrata</i>	false daisy	
<i>Encelia californica</i>	California brittlebush	
<i>Encelia farinosa</i>	brittlebush	
<i>Ericameria pinifolia</i>	pine-bush	
<i>Erigeron canadensis</i>	horseweed	
<i>Eriophyllum confertiflorum</i>	golden yarrow	
<i>Gutierrezia californica</i>	California matchweed	
* <i>Helminthotheca echioides</i>	bristly ox-tongue	
<i>Heterotheca grandiflora</i>	telegraph weed	
<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies' goldenbush	
* <i>Lactuca serriola</i>	prickly lettuce	
* <i>Oncosiphon piluliferum</i>	stinknet	
<i>Osmadenia tenella</i>	false rosinweed	

Scientific Name	Common Name	Special Status
<i>Pseudognaphalium californicum</i>	Ladies' tobacco	
* <i>Pulicaria paludosa</i>	Spanish false fleabane	
* <i>Sonchus asper</i>	spiny sow thistle	
* <i>Sonchus oleraceus</i>	common sow thistle	
<i>Stebbinsoseris heterocarpa</i>	grassland silverpuffs	
<i>Xanthium strumarium</i>	cocklebur	
Boraginaceae - Borage Family		
<i>Amsinckia</i> sp.	fiddleneck	
<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	seaside heliotrope, alkali heliotrope	
Brassicaceae - Mustard Family		
* <i>Brassica nigra</i>	black mustard	
* <i>Hirschfeldia incana</i>	short-podded mustard	
Cactaceae - Cactus Family		
<i>Cylindropuntia prolifera</i>	coast cholla	
<i>Opuntia ficus-indica</i>	tuna cactus	
<i>Opuntia littoralis</i>	coastal prickly pear	
<i>Opuntia occidentalis</i>	western prickly pear	
<i>Opuntia vaseyi</i>	Vasey's prickly pear	
Chenopodiaceae - Goosefoot Family		
* <i>Atriplex semibaccata</i>	Australian saltbush	
* <i>Salsola tragus</i>	Russian thistle	
Cleomaceae - Spiderflower Family		
<i>Peritoma arborea</i>	bladderpod	
Convolvulaceae - Morning-glory Family		
<i>Calystegia macrostegia</i>	Island false bindweed	
Crassulaceae - Stonecrop Family		
<i>Dudleya lanceolata</i>	lance-leaved dudleya	
Cucurbitaceae - Gourd Family		
<i>Cucurbita foetidissima</i>	calabazilla	
<i>Marah macrocarpa</i>	chilicothe	
Euphorbiaceae - Spurge Family		
<i>Euphorbia albomarginata</i>	rattlesnake weed	
* <i>Euphorbia maculata</i>	spotted spurge	
<i>Croton setigerus</i>	turkey-mullein	
* <i>Ricinus communis</i>	castor bean	

Scientific Name	Common Name	Special Status
Fabaceae - Legume Family		
<i>Acmispon glaber</i>	deerweed	
<i>Lupinus sp.</i>	lupine	
* <i>Melilotus officinalis</i>	yellow sweetclover	
Fagaceae - Oak Family		
<i>Quercus agrifolia</i>	coast live oak	
Geraniaceae - Geranium Family		
* <i>Erodium cicutarium</i>	red-stemmed filaree	
Lamiaceae - Mint Family		
* <i>Marrubium vulgare</i>	horehound	
<i>Salvia apiana</i>	white sage	
<i>Salvia mellifera</i>	black sage	
Malvaceae - Mallow Family		
<i>Malacothamnus fasciculatus</i>	chaparral mallow	
* <i>Malva parviflora</i>	cheeseweed	
Myrtaceae - Myrtle Family		
* <i>Eucalyptus camaldulensis</i>	red gum	
Nyctaginaceae - Four O'clock Family		
<i>Mirabilis laevis</i>	wishbone bush	
Onagraceae - Evening Primrose Family		
<i>Ludwigia repens</i>	creeping primrose-willow	
Plantaginaceae - Plantain Family		
<i>Plantago erecta</i>	California plantain	
Polygonaceae - Buckwheat Family		
<i>Eriogonum fasciculatum</i>	California buckwheat	
* <i>Rumex crispus</i>	curly dock	
Portulacaceae - Purslane Family		
* <i>Portulaca oleracea</i>	purslane	
Rosaceae - Rose Family		
<i>Heteromeles arbutifolia</i>	toyon	
Rutaceae - Rue Family		
<i>Heteromeles arbutifolia</i>	wilga	
Salicaceae - Willow Family		
<i>Salix gooddingii</i>	Goodding's black willow	
<i>Salix lasiolepis</i>	arroyo willow	

Scientific Name	Common Name	Special Status
Saxifragaceae - Saxifrage Family		
<i>Jepsonia parryi</i>	Parry's jepsonia	
Scrophulariaceae - Figwort Family		
<i>Penstemon spectabilis</i>	showy penstemon	
Solanaceae - Nightshade Family		
<i>Datura wrightii</i>	sacred thorn-apple	
* <i>Nicotiana glauca</i>	tree tobacco	
<i>Solanum americanum</i>	American black nightshade	
<i>Solanum douglasii</i>	greenspot nightshade	
* <i>Solanum nigrum</i>	black nightshade	
Tamaricaceae - Tamarisk Family		
* <i>Tamarix ramosissima</i>	tamarisk	
Ulmaceae - Elm Family		
<i>Ulmus parvifolia</i>	Chinese elm	
Verbenaceae - Vervain Family		
<i>Verbena lasiostachys</i>	western vervain	
MONOCOTS		
Agavaceae - Century Plant Family		
<i>Hesperoyucca whipplei</i>	chaparral yucca	
<i>Yucca gigantea</i>	giant yucca	
Arecaceae - Palm Family		
* <i>Phoenix canariensis</i>	Canary Island palm	
* <i>Washingtonia robusta</i>	Mexican fan palm	
Cyperaceae - Sedge Family		
* <i>Cyperus involucreatus</i>	umbrella plant	
<i>Schoenoplectus californicus</i>	California bulrush	
Liliaceae - Lily Family		
<i>Bloomeria crocea</i>	common goldenstar	
<i>Calochortus catalinae</i>	Catalina mariposa lily	CRPR 4.2
<i>Calochortus splendens</i>	splendid mariposa lily	
<i>Chlorogalum pomeridianum</i>	soap plant	
Poaceae - Grass Family		
* <i>Avena barbata</i>	slender oat	
* <i>Bromus diandrus</i>	ripgut brome	
* <i>Bromus hordeaceus</i>	soft chess	

Scientific Name	Common Name	Special Status
* <i>Bromus madritensis</i>	compact brome	
<i>Distichlis spicata</i>	salt grass	
<i>Elymus condensatus</i>	giant wild rye	
* <i>Festuca myuros</i>	rattail sixweeks grass	
* <i>Hordeum murinum</i>	wall barley	
<i>Leptochloa fusca ssp. uninervia</i>	Mexican sprangletop	
<i>Melica imperfecta</i>	little California melica	
* <i>Pennisetum setaceum</i>	fountain grass	
* <i>Polypogon monspeliensis</i>	rabbitfoot grass	
<i>Schismus barbatus</i>	Mediterranean grass	
<i>Stipa lepida</i>	foothill needlegrass	
<i>Stipa pulchra</i>	purple needlegrass	
Typhaceae - Cattail Family		
<i>Typha sp.</i>	cattail	

Legend

*= Non-native or invasive species

Special Status:

Federal:

FE = Endangered

FT = Threatened

State:

SE = Endangered

ST =Threatened

California Rare Plant Rank:

1A: Plants presumed extirpated in California and either rare or extinct elsewhere

1B: Plants rare, threatened, or endangered in California and elsewhere

2A: Plants presumed extirpated in California but common elsewhere

2B: Plants rare, threatened, or endangered in California but more common elsewhere

3: Review List: Plants about which more information is needed

4: Watch List: Plants of limited distribution

Threat Rank:

.1 - Seriously endangered in California

.2 – Fairly endangered in California

Scientific Name	Common Name	Special Status
VERTEBRATES		
Reptiles		
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	
<i>Sceloporus occidentalis</i>	western fence lizard	
<i>Uta stansburiana</i>	side-blotched lizard	
Birds		
<i>Oxyura jamaicensis</i>	ruddy duck	
<i>Phalacrocorax auritus</i>	double-crested cormorant	
<i>Ardea alba</i>	great egret	
<i>Egretta thula</i>	snowy egret	
<i>Cathartes aura</i>	turkey vulture	
<i>Pandion haliaetus</i>	osprey	
<i>Buteo jamaicensis</i>	red-tailed hawk	
<i>Fulica americana</i>	American coot	
<i>Calidris minutilla</i>	least sandpiper	
<i>Hydroprogne caspia</i>	Caspian tern	
<i>Sterna forsteri</i>	Forster's tern	
<i>Zenaida macroura</i>	mourning dove	
<i>Chordeiles acutipennis</i>	lesser nighthawk	
<i>Calypte anna</i>	Anna's hummingbird	
<i>Selasphorus sasin</i>	Allen's hummingbird	
<i>Sayornis nigricans</i>	black phoebe	
<i>Sayornis saya</i>	Say's phoebe	
<i>Tyrannus vociferans</i>	Cassin's kingbird	
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE
<i>Corvus corax</i>	common raven	
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	
<i>Petrochelidon pyrrhonota</i>	cliff swallow	
<i>Hirundo rustica</i>	barn swallow	
<i>Psaltirparus minimus</i>	bushy tit	
<i>Thryomanes bewickii</i>	Bewick's wren	
<i>Poliioptila californica</i>	California gnatcatcher	FT, SC
<i>Chamaea fasciata</i>	wrentit	

Scientific Name	Common Name	Special Status
<i>Dendroica petechia</i>	yellow warbler	SC
<i>Dendroica townsendi</i>	Townsend's warbler	
<i>Wilsonia pusilla</i>	Wilson's warbler	
<i>Melospiza melodia</i>	song sparrow	
<i>Quiscalus mexicanus</i>	great-tailed grackle	
<i>Icterus cucullatus</i>	hooded oriole	
<i>Carpodacus mexicanus</i>	house finch	
<i>Carduelis psaltria</i>	lesser goldfinch	
MAMMALS		
<i>Canis latrans</i>	coyote	
<i>Sylvilagus audubonii</i>	desert cottontail	

Legend

*= Non-native or invasive species

Special Status:

Federal:

FE = Endangered

FT = Threatened

State:

SE = Endangered

ST =Threatened

SC = California Species of Special Concern

FP = California Fully Protected Species

APPENDIX D

Special-Status Plant and Wildlife Species with Potential to Occur Within the Study Area

SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
chaparral sand- verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	-/1B.1/Not Covered	Found in sandy areas, chaparral, desert dunes, and coastal scrub habitats from 75 – 1600 m elevation. Blooming period is January to September.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
Munz's onion (<i>Allium munzii</i>)	FE/ST,1B.1/Not Covered	Perennial herb found in chaparral, foothill woodlands, pinyon-juniper woodlands, and valley grasslands. Grassy openings in coastal sage scrub. Blooming period is March to May, and this species is found at elevation between 300 and 900m.	Unlikely. Although some suitable habitat is present on site, the study area is outside of the known elevation range for this species and suitable soils are not present on-site or within the immediate vicinity. No records or collections of this species has been made within Orange County.
aphanisma (<i>Aphanisma blitodes</i>)	-/1B.2/Not Covered	Annual herb found in coastal bluff scrub, coastal dunes, and coastal scrub; sandy soils. Blooming period is March to June and found at elevations from 1 - 305 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.
Braunton's milk-vetch (<i>Astragalus brauntonii</i>)	-/1B.1/Not Covered	A perennial herb found within disturbed areas within chaparral, valley grassland, coastal sage scrub, closed-cone pine forest habitats. Blooming period is January to August. Occurs at elevations less than 650m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
Coulter's saltbush (<i>Atriplex coulteri</i>)	-/1B.2/Not Covered	Found on alkaline or clay substrate within coastal bluff scrub, coastal dune, coastal scrub and valley and foothill grassland habitats. Blooming period is March to October. Occurs at elevations from 3 - 460 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
South Coast saltscale (<i>Atriplex pacifica</i>)	-/1B.2/Not Covered	Found within chenopod scrub, coastal bluff and coastal scrub habitats. Blooming period is March to October. Occurs at elevations up to 140 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
Parish's brittscale (<i>Atriplex parishii</i>)	-/1B.1/Not Covered	Found in alkali meadows, vernal pools, playas and chenopod scrub. Associated with alkaline soils. Blooming period is June to October. Occurs at 25 – 1900 m elevation.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. This species has not been collected in Orange County since 1881.
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	-/1B.2/Not Covered	Found on alkaline substrate within coastal bluff scrub and coastal scrub habitats. Blooming period is from April to October and occurs at elevations from 10 - 200 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.
Malibu baccharis (<i>Baccharis malibuensis</i>)	-/1B.1/Not Covered	A shrub found within grassy openings of chaparral habitats. Blooming period is in August and occurs at elevations between 50 to 300m.	Low. Although some suitable habitat is present on site, suitable sedimentary substrates are absent within the study area. This perennial species was not observed during special-status plant surveys conducted in 2018.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	-/1B.1/Not Covered	A perennial herb found within grasslands and vernal pools in valley grassland, foothill woodland, coastal sage scrub, freshwater wetlands, and wetland-riparian habitats. Blooming period is March to June. Occurs at elevations between 25 to 860m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
Catalina mariposa lily (<i>Calochortus catalinae</i>)	-/4.2/Covered	Occurs in heavy soils in chaparral, cismontane woodland, coastal scrub and valley and foothill grassland below 700 m. When occurring on slopes, it is usually associated with coastal scrub vegetation. Blooming period is February to June.	Present. Dried fruits and stems of a mariposa lily species (<i>Calochortus</i> sp.) were observed on-site during special-status plant surveys conducted in spring 2018. Although no live specimens were observed, it was presumed to be Catalina mariposa lily based on fruit shape. Approximately 83 individuals (i.e., 13 individual dried lilies and a patch of approximately 70 dried lilies) were observed on-site. In addition, suitable habitat is present on-site, and collections of this species made within 1.5 miles of study area. This species was also observed on-site during previous surveys by Harmsworth Associates in 1998 (Dudek 2012).
intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	-/1B.2/Conditionally Covered	Found in coastal scrub, chaparral, and valley and foothill grassland on dry, rocky open slopes and rock outcrops. Blooming period is May to July, and this species occurs at elevations of 120 - 850 m.	Moderate. Suitable habitat is present on-site or within the immediate vicinity. Collections of this species made within 1.5 miles north of study area. This species was not observed during special-status plant surveys conducted in 2018.
southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>)	-/1B.1/Not Covered	Found in the margins of marshes and swamps, vernal mesic valley and foothill grasslands, and vernal pool habitats. This species is commonly found in disturbed areas, in relatively close proximity to a seasonal or perennial water source. Blooming period is May to November; and this species occurs at elevations up to 425 m.	Unlikely. Suitable alkali/vernal habitat and soils are not present on-site or within the immediate vicinity.
smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	-/1B.1/Not Covered	Annual herb found within open, poorly drained flats, depressions, waterway banks and beds, grassland, and disturbed sites in shadscale scrub, alkali sink, and valley grassland habitats. Blooming period is April to September, and this species occurs at elevations between 90 – 500 m.	Unlikely. Suitable alkali/vernal habitat and soils are not present on-site or within the immediate vicinity.
small-flowered mountain mahogany (<i>Cercocarpus minutiflorus</i>)	-/-/Covered	Found in chaparral, at elevations of less than 1400 m. Blooming period is March to May.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. Project site is north of the recorded distribution.
Orcutt's pincushion (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	-/1B.1/Not Covered	Found in coastal bluff scrub and coastal dunes, on sandy sites at elevations of 3 -100 m. Blooming period is January to August.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
salt marsh bird's-beak (<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>)	FE/SE,1B.2/Not Covered	Found within coastal dune, salt marsh, and swamp habitats, at elevations up to 1400 m. Blooming period is May to October.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.
San Fernando Valley spineflower (<i>Chorizanthe parryi</i> var. <i>fernandina</i>)	FC/SE,1B.1/Not Covered	Annual herb found within sandy coastal scrub and valley and foothill grassland. Blooming period is April to July; this species occurs at 150 – 1220 m elevation.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. Single collection of species in Orange County is 100 years old and is likely outside of geographic range.
long-spined spineflower (<i>Chorizanthe polygonooides</i> var. <i>longispina</i>)	-/1B.2/Not Covered	Annual herb found in sandy meadows within chaparral, valley grassland, and coastal sage scrub habitats. Blooming period is April to June within elevations between 30 and 1500 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
white-bracted spineflower (<i>Chorizanthe xanti</i> var. <i>leucotheca</i>)	-/1B.2/Not Covered	Annual herb found within sandy or gravelly soils in creosote bush scrub or pinyon-juniper woodland habitats. Blooming period is April to June, and this species occurs at elevations of 400 – 1300 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. Elevation constraints further limit suitability.
San Miguel savory (<i>Clinopodium chandleri</i>)	-/1B.2/Not Covered	Perennial herb found in riparian habitats or rocky slopes of chaparral, foothill woodland, coastal sage scrub, and valley grassland communities. Blooming period in March to July, and this species occurs at elevations less than 1100 m.	Low. Low quality habitat is present on- site or within the immediate vicinity. No recent collections made within 5 miles of project area. This species was not observed during special-status plant surveys conducted in 2018.
summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	-/1B.2/Not Covered	Perennial evergreen shrub found in chaparral and cismontane woodland. Blooming period is April to June, and this species is found at elevations of 30 – 790 m.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. No recent collections made within 5 miles of project area.
slender-horned spineflower (<i>Dodecahema leptoceras</i>)	FE/SE,1B.1/Not Covered	Annual herb found in sandy or gravelly soils of alluvial fans within chaparral and coastal sage scrub communities. Blooming period is May to June, and this species occurs at elevations between 200 – 700 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity, and the study area is outside of known distribution and elevation range for this species.
Santa Monica Mountains dudleya (<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>)	FT/1B.1/Covered	Perennial herb found in shaded rocky outcrops and slopes within chaparral and coastal sage scrub communities. Blooming period is March to June, and this species occurs at elevations between 150 and 500m.	Unlikely. No suitable habitat is present on-site or within the immediate vicinity.
many-stemmed dudleya (<i>Dudleya multicaulis</i>)	-/1B.2/Not Covered	Found on clay substrate within chaparral, coastal scrub and valley and grassland habitats. Blooming period is April to July; this species occurs at elevations from 15 - 790 m.	Unlikely. Suitable habitat and heavy clay soils are not present on-site or within the immediate vicinity. Nearest occurrence was documented 0.8 mile north of the study area in 1989 in CNDDB.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
Laguna Beach dudleya (<i>Dudleya stolonifera</i>)	FT/ST,1B.1/Covered	Found on rocky substrate within chaparral, cismontane woodland, coastal scrub and valley and grassland habitats at elevations from 10 to 260 m. Blooming period is May to July.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
sticky dudleya (<i>Dudleya viscida</i>)	-/1B.2/Not Covered	Perennial herb found on bluffs and rocky cliffs on coastal habitat within chaparral and coastal sage scrub communities. Blooming period is May to June and occurs at elevations less than 450 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	FE/SE,1B.1/Not Covered	Perennial herb found in chaparral or coastal scrub habitats (alluvial fans); sandy or gravelly soil. Blooming period is April to September; this species occurs at elevations from 90 – 610 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. Plants generally restricted to Santa Ana River.
cliff spurge (<i>Euphorbia misera</i>)	-/2B.2/Not Covered	Perennial shrub found in coastal bluff scrub, coastal scrub, and Mojavean desert scrub; rocky soils. Blooming period is December to October, and this species occurs at elevations of 10 – 500 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity. The project site is not a coastal setting.
Los Angeles sunflower (<i>Helianthus nuttallii</i> var. <i>parishii</i>)	-/1A/Not Covered	Perennial rhizomatous herb occurs in coastal salt and freshwater marshes and swamps. Blooming period is August to October, and this species occurs at 10 – 1675 m elevation.	Low. Very limited habitat is present on-site or within the immediate vicinity. Species has not been observed since 1933 and is likely extinct. This species was not observed during special-status plant surveys conducted in 2018.
Tecate cypress (<i>Hesperocyparis forbesii</i>)	-/1B.1/Covered	Small perennial evergreen tree found in chaparral and closed-cone coniferous forest; clay, gabbroic or metavolcanic, mostly in Santa Ana Mountains and south to Baja California. This species occurs from 80 – 1500 m elevation.	Low. Marginally suitable habitat is present on-site. This species is recorded about 6 miles north of the project site but was not observed during special-status plant surveys conducted in 2018.
mesa horkelia (<i>Horkelia cuneata</i> ssp. <i>puberula</i>)	-/1B.1/Not Covered	Perennial herb found in chaparral, cismontane woodland and coastal scrub habitats; found in gravelly or sandy sites from 70 – 810 m elevation. Blooming period is February to September.	Low. Low quality habitat is present on-site but nearest observations greater than 5 miles from study area. This species was not observed during special-status plant surveys conducted in 2018.
California satintail (<i>Imperata brevifolia</i>)	-/2B.1/Not Covered	Perennial grass found in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), or riparian scrub below 500 m elevation. Blooming period is September to May.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	-/1B.2/Not Covered	Perennial shrub that occurs in chaparral and coastal scrub; sandy soils (often within disturbed areas). Blooming period is April to November, and this species occurs at 10 – 135 m elevation.	Unlikely. Low quality habitat is present on-site but species does not grow far from the coast. The nearest observations are in Newport Beach, greater than 5 miles from project area.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	-/1B.1/Not Covered	Found in wetland habitats. Microhabitats include playas and vernal pools at elevations up to 1220 m. Blooming period is February to June.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
heart-leaved pitcher sage (<i>Lepechinia cardiophylla</i>)	-/1B.2/Covered	Shrub found in chaparral, foothill woodland, and closed-cone pine forest communities. Blooming period is April to July, and this species occurs at elevations between 600 – 1200 m.	Unlikely. Low quality habitat is present on-site but nearest observations greater than 5 miles from study area. The study area is outside of the known elevation range for this species.
intermediate monardella (<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>)	-/1B.3/Not Covered	Perennial herb found on dry slopes of chaparral, oak woodland, and occasionally conifer forest at elevations between 200 and 1250m. Blooming period in June to September.	Unlikely. No suitable habitat is present on-site or within the immediate vicinity, and the study area is outside of the known elevation range for this species.
felt-leaved monardella (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	-/1B.2/Not Covered	Perennial rhizomatous herb found on rocky or granitic slopes in chaparral and foothill woodland communities. Blooming period is June to August, and this species occurs at elevations of 300 – 1500 m.	Unlikely. No suitable habitat is present on-site or within the immediate vicinity, and the study area is outside of the known elevation range for this species.
Hall's monardella (<i>Monardella macrantha</i> ssp. <i>hallii</i>)	-/1B.3/Not Covered	Perennial rhizomatous herb found in chaparral, foothill woodland communities. Blooming period is June to August, and this species occurs at elevations of 300 – 1500 m.	Unlikely. No suitable habitat is present on-site or within the immediate vicinity, and the study area is outside of the known elevation range for this species.
mud nama (<i>Nama stenocarpum</i>)	-/2B.2/Not Covered	Found along freshwater lake margins, riverbanks, marshes and swamps. Blooming period is January to July; this species occurs at elevations from 5 - 500 m.	Low. Marginal habitat is present on-site or within the immediate vicinity. Collected within adjacent Lambert reservoir. This species was not observed during special-status plant surveys conducted in 2018.
Gambel's water cress (<i>Nasturtium gambelii</i>)	FE/ST,1B.1/Not Covered	Perennial rhizomatous herb found in marshes and swamps (freshwater or brackish). Blooming period is April to October; this species is found at elevations of 5 - 330 m.	Low. Very limited habitat is present on-site or within the immediate vicinity. Species likely extirpated from county. This species was not observed during special-status plant surveys conducted in 2018.
prostrate navarretia (<i>Navarretia prostrata</i>)	-/1B.1/Not Covered	Annual herb associated with coastal scrub, valley and foothill grassland, vernal pools from 15 – 1210 m elevation. Blooming period is from April to July.	Unlikely. Not expected due to lack of suitable vernal pool habitat on-site or within the immediate vicinity.
chaparral nolina (<i>Nolina cismontana</i>)	-/1B.2/Not Covered	Shrub found in dry chaparral of coastal mountains. Blooming period lasts from May to July, and this species occurs from 200 - 1200 m elevation.	Low. Marginal habitat is present on-site or within the immediate vicinity. Nearest observation of species 4 miles to east in Foothill Ranch area. This species was not observed during special-status plant surveys conducted in 2018.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
California beardtongue (<i>Penstemon californicus</i>)	-/1B.2/Not Covered	Perennial herb found in sandy soils within chaparral, yellow pine forest and pinyon-juniper woodland communities located in elevations between 1200 and 2300 m. Blooming period is May to June.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity, and the study area is outside of known elevation range for this species.
Allen's pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>allenii</i>)	-/1B.1/Not Covered	Annual herb found in coastal scrub openings and valley and foothill grasslands; often on clay. Blooming period is March to June; this species occurs at 75 – 520 m elevation.	Low. Low quality habitat is present on-site or within the immediate vicinity; suitable soils not present. This species was not observed during special-status plant surveys conducted in 2018.
Santiago Peak phacelia (<i>Phacelia keckii</i>)	-/1B.3/Not Covered	Annual herb found in open areas of chaparral and closed-cone pine forest. Blooming period is May to September, and this species grows at elevations of 500 – 1600 m.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity and nearest observations greater than 5 miles from study area. The study area is outside of the known elevation range for this species.
white rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	-/2B.2/Not Covered	Perennial herb found in sandy or gravelly benches, dry stream bottoms, and canyon bottoms within coastal sage scrub and chaparral communities. Blooming period is August to November, and this species occurs at elevations below 500 m.	Low. Limited, low quality habitat is present on-site or within the immediate vicinity. This species was not observed during special-status plant surveys conducted in 2018.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	-/1B.1/Covered	Perennial evergreen shrub found in close-cone coniferous forest, chaparral, and coastal sage scrub; sandy, clay loam soil. Blooming period is February to August, and this species occurs at 15 – 400 m elevation.	Low. Limited, low quality habitat is present on-site or within the immediate vicinity. This species was not observed during special-status plant surveys conducted in 2018.
Coulter's matilija poppy (<i>Romneya coulteri</i>)	-/4.2/Covered	Perennial rhizomatous herb found near dry washes and canyons in chaparral and coastal sage scrub communities. This species occurs at elevations under 1200 m; blooming period is March to July.	Low. Marginal habitat is present on-site or within the immediate vicinity. This species was not observed during special-status plant surveys conducted in 2018.
chaparral ragwort (<i>Senecio aphanactis</i>)	-/2B.2/Not Covered	Annual herb found in chaparral, cismontane woodland, and coastal scrub; soil is sometimes alkaline. Blooming period is January to April, and this species occurs at 15 – 800 m elevation.	Low. Limited, low quality habitat is present on-site or within the immediate vicinity; heavy clay soils largely absent. This species was not observed during special-status plant surveys conducted in 2018.
Salt Spring checkerbloom (<i>Sidalcea neomexicana</i>)	-/2B.2/Not Covered	Perennial herb found in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; alkaline, mesic soils. Blooming period is March to June, and this species occurs at 15 - 1530 m elevation.	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.
estuary seablite (<i>Suaeda esteroa</i>)	-/1B.2/Not Covered	Perennial herb found in coastal salt marshes and swamps with tidal flows. Blooming period is May to January; this species occurs at sea level (up to 5 m elevation).	Unlikely. Suitable habitat and soils are not present on-site or within the immediate vicinity.

