



IRVINE RANCH WATER DISTRICT

15600 Sand Canyon Ave., P.O. Box 57000, Irvine, CA 92619-7000 (949) 453-5300

November 1, 2011

To: Interested Parties

**Subject: NOTICE OF INTENT TO ADOPT
A MITIGATED NEGATIVE
DECLARATION FOR THE PROPOSED
SANTIAGO CANYON AREA BOOSTER
PUMP STATION (BPS) PERMANENT
GENERATORS PROJECT**

The Irvine Ranch Water District (IRWD) is proposing replacement of the existing portable generators at five BPS sites with permanent electrical emergency generators set with a diesel engine and integral 24-hour fuel storage set on a concrete pad. As the Lead Agency under the California Environmental Quality Act (CEQA), the IRWD has prepared an Initial Study/Draft Mitigated Negative Declaration (IS/MND) which evaluates the potential environmental effects of the proposed project.

Project Location: The Proposed Project site is located within the Santiago Canyon-Modjeska Canyon area within an unincorporated portion of the County. The Proposed Project site is located within five separate IRWD BPS sites. Three of the BPS sites (Fleming BPS, Shaw BPS, and Read BPS) are along Silverado Canyon Road, which runs east from Santiago Canyon Road. The fourth site (Williams BPS) is located along Williams Canyon Road, which also runs east from Santiago Canyon Road and is approximately 1 mile (mi) south of Silverado Canyon Road. The fifth site (Manning BPS) is

located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mi south of Williams Canyon Road.

Project Description: IRWD is proposing replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This Proposed Project would replace the portable generators at each of the sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Four of the five permanent generators would be contained within a concrete masonry unit (CMU) block wall for protection against fires. Construction is anticipated to be phased to allow work at no more than two sites at any given time in order to minimize disruption to local residents and avoid extended work stoppages at any individual site.

Public Review Period: The IS/MND is being made available for public review for a period of 30 days beginning November 2, 2011 and concluding December 1, 2011. The electronic version of the IS/MND may be viewed at the following website address:
<http://www.irwd.com/environment/ceqa.html>
Printed copies of the IS/MND are also available for review at the Irvine Ranch Water District Headquarters, located at 15600 Sand Canyon Avenue, Irvine, California 92618-3102.

Comments on the IS/MND must be received in writing no later than 5:00 p.m., December 1, 2011 and sent to:

Irvine Ranch Water District
Attention: Christian Kessler
15600 Sand Canyon Avenue
Irvine, California 92618-3102

Comments may also be emailed to Christian Kessler at KESSLER@irwd.com.

All comments received related to issues discussed in the IS/MND will be included in the final package that is forwarded to the Board of Directors for final consideration.

Public Meeting: The Board will consider the adoption of the IS/MND and any comments received on the IS/MND, along with the proposed project at a regularly scheduled Board meeting to be held on December 12, 2011 at 5:00 p.m. at Irvine Ranch Water District Headquarters, located at 15600 Sand Canyon Avenue, Irvine, California 92618. All parties are welcome to attend and provide testimony as to the proposed project and/or the IS/MND.

If you have any questions regarding the IS/MND, please contact Mr. Christian Kessler at (949) 453-5441.

The project site is not listed as a hazardous waste site under Government Code Section 65962.5.

DRAFT

**INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION**

**SANTIAGO CANYON AREA BOOSTER PUMP STATION
PERMANENT GENERATORS PROJECT**

LSA

October 2011

DRAFT

**INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION**

**SANTIAGO CANYON AREA BOOSTER PUMP STATION
PERMANENT GENERATORS PROJECT**

Submitted to:

Christian Kessler
Water Resources and Environmental Compliance
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618
(949) 453-5300

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LSA

October 2011

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

In accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared as environmental documentation for the proposed Santiago Canyon Area Booster Pump Station (BPS) Permanent Generators Project (Proposed Project) located in the Santiago Canyon area of unincorporated County of Orange (County). This IS/MND includes a description of the Proposed Project, the location of the project site, evaluation of the potential environmental impacts, findings from the environmental review, and proposed mitigation measures to lessen or avoid potentially significant adverse impacts to the environment.

This IS/MND analyzes the environmental effects of the Proposed Project, including related infrastructure improvements. The Proposed Project would replace the existing portable generators at each of the BPS sites with permanent electrical emergency generators set with a diesel engine and integral 24-hour fuel storage set on a concrete pad. A full project description is provided in Section 2.3.

The purpose of this analysis is to provide Irvine Ranch Water District (IRWD) with information to use as the basis for making an environmental determination regarding whether an Environmental Impact Report (EIR) or an MND is the appropriate CEQA documentation for the Proposed Project. An EIR must be prepared when the Lead Agency determines that there is substantial evidence that the Proposed Project, either individually or cumulatively, may cause a significant effect on the environment.

Section 15070 of the State CEQA Guidelines authorizes a Lead Agency to prepare an MND when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Thus, where appropriate mitigation measures are incorporated to reduce potentially significant effects to a level of insignificance, the Lead Agency may prepare and adopt an MND.

In accordance with Sections 15050 and 15367 of the State CEQA guidelines, IRWD is the designated Lead Agency, has principal authority and jurisdiction over all land use entitlements, and is responsible for adoption and/or certification of the environmental documentation.

1.2 FINDINGS OF THIS INITIAL STUDY

Pursuant to CEQA and the State CEQA Guidelines, this IS/MND has been prepared to determine whether implementation of the proposed improvements will result in significant environmental impacts that would require mitigation or preparation of an EIR if significant impacts cannot be avoided. The analysis contained in this IS/MND has found that the Proposed Project may have a significant effect on the environment unless mitigation is included to lessen or avoid the environmental effects of the Proposed Project. Mitigation measures have been identified in this IS/MND. With incorporation of these measures, potential environmental effects would be reduced to less than significant levels. Therefore, IRWD has determined that an MND is the appropriate environmental documentation for the Proposed Project.

This IS/MND is based on an Environmental Checklist Form (Form), as suggested in Section 15063 (d)(3) of the State CEQA Guidelines. The completed Form is found in Section 3.0 of this IS/MND. Section 4.0 provides an explanation for each answer indicated on the Form. The Form and the accompanying evaluation provide the information and analysis upon which IRWD has made its determination that an MND is the appropriate CEQA document for the Proposed Project. The Form is used to review the potential environmental effects of the Proposed Project for each of the following areas:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Mandatory Findings of Significance

1.3 EXISTING DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the State CEQA Guidelines permits an environmental document to incorporate by reference other documents that provide relevant data. The documents outlined in this section are hereby incorporated by reference, and the pertinent material contained therein is summarized throughout this IS/MND where that information is relevant to the environmental setting and analysis

of potential impacts resulting from the Proposed Project. Any document incorporated by reference is available for review at IRWD (address and contact information is provided in Section 1.4). The following was used as a source document in preparing the responses to the Form in Section 4.0; the reference number indicated below has been incorporated into the text:

1. Irvine Ranch Water District, Preliminary Design Report for Santiago Canyon Area Booster Pump Station Permanent Generators Project, Psomas, May 2011.

1.4 REVIEW OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The IS/MND has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as any other parties requesting a copy of the environmental document pursuant to Public Resources Code (PRC) Section 21092.

IRWD has circulated the IS/MND through the State of California Department of Governor's Office of Planning and Research (OPR), although this is not a requirement pursuant to CEQA. Environmental comments and their responses are included as part of the environmental record for consideration by the decision-makers for the Proposed Project. During the 30-day public review period, the Draft IS/MND is available for review at the following locations:

- Irvine Ranch Water District
Water Resources and Environmental Compliance
15600 Sand Canyon Avenue
Irvine, California 92618
- IRWD web page: <http://www.irwd.com/environment/ceqa.html>.

Written or electronic comments on the IS/MND should be addressed to the IRWD contact listed in Section 1.5.

1.5 PROJECT CONTACT PERSONS

IRWD is the Lead Agency for preparation of this IS/MND. All inquiries regarding the IS/MND should be directed to IRWD as follows:

Lead Agency: **Irvine Ranch Water District**
Water Resources and Environmental Compliance
Christian Kessler
15600 Sand Canyon Avenue
Irvine, California 92618
(949) 453-5441
kessler@irwd.com

2.0 PROJECT DESCRIPTION

2.1 EXISTING SETTING

The Proposed Project site is located within the Santiago Canyon-Modjeska Canyon area within an unincorporated portion of the County. The Proposed Project site is located within five separate IRWD BPS sites. Three of the BPS sites (Fleming BPS, Shaw BPS, and Read BPS) are along Silverado Canyon Road, which runs east from Santiago Canyon Road. The fourth site (Williams BPS) is located along Williams Canyon Road, which also runs east from Santiago Canyon Road and is approximately 1 mile (mi) south of Silverado Canyon Road. The fifth site (Manning BPS) is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mi south of Williams Canyon Road. The Project Location Map (refer to Figure 2.1) identifies each of the five BPS locations.

Santiago Canyon Road is generally a two-way highway (one northbound lane and one southbound lane) from Jamboree Road to Live Oak Canyon Road and is designated as a viewscape corridor in the County's General Plan Circulation Element. Silverado Canyon Road, Williams Canyon Road, and Modjeska Canyon Road primarily serve the rural residential communities within these canyons. The BPS sites are primarily located within rural residential land uses, including small ranches. However, the BPS project sites are within developed portions of the general project area.

A summary of each of the project site settings is discussed below:

- **Fleming BPS:** The Fleming BPS is located on Prairie Road between Santiago Canyon Road and Silverado Canyon Road at approximately 1,030 feet (ft) above mean sea level (amsl). The Fleming site is fully developed and within a fenced facility with little to no vegetation on site. There are no nearby or adjacent sensitive receptors.
- **Shaw BPS:** The Shaw BPS is located within an 18 x 20 ft fenced site set approximately 2 ft back from Silverado Canyon Road and 10 ft north of an existing retaining wall along Silverado Creek at approximately 1,305 ft amsl. The site is a pavement and gravel surface within an existing chain-link fence, and is surrounded on all sides by residential sensitive receptors.
- **Read BPS:** The Read BPS is located within an 18 x 22 ft fenced area on the IRWD Read Reservoir property south of Silverado Creek at approximately 1,615 ft amsl. The site is a pavement and gravel surface and is near residential sensitive receptors.
- **Williams BPS:** The Williams BPS is located within a fenced area adjacent to Williams Canyon Road near the beginning of the access road to Williams Canyon Reservoir at approximately 1,272 ft amsl. Silverado Creek is located south of the project site. The site is within a chain link fence area with paved and dirt surface. There are no adjacent or nearby sensitive receptors within 100 ft of the site.
- **Manning BPS:** The Manning BPS is located in a triangular-shaped fenced area near Modjeska Canyon Road at approximately 1,245 ft amsl. The BPS site also houses the Water Treatment Plant, so space is limited at this site.

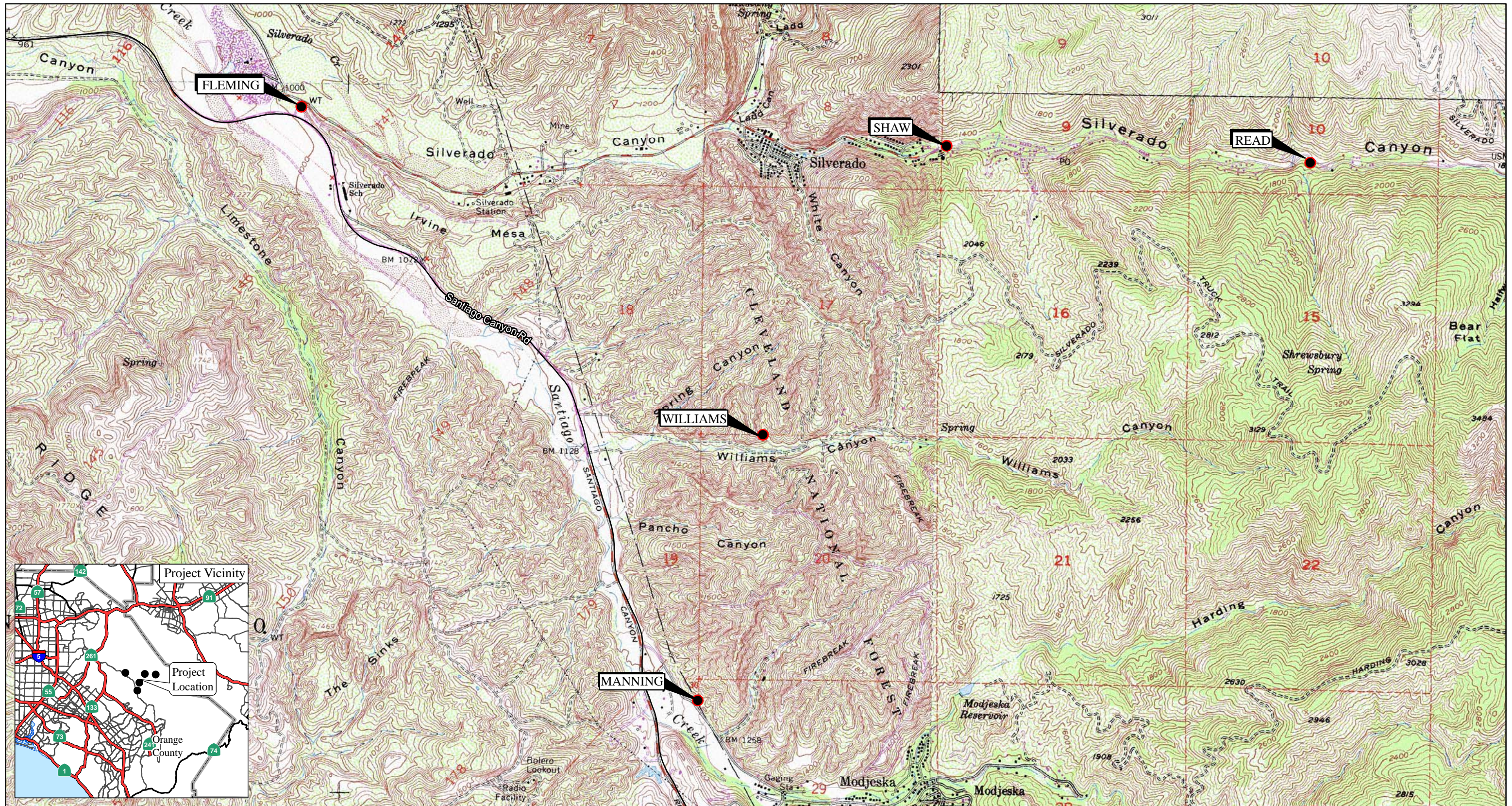
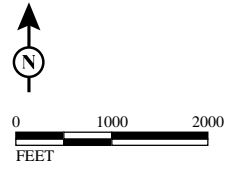


FIGURE 2.1

LSA
 LEGEND
 ● IRWD Booster Pump Stations



SOURCE: USGS 7.5' QUAD - EL TORO ('82)
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Santiago Canyon Area
 BPS Permanent Generators Project
 Project Location Map

The site is largely developed on paved surfaces; however, there is existing natural vegetation and an oak tree located at the northern project limits. Residential sensitive receptors are located in the vicinity, west and south of the site across Modjeska Canyon Road.

2.2 BACKGROUND INFORMATION

In October 2007, the Santiago Fire burned through IRWD’s Santiago Canyon service area, threatening homes, businesses, and the IRWD reservoirs and BPSs in the region. Water pressure in this area is maintained by five BPSs. Continuous operation of these pump stations during a fire is vital to firefighting operations. The name, location, and existing pump motor size of each of the five BPSs are listed in Table 2.A. During the Santiago Fire, power outages were experienced at each of the pump stations, requiring the installation of portable emergency generators at each site. However, these temporary generators are also susceptible to damage by wildfires and are not permitted for permanent installation.

Table 2.A: Existing BPSs in Santiago Canyon Service Area

Booster Pump Station	Location	Pump Motor Size and Quantity
Fleming	74341 Silverado Canyon Road	Two 60 hp pumps
Shaw	28934 Silverado Canyon Road	Two 25 hp pumps
Read	30500 Silverado Canyon Road	Two 25 hp pumps
Williams	27600 Williams Canyon Road	One 60 hp and two 30 hp pumps
Manning	27989 Modjeska Canyon Road	Two 50 hp pumps

hp = horsepower

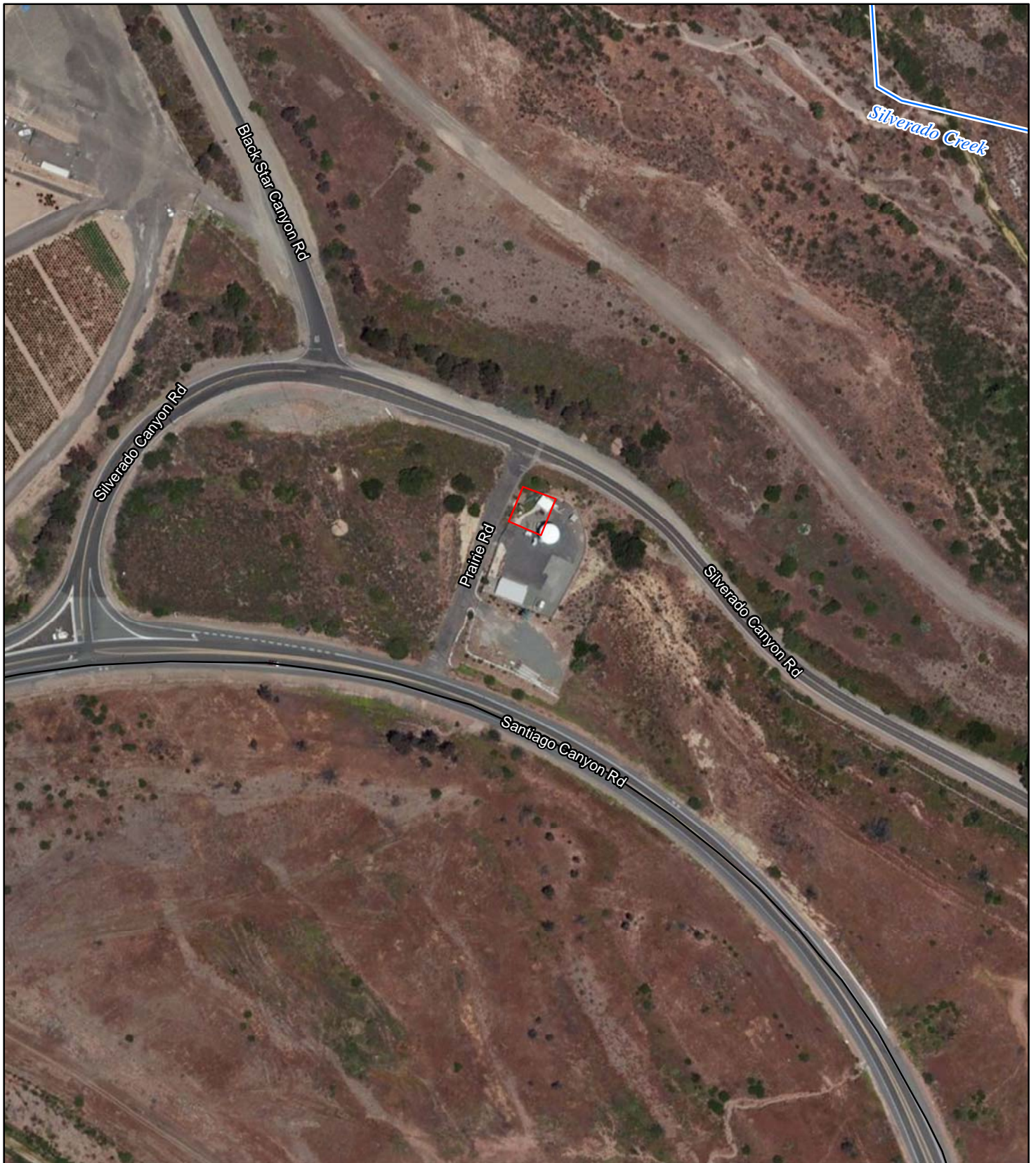
2.3 PROPOSED PROJECT

IRWD is proposing replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This Proposed Project would replace the portable generators at each of the sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Four of the five permanent generators would be contained within a concrete masonry unit (CMU) block wall for protection against fires. Each of the BPSs and the proposed improvements are listed in further detail below.

Construction is anticipated to be phased to allow work at no more than two sites at any given time in order to minimize disruption to local residents and avoid extended work stoppages at any individual site.

2.3.1 Fleming Booster Pump Station

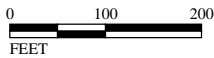
The Fleming BPS is located on Prairie Road between Santiago Canyon Road and Silverado Canyon Road at approximately 1,030 ft amsl (refer to Figures 2.2 and 2.3). This 0.5-acre (ac) site is unique compared to the other four sites, due to its size and the availability of space for new construction. This site can easily accommodate a permanent emergency generator.



LSA

LEGEND

- Project Site
- Creeks

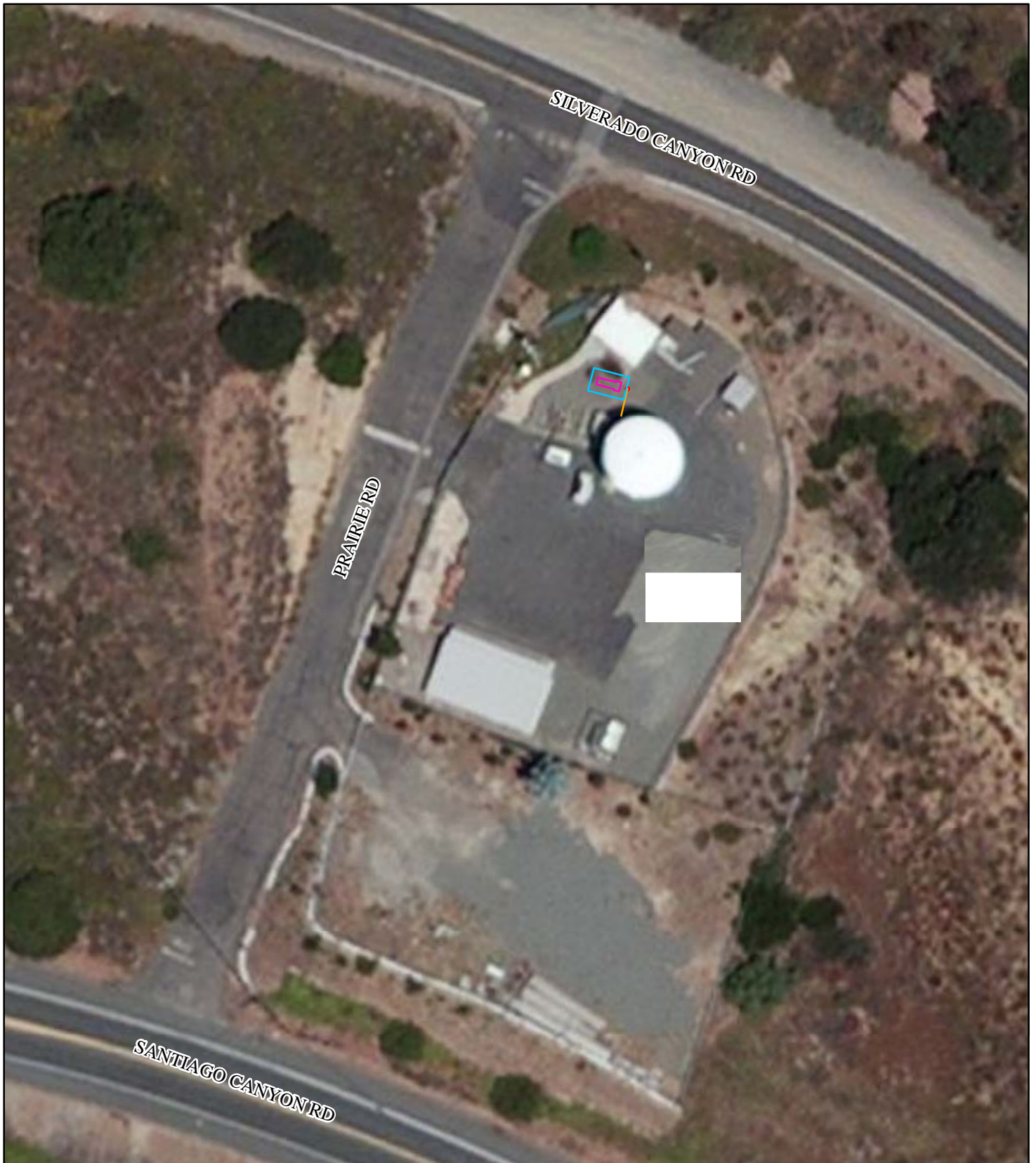


SOURCE: Bing 2010

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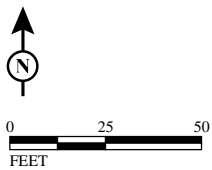
FIGURE 2.2

Santiago Canyon Area
 BPS Permanent Generators Project
 Fleming Booster Pump Station Vicinity Map



LSA

- LEGEND
- Fleming Booster Pump Station Project Site
 - Electric
 - Electric Underground
 - Generator
 - Generator Pad



SOURCE: Bing 2010

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FIGURE 2.3

Santiago Canyon Area
BPS Permanent Generators Project
Fleming Booster Pump Station
Existing and Proposed Site Improvements

Existing facilities at the Fleming BPS site include the following:

- Two 60-horsepower (hp) pumps with aboveground piping, valves, and appurtenances
- Electrical and control panels with electrical service, switchgear, and Supervisory Control and Data Acquisition (SCADA) equipment
- Trailer-mounted portable generator
- Trailer-mounted emergency pump
- Office building
- Maintenance storage buildings
- Cellular telephone tower and switchgear
- Chain-link fence and gates around site perimeter

The following are proposed improvements at this site:

- Permanent electrical emergency generator (150 kilowatts [kW] to power two 60 hp water pumps on 480-volt [V] service) with a diesel engine and integral 24-hour fuel storage set on a concrete pad
- One automatic transfer switch with electrical connections to facilitate the powering of two existing 60 hp pumps from a permanent electric generator
- Triple switch and camlock connector
- Site improvements including pavement and gravel restoration

Access, Property Issues, Easements. The Fleming BPS is located on IRWD-owned property. Construction access, as well as future IRWD maintenance access, is available through an existing chain-link swing gate fronting a paved access road between Silverado Canyon Road and Santiago Canyon Road. The existing access gate and driveway pavement would not be disturbed. Work can be performed within the limits of the existing property without obtaining easements or additional real property.

Site Layout and Improvements. The pump station site is mostly paved with descending slopes along the perimeter to the north and south and an ascending slope to the east. The project would construct and install a permanent emergency electrical generator set on a concrete pad. The recommended location is relatively close to the existing electrical panel, providing a shorter run of conduit compared to other on-site alternative locations considered.

Security Requirements and Fencing. The Fleming BPS is located within an existing chain-link gate. No additional security improvements are needed or proposed for this facility.

Setback Requirements. The generator pad would be located in an open area providing a minimum 4 ft clearance for access on all sides to open panels on the weatherproof enclosure for maintenance and repair. Access for fueling would be provided.

Drainage. The existing runoff pattern would not be changed. The runoff quantity or discharge rate is not expected to increase. The new generator pad would be surrounded by gravel surface.

Construction. Miscellaneous site demolition including removal of decorative wishing well, and utility relocations would be required for construction of the generator pad and conduits. No excavation greater than 5 ft deep is anticipated. Proposed construction staging areas are shown in Figure 2.3. Construction is anticipated to occur in January 2012 and be complete, including site stabilization, within 8 weeks.

Traffic Control. Work at this site would not require traffic control.

2.3.2 Shaw Booster Pump Station

The Shaw BPS is located within an 18 x 20 ft fenced site set approximately 2 ft back from Silverado Canyon Road and 10 ft north of an existing retaining wall along Silverado Creek at approximately 1,305 ft amsl (Figures 2.4 and 2.5).

Existing facilities at the Shaw BPS site include the following:

- Two 25 hp pumps with aboveground piping, valves, and appurtenances
- Electrical and control panels with electrical service, switchgear, and SCADA equipment
- Power pole with overhead power at site
- Chain-link security fence

The following are proposed improvements at this site:

- Permanent electrical emergency generator (100 kW to power two 25 hp water pumps on 480V service) with a diesel engine and integral 24-hour fuel storage set on a concrete pad
- New electrical service meter pedestal and switchgear equipment and cabinets, including all new buried conduits with conductors
- One automatic transfer switch with electrical connections to facilitate the powering of two existing 25 hp pumps from a permanent electric generator
- Triple switch and camlock connector
- Site improvements including a masonry wall, chain-link fence with swing gate, and asphalt concrete (AC) paving in front of the access gate



LSA

LEGEND

-  Project Site
-  Creeks



SOURCE: Bing 2010
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FIGURE 2.4

Santiago Canyon Area
BPS Permanent Generators Project
 Shaw Booster Pump Station Vicinity Map

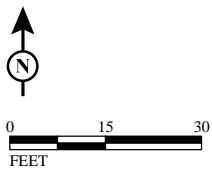


L S A

LEGEND

- Shaw Booster Pump Station Project Site
- Electric
- Generator
- Generator Pad
- Site Wall
- Site Wall Footing
- Site Fence
- Site Gate
- Contractor Staging Area
- Water Equipment

* The site boundary is an approximate location based on available information provided by Psomas.



SOURCE: Bing 2010

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FIGURE 2.5

*Santiago Canyon Area
BPS Permanent Generators Project*

**Shaw Booster Pump Station
Existing and Proposed Site Improvements**

Access, Property Issues, Easements. The Shaw BPS is located partially on IRWD-owned property and partially in County roadway right-of-way along Silverado Canyon Road. All-weather access is available from the County road and gravel access around the pump station. Work would be required inside County right-of-way, requiring a County encroachment permit.

Site Layout and Improvements. The Shaw BPS site lies between Silverado Canyon Road and a retaining wall in Silverado Creek. The project would construct a permanent emergency electrical generator set on a concrete pad on the west side of the existing BPS in order to avoid overhead utility conflicts when installing or removing the generator by crane and provide better access for fueling, maintenance, and repair.

The proposed block screening wall is located approximately 2 ft from the existing Silverado Creek retaining wall. The retaining wall varies from approximately 4 ft high closest to the proposed block wall to 5 ft high across from the proposed new electrical cabinets. The foot of the existing concrete wall would be lowered to 2 ft below grade, thereby reducing the additional load on the existing retaining wall to near zero and providing a deepened footing in an area known to flood when Silverado Creek overtops the banks. There is an existing 8-inch (in) asbestos cement waterline supplying water to the suction side of the pump station. The generator foundation would be designed for a depth of 4 ft.

Security Requirements and Fencing. A new 8 ft high block wall along the south and east sides of the site would be constructed to protect the equipment from radiant heat during a brush fire. A chain-link fence and a 12 ft wide double-swing chain-link gate would be constructed on the north and west sides for security.

Setback Requirements. The existing chain-link fence has an approximately 2 ft setback from the Silverado Canyon Road edge of pavement. The proposed chain-link fence would be constructed approximately 2 additional ft from the edge of pavement. The generator pad would be located within the proposed block wall and fencing to provide a minimum 4 ft clearance for access on all sides in order to open panels on the weatherproof enclosure for maintenance and repair. Access for fueling would be provided.

Drainage. The existing runoff pattern would not be changed. The runoff quantity or discharge rate is not expected to measurably increase. The site is located in an area with gravel surfaces on all sides. The new generator pad would be surrounded by gravel surfaces.

Construction. The proposed improvements, including construction of the generator pad, electrical cabinets, block wall, and conduits would require minor demolition work comprising fence, gravel, and electrical panel removal. No excavation greater than 5 ft deep is anticipated. Proposed construction staging areas are shown in Figure 2.5. Construction is anticipated to occur in January/February 2012 and be complete, including site stabilization, within 8 weeks.

Traffic Control. Work at the site would require traffic control on Silverado Canyon Road.

2.3.3 Read Booster Pump Station

The Read BPS is located within an 18 x 22 ft fenced area on the IRWD Read Reservoir property, south of Silverado Creek at approximately 1,615 ft amsl (Figures 2.6 and 2.7). Existing facilities at the Read BPS site include the following:

- Two 25 hp pumps with aboveground piping, valves, and appurtenances
- Electrical and control panels with electrical service, switchgear, and SCADA equipment
- Trailer-mounted portable generator outside the existing pump station fencing
- Two power poles with overhead power at site
- Chain-link security fence

The following are proposed improvements at this site:

- Permanent electrical emergency generator (100 kW to power two 25 hp water pumps on 480V service) with a diesel engine and integral 24-hour fuel storage set on a concrete pad
- New electrical service meter pedestal and switchgear equipment and cabinets, including all new buried conduits with conductors
- One automatic transfer switch with electrical connections to facilitate the powering of two existing 25 hp pumps from a permanent electric generator
- Triple switch and camlock connector
- Site improvements, including a masonry wall and chain-link swing gate

Access, Property Issues, Easements. The Read BPS is located on IRWD-owned property at the Read Reservoir site. All-weather access is available from Silverado Canyon Road to a paved local road, to a paved reservoir access road. Work identified herein can be performed within the existing property limits without obtaining easements or additional real property.

Site Layout and Improvements. Two potential locations were considered to construct a permanent emergency electrical generator set on a concrete pad. The first option, installation of a new generator on the northeast side of the existing pump station, would be close to the pump station and out of the way in an area not otherwise required for access. Minimal brush clearing and grading would be required for constructing the generator in this location. The wall would be angled in the north corner to maintain separation from the top of the Silverado Creek embankment. A second option would place the permanent generator at approximately the same location as the existing trailer-mounted unit. Construction of the block wall would need to enclose the power pole and guy-wire. The first option on the northeast side of the existing pump station was chosen as the preferred alternative.



LSA

LEGEND

-  Project Site
-  Creeks



SOURCE: Bing 2010
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FIGURE 2.6

Santiago Canyon Area
 BPS Permanent Generators Project
 Read Booster Pump Station Vicinity Map



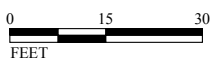
LSA

LEGEND

- Read Booster Pump Station Project Site
- Electric
- Existing Electric
- Generator

- Generator Pad
- Portable Generator
- Site Wall
- Site Wall Footing

- Site Fence
- Site Gate
- Contractor Site
- Water Equipment



* The site boundary is an approximate location based on available information provided by Psomas.

FIGURE 2.7

Santiago Canyon Area
BPS Permanent Generators Project

Read Booster Pump Station
Existing and Proposed Site Improvements

Security Requirements and Fencing. A split-face block wall, approximately 100 ft long, would be constructed to replace the existing chain-link fence along the northwest side of the site, and to expand the site for the new generator. The existing chain-link fence near the electrical panels is approximately 4 to 6 ft from the top of slope above Silverado Creek. The north corner of the wall would be angled across the corner to maintain as much separation as possible between the new wall and the top of the slope. Enclosing the generator within the block wall perimeter would provide security and fire protection in the event of a brush fire. The overall length of the block wall would be approximately 100 linear feet. A 12 ft wide chain-link gate would provide access to the generator and pumps.

Setback Requirements. The generator pad would be located within the proposed block wall and fencing to provide a minimum 4 ft clearance for access on all sides to open panels on the weatherproof enclosure for maintenance and repair. Access for fueling would be provided.

Drainage. The existing runoff pattern would not be changed. The runoff quantity or discharge rate is not expected to measurably increase. The site is located in an area with AC pavement on two sides and dirt on the remaining two sides. The new generator pad would be surrounded by gravel surfaces.

Construction. The proposed improvements, including construction of the generator pad, electrical cabinets, block wall, and conduits would require minor demolition work comprising fence, gravel, and electrical panel removal. No excavation greater than 5 ft deep is anticipated. Proposed construction staging areas are shown in Figure 2.7. Construction is anticipated to occur in February/March 2012 and be complete, including site stabilization, within 8 weeks.

Traffic Control. Work at the site would not require traffic control.

2.3.4 Williams Booster Pump Station

The Williams BPS is located within a fenced area adjacent to Williams Canyon Road near the beginning of the access road to Williams Canyon Reservoir at approximately 1,272 ft amsl (Figures 2.8 and 2.9). IRWD owns a 60 ft wide ingress/egress easement for utility purposes and a 15 ft wide slope, grading, and drainage easement. The majority of the existing pump station lies within the utility easement with a sliver of the fence located within the slope and drainage easement.

Existing facilities at the Williams BPS site include the following:

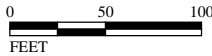
- One 60 hp pump and two 30 hp pumps with aboveground piping, valves, and appurtenances
- Electrical and control panels with electrical service, switchgear, and SCADA equipment
- Trailer-mounted portable generator outside the existing pump station fencing
- Power pole with overhead power at site
- Chain-link security fence



LSA

LEGEND

-  Project Site
-  Creeks



SOURCE: Bing 2010

I:\IRW0901P6\GIS\Williams.mxd (9/21/2011)

FIGURE 2.8

Santiago Canyon Area
BPS Permanent Generators Project
Williams Booster Pump Station Vicinity Map



WILLIAMS CANYON RD

LSA

LEGEND

Williams Booster Pump Station Project Site

- Electric
- Existing Electric
- Generator
- Generator Pad

- Portable Generator
- Site Wall
- Site Wall Footing
- Asphalt Parking
- Site Drain
- Site Drain Pipe
- Site Gate
- Contractor Staging Area



0 25 50
FEET

SOURCE: Bing 2010

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FIGURE 2.9

Santiago Canyon Area
BPS Permanent Generators Project
Williams Booster Pump Station
Existing and Proposed Site Improvements

The following are proposed improvements at this site:

- Permanent electrical emergency generator (150 kW to power one 60 hp water pump and two 30 hp pumps on 480V service) with a diesel engine and integral 24- hour fuel storage set on a concrete pad
- One automatic transfer switch with electrical connections to facilitate the powering of one existing 60 hp pump and two existing 30 hp pumps from a permanent electric generator
- Triple switch and camlock connector
- Site improvements including a masonry wall and chain-link swing gate

Access, Property Issues, Easements. The Williams BPS is located on private property near the entrance to the Williams Canyon Reservoir access road. All-weather access to the site is provided by Williams Canyon Road from Santiago Canyon Road. IRWD owns access, utilities, and slope easements from Santiago Canyon Road to the Williams BPS and Williams Canyon Reservoir sites.

Site Layout and Improvements. Site access is open to the west, south, and east.

Security Requirements and Fencing. A split-face block wall would be constructed to replace the existing chain-link fence in approximately the same location as the existing fence to provide security and fire protection in the event of a brush fire. The overall length of the block wall would be approximately 105 linear feet.

Setback Requirements. The generator pad would be located within the proposed block wall and fencing to provide a minimum 4 ft clearance for access on all sides to open panels on the weatherproof enclosure for maintenance and repair. Access for fueling would be provided.

Drainage. The existing runoff pattern would not be changed. The runoff quantity or discharge rate is not expected to measurably increase. The site is located in an area with gravel surfaces on all sides. The new generator would be surrounded by gravel surfaces.

Construction. The proposed improvements, including construction of the generator pad, electrical cabinets, block wall, and conduits would require minor demolition work comprising fence and gravel removal. No excavation greater than 5 ft deep is anticipated. The area between Williams Canyon Road and the pump station would be graded slightly flatter than the existing grade and paved over. No brush clearing and minimal grading would be required for construction. Site grading up to 2 ft is anticipated to adjust the existing finish grades to proposed final grades. Proposed construction staging areas are shown in Figure 2.9. Construction is anticipated to occur in February 2012 and be complete, including site stabilization, within 8 weeks.

Traffic Control. Work at the site would require minimal traffic control near Williams Canyon Road.

2.3.5 Manning Booster Pump Station

The Manning Water Treatment Plant and BPS is located in a triangular-shaped fenced area near Modjeska Canyon Road (Figures 2.10 and 2.11). Two options were considered for the location of a new permanent generator set. One option is a site between the paved access to the treatment plant and Modjeska Canyon Road. The second option is behind the treatment plant in the northeast corner of the site. A split-face block wall would be constructed to replace the existing chain-link fence along the northwest and east sides of the treatment plant. The existing chain-link fence along the southwest side of the site (facing Modjeska Canyon Road) would remain. The new block walls would provide fire protection for the treatment plant and generator.

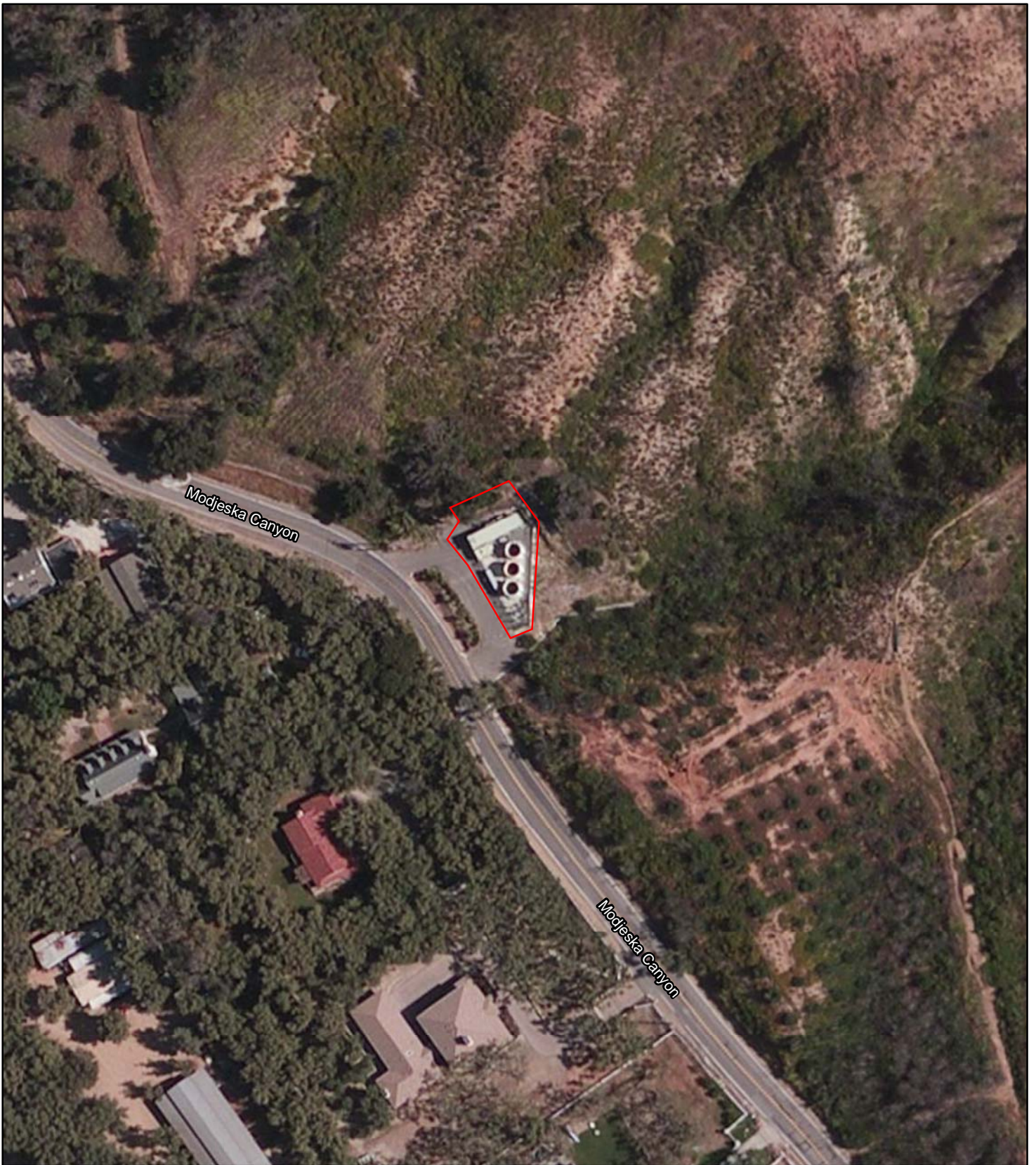
Existing facilities at the Manning BPS site include the following:

- Two 50 hp pumps with aboveground piping, valves, and appurtenances
- Water treatment plant inside chain-link fenced enclosure
- Electrical and control panels with electrical service, switchgear, and SCADA equipment
- Circuit breakers with a mechanical interlock bar for safety
- Trailer-mounted portable generator outside the existing pump station fencing
- Power pole with overhead power at site
- Underground piping in front of the treatment plant
- Paved access in front of the treatment plant

The following are proposed improvements at this site:

- Permanent electrical emergency generator (150 kW to power two 50 hp water pumps on 480V service) with a diesel engine and integral 24-hour fuel storage set on a concrete pad;
- One automatic transfer switch with electrical connections to facilitate the powering of two existing 50 hp pumps from a permanent electric generator. The interlocked circuit breaker manual transfer switch would be removed;
- Triple switch and camlock connector; and
- Site improvements including a reinforced concrete retaining wall, concrete flatwork, and masonry wall.

Access, Property Issues, Easements. All-weather access to the site is provided by Modjeska Canyon Road from Santiago Canyon Road. Property ownership is complicated with both a private owner (Crocker) and the United States Forest Service (USFS) owning parcels dating back to the late 1800s. IRWD currently has an existing easement and agreement with the USFS for the existing pump station site. IRWD shares a driveway with the adjoining neighboring property (Crocker) to the west, where a future development is planned. The Crocker property includes a strip of land between the USFS



LSA

LEGEND



-  Project Site
-  Creeks

FIGURE 2.10

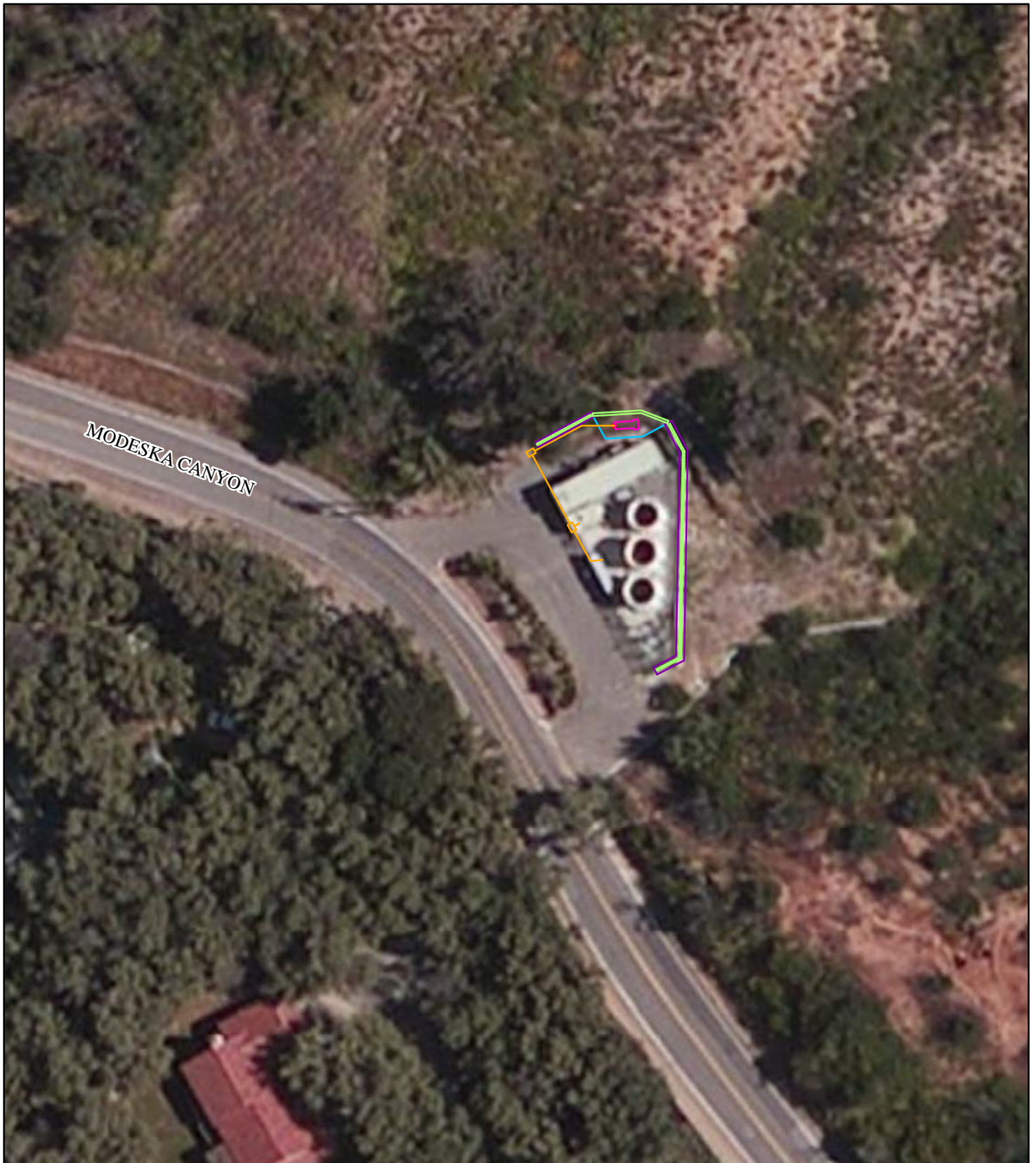


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SOURCE: Bing 2010

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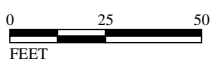
Santiago Canyon Area
BPS Permanent Generators Project
Manning Booster Pump Station Vicinity Map



LSA

LEGEND

- Manning Booster Pump Station Project Site
- Electric
- Electric Underground
- Generator
- Generator Pad
- Site Wall
- Site Wall Option 2



SOURCE: Bing 2010

I:\IRW0901P6\GIS\Manning_Improvements.mxd (9/21/2011)

FIGURE 2.11

*Santiago Canyon Area
BPS Permanent Generators Project*

Manning Booster Pump Station
Existing and Proposed Site Improvements

parcel and Modjeska Canyon Road. IRWD owns an entry and utility easement across this property in order to access the treatment plant and the existing buried piping between the treatment plant and Modjeska Canyon Road.

The USFS and IRWD agreement will be revised to allow for the permanent installation of emergency generators to support the existing pump station. The USFS will prepare a separate National Environmental Policy Act (NEPA) document to detail the impacts associated with the change to the agreement (Proposed Project).

Site Layout and Improvements. Site access is challenging because the site is triangular-shaped. Initial review of the site identified up to five possible locations for the new generator. Additional analysis reduced the number of possible new generator locations to two. The area behind the existing treatment plant has been graded and sandbagged, and has had drains installed to protect the slopes uphill of the plant. This area provides the most open space for installation of a generator, but provides the poorest access for fueling, maintenance, and repair, and is located on private property. Access is available around the south side of the treatment plant through a 12 ft wide strip between the treatment plant and a concrete v-ditch.

If the existing utility vault and air/vacuum valve were relocated, a second possible location for the new generator would be at the southern tip of the treatment plant. This location, however, completely blocks access behind the treatment plant, leaving little room for construction of a block wall.

The third and fourth alternative locations include variations of constructing a generator and block wall enclosure in front of the treatment plant along Modjeska Canyon Road, either between the driveway and roadway in an existing landscaped area or in the existing access road entrance, which would require the road entrance to be reconstructed to the north. The proposed development of the Crocker property to the north of the treatment plant shares the access road in front of the plant, so any construction in this area would have a significant impact on access for IRWD (the current property owner), as well as residents of a future development.

A fifth alternative, a location behind the treatment plant, was considered in the analysis and was preferred by IRWD because the generator would be on the plant site with minimal impact to access and with low public visibility. However, this location would require considerable rock excavation and grading to construct an 8 ft high reinforced-concrete retaining wall tied to the proposed generator concrete slab. Lower retaining walls would blend into either side of the 8 ft wall and transition into the block screening wall.

Security Requirements and Fencing. A new block wall would be constructed along the treatment plant perimeter. The new concrete retaining wall near the generator set would provide fire protection.

Setback Requirements. Setback requirements from property lines would be considered in the final site selection and design. The generator pad would provide access on all sides for fueling, maintenance, and repair, thereby meeting the National Electrical Code.

Drainage. The existing runoff pattern would not be measurably changed. The runoff quantity or discharge rate is not expected to increase. The site is located in an area with an existing gravel surface. The terrain has sufficient relief to easily drain storm water runoff to ditches and storm drains.

Construction. Demolition required for the proposed improvements varies among the alternatives presented, but generally includes fencing, AC pavement, and utilities for relocation. Additional concrete and utilities demolition work would be required if the selected alternative is to work inside the treatment plant. Excavation for a retaining wall would exceed 5 ft of open excavation. The Proposed Project would also require site grading to adjust the existing finish grades by as much as 2 to 3 ft. Proposed construction staging areas are shown in Figure 2.11. Construction is anticipated to occur in March/April 2012 and be complete, including site stabilization, within 8 weeks.

Traffic Control. Work at the site in the vicinity of Modjeska Canyon Road would require occasional traffic control, primarily for materials deliveries. The work on the site away from the road would not require traffic control.

2.4 PROJECT OBJECTIVES

The following Proposed Project objectives are common to all sites:

- Install a permanent emergency generator
- Replace all, or a portion of, the existing chain-link fence at each site, as required, with a CMU block wall to assist in deflecting radiant heat from a brush fire per a fire vulnerability analysis assessment recommendation.
- Piping modification and construction of two automated motor operated valves to automate the discharge of off-specification waters.

2.5 DISCRETIONARY ACTIONS

The following discretionary actions are required for project approval:

- **IRWD:** Approval of Proposed Project and Initial Study/Mitigated Negative Declaration (IS/MND)
- **County of Orange:** Encroachment permit for improvements to the Shaw BPS site
- **Orange County Fire Authority:** Approval of setbacks and vent stack heights
- **South Coast Air Quality Management District (SCAQMD):** Permit to construct and operate new permanent engine generators
- **United States Department of Agriculture – Department of Forestry:** Amended permit to operate the permanent generators on the Manning BPS site; NEPA compliance

3.0 ENVIRONMENTAL CHECKLIST FORM

The following pages contain the Environmental Checklist Form for the Proposed Project. The Form is marked with findings as to the environmental effects of the project. A checked box (☒) in Column 1 (Potential Significant Impact) requires preparation of additional environmental analysis in the form of an EIR.

Pursuant to the provisions of CEQA, and as explained in Section 1.0, Introduction, this analysis has been undertaken to provide IRWD with the factual basis for determining, based on the information available, which form of environmental documentation the project warrants. The basis for each of the findings listed in the Form is explained in Section 4.0, Environmental Analysis and Explanation of Checklist Responses.

IRVINE RANCH WATER DISTRICT

INITIAL STUDY OF ENVIRONMENTAL IMPACTS

I. BACKGROUND

1. Project Title: Santiago Canyon Area Booster Pump Station (BPS)
Permanent Generators Project (Proposed Project)
2. Lead Agency Name & Address: Irvine Ranch Water District
Water Resources and Administration
15600 Sand Canyon Avenue
Irvine, California 92618
3. Contact Person and Phone Number: Christian Kessler
(949) 453-5441
kessler@irwd.com
4. Project Location:
 - Fleming BPS – 74341 Silverado Canyon Road,
Silverado, California 92676
 - Shaw BPS – 28934 Silverado Canyon Road,
Silverado, California 92676
 - Read BPS – 30500 Silverado Canyon Road,
Silverado, California 92676
 - Williams BPS – 27600 Williams Canyon Road,
Silverado, California 92676
 - Manning BPS – 27989 Modjeska Canyon Road,
Silverado, California 92676
5. General Plan Designation: Rural and suburban residential
6. Zoning: Silverado-Modjeska Canyon Specific Plan, Rural
Residential
7. Project Description: The IRWD is proposing replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators at each of the sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Four of the five

permanent generators would be contained within a concrete masonry unit block wall for protection against fires. The fifth generator (Manning BPS) does not require this additional fire protection.

8. Surrounding land uses and setting:

The BPS sites are primarily located within rural residential land uses, including small ranches, and surrounded by open space land uses.

9. Other public agencies whose approval is required:

- IRWD: Approval of Proposed Project and Initial Study/Mitigated Negative Declaration (IS/MND)
- County of Orange: Encroachment permit for Shaw BPS
- Orange County Fire Authority: Approval of setbacks and vent stack heights
- South Coast Air Quality Management District (SCAQMD): Permit to construct and operate new permanent engine generators
- United States Department of Agriculture – Department of Forestry: Amended permit to operate the permanent generators on the Manning BPS; NEPA compliance

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below have the potential to be significantly impacted by this project, as indicated by the checklist in Section IV.

- | | | |
|----------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" 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"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

III. IRVINE RANCH WATER DISTRICT DETERMINATION

On the basis of this initial evaluation:

- 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. 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 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 the 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 have been (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.

Christian Kessler

Signature

October 31, 2011

Date

Christian Kessler

Printed Name

4.0 ENVIRONMENTAL ANALYSIS AND EXPLANATION OF CHECKLIST RESPONSES

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.1 AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact. The Project Location Map (refer to Figure 1-1) identifies each of the five BPS locations. The BPS sites are located primarily within rural residential land uses, including small ranches, and adjacent to open space land uses. However, the BPS project sites are within developed portions of the general project area. IRWD is proposing replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This Proposed Project would replace the portable generators at each of the sites with permanent electrical emergency generators set with a diesel engine and integral 24-hour fuel storage set on a concrete pad. Four of the five permanent generators would be contained within a CMU block wall for protection against fires. A summary of each of the Proposed Project site settings and impacts is discussed below.

- Fleming BPS:** The Fleming BPS is located on Prairie Road between Santiago Canyon Road and Silverado Canyon Road at approximately 1,030 ft amsl. The Fleming site is largely developed and is within a fenced facility with little to no vegetation on site. There are no surrounding sensitive receptors. The Proposed Project would remove the trailer-mounted portable generator and emergency pump. Construction at this site will require removal of the decorative wishing well located on site; however, given the industrial nature of the facility, this is not considered to be a significant impact. Once construction activities are complete, the site will appear similar to existing conditions.

- **Shaw BPS:** The Shaw BPS is located within an 18 x 20 ft fenced site set approximately 2 ft back from Silverado Canyon Road and 10 ft north of an existing retaining wall along Silverado Creek at approximately 1,305 ft amsl. There is an existing chain-link fence around the site, and the site is surrounded on all sides by residential sensitive receptors. Improvements at this site include a masonry wall, chain-link fence with a swing gate, and AC paving in front of the access gate. Given the facility's location next to Silverado Canyon Road and the nature of existing facilities, the addition of a masonry block wall around the perimeter of the station will not substantially change the visual appearance of the site from existing conditions. Once construction activities are complete, the site will look similar to existing conditions.
- **Read BPS:** The Read BPS is located within an 18 x 22 ft fenced area on the IRWD Read Reservoir property, south of Silverado Creek at approximately 1,615 ft amsl. The site is surrounded on the south by residential sensitive receptors. Improvements at this site include a permanent electrical emergency generator, masonry wall, and a chain-link fence with a swing gate. Given that this facility is mostly hidden by vegetation from sensitive receptors, the addition of a masonry block wall around the perimeter of the station will not substantially change the visual appearance of the site from existing conditions. Once construction activities are complete, the site will look similar to existing conditions.
- **Williams BPS:** The Williams BPS is located within a fenced area adjacent to Williams Canyon Road, near the beginning of the access road to Williams Canyon Reservoir at approximately 1,272 ft amsl. There are no surrounding sensitive receptors within 100 ft of the site. Improvements at this site include a masonry wall and a chain-link fence with a swing gate. Given that the facility is not located within view of any sensitive receptors, the addition of a masonry block wall around the perimeter of the station will not substantially change the visual appearance of the site from existing conditions. Once construction activities are complete, the site will appear similar to existing conditions.
- **Manning BPS:** The Manning Water Treatment Plant and BPS is located in a triangular-shaped fenced area near Modjeska Canyon Road. The site backs up to open space land uses. Residential sensitive receptors are located west and south of the site, but not within view of the site improvements. This site is fully developed with infrastructure uses; therefore, the addition of a permanent generator and block wall around the back perimeter would not significantly alter the appearance of this facility. In addition, the improvements are not located within view of any sensitive receptors. Once construction activities are complete, the site will look similar to existing conditions.

Santiago Canyon Road is designated as a viewscape corridor in the County's General Plan Circulation Element. Sensitive viewer groups in the Proposed Project area include motorists and a limited number of residents. However, no improvements would occur along Santiago Canyon Road; therefore, there would be no impact to views of or from Santiago Canyon Road. Implementation of the Proposed Project would not result in permanent significant visual changes to the environment. However, construction activities would temporarily affect the aesthetic views of the local environment (adjacent to each site). Viewer groups that would be impacted by construction activities include motorists and local residents. All visual impacts would cease upon completion of construction activities. Although views of the Proposed Project area may be temporarily impacted by construction, the future facilities, once completed, would appear similar to existing conditions. The present character of the site would not be altered substantially by the improvements since these are

improvements to existing structures in mostly developed areas, and they will also provide additional fire protection safety to the local residents. Therefore, no impacts to scenic resources are anticipated.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no designated State Scenic Highways within the project vicinity. There would be no impacts to a State-designated Scenic Highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. Refer to Response 4.1(a) above.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

No Impact. The Proposed Project does not include the addition of a new source of light and glare to the Proposed Project vicinity. Construction of the Proposed Project would occur during daylight hours, and no construction lighting would be required. Therefore, no impacts related to light and glare would occur as a result of the Proposed Project.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FOREST RESOURCES. 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?	<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 checked="" type="checkbox"/>	<input 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"/>

4.2 AGRICULTURE AND FOREST RESOURCES

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. The Proposed Project sites are not used for agricultural purposes and are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation.¹ Therefore, no impact to farmland would occur as a result of the Proposed Project.

¹ Farmland Mapping and Monitoring Program of the California Department of Conservation, Division of Land Resource Protection, <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/ora08.pdf>. Accessed on May 31, 2011.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Proposed Project site is not used for agricultural purposes and is not restricted by existing agricultural zoning¹ or a Williamson Act contract.² As a result, the Proposed Project would not impact agriculturally zoned or protected lands.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(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 site is not used for forest land or timberland purposes and is not zoned Timberland Production. Therefore, no impact to forestland or timberland would occur as a result of the Proposed Project.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less than Significant Impact. The Proposed Project site is not used for forest land. However, the Manning Site is located on USFS parcels. IRWD currently has an existing easement and agreement with the USFS for the existing pump station site. The agreement will be revised to allow for the permanent installation of emergency generators to support the existing pump station. Impacts associated with the installation of the permanent generators are detailed throughout this Initial Study Mitigated Negative Declaration (IS/MND). In addition, the USFS will prepare a separate NEPA document that details the impacts to USFS land. Given that the site is already permitted for this use, the addition of a permanent generator and block wall would not result in the conversion of forest land to non-forest use. Therefore, no impact to forest land, either loss or conversion, would occur as a result of the Proposed Project.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?

No Impact. Refer to Response 4.2.d above. The Proposed Project would not lead to conversion of farmland or forest land, either directly or indirectly, as the Proposed Project site is not used for farmland or forest land. The Proposed Project would also not result in the conversion of agricultural land or forest land in other areas. Therefore, the Proposed Project would not lead to the conversion of existing farmland or forest land.

¹ County of Orange Zoning Map. May 24, 2005.

² State of California Department of Conservation, Williamson Act Program, ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Map%20and%20PDF/Orange/orange_2004.jpg. Accessed on May 31, 2011.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY. 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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.3 AIR QUALITY

4.3.1 Air Quality Significance Criteria

Air quality impacts would be significant if the Proposed Project does not conform with applicable air quality plans, violates ambient air quality standards, contributes substantially to an existing or projected air quality violation, exposes sensitive receptors to substantial pollutant concentrations, or creates odors that affect a substantial number of people. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD's *CEQA Air Quality Handbook*. The criteria include emission thresholds, compliance with State and national air quality standards, and conformity with the existing State Implementation Plan (SIP) or consistency with the current Air Quality Management Plan (AQMP).

Thresholds for Construction Emissions. The following significance thresholds for construction emissions have been established by the SCAQMD:

- 75 pounds per day (lbs/day) of reactive organic compounds (ROC)
- 100 lbs/day of nitrogen oxide (NO_x)
- 550 lbs/day of carbon monoxide (CO)
- 150 lbs/day of particulate matter less than 10 microns in size (PM₁₀)
- 55 lbs/day of particulate matter less than 2.5 microns in size (PM_{2.5})
- 150 lbs/day of sulfur oxide (SO_x)

Projects in the South Coast Air Basin (Basin) with construction-related emissions that exceed any of the emission thresholds above are considered significant by the SCAQMD.

Thresholds for Operational Emissions. The daily operational emissions “significance” thresholds are as follows:

- **Emission Thresholds for Criteria Pollutants with Regional Effects:**

- 55 lbs/day of ROC
- 55 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM₁₀
- 55 lbs/day of PM_{2.5}
- 150 lbs/day of SO_x

Projects in the Basin with operations-related emissions that exceed any of the emission thresholds are considered significant by the SCAQMD.

- **Emission Thresholds for Pollutants with Localized Impacts:**

- California State 1-hour CO standard of 20.0 parts per million (ppm)
- California State 8-hour CO standard of 9.0 ppm

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the Proposed Project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more.

Thresholds for Localized Significance. For this Proposed Project, the appropriate Source Receptor Area (SRA) for Localized Significance Thresholds (LST) is Saddleback Valley (SRA No. 19), according to the SRA/City Table on the SCAQMD LST website.¹ The Proposed Project sites are located within 50 to 1,500 ft (15 to 457 meters [m]) of sensitive land uses (residences and a school). The shortest distance that the SCAQMD recommends to be used in an LST analysis is 25 m (82 ft). Therefore, the thresholds for a 1 ac site located within 25 m of the nearest sensitive receptor were applied to the Proposed Project. The following thresholds apply for this Proposed Project.

- **Construction Thresholds for a 1 Ac Site:**

- 91 lbs/day of NO_x at 25 m
- 696 lbs/day of CO at 25 m

¹ www.aqmd.gov/ceqa/handbook/LST/LST.html.

- 4 lbs/day of PM₁₀ at 25 m
- 2 lbs/day of PM_{2.5} at 25 m
- **Operational Thresholds for a 1 Ac Site:**
 - 91 lbs/day of NO_x at 25 m
 - 696 lbs/day of CO at 25 m
 - 1 lb/day of PM₁₀ at 25 m
 - 1 lb/day of PM_{2.5} at 25 m

The criteria used in this analysis as a threshold for impact significance are based on the Environmental Checklist questions in Section 3.0 of this IS, as listed below. The Proposed Project is deemed to have a potentially significant impact related to air quality if implementation would result in any of the following:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. An AQMP describes air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projection. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. The Proposed Project emissions would be below the emissions thresholds established in SCAQMD's *CEQA Air Quality Handbook, April 1993* (CEQA Handbook), as shown in Response (b). The analysis provided in Response (c) also discusses the Proposed Project's compliance with the AQMP. Therefore, the Proposed Project will not conflict with the AQMP, and no significant impact will result with respect to implementation of the AQMP.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact.

Long-Term (Operational) Emissions. Long-term air emission impacts are associated with any change in permanent use of the Proposed Project site by on-site stationary and off-site mobile sources that substantially increase emissions. Stationary source emissions include emissions associated with electricity consumption and natural gas usage. Mobile-source emissions would result from vehicle trips associated with the Proposed Project. The Proposed Project would replace existing portable generators with permanent emergency generators. Other than monthly testing and emergency events, these generators would not result in any long-term on-site stationary sources. Maintenance activities occur today and would remain the same with the Proposed Project. Therefore, no emissions were calculated for the Proposed Project from long-

term mobile-sources, or long-term stationary sources. The Proposed Project’s long-term air quality impacts would be less than significant.

Short-Term (Construction) Emissions. Air quality impacts would occur during construction of the Proposed Project from soil disturbance and equipment exhaust. Major sources of emissions during grading and site preparation include: (1) exhaust emissions from construction vehicles; (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces; and (3) soil disturbances from grading and backfilling. The following summarizes construction emissions and associated impacts for the Proposed Project site.

Equipment Exhaust and Related Construction Activities. Construction of each of the Proposed Project phases will include the following tasks: site preparation, grading, building, and paving. Peak daily emissions associated with construction equipment exhaust for the Proposed Project during each of the construction tasks were calculated using the SCAQMD CalEEMod emission model. The construction emissions are summarized in Table 4.3.A and detailed in Appendix A. This table shows that construction equipment/vehicle emissions during construction periods would not exceed any of the SCAQMD established daily emissions thresholds.

Table 4.3.A: Peak Day Construction Emissions (lbs/day) by Phase

Construction Phase ¹	CO	VOC	NO _x	SO ₂	PM ₁₀ ²	PM _{2.5}
Site Preparation	1.93	0.45	2.84	0.0	0.26	0.26
Paving (Slab)	1.84	0.42	2.68	0.0	0.24	0.24
Construction	7.37	1.75	12.83	0.01	0.88	0.88
SCAQMD Emissions Threshold	550	75	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO

Source: LSA Associates, Inc., June 2011.

¹ It is assumed that there is no overlap of these construction phases.

² Total PM₁₀ daily emission rate with fugitive dust mitigation measures implemented.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = oxides of nitrogen

PM_{2.5} = particulate matter less than 2.5 microns in diameter

PM₁₀ = particulate matter less than 10 microns in diameter

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

VOC = volatile organic compound

Fugitive Dust. Fugitive dust emissions are generally associated with land clearing, exposure, and cut-and-fill operations. Dust generated daily during construction would vary substantially, depending on the level of activity, the specific operations, and weather conditions. Nearby sensitive receptors and on-site workers may be exposed to blowing dust, depending upon prevailing wind conditions. Fugitive dust would also be generated as construction equipment or trucks travel on unpaved areas of the construction site. The PM₁₀ and PM_{2.5} fugitive dust emissions are included in Table 4.3.A.

Localized Significance. The following analysis was performed per SCAQMD *Final Localized Significance Threshold Methodology* (June 2003). The closest sensitive receptors to the various

construction phases are located at a distance of approximately 15 m (50 ft). However, the shortest distance SCAQMD recommends using in an LST analysis is 25 m. Thus, LST values for 25 m were used.

Table 4.3.B shows the construction-related emissions of NO_x, CO, PM₁₀, and PM_{2.5}, compared to the LSTs for Saddleback Valley at a distance of 25 m.

Table 4.3.B: Summary of Construction Emissions, Localized Significance by Phase

Construction Phase	Emission Rates (lbs/day)			
	CO	NO _x	PM ₁₀	PM _{2.5}
Site Preparation	1.93	2.84	0.26	0.26
Paving (Slab)	1.84	2.68	0.24	0.24
Construction	7.37	12.83	0.88	0.88
Localized Significance Threshold (at 25 m)	696	91	4	2
Exceed Significance?	NO	NO	NO	NO

Source: LSA Associates, Inc., June 2011.

CO = carbon monoxide

lbs/day = pounds per day

m = meters

NO_x = oxides of nitrogen

PM_{2.5} = particulate matter less than 2.5 microns in diameter

PM₁₀ = particulate matter less than 10 microns in diameter

Table 4.3.B shows that the calculated emissions rates for the proposed construction activities are below the localized significance thresholds for NO_x, CO, PM₁₀, and PM_{2.5}. Therefore, the Proposed Project would not cause any short-term, localized, significant air quality impacts, and no mitigation is required.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?**

Less Than Significant Impact. As discussed in item b) above, no exceedance of SCAQMD's criteria pollutant emission thresholds would be anticipated for the Proposed Project. The projected emissions of criteria pollutants as a result of the Proposed Project are expected to be below the emissions thresholds established for the region. Cumulative emissions are part of the emission inventory included in the AQMP for the Proposed Project area. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the Basin.

- d) **Expose sensitive receptors to substantial pollutant concentrations?**

Less Than Significant Impact. As described in Response (b), the Proposed Project would not significantly increase the long-term emissions within the Proposed Project area. Construction of the Proposed Project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually from diesel-fueled vehicles and equipment). However, as required by SCAQMD, construction contractors will be required to

implement standard minimization measures to reduce or eliminate emissions. The SCAQMD's standard minimization measures are listed below. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during construction, and potential short-term impacts are considered less than significant.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Some objectionable odors may emanate from the operation of diesel-powered construction equipment during construction of the Proposed Project. These odors, however, would be limited to the site only during the construction period, and therefore, would not be considered a significant impact.

4.3.2 Standard Minimization Measures

AQ-1 During construction, the contractor will comply with the following rules for construction and operation to minimize the air quality impacts from the Proposed Project. The following measures are required by SCAQMD Rules 402 and 403 and will reduce or minimize air pollutants generated by construction vehicles and equipment and fugitive dust emissions associated with earthmoving or excavation operations, or other soil disturbances.

During earthmoving or excavation operations, fugitive dust emissions shall be controlled by regular watering or other dust-preventive measures using the following procedures:

- All material excavated shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.
- All earthmoving or excavation activities shall cease during periods of high winds (i.e., winds greater than 20 miles per hour [mph] averaged over 1 hour).
- All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by earthmoving or excavation operations shall be minimized at all times.

After earthmoving or excavation operations, fugitive dust emissions shall be controlled using the following measures:

- Portions of the construction area to remain inactive longer than a period of 3 months shall be revegetated and watered until cover is grown.
- All active portions of the construction site shall be watered to prevent excessive amounts of dust.

At all times, fugitive dust emissions shall be controlled using the following procedures:

- On-site vehicle speed shall be limited to 15 mph.
- Road improvements shall be paved as soon as feasible, watered periodically, or chemically stabilized.

At all times during the construction phase, ozone precursor emissions from mobile equipment shall be controlled using the following procedures:

- Equipment engines shall be maintained in good condition and in proper tune according to manufacturers' specifications.
- On-site mobile equipment shall not be left idling for a period longer than 5 minutes.
- Outdoor storage piles of construction materials shall be kept covered, watered, or otherwise stabilized with a chemical wetting agent to minimize fugitive dust emissions and wind erosion.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.4 BIOLOGICAL RESOURCES

The information summarized below is based on information in the Biological Assessment prepared for the Proposed Project. This report is found in its entirety in Appendix B.

A biological survey of the study areas was conducted on May 11, 2011. During the survey, the entirety of the study area was covered on foot, and the existing biological resources were thoroughly assessed. This included identifying and classifying vegetation communities present in the study area, photo documenting the general site conditions, compiling an inventory of the vascular plant and animal species observed or otherwise detected on site, and searching for any special-interest species present or potentially occurring on site. The following details the vegetation present at each site.

4.4.1 Vegetation

Fleming Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the Proposed Project area. The study area is paved.

Shaw Pump Station: The majority of the study area consists of a gravel turnout. It is likely that two laurel sumac (*Malosma laurina*) individuals will be impacted (i.e., trimmed or removed) as a result of the Proposed Project. The only other plant species observed within the study area was a wild cucumber (*Marah macrocarpus*).

Read Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the Proposed Project area. The study area is paved.

Williams Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the Proposed Project area. The study area is partially paved and partially gravel.

Manning Pump Station: The study area includes the existing facility and an open space area adjacent to the existing facility. The open space portion of the study area is approximately 4–5 ft higher in elevation in relation to the adjacent existing facility portion of the study area. There is an existing retaining wall separating the two areas. The existing facility portion of the study area is unvegetated. The vegetation adjacent to the facility within the Proposed Project area consists of coast live oak (*Quercus agrifolia*), laurel sumac, chaparral bedstraw (*Galium angustifolium*), yellow sweet clover (*Melilotus indicus*), shortpod mustard (*Hirschfeldia incana*), red brome (*Bromus madritensis*), riggut brome (*Bromus diandrus*), long-stemmed golden yarrow (*Eriophyllum confertiflorum*), and Parish's nightshade (*Solanum parishii*).

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 Services?**

No Impact. Special-interest species are those plants or animals that (1) are federally and/or State-listed, (2) are currently proposed for listing, or (3) have some other special designation from a resource agency or a recognized conservation organization (e.g., the California Native Plant Society [CNPS]). Attachment A in Appendix B contains a table that identifies those special-interest plant and animal species known to occur or that may potentially occur in the region. This table contains detailed information regarding special-interest plant and animal species' habitat and distribution, activity periods, State- and federal-status designations, and probability of occurrence.

Due to the very small size of the habitat present at only one of the five study areas, LSA Associates, Inc. (LSA) identified two special-interest plant species and no special-interest animal species with a “low” probability of occurrence for these particular study areas. The two special-interest plant species with a “low” probability of occurrence are the intermediate mariposa lily (*Calochortus weedii* var. *intermedius*) and the southern tarplant (*Centromadia parryi* ssp. *australis*). Both plants are included on the California Department of Fish and Game (CDFG) “Special Plants” list and are designated List 1B by the CNPS. Neither of these two plant species was observed within the study area limits during the surveys. Therefore, no impacts to candidate, sensitive, or special-status species are anticipated.

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 United States Fish and Wildlife Service?

Less Than Significant Impact with Mitigation. Manning BPS is the only site with natural communities on site. The vegetation communities adjacent to the existing facility are best described as oak woodland (< 0.01 ac) and disturbed ruderal grassland (< 0.01 ac). There are two coast live oaks that may be impacted by the Proposed Project. The first coast live oak has multiple stems (10) at breast height (DBH) with no stem having a DBH of greater than 2 in. The other coast live oak has a DBH of approximately 18 inches. It is not anticipated that the Proposed Project will require the removal of the two oaks and best efforts will be made to preserve the trees. However, given the proximity to the construction, it is possible that the root system of the trees may be damaged as a result of grading activities. Since these oaks are directly adjacent to the developed Manning Site; the potential impact to these two oaks would not be considered a significant loss to the natural communities on site. However, in the event that the trees become destabilized as a result of the grading activities, the trees will be removed and replaced at a ratio determined by the USFS. Also, short-term construction-related impacts (e.g., nuisance noise) to the adjacent off-site habitat would be temporary and are not expected to be significant. However, to prevent any incidental impacts to the natural communities immediately adjacent to the study area, the installation and maintenance of fencing along the proposed construction perimeter is recommended prior to the commencement of construction activities. These fence materials should be removed upon completion of the Proposed Project.

To prevent any incidental impacts to the native habitat immediately adjacent to the study area, Minimization Measure BIO-1 requires the installation and maintenance of temporary fencing along the proposed construction perimeter prior to the commencement of construction activities. Implementation of Minimization Measures BIO-1 and BIO-2 would reduce any potential impacts to adjacent natural communities to less than significant levels.

4.4.2 Standard Minimization Measures

BIO-1 Prior to the commencement of construction activities or other activities involving significant soil disturbance, all areas to be protected adjacent to the project limits shall be identified with temporary fencing or other suitable barriers clearly visible to construction personnel.

BIO-2 Affected vegetation shall be restored using native seed mix, and the use of invasive exotic plant species shall be strictly prohibited as part of any revegetation efforts on this project.

- c) **Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact. No wetlands or potential jurisdictional drainages were observed within the study areas.

- 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?**

No Impact. There is little to no habitat associated with the Fleming, Shaw, Read, Williams, and the majority of the Manning study areas. The small portion of the Manning study area that is not developed does offer some habitat value; however, this portion of the study area is of limited value to wildlife due to its small size and generally disturbed nature. Woodland, Riparian, Grassland, Scrub, and Chaparral habitats all occur in the open space areas surrounding the study areas. Therefore, many wildlife species occur in the area, including a number with special regulatory status. However, no wildlife species were detected within the study areas during the site visit on May 11, 2011, and as the Proposed Project improves an existing facility, no impacts to wildlife species is anticipated.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Less Than Significant Impact. There are two coast live oaks (Manning Site) that may be impacted by the Proposed Project. The first coast live oak has multiple stems (10) at breast height (DBH) with no stem having a DBH of greater than 2 in. The other coast live oak has a DBH of approximately 18 inches. It is not anticipated that the Proposed Project will require the removal of the two oaks and best efforts will be made to preserve the trees. However, given the proximity to the construction, it is possible that the root system of the trees may be damaged as a result of grading activities. However, in the event that the trees become destabilized as a result of the grading activities, the trees will be removed and replaced at a ratio determined by the USFS.

- f) **Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

Less Than Significant Impact. The Proposed Project may result in direct impacts to less than 0.01 ac of coast live oak woodland. Oak woodland is a covered habitat under the Central/Coastal Orange County NCCP/HCP, under which the IRWD is a Participating Landowner and signatory. As such, impacts to the less than 0.01 ac of oak woodland vegetation on site would be considered less than significant.

TOPICS

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines, Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines, Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.5 CULTURAL/SCIENTIFIC RESOURCES

The information summarized below is based on information in the Cultural Resources Report prepared for the Proposed Project. This report is found in its entirety in Appendix C.

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

No Impact. Each of the five BPS project areas are built and modern in origin, appear to be disturbed to depth, and are located in areas of modern development. These BPS facilities, including the portable generators, are not considered historical resources as defined in Section 15064.5.

- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Less Than Significant Impact. A records search for the five BPS locations was completed on May 10, 2011, and on June 7, 2011, at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton. The records search included a review of all recorded historic and prehistoric archaeological sites within a 0.25 mi radius of the five BPS generator locations, as well as a review of known cultural resource survey and excavation reports. In addition, the California State Historic Resources Inventory, which includes the National Register of Historic Places (National Register), California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), and various local historical registers were examined.

The records search conducted at the SCCIC indicated that no archaeological resources are documented within any of the five Proposed Project areas; two archaeological resources have been documented within a 0.25 mi radius of the Proposed Project Area of Potential Effects (APE). Two historic resources are recorded as being within the 0.25 mi radius. No historic resources are documented in the Proposed Project area. Twenty-one cultural resource studies have been conducted within the 0.25 mi radius records search area. Of these, nine are located within the Proposed Project site.

The archaeological field survey did not locate any cultural resources at any of the five BPS locations. All of the locations have been previously disturbed to depth by the construction of the existing facilities and surrounding modern development. Based on the information summarized above, as well as on the visual examination of the areas, LSA recommends that the Proposed Project APE is not sensitive for cultural resources.

Therefore, LSA recommends that no further cultural resource management of the project area (such as construction monitoring) is necessary. However, in the unlikely event that archaeological materials are encountered during construction, a qualified archaeologist should be contacted in order to determine the appropriate treatment of the discovery.

Therefore, Standard Minimization Measure CUL-1 is proposed to minimize potential impacts to previously undocumented cultural resources by the Proposed Project. Implementation of Standard Minimization Measure CUL-1 will ensure that impacts to unknown cultural resources encountered during construction activities are adequately addressed and are reduced to below the level of significance.

4.5.1 Standard Minimization Measure

CUL-1 Project plans will specify that in the event that cultural resources are discovered in the project area during ground-disturbing activities, work will stop in that area until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. According to the County's General Plan, Resources Element, the Proposed Project is located within a general area of paleontological sensitivity. However, given that the proposed work will be conducted on graded, leveled, and 100 percent disturbed sites, no paleontological resources are likely to be affected by the Proposed Project. Since the project area has been previously entirely mechanically disturbed, the potential is low for buried resources to be present.

If such resources are at the project site, they are buried or covered by vegetation and are unknown. The extent of paleontological resources is unknown at this time due to site conditions. Grading

activities associated with the improvements could potentially disturb unknown subsurface paleontological resources. Standard Minimization Measure CUL-2 would reduce potential impacts to unknown paleontological resources to less than significant levels.

4.5.2 Standard Minimization Measure

CUL-2 In the event that paleontological resources are discovered in the project area during ground-disturbing activities, work will stop in that area until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. During construction, a very low potential exists to encounter human remains. With implementation of Standard Minimization Measure CUL-3, the potential impact related to the discovery of human remains will be reduced to below a level of significance.

4.5.3 Standard Minimization Measure

CUL-3 In the event human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Orange County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have spills 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"/>

4.6 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.**

Less Than Significant Impact. The Proposed Project site is located in a seismically active region characteristic of Southern California. Several regional faults (e.g., the Newport-Inglewood, Whittier-Elsinore, San Jacinto, and San Andreas faults among others) could cause secondary seismic effects such as ground shaking in the study area. Seismically active faults have not been identified at the Proposed Project sites.¹ The Proposed Project site itself is not located within any

¹ Geotechnical Evaluation and Design Report for Five Proposed BPS Generator Installations at Existing IRWD Pump Station Sites, County of Orange, California, NMG Geotechnical, Inc., April 28, 2011.

Special Studies Zone and is not expected to experience primary surface fault rupture or related ground deformation during the life of the Proposed Project. The Proposed Project is not anticipated to expose people or structures to rupture of a known earthquake fault on site since the project does not include any structures for human occupancy or facilities that would be considered essential to sustain life and property during a seismic event. The proposed site improvements will be designed per applicable seismic design criteria to withstand an acceptable level of risk. Therefore, no significant impacts related to the rupture of a known earthquake fault would result from the Proposed Project.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Please see the response for 4.6(a)(i) (above).

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction occurs when loose, unconsolidated, water-laden soils are subject to shaking, causing the soils to lose cohesion. According to the United States Geological Survey (USGS) Seismic Hazard Zone Map, *El Toro, California* quadrangle, the Proposed Project site is outside the area of potential liquefaction. In addition, the Proposed Project will be designed per applicable seismic design criteria to withstand an acceptable level of risk. Compliance with these standards and other specific design parameters that may be identified by project engineers prior to the preparation of construction plans is anticipated to limit hazards from ground failure and liquefaction to less than significant levels.

iv) Landslides?

Less Than Significant Impact. According to the Geotechnical Evaluation prepared for the Proposed Project, the project site is adjacent to mapped hazards for seismically induced landslides. However, there are no existing landslide issues on or adjacent to the site. Given the nature of the Proposed Project (generator replacement) and the limited amount of excavation and grading, the Proposed Project is not anticipated to result in landslides. Therefore, no significant impacts related to the landslides would result from the Proposed Project.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Less than 1 ac of soil would be temporarily disturbed as a result of the proposed improvements. As such, the potential exists for windborne and waterborne erosion and loss of topsoil due to this disturbance. Soil erosion and loss of topsoil would be minimized through compliance with SCAQMD Rules 402/403 and the Orange County Drainage Area Management Plan minimum requirements. Please see responses 4.3(a) and 4.9(a) below for further 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. See Responses 4.6 (a)(iii) and (iv).

- d) **Be located on expansive soils, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property?**

Less Than Significant Impact. All the sites, with the exception of the Williams site, are located on soils that have very low expansion potential and negligible sulfate potential. The Williams site soils have medium expansion potential and severe sulfate potential. In order to reduce the impacts associated with severe sulfate exposure, grading and excavations should be performed in accordance with the General Earthwork and Grading Specifications detailed in the Geotechnical Evaluation and Design Report. In addition, as previously mentioned, all structures must comply with applicable seismic standards. Compliance with these standards and other specific design parameters that may be identified by project engineers prior to the preparation of construction plans is anticipated to limit hazards from potentially expansive soils to less than significant levels.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?**

No Impact. The Proposed Project is replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages. The Proposed Project does not propose the use of septic tanks or alternative wastewater disposal systems. Further, wastewater requiring the use of these wastewater disposal systems would not be generated by the Proposed Project.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Introduction

CEQA Guidelines Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

However, despite this, currently neither the CEQA statutes, the OPR guidelines, nor the draft proposed changes to the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

In this vacuum, on December 5, 2008, the SCAQMD adopted an interim greenhouse gas (GHG) threshold of significance for projects in which it is the Lead Agency, using a tiered approach for determining significance.¹ The objective of the SCAQMD’s interim GHG threshold of significance proposal is to achieve a GHG emission capture rate of 90 percent of all new or modified stationary source projects. SCAQMD asserts that a GHG threshold of significance based on a 90 percent emission capture rate is considered to be more appropriate to address the long-term adverse impacts associated with global climate change (GCC) because most projects will be required to implement GHG reduction measures. SCAQMD further asserts that a 90 percent GHG emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. The following bullet points describe the basic structure of SCAQMD’s tiered interim GHG significance threshold for stationary sources:

- **Tier 1** consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. For example, Senate Bill (SB) 97 specifically exempts a limited number of projects

¹ South Coast Air Quality Management District, Draft Guidance Document – *Interim CEQA Greenhouse Gas Significance Threshold*. October 2008.

until it expires in 2010. If the project qualifies for an exemption, no further action is required. If the project does not qualify for an exemption, then it would move to the next tier.

- **Tier 2** consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with Assembly Bill (AB) 32 GHG reduction goals; include an emissions inventory agreed upon by either California Air Resources Board (ARB) or the SCAQMD; have been analyzed under CEQA and have a certified Final CEQA document; and have monitoring and enforcement components. If the Proposed Project is consistent with the qualifying local GHG reduction plan, its GHG emissions are not significant. If the Proposed Project is not consistent with a local GHG reduction plan, if there is no approved plan, or if the GHG reduction plan does not include all of the components described above, the Proposed Project would move to Tier 3.
- **Tier 3** establishes a screening significance threshold level to determine significance using a 90 percent GHG emissions capture rate. The 90 percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the following methodology. Using the SCAQMD's Annual Emission Reporting (AER) Program, the reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007 was compiled, and the facilities were rank-ordered to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. Approximately 10 percent of facilities evaluated comprise more than 90 percent of the total natural gas consumption, which corresponds to 10,000 metric tons of carbon dioxide (CO₂) equivalent emissions per year (MTCO₂e/yr) (the majority of combustion emissions consist of CO₂). At the November 2009 SCAQMD Board meeting, staff recommended the following GHG screening thresholds:
 - **Residential:** 3,500 tons per year (tpy) CO₂e
 - **Commercial:** 1,400 tpy CO₂e
 - **Mixed Use:** 3,000 tpy CO₂e

If a project's GHG emissions exceed the GHG screening threshold, the project would move to Tier 4.

- **Tier 4** establishes a decision-tree approach that includes compliance options for projects that have incorporated design features into the project and/or that implement GHG mitigation measures.
 - **Option No. 1: Reduction Target (percentage)**
 - Maximum percentage reduction (land use sector reduction, 23.9 percent; Scoping Plan overall reduction, 28 percent)
 - Target updated as AB 32 Scoping Plan revised
 - Residual emissions not to exceed 25,000 million tons per year (mty) CO₂e
 - Base case scenario to be defined

- **Option No. 2: Efficiency Target**

- 4.6 million tons of CO₂e per Service Population (SP) for project-level threshold (land use emissions only) and total residual emissions not to exceed 25,000 mty CO₂e
- 6.6 million tons of CO₂e per SP for plan level threshold (all sectors)

If a project fails to meet any of these emissions reduction targets and efficiency targets, the project would move to Tier 5.

- **Tier 5** would require projects that implement off-site GHG mitigation that includes purchasing offsets to reduce GHG emission impacts to purchase sufficient offsets for the life of the project (30 years) to reduce GHG emissions to less than the applicable GHG screening threshold level.

The interim GHG significance threshold that was adopted by the SCAQMD Governing Board only applies to stationary source/industrial projects where the SCAQMD is the Lead Agency under CEQA. The types of projects in which the significance threshold applies include SCAQMD rules, rule amendments, and plans (e.g., Air Quality Management Plans). In addition, the SCAQMD may be the Lead Agency under CEQA for projects that require discretionary approval (i.e., projects that require air quality permits from the SCAQMD and which allow the SCAQMD to exercise discretion in regard to imposing permit conditions). However, for the purposes of this analysis, the IRWD will use the Tier 3 threshold.