Species	Status ¹ Federal/State, CRPR/County	Habitat Requirements	Potential to Occur
San Bernardino aster (<i>Symphyotrichum defoliatum</i>)	-/1B.2/Not Covered	Perennial rhizomatous herb found near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland. This species occurs from 2 – 2040 m elevation; blooming period is July to November.	Low. Marginally suitable habitat and moist soils are present on-site. This species was not observed during special-status plant surveys conducted in 2018.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	-/1B.2/Not Covered	Shrub found on dry slopes in chaparral and coastal sage scrub communities. Blooming period is April to May, and this species occurs in elevations less than 1000 m.	Low. Limited, low quality habitat is present on-site or within the immediate vicinity. Single county record observed in 1948 with poor locational accuracy. At the northern limit of its recorded distribution. This species was not observed during special-status plant surveys conducted in 2018.
big-leaved crownbeard (<i>Verbesina dissita</i>)	-/1B.2/Not Covered	Found within chaparral and coastal scrub habitats. Blooming period is April to July, and this species occurs at elevations from 145 - 205 m.	Unlikely. Limited, low quality habitat is present on-site or within the immediate vicinity but project site is outside the recorded distribution for this species. Species records restricted to coastal bluffs near Laguna Niguel.
San Diego County viguiera (<i>Bahiopsis laciniata</i>)	-/4.3/Not Covered	Perennial shrub found on chaparral and coastal scrub. Blooming period is February to June (August), and this species occurs at elevations from 60 - 750 m.	Present. One individual was observed on-site in the easternmost portion of the study area.

¹ Description of status codes:

FE = Listed as endangered under the FESA

FT = Listed as threatened under the FESA

SE = Listed as endangered under the CESA

ST = Listed as threatened under the CESA

CRPR = California Rare Plant Rank (CNPS 2018)

CRPR 1A = Presumed extinct

CRPR 1B = Plants rare, threatened or endangered in California and elsewhere

CRPR 2B = Plants rare, threatened or endangered in California, but more common elsewhere

CRPR 3 = Plants about which more information is needed

CRPR 4 = Watch-list: Plants of limited distribution

.1 = Seriously threatened in California

.2 = Moderately threatened in California

.3 = Not very threatened in California

Covered = Covered under the Orange County NCCP/HCP

Conditionally Covered = Conditionally Covered under the Orange County NCCP/HCP

Not Covered = Not Covered under the Orange County NCCP/HCP

SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Species	Status ¹ Federal/State/County	Habitat Requirements	Potential to Occur
INSECTS			
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/--/Conditionally Covered	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>Plantago insularis</i> , and <i>Orthocarpus purpurescens</i> .	Unlikely. The study area is outside of the currently known range for this species, and outside of the protocol survey area (USFWS 2014). Nearest known occurrences documented by the UFWS are 3-4 miles to the north from 1928 and 1937.
CRUSTACEANS			
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE/--/Conditionally Covered	Known to occur in areas of swales/earth slump basins in grassland, chaparral and coastal sage scrub. Inhabit seasonally wet pools filled by winter/spring rains. Hatch in warm water later in the season.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE/--/Conditionally Covered	Generally restricted to vernal pools and other non-vegetated ephemeral pools greater than 12 inches in depth in Riverside, Orange, and San Diego Counties. Typically observed January through March.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
FISH			
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT/--/Not Covered	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
tidewater goby (<i>Eucyclogobius newberryi</i>)	FE/SC/Not Covered	Found in shallow brackish water habitats, lagoons and lower stream reaches. Require fairly still but not stagnant water & high oxygen levels.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
arroyo chub (<i>Gila orcuttii</i>)	--/SC/Not Covered	Los Angeles Basin south coastal streams. Slow water stream sections with mud or sand bottoms.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
steelhead - southern California DPS (<i>Oncorhynchus mykiss irideus</i> pop. 10)	FE/--/Not Covered	Found in streams and rivers with at least 7 inches minimum depth	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
Santa Ana speckled dace (<i>Rhinichthys osculus</i> ssp. 3)	--/SC/Not Covered	Prefers south coast flowing waters	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
AMPHIBIANS			
arroyo toad (<i>Anaxyrus californicus</i>)	FE/SC/Conditionally Covered	Prefers streams and river with fine sediments and where flow rates are great enough to keep silt and clay suspended. Shallow sandy pools bordered sand and gravel flood terraces are needed for breeding	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
arboreal salamander (<i>Aneides lugubris</i>)	--/--/Covered	Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, and mixed conifer habitats, but is also known from Douglas fir	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
			and redwood habitat types. May be found in chaparral in southern California. This species is only found on the surface during moist periods, when it can be common. Elevation range extends from sea level to 1520 m (5000 ft).	
black-bellied slender salamander (<i>Batrachoseps nigriventris</i>)		-/-Covered	Found primarily near drainages associated with open oak, mixed conifer forests, and mixed chaparral.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
northern leopard frog (<i>Lithobates pipiens</i>)		-/SC/Not Covered	Prefers a variety of aquatic habitats that include slow-moving or still water along streams and rivers, wetlands, permanent or temporary pools, beaver ponds, and human-constructed habitats such as earthen stock tanks and burrow pits.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. The study area is not within species range.
western spadefoot (<i>Spea hammondi</i>)		-/SC/Covered	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools or shallow temporary pools, which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Low to Moderate. Some suitable habitat is present on-site or within the immediate vicinity.
Coast Range newt (<i>Taricha torosa</i>)		-/SC/Not Covered	Found in drier chaparral, oak woodland, and grasslands.	Low. Suitable but low quality habitat is present on-site or within the immediate vicinity.
REPTILES				
southern California legless lizard (<i>Anniella stebbinsi</i>)		-/SC/Not Covered	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	Low. Suitable but low quality habitat is present on-site or within the immediate vicinity.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
California glossy snake (<i>Arizona elegans occidentalis</i>)	-/SC/Not Covered		Inhabits arid scrub, rocky washes, grasslands, and chaparral. Appears to prefer microhabitats of open areas with friable soils for burrowing.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	-/-/Covered		Species requires intact habitat within chaparral, cismontane woodland and coastal scrub plant communities. Prefers washes & other sandy areas with patches of brush & rocks. Perennial plants necessary for its major food-termites.	Present. This species was observed within the study area during 2018 biological surveys, and was documented on-site in CNDDDB in 1990.
coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	-/SC/Covered		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate. Suitable habitat is present on-site or within the immediate vicinity. This species was documented in CNDDDB 2 miles to the northeast in Limestone Canyon in 1999.
red-diamond rattlesnake (<i>Crotalus ruber</i>)	-/SC/Covered		Known to occur in chaparral, Mojavean desert scrub and Sonoran Desert scrub communities. Occurs in rocky areas & dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Low. Suitable habitat is present on-site or within the immediate vicinity. This species was documented in CNDDDB 2 miles to the northeast in Limestone Canyon in 1999.
San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	-/-/Covered		Most common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. Nearest documented occurrences in CNDDDB are from Los Angeles and Riverside Counties.
western pond turtle (<i>Emys marmorata</i>)	-/SC/Not Covered		Known to occur in slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter.	Unlikely. Suitable but low quality habitat is present on-site or within the immediate vicinity. No basking sites available within the study area, and no observation of submerged vegetation.
coastal rosy boa (<i>Lichanura trivirgata rosafusca</i>)	-/-/Covered		Rocky areas of chaparral and coastal sage scrub habitats. Attracted to water sources such as permanent and intermittent streams, but does not require permanent water.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
Coronado skink (<i>Plestiodon skiltonianus interparietalis</i>)	-/-/Covered		Grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak and pine forests in Coast Ranges of Southern California. Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides.	Unlikely. Suitable habitat is not present on-site. Nearest known occurrences documented in CNDDDB are in Camp Pendleton in San Diego County from 1999; no CNDDDB occurrences of this species are documented in Orange County.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
coast horned lizard (<i>Phrynosoma blainvillii</i>)	-/SC/Covered		Known to occur in sandy washes with within chaparral or coastal scrub habitat. Requires loose soil for burial and abundant supply of harvester ants.	Low. Suitable but low quality habitat is present on-site or within the immediate vicinity.
coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	-/SC/Not Covered		Known to inhabit semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	Low. Suitable but low quality habitat is present on-site or within the immediate vicinity.
two-striped garter snake (<i>Thamnophis hammondi</i>)	-/SC/Not Covered		Habitat includes marsh and swamp, riparian scrub, riparian woodland, and wetland. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Unlikely. Suitable but low quality habitat is present on-site or within the immediate vicinity.
BIRDS				
sharp-shinned hawk (<i>Accipiter striatus</i>)	-/Covered		Most commonly associated with woodlands and brushlands. A wide variety of habitat types are used by wintering birds.	High. Suitable habitat is present on-site.
tricolored blackbird (<i>Agelaius tricolor</i>)	-/SC/Not Covered		Known to occur in freshwater marsh, marsh, swamp, and wetland; highly colonial species, most numerous in Central Valley & vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Low. Limited, low quality habitat is present on-site or within the immediate vicinity.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	-/Covered		Known to frequent relatively steep, often rocky hillsides with grass and forb species. Resident in southern California coastal sage scrub and mixed chaparral.	Present. Suitable habitat is present on-site or within the immediate vicinity. This species was observed on-site during previous surveys (Dudek 2012).
grasshopper sparrow (<i>Ammodramus savannarum</i>)	-/SC/Not Covered		Known to occur in dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs.	Present. Limited, low quality habitat is present on-site or within the immediate vicinity. One migrant species was observed on-site during previous surveys by LSA in 1999 (Dudek 2012).
golden eagle (<i>Aquila chrysaetos</i>)	-/FP/Conditionally Covered		Known to live in open and semi-open country featuring native vegetation across most of the Northern Hemisphere. They avoid developed areas and uninterrupted stretches of forest. They are found primarily in mountains up to 12,000 feet, canyonlands, rimrock terrain, and riverside cliffs and bluffs. Golden Eagles nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
long-eared owl (<i>Asio otus</i>)	-/SC/Not Covered		Roosts in dense vegetation and forage in open grasslands or shrublands; also open coniferous or deciduous woodlands. They occur at elevations ranging from near sea level to above 6,500 feet.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
burrowing owl (<i>Athene cunicularia</i>)	-/SC/Not Covered		Known to occur within open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. No suitable burrows observed within the site.
rough-legged hawk (<i>Buteo lagopus</i>)	-/-/Covered		Occurs in California only during the winter months, from October through March. Occurs in prairies, semi-deserts, grassland, pastures, and marshlands that are distant from extensive woodlands and densely developed areas.	Unlikely. Suitable habitat is not present on-site.
red-shouldered hawk (<i>Buteo lineatus</i>)	-/-/Covered		Prefers mature lowland forests with open water and clearings nearby. Can sometimes nest in eucalyptus groves.	Present. Suitable habitat is present on-site. This species was observed on-site during previous surveys (Dudek 2012).
coastal cactus wren (<i>Campylorhynchus brunneicapillus cousei</i>)	-/SC/Covered		Known to occur in coastal scrub habitats; requires stands of prickly pear or cholla cactus for nesting and roosting.	Low (Previously Present). This species was previously documented on-site in 1990 in CNDDDB. Cactus wren were also documented on-site around 2000, prior to the 2007 Santiago Fire (Dudek 2012). There is currently very limited, isolated cactus on-site so this species has a low potential to occur due to limited suitable habitat on-site or within the immediate vicinity.
northern harrier (<i>Circus cyaneus</i>)	-/SC/Covered		Coastal salt & fresh-water marsh. Nest & forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Present. Suitable habitat is present on-site or within the immediate vicinity. This species was observed on-site during previous surveys (Dudek 2012).
western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT/SE/Not Covered		Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
yellow rail (<i>Coturnicops noveboracensis</i>)	-/SC/Not Covered		Known to occur within freshwater marshlands, meadows and seeps.	Unlikely. Limited suitable habitat is present on-site or within the immediate vicinity. Nearest occurrences in CNDDDB are in Newport Back Bay in 1896 and Corona in 1914.