4.7.2 Threshold Analysis

The Proposed Project is deemed to have a potentially significant impact related to GHG if implementation would result in any of the following:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. It is not possible for the Proposed Project to generate enough GHG emissions to influence GCC on its own. The Proposed Project participates in potential GCC by its incremental contribution (positive or negative) of GHG emissions that, when combined with the cumulative increase of all other natural and anthropogenic sources of GHGs, impact GCC. Therefore, GCC is a type of cumulative impact, and the proposed development's participation in this cumulative impact is through its incremental contribution of GHG emissions. In Section 15064(h)(1) of the CEQA Guidelines, "cumulatively considerable" is defined to mean "that the incremental effects of an individual 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." The CEQA Guidelines advise that an individual project would normally be judged to produce a significant or potentially significant effect on the environment if the project were to result in a cumulatively considerable net increase of an air pollutant creating the impact. In this case, the air pollutants under consideration are GHG emissions, which are creating cumulative GCC independent of the Proposed Project.

However, the analysis of GHGs from a project is a very different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, significance thresholds are based on daily emissions because attainment or nonattainment is based on daily exceedances of applicable ambient

air quality standards (AAQS). Further, several AAQS are based on relatively short-term exposure effects on human health (e.g., 1-hour and 8-hour). Since the half-life of CO₂ is approximately 100 years, for example, the effects of GHGs are longer term, potentially affecting GCC over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate GHG effects over a longer time frame than a single day.

As noted above, at the November 2009 Board meeting, the SCAQMD recommended a CEQA GHG interim threshold of 1,400 million tons of CO₂e per year for industrial sources. As additional information is compiled regarding the level of GHG emissions that constitute a significant cumulative climate change impact, SCAQMD will continue to revisit and possibly revise the level of GHG emissions considered to be significant. For the purposes of this analysis, the IRWD will apply the SCAQMD's recommended interim threshold for industrial uses.

Construction and Operational GHG Emissions. GHG emissions associated with the Proposed Project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Accordingly, primarily combustion GHG emissions in the form of CO₂, methane (CH₄), and nitrous oxide (N₂O) will be generated by the off-road equipment and on-road vehicles during the construction phase of the Proposed Project. The CalEEMod modeling indicates that construction of each Proposed Project site is expected to generate a total of 9.41 metric tons of GHG emissions (CO₂e emissions). If all five Proposed Project sites are built within the same year, the construction emissions would increase to 47.05 metric tons of CO₂e. Per the requirements of the SCAQMD's recommended GHG significance threshold, the GHG construction emissions are amortized for a period of 30 years, resulting in an estimated 1.57 metric tons of CO₂e per year (see Table 4.7.A).

Table 4.7.A: Greenhouse Gas Emissions

Emissions Source	CO ₂ e Emissions (metric tons/year)
Peak Construction ¹	1.6
Diesel Consumption	4.1
Total Annual Emissions	5.7
SCAQMD Thresholds	1,400
Significant?	No

Source: LSA Associates, Inc., June 2011.

¹ Construction emissions have been amortized for 30 years per the GHG significance threshold adopted by the SCAQMD on December 5, 2008.

CO₂e = carbon dioxide equivalent

SCAQMD = South Coast Air Quality Management District

The vast majority of the potential GHG emissions associated with Proposed Project's operations will come from the monthly testing of the emergency generators, with a small portion coming from energy consumption. At 50 percent load, each generator would consume up to 21.2 liters of diesel fuel per hour. Monthly testing of 5 generators would consume 1,272 liters of diesel fuel per year. Each liter of diesel fuel burned produces 3.2 kilograms (kg) of CO₂e for a total of 4,070 kg or 4.1 metric tons of CO₂e. Table 4.7.A lists the potential GHG construction and operation emissions from the Proposed Project and shows that project GHG emissions will be below the SCAQMD's GHG threshold of 1,400 mty. Therefore, less than significant impacts related to this issue are anticipated and no mitigation is required.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Implementation of the Proposed Project would not result in GHG emission levels that would substantially conflict with implementation of the GHG reduction goals under AB 32 or other State regulations, fail to achieve energy efficiency, or increase consumption of fuels that contribute to GHG emissions when they are consumed.

While the direct output of GHGs from the Proposed Project can theoretically be estimated based on methodologies available to date, the emission of GHGs associated with implementation of any one development project would not likely result in any directly correlative and measurable global or local effects. Any potential impact of a project on climate change would be considered cumulative because the project is making an incremental contribution to an overall change in the environment.

Refer to Response 4.7.a for additional information regarding applicable GHG plans and policies. Therefore, less than significant impacts related to this issue are anticipated, and no mitigation is required.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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 included on a list of 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private helipad or airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.8 HAZARDS AND HAZARDOUS MATERIALS

The information summarized below is based on information in the Environmental FirstSearch Report conducted for the Proposed Project. This report is found in its entirety in Appendix D.

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 proposed improvements would replace the portable emergency temporary generators at the five domestic water BPSs. Four of the five permanent generators would be contained within a CMU block wall for protection against fires. Construction of the Proposed

Project would involve the use of limited quantities of chemical agents, solvents, paints, vehicle fuel, and other hazardous materials. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Because of the relatively small volume of such materials on site and the limited duration of construction, the potential for release and exposure is limited to the duration of construction. All use and disposal of hazardous materials must comply with existing State and federal government regulations, and potential impacts to the public or the environment are considered less than significant.

A regulatory information search (database search reports) was conducted for the Proposed Project site (Appendix D). The database search reports were prepared by Track Info Services, LLC (Track Info). The search radii met the criteria specified in the American Society for Testing and Materials (ASTM) E 1527-05 (*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*). A regulatory records search of this nature is based on information published by federal, State, and local regulatory agencies and is used to determine whether the subject property or nearby properties are listed as having a past or present record of actual or potential environmental impacts from hazardous substances or materials. Regulatory listings include only those facilities that are known to the regulatory agencies at the time of publication. The database search reports (dated May 2, 2011) for the five domestic water BPSs, summarize hazardous releases within 0.75 mi of each Proposed Project site. Each site is further discussed below:

- **Fleming BPS – No Impact:** The Track Info Environmental FirstSearch Summary Report summarizes the records identified in this database review. The database search report listed one solid waste land (SWL) facility within 0.125 mi and four underground storage tanks (USTs) within 0.25 mi. Due to the type of the Proposed Project and its distance from these sites, these facilities are unlikely to pose a concern to the construction of the Proposed Project.

In addition, a total of two nongeocoded sites¹ (consisting of one nongeocoded SWL site and one nongeocoded tribal land site) were reported within the FirstSearch database report. These nongeocoded facilities were determined to be greater than 1 mi from the Proposed Project limits and would not pose a potential concern to the Proposed Project site.

- **Shaw BPS – No Impact:** A total of two nongeocoded sites² (consisting of one nongeocoded SWL site and one nongeocoded tribal land site) were reported within the FirstSearch database report. These nongeocoded facilities were determined to be greater than 1 mi from the Proposed Project limits and would not pose a potential concern to the Proposed Project site.
- **Read BPS – No Impact:** A total of two nongeocoded sites³ (consisting of one nongeocoded SWL site and one nongeocoded tribal land site) were reported within the FirstSearch database report. These nongeocoded facilities were determined to be greater than 1 mi from the Proposed Project limits and would not pose a potential concern to the Proposed Project site.

¹ Nongeocoded facilities consist of facilities for which missing or inaccurate information has been provided by the reporting agency, or for which insufficient information prevents the proper placement of a facility on a given map.

² Ibid.

³ Ibid.

- **Williams BPS – No Impact:** One nongeocoded tribal land site¹ was reported within the FirstSearch database report. This tribal land site was determined to be greater than 1 mi from the Proposed Project limits and would not pose a potential concern to the Proposed Project site.
 - **Manning BPS – No Impact:** One nongeocoded tribal land site² was reported within the FirstSearch database report. This tribal land site was determined to be greater than 1 mi from the Proposed Project limits and would not pose a potential concern to the Proposed Project site.
- 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?**

No Impact. Refer to Response 4.8.a above.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less Than Significant Impact. The Proposed Project sites involve five separate sublocations. The potential of these to emit hazardous emissions or to handle hazardous or acutely hazardous materials substances or waste within 0.25 mi of an existing or proposed school is summarized as follows:

- **Fleming BPS – No Impact:** Based upon the site visit on May 11, 2011, and research on the internet, there are no existing or proposed schools located within 0.25 mi of the Proposed Project site. Therefore, no impacts related to this issue will result from the Proposed Project, and no mitigation measures are required.
- **Shaw BPS – No Impact:** Based upon the site visit on May 11, 2011, and research on the internet, there are no existing or proposed schools located within 0.25 mi of the Proposed Project site. Therefore, no impacts related to this issue will result from the Proposed Project, and no mitigation measures are required.
- **Read BPS – No Impact:** Based upon the site visit on May 11, 2011, and research on the internet, there are no existing or proposed schools located within 0.25 mi of the Proposed Project site. Therefore, no impacts related to this issue will result from the Proposed Project, and no mitigation measures are required.
- **Williams BPS – No Impact:** Based upon the site visit on May 11, 2011, and research on the internet, there are no existing or proposed schools located within 0.25 mi of the Proposed Project site. Therefore, no impacts related to this issue will result from the Proposed Project, and no mitigation measures are required.
- **Manning BPS – No Impact:** Based upon the site visit on May 11, 2011, and research on the internet, there are no existing or proposed schools located within 0.25 mi of the Proposed Project

¹ Nongeocoded facilities consist of facilities where missing or inaccurate information has been provided by the reporting agency, or where insufficient information prevents the proper placement of a facility on a given map.

² Ibid.

site. Therefore, no impacts related to this issue will result from the Proposed Project, and no mitigation measures are required.

- 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?**

Less Than Significant Impact. None of the Proposed Project sites are included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5.¹ The potential exists for unknown hazardous contamination to be revealed during project construction. If significant surface or subsurface staining is uncovered during grading or excavation activities, it will be investigated for hazardous content, and appropriate measures will be taken in accordance with all applicable regulations. Due to the nature of activities within the Proposed Project area, the probability of contaminated soils being present on site is considered low.

- e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. None of the Proposed Project sites is located within the vicinity of a private airstrip.² Therefore, there are no impacts related to this issue.

- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. The Proposed Project improvements are not located within the vicinity of a private airstrip³ and, therefore, would not result in a safety hazard for people residing or working in the Proposed Project area.

- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact. The proposed improvements would not impair implementation with an adopted emergency response plan or evacuation plan. The Proposed Project would not require closure of the roadway; however, prior to construction, IRWD would coordinate with emergency response providers to ensure the Proposed Project does not result in temporary interference with an emergency response plan or evacuation plan.

¹ California Department of Toxic Substances Control, Hazardous Waste and Substances Site List – Site Cleanup (Cortese List), http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed on May 10, 2011.

² Orange County Airport Planning Areas, Airport Land Use Commission for Orange County, May 10, 2011.

³ Ibid.

h) Expose people or structures to significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The Proposed Project site is located within a high fire hazard area. In October 2007, the Santiago Fire burned through IRWD's Santiago Canyon service area, threatening homes, businesses, and the IRWD reservoirs and BPSs in the region. Water pressure in this area is maintained by five BPSs, all of which are critical to firefighting operations. During the Santiago Fire, power outages were experienced at each of the pump stations, requiring the installation of portable emergency generators at each site. However, these temporary generators are also susceptible to damage by wildfires and are not permitted for permanent installation. The intent of the Proposed Project is replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires within the canyons. In addition, four of the five permanent generators would be contained within a CMU block wall for additional protection against fires. As a result, the Proposed Project would help to reduce potential significant risk or loss, injury, or death involving wildland fires.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.9 HYDROLOGY AND WATER QUALITY

Would the project:

- a) **Violate any water quality standards or waste discharge requirements?**

Less Than Significant Impact. Short-term and long-term erosion and water quality impacts have the potential to occur.

Long-Term Impacts. Operation of the Proposed Project would have a limited potential for increasing pollutant levels in localized runoff, as a result of the negligible amount of impervious surface associated with the Proposed Project. The Proposed Project includes replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages. This Proposed Project would replace the portable generators at each of the sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Four of the five permanent generators would be contained within a CMU block wall for protection against fires. Therefore, there is a potential for a minor increase in the amount of impervious surfaces at the Williams and Manning sites. The other three sites will place the generators on existing impervious surfaces. However, this increase is negligible and is not anticipated to result in a violation of water quality standards.

Short-Term Impacts. During the construction phase, it is possible that some discharge of sediments and pollutants might occur into surface waters from the use of construction equipment and as a result of excavation and construction activities. Pollutants of concern during construction include sediments, trash, oil and grease fuels from equipment, and materials used for concrete and asphalt installation. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality and aquatic habitats. While these discharges might occur, their effect on water quality would be minimized through the incorporation of several procedures imposed on the Proposed Project. Such conditions are those prescribed in the general National Pollution Discharge Elimination System (NPDES) dewatering permit issued by the California Regional Water Quality Control Board (RWQCB), the general NPDES Permit for Construction Activities issued by the California Water Resources Control Board, and the Areawide Urban Stormwater Runoff Permit for Orange County issued by the California RWQCB. The following minimum requirements will be implemented to reduce impacts to water quality during construction.

- **Erosion and Sediment Control:** Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment maximum extent practicable (MEP) controls, and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities, or adjacent properties via runoff, vehicle tracking, or wind.
- **Waste and Materials Management Control:** Construction-related materials, wastes, spills, or residues shall be retained on site to minimize transport from the site to streets, drainage facilities, or adjoining property by wind or runoff.

In consideration of the nature of the Proposed Project and the implementation of the minimum requirements identified above, impacts are considered less than significant.

- b) **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

No Impact. The Proposed Project site is located outside the Orange County Groundwater Basin, as shown in the County General Plan, Resources Element. According to the geotechnical report prepared for the Proposed Project, historic groundwater is mapped as 5–10 ft below ground surface (bgs) in both Silverado Canyon and Santiago Canyon. Groundwater at the Proposed Project sites are estimated to range from 10 ft bgs to 30 ft bgs. However, surface water and perched groundwater may be encountered at the Manning site. The Proposed Project includes replacement of the portable generators at each of the sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. In addition, the Proposed Project does not include groundwater extraction or injection, or create a demand for groundwater, and the Proposed Project site is not located in a groundwater recharge area, therefore, the Proposed Project would have no effect on groundwater quantities. Though not anticipated, groundwater dewatering may be necessary. Dewatered groundwater may contain high levels of total dissolved solids (TDS), salinity, high nitrates, or other contaminants that could be introduced to surface waters during construction. Groundwater and any other nonstorm water dewatering activities are subject to the requirements of the De Minimus Permit (Order Number R8-2009-0003 NPDES Number CAG998001) and any subsequent permit. Compliance with this permit, as stipulated in Standard Minimization Measure WQ-1, would avoid adverse impacts to water quality via dewatering. Therefore, no impacts related to groundwater resources would occur from implementation of the Proposed Project.

4.9.1 Standard Minimization Measure

WQ-1 Construction site dewatering, if required, must comply with the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant Threat to Water Quality* (Order Number R8-2009-0003 NPDES Number CAG998001), and any subsequent updates to the permit at the time of construction. Dewatering best management practices (BMPs) must be used to control sediment and pollutants, and the discharges must comply with the Waste Discharge Requirements (WDRs) issued by the San Diego RWQCB. This will include submission of a Notice of Intent (NOI) to the San Diego RWQCB at least 3 months before the start of dewatering and compliance with all applicable provisions in the De Minimus Permit, including water sampling, analysis, and reporting of dewatering-related discharges.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?**

Less Than Significant Impact. The Proposed Project includes replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages. The resulting area of disturbance at each site is less than (<) 1 ac. The

replacement of the generator facilities and modification to the fence would not alter the course of a stream or a river, but would result in minor modifications to the drainage from these facilities into the adjacent tributary (for the Shaw and Read BPS sites only). However, the existing drainage pattern would be maintained. With implementation of the standard BMPs, potential erosion impacts due to construction of the Proposed Project improvements are considered less than significant. In addition, with implementation of the minimum requirements identified above, the Proposed Project improvements would not increase the potential sediment load of downstream flow over existing levels. See Response 4.9(a) for additional discussion.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact. The Proposed Project includes replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages. The resulting area of disturbance at each site is less than (<) 1 ac. The replacement of the generator facilities and modification to the fence would not alter the course of a stream or a river, but would result in minor modifications to the drainage from these facilities into the adjacent tributary (for the Shaw and Read BPS sites only). However, the existing drainage pattern would be maintained. With implementation of the minimum requirements, potential erosion impacts due to construction of the Proposed Project improvements are considered less than significant. In addition, with implementation of the standard procedures identified above, the Proposed Project improvements would not result in flooding on- or off-site. See Response 4.9(a) for additional discussion. Potential impacts related to on- or off-site flooding due to changes in drainage patterns are anticipated to be less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. See responses to 4.9.a, 4.9.c, and 4.9.d above. As stated above, development of the Proposed Project would not substantially increase the volume of runoff from the project site and would therefore not exceed the capacity of the existing storm water drainage system. The Proposed Project rehabilitates the existing facilities; therefore, the amount of impervious surfaces is the same or nearly the same as existing conditions. Thus, pollutant contribution would be similar to existing conditions. In addition, with implementation of the minimum requirements, the Proposed Project would not result in substantial additional sources of polluted runoff.

f) Have a significant adverse impact on groundwater quality or otherwise substantially degrade water quality?

Less Than Significant Impact. See responses to 4.9.a and 4.9.b; Section 303(d) of the Clean Water Act (CWA) requires that the State adopt water quality objectives for surface waters. The RWQCB has adopted a Basin Plan for its region of responsibility, which includes the County. The Basin Plan contains water quality objectives considered necessary to protect the specific beneficial uses it

identifies. Section 303(d) specifically requires the State to develop a list of impaired water bodies and the subsequent numeric Total Maximum Daily Load (TMDL) for whichever constituents impair a particular water body. These constituents include inorganic and organic chemical compounds, metals, sediment, and biological agents.

The TMDL is the total amount of a constituent that can be discharged while meeting water quality objectives and protecting beneficial uses. It is the sum of the individual load allocations for point-source inputs (e.g., an industrial plant), load allocations for nonpoint-source inputs (e.g., runoff from urban areas), and natural background, with a margin of safety (RWQCB 2002).

The State Water Board approved the 2010 Integrated Report on August 4, 2010. The 2010 Integrated Report includes changes to the 2006 CWA Section 303(d) list of impaired water bodies and the CWA Section 305(b) report on the quality of waters in California. The 2010 Integrated Report and supporting documents were submitted to the United States Environmental Protection Agency (USEPA) for final approval on October 13, 2010. On November 12, 2010, USEPA approved the inclusion of all waters to California's 2008–2010 Section 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The Proposed Project area discharges to Silverado Creek. Silverado Creek is currently listed as impaired for salinity, TDS, chlorides, and pathogens. TMDL levels have not yet been established for Silverado Creek.

There is a very low potential for impairment of the adjacent tributary for these particular pollutants of concern during construction. The minimum requirements identified above would be employed during construction to ensure that sediment, hazardous materials, and other urban pollutants do not impair water quality. Therefore, the Proposed Project would not contribute pollutants of concern to the receiving water body, and no mitigation measures would be required.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The Proposed Project involves replacement of the portable generators at each of the five BPS sites and does not involve the placement of housing.

h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

No Impact. The Proposed Project improvements would replace the portable generators at each of the five BPS sites. The replacement of the portable generators would not impede or redirect flood flows. Therefore, no impacts are anticipated.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. Santiago Reservoir, north of the Proposed Project area, is an earthen dam that impounds water forming Irvine Lake. Irvine Lake is approximately 7–10 mi north of the project area. According to the County’s General Plan, Safety Element, the Proposed Project area is not within the dam inundation area should the Santiago Creek Dam fail. The pattern of flow would be away from the project site, not toward the Proposed Project site. Therefore, there would be no risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The closest body of water to the Proposed Project site is Irvine Lake, which is approximately 7–10 mi north of the project site. In addition, the Proposed Project area is approximately 15 mi inland, far from the influence of a tsunami. Therefore, the risks associated with a seiche or a tsunami are considered low. The potential for mudflow at the project site is also low given that the nearby waterbodies are contained within the flood zone. Therefore, the risk of seiche, tsunami, or mudflow as a result of the Proposed Project is no greater than exists today.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.10 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. There are several rural communities in the vicinity of the Proposed Project sites. However, each of the BPS stations is an existing facility serving the surrounding communities. The intent of the Proposed Project is replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. In addition, four of the five permanent generators would be contained within a CMU block wall for protection against fires. The project is anticipated to provide a more reliable water supply to the existing community in the event of a wildland fire. Therefore, the Proposed Project improvements would not divide an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The County's General Plan contains goals, objectives, and policies to guide and implement current and future land use planning and growth within the County. The Proposed Project area is designated Rural Residential in the County's General Plan and Zoning land use map. No action that would affect a change of land use is proposed. The Proposed Project would improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. The proposed improvements would not alter the character of the Proposed Project area. Since these modifications would not change the character or nature of the overall site, the changes remain consistent with the policies of the County's General Plan and Zoning Ordinance.

A portion of the Manning site is located on the USFS parcels. The IRWD currently has an existing easement and agreement with the USFS for the existing pump station site. The agreement will be

amended to allow for the addition of the permanent generators to operate on site. A separate environmental review to comply with NEPA is being undertaken by the USFS as part of the process to amend the existing permit.

No other conflicts with local plans are known, and none are anticipated. Therefore, no adverse land use impacts are anticipated.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less Than Significant Impact. The Proposed Project is within a NCCP/HCP that may result in direct impacts to less than 0.01 ac of coast live oak woodland. Oak woodland is a covered habitat under the NCCP/HCP, under which IRWD is a Participating Landowner and signatory. As such, impacts to the less than 0.01 ac of oak woodland vegetation on site would be considered less than significant.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

4.11 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?**

No Impact. As shown in the Resources Element of the County General Plan, the Proposed Project improvements are not located within an area of known mineral resources of either regional or local value.

- 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. Refer to Response 4.13(a) above.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE. Would the project result in:				
a) Exposure of persons to, or generation of noise levels in excess of standards established in the Orange County General Plan and noise ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to, or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within the airport environs land use plan, 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"/>
f) For a project within the vicinity of a private helipad or airstrip, 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"/>

4.12 NOISE

Would the project:

- a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than Significant with Mitigation. The Proposed Project would replace portable generators at five BPS with permanent electrical emergency generators set with diesel engines. The operations of the permanent electric emergency generators during an emergency event are exempt from the County Noise Ordinance under Section 4-6-7, Special Provisions. However, these five emergency generators are subject to the County's noise ordinance during reliability testing. Typically, tests would occur during daytime hours every month for a period of up to 45 minutes. An 8 ft high masonry wall surrounding the sites at Manning, Read, Shaw, and Williams would provide a noise level reduction of 8 decibels (dB) because the generator would be located well under the shadow of the perimeter wall. No perimeter wall or barrier is proposed for the emergency generator at Fleming. Table 4.12.A shows that the emergency generators at Fleming and Williams with the weatherproof enclosure would be sufficient to reduce noise levels to below the County's daytime noise standard of 55 A-weighted decibels (dBA). However, the emergency generators at Manning and Read would require Quiet (Level II) Enclosures, and the emergency generator at Shaw would require Premium (Level III) Enclosures to reduce noise levels to below the County's daytime noise standard of 55 dBA. The Quiet (Level II) Enclosure and the Premium (Level III) Enclosure would provide a noise level reduction of

Table 4.12.A: Noise Levels at the Closest Residence from the Emergency Generator

Location	Approximate Distance to the Closest Residence (ft)	With Weatherproof Enclosure				Noise Level	
		Noise Level at 23 ft (dB)	Noise Level at the Closest Residence (dB)	8 ft High Perimeter Wall ¹	Noise Level (dB)	With Quiet (Level II) Enclosure (dB)	With Premium (Level III) Enclosure (dB)
Fleming	1,580	88.0	50.3	No	50.3 ²	37.3	32.3
Manning	165	88.0	69.9	Yes	61.9	48.9	43.9
Read	140	88.0	71.3	Yes	63.3	50.3	45.3
Shaw	70	88.0	77.3	Yes	69.3	56.3	51.3
Williams	780	88.0	56.4	Yes	48.4	35.4	30.4

Source: LSA Associates, Inc., June 2011.

¹ If there is an 8 ft high perimeter masonry wall planned, the wall would provide a noise level reduction of 8 dB.

² Bold numbers represent noise levels that would comply with the County of Orange's noise daytime standard of 55 dB.

dB = decibels

ft = feet

13 dB and 18 dB, respectively, compared to the Weatherproof Enclosure. Therefore, long-term potential operational noise impacts are considered less than significant with mitigation.

Construction activities could generate substantial noise that may affect residents located closest to the project area. Construction of the Proposed Project is expected to require the use of one bulldozer, a water truck, and a pickup truck. The maximum noise level generated by one bulldozer is assumed to be approximately 85 dBA maximum instantaneous noise level (L_{max}) at a distance of 50 ft. Also, the maximum noise level generated by water trucks and pickup trucks is approximately 86 dBA L_{max} at 50 ft from these vehicles. Each doubling of the sound source with equal strength increases the noise level by 3 dBA. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 90 dBA L_{max} (at a distance of 50 ft from an active construction area). The closest residences located immediately adjacent to the Proposed Project, within 50 ft from the project site, would at times be exposed to high intermittent construction noise of 90 dBA L_{max} or higher. However, construction of the Proposed Project would comply with applicable provisions of the County Noise Ordinances, which limit construction activities to between 7:00 a.m. and 8:00 p.m., Monday through Saturday, and prohibit activities on Sundays and federal holidays. Therefore, potential short-term noise impacts are considered less than significant, and no mitigation is required.

4.12.1 Mitigation Measure

NOISE-1 The following measures are required to reduce noise levels to comply with the County's noise ordinance for daytime hours:

- Quiet (Level II) Enclosures manufactured by Cummins Power Generation will be required for emergency generators located at Manning and Read. This enclosure is a cover for the emergency generator to attenuate noise levels by 13 dB.

- Premium (Level III) Enclosures manufactured by Cummins Power Generation will be required for the emergency generator located at Shaw. This enclosure is a cover for the emergency generator and will attenuate noise levels by 18 dB.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Less Than Significant Impact. Construction of the Proposed Project would not result in significant groundborne vibration or groundborne noise on properties adjacent to the project site, because the use of bulldozers, water trucks, and pick-up trucks could be distinctly perceptible but would not cause property damage to the closest residence from the project construction boundary. Construction of the Proposed Project would comply with applicable provisions of the County Noise Ordinances, which limit construction activities to between 7:00 a.m. and 8:00 p.m., Monday through Saturday, and prohibit activities on Sundays and federal holidays. Furthermore, project operation would not generate groundborne noise and vibration that is above existing levels. Therefore, groundborne noise and vibration impacts are considered less than significant, and no mitigation measures are required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed permanent electrical emergency generators set with diesel engines at the five locations would only operate during monthly reliability testing or an emergency event. Therefore, the Proposed Project would not permanently increase the ambient noise levels which exist without the Proposed Project.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Although there would be, at times, high intermittent noise in the project area during construction, it would not significantly affect land uses adjacent to the Proposed Project site. In addition, construction at the Proposed Project site would comply with the operating restrictions specified by the County's Noise Ordinance. Therefore, potential construction noise impacts are considered less than significant with compliance to the noise ordinance.

e) For a project within an airport land use plan or, where such plan has not been adopted, within two miles of a private or 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 Proposed Project is not located within an airport land use plan or within 2 mi of any airport. Therefore, no impacts related to aircraft noise would occur as a result of the Proposed Project.

- f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working the project area to excessive noise levels?**

No Impact. The Proposed Project site is not located within the vicinity of a private airstrip. Therefore, there are no impacts related to this issue.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.13 POPULATION AND HOUSING

Would the project:

- a) **Induce substantial population growth in the 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 directly result in population growth and does not indirectly add capacity allowing population growth. The Proposed Project would replace the portable generators at each of five sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Four of the five permanent generators would be contained within a CMU block wall for protection against fires. Therefore, the Proposed Project would help to better serve existing residents within the service area, and as such, would not facilitate population growth or increase vehicle trips.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. There are several communities or housing tracts surrounding the Proposed Project sites; however, the Proposed Project is generally located within existing IRWD and County right-of-way; therefore, the proposed improvements do not displace any housing.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. There are several communities or housing tracts surrounding the Proposed Project sites; however, the Proposed Project is generally located within existing IRWD and County right-of-way; therefore, the proposed improvements do not displace any housing, and no people would be displaced.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
PUBLIC SERVICES. Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental 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 public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.14 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 governmental 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 public services, including: fire protection, police protection, schools, parks, and other public facilities?**

No Impact. The intent of the Proposed Project is replacement of the portable generators at each of the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. In addition, four of the five permanent generators would be contained within a CMU block wall for protection against fires. The Proposed Project would not generate demand for emergency services, schools, parks, or other facilities. However, the Proposed Project is anticipated to provide reliable water supply in the event of a wildland fire. Prior to construction, the IRWD will coordinate with emergency response providers to ensure the Proposed Project does not interfere with emergency response times in any other way.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.15 RECREATION

Would the project:

- a) **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?**

Less than Significant Impact. The proposed improvements would replace the portable emergency temporary generators at the five domestic water BPSs. Four of the five permanent generators would be contained within a CMU block wall for protection against fires. As described in section 4.16.(g), Santiago Canyon Road is a Class II bike trail. The Proposed Project would not result in permanent impacts to this bikeway since the improvements are located outside of the roadway. Construction activities of the Proposed Project may temporarily impact the on-street bikeway requiring limited rerouting around the construction area. However, the impacts would be temporary during construction only, and bikes, similar to motor vehicles, would be detoured around the construction area and provided through-access around the project site. Therefore, the Proposed Project does not affect demand for recreational resources; would not affect the use of existing neighborhood, regional, or other recreational facilities; and would not create a permanent impairment to the bike trail; therefore, impacts are considered temporary and less than significant.

IRWD currently has an existing easement and agreement with the USFS for the existing pump station site. The agreement will be revised to allow for the permanent installation of emergency generators to support the existing pump station. Impacts associated with the permanent generators installation are detailed throughout this IS/MND. In addition, the USFS will prepare a separate NEPA document to detail the impacts to USFS land. Given that the site is already permitted for this use, the addition of a permanent generator and block wall would not result in substantial physical deterioration of USFS land.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

Less than Significant Impact. See Response 4.15(a) above.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC. Would the project:				
a) Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a 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"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.16 TRANSPORTATION/CIRCULATION

- a) **Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**

Less Than Significant Impact. The Proposed Project improvements would replace the portable generators at each of five sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. Santiago Canyon Road is a two-lane roadway and is classified as a Primary Arterial in the County General Plan, Transportation Element. According to the Orange County Traffic Flow Map,¹ Santiago Canyon Road currently carries up to approximately 6,000 vehicles per day.

Operation of the portable generators would not increase traffic demand on Santiago Canyon Road. Vehicle trips would be limited to maintenance vehicles. No greater trips would be generated than currently occur for maintenance activities. During construction, vehicle trips of workers and construction vehicles would occur. Up to approximately five workers would be required on a given workday. Construction and haul vehicle trips during construction are expected, due to excavation and

¹ Orange County Traffic Flow Map, 2009, <http://www.octa.net/pdf/2009trafficflow.pdf>. Accessed on May 31, 2011.

block wall construction activities. Maximum weekday trip generation is estimated to be up to 10 daily trips (i.e., one inbound and one outbound trip per each worker and haul truck).

The addition of up to 10 daily construction trips to Santiago Canyon Road would increase traffic on these roadways by less than 1 percent. Placement of the portable generators may require limited lane closures around the construction area; however, closure of the roadway would not be required. This detouring could result in localized traffic delays. The traffic generated by the construction activities and traffic delays is temporary and would not be considered substantial when added to the existing traffic load on Santiago Canyon Road, and would not cause any measurable deterioration in daily traffic operations. In addition, a Traffic Detour Plan will be prepared that requires the use of traffic controls to ensure safety to the public at all times during construction. Therefore, short-term traffic impacts resulting from construction activities are considered less than significant.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

No Impact. Santiago Canyon Road is not identified as part of the Orange County Congestion Management Plan (CMP) Highway System.¹ The CMP requires that a traffic impact analysis be conducted when a project generates 1,600 daily trips and directly accesses a CMP facility. When a project does not directly access a CMP facility, the threshold is 2,400 daily trips. After construction, the Proposed Project would not generate any traffic trips other than limited maintenance trips by IRWD staff. As stated in Response 4.15 (a), the Proposed Project would generate approximately up to 10 trips per day during construction and may require temporary lane closures around the Proposed Project area during the construction. This temporary increase would not significantly impact any surrounding roadway.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed improvements are confined to the Proposed Project site and are infrastructure improvements that would not result in any change to air traffic patterns or levels of air traffic.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed improvements would replace the portable generators at each of five sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad. No permanent changes to the roadway's existing design or the local circulation are proposed as part of the project. As a result, there are no incompatible uses or hazardous design features associated with the Proposed Project. In fact, the Proposed Project would have a net positive effect by improving the reliability of the water system during power outages,

¹ Orange County CMP, 2007. <http://www.octa.net/pdf/cmp09.pdf>. Accessed on May 31, 2011.

particularly when the outages are caused by fires in the canyons. Therefore, there are no impacts associated with this issue.

e) Result in inadequate emergency access?

Less than Significant Impact. The Proposed Project would not require emergency access, nor would it impede emergency access to the surrounding land uses. The Proposed Project would require limited lane closures around the construction area; however, closure of the roadway would not be required. This detouring could result in localized traffic delays. Prior to construction, IRWD would coordinate with emergency response providers prior to ensuring that the Proposed Project does not result in temporary interference with emergency access routes.

f) Result in inadequate parking capacity?

Less than Significant Impact. The Proposed Project would not generate a permanent demand for parking or change the parking capacity of the surrounding area. Construction workers would utilize existing street right-of-way along local streets for parking employee vehicles and construction equipment. These parking impacts are temporary and are considered less than significant.

g) Conflict with adopted policies, plan or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Less than Significant Impact. The Proposed Project is adjacent to an on-street bikeway. The Orange County Existing Bikeways map has identified Santiago Canyon Road as a Class II Bikeway. The Proposed Project would not result in permanent impacts to this bikeway since the improvements are located outside of the roadway. Construction activities of the Proposed Project may temporarily impact the on-street bikeway requiring limited rerouting around the construction area. However, the impacts would be temporary during construction only, and bikes, similar to motor vehicles, would be detoured around the construction area and provided through-access along Santiago Canyon Road. Therefore, temporary construction impacts to alternative transportation uses are considered less than significant. In addition, because the Proposed Project would not generate either vehicle or alternative transportation trips, it would not affect any adopted policies, plans, or programs supporting alternative transportation.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that 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"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.17 UTILITIES AND SERVICE SYSTEMS

Would the project:

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board**

No Impact. The Proposed Project improvements do not create any wastewater demand, and therefore, would not exceed wastewater treatment requirements of the State Water Resources Control Board (SWRCB) (Santa Ana Region).

- b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?**

No Impact. The Proposed Project improvements do not create a demand requiring the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.

- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?**

No Impact. The Proposed Project does not result in a substantial net increase in peak discharge and would not substantially change the existing condition or result in environmental effects. Refer to the discussion in Section 4.9(a).

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

No Impact. As an infrastructure improvement project (replacement of the portable generators at each of five sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad), the Proposed Project does not create a demand for water supplies.

- e) **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. Refer to Response 4.17(a) above.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less than Significant Impact. As an infrastructure improvement project (replacement of the portable generators at each of five sites with permanent electrical emergency generators, each set with a diesel engine and integral 24-hour fuel storage on a concrete pad), the Proposed Project does not generate a permanent demand for landfill capacity. Potential construction debris may be generated that would be disposed of at one of the County's landfills. The amount of debris generated would be limited, and the impacts are considered less than significant.

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

No Impact. As a storm drain and roadway improvement project, the Proposed Project does not create a demand for solid waste facilities.

TOPICS	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment; substantially reduce the habitat or 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 type="checkbox"/>	<input checked="" 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, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that 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"/>

4.18 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?**

Less Than Significant Impact. As described in the sections above, all environmental effects were determined to be less than significant or reduced to below a level of significance with mitigation. The noise environment will be the most affected resource; however, this impact will be mitigated and Measure NOISE-1 will be implemented to reduce the level of impact to below significant. In addition, there are no known cultural resources within the study area. However, the potential exists to encounter unknown resources during construction activities. With implementation of Standard Minimization Measures CUL-1 and CUL-3, potential effects to unknown cultural resources would be reduced to below the level of significance.

To prevent any incidental impacts to the native habitat immediately adjacent to the study area, Mitigation Measure BIO-1 requires the installation and maintenance of temporary fencing along the proposed construction perimeter prior to the commencement of construction activities. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce any potential impacts to adjacent natural communities to less than significant levels.

- 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)?**

Less Than Significant Impact. As the proposed improvements would replace an existing facility, the potential permanent environmental effects of the Proposed Project are not considered cumulatively considerable. All permanent and temporary impacts are either less than significant or can be mitigated to below the level of significance. In particular, impacts to the noise environment would be mitigated, and the contribution of the Proposed Project to cumulative impacts is addressed through the mitigation provided. Therefore, the Proposed Project’s contribution to cumulative impacts is considered less than significant.

- c) **Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than Significant Impact. The effects to human beings are related to temporary access interruption and to potential noise and aesthetic views from construction. These effects are temporary and not substantial relative to the setting of the Proposed Project. After construction of the Proposed Project, there would be no change to the human environment. Construction activities would affect local ambient air quality and noise levels; however, these impacts are short-term, and mitigation measures or standard County requirements have been identified to reduce the effects of these impacts to less than significant levels.

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6.0 LIST OF PREPARERS

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APPENDIX A

AIR QUALITY EMISSIONS WORKSHEETS

IRWD Santiago Canyon Booster Pump Station Permanent Generators Project - IRW0901 P6 T 2D
Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	100	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)		Utility Company	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			30		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Assuming a 10x10 foot pad and slightly larger cleared area.
- Construction Phase - Very simple site prep, cement pad construction and pump installation
- Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.
- Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.
- Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.
- Trips and VMT - Changed construction worker trips from zero to match the Paving phase.
- Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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
Year	tons/yr										MT/yr					
2011	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	9.39	9.39	0.00	0.00	9.41
Total	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	9.39	9.39	0.00	0.00	9.41

Mitigated Construction

	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
Year	tons/yr										MT/yr					
2011	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	9.39	9.39	0.00	0.00	9.41
Total	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	9.39	9.39	0.00	0.00	9.41

2.2 Overall Operational

Unmitigated Operational

	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					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Operational

	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					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2011

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	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.26	1.26	0.00	0.00	1.26
Total	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.26	1.26	0.00	0.00	1.26

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23

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	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.26	1.26	0.00	0.00	1.26
Total	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.26	1.26	0.00	0.00	1.26

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23

3.3 Building Construction - 2011

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	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.92	5.92	0.00	0.00	5.93
Total	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.92	5.92	0.00	0.00	5.93

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38

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	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.92	5.92	0.00	0.00	5.93
Total	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.92	5.92	0.00	0.00	5.93

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38

3.4 Paving - 2011

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	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.22	1.22	0.00	0.00	1.22
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.22	1.22	0.00	0.00	1.22

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38

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	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.22	1.22	0.00	0.00	1.22
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.22	1.22	0.00	0.00	1.22

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38

IRWD Santiago Canyon Booster Pump Station Permanent Generators Project - IRW0901 P6 T 2D
Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	100	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)		Utility Company	Southern California Edison
Climate Zone	8		2.2		
		Precipitation Freq (Days)			
			30		

1.3 User Entered Comments

Project Characteristics -

Land Use - Assuming a 10x10 foot pad and slightly larger cleared area.

Construction Phase - Very simple site prep, cement pad construction and pump installation

Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.

Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.

Off-road Equipment - Load factor reduced by 33% to account for OFFROAD emissions overestimation error.

Trips and VMT - Changed construction worker trips from zero to match the Paving phase.

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	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
Year	lb/day										lb/day					
2011	1.79	12.87	7.90	0.01	0.11	0.88	0.99	0.00	0.88	0.88	0.00	1,393.16	0.00	0.16	0.00	1,396.55
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	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
Year	lb/day										lb/day					
2011	1.79	12.87	7.90	0.01	0.11	0.88	0.99	0.00	0.88	0.88	0.00	1,393.16	0.00	0.16	0.00	1,396.55
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	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					

Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

Mitigated Operational

	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					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2011

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	0.45	2.84	1.93	0.00		0.26	0.26		0.26	0.26		277.89		0.04		278.73
Total	0.45	2.84	1.93	0.00		0.26	0.26		0.26	0.26		277.89		0.04		278.73

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.06	0.00	0.07	0.00	0.00	0.00		52.65		0.00		52.71
Total	0.03	0.03	0.32	0.00	0.06	0.00	0.07	0.00	0.00	0.00		52.65		0.00		52.71

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	0.45	2.84	1.93	0.00		0.26	0.26		0.26	0.26	0.00	277.89		0.04		278.73
Total	0.45	2.84	1.93	0.00		0.26	0.26		0.26	0.26	0.00	277.89		0.04		278.73

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.06	0.00	0.07	0.00	0.00	0.00		52.65		0.00		52.71
Total	0.03	0.03	0.32	0.00	0.06	0.00	0.07	0.00	0.00	0.00		52.65		0.00		52.71

3.3 Building Construction - 2011

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	1.75	12.83	7.37	0.01		0.88	0.88		0.88	0.88		1,305.41		0.16		1,308.70
Total	1.75	12.83	7.37	0.01		0.88	0.88		0.88	0.88		1,305.41		0.16		1,308.70

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86
Total	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86

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	1.75	12.83	7.37	0.01		0.88	0.88		0.88	0.88	0.00	1,305.41		0.16		1,308.70
Total	1.75	12.83	7.37	0.01		0.88	0.88		0.88	0.88	0.00	1,305.41		0.16		1,308.70

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86
Total	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86

3.4 Paving - 2011

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	0.42	2.68	1.84	0.00		0.24	0.24		0.24	0.24		268.84		0.04		269.63
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	0.42	2.68	1.84	0.00		0.24	0.24		0.24	0.24		268.84		0.04		269.63

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86
Total	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86

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	0.42	2.68	1.84	0.00		0.24	0.24		0.24	0.24	0.00	268.84		0.04		269.63
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	0.42	2.68	1.84	0.00		0.24	0.24		0.24	0.24	0.00	268.84		0.04		269.63

Mitigated 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86
Total	0.04	0.05	0.53	0.00	0.11	0.00	0.11	0.00	0.00	0.01		87.74		0.01		87.86

APPENDIX B

BIOLOGICAL ASSESSMENT

June 8, 2011

Christian Kessler
Water Resources & Administration
Irvine Ranch Water District
15600 Sand Canyon Ave.
Irvine, CA 92618

Subject: Biological Assessment of Santiago Canyon Area Booster Pump Station Permanent Generators, County of Orange, California

Dear Mr. Kessler:

Per your request, LSA Associates, Inc. (LSA) conducted a general assessment of the biological resources associated with the proposed replacement of the portable generators at each of the five Booster Pump Stations (BPS) sites identified (Figures 1–6; all figures attached) to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators at each of the sites with permanent electrical emergency generators set with a diesel engine and integral 24-hour fuel storage set on a concrete pad. Four of the five permanent generators would be contained within a concrete masonry unit block wall for protection against fires. The fifth generator (Manning BPS) does not require this additional fire protection. The study areas for each of the BPSs and the proposed improvements are described in further detail below. All five of the study areas are within the Natural Community Conservation Plan (NCCP) Planning Area; however, none are within the NCCP Reserve. All five of the study areas are within the United States Forest Service (USFS) administrative boundary; however, none are within Cleveland National Forest.

Fleming Pump Station: The study area is located in Santiago Canyon on Silverado Canyon Road approximately 400 feet (ft) southeast of Black Star Canyon Road (Figure 2).

Shaw Pump Station: The study area is located in Silverado Canyon on Silverado Canyon Road approximately 200 ft east of Cactus Way (Figure 3).

Read Pump Station: The study area is located in Silverado Canyon on Askarben Way approximately 200 ft northwest of Naeco Way (Figure 4).

Williams Pump Station: The study area is located in Williams Canyon on Williams Canyon Road approximately 1,000 ft west of Concord Street (Figure 5).

Manning Pump Station: The study area is located in Modjeska Canyon on Modjeska Canyon Road approximately 700 ft northwest of Croatian (Figure 6).

This biological resources assessment describes the site-specific survey methods, results of the surveys, an impact analysis, and recommendations for the mitigation of significant adverse impacts, as needed. This technical information is provided for project review under the California Environmental Quality Act (CEQA), State and federal Endangered Species Acts, and other pertinent regulations.

METHODS

As a part of this General Biological Assessment, the California Department of Fish and Game's (CDFG) Rarefind 3 and the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California were utilized to assist in determining the existence or potential occurrence of any special-interest plant and animal species in or immediately adjacent to the study area.

LSA senior biologist Chris Meloni conducted a biological survey of the study areas on May 11, 2011. During the surveys, the entirety of the study areas were covered on foot, and the existing biological resources were thoroughly assessed. This included identifying and classifying vegetation communities present in the study area, photo documenting the general site conditions, compiling an inventory of the vascular plant and animal species observed or otherwise detected on site, and searching for any special-interest species present or potentially occurring on site.

RESULTS

Vegetation

Fleming Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the proposed project area. The study area is paved.

Shaw Pump Station: The majority of the study area is comprised of a gravel turnout. It is likely that two laurel sumac (*Malosma laurina*) individuals will be impacted (i.e., trimmed or removed) as a result of the proposed project. The only other plant species observed within the study area was a wild cucumber (*Marah macrocarpus*).

Read Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the proposed project area. The study area is paved.

Williams Pump Station: The entire study area lies within the footprint of the existing facility. No vegetation is present within the proposed project area. The study area is partially paved and partially gravel.

Manning Pump Station: The study area includes the existing facility and an open space area adjacent to the existing facility. The open space portion of the study area is approximately 4–5 ft higher in elevation in relation to the adjacent existing facility portion of the study area. There is an existing retaining wall separating the two areas. The existing facility portion of the study area is unvegetated. The vegetation adjacent to the facility within the proposed project area is comprised of coast live oak (*Quercus agrifolia*), laurel sumac, chaparral bedstraw (*Galium angustifolium*), yellow sweet clover (*Melilotus indicus*), shortpod mustard (*Hirschfeldia incana*), redbrome (*Bromus madritensis*), ripgut

brome (*Bromus diandrus*), long-stemmed golden yarrow (*Eriophyllum confertiflorum*), and Parish's nightshade (*Solanum parishii*). The vegetation communities adjacent to the existing facility are best described as oak woodland (< 0.01 acre [ac]) and disturbed ruderal grassland (< 0.01 ac). There are two coast live oaks that may be impacted by the proposed project. The first coast live oak has multiple stems (10) at breast height with no stem having a diameter at breast height (DBH) of greater than 2 inches. The other coast live oak has a diameter at breast height of approximately 18 inches. The project footprint may not include removal of either oak tree; however, it is likely that expansion of the existing grade of the facility into the hillside will detrimentally affect the root system of the oak trees and thereby destabilize them. It would be prudent to remove the larger of the two oak trees if its root system is substantially affected in order to ensure that it does not fall onto the existing facility.

Wildlife

There is little to no habitat associated with the Fleming, Shaw, Read, Williams, and majority of the Manning study areas. The small portion of the Manning study area that is not developed does offer some habitat value; however, this portion of the study area is of limited value to wildlife due to its small size and generally disturbed nature.

Woodland, Riparian, Grassland, Scrub, and Chaparral habitats all occur in the open space areas surrounding the study areas. Therefore, many wildlife species occur in the area, including a number with special regulatory status (see Attachment A). No wildlife species were detected within the study areas during the site visit on May 11, 2011.

Special-Interest Species

Special-interest-species are those plants or animals that (1) are federally and/or State-listed, (2) are currently proposed for listing, or (3) have some other special designation from a resource agency or a recognized conservation organization (e.g., CNPS). Attachment A is a table that identifies those special-interest plant and animal species known to occur or potentially occurring in the region. These species were compiled largely from database records from the CNPS electronic inventory and the California Natural Diversity Data Base (CNDDDB) and from LSA's extensive knowledge and experience in the region. This table contains detailed information regarding special-interest plant and animal species' habitat and distribution, activity period, State and federal status designations, and probability of occurrence.

Due to the very small size of the habitat present at only one of the five study areas, LSA identified two special-interest plant species and no special-interest animal species with a "low" probability of occurrence for these particular study areas. The two special-interest plant species with a "low" probability of occurrence are the intermediate mariposa lily (*Calochortus weedii* var. *intermedius*) and the southern tarplant (*Centromadia parryi* ssp. *australis*). Both plants are included on the CDFG "Special Plants" list and are designated List 1B by the CNPS. Neither of these two plant species was observed within the study area limits during the surveys.

Wetlands and Potential Jurisdictional Drainages

No wetlands or potential jurisdictional drainages were observed within the study areas.

IMPACTS AND RECOMMENDATIONS

The proposed project may result in direct impacts to two coast live oak individuals and less than 0.01 ac of coast live oak woodland. Oak woodland is a covered habitat under the Central/Coastal Orange County Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP), under which the Irvine Ranch Water District (IRWD) is a Participating Landowner and signatory. As such, impacts to the less than 0.01 ac of oak woodland vegetation on site would be considered less than significant. However, pursuant to the County of Orange's General Plan policies, impacts to coast live oaks have traditionally been mitigated. If the project results in impact (i.e., removal) of the two coast live oak individuals at the Manning site, IRWD may wish to consider replacement of these trees, as a "project betterment". Based on typical pre-NCCP/HCP mitigation measures, LSA estimates that planting 13 coast live oak acorn plantings (three acorns per planting) or small container-grown trees would be appropriate. However, any number of replacement trees should be viewed as a project improvement.

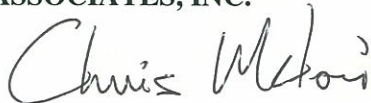
Also, short-term construction-related impacts (e.g., nuisance noise) to the adjacent off-site habitat would be temporary and are not expected to be significant. However, to prevent any incidental impacts to the native habitat immediately adjacent to the study area, LSA recommends the installation and maintenance of orange snow fencing along the proposed construction perimeter prior to the commencement of construction activities. These fence materials should be removed upon completion of the project.

In summary, the proposed project is not expected to result in any significant adverse impacts to biological resources within or immediately adjacent to the study area. Therefore, aside from the recommendations described above, no other mitigation measures are suggested or warranted.

If you have any questions or comments regarding this letter report, please feel free to contact me at (949) 553-0666.

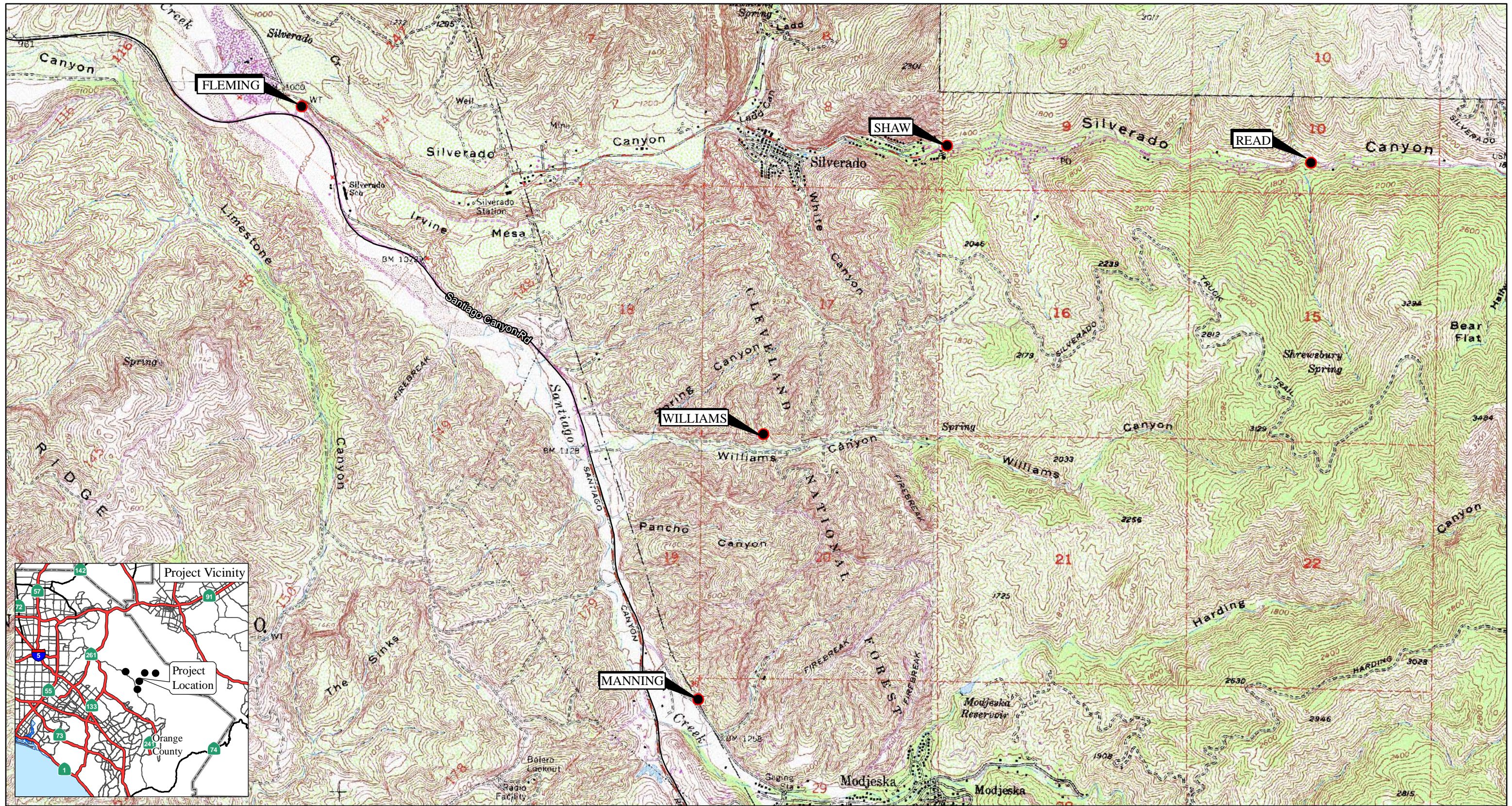
Sincerely,

LSA ASSOCIATES, INC.



Chris Meloni
Senior Biologist

Attachments: Figures 1–6
A: Summary of Special-Interest Species



LSA

LEGEND

● IRWD Booster Pump Stations

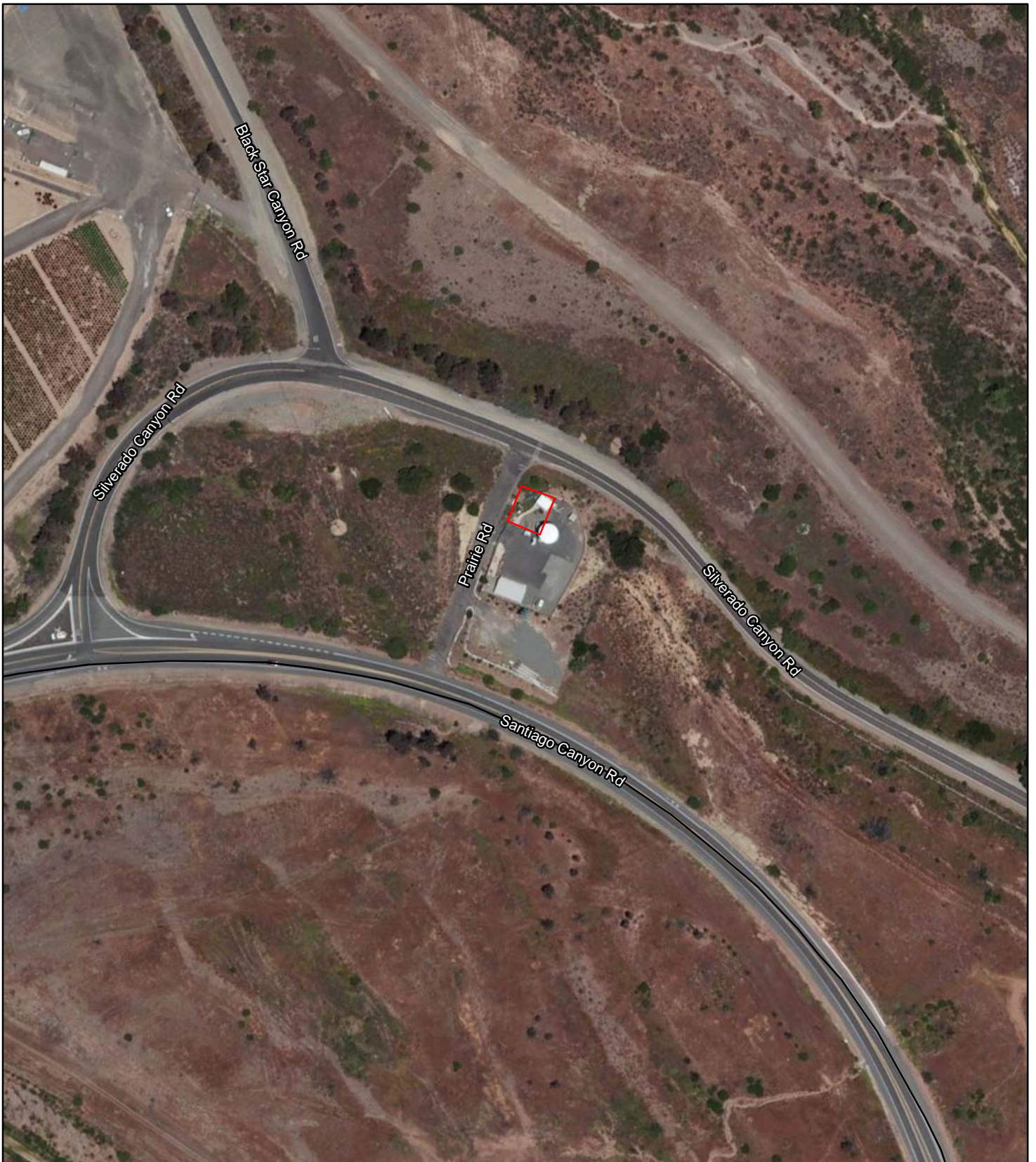


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SOURCE: USGS 7.5' QUAD - EL TORO ('82)

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FIGURE 1



LSA

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 Project Site

FIGURE 2

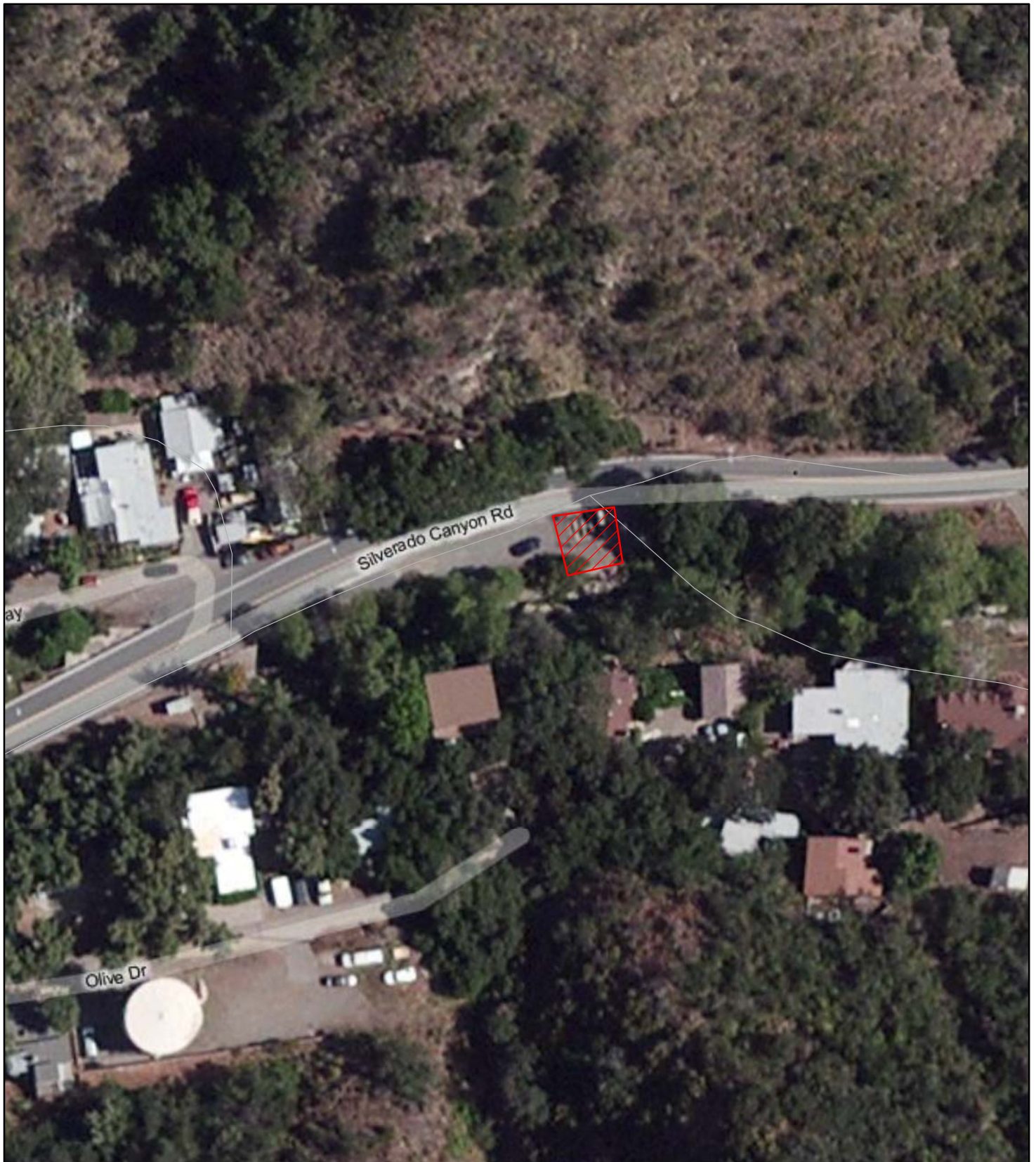


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SOURCE: Bing 2010

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Santiago Area BPS Generator Project
Fleming Pump Station



L S A

LEGEND

 Project Site

FIGURE 3



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SOURCE: Bing 2010

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Santiago Area BPS Generator Project
Shaw Pump Station



LSA

LEGEND


 Project Site

FIGURE 4

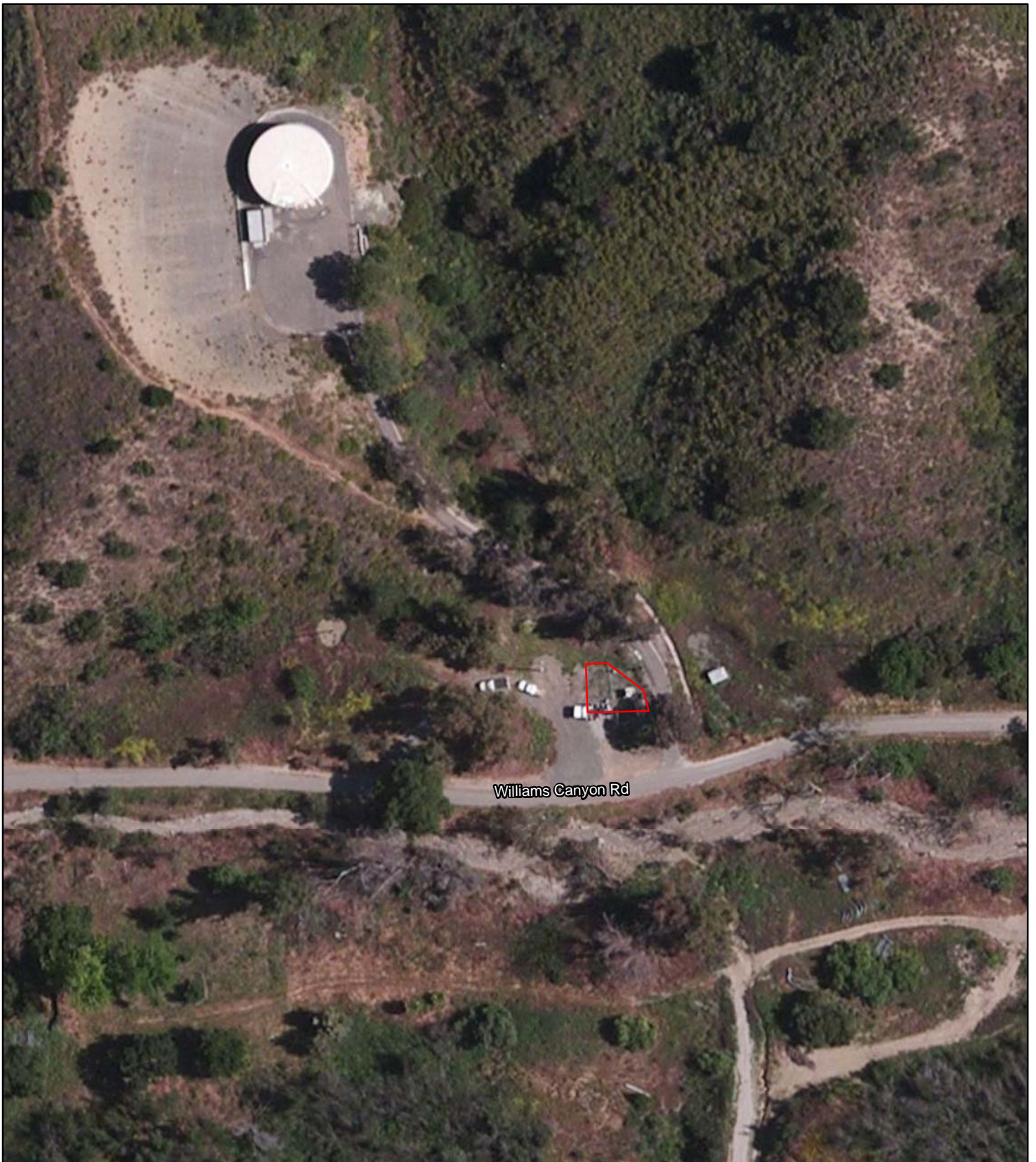


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SOURCE: Bing 2010

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Santiago Area BPS Generator Project
Read Pump Station Location



LSA

LEGEND

 Project Site

FIGURE 5

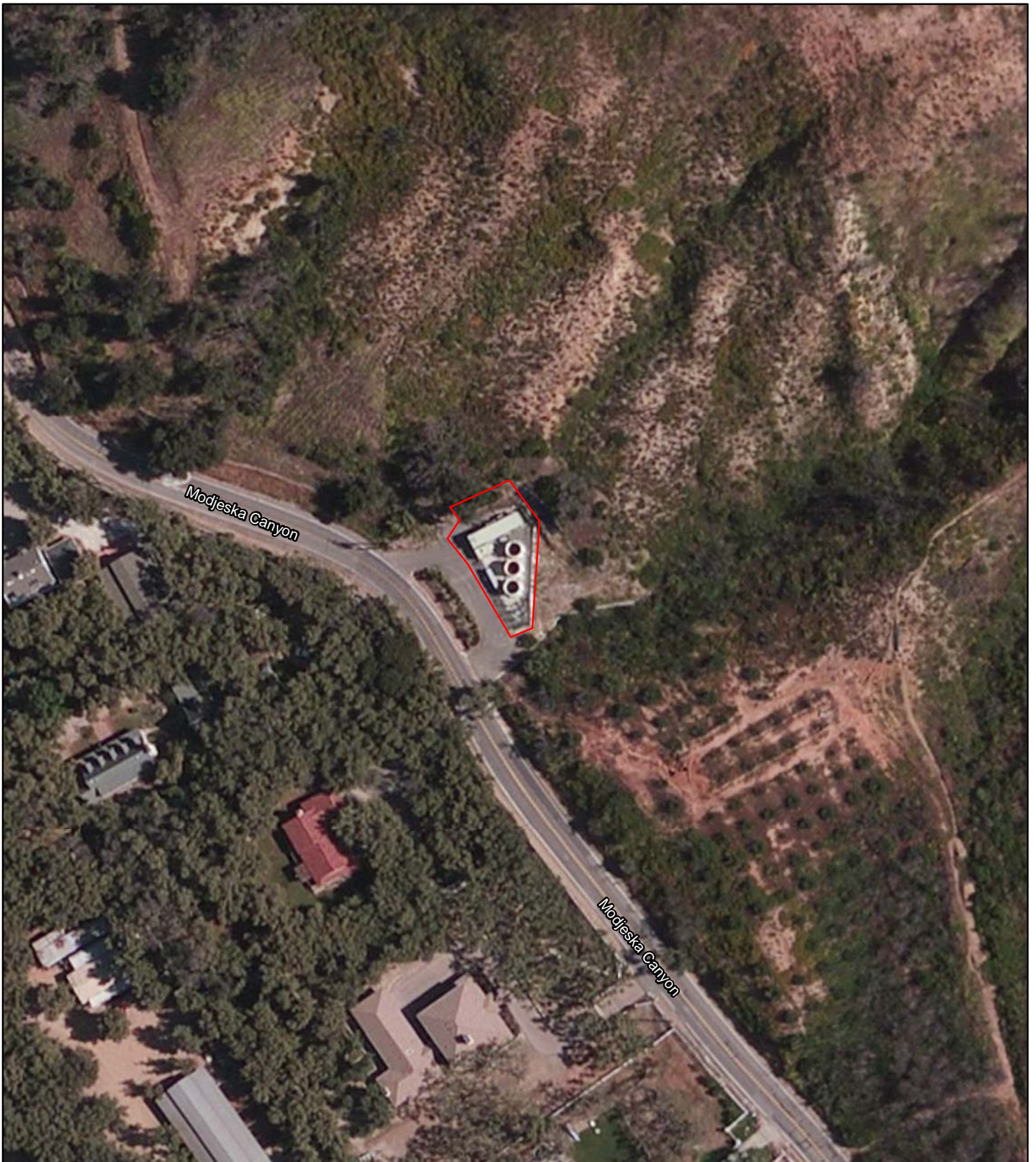


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SOURCE: Bing 2010

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Santiago Area BPS Generator Project
Williams Pump Station



LSA

LEGEND



-  Project Site
-  Creeks

FIGURE 6



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SOURCE: Bing 2010

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Santiago Area BPS Generator Project
Manning Pump Station

Special-Status Plant Species Potentially Occurring in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence
Chaparral sand-verbena	<i>Abronia villosa</i> var. <i>aurita</i>	US: - CA: SP CNPS: 1B.1	Chaparral, coastal scrub, desert dunes/sandy, 80–1600 m in elevation,	January–September	Not expected. Project area and vicinity lacking suitable habitat for this species
Munz's onion	<i>Allium munzii</i>	US: FE CA: ST CNPS: 1B.1	On clay soils in openings within coastal sage scrub, pinyon juniper woodland, and grassland; 300 to 1,070 m (1,000 to 3,500 ft) elevation. Known only from western Riverside County in Temescal Canyon, Gavilan Plateau, and Skunk Hollow areas.	March–May	Not expected. Project area and vicinity lacking suitable habitat for this species
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	US: FE CA: SP CNPS: 1B.1	Perennial herb considered a limestone endemic and dependent on fire. Typically associated with the fire-dependent chaparral habitat on limestone and on down-wash sites. Elevation is below 640 m (3,000 ft). Los Angeles, Orange, and Ventura Counties.	March–July	Not expected. Project area and vicinity lacking suitable habitat for this species
Malibu baccharis	<i>Baccharis malibuensis</i>	US: - CA: SP CNPS: 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian woodland. From 150–305 m	August	Absent
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	US: FT CA: CE CNPS: 1B.1	Bulbiferous perennial herb. Occurs primarily in vernal pools, but also found in chaparral, cismontane woodlands, coastal scrub, playas, and valley and foothill grasslands, usually in clay soils. From 115 to 4,003 ft in elevation.	March–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Plummer's mariposa lily	<i>Calochortus plummerae</i>	US: – CA: SP CNPS: 1B.2	Perennial herb of sandy or rocky sites of (usually) granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest at 100 to 1,700 m (300 to 5,600 ft) elevation. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Los Angeles and Ventura Counties	May–July	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Plant Species Potentially Occurring in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence
Intermediate mariposa lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	US: - CA: SP CNPS: 1B.2	Perennial bulbiferous herb. Occurs in chaparral, coastal scrub, and valley and foothill grassland. Often in dry, rocky soils. From 395 to 2,805 ft in elevation.	May–July	Low. Not observed. Marginally suitable conditions present.
Lewis' evening-primrose	<i>Camissonia lewisii</i>	US: - CA: SP CNPS: 3	Annual herb. Occurs in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grasslands on sandy or clay soils. From 0 to 1,000 ft in elevation.	March–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	US: - CA: SP CNPS: 1B.1	Annual herb. Occurs in vernal pools, margins of marshes and swamps, and vernal mesic valley and foothill grasslands, sometimes with saltgrass on alkaline soils. Up to 1,400 ft in elevation.	May–November	Low. Not observed. Marginally suitable conditions present.
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	US: – CA: SE CNPS: 1B.1	Annual herb found in sandy soils in coastal scrub, primarily in northeastern Western Transverse Ranges and San Gabriel Mountains at elevations between 3 to 1,220 m (10 and 4,000 ft).	April–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Long-spined spineflower	<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	US: – CA: SP CNPS: 1B.2	Annual herb of clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland at 30 to 1,450 m (100 to 4,800 ft) elevation. Occurs in Orange, Riverside, and San Diego Counties.	April–July	Not expected. Project area and vicinity lacking suitable habitat for this species
White-bracketed spineflower	<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	US: – CA: SP CNPS: 1B.2	Annual herb of Mojave desert scrub and pinyon and juniper woodland 300 to 1,200 m (900 to 4,000 ft) elevation. Known only from Los Angeles, Riverside and San Bernardino Counties.	April–June	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Plant Species Potentially Occurring in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	US: FE CA: SE CNPS: 1B.1	Gravel soils of Temecula arkose deposits in openings in chamise chaparral in the Vail Lake Area, or on sandy soils in opening in alluvial scrub (usually late seral stage) in floodplain terraces and benches that receive overbank deposits every 50 to 100 years from generally large washes or rivers; 200 to 760 m (600 to 2,500 ft) elevation. Los Angeles, Riverside, and San Bernardino Counties.	April–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Santa Monica Mountains dudleya	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	US: FT CA: SP CNPS: 1B.2	Perennial herb of cracks and crevices of rock outcrops and cliff faces in canyons (primarily on north-facing slopes) in chaparral and coastal scrub at 150 to 1700 m (500 to 5500 ft) elevation. Known only from Los Angeles and Orange Counties.	March–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	US: - CA: SP CNPS: 1B.2	Perennial herb. Occurs in chaparral, coastal scrub, and valley and foothill grassland usually in heavy, often clayey soils. From 45 to 2,370 ft in elevation.	April–July	Not expected. Project area and vicinity lacking suitable habitat for this species
Santa Ana River woollystar	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	US: FE CA: SE CNPS: 1B.1	Sandy soils on river floodplains and terraced fluvial deposits. Known only from Santa Ana River and larger tributaries in San Bernardino and Riverside Counties; elevations of 120 to 625 m (400 to 2,100 ft).	May–September	Absent
Tecate cypress	<i>Hesperocyparis forbesii</i>	US: - CA: SP CNPS: 1B.1	Evergreen tree. Occurs in closed-cone coniferous forest and chaparral. From 835 to 4,920 ft in elevation.	N/A	Absent

Special-Status Plant Species Potentially Occurring in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence
Vernal barley	<i>Hordeum intercedens</i>	US: – CA: SP CNPS: 3.2	Annual herb found in coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions) and vernal pools in Los Angeles, Orange, Riverside, Santa Barbara, San Diego, and Ventura Counties. Found at elevations 5 to 1,000 m (20 to 3,300 ft).	March–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	US: – CA: SP CNPS: 1B.2	Closed cone coniferous forest, chaparral, cismontane woodland; 550 to 1,370 m (1,800 to 4,500 ft) elevation; Santa Ana Mountains in Riverside and Orange Counties. Also reported from San Diego County and Baja California.	April–July	Not expected. Project area and vicinity lacking suitable habitat for this species
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	US: – CA: SP CNPS: 1B.2	Dry soils in coastal sage scrub and chaparral, typically below 500 m (1,600 ft) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, and San Bernardino Counties.	January–July	Not expected. Project area and vicinity lacking suitable habitat for this species
Felt-leaved monardella	<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	US: – CA: SP CNPS: 1B.2	Chaparral and woodland, 300 to 1,190 m (1,000 to 3,900 ft) elevation. Known from Peninsular Ranges in Orange and San Diego Counties and from northern Baja California.	June–August	Not expected. Project area and vicinity lacking suitable habitat for this species
Hall's monardella	<i>Monardella macrantha</i> ssp. <i>hallii</i>	US: – CA: SP CNPS: 1B.3	Perennial herb of dry slopes and ridges in openings in chaparral, woodland, and forest at 700 to 2,195 m (2,300 to 7,200 ft) elevation. Known only from San Diego, Orange, Riverside, and San Bernardino Counties.	June–August	Not expected. Project area and vicinity lacking suitable habitat for this species
Mud nama	<i>Nama stenocarpum</i>	US: - CA: SP CNPS: 2.2	Annual to perennial herb. Occurs in marshes and swamps and along lake margins and riverbanks. From 15 to 1,640 ft in elevation.	January–July	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Plant Species Potentially Occurring in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence
Peninsular nolina	<i>Nolina cismontana</i>	US: - CA: SP CNPS: 1B.2	Evergreen shrub. Occurs in chaparral and coastal scrub on sandstone or gabbro soils. From 420 to 3,825 ft in elevation.	May–July	Absent
California beardtongue	<i>Penstemon californicus</i>	US: - CA: SP CNPS: 1B.2	Perennial herb. Occurs in chaparral, lower montane coniferous forest, and pinyon and juniper woodland on sandy soils. From 3,800 to 7,500 ft in elevation.	May–August	Not expected. Project area and vicinity lacking suitable habitat for this species
Allen's pentachaeta	<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	US: - CA: SP CNPS: 1B.1	Annual herb. Occurs in coastal scrub openings and valley and foothill grassland. From 225 to 1,560 ft in elevation.	March–June	Not expected. Project area and vicinity lacking suitable habitat for this species
Santiago Peak phacelia	<i>Phacelia suaveolens</i> ssp. <i>keckii</i>	US: – CA: SP CNPS: 1B.3	Annual herb found in closed-coned coniferous forest and chaparral in elevations from 545 to 1,600 m (1,800 to 5,200 ft). Known from Orange and Riverside Counties.	May–June	Not expected. Project area and vicinity lacking suitable habitat for this species
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	US: - CA: SP CNPS: 2.2	Perennial herb. Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland on sandy and gravelly soils below 7,000 ft elevation	August–November	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
INVERTEBRATES				
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	US: FE CA: CSA	Endemic to vernal pools in Orange and San Diego Counties. Usually appears in late fall, winter, and spring when rains fill their small, shallow, seasonal pools.	Not expected. Project area and vicinity lacking suitable habitat for this species
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	US: FE CA: CSA	Warm-water pools (i.e., large, deep pools that retain water into the warm season); Vernal Pools in Orange, Riverside, Los Angeles, Ventura, and San Diego Counties.	Not expected. Project area and vicinity lacking suitable habitat for this species
FISH				
Santa Ana sucker	<i>Catostomus santaanae</i>	US: FT CA: SSC	The Santa Ana sucker's historical range includes the Los Angeles, San Gabriel, and Santa Ana River drainage systems located in Southern California. An introduced population also occurs in the Santa Clara River drainage system in southern California. Found in shallow, cool, running water.	Not expected. Project area and vicinity lacking suitable habitat for this species
Arroyo chub	<i>Gila orcuttii</i>	US: - CA: SSC	Occurs in slow-water stream sections with mud or sand bottoms in the Los Angeles Basin south coastal streams.	Not expected. Project area and vicinity lacking suitable habitat for this species
Santa Ana speckled dace	<i>Rhinichthys osculus</i>	US: - CA: SSC	Occurs in headwaters of the Santa Ana and San Gabriel Rivers and may be extirpated from the Los Angeles River system. Requires permanent flowing streams with cobble and gravel riffle complexes.	Not expected. Project area and vicinity lacking suitable habitat for this species
AMPHIBIANS				
Arroyo toad	<i>Bufo californicus</i>	US: FE CA: SSC	Found in semi-arid regions near washes or intermittent streams. Often found near streams with sandy banks, gravel washes, and riparian vegetation.	Not expected. Project area and vicinity lacking suitable habitat for this species
Western spadefoot	<i>Spea hammondi</i>	US: - CA: SSC	Occurs primarily in grassland and other relatively open habitats. Found in elevations ranging from sea level to 4,500 ft. Requires temporary pools for breeding.	Not expected. Project area and vicinity lacking suitable habitat for this species
Coast Range newt	<i>Taricha torosa torosa</i>	US: - CA: SSC	Breeds in ponds, reservoirs, and slow-moving streams; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County, with populations from Monterey County south designated as sensitive.	Not expected. Project area and vicinity lacking suitable habitat for this species
REPTILES				
Orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	US: - CA: SSC	Inhabits low-elevation coastal scrub, chaparral, and valley hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
			major food, termites.	
Coastal western whiptail	<i>Aspidoscelis tigris stejnegeri</i>	US: - CA: CSA	Occurs in deserts and semiarid areas with sparse vegetation. Often found in woodland and riparian areas.	Not expected. Project area and vicinity lacking suitable habitat for this species
Rosy boa	<i>Charina trivirgata</i>	US: - CA: CSA	Inhabits rock outcrops and rocky shrublands in the southwestern United States and western Mexico.	Not expected. Project area and vicinity lacking suitable habitat for this species
Northern red-diamond rattlesnake	<i>Crotalus ruber ruber</i>	US: - CA: SSC	Associated with chaparral, woodland, grassland, and desert communities from Los Angeles County to Baja California Sur. Prefers rocky areas with dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects for shelter.	Not expected. Project area and vicinity lacking suitable habitat for this species
Southwestern pond turtle	<i>Emys marmorata pallida</i>	US: - CA: SSC	Occurs in a variety of habitats, including woodland, grassland, and open forest. Thoroughly aquatic, existing in good-quality ponds, marshes, rivers, streams, and irrigation ditches that have rocky or muddy bottoms. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks.	Not expected. Project area and vicinity lacking suitable habitat for this species
San Diego mountain kingsnake	<i>Lampropeltis zonata pulchra</i>	US: - CA: SSC	Wet meadows and moist woods in chaparral, woodland and coniferous forest. Most common in the vicinity of rocks or boulders near streams or lake shores. Ranges from sea level to 1,800 m (5,900 ft) elevation. Los Angeles County to San Diego County.	Not expected. Project area and vicinity lacking suitable habitat for this species
San Diego horned lizard	<i>Phrynosoma coronatum blainvillii</i>	US: - CA: SSC	Occurs in CSS, open chaparral, riparian woodland, and annual grassland habitats that support adequate prey species.	Not expected. Project area and vicinity lacking suitable habitat for this species
Coast patch-nosed snake	<i>Salvadora hexalepis virgulata</i>	US: - CA: SSC	Occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas.	Not expected. Project area and vicinity lacking suitable habitat for this species
Two-striped garter snake	<i>Thamnophis hammondi</i>	US: - CA: SSC	Highly aquatic. Found in or near permanent fresh water. Often found along streams with rocky beds and riparian growth.	Not expected. Project area and vicinity lacking suitable habitat for this species
BIRDS				
Cooper's hawk (nesting)	<i>Accipiter cooperii</i>	US: - CA: CSA	Nests in a wide variety of woodland and forest habitats.	Not expected. Project area and vicinity lacking suitable habitat for this species
Tricolored blackbird	<i>Agetaius tricolor</i>	US: - CA: SSC	Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs. Occurs in non-desert lowlands throughout California.	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	US: - CA: CSA	Resident in Southern California CSS and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Not expected. Project area and vicinity lacking suitable habitat for this species
Grasshopper sparrow (nesting)	<i>Ammodramus savannarum</i>	US: - CA: SSC	Occurs in dense grasslands, preferring native grasslands with a mixture of forbs and shrubs.	Not expected. Project area and vicinity lacking suitable habitat for this species
Golden eagle	<i>Aquila chrysaetos</i>	US: - CA: CFP	Grasslands, brushlands, deserts, oak savannas, open coniferous forests and montane valleys. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	Not expected. Project area and vicinity lacking suitable habitat for this species
Great Blue Heron	<i>Ardea herodias</i>	US: - CA: SA	Usually nests in trees, but also on large bushes, poles, reedbeds, and even on the ground. Frequents a wide range of wetland habitats at other times of year. February to July at nesting sites; year round elsewhere	Not expected. Project area and vicinity lacking suitable habitat for this species
Long-eared owl	<i>Asio otus</i>	US: - CA: SSC	Rare resident in Southern California coastal and foothill areas and uncommon resident in desert areas. Dense willow-riparian woodland and oak woodland. Breeds from valley foothill hardwood up to ponderosa pine habitat.	Not expected. Project area and vicinity lacking suitable habitat for this species
Burrowing owl (burrow sites)	<i>Athene cunicularia</i>	US: - CA: SSC	Burrows in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Not expected. Project area and vicinity lacking suitable habitat for this species
Ferruginous hawk	<i>Buteo regalis</i>	US: - CA: CSA	Found in open country in western North America; migrates north to Canada in summer and south to Mexico in winter.	Not expected. Project area and vicinity lacking suitable habitat for this species
San Diego cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	US: - CA: SSC	Occurs in CSS habitats. Requires tall <i>Opuntia</i> cactus for nesting and roosting.	Not expected. Project area and vicinity lacking suitable habitat for this species
Northern harrier	<i>Circus cyaneus (nesting)</i>	US: - CA: SSC	Grassland and marshy habitats in Southern California. Uncommonly in open desert and brushlands.	Not expected. Project area and vicinity lacking suitable habitat for this species
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis (nesting)</i>	US: - CA: SE	Breeds and nests in extensive stands of dense cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems. Very rare and local in California. May through September	Not expected. Project area and vicinity lacking suitable habitat for this species
White-tailed kite	<i>Elanus leucurus</i>	US: - CA: CFP	Breeds in riparian trees such as oaks, willows, and cottonwoods in lower-elevation areas, particularly coastal valleys and plains.	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	US: FE CA: SE	Breeds and nests in riparian forest with dense understory. Rare and local in Southern California.	Not expected. Project area and vicinity lacking suitable habitat for this species
California horned lark	<i>Eremophila alpestris actia</i>	US: - CA: CSA	Occurs in open grasslands, farmlands, prairies, tundras, airports, beaches, golf courses, cemeteries, and parks.	Not expected. Project area and vicinity lacking suitable habitat for this species
Yellow-breasted chat (nesting)	<i>Icteria virens</i>	US: - CA: SSC	Summer resident of California. Inhabits riparian thickets of willow and other brushy tangles near water. Nests in low, dense vegetation consisting of willow, blackberry, and wild grape.	Not expected. Project area and vicinity lacking suitable habitat for this species
Coastal California gnatcatcher	<i>Poliophtila californica californica</i>	US: FT CA: SSC	Obligate, permanent resident of CSS below 2,500 ft in elevation in Southern California.	Not expected. Project area and vicinity lacking suitable habitat for this species
Least Bell's vireo (nesting)	<i>Vireo bellii pusillus</i>	US: FE CA: CE	Occurs in moist thickets and riparian areas that are predominantly composed of willow and mulefat.	Not expected. Project area and vicinity lacking suitable habitat for this species
MAMMALS				
Pallid bat	<i>Antrozous pallidus</i>	US: - CA: SSC	Found in varied habitats in western North America.	Not expected. Project area and vicinity lacking suitable habitat for this species
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	US: - CA: SSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush in western San Diego and southwestern Riverside Counties.	Not expected. Project area and vicinity lacking suitable habitat for this species
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	US: - CA: SSC	Occasionally found in San Diego County. Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves as well as in and around buildings.	Not expected. Project area and vicinity lacking suitable habitat for this species
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	US: FE CA: ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with <i>Artemisia tridentata</i> , <i>Eriogonum fasciculatum</i> , and <i>Erodium</i> . Requires well-drained soils with compaction characteristics suitable for burrow construction. Not found in soils that are highly rocky, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County and northern San Diego County, below 915 m (3,000 ft) elevation. In northeastern Riverside County, known only from east of Interstate 15.	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
Western mastiff bat	<i>Eumops perotis californicus</i>	US: - CA: SSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral communities. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Not expected. Project area and vicinity lacking suitable habitat for this species
Western red bat	<i>Lasiurus blossevillii</i>	US: - CA: SSC	Forages over a wide range of habitats, but generally roosts in woodlands and forests. Ranges from southwestern Canada through the western United States and Middle America to South America.	Not expected. Project area and vicinity lacking suitable habitat for this species
Western yellow bat	<i>Lasiurus xanthinus</i>	US: - CA: SSC	Occurs in southern California in palm oases and in residential areas with untrimmed palm trees. Roosts primarily in trees, especially the dead fronds of palm trees. Forages over water and among trees.	Not expected. Project area and vicinity lacking suitable habitat for this species
Yuma myotis	<i>Myotis yumanensis</i>	US: - CA: CSA	Common and widespread in California. Found in a wide variety of habitats in elevations ranging from sea level to 11,000 ft. Optimal habitats are open forests and woodlands with sources of water over which to feed.	Not expected. Project area and vicinity lacking suitable habitat for this species
Pocketed free-tailed bat	<i>Nyctinomops femorasacca</i>	US: - CA: SSC	Spotty distribution in California, ranging from Southern California south to the Baja Peninsula, and through southwestern Arizona to at least central Mexico (Williams 1986). In California, typically found in rocky, desert areas with relatively high cliffs.	Not expected. Project area and vicinity lacking suitable habitat for this species
Big free-tailed bat	<i>Nyctinomops macrotis</i>	US: - CA: SSC	Primarily occurs in arid habitats from the southwestern U.S. to South America, but has been recorded far "out of range" during migration. Roost sites include cliffs, buildings, and hollow trees.	Not expected. Project area and vicinity lacking suitable habitat for this species
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	US: - CA: SSC	Occurs in CSS and chaparral; most commonly associated with cactus and rocky cliffs and slopes. Found in coastal Southern California from San Diego County to San Luis Obispo County.	Not expected. Project area and vicinity lacking suitable habitat for this species

Special-Status Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	US: FE CA: SSC	Inhabits friable soils along the narrow coastal plains from the northern Mexican border to Los Angeles County.	Not expected. Project area and vicinity lacking suitable habitat for this species

Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Delisted (FD); California Endangered (CE); California Threatened (CT); California Species of Special Concern (SSC); California Fully Protected Species (CFP); California Special Plant (CSP), California Special Animal (CSA)

Habitat Present/Absent: Absent (A) – No habitat is present and no further work is needed; Habitat Present (HP) – Habitat is or may be present; Species Present (O) – The species was observed within the BSA during surveys; Critical Habitat (CH) – The project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

BSA = Biological Study Area

CSS = coastal sage scrub

ft = feet

m = meters

APPENDIX C

CULTURAL RESOURCES REPORT

CULTURAL RESOURCES ASSESSMENT

SANTIAGO AREA BPS GENERATOR PROJECT

ORANGE COUNTY, CALIFORNIA

LSA

July 2011

CULTURAL RESOURCES ASSESSMENT

SANTIAGO AREA BPS GENERATOR PROJECT

ORANGE COUNTY, CALIFORNIA

Submitted to:

Christian Kessler
Water Resources and Administration
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

Prepared by:

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LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614-4731
(949) 553-0666

LSA Project No. IRW0901 P6

National Archaeological Data Base Information:

Type of Study: Records Search, Survey

Archaeological Sites Recorded: None

USGS Quadrangle: Black Star Canyon, California and El Toro, California 7.5'

Acreage: ~1 acre

LSA

July 2011

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- A: RECORDS SEARCH RESULTS
- B: NATIVE AMERICAN CONSULTATION

ABSTRACT

LSA Associates, Inc. (LSA) conducted a cultural resources assessment for the Santiago Area Booster Pump Stations (BPS) Generator Project, located in five disparate locations off of Santiago Canyon Road, in Orange County (County), California. The Area of Potential Effects (APE) for the project is the total area of the five BPS locations. The purpose of the assessment was to determine whether cultural resources are present within the proposed project APE.