Species	Status ¹ Federal/State/County	Habitat Requirements	Potential to Occur
white-tailed kite (<i>Elanus leucurus</i>)	-/FP/Not Covered	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Present. Suitable habitat is present on-site or within the immediate vicinity. This species was observed on-site during previous surveys by LSA in 1999 (Dudek 2012).
southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/SE/Conditionally Covered	Breeds in dense willow-dominated riparian habitat near open water.	Low to Moderate. Suitable but limited habitat is present on-site or within the immediate vicinity.
prairie falcon (<i>Falco mexicanus</i>)	-/-/Conditionally Covered	Grasslands and other open habitats. Foraging occurs of wide areas, but cliffs are generally required for nest sites.	Present. Suitable foraging habitat is present on-site. No suitable nesting habitat occurs on-site, and this species is currently not known to nest within Orange County. This species was observed on-site during previous surveys (Dudek 2012).
American peregrine falcon (<i>Falco peregrinus anatum</i>)	-/FP/Covered	Known to occur near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Present. Suitable foraging habitat is present on-site or within the immediate vicinity. No suitable nesting habitat occurs within the study area or immediate vicinity. This species was observed on-site during previous surveys (Dudek 2012).
bald eagle (<i>Haliaeetus leucocephalus</i>)	-/SE,FP/Not Covered	Typically nest in forested areas adjacent to large bodies of water, staying away from heavily developed areas when possible. Tolerant of human activity when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate. For perching, bald eagles prefer tall, mature coniferous or deciduous trees that afford a wide view of the surroundings. In winter, bald eagles can also be seen in dry, open uplands if there is access to open water for fishing.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
yellow-breasted chat (<i>Icteria virens</i>)	-/SC/Not Covered	Known to occur within riparian forest, scrub and woodland habitats.	Moderate. Suitable habitat is present on-site or within the immediate vicinity.
California black rail (<i>Laterallus jamaicensis coturniculus</i>)	-/ST,FP/Not Covered	Known to occur in brackish and freshwater marshes. Inhabits riparian thickets of willow & other brushy tangles near watercourses. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Unlikely. Limited suitable habitat is present on-site or within the immediate vicinity. Nearest occurrences in CNDDDB are in Newport Back Bay in 1983 and near Orange in 1986.
Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	-/SE/Not Covered	Inhabits coastal salt marshes. Nests in pickleweed on and about margins of tidal flats.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT/SC/Covered		Species is an obligate, permanent resident of coastal sage scrub in southern California. Low, coastal sage scrub in arid washes, on mesas and slopes.	Present. This species was observed within the study area during 2018 biological surveys.
light-footed Ridgway's rail (<i>Rallus obsoletus levipes</i>)	FE/SE,FP/Not Covered		Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
yellow warbler (<i>Setophaga petechia</i>)	-/SC/Not Covered		Riparian plant associations in close proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Present. This species was observed within the study area during 2018 biological surveys.
California least tern (<i>Sternula antillarum browni</i>)	FE/SE,FP/Not Covered		Known to occur in alkali playas and coastal dune and beach habitats. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE/Conditionally Covered		Known to occur in riparian forest, scrub, and woodland habitats. Nests primarily in willow, baccharis, or mesquite habitats.	Present. This species was observed within the study area during 2018 biological surveys.
MAMMALS				
coyote (<i>Canis latrans</i>)	-/-/Covered		Occur in all wildland habitat types in the subregion, and are adaptable enough to use agricultural and developed lands.	Present. This species was observed within the study area during 2018 biological surveys, and previous surveys (Dudek 2012).
gray fox (<i>Urocyon cinereoargenteus</i>)	-/-/Covered		Found in many habitat types, with preference for woodlands, chaparral, and coastal scrub.	Low. Suitable habitat is present on-site or within the immediate vicinity.
pallid bat (<i>Antrozous pallidus</i>)	-/SC/Not Covered		Known to occur in a wide variety of habitats including deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting; particularly associated with buildings and bridges.	Low. Suitable habitat is present on-site or within the immediate vicinity.
northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	-/SC/Not Covered		Moderate canopy coverage of arid shrubland or pinyon-juniper habitats on or near rocky slopes and sandy areas.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	-/SC/Not Covered		Known to occur at altitudes of 300-2,400 meters in deciduous, semi-arid thorn scrub and mixed oak-conifer forests	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. The study area is outside of the typical range for this species.
Stephen's kangaroo rat (<i>Dipodomys stephensi</i>)	FE/SE/Not Covered		Known to occur in sparse perennial vegetation with firm soil, "neither hard nor sandy".	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity. The study area is outside of the typical range for this species.

Species	Status ¹		Habitat Requirements	Potential to Occur
	Federal/State/County			
western mastiff bat (<i>Eumops perotis californicus</i>)	-/SC/Not Covered		Known to occur in habitat consisting of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings.	Low. Limited suitable habitat is present on-site or within the immediate vicinity. Nearest CNDDDB occurrence is an anecdotal observation from Limestone Canyon (date unknown) 2.8 miles to the northeast.
western red bat (<i>Lasiurus blossevillii</i>)	-/SC/Not Covered		Prefers edges or habitat mosaics that have trees for roosting and open areas for foraging. Requires nearby water source. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Not found in desert areas.	Low. Limited habitat is present on-site or within the immediate vicinity. Nearest CNDDDB occurrence is from Bell Canyon (near Starr Ranch) 11 miles to the southeast in 1997.
western yellow bat (<i>Lasiurus xanthinus</i>)	-/SC/Not Covered		Known only in Los Angeles and San Bernardino Cos. south to the Mexican border. This species has been recorded below 600 m (2000 ft) in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	-/SC/Covered		Known to occur in coastal scrub, desert scrub, chaparral, cactus, and rocky habitats.	Moderate. Some suitable habitat is present on-site or within the immediate vicinity.
pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	-/SC/Not Covered		Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Prefers rocky desert areas with high cliffs and rock outcrops.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
big free-tailed bat (<i>Nyctinomops macrotis</i>)	-/SC/Not Covered		Prefers rugged, rocky canyons.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	-/SC/Not Covered		Alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats. Uncommon in valley foothill and montane riparian, and in a variety of other habitats.	Low. Suitable habitat is present on-site or within the immediate vicinity.
Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>)	FE/SC/Conditionally Covered		Known to occur in coastal scrub habitats. Seems to prefer soils of fine alluvial sands of coastal plains near the ocean.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.
Southern California saltmarsh shrew (<i>Sorex ornatus salicornicus</i>)	-/SC/Not Covered		Known to occur in salt marsh habitat within Southern California. Requires dense vegetation and woody debris for cover.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.

Species	Status ¹ Federal/State/County	Habitat Requirements	Potential to Occur
American badger (<i>Taxidea taxus</i>)	-/SC/Not Covered	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Unlikely. Suitable habitat is not present on-site or within the immediate vicinity.

¹ Description of status codes:

FE = Listed as endangered under the FESA

FT = Listed as threatened under the FESA

SE = Listed as endangered under the CESA

ST = Listed as threatened under the CESA

FP = Listed as fully protected under CDFW code

SC = Species of Special Concern

Covered = Covered under the County of Orange NCCP/HCP

Conditionally Covered = Conditionally Covered under the County of Orange NCCP/HCP

Not Covered = Not covered under the County of Orange NCCP/HCP

Appendix CUL
Syphon Reservoir Improvement
Project Cultural Resources
Assessment
Report (Confidential)



Appendix NOI

Construction Noise Calculation Worksheets



Project: IRWD Syphon Reservoir Geotechnical Investigations
 Construction Noise Impact on Sensitive Receptors



Parameters

Leq to L10 factor	3
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				Sensitive Receptors to the West				
Construction Phase Equipment Type	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA
Access Road					50	46		
Rubber Tired Dozer	1	79	40%	900	49	45	48	5
Water Trucks	1	80	10%	900	50	40	43	5
Borings					55	55		
Bore/Drill Rig Truck	1	79	20%	600	52	45	48	5
Rubber Tired Dozer	1	79	40%	700	51	47	50	5
Support Trucks	2	76	40%	700	51	47	50	5
Water Trucks	1	80	10%	600	53	43	46	5
Pickup Truck	5	75	40%	600	55	51	54	5
Test Pits					54	55		
Excavator	1	81	40%	600	54	50	53	5
Backhoe	1	78	40%	700	50	46	49	5
Rubber Tired Dozer	1	79	40%	600	52	48	51	5
Water Trucks	1	80	10%	600	53	43	46	5
Support Trucks	2	76	40%	700	51	47	50	5
Pickup Truck	1	75	40%	700	47	43	46	5
Trenches					46	47		
Excavator	1	81	40%	1600	46	42	45	5
Backhoe	1	78	40%	1700	42	38	41	5
Rubber Tired Dozer	1	79	40%	1700	43	39	42	5
Water Trucks	1	80	10%	1600	45	35	38	5
Support Trucks	2	76	40%	1800	43	39	42	5
Pickup Truck	1	75	40%	1800	39	35	38	5
Seismic/Electric Surveys					45	41		
Pickup Truck	1	75	40%	900	45	41	44	5

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

TRAFFIC NOISE ANALYSIS TOOL



Project Name: IRWD Syphon Reservoir Geotechnical Investigations
Analysis Scenario:
Source of Traffic Volumes:

Roadway Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Potola Parkway	Hard	100	40	40	40	46	0	10	55.1	55.4

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).
 The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.
 Accuracy of the calculation is within ± 0.1 dB when comparing to TNM results.
 Noise propagation greater than 50 feet is based on the following assumptions:
 For hard ground, the propagation rate is 3 dB per doubling the distance.
 For soft ground, the propagation rate is 4.5 dB per doubling the distance.
 Vehicles are assumed to be on a long straight roadway with cruise speed.
 Roadway grade is less than 1.5%.
 CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