The records search conducted at the South Central Coastal Information Center (SCCIC) indicated that no archaeological resources are documented within the APE; two archaeological resources have been documented within a 0.25 mile (mi) radius of the project APE. Two historic resources are recorded as being within the 0.25 mi radius. No historic resources are documented in the project APE. Twenty-one cultural resources studies have been conducted within the 0.25 mi radius records search area. Of these, nine are located within the project APE.

The Native American Heritage Commission (NAHC) was contacted to perform a Sacred Lands File search for the project APE. The NAHC responded to say that the Sacred Lands File search did not identify Native American cultural resources at any of the five project locations specified. The NAHC response included a list of 15 Native American contacts that may have information regarding cultural resources that could be impacted by the project. Project notification letters were sent to each of the individuals and follow up communication by telephone and email was attempted. No cultural resources in the project APE were identified by any of the Native Americans contacted.

The archaeological field survey did not locate any cultural resources at any of the five BPS locations. All of the locations have been previously disturbed to depth by the construction of the existing facilities and surrounding modern development. Based on the information summarized above, as well as on the visual examination of the areas, LSA recommends that the project APE is not sensitive for cultural resources. No further cultural resources work is recommended for the project unless development plans undergo such changes as to include areas not covered by this study.

In the event that archaeological materials are encountered during construction, work in the vicinity of the find should be halted, and a qualified archaeologist should be consulted to determine the appropriate treatment of the discovery (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15064.5(f)).

In the event human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the

inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

INTRODUCTION

LSA has been contracted to conduct a cultural resources assessment for the Santiago Area BPS Generator Project to determine whether cultural resources are present. The assessment included a records search, Native American scoping, a survey, and this report. The records search was completed on May 10 and June 7, 2011; Native American contact and scoping took place between May 17 and June 10, 2011; the field survey was performed on May 16, 2011; and the report was completed in June 2010.

This assessment was prepared in accordance with the Advisory Council on Historic Preservation regulations (revised January 11, 2001) for the identification of historic properties (prehistoric or historic sites, buildings, structures, objects, or districts listed in, or eligible for listing in, the National Register of Historic Places [National Register]) as required by 36 Code of Federal Regulations (CFR) Part 800 and the regulations implementing Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106). This assessment also addresses the requirements of the California Environmental Quality Act ([CEQA]; as amended January 1, 2011): PRC, Division 13 (Environmental Quality), Chapter 2.6 21083.2 (Archaeological Resources) and 21084.1 (Historical Resources); and the Guidelines for CEQA (as amended March 18, 2010), CCR Title 14, Chapter 3, Article 5 15064.5 (Determining the Significance of Impacts on Historical and Unique Archaeological Resources).

BACKGROUND INFORMATION

In October 2007, the Santiago Fire burned through Irvine Ranch Water District's (IRWD) Santiago Canyon service area, threatening homes, businesses, and the IRWD reservoirs and BPSs in the region. Water pressure in this area is maintained by five BPSs; continuous operations of these are vital to firefighting operations. The name, location, and pump-motor size of the five BPSs are listed in Table A.

Table A: Booster Pump Stations in Santiago Canyon Service Area

Pump Station	Location	Pump Motor Size
Fleming BPS	74341 Silverado Canyon Road	Two 60 hp pumps
Shaw BPS	28934 Silverado Canyon Road	Two 25 hp pumps
Read BPS	30500 Silverado Canyon Road	Two 25 hp pumps
Williams BPS	27600 Williams Canyon Road	One 60 hp and two 30 hp pumps
Manning BPS	27989 Modjeska Canyon Road	Two 50 hp pumps

BPS = Booster Pump Station
hp = horsepower

During the Santiago Fire, power outages were experienced at each of the pump stations, requiring the installation of portable emergency generators at each site. However, these temporary generators are also susceptible to damage by wildfires and are not permitted for permanent installation.

PROPOSED PROJECT

The project site is comprised of five separate IRWD BPS locations. The IRWD is proposing replacement of the portable generators at the five BPS sites identified to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and integral 24-hour fuel storage on a concrete pad. Four of the five permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

Three of the BPS sites (Fleming BPS, Shaw BPS, and Read BPS) are along Silverado Canyon Road, which runs east from Santiago Canyon Road. The fourth site (Williams BPS) is located along Williams Canyon Road, which also runs east from Santiago Canyon Road and is approximately 1 mi south of Silverado Canyon Road. The fifth site (Manning BPS) is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mi south of Williams Canyon Road. The five project locations are depicted on the United States Geological Survey (USGS) *El Toro, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 7 and 19, and Township 5 South, Range 8 West, Irvine Ranch Section 147; as well as on the USGS *Santiago Peak, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 9 and 10, San Bernardino Baseline and Meridian (Figure 1).

Primary project personnel includes Terri Fulton and Phil Fulton, who conducted the archaeological field survey; Ms. Fulton also authored this report. Deborah McLean, M.A., provided project oversight and Principal review of this report.

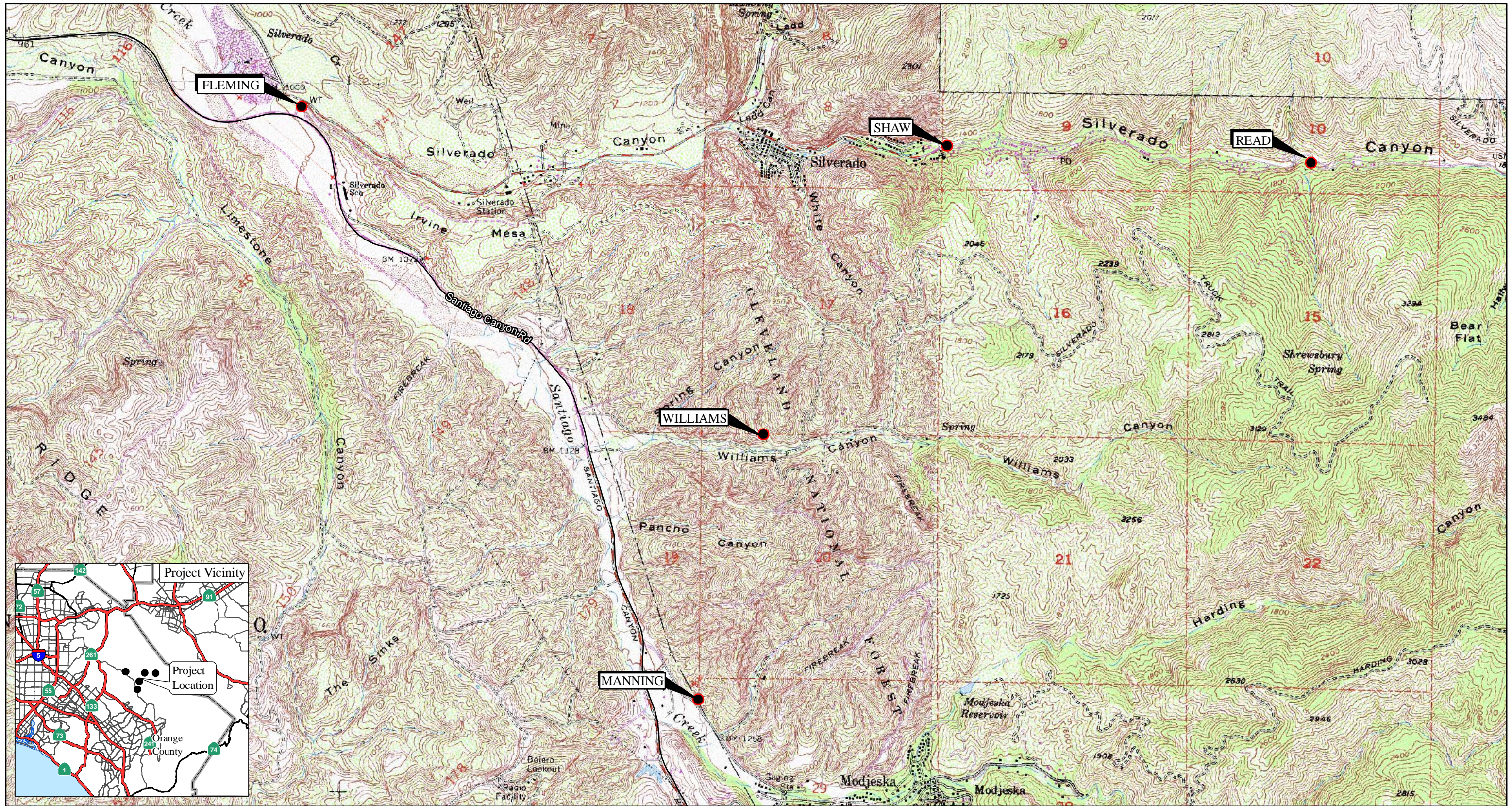


FIGURE 2.1

L S A

LEGEND

● IRWD Booster Pump Stations

0 1000 2000
FEET

SOURCE: USGS 7.5' QUAD - EL TORO ('82)
I:\IRW0901P6\GIS\Fig1_ProjLoc.mxd (7/18/2011)

Santiago Area BPS Generator Project
Project Location Map

SETTING

GEOLOGY AND GEOMORPHOLOGY

The APE is located on the western flank of the Peninsular Ranges Geomorphic Province. This region is characterized by a series of northwesterly trending mountain ranges separated by northwesterly trending valleys and subparallel faults branching from the San Andreas Fault. The width of the Province varies from 30 to 225 mi, with a maximum land bound width of 65 mi (Sharp 1976). Specifically, the APE lies in the vicinity of Santiago Canyon within the foothills on the southwestern slopes of the Santa Ana Mountains. The foothill section of the Santa Ana Mountains has been sculpted by erosion into a maze of canyons and tributary gullies, including Santiago Canyon, which was formed by Santiago Creek and has been referred to locally as the “Grand Canyon of the Santa Ana Mountains” (Greenwood 2000). The surface geology of the APE consists of active alluvial deposits (Qyag). Miller and Tan (1983) identified these younger (active) alluvial (wash) deposits within the higher reaches of creeks that are tributary to Santiago Creek. They generally consist of wet, loose, gravelly sands and sands.

ECOLOGY

The project lies within the Coastal Hills ecological subregion (subregion 261Bi) within the Southern California Coast ecological section as defined by Miles and Goudey (1997). This subsection consists of foothills along the west side of the Peninsular Ranges from the Santa Ana River southeast to the Mexican border. The climate is hot and subhumid and is modified greatly by oceanic influence (Miles and Goudey 1997). The climate of the area is classified as Dry Summer Subtropical, also known as Mediterranean. The wet winter/dry summer seasonality of precipitation is the defining characteristic of this climate (Ritter 2006).

PALEOENVIRONMENT

Although the Holocene climate has in general been considerably more stable than the Late Pleistocene climate (Ditlevsen et al. 1996; GRIP 1993), California has experienced relatively rapid changes in climatic and environmental conditions over the past 10,000 years. Two variables, sea levels and the incidence of drought and flooding, played significant roles in determining the distribution and abundance of important coastal and inland resources.

The sequence of changes in coastlines and habitats has been well-documented for the Southern California coast (Inman 1983; Masters and Gallegos 1997; Nardin et al. 1981). Sea levels rose rapidly following the end of the Ice Age. Rising sea levels produced rich estuarine habitats and rich near shore habitats, including rocky reefs and kelp beds. After 5000 BP, the rate at which sea levels rose had slowed considerably.

Before the rivers were channelized, periodic drought and flooding may have been a common but unpredictable feature of life. For example, the Los Angeles and Santa Ana Rivers have captured the San Gabriel River at times in the recent past, causing extensive floods. Such floods would disrupt ordinary riparian flora and fauna. The climate has generally become drier since the last Ice Age (Axelrod 1981; Heusser and Sirocko 1997). Alternations between wetter and drier periods occurred during the last 750 years, with intervals lasting about 40 to 160 years on average (Ingram et al. 1996). The climate was generally dry between A.D. 500 and 800, between A.D. 980 and 1300, and between A.D. 1650 and 1750 (Boxt et al. 1999; Larson and Michaelson 1989; Stine 1994). Severe droughts probably afflicted Southern California around A.D. 1000 to 1100 and A.D. 1250 to 1300 (deMenocal 2001; Stine 1994).

CURRENT SETTING

The project site is located within the Santiago Canyon-Modjeska Canyon area within an unincorporated portion of Orange County. Santiago Canyon Road is generally a two-way highway (one northbound lane and one southbound lane) from Jamboree Road to Live Oak Canyon Road and is designated as a views cape corridor in the County's General Plan Circulation Element. The majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches. However, the BPS project locations are within the developed portions of the project area.

CULTURAL

Prehistory

The description of an overall regional chronology demarking the major stages of cultural evolution in the Southern California area has been attempted many times. Two principal chronologies, Wallace (1955; 1978) and Warren (1968), have been revised slightly (Koerper and Drover 1983). Southern California cultural developments occur gradually and appear to have long-term stability; specifically applying a chronology is often difficult. These researchers have divided regional prehistory into a four-stage chronology describing changing artifact assemblages and evolving ecological adaptations. The principal chronology proposed by Wallace (1955) defines four cultural horizons, or periods, for Southern California: these include the Early Period, the Millingstone Period, the Intermediate Period, and the Late Prehistoric Period.

The Early Period covers a period between approximately 10,000 and approximately 5500 BC. Artifacts and cultural activities from this time period represent a predominantly hunting culture (Wallace 1955). Early Period sites in Southern California are rare; however, Moratto (1984:76) lists several traits characteristic of sites occupied during this period. This list includes locations on shorelines of ancient lakes and marshes. In coastal areas, such sites are located along stream channels or near estuaries. Although bows and arrows do not exist, atlatls and darts are known. An array of specialized cobble, core, flake and blade implements are also known. In certain areas, the presence of extremely large, often fluted bifaces marks the Early Period (Moratto 1984:81).

The Early Period is followed in time by the Millingstone Period. Sites from the Millingstone Period (post-5500 BC) typically contain groundstone artifacts such as manos, metates, and coggled stones, as well as soapstone objects. Wallace suggests that Millingstone Period cultures were generally

hunter-gatherers who spent much time collecting and processing plants. When bifaces are found on Millingstone Period sites, they are commonly large and associated with the use of the atlatl.

By 3000 BC, coastal populations began greater reliance on marine resources. The remains of near-shore and deep sea fish appear more often as refuse in middens. Much further inland, populations centered around pluvial lakes created by runoff from melting glaciers. In coastal areas, there was an increased use of the mortar and pestle, which marked a technological change in the manner seeds were processed. Instead of using just mano and metate, smaller seeds could be better contained in the basket like mortar or hopper mortar (basket asphalted to a mortar base), and it is possible that the mortar and pestle indicate a diversification in seed collecting strategy. The use of the mortar and pestle marks Wallace's Intermediate Period.

The Late Prehistoric Period begins in approximately AD 500 (Bean and Smith 1978). During this period, artifact changes and new cultural practices occur. Smaller projectile points, representing bow and arrow hunting, appear on Late Period sites. This period is also marked by steatite effigies and by cremation as an interment practice. These artifacts and practices have been linked to a proposed Shoshonean (Tatic) immigration from the Great Basin that ended at the coast. By AD 1000, smoking pipes and ceramic pottery occur, although ceramic smoking pipes may occur somewhat earlier within the later portion of the Intermediate Period.

Ethnography

The APE is near the boundary of territory ethnographically occupied by the Juaneño to the south and the Gabrielino to the north. The Luiseño occupied lands south of the Juaneño. The Juaneño are considered to be a linguistically related subgroup of the Luiseño that occupied the area near San Juan Capistrano. What is known about the Juaneño was recorded principally during the initial European land expeditions through the Southern California area. The reason for this is that the swift decline in native populations made it difficult even for early European explorers and inhabitants to observe endemic Southern California peoples in a natural state. This decline in native population was brought about by the establishment of the Mission system and the inability of Native Americans to resist European diseases introduced through initial contact.

The name "Gabrielino" describes those native groups living in what is now the Los Angeles and Orange County areas and was given due to the affiliation of these groups with Mission San Gabriel Arcángel. Linguistically, the Gabrielino language, as well as that of the Luiseño and Juaneño, is a Cupan language in the Tatic family, which is part of the Uto-Aztecan (formerly Shoshonean) linguistic stock that once extended across the Great Basin region of Utah, Nevada, and California (Bean and Shipek 1978:550; Bean and Smith 1978:538). In California, the northernmost members of this stock are the Mono, while the Chemehuevi are the easternmost, the Cahuilla are the southernmost, and the Luiseño were the southwesternmost California members (Kroeber 1976). These languages have elsewhere been referred to as Southern California Shoshonean.

History

Spanish Mission Period (1769–1821). The Historic Period in Southern California is generally accepted to commence with the establishment of Mission San Diego De Alcalá, first and

southernmost of the Alta California Missions, on July 16, 1769 (Lowman 1993:2, 5). The seventh mission founded in Alta California was Mission San Juan Capistrano, established on November 1, 1776, in Juaneño territory (Lowman 1993:9).

The San Juan Capistrano Mission land holding was extensive in order to support itself and its Indian converts. The Mission lands stretched 13–14 leagues north to south and 3–4 leagues east to west. The Mission ranchos included *Rancho Santa Ana*, *Rancho San Joaquin*, *Rancho Mission Viejo*, *Rancho Trabuco*, and *Rancho San Mateo* (Bancroft 1966; Englehardt 1998). The Mission used the land for crops and cattle. This land was to be turned over to the Indians as a pueblo and was thus held in trust by the Church for the benefit of the natives (Robinson 1979). The Missions recruited neophytes, native converts, to settle on land close to the Mission. Local native villages, *rancherías*, were thus incorporated into the Mission system.

The Franciscans' goal was to convert the Native Americans to Christianity and incorporate them into Spanish society. The local natives could learn metallurgy, plant and animal domestication, and European building construction methods. Europeans learned how and where indigenous people lived and gathered information about native life as well as ceremonial and ritual practices. Occasionally, this information was recorded, and from these early records comes much of what we now know concerning native life.

Ultimately, Spanish colonization resulted in the destruction of native culture and society. Two important factors that contributed to this decline included (1) the removal of the youngest, healthiest and most productive natives from their traditional communities and their placement into the mission system, and (2) the introduction of highly infectious diseases, which eventually led to epidemics and reduced birth rates. As a result, traditional Native American communities were depopulated and the survivors integrated into local Mexican-American communities.

Mexican Rancho Period (1821–1848). In 1821, Mexico gained independence from Spain, and in 1848, the United States formally obtained California. The period from 1821 to 1848 is here referred to as the Mexican Rancho Period. During this period, there was a change from the subsistence agriculture of the Spanish Mission Period to livestock husbandry of the large ranches, or *ranchos*, acquired by Mexican citizens through grants or by purchase from mission administrators. This change was even more distinct after 1833–1834, when mission secularization occurred.

In 1833, 12 years after gaining independence from Spain, the Mexican government's Secularization Act changed missions into civil parishes, and those natives who had inhabited areas adjacent to a Spanish Period mission were to obtain half of all mission possessions, including land. However, this did not occur in most instances, and the Secularization Act resulted in the transfer of large mission tracts to politically prominent individuals rather than to local natives. Economic activities centered around cattle ranching on the numerous expansive "ranchos" that had been created out of the mission lands.

The 1840s saw increased tension between the United States and Mexico. Finally, in 1846, war was declared between these two countries. By 1847, the United States had established control of California. The Treaty of Guadalupe Hidalgo in 1848 formally ended hostilities.

Local History

Rancho Lomas de Santiago. By the early 1800s, army officers and veterans began receiving grants to establish large, private grazing areas. This process accelerated in 1833 when the Mexican government enacted the Secularization Acts and began transferring mission lands to wealthy and politically prominent individuals. The APE is located within the boundaries of one of these early Mexican grants, the Rancho Lomas de Santiago. Rancho Lomas de Santiago was granted to Don Teodosio Yorba by Governor Pio Pico; Yorba subsequently sold the rancho to William Wolfskill in 1860. The 47,227 ac property extended from the Santa Ana River south to Rancho Aliso, and from the Santa Ana Mountains west to Rancho San Joaquin. Although Wolfskill originally purchased the land to graze cattle, he began converting his ranch to sheep raising following a disastrous drought during the early 1860s (Liebeck 1990:9,10). During the 1860s, Rancho Lomas de Santiago was consolidated with Rancho San Joaquin and a portion of Rancho Santiago de Santa Ana to form a 125,000 ac holding, which retained the name Rancho San Joaquin. After James Irvine I became the sole owner in 1876, the holding was generally known as the Irvine Ranch.

METHODS

ARCHIVAL AND HISTORICAL RESEARCH

A records search for the five BPS locations was completed on May 10, and on June 7, 2011, at the SCCIC, located at California State University, Fullerton. The records search included a review of all recorded historic and prehistoric archaeological sites within a 0.25 mi radius of the five BPS generator locations, as well as a review of known cultural resource survey and excavation reports. In addition, the California State Historic Resources Inventory, which includes the National Register of Historic Places (National Register), California Historical Landmarks, California Points of Historical Interest, and various local historical registers were examined.

NATIVE AMERICAN CONSULTATION

On May 4 and May 18, 2011, letters were sent to the NAHC requesting a search of the Sacred Lands File in order to identify areas of religious or cultural significance to Native Americans. The NAHC responded on May 6, and May 19, 2011, to say that the Sacred Lands File searches did not identify Native American cultural resources at the location of any of the five BPS generator locations. The NAHC responses also contained lists of 15 individuals affiliated with various Juaneño and Gabrielino Tongva groups that might have knowledge of cultural resources in the project APE. LSA prepared a letter that discussed the project and requested information on cultural resources in the area that may be significant to their communities. The letter was sent to the following groups and individuals via certified mail on May 17 and 20, 2011:

- Ti'At Society/Inter-Tribal Council of Pimu, Cindi M. Alvitre, Chairwoman-Manisar
- Gabrielino Tongva Nation, Sam Dunlap, Chairperson
- Juaneño Band of Mission Indians Acjachemen Nation, David Belardes, Chairperson
- Juaneño Band of Mission Indians Acjachemen Nation, Anthony Rivera, Chairman
- Tongva Ancestral Territorial Tribal Nation, John Tommy Rosas, Tribal Administrator
- Gabrielino Tongva Indians of California Tribal Council, Robert F. Dormae, Tribal Chair/Cultural Resources
- Gabrielino/Tongva San Gabriel Band of Mission Indians, Anthony Morales, Chairperson
- Juaneño Band of Mission Indians, Alfred Cruz, Cultural Resources Coordinator
- Juaneño Band of Mission Indians, Sonia Johnston, Tribal Chairperson
- Gabrielino-Tongva Tribe, Bernie Acuna
- Juaneño Band of Mission Indians Acjachemen Nation, Joyce Perry, Representing Tribal Chairperson
- Gabrielino-Tongva Tribe, Linda Candelaria, Chairwoman

- Juaneño Band of Mission Indians, Adolph 'Bud' Sepulveda, Vice Chairperson
- Juaneño Band of Mission Indians, Anita Espinoza
- United Coalition to Protect Panhe (UCPP), Rebecca Robles

FIELD SURVEY

A pedestrian field survey of the APE at each of the five BPS locations was completed by LSA Archaeologists Phil Fulton and Terri Fulton on May 16, 2011. All visible ground surface within the APE of each of the five individual BPS locations was intensively examined for the presence of cultural material. This included examining rodent burrow backdirt and cut slopes or drainages, when present. The APE was found to be graded, leveled, and/or built up, from the original landform in all cases; the BPS areas are modern in construction and are 100 percent disturbed. The five locations are surrounded by modern built environment.

REPORT OF FINDINGS

RECORDS SEARCH

The records search conducted at the SCCIC indicated that no archaeological resources are documented within any of the project APE; two archaeological resources have been documented within a 0.25 mi radius of the project APE. Two historic resources are recorded as being within the 0.25 mi radius. No historic resources are documented in the APE. Twenty-one cultural resources studies have been conducted within the 0.25 mi radius records search area. Of these, nine are located within the APE. For additional details of the records search results, please see Appendix A.

NATIVE AMERICAN CONSULTATION

No initial responses to the letters were received. Follow-up communication was attempted by telephone and email between May 31 and June 2, 2011.

As a result of the follow-up communications, responses were received from four parties. In a telephone call on June 1, 2011, Anita Espinoza, Juaneño Band of Mission Indians, requested to be notified of any cultural material encountered. She stated that the Santiago Canyon area is sensitive for cultural resources and recommended monitoring of construction by a Native American in order to stay ahead of any potential discoveries. She also recommended that three additional Juaneño people that were not on the NAHC lists be contacted: Sally Wright, Susan Wallace, and Joe Ocampo. She requested that the information be sent to her by email, and she will forward it to them for possible comment. The information was emailed on June 1, 2011.

In a telephone conversation on June 2, 2011, Sam Dunlap, Gabrielino Tongva Nation, stated that he had not retrieved the letter yet, but would pick it up the next week. He would comment at that time, if necessary. He emailed on June 7, 2011, to state that he has no comments or concerns.

In a phone call on June 2, 2011, Robert Dormae, Gabrielino Tongva Indians of California Tribal Council, requested that the information be emailed, which it was. He will review and comment if necessary. He would also like to be notified of any discoveries.

On June 10, 2011, Alfred Cruz, Juaneño Band of Mission Indians, called to say that while the area is sensitive for cultural resources, he has no comment if project excavation is in previously disturbed soil. He would also like to be notified of any discoveries.

Anthony Morales, Gabrieleno/Tongva San Gabriel Band of Mission Indians, called on June 21, 2011, to state that as long as ground disturbance will be within areas that are already disturbed by the current facilities, he is comfortable with the project. However, should there be new ground disturbance, such as utility lines, he believes the project warrants monitoring by a Native American and an archaeologist, as the area is very sensitive for cultural resources.

To date, there have been no comments from any of the remaining individuals contacted. For additional details of the Native American consultation, please see Appendix B.

ARCHAEOLOGICAL FIELD SURVEY

No cultural resources were identified during the field survey. Each of the five BPS locations are built and modern in origin, appear to be disturbed to depth, and are located in areas of modern development.

RECOMMENDATIONS

Based on the information summarized in this report, LSA recommends that the project APE is not sensitive for cultural resources. No further cultural resources work is recommended for the project unless development plans undergo such changes as to include areas not covered by this study. In the event that archaeological materials are encountered during construction, work in the vicinity of the find should be halted, and a qualified archaeologist should be consulted to determine the appropriate treatment of the discovery.

In the event human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

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APPENDIX A

RECORDS SEARCH RESULTS

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
anthro.fullerton.edu/sccic.html - sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

May 10, 2011

SCCIC # 11464.8141

Ms. Terri Fulton
LSA Associates, Inc.
20 Executive Park, Ste.200
Irvine, CA 92614
(949) 553-0666

RE: Records Search for the Santiago Area BPS Generator Project, Orange County, California.
LSA job no. IRW0901 P6.

Dear Ms. Fulton,

As per your request received on April 28, 2011, a records search was conducted for the above referenced project. The search includes a review of all recorded archaeological sites within a 1/2-mile radius of the project site as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historical Resources (CR), the National Register of Historic Places (NR), and the California State Historic Resources Inventory (HRI) listings were reviewed for the above referenced project. The following is a discussion of the findings.

Black Star Canyon, CA. & El Toro, CA. USGS 7.5' Quadrangles

ARCHAEOLOGICAL RESOURCES:

Four archaeological sites (30-000723, 30-000778, 30-001305, and 30-001630) have been identified within a 1/2-mile radius of the project site. No archaeological sites are located within the project site. One site is listed on the Archaeological Determination of Eligibility (DOE) list. No isolates have been identified within a 1/2-mile radius of the project site. No isolates are located within the project site.

HISTORIC RESOURCES:

Copies of our historic maps – Corona, CA (1902 & 1963) and Santiago Peak, CA (1942 & 1943) 15' USGS - are enclosed for your review.

The California Point of Historical Interest of the Office of Historic Preservation, Department of Parks and Recreation, lists no properties within a 1/2-mile radius of the project site.

The California Historical Landmarks of the Office of Historic Preservation, Department of Parks and Recreation, lists one property within a 1/2-mile radius of the project site (**see below**).

No. 202 Silverado

Located in Canada de la Madera (Timber Canyon) was a mining boomtown founded in 1878 when silver was discovered nearby. During the colorful life of its boom, 1878-1881, miners flocking to the area established a thriving community, served daily by stage from Los Angeles and Santa Ana. Located next to Silverado Fire Station #2 at the end of Silverado Canyon Road, 3.4 miles east of Silverado post office, Silverado. 30-162266

The California Register of Historical Resources lists no properties within a 1/2-mile radius of the project site. These are properties determined to have a National Register of Historic Places Status of 1 or 2, a California Historical Landmark numbering 770 and higher, or a Point of Historical Interest listed after 1/1/1998.

The National Register of Historic Places lists no properties within a 1/2-mile radius of the project site.

The California Historic Resources Inventory lists one property has been evaluated for historical significance within a 1/2-mile radius of the project site (**see enclosed list**).

PREVIOUS CULTURAL RESOURCES INVESTIGATIONS:

Twenty-two studies (OR228*, OR262, OR321*, OR383, OR393, OR470, OR501, OR555*, OR852*, OR943, OR1026*, OR1047, OR1127, OR1182, OR1441*, OR2945, OR3273*, OR3374, OR3384, OR3600, OR3834*, and OR3989) have been conducted within a 1/2-mile radius of the project site. Of these, eight are located within the project site. There are ten additional investigations located on the Black Star Canyon, CA. and El Toro, CA. 7.5' USGS Quadrangles that are potentially within a 1/2-mile radius of the project site. These reports are not mapped due to insufficient locational information.

(* = Located within the project site)

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you **do not include** resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at 714.278.5395 Monday through Thursday 9:00 am to 3:30 pm.

Should you require any additional information for the above referenced project, reference the SCCIC number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,
SCCIC



Lindsey Noyes
Staff Researcher

Enclosures:

- (X) Maps – Black Star Canyon, CA. and El Toro, CA. 7.5' USGS Quadrangles, Corona, CA (1902 & 1963) and Santiago Peak, CA. (1942 & 1943) 15' USGS Quadrangle – 11 pages
- (X) Bibliography – 9 pages
- (X) HRI – 1 page
- (X) ADOE – 1 page
- (X) National Register Status Codes – 1 page
- (X) Site Records – (30-000723, 30-000778, 30-001305, and 30-001630) – 16 pages
- (X) Confidentiality Form
- (X) Invoice #11464.8141

South Central Coastal Information Center
 California State University, Fullerton
 Department of Anthropology MH-426
 800 North State College Boulevard
 Fullerton, CA 92834-6846
 657.278.5395 / FAX 657.278.5542
 anthro.fullerton.edu/sccic.html - sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

June 7, 2011

SCCIC # 11550.8280

Ms. Terri Fulton
 LSA Associates
 20 Executive Park, Ste.200
 Irvine, CA 92614
 (949) 553-0666

LSA
 LSA ASSOCIATES, INC.

JUN 09 2011

RECEIVED
 IRVINE

RE: Records Search for the Santiago Area BPS Generator Project, Orange County, California.

Dear Ms. Fulton,

As per your request received on May 18, 2011, a records search was conducted for the above referenced project. The search includes a review of all recorded archaeological sites within a ¼-mile radius of the project site as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historical Resources (CR), the National Register of Historic Places (NR), and the California State Historic Resources Inventory (HRI) listings were reviewed for the above referenced project site. The following is a discussion of the findings.

RESOURCES AND REPORTS

CELL # ADDRESS	QUAD NAME	RESOURCES	REPORTS	BUILT ENVIRONMENT
Santiago Area BPS Generator Project LSA Project # IRW0901	El Toro, CA Santiago Peak, CA	None	OR259, OR1441* Unmappables+: 11	PHI: None SHL: None CR: None NR: None HRI: None

* = Located within the project site.

+ = The investigations are not mapped due to insufficient location information. A bibliography is available upon request.

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you **do not include** resource location maps and location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at 714.278.5395 Monday through Thursday 9:00 am to 3:30 pm.

Should you require any additional information for the above referenced project, reference the SCCIC number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,
SCCIC



Lindsey Noyes
Staff Researcher

Enclosures:

- (X) Maps – El Toro, CA & Santiago Peak, CA 7.5' USGS Quadrangle, Santiago Peak, CA (1942 & 1943) 15' USGS Quadrangle
- (X) Bibliography of Reports – 4 pages
- (X) HRI – 1 page
- (X) National Register Status Codes – 1 page
- (X) Confidentiality Form
- (X) Invoice #11550.8280

APPENDIX B

NATIVE AMERICAN CONSULTATION

SECTION 106 NATIVE AMERICAN CONTACT RECORD

Proposed Santiago Area BPS Generator Project, Orange County, California

Date LSA Requested the Sacred Lands File Search from the Native American Heritage Commission (NAHC): May 4, 2011, and May 18, 2011.
 Date the Native American Heritage Commission Replied: May 6, 2011, and May 19, 2011.

Results of the Sacred Lands File Search: Native American cultural resources were not identified in the Areas of Potential Effects (APE) for any of the five locations specified. However, the NAHC recommended that LSA contact the groups/individuals listed below who may have knowledge of cultural resources that could be impacted by the project.

Groups Contacted	Date LSA Sent Letter to Tribes	Date a Response to the Letter was Received by LSA	Date and Results of LSA Follow-up Telephone Calls and/or emails
Ti'At Society/Inter-Tribal Council of Pimu Cindi M. Alvitre, Chairwoman-Mamisar <i>Gabrielino</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Ms. Alvitre. 06-02-11: A voicemail was left for Ms. Alvitre.
Gabrielino Tongva Nation Sam Dunlap, Chairperson <i>Gabrielino Tongva</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Mr. Dunlap. 06-02-11: Mr. Dunlap stated that he had not picked up the letter yet; he will do that next week and comment if necessary. 06-07-11: Mr. Dunlap stated in an email that he has to comments or concerns.
Juaneño Band of Mission Indians Acjachemen Nation David Belardes, Chairperson <i>Juaneño</i>	05-17-11	No response received.	Please see Joyce Perry, below. She is the spokesperson for cultural resources.
Juaneño Band of Mission Indians Acjachemen Nation Anthony Rivera, Chairman <i>Juaneño</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Mr. Rivera. 06-02-11: A second email follow up was sent to Mr. Rivera.
Tongva Ancestral Territorial Tribal Nation John Tommy Rosas, Tribal Administrator <i>Gabrielino Tongva</i>	05-17-11 (via email)	No response received.	05-31-11: An email follow up was sent to Mr. Rosas. 06-02-11: A second email follow up was sent to Mr. Rosas.
Gabrielino Tongva Indians of California Tribal Council Robert F. Dormae, Tribal Chair/Cultural Resources <i>Gabrielino Tongva</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Mr. Dormae. 06-02-11: Mr. Dormae requested that the information be emailed, which it was; he will review and comment if necessary. He would also like to be notified immediately of any discoveries.

Groups Contacted	Date LSA Sent Letter to Tribes	Date a Response to the Letter was Received by LSA	Date and Results of LSA Follow-up Telephone Calls and/or emails
Gabrielino/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson <i>Gabrielino Tongva</i>	05-17-11	No response received.	06-01-11: A voicemail was left for Mr. Morales. 06-02-11: A follow up email was sent to Mr. Morales. 06-07-11: Mr. Morales left a voicemail stating that he has a couple questions about the project. 06-10-11: A voicemail was left for Mr. Morales. 06-21-11: Mr. Morales called to state that as long as ground disturbance will be within areas that are already disturbed by the current facilities, he is comfortable with the project. However, should there be new ground disturbance, such as utility lines, he believes the project warrants monitoring by a Native American and an archaeologist, as the area is very sensitive for cultural resources. He would also like to be notified of any discoveries.
Juaneño Band of Mission Indians Alfred Cruz, Cultural Resources Coordinator <i>Juaneño</i>	05-17-11	No response received.	06-01-11: A voicemail was left for Mr. Cruz. 06-02-11: A follow up email was sent to Mr. Cruz. 06-08-11: Mr. Cruz left a message that he returned the call. 06-10-11: Mr. Cruz called to say that while the area is sensitive for cultural resources, he has no comment if project excavation is in previously disturbed soil. He would also like to be notified of any discoveries.
Juaneño Band of Mission Indians Sonia Johnston, Tribal Chairperson <i>Juaneño</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Ms. Johnston. 06-02-11: A voicemail was left for Ms. Johnston.
Gabrielino-Tongva Tribe Bernie Acuna <i>Gabrielino</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Mr. Acuna. 06-02-11: There was no answer at the numbers provided; however, a voicemail that included Mr. Acuna was left at Linda. Candelaria's number (see below). They represent the same group.
Juaneño Band of Mission Indians Acjachemen Nation Joyce Perry, Representing Tribal Chairperson <i>Juaneño</i>	05-17-11	No response received.	06-01-11: A voicemail was left for Ms. Perry. 06-02-11: A second voicemail was left for Ms. Perry.

Groups Contacted	Date LSA Sent Letter to Tribes	Date a Response to the Letter was Received by LSA	Date and Results of LSA Follow-up Telephone Calls and/or emails
Gabrielino-Tongva Tribe Linda Candelaria, Chairwoman <i>Gabrielino</i>	05-17-11	No response received.	05-31-11: An email follow up was sent to Ms. Candelaria. 06-02-11: A voicemail was left for Ms. Candelaria.
Juaneño Band of Mission Indians Adolph 'Bud' Sepulveda, Vice Chairperson <i>Juaneño</i>	05-20-11	No response received.	Please see Alfred Cruz, above. He is the spokesperson for cultural resources.
Juaneño Band of Mission Indians Anita Espinoza <i>Juaneño</i>	05-20-11	No response received.	06-01-11: Ms. Espinoza would like to be notified immediately of any cultural resources discoveries. She also recommends monitoring by a Native American as there is always the potential to find something and monitoring is a means to stay ahead of any discoveries. In addition, she requested that the information be sent to her by email so that she could forward it to three other Juaneño individuals that were not on the NAHC contact list: Sally Wright, Susan Wallace, and Joe Ocampo. The information was sent on June 1, 2011.
United Coalition to Protect Panhe (UCPP) Rebecca Robles <i>Juaneño</i>	05-20-11	No response received.	05-31-11: An email follow up was sent to Ms. Robles. 06-02-11: A second email follow up was sent to Ms. Robles. 07-08-11: The letter was returned as "unclaimed".

May 4, 2011

Dave Singleton
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Subject: Sacred Lands File Search for the Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Singleton:

Attached please find a portion of one United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. Plotted on the map are five locations that encompass the Santiago Area BPS Generator Project, in Orange County, California. Specifically, the project is depicted on the United States Geological Survey (USGS) *El Toro, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 7 and 19; and Township 5 South, Range 8 West, Irvine Ranch Section 147. A map showing the project locations is attached.

There will be ground disturbance for this project. Per Section 106 of the National Historic Preservation Act, I would like to request a Sacred Lands File search for the project area. Please notify LSA of any Traditional Cultural Properties (TCPs) and/or sacred sites that may be impacted.

I will anticipate a response within 10 working days from your receipt of this request. If you have any questions or comments, please contact me at (949) 553-0666 or you may e-mail me at terri.fulton@lsa-assoc.com. As always, thank you very much for your assistance with this project.

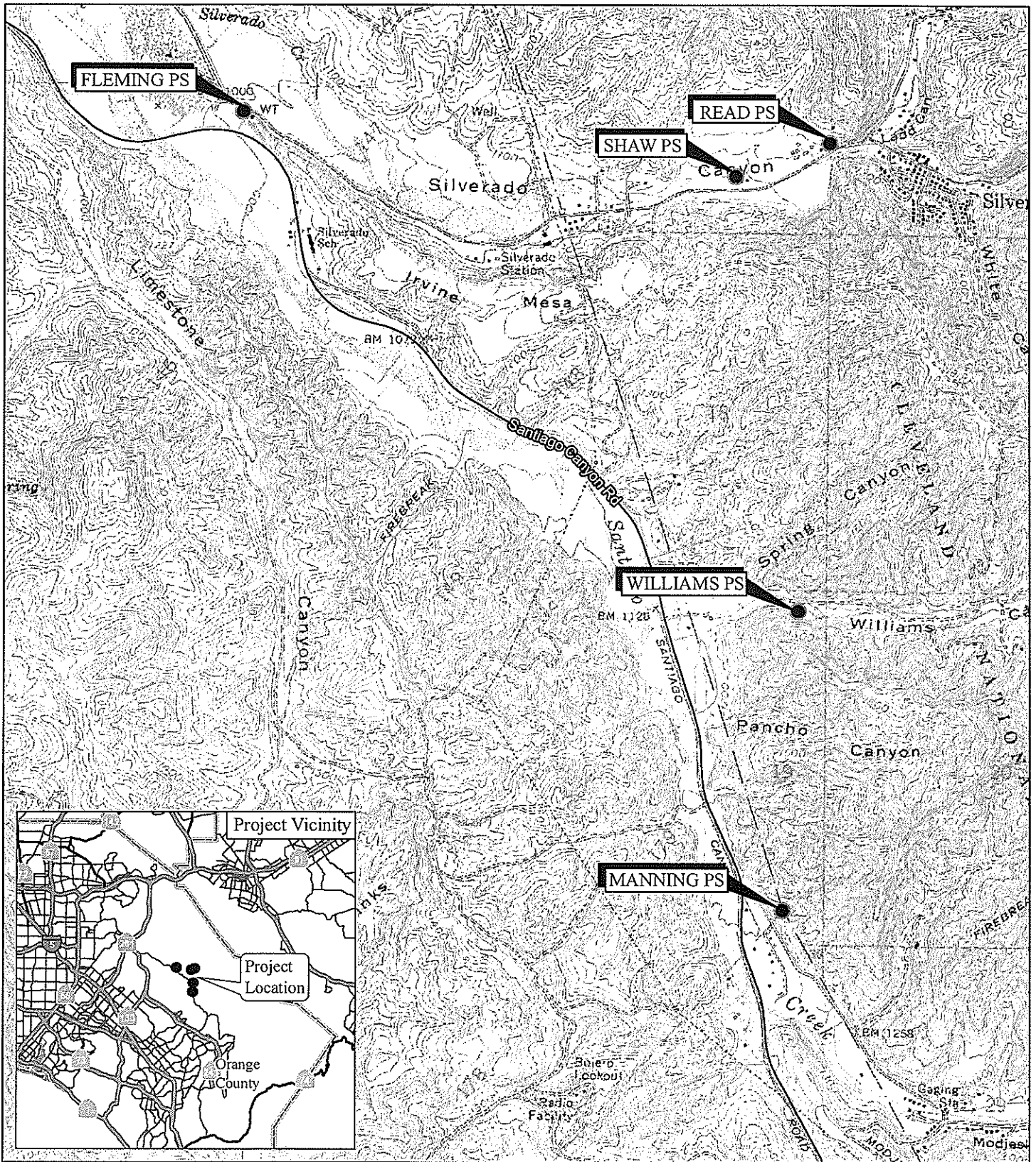
Best Regards,

LSA ASSOCIATES, INC.



Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation/Coordination

Attachments: USGS map

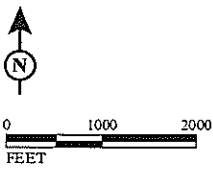


LSA

LEGEND

● Project Locations

FIGURE 1



SOURCE: USGS 7.5' QUAD - EL TORO ('82)
 F:\IRW0901P6\GIS\Fig1_ProjLoc.mxd (4/21/2011)

TRANSMISSION VERIFICATION REPORT

TIME : 05/04/2011 13:05
NAME :
FAX :
TEL :
SER.# : 000C5J225683

DATE, TIME 05/04 13:04
FAX NO./NAME NAHC
DURATION 00:00:59
PAGE(S) 02
RESULT OK
MODE STANDARD
ECM

LSA

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614

949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
POINT RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
S. SAN FRANCISCO

May 4, 2011

Dave Singleton
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Subject: Sacred Lands File Search for the Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Singleton:

Attached please find a portion of one United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. Plotted on the map are five locations that encompass the Santiago Area BPS Generator Project, in Orange County, California. Specifically, the project is depicted on the United States Geological Survey (USGS) *El Toro, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 7 and 19; and Township 5 South, Range 8 West, Irvine Ranch Section 147. A map showing the project locations is attached.

There will be ground disturbance for this project. Per Section 106 of the National Historic Preservation Act, I would like to request a Sacred Lands File search for the project area. Please notify LSA of any Traditional Cultural Properties (TCPs) and/or sacred sites that may be impacted.

I will anticipate a response within 10 working days from your receipt of this request. If you have any questions or comments, please contact me at (949) 553-0666 or you may e-mail me at teri.fulton@lsa-assoc.com. As always, thank you very much for your assistance with this project.

Best Regards,

May 18, 2011

Dave Singleton
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Subject: Sacred Lands File Search for the Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Singleton:

Attached please find a portion of one United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. Plotted on the map are two locations that are part of the Santiago Area BPS Generator Project, in Orange County, California. Specifically, the project is depicted on the United States Geological Survey (USGS) *Santiago Peak, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 9 and 10 (San Bernardino Baseline and Meridian). A map showing the project locations is attached.

There will be ground disturbance for this project. Per Section 106 of the National Historic Preservation Act, I would like to request a Sacred Lands File search for the project area. Please notify LSA of any Traditional Cultural Properties (TCPs) and/or sacred sites that may be impacted.

I will anticipate a response within 10 working days from your receipt of this request. If you have any questions or comments, please contact me at (949) 553-0666 or you may e-mail me at terri.fulton@lsa-assoc.com. As always, thank you very much for your assistance with this project.

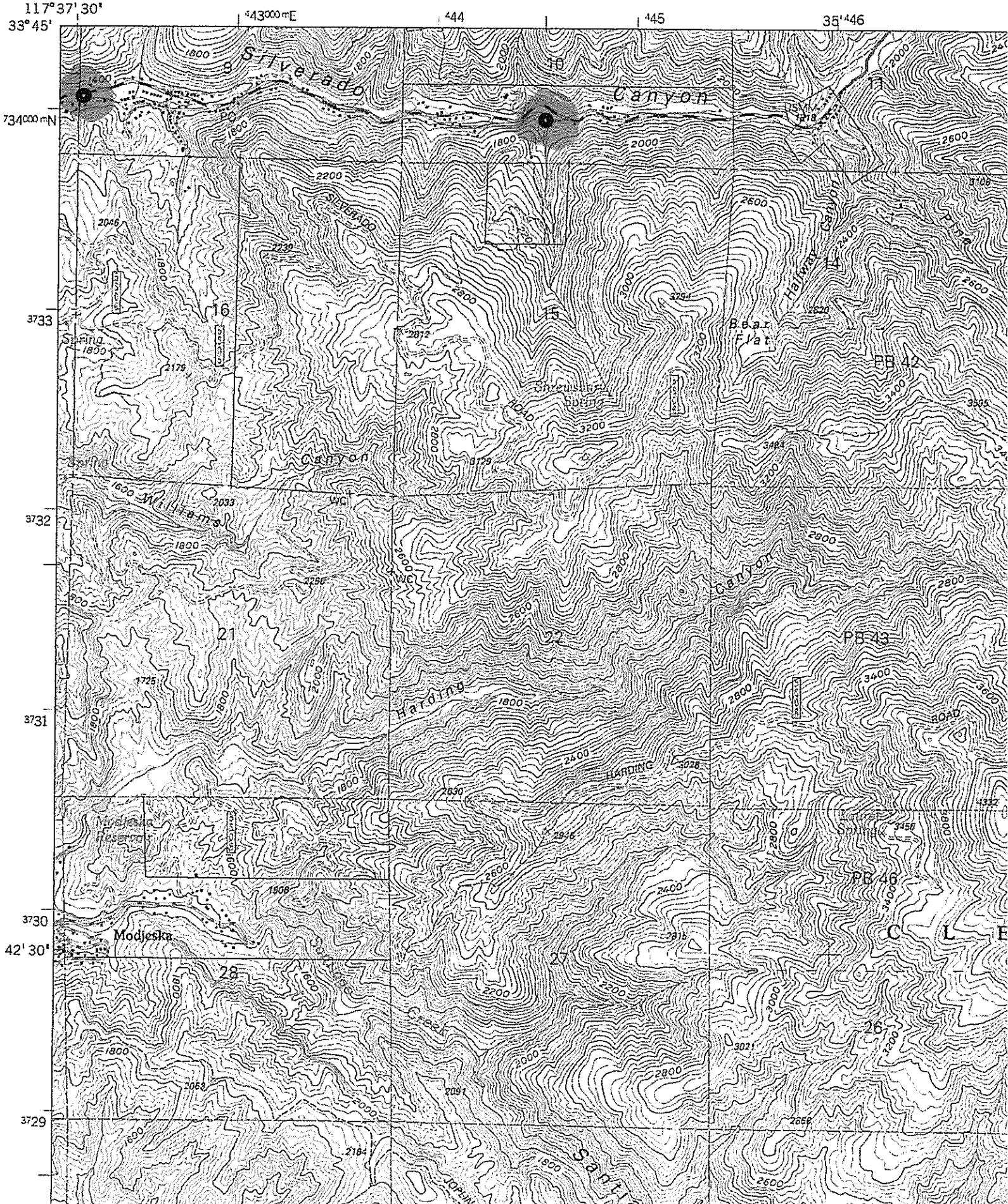
Best Regards,

LSA ASSOCIATES, INC.



Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation/Coordination

Attachments: USGS map



TRANSMISSION VERIFICATION REPORT

TIME : 05/18/2011 10:44
NAME :
FAX :
TEL :
SER. # : 000C5J225683

DATE, TIME 05/18 10:43
FAX NO. /NAME NAHC
DURATION 00:01:02
PAGE(S) 02
RESULT OK
MODE STANDARD
ECM

LSA

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614

949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
POINT RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
S. SAN FRANCISCO

May 18, 2011

Dave Singleton
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Subject: Sacred Lands File Search for the Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Singleton:

Attached please find a portion of one United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. Plotted on the map are two locations that are part of the Santiago Area BPS Generator Project, in Orange County, California. Specifically, the project is depicted on the United States Geological Survey (USGS) *Santiago Peak, California* 7.5-minute topographic quadrangle map in Township 5 South, Range 7 West, Sections 9 and 10 (San Bernardino Baseline and Meridian). A map showing the project locations is attached.

There will be ground disturbance for this project. Per Section 106 of the National Historic Preservation Act, I would like to request a Sacred Lands File search for the project area. Please notify LSA of any Traditional Cultural Properties (TCPs) and/or sacred sites that may be impacted.

I will anticipate a response within 10 working days from your receipt of this request. If you have any questions or comments, please contact me at (949) 553-0666 or you may e-mail me at terri.fulton@lsa-assoc.com. As always, thank you very much for your assistance with this project.

Best Regards,

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-6390
 Web Site www.nahc.ca.gov
 ds_nahc@pacbell.net



May 6, 2011

Ms. Terri Fulton, RPA

LSA ASSOCIATES, INC.

20 Executive Park, Suite 200
 Irvine, CA 92614

Sent by FAX to: 949-553-8076

No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the "Santiago Area BPS Generator Project;" located in disparate locations near the Irvine Mesa in Orange County, California

Dear Ms. Fulton:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search of the 'areas of potential effect,' (APEs) based on the USGS coordinates provided and found **Native American cultural resources were not identified** in the locations you specified. However, the absence of evidence of archaeological or Native American cultural resources does not indicate that such does not exist; items of significance may be unearthed during project construction activity.

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes.

Early consultation, even during Initial Study or First Phase surveys with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list of Native American Contacts we attach to this letter in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider avoidance as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a

significant impact on the environment as "substantial," and Section 2183.2 which requires documentation, data recovery of cultural resources.

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contact List
Orange County
May 6, 2011

Ti'At Society/Inter-Tribal Council of Pimu
 Cindi M. Alvitre, Chairwoman-Manisar
 6515 E. Seaside Walk, #C Gabrielino
 Long Beach , CA 90803
 calvitre@yahoo.com
 (714) 504-2468 Cell

Gabrielino Tongva Nation
 Sam Dunlap, Chairperson
 P.O. Box 86908
 Los Angeles , CA 90086
 samdunlap@earthlink.net
 (909) 262-9351 - cell

Juaneno Band of Mission Indians Acjachemen Nation
 David Belardes, Chairperson
 32161 Avenida Los Amigos Juaneno
 San Juan Capistrano CA 92675
 (949) 493-4933 - home
 chiefdavidbelardes@yahoo.
 com
 (949) 293-8522

Juaneno Band of Mission Indians Acjachemen Nation
 Anthony Rivera, Chairman
 31411-A La Matanza Street Juaneno
 San Juan Capistrano CA 92675-2674
 arivera@juaneno.com
 (949) 488-3484
 (949) 488-3294 - FAX
 (530) 354-5876 - cell

Tongva Ancestral Territorial Tribal Nation
 John Tommy Rosas, Tribal Admin.
 Private Address Gabrielino Tongva
 tattnlaw@gmail.com
 310-570-6567

Gabrielino Tongva Indians of California Tribal Council
 Robert F. Dormae, Tribal Chair/Cultural Resources
 P.O. Box 490
 Bellflower , CA 90707
 gtongva@verizon.net
 562-761-6417 - voice
 562-761-6417- fax

Gabrielino/Tongva San Gabriel Band of Mission
 Anthony Morales, Chairperson
 PO Box 693 Gabrielino Tongva
 San Gabriel , CA 91778
 GTTribalcouncil@aol.com
 (626) 286-1632
 (626) 286-1758 - Home
 (626) 286-1262 -FAX

Juaneno Band of Mission Indians
 Alfred Cruz, Cultural Resources Coordinator
 P.O. Box 25628 Juaneno
 Santa Ana , CA 92799
 alfredgcruz@sbcglobal.net
 714-998-0721
 714-998-0721 - FAX
 714-321-1944 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Santiago Area BPS Generator Project; located in Orange County, California for which a Sacred Lands file search and Native American Contacts list were requested.

Native American Contact List
Orange County
May 6, 2011

Juanefio Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
sonia.johnston@sbcglobal.
net
(714) 323-8312

Gabrielino-Tongva Tribe
Bernie Acuna
1875 Century Pk East #1500 Gabrielino
Los Angeles , CA 90067
(760) 721-0371-work
(310) 428-7720 - cell
(310) 587-0170 - FAX
bacuna1@gabrieinotribe.org

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry; Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
Irvine , CA 92612
949-293-8522

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles , CA 90067 Gabrielino
lcandelaria1@gabrielinoTribe.org
626-676-1184- cell
(310) 587-0170 - FAX
760-904-6533-home

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Santiago Area BPS Generator Project, located in Orange County, California for which a Sacred Lands file search and Native American Contacts list were requested.

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-5390
 Web Site www.nahc.ca.gov
de_nahc@pacbell.net



May 19, 2011

Ms. Terri Fulton, Archaeologist/Senior Cultural Resources Manager

LSA ASSOCIATES, INC.

20 Executive Place, Suite 200
 Irvine, CA 92614

Sent by FAX to: 949-553-8076

No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the "Santiago Area BPS Generator Project" located in the foothill area of eastern Orange County, California,

Dear Ms. Fulton:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search of the 'areas of potential effect,' (APEs) based on the USGS coordinates provided and found **Native American cultural resources were not identified** in the locations you specified. However, Native American cultural resources may be inadvertently discovered during ground-breaking activity.

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes.

Early consultation, even during Initial Study or First Phase surveys with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list of Native American Contacts we attach to this letter in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider avoidance as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "substantial," and Section 2183.2 which requires documentation, data recovery of cultural resources.

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,



Dave Singleton
Program Analyst

Attachment: Native American Contact List

**Native American Contact List
Orange County
May 19, 2011**

Juaneno Band of Mission Indians
Adolph 'Bud' Sepulveda, Vice Chairperson
P.O. Box 25828 Juaneno
Santa Ana , CA 92799
bssepul@yahoo.net
714-838-3270
714-914-1812 - CELL
bsepul@yahoo.net

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
sonia.johnston@sbcglobal.
net
(714) 323-8312

Juaneno Band of Mission Indians
Anita Espinoza
1740 Concerto Drive Juaneno
Anaheim , CA 92807
(714) 779-8832

United Coalition to Protect Panhe (UCPP)
Rebecca Robles
119 Avenida San Fernando Juaneno
San Clemente CA 92672
rebrobles1@gmail.com
(949) 573-3138

Gabrielino-Tongva Tribe
Bernie Acuna
1875 Century Pk East #1500 Gabrielino
Los Angeles , CA 90067
(760) 721-0371-work
(310) 428-7720 - cell
(310) 587-0170 - FAX
bacuna1@gabrieinotribe.org

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry; Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
Irvine , CA 92612
949-293-8522

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles , CA 90067 Gabrielino
lcandelaria1@gabrielinoTribe.org
626-676-1184- cell
(310) 587-0170 - FAX
760-904-6533-home

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Santiago Area BPS Generator Project; located in east central Orange County, California for which a Sacred Lands File search and Native American Contacts list were requested.



LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200 IRVINE, CALIFORNIA 92614
949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
POINT RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
SOUTH SAN FRANCISCO

May 17, 2011

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Administrator
Via E-mail to: tattnlaw@gmail.com

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project,
Orange County, California

Dear Mr. Rosas:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "T. Fulton", with a long horizontal flourish extending to the right.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

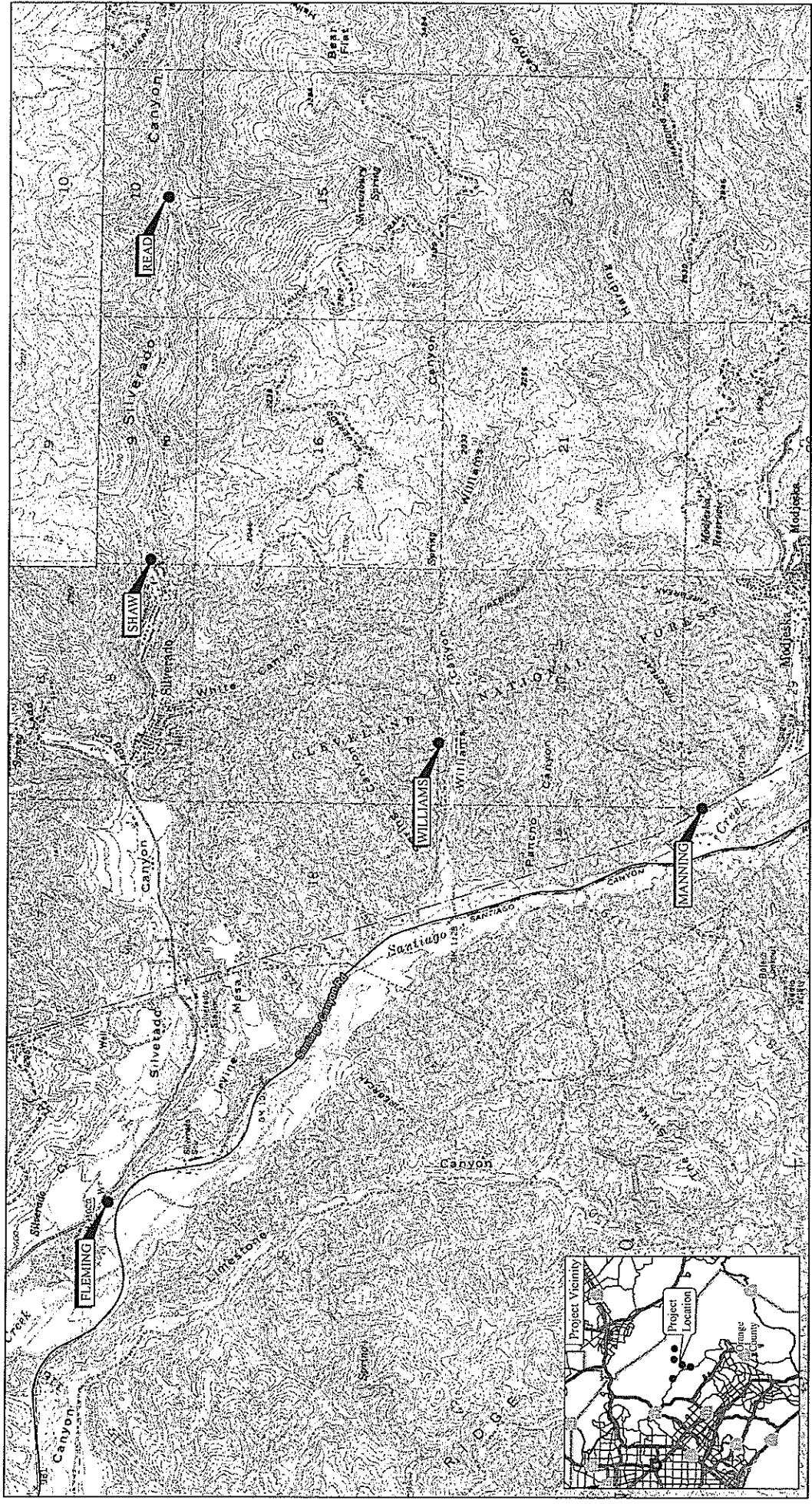


FIGURE 1

Santiago Area BPS Generator Project
Project Location Map

LSA

LEGEND

● Booster Pump Stations

0 1000 2000
FEET

SOURCE USGS 7.5' QUAD - EL TORO (82)

F:\BWP001\FWCIS\Fig_1 ProjLoc.mxd (5/16/2011)

Terri Fulton

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:18 PM
To: 'Cindi Alvitre'
Subject: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Hi Cindi,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Ti' At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
6515 E. Seaside Walk, Suite C
Long Beach, CA 90803

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project,
Orange County, California

Dear Ms. Alvitre:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and

integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: sam dunlap [samdunlap@earthlink.net]
Sent: Tuesday, June 07, 2011 12:17 PM
To: Terri Fulton
Subject: Re: FW: Santiago Area BPS Generator Project

Terri,

I have no specific comments or concerns.

Sam Dunlap

-----Original Message-----

From: Terri Fulton
Sent: May 31, 2011 3:21 PM
To: sam dunlap
Subject: FW: Santiago Area BPS Generator Project

Hi Sam,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908
Los Angeles, CA 90086

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Dunlap:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth

6/7/2011

BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: Terri Fulton
Sent: Thursday, June 02, 2011 11:35 AM
To: 'Chairman Rivera'
Cc: 'Jim Rivera'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Hello,

I would just like to follow up one more time on this. Please let me know at your earliest convenience if you would like to comment on this project. Thanks.

Best,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:23 PM
To: 'Chairman Rivera'
Cc: 'Jim Rivera'
Subject: FW: Santiago Area BPS Generator Project

Chairman Rivera,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Juaneño Band of Mission Indians Acjachemen Nation
Anthony Rivera, Chairman

31411-A La Matanza Street
San Juan Capistrano, CA 92675

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project, Orange County, California

Dear Mr. Rivera:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: Terri Fulton
Sent: Thursday, June 02, 2011 10:37 AM
To: 'Johntommy Rosas'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Rosas letter.pdf

Hi John Tommy,

I'm just checking one more time on this. Let me know at your earliest convenience if you would like to comment. Thanks!

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:02 PM
To: 'Johntommy Rosas'
Subject: FW: Santiago Area BPS Generator Project

Hi John Tommy,

I'm following up on this project as well. Please let me know at your earliest convenience if you have comments, questions, or concerns.

Thank you!

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

From: Terri Fulton
Sent: Tuesday, May 17, 2011 2:29 PM
To: Johntommy Rosas
Cc: Terri Fulton
Subject: Santiago Area BPS Generator Project

Hi John Tommy,

Here is another project for your review and comment. Thanks!

Best,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

Terri Fulton

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:25 PM
To: 'Robert F. Dormae'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Hi Robert,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dormae, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower, CA 90707

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project,
Orange County, California

Dear Mr. Dormae:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and

integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: Terri Fulton
Sent: Thursday, June 02, 2011 2:44 PM
To: GTTribalcouncil@ao.com
Cc: Terri Fulton
Subject: FW: Santiago BPS Generator Project, Orange County

Hi Anthony,

I think you received a letter that I sent on May 17, 2011 regarding the Santiago BPS Generator Project in Orange County. I'm just following up to see if you have any comments. I also left a voicemail about this yesterday. Please let me know at your earliest convenience if you have concerns about this project and its potential to impact cultural resources. Thank you, and hope all is well!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

Terri Fulton

From: Terri Fulton
Sent: Thursday, June 02, 2011 1:42 PM
To: alfredgcruz@sbcglobal.net
Cc: Terri Fulton
Subject: FW: Santiago BPS Generator Project, Orange County

Hi Alfred,

I think you received a letter that I sent on May 17, 2011 regarding the Santiago BPS Generator Project in Orange County. I'm just following up to see if you have any comments. I also left a voicemail about this yesterday. Please let me know at your earliest convenience if you have concerns about this project and its potential to impact cultural resources. Thank you, and hope all is well!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

Terri Fulton

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:28 PM
To: 'sonia.johnston@sbcglobal.net'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Hi Sonia,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628
Santa Ana, CA 92799

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project,
Orange County, California

Dear Ms. Johnston:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

While the majority of the project area is generally undeveloped and interspersed with scattered residential homes and small ranches, the BPS project locations are within the developed portions of the project area. The District is proposing replacement of the portable generators at these five domestic water BPSs to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. This project would replace the portable generators with permanent electrical emergency generators set with diesel engines and

integral 24-hour fuel storage on a concrete pad. Four of the five of the permanent generators would be contained within a concrete masonry unit block wall for protection against fires.

This project requires compliance with Section 106 of the National Historic Preservation Act. Section 106 dictates that federal undertakings such as this consider the effect they may have on historic properties. These include properties of traditional religious and cultural significance to Native American tribes. LSA has been asked to assist with the Section 106 consultation process.

To determine whether any historic properties may be affected by the project, a records search is being conducted at the South Central Coastal Information Center, located at California State University, Fullerton. The Native American Heritage Commission (NAHC) has also been asked to perform a Sacred Lands File (SLF) search. The results of the SLF **did not** identify Native American cultural resources at any of the five project Areas of Potential Effects. However, your name has been provided by the NAHC as someone who may have information or concerns regarding this project and its potential to impact cultural resources.

If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:33 PM
To: 'lcelandaria1@gabrielinoTribe.org'; 'bacuna1@gabrielinoTribe.org'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Ms. Candelaria and Mr. Acuna,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles, CA 90067

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project,
Orange County, California

Dear Ms. Candelaria:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

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Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

Terri Fulton

From: Terri Fulton
Sent: Thursday, June 02, 2011 12:17 PM
To: 'rebrobles1@gmail.com'
Subject: FW: Santiago Area BPS Generator Project
Attachments: Fig1_ProjLoc.pdf

Hi Rebecca,

I just wanted to follow up one more time on this. Please let me know at your earliest convenience if you have any concerns about this project impacting cultural resources. Thanks!

Best,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

From: Terri Fulton
Sent: Tuesday, May 31, 2011 3:36 PM
To: 'rebrobles1@gmail.com'
Subject: FW: Santiago Area BPS Generator Project

Hi Rebecca,

I'm following up on a letter that I sent regarding the Santiago Area BPS Generator Project. The text of the letter is below, and a map of the project area is attached. Please let me know if you would like to comment, or need more information. Thank you!

Best Regards,

Terri Fulton
Archaeologist/Senior Cultural Resources Manager
Native American Consultation

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614-4731
Phone (949) 553-0666
Fax (949) 553-8076
Wireless (949) 337-5454

May 17, 2011

United Coalition to Protect Panhe (UCPP)
Rebecca Robles
119 Avenida San Fernando
San Clemente, CA 92672

Subject: Native American Consultation for the Proposed Santiago Area BPS Generator Project, Orange County, California

Dear Ms. Robles:

LSA Associates, Inc. (LSA) is performing a cultural resources assessment for the Santiago Area Backup Power Source (BPS) Generator Project in an unincorporated portion of Orange County. The project site consists of five separate Irvine Ranch Water District (IRWD) Booster Pump Stations (BPS) located within Santiago Canyon. Three of the BPS sites are along Silverado Canyon Road, which runs east from Santiago Road. The fourth site is located along Williams Canyon Road, which also runs east from Santiago Road and is approximately 1 mile south of Silverado Canyon Road. The fifth BPS is located along Modjeska Canyon Road, which runs southeast off of Santiago Canyon Road and is approximately 1 mile south of Williams Canyon Road. A location map showing each of these five areas is attached.

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If you know of any cultural resources that may be of religious and/or cultural significance to your community that could be affected by this project, or if you would like more information, please do not hesitate to contact me at the above telephone number or address, or by e-mail at terri.fulton@lsa-assoc.com. If I do not receive a response from you in the near future, I will contact you again to discuss any comments or concerns that you may have. Your time and involvement in this process is important and very much appreciated.

Respectfully,

LSA ASSOCIATES, INC.

Terri Fulton
Native American Consultation Coordinator

Attachment: United States Geological Survey (USGS) Map

APPENDIX D

ENVIRONMENTAL FIRSTSEARCH REPORT

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

SHAW PS

SILVERADO CA 92676

Job Number: SantiagoArea

PREPARED FOR:

LSA Associates, Inc.

20 Executive Park, Suite 200

Irvine, CA 92614

949-553-0666

05-02-11



Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch Search Summary Report

Target Site: SHAW PS
SILVERADO CA 92676

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	0	0
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	03-14-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	03-30-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	03-07-11	0.50	0	0	0	0	-	1	1
State/Tribal LUST	Y	03-30-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	10-27-10	0.25	0	0	0	-	-	0	0
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	03-09-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-14-11	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	NA	0.50	0	0	0	0	-	0	0
State Permits	Y	10-13-10	0.12	0	0	-	-	-	0	0
State Other	Y	03-14-11	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
HW Manifest	Y	08-02-10	0.12	0	0	-	-	-	0	0
-TOTALS-				0	0	0	0	0	2	2

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch
Site Information Report***

Request Date: 05-02-11
Requestor Name: LSA_CARMEN LO
Standard: ASTM-05

Search Type: COORD
Job Number: SantiagoArea
Filtered Report

Target Site: SHAW PS
 SILVERADO CA 92676

Demographics

Sites: 2	Non-Geocoded: 2	Population: NA
Radon: NA		

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	-117.647006	-117:38:49	Easting: 440071.545
Latitude:	33.746456	33:44:47	Northing: 3734038.446
Elevation:	1135		Zone: 11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:					Services:	
<u>ZIP Code</u>	<u>City Name</u>	<u>ST</u>	<u>Dist/Dir</u>	<u>Sel</u>	<u>Requested?</u>	<u>Date</u>
					Fire Insurance Maps	No
					Aerial Photographs	No
					Historical Topos	No
					City Directories	No
					Title Search	No
					Municipal Reports	No
					Liens	No
					Historic Map Works	No
					Online Topos	No



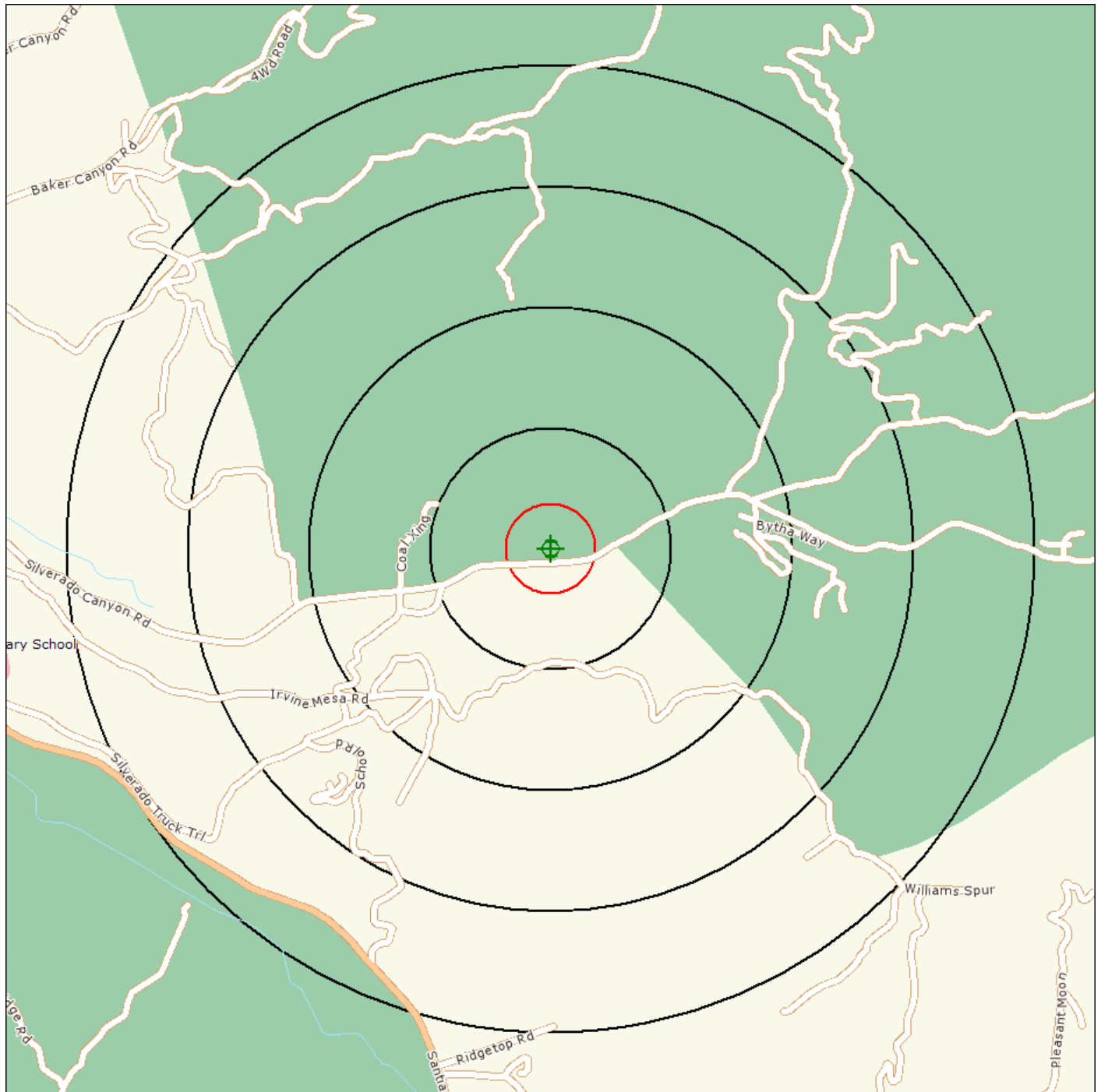
Environmental FirstSearch

1 Mile Radius

Single Map:



SHAW PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.746456 Longitude: -117.647006)
 - Identified Site, Multiple Sites, Receptor
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
 - Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





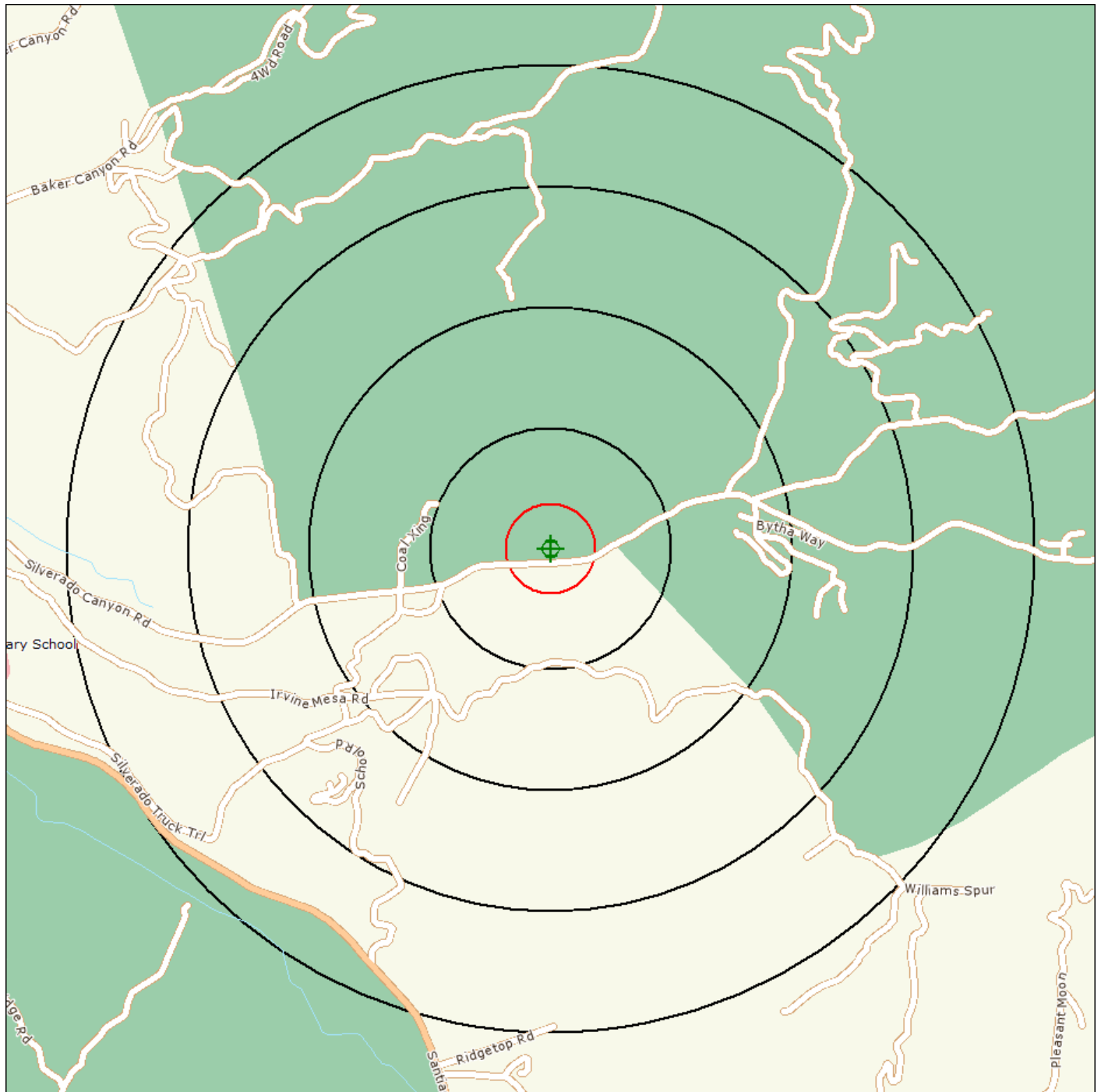
Environmental FirstSearch

1 Mile Radius

ASTM-05: NPL, RCRA COR, STATE



SHAW PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.746456 Longitude: -117.647006)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





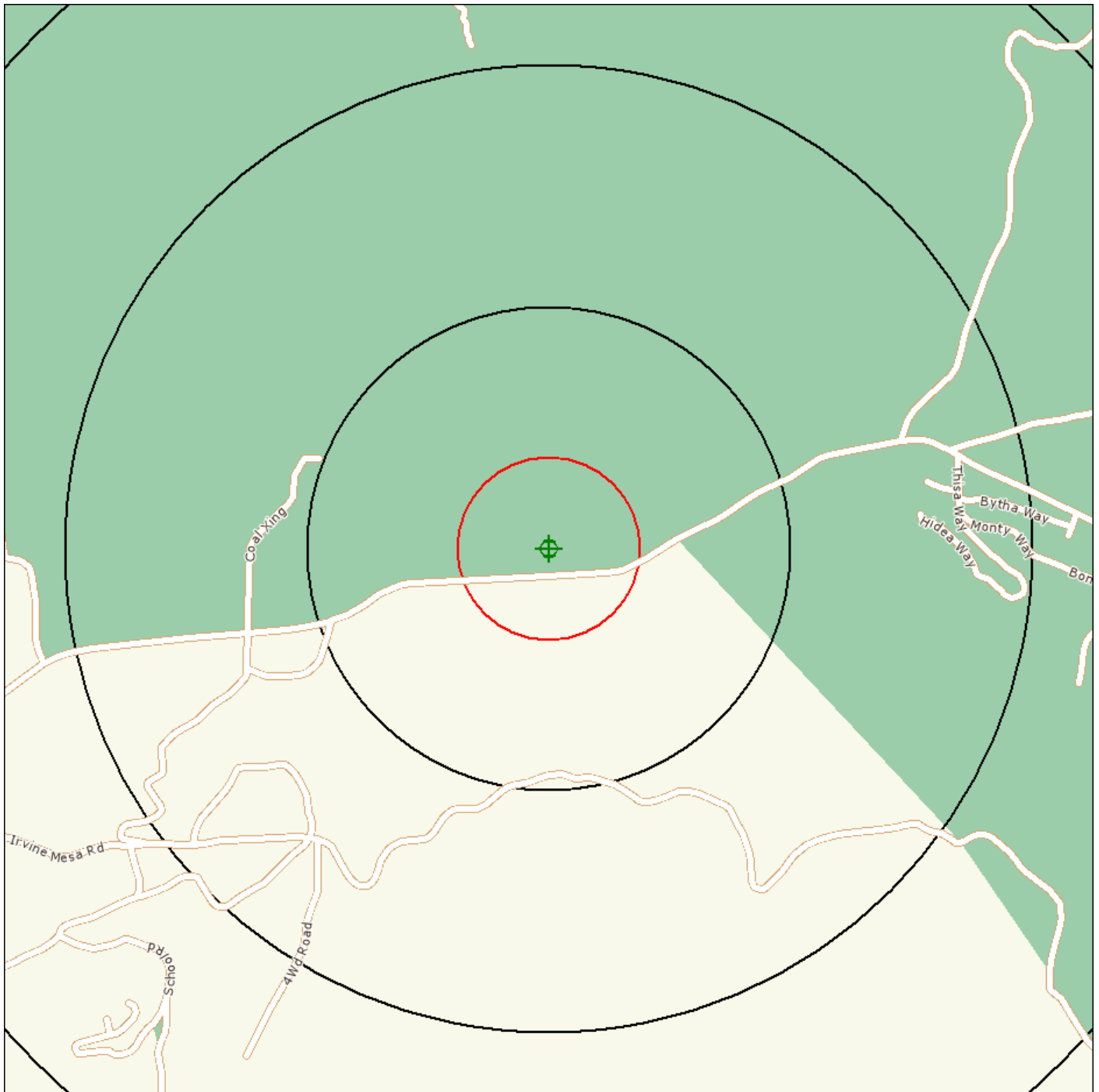
Environmental FirstSearch

.5 Mile Radius

ASTM-05: Multiple Databases



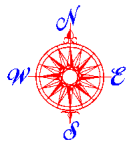
SHAW PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.746456 Longitude: -117.647006)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





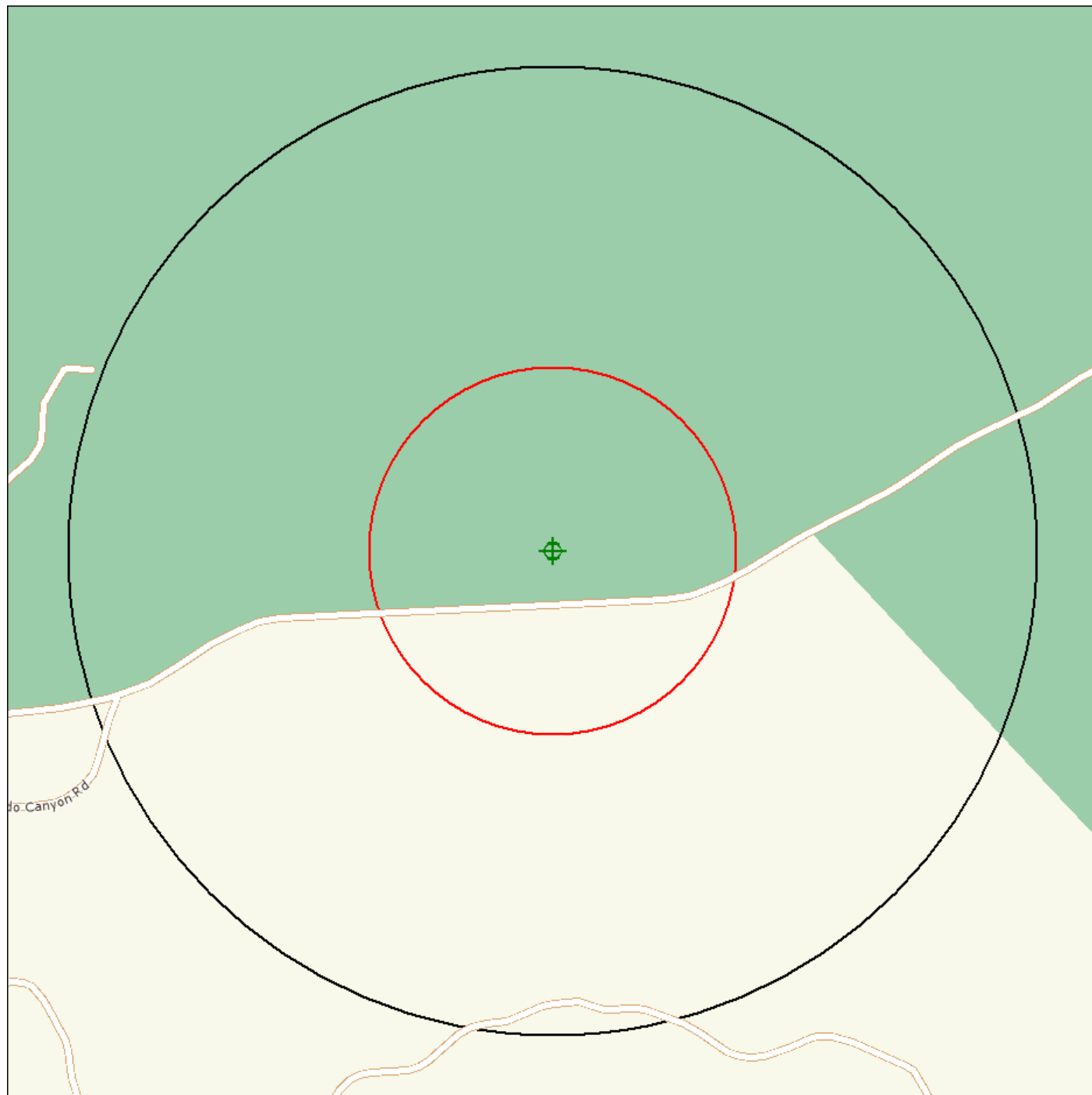
Environmental FirstSearch

.25 Mile Radius

ASTM-05: RCRA GEN, UST, OTHER



SHAW PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.746456 Longitude: -117.647006)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





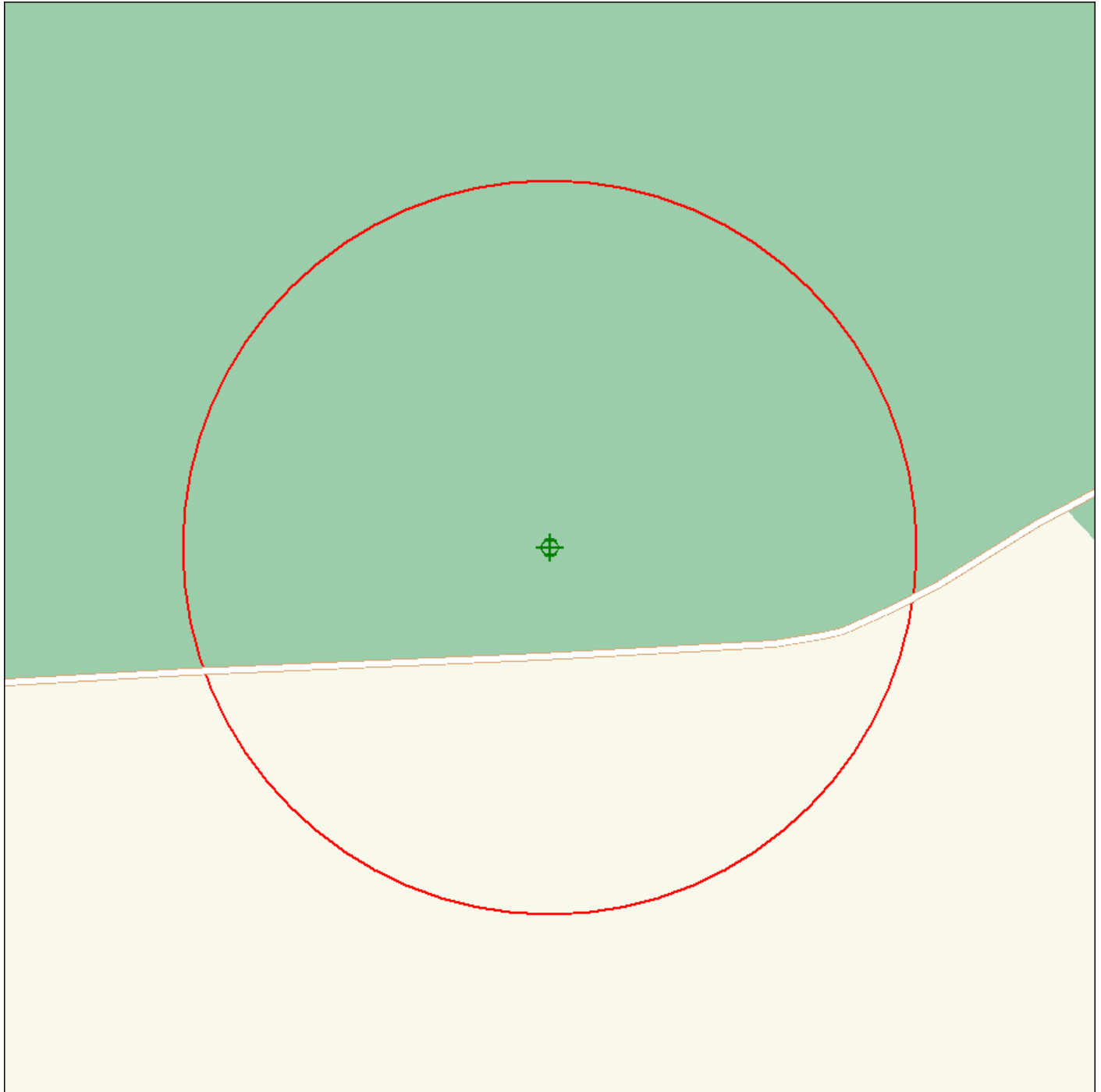
Environmental FirstSearch

.12 Mile Radius

ASTM-05: Multiple Databases



SHAW PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.746456 Longitude: -117.647006)
 - Identified Site, Multiple Sites, Receptor
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
 - Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



***Environmental FirstSearch
Sites Summary Report***

Target Property: SHAW PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 2 **GEOCODED:** 0 **NON GEOCODED:** 2 **SELECTED:** 2

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
SWL		SILVERADO CANYON DIPOSAL STATION # SWIS30-CR-0062/CLOSED	NEAR SANTIAGO AND SILVERAD SILVERADO CA	NON GC	N/A	2
TRIBALLAND		BUREAU OF INDIAN AFFAIRS CONTACT I BIA-92676/	UNKNOWN CA 92676	NON GC	N/A	3

Environmental FirstSearch
Site Detail Report

Target Property: SHAW PS
SILVERADO CA 92676

JOB: SantiagoArea

SWL

SEARCH ID:	DIST/DIR:	ELEVATION:	MAP ID:
1	NON GC		
NAME:	SILVERADO CANYON DIPOSAL STATION #9	REV:	03/07/11
ADDRESS:	NEAR SANTIAGO AND SILVERADO CYN SILVERADO CA ORANGE	ID1:	SWIS30-CR-0062
CONTACT:		ID2:	
SOURCE:	CA IWMB	STATUS:	CLOSED
		PHONE:	

SITE OPERATOR INFORMATION:

Operator:
Operator Address:
Permit Date:
Permit Status:
Land Use Name: Open Space - Nonirrigated
GIS Source for LAT and LONG: Map

SITE ACTIVITY INFORMATION:

Activity: Solid Waste Disposal Site
Accepted Waste:
Operational Status: Closed
Regulatory Status Pre-regulations
Program Type
Closure Date: 12/31/1967
Closure Type: Estimated
Permitted Throughput with Units: 0
Permitted Capacity with Units: 0
Remaining Capacity with Units (landfills only): 0
Permitted Total Acreage: 0
Permitted Disposal Acreage: 0
Last Tire Inspection Count:
Last Tire Inspection Count Date:
Inspection Frequency: Annual

SITE OWNER INFORMATION:

Owner: Irvine Company, The
Owner Phone: 9497202129
Owner Address: 550 Newport Center Drive

***Environmental FirstSearch
Site Detail Report***

Target Property: SHAW PS
SILVERADO CA 92676

JOB: SantiagoArea

TRIBALLAND

SEARCH ID:	DIST/DIR:	ELEVATION:	MAP ID:
2	NON GC		
NAME:	BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION	REV:	01/15/08
ADDRESS:	UNKNOWN	ID1:	BIA-92676
	CA 92676	ID2:	
	ORANGE	STATUS:	
CONTACT:		PHONE:	
SOURCE:	BIA		

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE: Pacific Regional Office
CONTACT: CLAY GREGORY,REGIONAL DIRECTOR

OFFICE ADDRESS: 2800 Cottage Way
Sacramento CA 95825
OFFICE PHONE: Phone: 916-978-6000
OFFICE FAX: Fax: 916-978-6099

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.**FINAL** - Currently on the Final NPL**PROPOSED** - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.**DELISTED** - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.**PART OF NPL**- Site is part of NPL site**DELETED** - Deleted from the Final NPL**FINAL** - Currently on the Final NPL**NOT PROPOSED** - Not on the NPL**NOT VALID** - Not Valid Site or Incident**PROPOSED** - Proposed for NPL**REMOVED** - Removed from Proposed NPL**SCAN PLAN** - Pre-proposal Site**WITHDRAWN** - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.**NFRAP** – No Further Remedial Action Plan**P** - Site is part of NPL site**D** - Deleted from the Final NPL**F** - Currently on the Final NPL**N** - Not on the NPL**O** - Not Valid Site or Incident**P** - Proposed for NPL**R** - Removed from Proposed NPL**S** - Pre-proposal Site**W** – Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.**RCRAInfo** facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are

required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. **LGN** - Large Quantity Generators **SGN** - Small Quantity Generators **VGN** – Conditionally Exempt Generator. Included are **RAATS** (RCRA Administrative Action Tracking System) and **CMEL** (Compliance Monitoring & Enforcement List) facilities. **CONNECTICUT HAZARDOUS WASTE MANIFEST** – Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. **MASSACHUSETTES HAZARDOUS WASTE GENERATOR** – database of generators that are regulated under the MA DEP. **VQN-MA** = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. **SQN-MA** = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. **LQG-MA** = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. **CLEANUPS IN MY COMMUNITY** (subset) - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under ST are: 1. State Response Sites. 2. School Property Evaluation Program Properties (SCH) Please Note: Our reports list the above sites as DB Type (STATE). Other categories found in the SMBRPD are listed in our reports in the DB Types OT and VC. Each Category contains information on properties based upon the type of work taking place at the site. State Response Sites contains only known and potential hazardous substance release sites considered as posing the greatest threat to the public. School sites included in ST will be found within the SMBRPD's School Property Evaluation Program. CORTESE LIST-Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program to provide information about the location of hazardous materials release sites. Cortese List sites that fall under DTSC's guidelines for State Response sites are included in our reports in the ST category as are qualifying sites from the Annual Work Plan (formerly Bond Expenditure Plan) and the historic ASPIS databases.