Environmental Review of Syphon Reservoir Geotechnical Investigations Project

IRWD Board of Directors Meeting

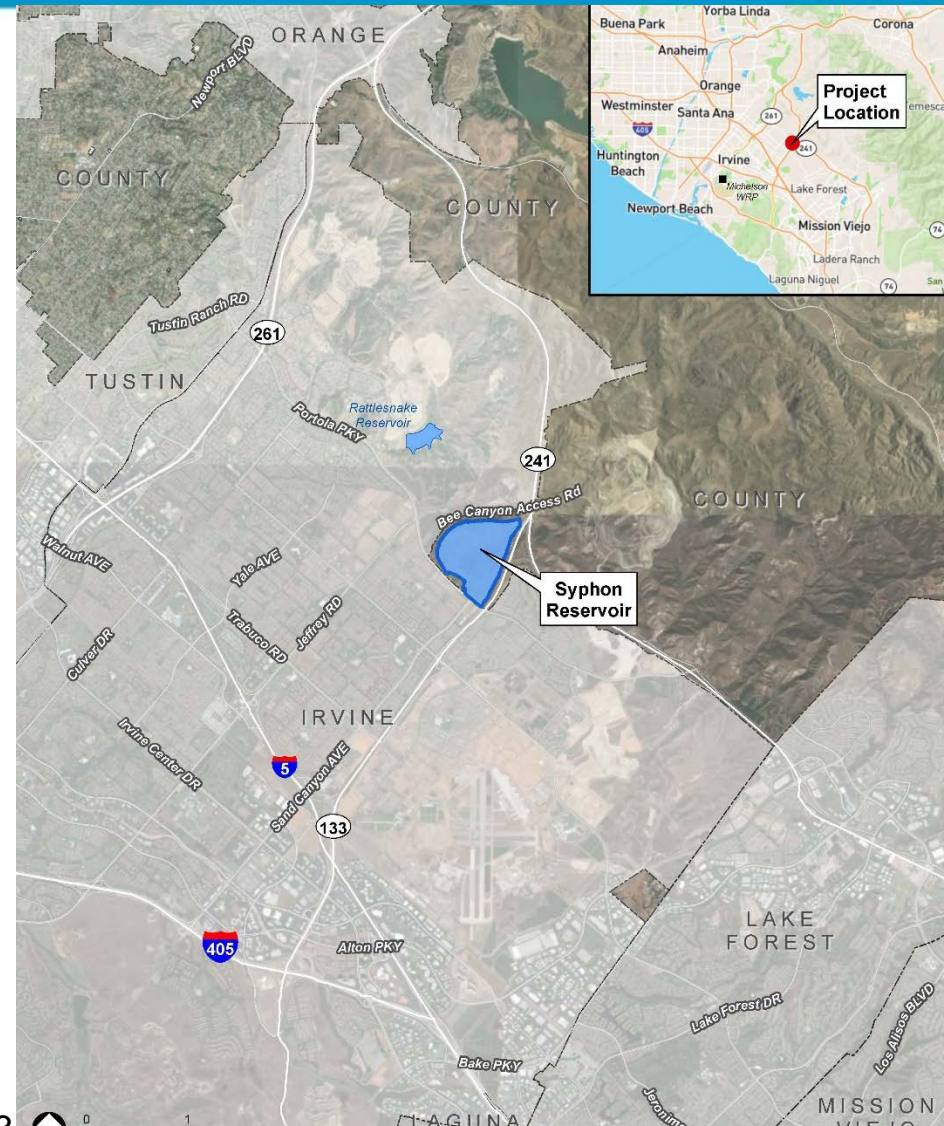
June 24, 2019



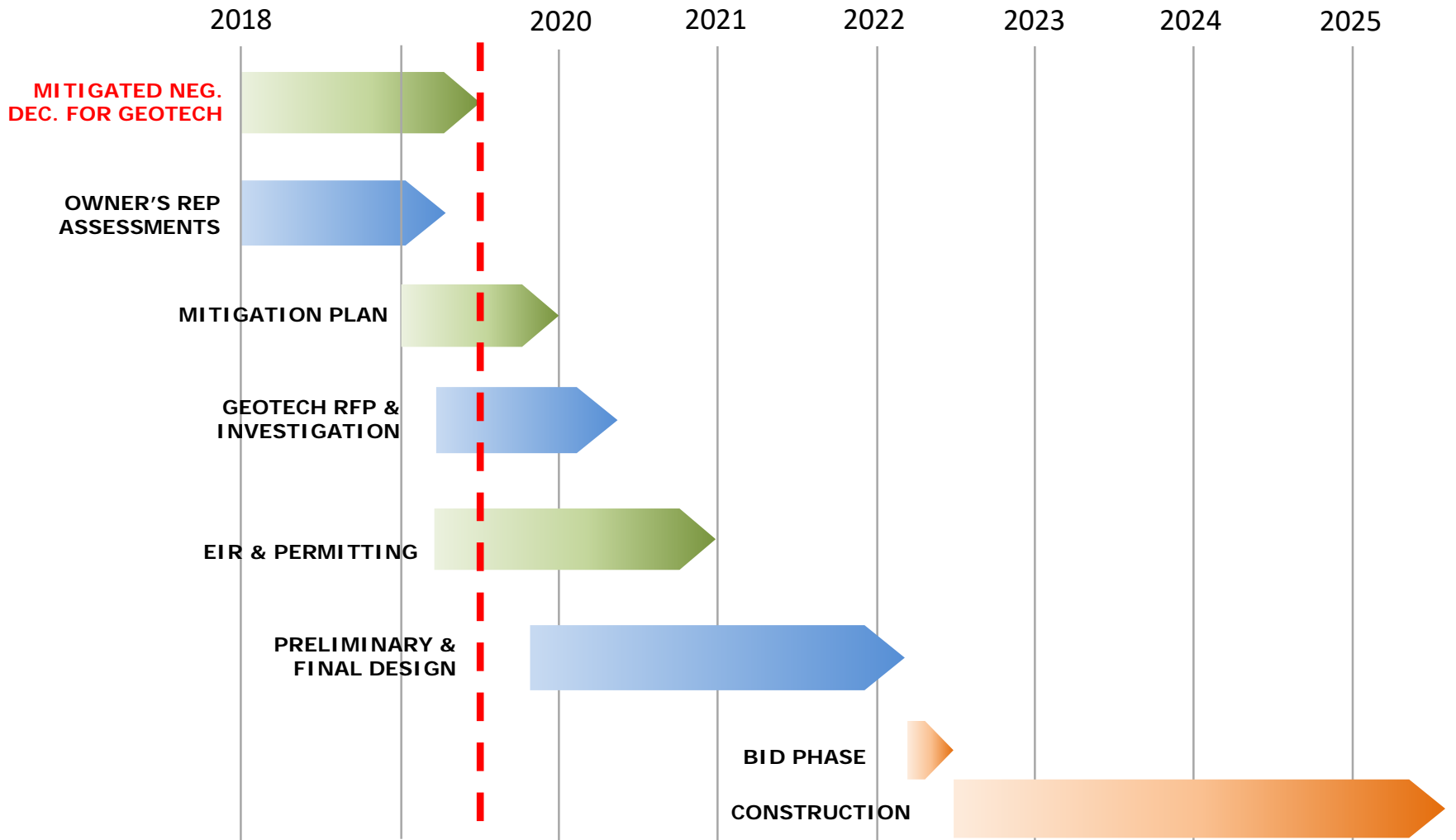
- Background
- Project Schedule
- Geotechnical Investigations Project
- Preparation of Initial Study/Mitigated Negative Declaration (IS/MND)
 - Findings
 - Comment Letters
 - Mitigation Monitoring and Reporting Plan (MMRP)
- Recommendation

Background

- Syphon Reservoir acquired in 2010 from the Irvine Company
- Integrated into IRWD's Recycled Water System in 2013
- June 2017 Board approved work on engineering services and environmental documentation for Syphon Reservoir Improvement Project



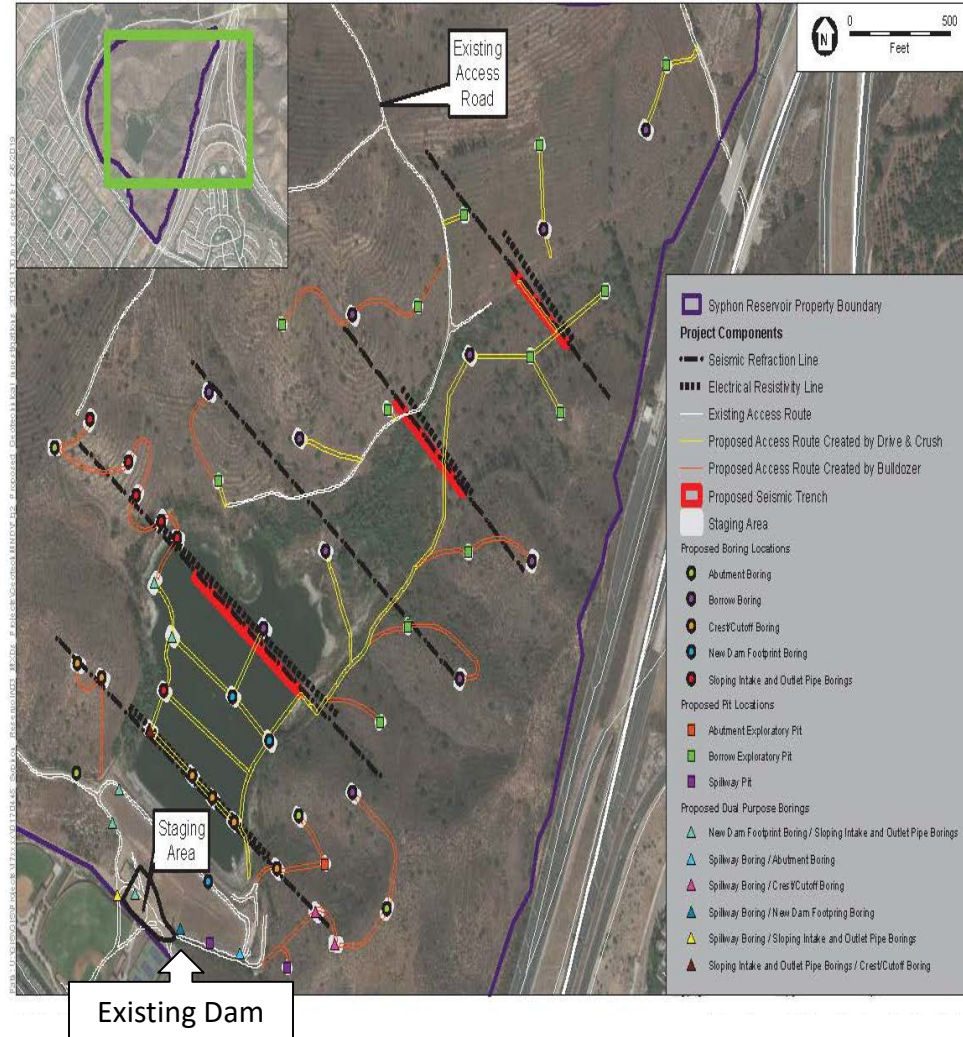
Syphon Reservoir Improvement Project Schedule



Syphon Reservoir Geotechnical Investigations Project

Project Summary

- Goal is to characterize the geologic and geotechnical conditions at the site
- Extensive program including soil borings, exploratory test pits, fault evaluation trenches and geophysical testing
- Work expected to begin September 2019
- Geotechnical Data Report anticipated in March 2020



Syphon Reservoir Geotechnical Investigations Project

IS/MND Findings:

- Proposed project will not have a significant adverse effect on the environment
- All potential effects of the project can be reduced to less-than-significant levels
- IS/MND satisfies the requirements of CEQA

Syphon Reservoir Geotechnical Investigations Project

IS/MND Comment Letters:

- **Gabrieleño Band of Mission Indians**
 - On-site consultation & monitoring for ground disturbance work
- **City of Irvine and Orange County Fire Authority**
 - Acknowledges receipt and review of MND
- **South Coast Air Quality Management District**
 - Project may require permit from SCAQMD
(Note: IRWD confirmed permit not required)

Syphon Reservoir Geotechnical Investigations Project

IS/MND Comment Letters (continued):

- Orange County Public Works
 - All work within or adjacent to flood control channel shall not impact the channel's integrity
 - IRWD to request encroachment permit if needed
- Transportation Corridor Agencies (TCA)
 - Grant Deed use restrictions and coordination w/3rd Parties
- CA Department of Water Resources
 - Syphon under California Division of Dam Safety (DSOD) jurisdiction
 - Alteration application, work plan and filing fee required for approval

Syphon Reservoir Geotechnical Investigations Project

IS/MND Comment Letters (continued):

- US Fish & Wildlife Service /
California Department of Fish & Wildlife
 - Approvals needed in accordance w/Grant Deed restrictions
 - Appropriate to delay mitigation for impacts in areas overlapping future reservoir expansion
 - Mitigation for permanent impacts must:
 - account for past restoration; and
 - adequately replace lost habitat under Grant Deed
 - Joint letter of “no objection” to the geotech project with necessary approvals issued by the agencies June 11, 2019 and included in Final IS/MND

Syphon Reservoir Geotechnical Investigations Project

Mitigation Monitoring & Reporting Program

- Mitigate impacts to Special-Status Species, Sensitive Natural Communities, Jurisdictional Wetlands
- Pre-Construction surveys (Birds & Plants)
- Lake and Streambed Alteration Agreement (1602) - CDFW
- Monitoring by biologist, archeologist, paleontologist
- On-site tribal consultation, as needed
- Implement Fire Hazard Reduction Measures

Staff recommends that the Board:

- Find that there is no evidence that the Geotechnical Investigations Project will have a significant effect on the environment and that the Final IS/MND reflects IRWD's independent judgement and analysis;
- Adopt the Final IS/MND and the associated MMRP for the Geotechnical Investigations Project; and
- Approve the Geotechnical Investigations Project and authorize staff to file the Notice of Determination and submit payment for related filing fees

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June 24, 2019
Prepared and
Submitted by: C. Compton
Approved by: Paul A. Cook



ACTION CALENDAR

NOMINATION OF STEVE LAMAR AS A CANDIDATE FOR PRESIDENT OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES

SUMMARY:

The Association of California Agencies (ACWA) Nominating Committee is seeking nominations for candidates to serve as the ACWA President and Vice President for the 2020-2021 two-year term. The ACWA Nominating Committee will recommend a slate of candidates for election by the ACWA membership at its fall conference in December 2019.

To be eligible for consideration for either the ACWA President or Vice President positions, candidates must be members of the board of directors of an ACWA member agency, and must be nominated by their boards. Nominations must be accompanied by an official nominating resolution, and a statement of qualifications or a resume highlighting the proposed candidate's background and qualifications.

IRWD Director Steve LaMar is currently serving as the ACWA Vice President for the 2018-2019 term. He has expressed an interest in the position of ACWA President, and staff has prepared a resolution, provided as Exhibit "A", for the IRWD Board of Directors to nominate him as a candidate for ACWA President for the 2020-2021 term.

BACKGROUND:

The ACWA Nominating Committee is currently seeking candidates who wish to be considered for the offices of ACWA President and Vice President. Resolutions to nominate a candidate must be received in the ACWA office by September 3, 2019, to be considered by the Nominating Committee. Nominees will be notified regarding individual interviews, which will be conducted in September. The Nominating Committee's recommended slate will be announced on September 27 at the ACWA Board of Directors' meeting. The election for the two postings will take place on December 4, 2019, during the ACWA 2019 Fall Conference.

Director LaMar has expressed his interest in serving as President of ACWA, and a resolution has been prepared supporting his nomination. Staff recommends that the Board support the nomination of Director LaMar and adopt a resolution nominating him for the position of President of ACWA.

FISCAL IMPACTS:

The ACWA President will be responsible for attending all ACWA Board meetings and other related industry meetings, including the ACWA conferences; therefore, travel expenses and director fees will be incurred.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD SUPPORT THE NOMINATION OF IRWD DIRECTOR STEVE LAMAR FOR PRESIDENT OF ACWA FOR A TWO-YEAR TERM BEGINNING JANUARY 1, 2020 AND THAT THE FOLLOWING RESOLUTION BE ADOPTED BY TITLE SUBJECT TO NON-SUBSTANTIVE CHANGES AND IN ACCORDANCE WITH ACWA'S REQUIREMENTS:

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
NOMINATING STEVE LAMAR AS A CANDIDATE FOR PRESIDENT OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES

LIST OF EXHIBITS:

Exhibit "A" – Proposed Resolution Nominating Steve LaMar as a Candidate for President of
ACWA

EXHIBIT "A"

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
NOMINATING STEVE LAMAR AS A CANDIDATE FOR PRESIDENT OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES

The Board of Directors of the Irvine Ranch Water District has received a call for nominations for the President and Vice President of the Association of California Water Agencies (ACWA) during the 2020-2021 term; and

Irvine Ranch Water District's Board member Steve LaMar has indicated a desire to serve as President of ACWA; and

Steve LaMar is currently serving as the Vice President of ACWA. He previously served as Chairman of ACWA's Federal Affairs Committee and as a member of ACWA's Headwater Task Force during which time he assisted with drafting the Policy Principles and Headwaters framework; and

Steve LaMar is a committed and experienced leader in the water industry and his in-depth knowledge and understanding of critical water issues facing California would be a great benefit to the Association; and

ACWA is the largest coalition of public water agencies in the country and the premier water organization in California.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. Reaffirms its support of the nomination of Steve LaMar for President of the Association of California Water Agencies for 2020 through 2021, and the Secretary is hereby directed to forward a certified copy of this resolution to the Association of California Water Agencies.

ADOPTED, SIGNED AND APPROVED this 24th day of June 2019.

President, IRVINE RANCH WATER
DISTRICT and of the Board of
Directors thereof

Secretary, IRVINE RANCH WATER
DISTRICT and of the Board of
Directors thereof

LICENSE FOR COUNTY TO ACCESS AND USE RECREATION RIGHTS TO IRVINE LAKE

THIS ACCESS AND USE LICENSE ("**License**") is entered into the 1st day of July, 2019 ("**Effective Date**") by and between IRVINE RANCH WATER DISTRICT, a California water district organized under and existing pursuant to Sections 34000, *et seq.* of the California Water Code ("**IRWD**"), SERRANO WATER DISTRICT, a special governmental district formed under the Irrigation District Law, California Water Code Sections 20500, *et seq.* ("**SWD**") and the COUNTY OF ORANGE, a political subdivision of the State of California ("**County**"). Each entity may be referred to herein individually as a "Party," or collectively as the "Parties."

RECITALS

1. SWD and IRWD are the co-owners in fee title to that certain Reservoir facility historically known as "Santiago Reservoir" ("**Santiago Reservoir**" or "**Reservoir**") and its waters ("**Irvine Lake**").
2. The Irvine Company, a Delaware limited liability company and TIC Land Investment LLC, a Delaware limited liability company (collectively, "**TIC**"), and SWD jointly own the recreational rights to the waters of Irvine Lake, which, according to that certain settlement agreement dated April 19, 1929, include "fishing, hunting, boating and such other uses as will not pollute or interfere with the use of said waters by the parties..." ("**Recreational Rights**"). TIC owns 75% of the Recreational Rights and SWD owns 25%. Use of the Recreational Rights by the general public is not authorized without mutual agreement between TIC and SWD. County and TIC have executed a separate agreement by which TIC has permitted the County to utilize its Recreational Rights for the purposes set forth in this License.
3. County received property ("**Donation Property**") in 2014 through an historic donation from TIC, some of which is adjacent to portions of the Reservoir ("**Recreational Parcel**"). Included with this donation, TIC made an Irrevocable Offer of Dedication ("**IOD**") to County that included, among other things, TIC's share of Recreational Rights to the waters of Irvine Lake. The IOD requires satisfying certain conditions precedent prior to the transfer of the Recreational Parcel and TIC's Recreational Rights to the County.
4. Subject to the terms and conditions set forth below, SWD and IRWD (collectively, "**Licensors**") are willing to enter into an exclusive license ("**License**") with the County whereby the County may enter and utilize the Recreational Rights and the Reservoir, and Irvine Lake ("**Premises**") for recreational uses ("**Recreational Activities**") consistent with the Recreational Rights held by TIC and SWD.
5. The Parties recognize that SWD claims that its past use of the Recreation Rights have historically yielded SWD substantial revenue. The Parties further understand that County's payments to SWD are only intended as consideration for the limited purposes of this License.

NOW, THEREFORE, in consideration for the mutual promises, covenants and conditions contained herein, the Parties agree as follows:

I. DEFINITIONS

The following terms provided in this section shall have the specific meanings assigned below and to be used throughout the entirety of this License.

“County” shall mean or refer to the County of Orange, a political subdivision of the State of California.

“Effective Date” shall mean or refer to the date this License is signed by all Parties which shall commence the term.

“Irvine Lake” shall mean or refer to the water located within the Reservoir over which TIC and SWD currently own the Recreational Rights.

“IRWD” shall mean or refer to Irvine Ranch Water District, a California water district organized under and existing pursuant to Section 34000, *et seq.* of the California Water Code.

“License” shall mean or refer to this agreement for the access and use of the Reservoir and the Water of Irvine Lake.

“Licensors” shall mean or refer to SWD and IRWD, collectively.

“Licensors’ Respective Rights” shall mean or refer to all of the following, collectively: (i) SWD’s ownership rights to the Reservoir, the waters of the Reservoir, and its proportional share of the Recreational Rights to the waters of Irvine Lake; (ii) IRWD’s ownership rights to the Reservoir and the waters of the Reservoir.

“Recreational Activities” shall mean or refer to activities, actions, and events consistent with the exercise of the Recreational Rights under this License. For the purposes of this License, the Recreational Activities to be exercised by County shall be limited to shoreline fishing in areas designated on the map attached hereto as Exhibit 1 and those activities reasonably related thereto (e.g. access over the Reservoir, in designated areas, to reach the waters of Irvine Lake). Recreational Activities shall not include boating or other on-water use of Irvine Lake.

“Recreational Rights” shall mean or refer to the rights to use the waters of Irvine Lake, which said rights are currently owned by TIC (75%) and SWD (25%), as stated in a certain agreement dated April 19, 1929 between the predecessors in interest of TIC and SWD, which rights include “fishing, hunting, boating and such other uses as will not pollute or interfere with the use of said waters by the parties[.]”

“Santiago Reservoir” or **“Reservoir”** shall mean or refer to the property (shoreline, lake bed, etc.) in which the water of Irvine Lake is located.

“SWD” shall mean or refer to Serrano Water District, a special governmental district formed under the Irrigation District Law, Sections 20500, *et seq.* California Water Code.

“TIC” shall mean or refer to The Irvine Company, a Delaware limited liability company and TIC Land Investment LLC, a Delaware limited liability company.

II. PREMISES

The premises (“**Premises**”) shall mean or refer to those areas of Santiago Reservoir identified in Exhibit 1 and designated for the Recreational Activities along, in, and over the Reservoir and for access to the waters of Irvine Lake for the purpose of the general public to engage in the Recreational Activities.

III. CONDITION AND INSPECTION OF PREMISES

- A. County acknowledges that the Premises are being licensed on an “as-is” basis, and County’s access to and use of the Premises is done without reliance upon any representation by the Licensors, or any of their respective officers, employees, agents or representatives, or any other person, concerning the Premises, their fitness for County’s intended use or any other particular purpose of use, their income producing history, potential or capabilities, their value, or any other promise, representation or inducement not expressly set forth in this License.
- B. County acknowledges that the Licensors, their respective officers, employees, agents or representatives, have not made any written or oral representation, promise or warranty, expressed or implied, concerning the Premises, its fitness for County’s intended use or any other purpose or use, their income producing history, potential or capabilities, their value, or any other matter not expressly set forth in this License.
- C. County acknowledges that County has had the opportunity to and has inspected the Premises prior to the execution of this License, and that County accepts the Premises in the condition in which the Premises exist as of the date of this License. County shall be responsible for preparing and maintaining the Premises in a manner that is sufficiently safe and appropriate for the Recreational Activities.
- D. The Parties understand that Irvine Lake is first and foremost a water supply reservoir that will be operated to ensure continued performance of that function. Licensors retain the sole discretion to determine how the Reservoir will be operated, to include how it will be filled and drained, and what water quality will be required to ensure continued function as a source of drinking water. Licensors agree to provide information (e.g. water levels and water quality) that Licensors already collect to County to assist County with making adjustments to accommodate the shoreline fishing use of the lake. Further, Licensors will notify County as soon as practicable of any water quality or water level issues that may negatively impact public health and safety (e.g. contamination levels that may impact fish or public’s consumption of fish).

IV. TERM

The term (“**Term**”) of this License and the rights of the County hereunder shall commence on the Effective Date and shall only be revoked or terminated upon the earlier of:

- A. 12 months after the Effective Date of this License; or

- B. The abandonment of this License by the County for its convenience as evidenced by a 30 day written notice provided by the County to Licensors¹; or
- C. A written agreement to terminate has been signed by all Parties.
- D. County engaging in prohibited activities or uses inconsistent with or beyond the scope of this License.
- E. Action by a regulatory agency that limits or otherwise restrains the ability of the public to consume fish caught in Irvine Lake.

If this License is terminated by Licensors prior to the expiration date of this License, then the County shall only need to pay a pro rata amount of its Fee based on the actual amount of time the License was effective.

V. USE

Consistent with the Licensors' Respective Rights, for and during the term of this License, and any extension or renewal of it, the Licensors hereby grant to the County the following uses of the Premises:

- A. Exclusive use of Recreational Rights to the waters of Irvine Lake as currently owned by TIC and SWD and defined in this License; and
- B. Exclusive access rights upon, over, and across the Reservoir, in designated areas, to reach the waters of Irvine Lake for the purposes of using the Recreational Rights for Recreational Activities; and
- C. Ability to prepare the Premises as necessary for the Recreational Activities, including, but not limited to, brush clearing and grading; and
- D. The right to engage a County supported concessionaire ("**Concessionaire**") for the purposes of offering the use of the Recreational Rights and access to and from the Reservoir to the general public for the purpose of Recreational Activities.

The County's use of the Premises includes the ability to offer to the general public access and use of the Reservoir and the waters of Irvine Lake for the Recreational Activities as well as access and use of the Premises by County contractors, licensees, employees, the Concessionaire, etc. to effectuate the County and general public's exercise of the Recreational Rights to conduct Recreational Activities.

The rights granted herein are subject to all easements, covenants, conditions, restrictions, reservations, rights, rights-of-way, encumbrances, assessments, leases and other matters of record, apparent or of which County is or should be aware, as such matters now or hereafter affect the Premises.

Licensors retain all of their respective rights in the Premises and the County will not acquire any interest temporary, permanent, irrevocable, possessory or otherwise by reason of this License, or by the exercise of the permission given herein. The County will make no claim to any such interest.

¹ Should the County terminate this License "for cause," to include, among other things, regulatory restrictions that frustrate Recreational Activities, or material breach by one of the Licensors, then County is not required to provide a 30 day written notification prior to terminating this License.

VI. IMPROVEMENTS

County may make improvements to the Premises and perform all necessary repair and maintenance of said improvements in order to engage in the use and benefit of the Recreational Activities. County must submit to Licensors, for prior written approval, complete improvement plans, including grading plans, identifying all proposed improvements. Submittal and response from SWD and IRWD shall be concluded within two (2) weeks prior to County making any improvements to the Premises. The Parties agree to work in good faith to agree on any adjustments or modifications to County's plans for improvements and to work expeditiously on finalizing any such plans. Licensors are not required, at any time, to make any improvements, alterations, changes or additions of any nature whatsoever to the Premises; provided, however, that Licensors shall be responsible to repair damage to any County-installed improvements caused by the active negligence or intentional acts or omissions of Licensors or their respective contractors, agents, employees, or invitees.

VII. MAINTENANCE AND REPAIRS

Except for maintenance or repairs necessary to address damage caused by the negligent or intentional acts or omissions of Licensors or their respective contractors, employees, invitees, etc., County shall perform, at its sole cost and expense, all maintenance and repairs of any improvements installed by County within the Premises. Such maintenance shall be performed in such manner and at such intervals as shall be required to maintain County's improvements within the Premises in good condition and repair, and shall be accomplished without interfering with the use and operation of the Reservoir for water supply purposes by SWD and IRWD.

VIII. FEE

For the County's use of the Recreational Activities, the County shall pay SWD a fee ("**Fee**") which shall be the greater of: (i) \$4,500 per month or (ii) 25% of the County's net proceeds obtained from its Recreational Activities.. Payment of the Fee shall be made on a monthly basis in arrears within forty-five days with supporting documents to verify the Fee paid.

If this License is terminated by County prior to its expiration date for convenience pursuant to Section IV, above, the County shall provide thirty (30) days advance notice and shall pay the full amount otherwise due for any month or portion of month this License is still in effect, with no pro rata calculation applicable for such month.

If this License is terminated by County prior to its expiration date for cause (e.g. material breach, regulatory requirements impose a substantial and negative impact on County's use of the License), the termination shall be effective immediately upon written notice provided by County to the Licensors, and County shall only be responsible for a pro rata difference in the Fee owed for the County's actual use of the Premises.

IX. APPROVALS; COMPLIANCE

The County's use of the Premises hereunder shall be conditioned upon the County, at its sole cost and expense:

- A. Obtaining and/or maintaining all necessary licenses and permits from all appropriate public and/or governmental agencies with respect to such use; and

- B. Complying with each and every federal, state or local law, regulation, standard, decision of court, ordinance, rule, code, order, decree, directive, guideline, permit or permit condition, together with any agreement, declaration of covenants, conditions and restrictions which have been recorded in any official or public records with respect to the Reservoir or any portion thereof, each as currently existing and as amended, enacted, issued or adopted in the future which are or become applicable to the License Area.

X. DAMAGE; LIENS

The County shall repair and restore any damage or casualty to any improvements located within the Premises arising from the County's exercise of this License and/or use of the Premises hereunder. The County shall not permit to exist or otherwise to be enforced against the Premises (or any portion thereof) any mechanics', materialmen's, contractors' or other liens arising out of the acts or omissions of the County hereunder.

XI. HAZARDOUS SUBSTANCES

The County shall not use, store, or allow the use of any hazardous substances on or onto the Premises, except those used in the normal course of business for the Recreational Activities.

XII. INDEMNIFICATION

- A. The County shall hold harmless, defend with counsel (approved by Licensors) and indemnify Licensors, their elected Board members, respective officers, agents and employees, and successors and assigns, from and against all claims, loss, damage, actions, causes of actions, expense and/or liability arising from or related to loss or damage to property, including that of Licensors, or injury to or death of persons, including but not limited to, agents or employees of Licensors and members of the public that visit Irvine Lake per the County's opening of Irvine Lake for recreation, that result in any manner whatsoever, directly or indirectly, by the County's, and by extension, the public's, use of the Premises during the Term of this License.
- B. The Licensors shall hold harmless, defend with counsel (approved by County) and indemnify County, its elected Board members, officers, agents and employees, and successors and assigns, from and against all claims, loss, damage, actions, causes of actions, expense and/or liability arising from or related to loss or damage to property, including that of County, or injury to or death of persons, including employees of County, resulting in any manner whatsoever, directly or indirectly, by the Licensors' use of the Premises during the Term of this License. Licensors shall not incur an indemnification obligation by virtue of adding or removing water from Irvine Lake, or from otherwise maintaining water levels or water quality in Irvine Lake.