State Spills 90: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

State/Tribal SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM-The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field.. Please Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in our reports. WMUDS-The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

State/Tribal LUST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

State/Tribal UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING-The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. We have included the UST information from the FIDS database in our reports for historical purposes to help our clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9.CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: We collect and maintains information regarding Underground Storage Tanks from the majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

State/Tribal IC: CA EPA DEED-RESTRICTED SITES LISTING- The California EPA's Department of Toxic Substances Control Board maintains a list of deed-restricted sites, properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical or necessary at the site.

State/Tribal VCP: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The Voluntary Cleanup Program (VCP) category contains only those

properties undergoing voluntary investigation and/or cleanup and which are listed in the Voluntary Cleanup Program. Please Note: Our reports list the above sites as DB Type VC.

State Permits: CA EPA/COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS- Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

State Other: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under OT are: 1. Unconfirmed Properties Referred to Another Local or State Agency (REF) 2. Properties where a No Further Action Determination has been made (NFA) Please Note: Our reports list the above sites as DB Type (OTHER). Other categories found in the SMBRPD are listed in our reports in the DB Types ST and VC. LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG- The County of Los Angeles Public Health Investigation Compliant Control Log. ORANGE COUNTY INDUSTRIAL SITE CLEANUPS- List maintained by the Orange County Environmental Health Agency. RIVERSIDE COUNTY WASTE GENERATORS- A list of facilities in Riverside County which generate hazardous waste. SACRAMENTO COUNTY MASTER HAZMAT LIST- Master list of facilities within Sacramento County with potentially hazardous materials. SACRAMENTO COUNTY TOXIC SITE CLEANUPS- A list of sites where unauthorized releases of potentially hazardous materials have occurred.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either engineering or an institutional control. The data includes the control and the media contaminated. RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) – RCRA site that have institutional controls.

State/Tribal HW: CA EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL HAZARDOUS WASTE MANIFEST INVENTORY- Records maintained by the CA DTSC of Hazardous Waste Manifests used to track and document the transport of hazardous waste from a generator's site to the site of its final disposition.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: CA EPA The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 For Cortese List information contact The CAL EPA, Department of Toxic Substances Control at (916) 445-6532

Updated quarterly/when available

State Spills 90: CA EPA The California State Water Resources Control Board For phone number listings of departments within each region visit their web sites at: <http://www.swrcb.ca.gov/regions.html>

Updated when available

State/Tribal SWL: CA IWMB/SWRCB/COUNTY The California Integrated Waste Management Board

Phone:(916) 255-2331

The State Water Resources Control Board

Phone:(916) 227-4365

Orange County Health Department

Phone:(714) 834-3536

Updated quarterly/when available

State/Tribal LUST: CA SWRCB/COUNTY The California State Water Resources Control Board Phone:(916) 227-4416

San Diego County Department of Environmental Health Phone:(619) 338-2242

Updated quarterly/when available

State/Tribal UST/AST: CA EPA/COUNTY/CITY The State Water Resources Control Board

Phone:(916) 227-4364

CAL EPA Department of Toxic Substances Control

Phone:(916)227-4404

US EPA Region 9 Underground Storage Tank Program

Phone: (415) 972-3372

ALAMEDA COUNTY CUPAS:

* County of Alameda Department of Environmental Health

* Cities of Berkeley, Fremont, Hayward, Livermore / Pleasanton, Newark, Oakland, San Leandro, Union

ALPINE COUNTY CUPA:

* Health Department (Only updated by agency sporadically)

AMADOR COUNTY CUPA:

* County of Amador Environmental Health Department

BUTTE COUNTY CUPA

* County of Butte Environmental Health Division (Only updated by agency biannually)

CALAVERAS COUNTY CUPA:

* County of Calaveras Environmental Health Department

COLUSA COUNTY CUPA:

* Environmental Health Dept.

CONTRA COSTA COUNTY CUPA:

* Hazardous Materials Program

DEL NORTE COUNTY CUPA:

* Department of Health and Social Services

EL DORADO COUNTY CUPAS:

* County of El Dorado Environmental Health - Solid Waste Div (Only updated by agency annually)

* County of El Dorado EMD Tahoe Division (Only updated by agency annually)

FRESNO COUNTY CUPA:

* Haz. Mat and Solid Waste Programs

GLENN COUNTY CUPA:

* Air Pollution Control District

HUMBOLDT COUNTY CUPA:

* Environmental Health Division

IMPERIAL COUNTY CUPA:

* Department of Planning and Building

INYO COUNTY CUPA:

* Environmental Health Department

KERN COUNTY CUPA:

* County of Kern Environmental Health Department

* City of Bakersfield Fire Department

KINGS COUNTY CUPA:

* Environmental Health Services

LAKE COUNTY CUPA:

* Division of Environmental Health

LASSEN COUNTY CUPA:

* Department of Agriculture

LOS ANGELES COUNTY CUPAS:

* County of Los Angeles Fire Department CUPA Data as maintained by the Los Angeles County Department of Public Works

* County of Los Angeles Environmental Programs Division

* Cities of Burbank, El Segundo, Glendale, Long Beach/Signal Hill, Los Angeles, Pasadena, Santa Fe Springs, Santa Monica, Torrance, Vernon

MADERA COUNTY CUPA:

* Environmental Health Department

MARIN COUNTY CUPA:

* County of Marin Office of Waste Management

* City of San Rafael Fire Department

MARIPOSA COUNTY CUPA:

* Health Department

MENDOCINO COUNTY CUPA:

* Environmental Health Department

MERCED COUNTY CUPA:

- * Division of Environmental Health

MODOC COUNTY CUPA:

- * Department of Agriculture

MONO COUNTY CUPA:

- * Health Department

MONTEREY COUNTY CUPA:

- * Environmental Health Division

NAPA COUNTY CUPA:

- * Hazardous Materials Section

NEVADA COUNTY CUPA:

- * Environmental Health Department

ORANGE COUNTY CUPAS:

- * County of Orange Environmental Health Department
- * Cities of Anaheim, Fullerton, Orange, Santa Ana
- * County of Orange Environmental Health Department

PLACER COUNTY CUPAS:

- * County of Placer Division of Environmental Health Field Office
- * Tahoe City
- * City of Roseville Roseville Fire Department

PLUMAS COUNTY CUPA:

- * Environmental Health Department

RIVERSIDE COUNTY CUPA:

- * Environmental Health Department

SACRAMENTO COUNTY CUPA:

- * County Environmental Mgmt Dept, Haz. Mat. Div.

SAN BENITO COUNTY CUPA:

- * City of Hollister Environmental Service Department

SAN BERNARDINO COUNTY CUPAS:

- * County of San Bernardino Fire Department, Haz. Mat. Div.
- * City of Hesperia Hesperia Fire Prevention Department
- * City of Victorville Victorville Fire Department

SAN DIEGO COUNTY CUPA:

- * The San Diego County Dept. of Environmental Health HE 17/58

SAN FRANCISCO COUNTY CUPA:

- * Department of Public Health

SAN JOAQUIN COUNTY CUPA:

- * Environmental Health Division

SAN LUIS OBISPO COUNTY CUPAS:

- * County of San Luis Obispo Environmental Health Division
- * City of San Luis Obispo City Fire Department

SAN MATEO COUNTY CUPA:

- * Environmental Health Department

SANTA BARBARA COUNTY CUPA:

- * County Fire Dept Protective Services Division
- SANTA CLARA COUNTY CUPAS:
- * County of Santa Clara Hazardous Materials Compliance Division
- * Santa Clara County Central Fire Protection District (Covers Campbell, Cupertino, Los Gatos, & Morgan Hill)
- * Cities of Gilroy, Milpitas, Mountain View, Palo Alto, San Jose Fire, Santa Clara, Sunnyvale
- SANTA CRUZ COUNTY CUPA:
- * Environmental Health Department
- SHASTA COUNTY CUPA:
- * Environmental Health Department
- SIERRA COUNTY CUPA:
- * Health Department
- SISKIYOU COUNTY CUPA:
- * Environmental Health Department
- SONOMA COUNTY CUPAS:
- * County of Sonoma Department Of Environmental Health
- * Cities of Healdsburg / Sebastopol, Petaluma, Santa Rosa
- STANISLAUS COUNTY CUPA:
- * Department of Environmental Resources Haz. Mat. Division
- SUTTER COUNTY CUPA:
- * Department of Agriculture
- TEHAMA COUNTY CUPA:
- * Department of Environmental Health
- TRINITY COUNTY CUPA:
- * Department of Health
- TULARE COUNTY CUPA:
- * Environmental Health Department
- TUOLUMNE COUNTY CUPA:
- * Environmental Health
- VENTURA COUNTY CUPAS:
- * County of Ventura Environmental Health Division
- * Cities of Oxnard, Ventura
- YOLO COUNTY CUPA:
- * Environmental Health Department
- YUBA COUNTY CUPA:
- * Yuba County of Emergency Services

Updated quarterly/annually/when available

State/Tribal IC: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State/Tribal VCP: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State Permits: CA EPA/COUNTY The San Diego County Depart. Of Environmental Health Phone:(619) 338-2211 San Bernardino County Fire Department Phone:(909) 387-3080

Updated quarterly/when available

State Other: CA EPA/COUNTY The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 The Los Angeles County Hazardous Materials Division Phone: (323) 890-7806 Orange County Environmental Health Agency Phone: (714) 834-3536 Riverside County Department of Environmental Health, Hazardous Materials Management Division Phone:(951) 358-5055 Sacramento County Environmental Management Department Phone: (916) 875-8550

Updated quarterly/when available

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

State/Tribal HW: CA EPA CAL EPA, Department of Toxic Substances Control Phone:(916) 255-087

Updated annually/when available

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

READ PS

SILVERADO CA 92676

Job Number: SantiagoArea

PREPARED FOR:

LSA Associates, Inc.

20 Executive Park, Suite 200

Irvine, CA 92614

949-553-0666

05-02-11



Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch Search Summary Report

Target Site: READ PS
SILVERADO CA 92676

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	0	0
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	03-14-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	03-30-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	03-07-11	0.50	0	0	0	0	-	1	1
State/Tribal LUST	Y	03-30-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	10-27-10	0.25	0	0	0	-	-	0	0
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	03-09-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-14-11	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	NA	0.50	0	0	0	0	-	0	0
State Permits	Y	10-13-10	0.12	0	0	-	-	-	0	0
State Other	Y	03-14-11	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
HW Manifest	Y	08-02-10	0.12	0	0	-	-	-	0	0
-TOTALS-				0	0	0	0	0	2	2

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch
Site Information Report***

Request Date: 05-02-11
Requestor Name: LSA_CARMEN LO
Standard: ASTM-05

Search Type: COORD
Job Number: SantiagoArea
Filtered Report

Target Site: READ PS
 SILVERADO CA 92676

Demographics

Sites: 2	Non-Geocoded: 2	Population: NA
Radon: NA		

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	-117.642363	-117:38:33	Easting: 440502.593
Latitude:	33.747883	33:44:52	Northing: 3734193.973
Elevation:	1172		Zone: 11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:					Services:	
<u>ZIP Code</u>	<u>City Name</u>	<u>ST</u>	<u>Dist/Dir</u>	<u>Sel</u>	<u>Requested?</u>	<u>Date</u>
					Fire Insurance Maps	No
					Aerial Photographs	No
					Historical Topos	No
					City Directories	No
					Title Search	No
					Municipal Reports	No
					Liens	No
					Historic Map Works	No
					Online Topos	No



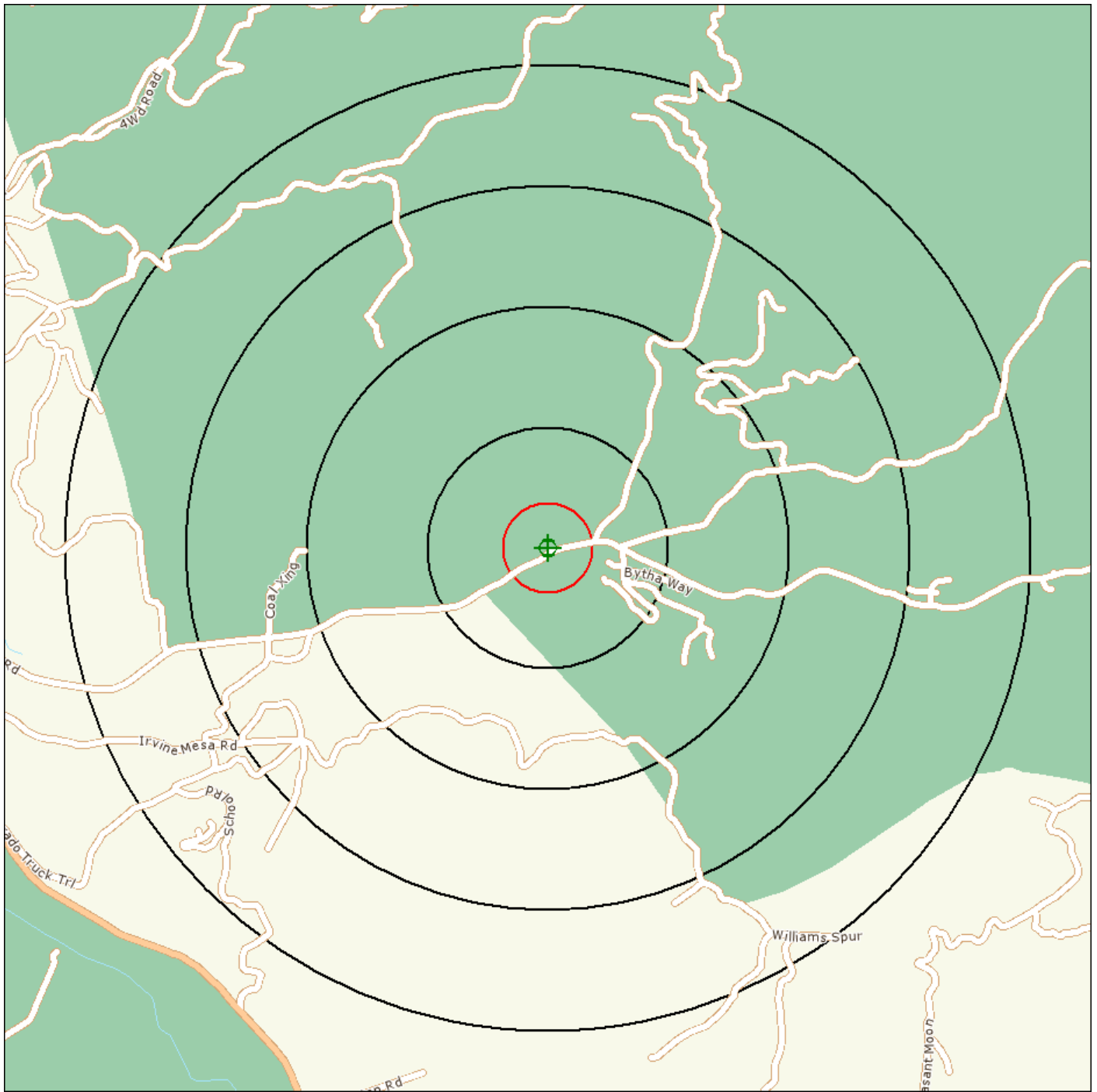
Environmental FirstSearch

1 Mile Radius

Single Map:



READ PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.747883 Longitude: -117.642363)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





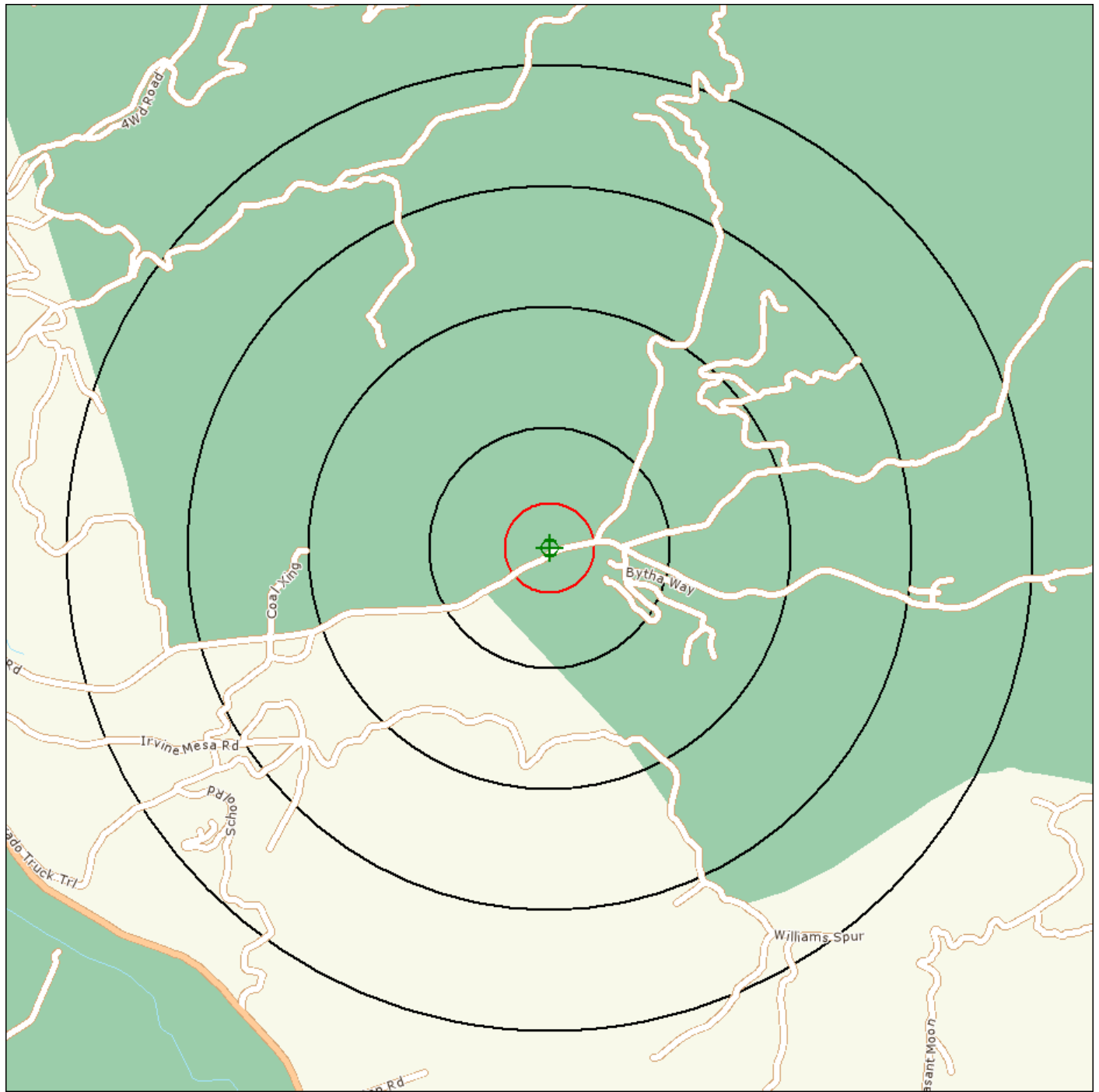
Environmental FirstSearch

1 Mile Radius

ASTM-05: NPL, RCRA COR, STATE



READ PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.747883 Longitude: -117.642363)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





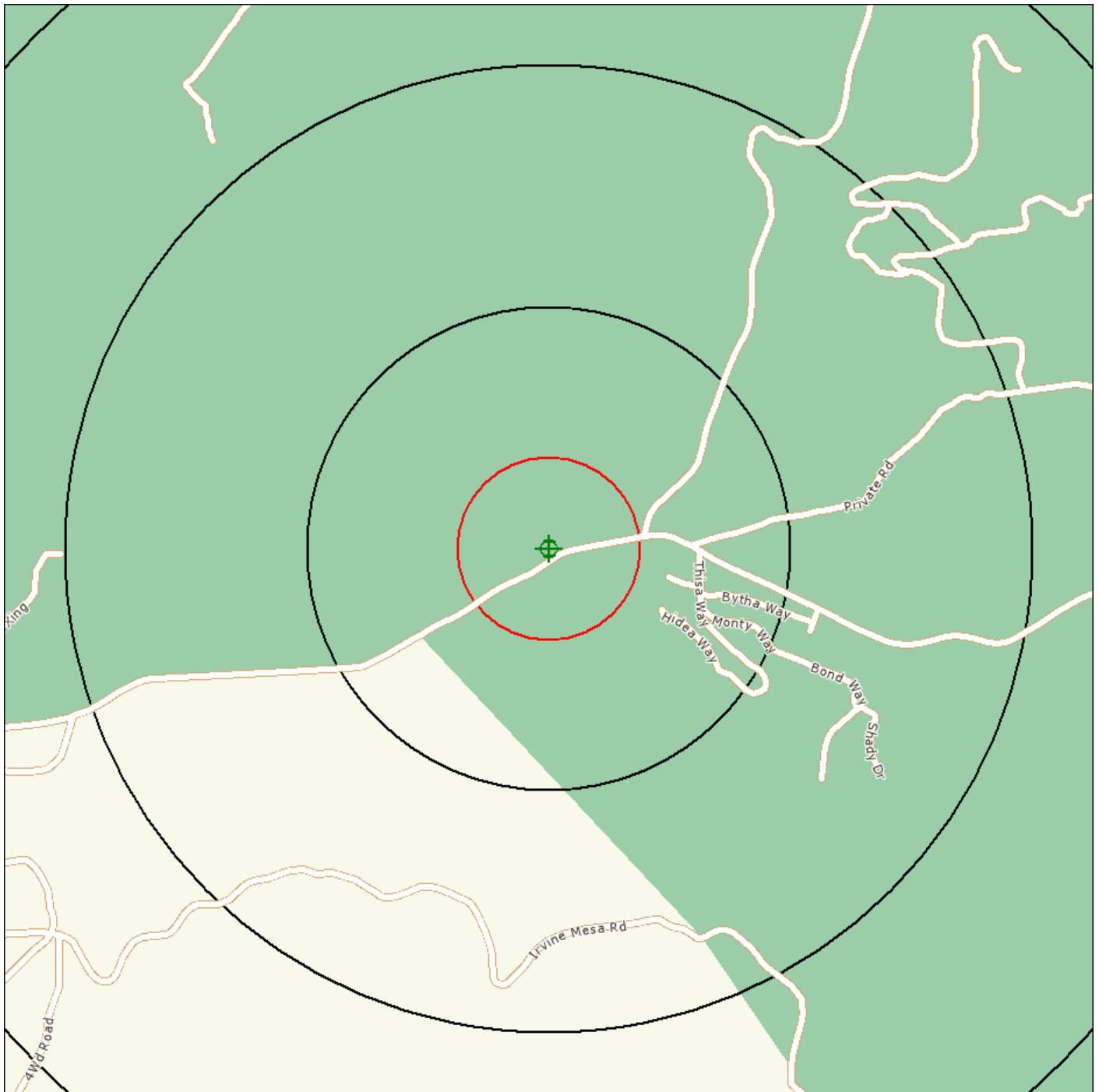
Environmental FirstSearch

.5 Mile Radius

ASTM-05: Multiple Databases



READ PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.747883 Longitude: -117.642363)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....



Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



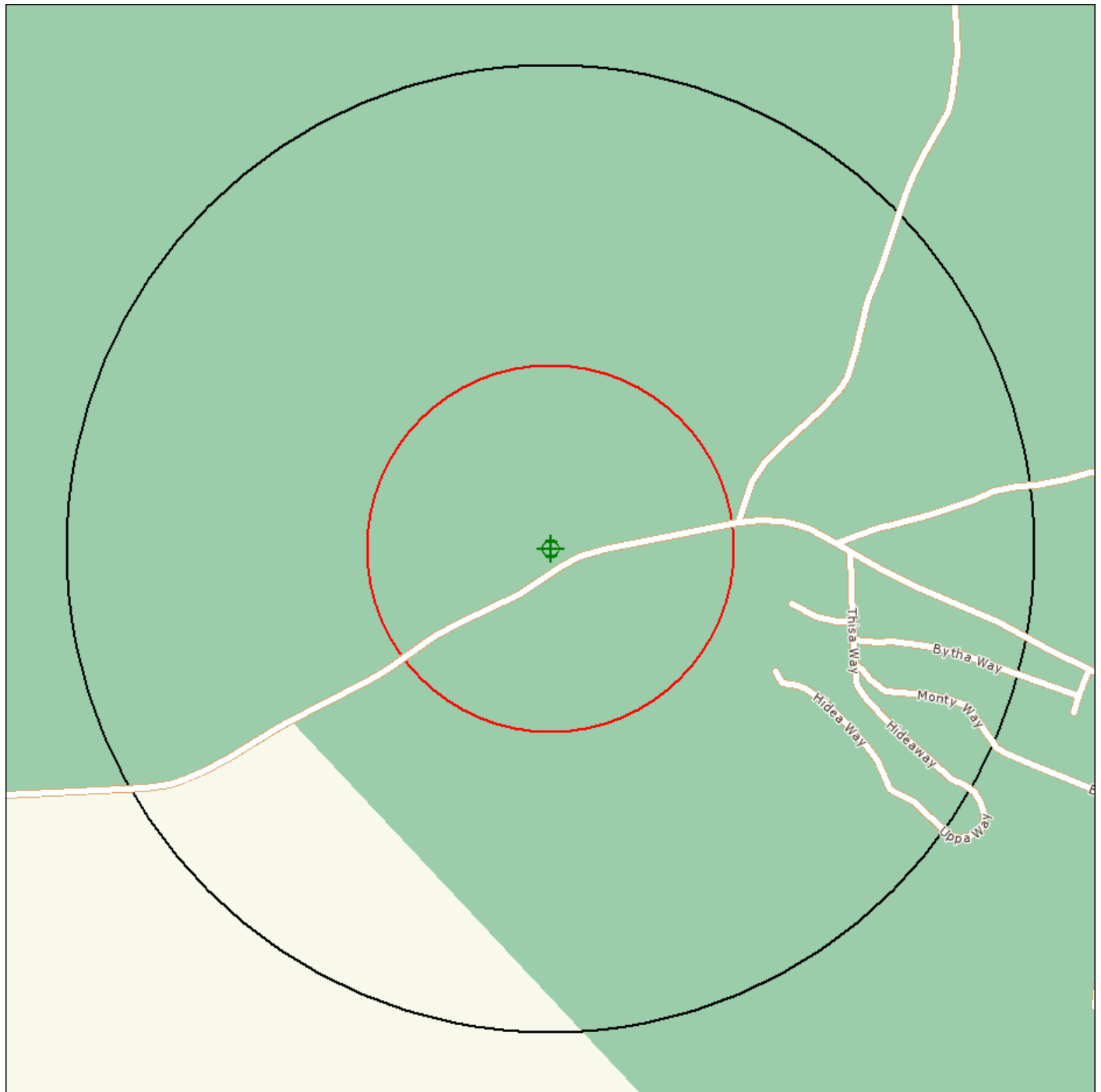
Environmental FirstSearch

.25 Mile Radius

ASTM-05: RCRA GEN, UST, OTHER



READ PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.747883 Longitude: -117.642363)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....



Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



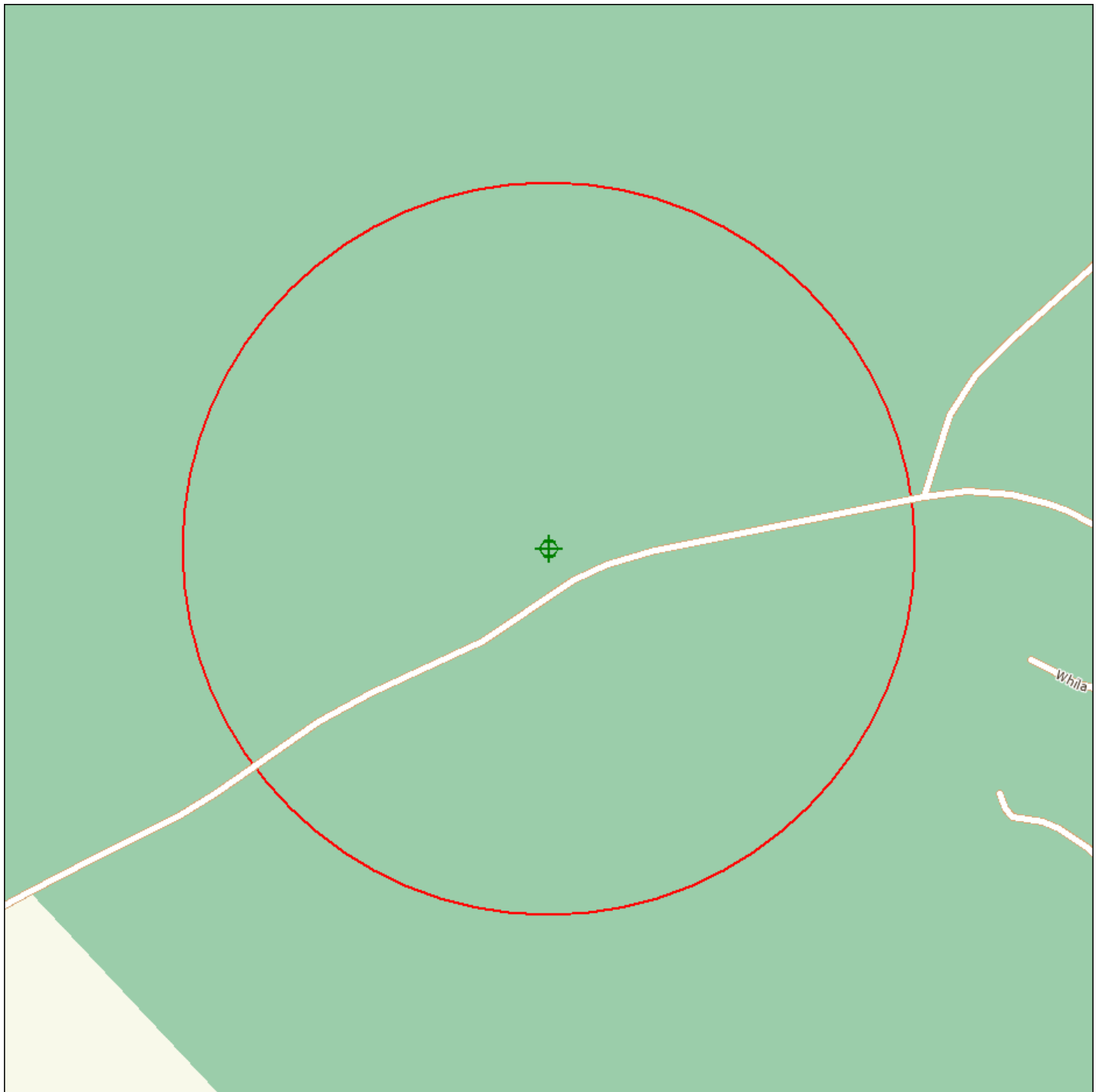
Environmental FirstSearch

.12 Mile Radius

ASTM-05: Multiple Databases



READ PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.747883 Longitude: -117.642363)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



***Environmental FirstSearch
Sites Summary Report***

Target Property: READ PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 2 **GEOCODED:** 0 **NON GEOCODED:** 2 **SELECTED:** 2

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
SWL		SILVERADO CANYON DIPOSAL STATION # SWIS30-CR-0062/CLOSED	NEAR SANTIAGO AND SILVERAD SILVERADO CA	NON GC	N/A	2
TRIBALLAND		BUREAU OF INDIAN AFFAIRS CONTACT I BIA-92676/	UNKNOWN CA 92676	NON GC	N/A	3

Environmental FirstSearch
Site Detail Report

Target Property: READ PS
SILVERADO CA 92676

JOB: SantiagoArea

SWL

SEARCH ID:	DIST/DIR:	ELEVATION:	MAP ID:
1	NON GC		
NAME:	SILVERADO CANYON DIPOSAL STATION #9	REV:	03/07/11
ADDRESS:	NEAR SANTIAGO AND SILVERADO CYN SILVERADO CA ORANGE	ID1:	SWIS30-CR-0062
CONTACT:		ID2:	
SOURCE:	CA IWMB	STATUS:	CLOSED
		PHONE:	

SITE OPERATOR INFORMATION:

Operator:
Operator Address:
Permit Date:
Permit Status:
Land Use Name: Open Space - Nonirrigated
GIS Source for LAT and LONG: Map

SITE ACTIVITY INFORMATION:

Activity: Solid Waste Disposal Site
Accepted Waste:
Operational Status: Closed
Regulatory Status Pre-regulations
Program Type
Closure Date: 12/31/1967
Closure Type: Estimated
Permitted Throughput with Units: 0
Permitted Capacity with Units: 0
Remaining Capacity with Units (landfills only): 0
Permitted Total Acreage: 0
Permitted Disposal Acreage: 0
Last Tire Inspection Count:
Last Tire Inspection Count Date:
Inspection Frequency: Annual

SITE OWNER INFORMATION:

Owner: Irvine Company, The
Owner Phone: 9497202129
Owner Address: 550 Newport Center Drive

Environmental FirstSearch
Site Detail Report

Target Property: READ PS
SILVERADO CA 92676

JOB: SantiagoArea

TRIBALLAND

SEARCH ID: 2	DIST/DIR: NON GC	ELEVATION:	MAP ID:
NAME: BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION		REV: 01/15/08	
ADDRESS: UNKNOWN		ID1: BIA-92676	
CA 92676		ID2:	
ORANGE		STATUS:	
CONTACT:		PHONE:	
SOURCE: BIA			

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE: Pacific Regional Office
CONTACT: CLAY GREGORY,REGIONAL DIRECTOR

OFFICE ADDRESS: 2800 Cottage Way
Sacramento CA 95825
OFFICE PHONE: Phone: 916-978-6000
OFFICE FAX: Fax: 916-978-6099

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.**FINAL** - Currently on the Final NPL**PROPOSED** - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.**DELISTED** - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.**PART OF NPL**- Site is part of NPL site**DELETED** - Deleted from the Final NPL**FINAL** - Currently on the Final NPL**NOT PROPOSED** - Not on the NPL**NOT VALID** - Not Valid Site or Incident**PROPOSED** - Proposed for NPL**REMOVED** - Removed from Proposed NPL**SCAN PLAN** - Pre-proposal Site**WITHDRAWN** - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.**NFRAP** – No Further Remedial Action Plan**P** - Site is part of NPL site**D** - Deleted from the Final NPL**F** - Currently on the Final NPL**N** - Not on the NPL**O** - Not Valid Site or Incident**P** - Proposed for NPL**R** - Removed from Proposed NPL**S** - Pre-proposal Site**W** – Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.**RCRAInfo** facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are

required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. **LGN** - Large Quantity Generators **SGN** - Small Quantity Generators **VGN** - Conditionally Exempt Generator. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities. **CONNECTICUT HAZARDOUS WASTE MANIFEST** - Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. **MASSACHUSETTES HAZARDOUS WASTE GENERATOR** - database of generators that are regulated under the MA DEP. **VQN-MA** = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. **SQN-MA** = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. **LQG-MA** = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. **CLEANUPS IN MY COMMUNITY (subset)** - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under ST are: 1. State Response Sites. 2. School Property Evaluation Program Properties (SCH) Please Note: Our reports list the above sites as DB Type (STATE). Other categories found in the SMBRPD are listed in our reports in the DB Types OT and VC. Each Category contains information on properties based upon the type of work taking place at the site. State Response Sites contains only known and potential hazardous substance release sites considered as posing the greatest threat to the public. School sites included in ST will be found within the SMBRPD's School Property Evaluation Program. CORTESE LIST-Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program to provide information about the location of hazardous materials release sites. Cortese List sites that fall under DTSC's guidelines for State Response sites are included in our reports in the ST category as are qualifying sites from the Annual Work Plan (formerly Bond Expenditure Plan) and the historic ASPIS databases.

State Spills 90: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

State/Tribal SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM-The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field.. Please Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in our reports. WMUDS-The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

State/Tribal LUST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

State/Tribal UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING-The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. We have included the UST information from the FIDS database in our reports for historical purposes to help our clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9.CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: We collect and maintains information regarding Underground Storage Tanks from the majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

State/Tribal IC: CA EPA DEED-RESTRICTED SITES LISTING- The California EPA's Department of Toxic Substances Control Board maintains a list of deed-restricted sites, properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical or necessary at the site.

State/Tribal VCP: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The Voluntary Cleanup Program (VCP) category contains only those

properties undergoing voluntary investigation and/or cleanup and which are listed in the Voluntary Cleanup Program. Please Note: Our reports list the above sites as DB Type VC.

State Permits: CA EPA/COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS- Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

State Other: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under OT are: 1. Unconfirmed Properties Referred to Another Local or State Agency (REF) 2. Properties where a No Further Action Determination has been made (NFA) Please Note: Our reports list the above sites as DB Type (OTHER). Other categories found in the SMBRPD are listed in our reports in the DB Types ST and VC. LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG- The County of Los Angeles Public Health Investigation Compliant Control Log. ORANGE COUNTY INDUSTRIAL SITE CLEANUPS- List maintained by the Orange County Environmental Health Agency. RIVERSIDE COUNTY WASTE GENERATORS- A list of facilities in Riverside County which generate hazardous waste. SACRAMENTO COUNTY MASTER HAZMAT LIST- Master list of facilities within Sacramento County with potentially hazardous materials. SACRAMENTO COUNTY TOXIC SITE CLEANUPS- A list of sites where unauthorized releases of potentially hazardous materials have occurred.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either engineering or an institutional control. The data includes the control and the media contaminated. RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) – RCRA site that have institutional controls.

State/Tribal HW: CA EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL HAZARDOUS WASTE MANIFEST INVENTORY- Records maintained by the CA DTSC of Hazardous Waste Manifests used to track and document the transport of hazardous waste from a generator's site to the site of its final disposition.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: CA EPA The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 For Cortese List information contact The CAL EPA, Department of Toxic Substances Control at (916) 445-6532

Updated quarterly/when available

State Spills 90: CA EPA The California State Water Resources Control Board For phone number listings of departments within each region visit their web sites at: <http://www.swrcb.ca.gov/regions.html>

Updated when available

State/Tribal SWL: CA IWMB/SWRCB/COUNTY The California Integrated Waste Management Board

Phone:(916) 255-2331

The State Water Resources Control Board

Phone:(916) 227-4365

Orange County Health Department

Phone:(714) 834-3536

Updated quarterly/when available

State/Tribal LUST: CA SWRCB/COUNTY The California State Water Resources Control Board Phone:(916) 227-4416

San Diego County Department of Environmental Health Phone:(619) 338-2242

Updated quarterly/when available

State/Tribal UST/AST: CA EPA/COUNTY/CITY The State Water Resources Control Board

Phone:(916) 227-4364

CAL EPA Department of Toxic Substances Control

Phone:(916)227-4404

US EPA Region 9 Underground Storage Tank Program

Phone: (415) 972-3372

ALAMEDA COUNTY CUPAS:

* County of Alameda Department of Environmental Health

* Cities of Berkeley, Fremont, Hayward, Livermore / Pleasanton, Newark, Oakland, San Leandro, Union

ALPINE COUNTY CUPA:

* Health Department (Only updated by agency sporadically)

AMADOR COUNTY CUPA:

* County of Amador Environmental Health Department

BUTTE COUNTY CUPA

* County of Butte Environmental Health Division (Only updated by agency biannually)

CALAVERAS COUNTY CUPA:

* County of Calaveras Environmental Health Department

COLUSA COUNTY CUPA:

* Environmental Health Dept.