XIII. ENTRY AT OWN RISK; NO DUTY TO WARN; RELEASE

The County and any other person entering upon the Premises under the authority or color of this License does so at his/her/its own risk and peril. Licensors shall have no duty to inspect the Premises (or any portion thereof) and no duty to warn any person of any latent or patent defect, condition or risk that might be incurred in the exercise of the rights granted herein. A lake carries the inherent risk of drowning or other injury to persons that access the lake, and the Parties agree that Licensors shall have no obligation to prevent drownings or other injuries to persons that access Irvine Lake per the County's opening of Irvine Lake for recreation. Accordingly, the County hereby agrees to release Licensors from any liability or third party claims that result from Recreational Activities by the public at Irvine Lake, as well as for any claimed injury attributable to water quality in Irvine Lake and/or SWD and/or IRWD filling, or declining to fill, Irvine Lake.

XIV. NOTICE

Unless otherwise expressly identified and authorized in the preceding Sections of this License, any and all notices given or delivered by any Party hereto shall be in writing and delivered in person or by Federal Express or similar private commercial courier for next business day delivery or otherwise deposited in the United States mail in the County of Orange, California, duly certified or registered, postage prepaid, and addressed as set forth below:

<u>County of Orange</u>	<u>Irvine Ranch Water District</u>	<u>Serrano Water District</u>
OC Parks 13042 Old Myford Road Irvine, CA 92602 Attn: OC Parks, Real Estate Division	Irvine Ranch Water District 15600 Sand Canyon Avenue P.O. Box 5700 Irvine, CA 92619-7000 Attn: General Manager	Serrano Water District 18021 East Lincoln St. Villa Park, CA 92861-8700 Attn: General Manager

XV. MISCELLANEOUS

- A. This License shall be binding on the successors, assigns and legal representatives of each of the Parties hereto; provided, the County shall not assign or transfer its interest in this License without the prior written consent of Licensors. Any such assignment without the consent and approval in writing of Licensors shall cause this License to automatically terminate.
- B. This License represents the entire agreement between the Parties hereto regarding the subject matter herein and supersedes all prior negotiations, representations or agreements, either written or oral. Exhibit 1 is attached hereto and is hereby incorporated herein by this reference for all purposes.

- C. This License may be modified only by written instrument executed by all Parties hereto.
- D. Time is of the essence of each provision of this License.
- E. No delay on the part of any Party hereto in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any Party hereto of any right, power or privilege hereunder operate as a waiver of any other right, power or privilege hereunder, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.
- F. This License shall be governed by and construed in accordance with the laws of the State of California.
- G. If any suit or action is brought to enforce or construe any provision of this License, each Party shall be responsible for its own costs and expenses arising out of such litigation, including attorneys' fees and court costs.
- H. Serrano Water District maintains an Aquaculture Permit, Facility Registration #1005950752 ("Aquaculture Permit"), with the California Department of Fish and Wildlife ("CDFW") which authorizes fish stocking in Irvine Lake. The Aquaculture Permit also allows for the public to participate in shoreline fishing of Irvine Lake without a CDFW freshwater fishing license. If authorized by CDFW, and as part of this License, SWD may agree to transfer its maintained and registered Aquaculture Permit to the County for the duration of this License. The County may agree to accept the transfer of the Aquaculture Permit, if authorized by CDFW, for the duration of this License, and if County accepts the transfer, County agrees to transfer the Aquaculture Permit back to SWD at the end of the 12 months (unless such transfer period is extended by written concurrence of SWD).
- I. This License may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, together, shall constitute but one and the same instrument.

[SIGNATURE PAGE TO FOLLOW]

This License may be executed and delivered in counterparts by facsimile, each of which so executed and delivered counterpart is original, and such counterparts, together, shall constitute but the same instrument. Each of the Parties hereto agrees to additionally execute, and deliver, original copies of this agreement circulated subsequent to its initial execution and delivery by facsimile.

IN WITNESS WHEREOF, the Parties have executed this License as of the Effective Date.

County of Orange

Date_____

Thomas A. Miller
Chief Real Estate Officer (Delegated
authority per Resolution 17-003)

Irvine Ranch Water District

Date_____

Paul Cook
General Manager

Leslie Bonkowski
Secretary

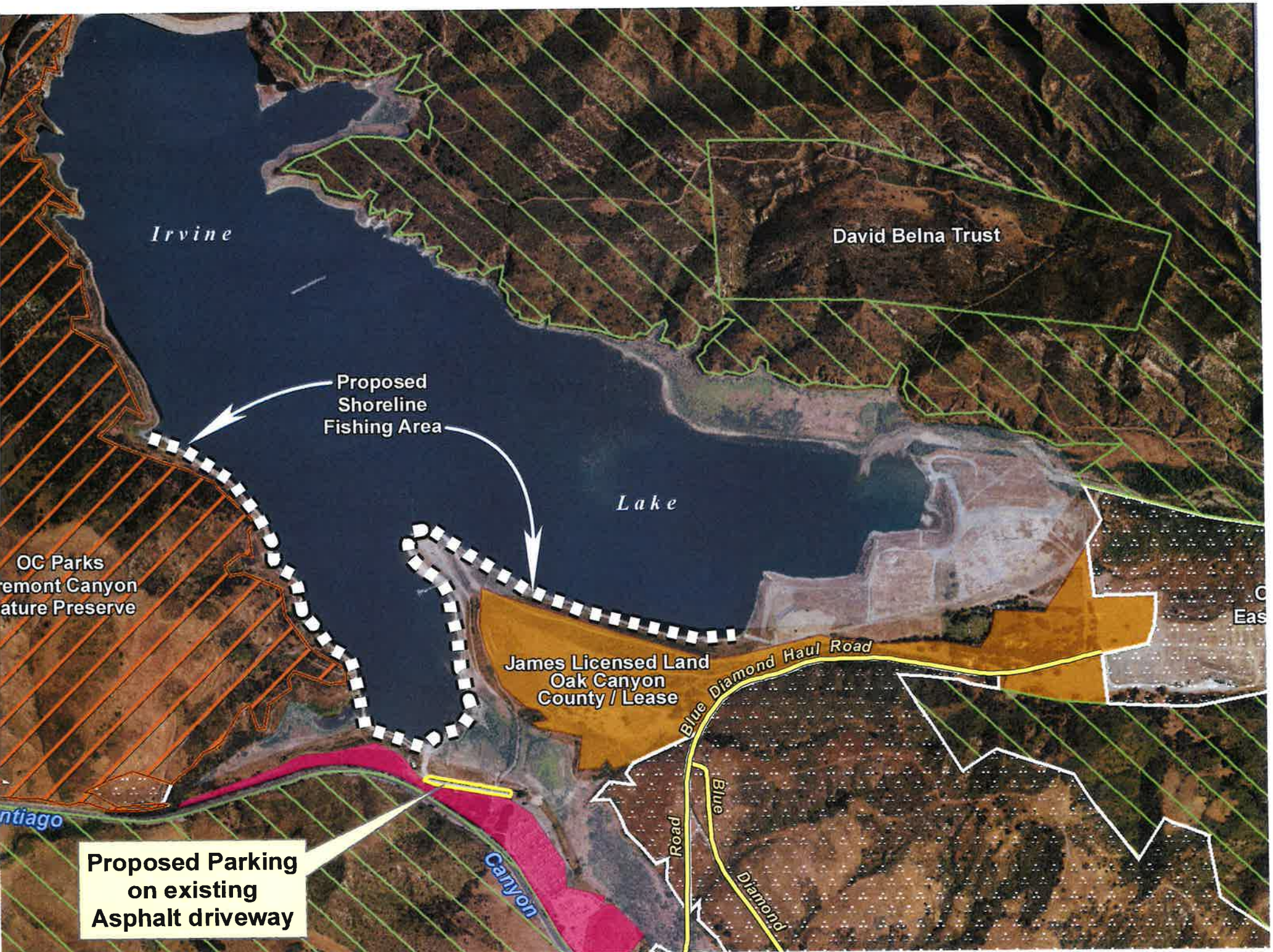
Serrano Water District

Date_____

Jerry Vilander
General Manager

EXHIBIT 1
MAP OF PREMISES

[attached]



Irvine

David Belna Trust

Proposed Shoreline Fishing Area

Lake

OC Parks Remont Canyon Nature Preserve

James Licensed Land Oak Canyon County / Lease

Blue Diamond Haul Road

Proposed Parking on existing Asphalt driveway

Canyon

Blue Diamond Road

Blue Diamond

Eas

LICENSE FOR COUNTY TO ACCESS AND USE RECREATION RIGHTS TO IRVINE LAKE

THIS ACCESS AND USE LICENSE ("**License**") is entered into the 1st day of July, 2019 ("**Effective Date**") by and between IRVINE RANCH WATER DISTRICT, a California water district organized under and existing pursuant to Sections 34000, *et seq.* of the California Water Code ("**IRWD**"), SERRANO WATER DISTRICT, a special governmental district formed under the Irrigation District Law, California Water Code Sections 20500, *et seq.* ("**SWD**") and the COUNTY OF ORANGE, a political subdivision of the State of California ("**County**"). Each entity may be referred to herein individually as a "Party," or collectively as the "Parties."

RECITALS

1. SWD and IRWD are the co-owners in fee title to that certain Reservoir facility historically known as "Santiago Reservoir" ("**Santiago Reservoir**" or "**Reservoir**") and its waters ("**Irvine Lake**").
2. The Irvine Company, a Delaware limited liability company and TIC Land Investment LLC, a Delaware limited liability company (collectively, "**TIC**"), and SWD jointly own the recreational rights to the waters of Irvine Lake, which, according to that certain settlement agreement dated April 19, 1929, include "fishing, hunting, boating and such other uses as will not pollute or interfere with the use of said waters by the parties..." ("**Recreational Rights**"). TIC owns 75% of the Recreational Rights and SWD owns 25%. Use of the Recreational Rights by the general public is not authorized without mutual agreement between TIC and SWD. County and TIC have executed a separate agreement by which TIC has permitted the County to utilize its Recreational Rights for the purposes set forth in this License.
3. County received property ("**Donation Property**") in 2014 through an historic donation from TIC, some of which is adjacent to portions of the Reservoir ("**Recreational Parcel**"). Included with this donation, TIC made an Irrevocable Offer of Dedication ("**IOD**") to County that included, among other things, TIC's share of Recreational Rights to the waters of Irvine Lake. The IOD requires satisfying certain conditions precedent prior to the transfer of the Recreational Parcel and TIC's Recreational Rights to the County.
4. Subject to the terms and conditions set forth below, SWD and IRWD (collectively, "**Licensors**") are willing to enter into an exclusive license ("**License**") with the County whereby the County may enter and utilize the Recreational Rights and the Reservoir, and Irvine Lake ("**Premises**") for recreational uses ("**Recreational Activities**") consistent with the Recreational Rights held by TIC and SWD.
5. The Parties recognize that SWD claims that its past use of the Recreation Rights have historically yielded SWD substantial revenue. The Parties further understand that County's payments to SWD are only intended as consideration for the limited purposes of this License.

NOW, THEREFORE, in consideration for the mutual promises, covenants and conditions contained herein, the Parties agree as follows:

I. DEFINITIONS

The following terms provided in this section shall have the specific meanings assigned below and to be used throughout the entirety of this License.

“County” shall mean or refer to the County of Orange, a political subdivision of the State of California.

“Effective Date” shall mean or refer to the date this License is signed by all Parties which shall commence the term.

“Irvine Lake” shall mean or refer to the water located within the Reservoir over which TIC and SWD currently own the Recreational Rights.

“IRWD” shall mean or refer to Irvine Ranch Water District, a California water district organized under and existing pursuant to Section 34000, *et seq.* of the California Water Code.

“License” shall mean or refer to this agreement for the access and use of the Reservoir and the Water of Irvine Lake.

“Licensors” shall mean or refer to SWD and IRWD, collectively.

“Licensors’ Respective Rights” shall mean or refer to all of the following, collectively: (i) SWD’s ownership rights to the Reservoir, the waters of the Reservoir, and its proportional share of the Recreational Rights to the waters of Irvine Lake; (ii) IRWD’s ownership rights to the Reservoir and the waters of the Reservoir.

“Recreational Activities” shall mean or refer to activities, actions, and events consistent with the exercise of the Recreational Rights under this License. For the purposes of this License, the Recreational Activities to be exercised by County shall be limited to shoreline fishing in areas designated on the map attached hereto as Exhibit 1 and those activities reasonably related thereto (e.g. access over the Reservoir, in designated areas, to reach the waters of Irvine Lake). Recreational Activities shall not include boating or other on-water use of Irvine Lake.

“Recreational Rights” shall mean or refer to the rights to use the waters of Irvine Lake, which said rights are currently owned by TIC (75%) and SWD (25%), as stated in a certain agreement dated April 19, 1929 between the predecessors in interest of TIC and SWD, which rights include “fishing, hunting, boating and such other uses as will not pollute or interfere with the use of said waters by the parties[.]”

“Santiago Reservoir” or **“Reservoir”** shall mean or refer to the property (shoreline, lake bed, etc.) in which the water of Irvine Lake is located.

“SWD” shall mean or refer to Serrano Water District, a special governmental district formed under the Irrigation District Law, Sections 20500, *et seq.* California Water Code.

“TIC” shall mean or refer to The Irvine Company, a Delaware limited liability company and TIC Land Investment LLC, a Delaware limited liability company.

II. PREMISES

The premises (“**Premises**”) shall mean or refer to those areas of Santiago Reservoir identified in Exhibit 1 and designated for the Recreational Activities along, in, and over the Reservoir and for access to the waters of Irvine Lake for the purpose of the general public to engage in the Recreational Activities.

III. CONDITION AND INSPECTION OF PREMISES

- A. County acknowledges that the Premises are being licensed on an “as-is” basis, and County’s access to and use of the Premises is done without reliance upon any representation by the Licensors, or any of their respective officers, employees, agents or representatives, or any other person, concerning the Premises, their fitness for County’s intended use or any other particular purpose of use, their income producing history, potential or capabilities, their value, or any other promise, representation or inducement not expressly set forth in this License.
- B. County acknowledges that the Licensors, their respective officers, employees, agents or representatives, have not made any written or oral representation, promise or warranty, expressed or implied, concerning the Premises, its fitness for County’s intended use or any other purpose or use, their income producing history, potential or capabilities, their value, or any other matter not expressly set forth in this License.
- C. County acknowledges that County has had the opportunity to and has inspected the Premises prior to the execution of this License, and that County accepts the Premises in the condition in which the Premises exist as of the date of this License. County shall be responsible for preparing and maintaining the Premises in a manner that is sufficiently safe and appropriate for the Recreational Activities.
- D. The Parties understand that Irvine Lake is first and foremost a water supply reservoir that will be operated to ensure continued performance of that function. Licensors retain the sole discretion to determine how the Reservoir will be operated, to include how it will be filled and drained, and what water quality will be required to ensure continued function as a source of drinking water. Licensors agree to provide information (e.g. water levels and water quality) that Licensors already collect to County to assist County with making adjustments to accommodate the shoreline fishing use of the lake. Further, Licensors will notify County as soon as practicable of any water quality or water level issues that may negatively impact public health and safety (e.g. contamination levels that may impact fish or public’s consumption of fish).

IV. TERM

The term (“**Term**”) of this License and the rights of the County hereunder shall commence on the Effective Date and shall only be revoked or terminated upon the earlier of:

- A. 12 months after the Effective Date of this License; or

- B. The abandonment of this License by the County for its convenience as evidenced by a 30 day written notice provided by the County to Licensors¹; or
- C. A written agreement to terminate has been signed by all Parties.
- D. County engaging in prohibited activities or uses inconsistent with or beyond the scope of this License.
- E. Action by a regulatory agency that limits or otherwise restrains the ability of the public to consume fish caught in Irvine Lake.

If this License is terminated by Licensors prior to the expiration date of this License, then the County shall only need to pay a pro rata amount of its Fee based on the actual amount of time the License was effective.

V. USE

Consistent with the Licensors' Respective Rights, for and during the term of this License, and any extension or renewal of it, the Licensors hereby grant to the County the following uses of the Premises:

- A. Exclusive use of Recreational Rights to the waters of Irvine Lake as currently owned by TIC and SWD and defined in this License; and
- B. Exclusive access rights upon, over, and across the Reservoir, in designated areas, to reach the waters of Irvine Lake for the purposes of using the Recreational Rights for Recreational Activities; and
- C. Ability to prepare the Premises as necessary for the Recreational Activities, including, but not limited to, brush clearing and grading; and
- D. The right to engage a County supported concessionaire ("**Concessionaire**") for the purposes of offering the use of the Recreational Rights and access to and from the Reservoir to the general public for the purpose of Recreational Activities.

The County's use of the Premises includes the ability to offer to the general public access and use of the Reservoir and the waters of Irvine Lake for the Recreational Activities as well as access and use of the Premises by County contractors, licensees, employees, the Concessionaire, etc. to effectuate the County and general public's exercise of the Recreational Rights to conduct Recreational Activities.

The rights granted herein are subject to all easements, covenants, conditions, restrictions, reservations, rights, rights-of-way, encumbrances, assessments, leases and other matters of record, apparent or of which County is or should be aware, as such matters now or hereafter affect the Premises.

Licensors retain all of their respective rights in the Premises and the County will not acquire any interest temporary, permanent, irrevocable, possessory or otherwise by reason of this License, or by the exercise of the permission given herein. The County will make no claim to any such interest.

¹ Should the County terminate this License "for cause," to include, among other things, regulatory restrictions that frustrate Recreational Activities, or material breach by one of the Licensors, then County is not required to provide a 30 day written notification prior to terminating this License.

VI. IMPROVEMENTS

County may make improvements to the Premises and perform all necessary repair and maintenance of said improvements in order to engage in the use and benefit of the Recreational Activities. County must submit to Licensors, for prior written approval, complete improvement plans, including grading plans, identifying all proposed improvements. Submittal and response from SWD and IRWD shall be concluded within two (2) weeks prior to County making any improvements to the Premises. The Parties agree to work in good faith to agree on any adjustments or modifications to County's plans for improvements and to work expeditiously on finalizing any such plans. Licensors are not required, at any time, to make any improvements, alterations, changes or additions of any nature whatsoever to the Premises; provided, however, that Licensors shall be responsible to repair damage to any County-installed improvements caused by the active negligence or intentional acts or omissions of Licensors or their respective contractors, agents, employees, or invitees.

VII. MAINTENANCE AND REPAIRS

Except for maintenance or repairs necessary to address damage caused by the negligent or intentional acts or omissions of Licensors or their respective contractors, employees, invitees, etc., County shall perform, at its sole cost and expense, all maintenance and repairs of any improvements installed by County within the Premises. Such maintenance shall be performed in such manner and at such intervals as shall be required to maintain County's improvements within the Premises in good condition and repair, and shall be accomplished without interfering with the use and operation of the Reservoir for water supply purposes by SWD and IRWD.

VIII. FEE

For the County's use of the Recreational Activities, the County shall pay SWD a fee ("Fee") which shall be the greater of: (i) \$4,500 per month or (ii) 25% of the County's net proceeds obtained from its Recreational Activities.. Payment of the Fee shall be made on a monthly basis in arrears within forty-five days with supporting documents to verify the Fee paid.

If this License is terminated by County prior to its expiration date for convenience pursuant to Section IV, above, the County shall provide thirty (30) days advance notice and shall pay the full amount otherwise due for any month or portion of month this License is still in effect, with no pro rata calculation applicable for such month.

If this License is terminated by County prior to its expiration date for cause (e.g. material breach, regulatory requirements impose a substantial and negative impact on County's use of the License), the termination shall be effective immediately upon written notice provided by County to the Licensors, and County shall only be responsible for a pro rata difference in the Fee owed for the County's actual use of the Premises.

IX. APPROVALS; COMPLIANCE

The County's use of the Premises hereunder shall be conditioned upon the County, at its sole cost and expense:

- A. Obtaining and/or maintaining all necessary licenses and permits from all appropriate public and/or governmental agencies with respect to such use; and

- B. Complying with each and every federal, state or local law, regulation, standard, decision of court, ordinance, rule, code, order, decree, directive, guideline, permit or permit condition, together with any agreement, declaration of covenants, conditions and restrictions which have been recorded in any official or public records with respect to the Reservoir or any portion thereof, each as currently existing and as amended, enacted, issued or adopted in the future which are or become applicable to the License Area.

X. DAMAGE; LIENS

The County shall repair and restore any damage or casualty to any improvements located within the Premises arising from the County's exercise of this License and/or use of the Premises hereunder. The County shall not permit to exist or otherwise to be enforced against the Premises (or any portion thereof) any mechanics', materialmen's, contractors' or other liens arising out of the acts or omissions of the County hereunder.

XI. HAZARDOUS SUBSTANCES

The County shall not use, store, or allow the use of any hazardous substances on or onto the Premises, except those used in the normal course of business for the Recreational Activities.

XII. INDEMNIFICATION

- A. The County shall hold harmless, defend with counsel (approved by Licensors) and indemnify Licensors, their elected Board members, respective officers, agents and employees, and successors and assigns, from and against all claims, loss, damage, actions, causes of actions, expense and/or liability arising from or related to loss or damage to property, including that of Licensors, or injury to or death of persons, including but not limited to, agents or employees of Licensors and members of the public that visit Irvine Lake per the County's opening of Irvine Lake for recreation, that result in any manner whatsoever, directly or indirectly, by the County's, and by extension, the public's, use of the Premises during the Term of this License.
- B. The Licensors shall hold harmless, defend with counsel (approved by County) and indemnify County, its elected Board members, officers, agents and employees, and successors and assigns, from and against all claims, loss, damage, actions, causes of actions, expense and/or liability arising from or related to loss or damage to property, including that of County, or injury to or death of persons, including employees of County, resulting in any manner whatsoever, directly or indirectly, by the Licensors' use of the Premises during the Term of this License. Licensors shall not incur an indemnification obligation by virtue of adding or removing water from Irvine Lake, or from otherwise maintaining water levels or water quality in Irvine Lake.

XIII. ENTRY AT OWN RISK; NO DUTY TO WARN; RELEASE

The County and any other person entering upon the Premises under the authority or color of this License does so at his/her/its own risk and peril. Licensors shall have no duty to inspect the Premises (or any portion thereof) and no duty to warn any person of any latent or patent defect, condition or risk that might be incurred in the exercise of the rights granted herein. A lake carries the inherent risk of drowning or other injury to persons that access the lake, and the Parties agree that Licensors shall have no obligation to prevent drownings or other injuries to persons that access Irvine Lake per the County’s opening of Irvine Lake for recreation. Accordingly, the County hereby agrees to release Licensors from any liability or third party claims that result from Recreational Activities by the public at Irvine Lake, as well as for any claimed injury attributable to water quality in Irvine Lake and/or SWD and/or IRWD filling, or declining to fill, Irvine Lake.

XIV. NOTICE

Unless otherwise expressly identified and authorized in the preceding Sections of this License, any and all notices given or delivered by any Party hereto shall be in writing and delivered in person or by Federal Express or similar private commercial courier for next business day delivery or otherwise deposited in the United States mail in the County of Orange, California, duly certified or registered, postage prepaid, and addressed as set forth below:

<u>County of Orange</u>	<u>Irvine Ranch Water District</u>	<u>Serrano Water District</u>
OC Parks 13042 Old Myford Road Irvine, CA 92602 Attn: OC Parks, Real Estate Division	Irvine Ranch Water District 15600 Sand Canyon Avenue P.O. Box 5700 Irvine, CA 92619-7000 Attn: General Manager	Serrano Water District 18021 East Lincoln St. Villa Park, CA 92861-8700 Attn: General Manager

XV. MISCELLANEOUS

- A. This License shall be binding on the successors, assigns and legal representatives of each of the Parties hereto; provided, the County shall not assign or transfer its interest in this License without the prior written consent of Licensors. Any such assignment without the consent and approval in writing of Licensors shall cause this License to automatically terminate.
- B. This License represents the entire agreement between the Parties hereto regarding the subject matter herein and supersedes all prior negotiations, representations or agreements, either written or oral. Exhibit 1 is attached hereto and is hereby incorporated herein by this reference for all purposes.

- C. This License may be modified only by written instrument executed by all Parties hereto.
- D. Time is of the essence of each provision of this License.
- E. No delay on the part of any Party hereto in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any Party hereto of any right, power or privilege hereunder operate as a waiver of any other right, power or privilege hereunder, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.
- F. This License shall be governed by and construed in accordance with the laws of the State of California.
- G. If any suit or action is brought to enforce or construe any provision of this License, each Party shall be responsible for its own costs and expenses arising out of such litigation, including attorneys' fees and court costs.
- H. Serrano Water District maintains an Aquaculture Permit, Facility Registration #1005950752 ("Aquaculture Permit"), with the California Department of Fish and Wildlife ("CDFW") which authorizes fish stocking in Irvine Lake. The Aquaculture Permit also allows for the public to participate in shoreline fishing of Irvine Lake without a CDFW freshwater fishing license. If authorized by CDFW, and as part of this License, SWD may agree to transfer its maintained and registered Aquaculture Permit to the County for the duration of this License. The County may agree to accept the transfer of the Aquaculture Permit, if authorized by CDFW, for the duration of this License, and if County accepts the transfer, County agrees to transfer the Aquaculture Permit back to SWD at the end of the 12 months (unless such transfer period is extended by written concurrence of SWD).
- I. This License may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, together, shall constitute but one and the same instrument.

[SIGNATURE PAGE TO FOLLOW]

This License may be executed and delivered in counterparts by facsimile, each of which so executed and delivered counterpart is original, and such counterparts, together, shall constitute but the same instrument. Each of the Parties hereto agrees to additionally execute, and deliver, original copies of this agreement circulated subsequent to its initial execution and delivery by facsimile.

IN WITNESS WHEREOF, the Parties have executed this License as of the Effective Date.

County of Orange

_____ Date _____
Thomas A. Miller
Chief Real Estate Officer (Delegated
authority per Resolution 17-003)

Irvine Ranch Water District

_____ Date _____
Paul Cook Leslie Bonkowski
General Manager Secretary

Serrano Water District

_____ Date _____
Jerry Vilander
General Manager

EXHIBIT 1
MAP OF PREMISES

[attached]