CONTRA COSTA COUNTY CUPA:

* Hazardous Materials Program

DEL NORTE COUNTY CUPA:

* Department of Health and Social Services

EL DORADO COUNTY CUPAS:

* County of El Dorado Environmental Health - Solid Waste Div (Only updated by agency annually)

* County of El Dorado EMD Tahoe Division (Only updated by agency annually)

FRESNO COUNTY CUPA:

* Haz. Mat and Solid Waste Programs

GLENN COUNTY CUPA:

* Air Pollution Control District

HUMBOLDT COUNTY CUPA:

* Environmental Health Division

IMPERIAL COUNTY CUPA:

* Department of Planning and Building

INYO COUNTY CUPA:

* Environmental Health Department

KERN COUNTY CUPA:

* County of Kern Environmental Health Department

* City of Bakersfield Fire Department

KINGS COUNTY CUPA:

* Environmental Health Services

LAKE COUNTY CUPA:

* Division of Environmental Health

LASSEN COUNTY CUPA:

* Department of Agriculture

LOS ANGELES COUNTY CUPAS:

* County of Los Angeles Fire Department CUPA Data as maintained by the Los Angeles County Department of Public Works

* County of Los Angeles Environmental Programs Division

* Cities of Burbank, El Segundo, Glendale, Long Beach/Signal Hill, Los Angeles, Pasadena, Santa Fe Springs, Santa Monica, Torrance, Vernon

MADERA COUNTY CUPA:

* Environmental Health Department

MARIN COUNTY CUPA:

* County of Marin Office of Waste Management

* City of San Rafael Fire Department

MARIPOSA COUNTY CUPA:

* Health Department

MENDOCINO COUNTY CUPA:

* Environmental Health Department

MERCED COUNTY CUPA:

- * Division of Environmental Health

MODOC COUNTY CUPA:

- * Department of Agriculture

MONO COUNTY CUPA:

- * Health Department

MONTEREY COUNTY CUPA:

- * Environmental Health Division

NAPA COUNTY CUPA:

- * Hazardous Materials Section

NEVADA COUNTY CUPA:

- * Environmental Health Department

ORANGE COUNTY CUPAS:

- * County of Orange Environmental Health Department
- * Cities of Anaheim, Fullerton, Orange, Santa Ana
- * County of Orange Environmental Health Department

PLACER COUNTY CUPAS:

- * County of Placer Division of Environmental Health Field Office
- * Tahoe City
- * City of Roseville Roseville Fire Department

PLUMAS COUNTY CUPA:

- * Environmental Health Department

RIVERSIDE COUNTY CUPA:

- * Environmental Health Department

SACRAMENTO COUNTY CUPA:

- * County Environmental Mgmt Dept, Haz. Mat. Div.

SAN BENITO COUNTY CUPA:

- * City of Hollister Environmental Service Department

SAN BERNARDINO COUNTY CUPAS:

- * County of San Bernardino Fire Department, Haz. Mat. Div.
- * City of Hesperia Hesperia Fire Prevention Department
- * City of Victorville Victorville Fire Department

SAN DIEGO COUNTY CUPA:

- * The San Diego County Dept. of Environmental Health HE 17/58

SAN FRANCISCO COUNTY CUPA:

- * Department of Public Health

SAN JOAQUIN COUNTY CUPA:

- * Environmental Health Division

SAN LUIS OBISPO COUNTY CUPAS:

- * County of San Luis Obispo Environmental Health Division
- * City of San Luis Obispo City Fire Department

SAN MATEO COUNTY CUPA:

- * Environmental Health Department

SANTA BARBARA COUNTY CUPA:

- * County Fire Dept Protective Services Division
- SANTA CLARA COUNTY CUPAS:
 - * County of Santa Clara Hazardous Materials Compliance Division
 - * Santa Clara County Central Fire Protection District (Covers Campbell, Cupertino, Los Gatos, & Morgan Hill)
 - * Cities of Gilroy, Milpitas, Mountain View, Palo Alto, San Jose Fire, Santa Clara, Sunnyvale
- SANTA CRUZ COUNTY CUPA:
 - * Environmental Health Department
- SHASTA COUNTY CUPA:
 - * Environmental Health Department
- SIERRA COUNTY CUPA:
 - * Health Department
- SISKIYOU COUNTY CUPA:
 - * Environmental Health Department
- SONOMA COUNTY CUPAS:
 - * County of Sonoma Department Of Environmental Health
 - * Cities of Healdsburg / Sebastopol, Petaluma, Santa Rosa
- STANISLAUS COUNTY CUPA:
 - * Department of Environmental Resources Haz. Mat. Division
- SUTTER COUNTY CUPA:
 - * Department of Agriculture
- TEHAMA COUNTY CUPA:
 - * Department of Environmental Health
- TRINITY COUNTY CUPA:
 - * Department of Health
- TULARE COUNTY CUPA:
 - * Environmental Health Department
- TUOLUMNE COUNTY CUPA:
 - * Environmental Health
- VENTURA COUNTY CUPAS:
 - * County of Ventura Environmental Health Division
 - * Cities of Oxnard, Ventura
- YOLO COUNTY CUPA:
 - * Environmental Health Department
- YUBA COUNTY CUPA:
 - * Yuba County of Emergency Services

Updated quarterly/annually/when available

State/Tribal IC: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State/Tribal VCP: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State Permits: CA EPA/COUNTY The San Diego County Depart. Of Environmental Health Phone:(619) 338-2211 San Bernardino County Fire Department Phone:(909) 387-3080

Updated quarterly/when available

State Other: CA EPA/COUNTY The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 The Los Angeles County Hazardous Materials Division Phone: (323) 890-7806 Orange County Environmental Health Agency Phone: (714) 834-3536 Riverside County Department of Environmental Health, Hazardous Materials Management Division Phone:(951) 358-5055 Sacramento County Environmental Management Department Phone: (916) 875-8550

Updated quarterly/when available

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

State/Tribal HW: CA EPA CAL EPA, Department of Toxic Substances Control Phone:(916) 255-087

Updated annually/when available

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

MANNING PS

SILVERADO CA 92676

Job Number: SantiagoArea

PREPARED FOR:

LSA Associates, Inc.

20 Executive Park, Suite 200

Irvine, CA 92614

949-553-0666

05-02-11



Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch Search Summary Report

Target Site: MANNING PS
SILVERADO CA 92676

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	0	0
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	03-14-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	03-30-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	03-07-11	0.50	0	0	0	0	-	0	0
State/Tribal LUST	Y	03-30-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	10-27-10	0.25	0	0	0	-	-	0	0
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	03-09-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-14-11	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	NA	0.50	0	0	0	0	-	0	0
State Permits	Y	10-13-10	0.12	0	0	-	-	-	0	0
State Other	Y	03-14-11	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
HW Manifest	Y	08-02-10	0.12	0	0	-	-	-	0	0
-TOTALS-				0	0	0	0	0	1	1

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch
Site Information Report***

Request Date: 05-02-11
Requestor Name: LSA_CARMEN LO
Standard: ASTM-05

Search Type: COORD
Job Number: SantiagoArea
Filtered Report

Target Site: MANNING PS
 SILVERADO CA 92676

Demographics

Sites: 1	Non-Geocoded: 1	Population: NA
Radon: NA		

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	-117.644260	-117:38:39	Easting: 440305.262
Latitude:	33.716653	33:42:60	Northing: 3730732.517
Elevation:	1215		Zone: 11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:					Services:	
ZIP Code	City Name	ST	Dist/Dir	Sel	Requested?	Date
					Fire Insurance Maps	No
					Aerial Photographs	No
					Historical Topos	No
					City Directories	No
					Title Search	No
					Municipal Reports	No
					Liens	No
					Historic Map Works	No
					Online Topos	No



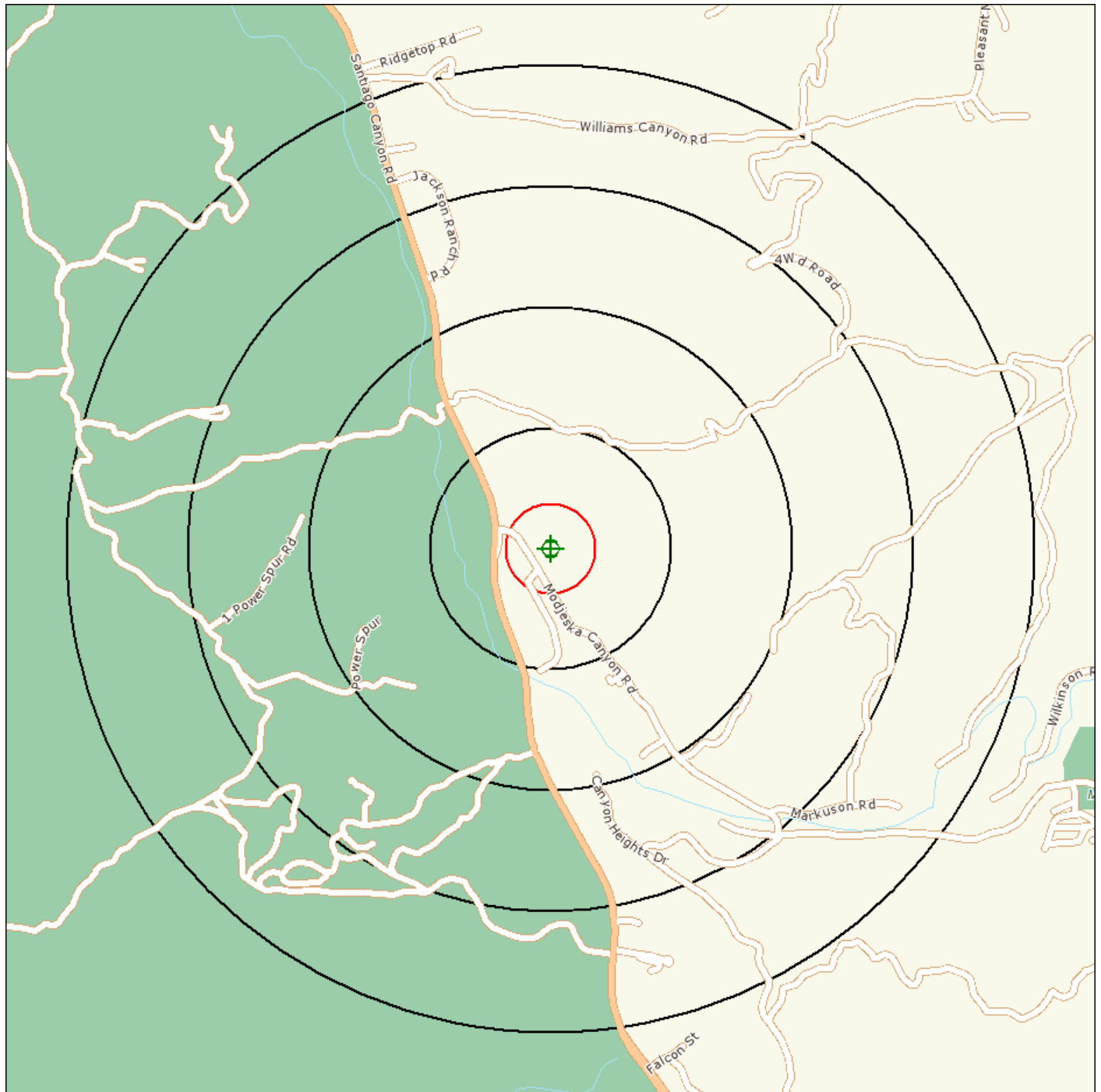
Environmental FirstSearch

1 Mile Radius

Single Map:



MANNING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.716653 Longitude: -117.644260)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





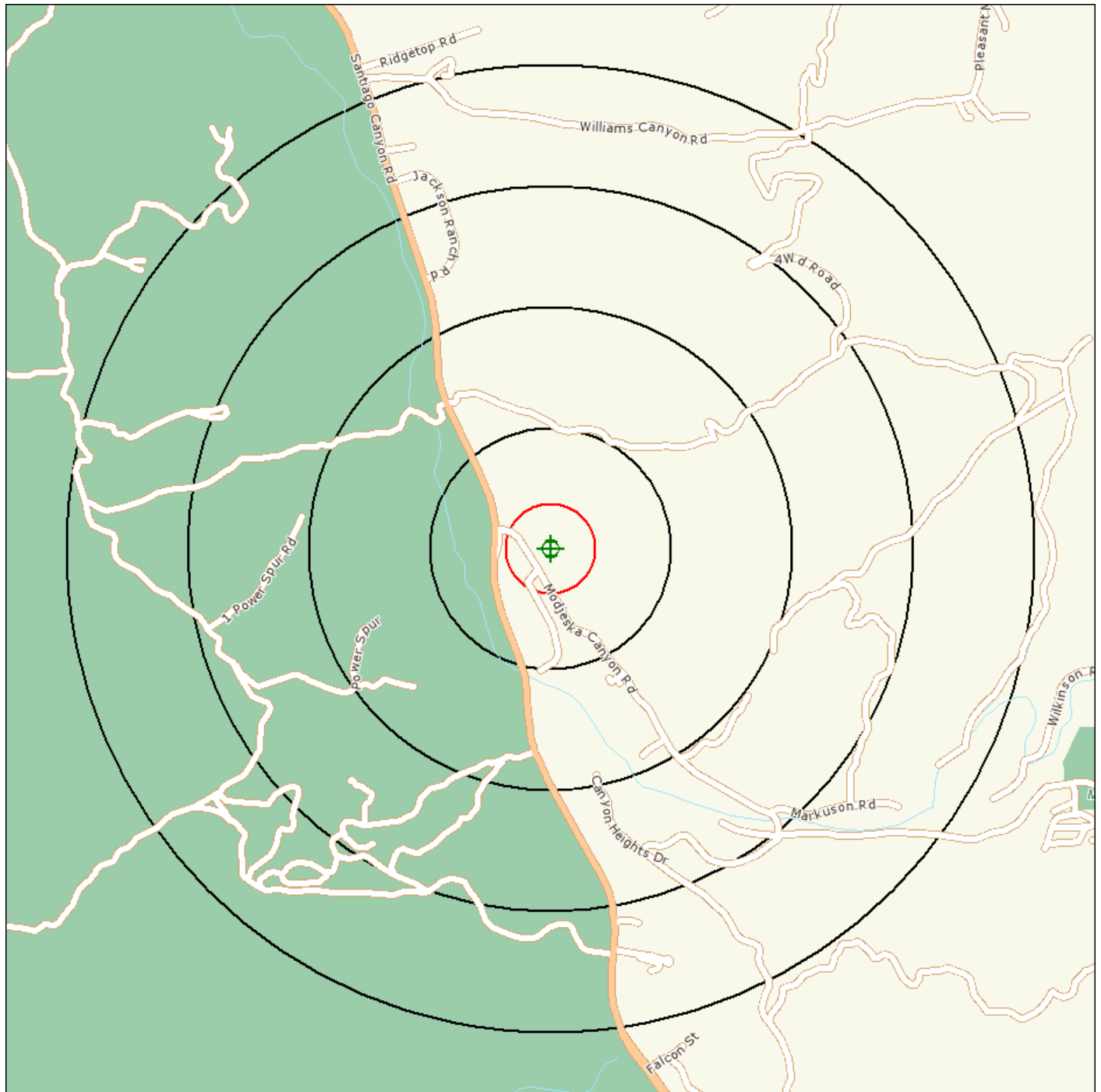
Environmental FirstSearch

1 Mile Radius

ASTM-05: NPL, RCRA COR, STATE



MANNING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.716653 Longitude: -117.644260)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
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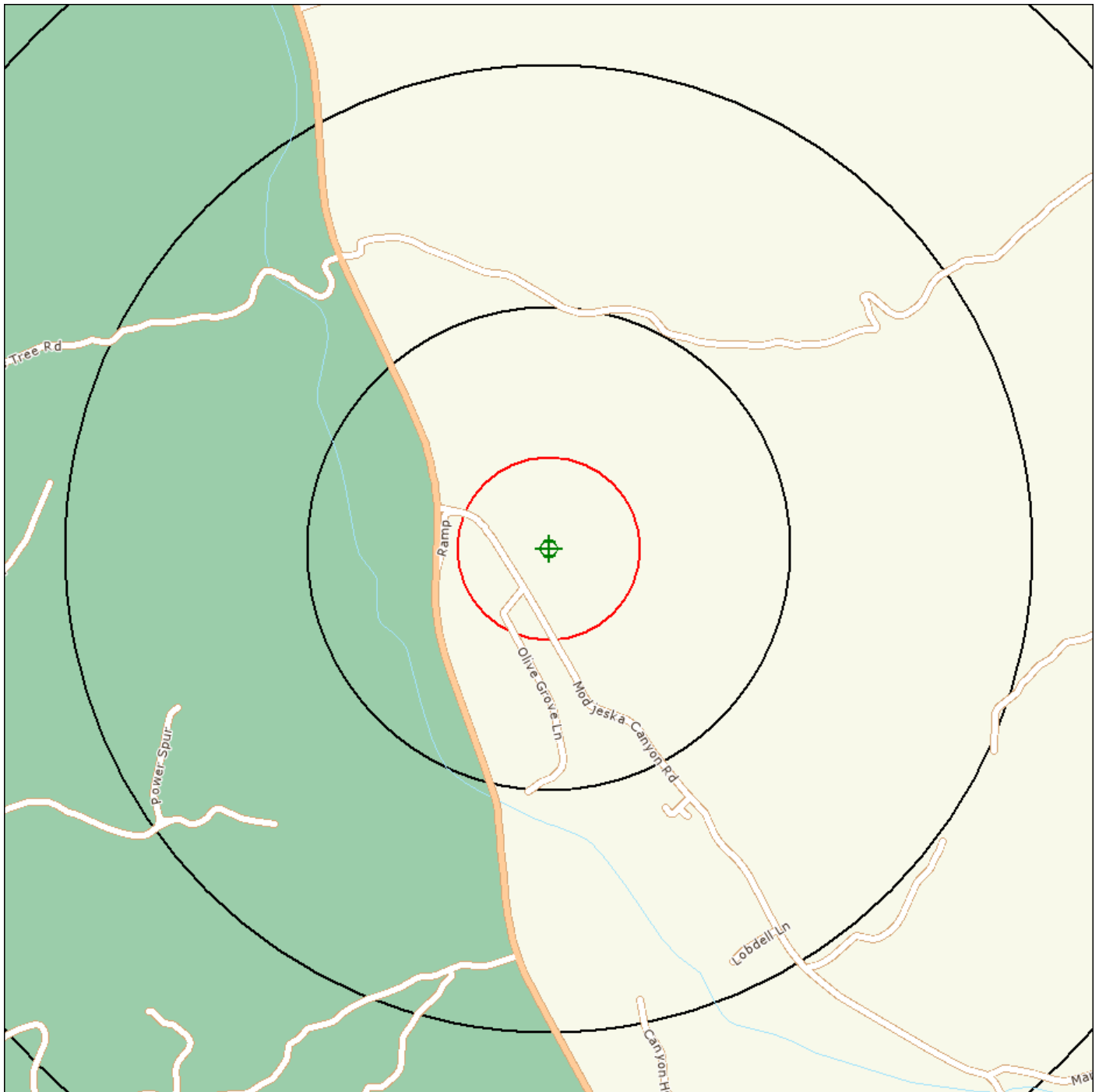
Environmental FirstSearch

.5 Mile Radius

ASTM-05: Multiple Databases



MANNING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.716653 Longitude: -117.644260)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





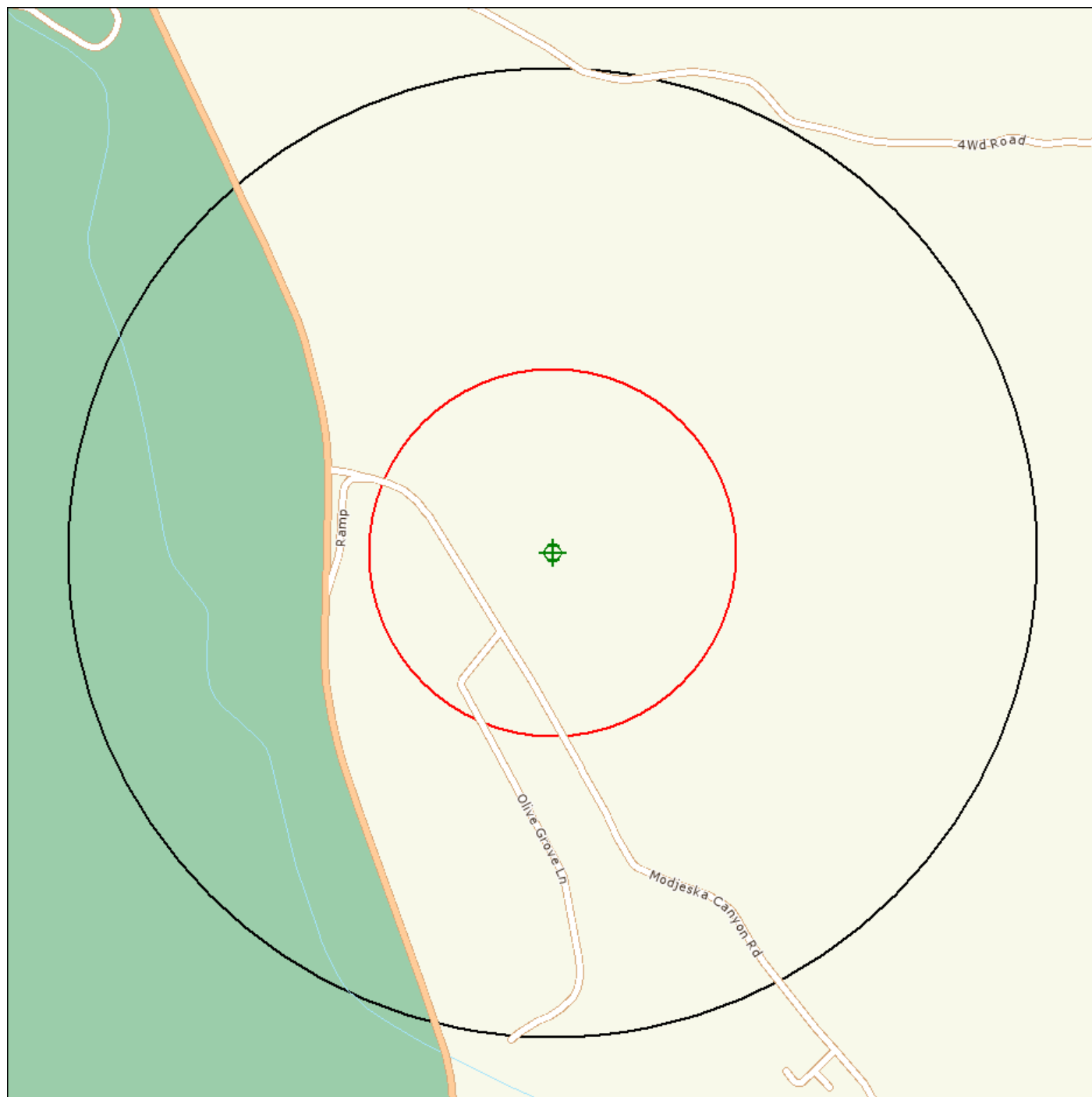
Environmental FirstSearch

.25 Mile Radius

ASTM-05: RCRA GEN, UST, OTHER



MANNING PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.716653 Longitude: -117.644260)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





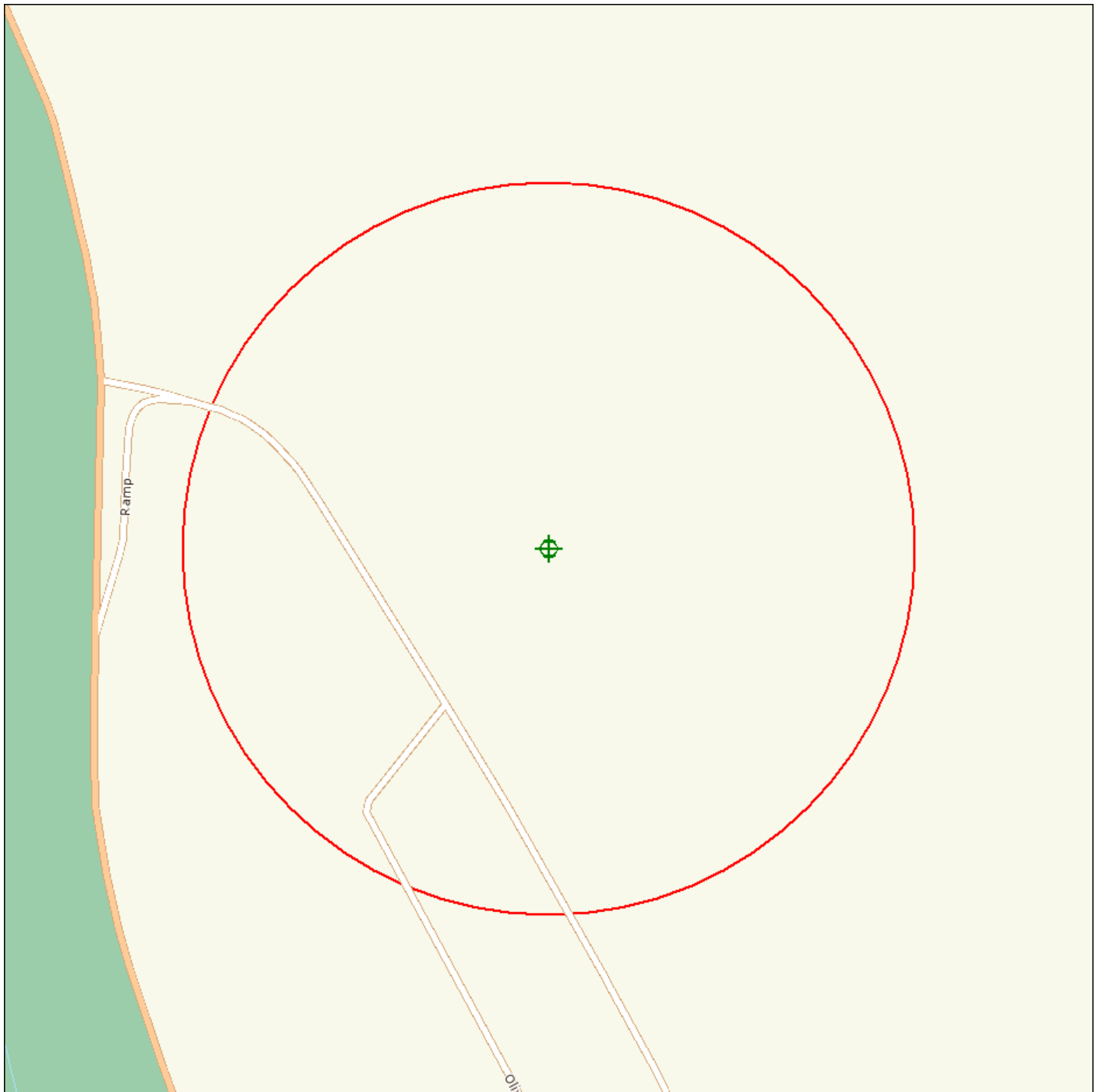
Environmental FirstSearch

.12 Mile Radius

ASTM-05: Multiple Databases



MANNING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.716653 Longitude: -117.644260)
 - Identified Site, Multiple Sites, Receptor
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
 - Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



***Environmental FirstSearch
Sites Summary Report***

Target Property: MANNING PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 1 **GEOCODED:** 0 **NON GEOCODED:** 1 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
	TRIBALLAND	BUREAU OF INDIAN AFFAIRS CONTACT I BIA-92676/	UNKNOWN CA 92676	NON GC	N/A	2

**Environmental FirstSearch
Site Detail Report**

Target Property: MANNING PS
SILVERADO CA 92676

JOB: SantiagoArea

TRIBALLAND

SEARCH ID:	DIST/DIR:	ELEVATION:	MAP ID:
1	NON GC		
NAME:	BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION	REV:	01/15/08
ADDRESS:	UNKNOWN	ID1:	BIA-92676
	CA 92676	ID2:	
	ORANGE	STATUS:	
CONTACT:		PHONE:	
SOURCE:	BIA		

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE: Pacific Regional Office
CONTACT: CLAY GREGORY,REGIONAL DIRECTOR

OFFICE ADDRESS: 2800 Cottage Way
Sacramento CA 95825
OFFICE PHONE: Phone: 916-978-6000
OFFICE FAX: Fax: 916-978-6099

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.**FINAL** - Currently on the Final NPL**PROPOSED** - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.**DELISTED** - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.**PART OF NPL**- Site is part of NPL site**DELETED** - Deleted from the Final NPL**FINAL** - Currently on the Final NPL**NOT PROPOSED** - Not on the NPL**NOT VALID** - Not Valid Site or Incident**PROPOSED** - Proposed for NPL**REMOVED** - Removed from Proposed NPL**SCAN PLAN** - Pre-proposal Site**WITHDRAWN** - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.**NFRAP** – No Further Remedial Action Plan**P** - Site is part of NPL site**D** - Deleted from the Final NPL**F** - Currently on the Final NPL**N** - Not on the NPL**O** - Not Valid Site or Incident**P** - Proposed for NPL**R** - Removed from Proposed NPL**S** - Pre-proposal Site**W** – Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.**RCRAInfo** facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are

required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. **LGN** - Large Quantity Generators **SGN** - Small Quantity Generators **VGN** – Conditionally Exempt Generator. Included are **RAATS** (RCRA Administrative Action Tracking System) and **CMEL** (Compliance Monitoring & Enforcement List) facilities. **CONNECTICUT HAZARDOUS WASTE MANIFEST** – Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. **MASSACHUSETTES HAZARDOUS WASTE GENERATOR** – database of generators that are regulated under the MA DEP. **VQN-MA** = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. **SQN-MA** = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. **LQG-MA** = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. **CLEANUPS IN MY COMMUNITY** (subset) - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under ST are: 1. State Response Sites. 2. School Property Evaluation Program Properties (SCH) Please Note: Our reports list the above sites as DB Type (STATE). Other categories found in the SMBRPD are listed in our reports in the DB Types OT and VC. Each Category contains information on properties based upon the type of work taking place at the site. State Response Sites contains only known and potential hazardous substance release sites considered as posing the greatest threat to the public. School sites included in ST will be found within the SMBRPD's School Property Evaluation Program. CORTESE LIST-Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program to provide information about the location of hazardous materials release sites. Cortese List sites that fall under DTSC's guidelines for State Response sites are included in our reports in the ST category as are qualifying sites from the Annual Work Plan (formerly Bond Expenditure Plan) and the historic ASPIS databases.

State Spills 90: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

State/Tribal SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM-The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field.. Please Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in our reports. WMUDS-The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

State/Tribal LUST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

State/Tribal UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING-The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. We have included the UST information from the FIDS database in our reports for historical purposes to help our clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9.CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: We collect and maintains information regarding Underground Storage Tanks from the majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

State/Tribal IC: CA EPA DEED-RESTRICTED SITES LISTING- The California EPA's Department of Toxic Substances Control Board maintains a list of deed-restricted sites, properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical or necessary at the site.

State/Tribal VCP: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The Voluntary Cleanup Program (VCP) category contains only those

properties undergoing voluntary investigation and/or cleanup and which are listed in the Voluntary Cleanup Program. Please Note: Our reports list the above sites as DB Type VC.

State Permits: CA EPA/COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. **SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS-** Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

State Other: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under OT are: 1. Unconfirmed Properties Referred to Another Local or State Agency (REF) 2. Properties where a No Further Action Determination has been made (NFA) Please Note: Our reports list the above sites as DB Type (OTHER). Other categories found in the SMBRPD are listed in our reports in the DB Types ST and VC. **LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG-** The County of Los Angeles Public Health Investigation Compliant Control Log. **ORANGE COUNTY INDUSTRIAL SITE CLEANUPS-** List maintained by the Orange County Environmental Health Agency. **RIVERSIDE COUNTY WASTE GENERATORS-**A list of facilities in Riverside County which generate hazardous waste. **SACRAMENTO COUNTY MASTER HAZMAT LIST-**Master list of facilities within Sacramento County with potentially hazardous materials. **SACRAMENTO COUNTY TOXIC SITE CLEANUPS-**A list of sites where unauthorized releases of potentially hazardous materials have occurred.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either engineering or an institutional control. The data includes the control and the media contaminated. **RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) –** RCRA site that have institutional controls.

State/Tribal HW: CA EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL HAZARDOUS WASTE MANIFEST INVENTORY-Records maintained by the CA DTSC of Hazardous Waste Manifests used to track and document the transport of hazardous waste from a generator's site to the site of its final disposition.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: CA EPA The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 For Cortese List information contact The CAL EPA, Department of Toxic Substances Control at (916) 445-6532

Updated quarterly/when available

State Spills 90: CA EPA The California State Water Resources Control Board For phone number listings of departments within each region visit their web sites at: <http://www.swrcb.ca.gov/regions.html>

Updated when available

State/Tribal SWL: CA IWMB/SWRCB/COUNTY The California Integrated Waste Management Board

Phone:(916) 255-2331

The State Water Resources Control Board

Phone:(916) 227-4365

Orange County Health Department

Phone:(714) 834-3536

Updated quarterly/when available

State/Tribal LUST: CA SWRCB/COUNTY The California State Water Resources Control Board Phone:(916) 227-4416

San Diego County Department of Environmental Health Phone:(619) 338-2242

Updated quarterly/when available

State/Tribal UST/AST: CA EPA/COUNTY/CITY The State Water Resources Control Board

Phone:(916) 227-4364

CAL EPA Department of Toxic Substances Control

Phone:(916)227-4404

US EPA Region 9 Underground Storage Tank Program

Phone: (415) 972-3372

ALAMEDA COUNTY CUPAS:

* County of Alameda Department of Environmental Health

* Cities of Berkeley, Fremont, Hayward, Livermore / Pleasanton, Newark, Oakland, San Leandro, Union

ALPINE COUNTY CUPA:

* Health Department (Only updated by agency sporadically)

AMADOR COUNTY CUPA:

* County of Amador Environmental Health Department

BUTTE COUNTY CUPA

* County of Butte Environmental Health Division (Only updated by agency biannually)

CALAVERAS COUNTY CUPA:

* County of Calaveras Environmental Health Department

COLUSA COUNTY CUPA:

* Environmental Health Dept.

CONTRA COSTA COUNTY CUPA:

* Hazardous Materials Program

DEL NORTE COUNTY CUPA:

* Department of Health and Social Services

EL DORADO COUNTY CUPAS:

* County of El Dorado Environmental Health - Solid Waste Div (Only updated by agency annually)

* County of El Dorado EMD Tahoe Division (Only updated by agency annually)

FRESNO COUNTY CUPA:

* Haz. Mat and Solid Waste Programs

GLENN COUNTY CUPA:

* Air Pollution Control District

HUMBOLDT COUNTY CUPA:

* Environmental Health Division

IMPERIAL COUNTY CUPA:

* Department of Planning and Building

INYO COUNTY CUPA:

* Environmental Health Department

KERN COUNTY CUPA:

* County of Kern Environmental Health Department

* City of Bakersfield Fire Department

KINGS COUNTY CUPA:

* Environmental Health Services

LAKE COUNTY CUPA:

* Division of Environmental Health

LASSEN COUNTY CUPA:

* Department of Agriculture

LOS ANGELES COUNTY CUPAS:

* County of Los Angeles Fire Department CUPA Data as maintained by the Los Angeles County Department of Public Works

* County of Los Angeles Environmental Programs Division

* Cities of Burbank, El Segundo, Glendale, Long Beach/Signal Hill, Los Angeles, Pasadena, Santa Fe Springs, Santa Monica, Torrance, Vernon

MADERA COUNTY CUPA:

* Environmental Health Department

MARIN COUNTY CUPA:

* County of Marin Office of Waste Management

* City of San Rafael Fire Department

MARIPOSA COUNTY CUPA:

* Health Department

MENDOCINO COUNTY CUPA:

* Environmental Health Department

MERCED COUNTY CUPA:

- * Division of Environmental Health

MODOC COUNTY CUPA:

- * Department of Agriculture

MONO COUNTY CUPA:

- * Health Department

MONTEREY COUNTY CUPA:

- * Environmental Health Division

NAPA COUNTY CUPA:

- * Hazardous Materials Section

NEVADA COUNTY CUPA:

- * Environmental Health Department

ORANGE COUNTY CUPAS:

- * County of Orange Environmental Health Department
- * Cities of Anaheim, Fullerton, Orange, Santa Ana
- * County of Orange Environmental Health Department

PLACER COUNTY CUPAS:

- * County of Placer Division of Environmental Health Field Office
- * Tahoe City
- * City of Roseville Roseville Fire Department

PLUMAS COUNTY CUPA:

- * Environmental Health Department

RIVERSIDE COUNTY CUPA:

- * Environmental Health Department

SACRAMENTO COUNTY CUPA:

- * County Environmental Mgmt Dept, Haz. Mat. Div.

SAN BENITO COUNTY CUPA:

- * City of Hollister Environmental Service Department

SAN BERNARDINO COUNTY CUPAS:

- * County of San Bernardino Fire Department, Haz. Mat. Div.
- * City of Hesperia Hesperia Fire Prevention Department
- * City of Victorville Victorville Fire Department

SAN DIEGO COUNTY CUPA:

- * The San Diego County Dept. of Environmental Health HE 17/58

SAN FRANCISCO COUNTY CUPA:

- * Department of Public Health

SAN JOAQUIN COUNTY CUPA:

- * Environmental Health Division

SAN LUIS OBISPO COUNTY CUPAS:

- * County of San Luis Obispo Environmental Health Division
- * City of San Luis Obispo City Fire Department

SAN MATEO COUNTY CUPA:

- * Environmental Health Department

SANTA BARBARA COUNTY CUPA:

- * County Fire Dept Protective Services Division
- SANTA CLARA COUNTY CUPAS:
 - * County of Santa Clara Hazardous Materials Compliance Division
 - * Santa Clara County Central Fire Protection District (Covers Campbell, Cupertino, Los Gatos, & Morgan Hill)
 - * Cities of Gilroy, Milpitas, Mountain View, Palo Alto, San Jose Fire, Santa Clara, Sunnyvale
- SANTA CRUZ COUNTY CUPA:
 - * Environmental Health Department
- SHASTA COUNTY CUPA:
 - * Environmental Health Department
- SIERRA COUNTY CUPA:
 - * Health Department
- SISKIYOU COUNTY CUPA:
 - * Environmental Health Department
- SONOMA COUNTY CUPAS:
 - * County of Sonoma Department Of Environmental Health
 - * Cities of Healdsburg / Sebastopol, Petaluma, Santa Rosa
- STANISLAUS COUNTY CUPA:
 - * Department of Environmental Resources Haz. Mat. Division
- SUTTER COUNTY CUPA:
 - * Department of Agriculture
- TEHAMA COUNTY CUPA:
 - * Department of Environmental Health
- TRINITY COUNTY CUPA:
 - * Department of Health
- TULARE COUNTY CUPA:
 - * Environmental Health Department
- TUOLUMNE COUNTY CUPA:
 - * Environmental Health
- VENTURA COUNTY CUPAS:
 - * County of Ventura Environmental Health Division
 - * Cities of Oxnard, Ventura
- YOLO COUNTY CUPA:
 - * Environmental Health Department
- YUBA COUNTY CUPA:
 - * Yuba County of Emergency Services

Updated quarterly/annually/when available

State/Tribal IC: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State/Tribal VCP: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State Permits: CA EPA/COUNTY The San Diego County Depart. Of Environmental Health Phone:(619) 338-2211 San Bernardino County Fire Department Phone:(909) 387-3080

Updated quarterly/when available

State Other: CA EPA/COUNTY The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 The Los Angeles County Hazardous Materials Division Phone: (323) 890-7806 Orange County Environmental Health Agency Phone: (714) 834-3536 Riverside County Department of Environmental Health, Hazardous Materials Management Division Phone:(951) 358-5055 Sacramento County Environmental Management Department Phone: (916) 875-8550

Updated quarterly/when available

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

State/Tribal HW: CA EPA CAL EPA, Department of Toxic Substances Control Phone:(916) 255-087

Updated annually/when available

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

FLEMMING PS
SILVERADO CA 92676

Job Number: SantiagoArea

PREPARED FOR:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614

949-553-0666

05-02-11



Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch Search Summary Report

Target Site: FLEMMING PS
SILVERADO CA 92676

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	0	0
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	03-14-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	03-30-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	03-07-11	0.50	0	1	0	0	-	1	2
State/Tribal LUST	Y	03-30-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	10-27-10	0.25	0	0	4	-	-	0	4
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	03-09-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-14-11	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	NA	0.50	0	0	0	0	-	0	0
State Permits	Y	10-13-10	0.12	0	0	-	-	-	0	0
State Other	Y	03-14-11	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
HW Manifest	Y	08-02-10	0.12	0	0	-	-	-	0	0
-TOTALS-				0	1	4	0	0	2	7

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch
Site Information Report***

Request Date: 05-02-11
Requestor Name: LSA_CARMEN LO
Standard: ASTM-05

Search Type: COORD
Job Number: SantiagoArea
Filtered Report

Target Site: FLEMMING PS
 SILVERADO CA 92676

Demographics

Sites: 7	Non-Geocoded: 2	Population: NA
Radon: NA		

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	-117.670909	-117:40:15	Easting: 437859.329
Latitude:	33.748990	33:44:56	Northing: 3734333.544
Elevation:	1011		Zone: 11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:					Services:	
<u>ZIP Code</u>	<u>City Name</u>	<u>ST</u>	<u>Dist/Dir</u>	<u>Sel</u>	<u>Requested?</u>	<u>Date</u>
					Fire Insurance Maps	No
					Aerial Photographs	No
					Historical Topos	No
					City Directories	No
					Title Search	No
					Municipal Reports	No
					Liens	No
					Historic Map Works	No
					Online Topos	No



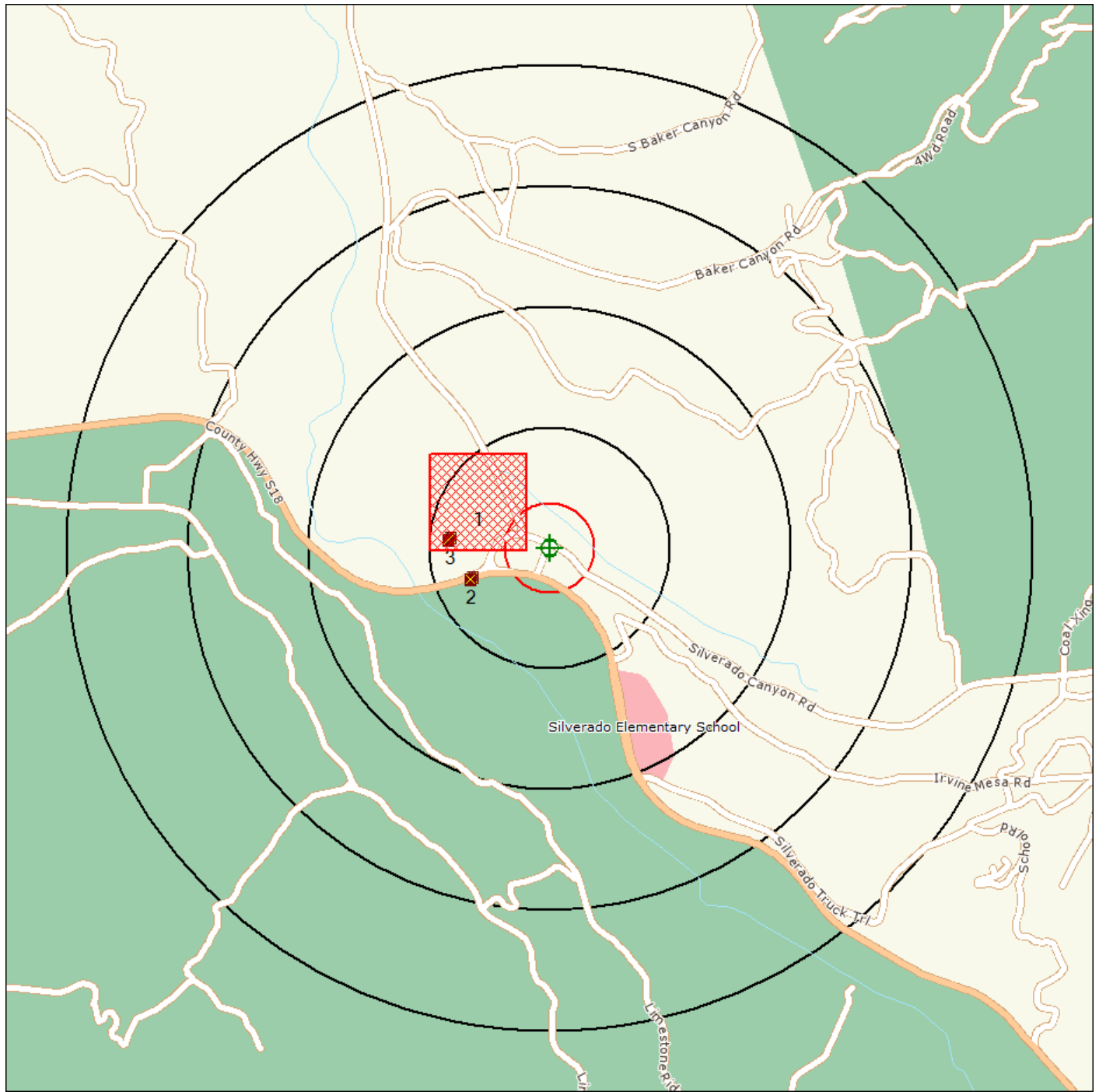
Environmental FirstSearch

1 Mile Radius

Single Map:



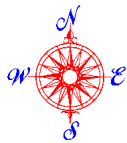
FLEMMING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.748990 Longitude: -117.670909)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





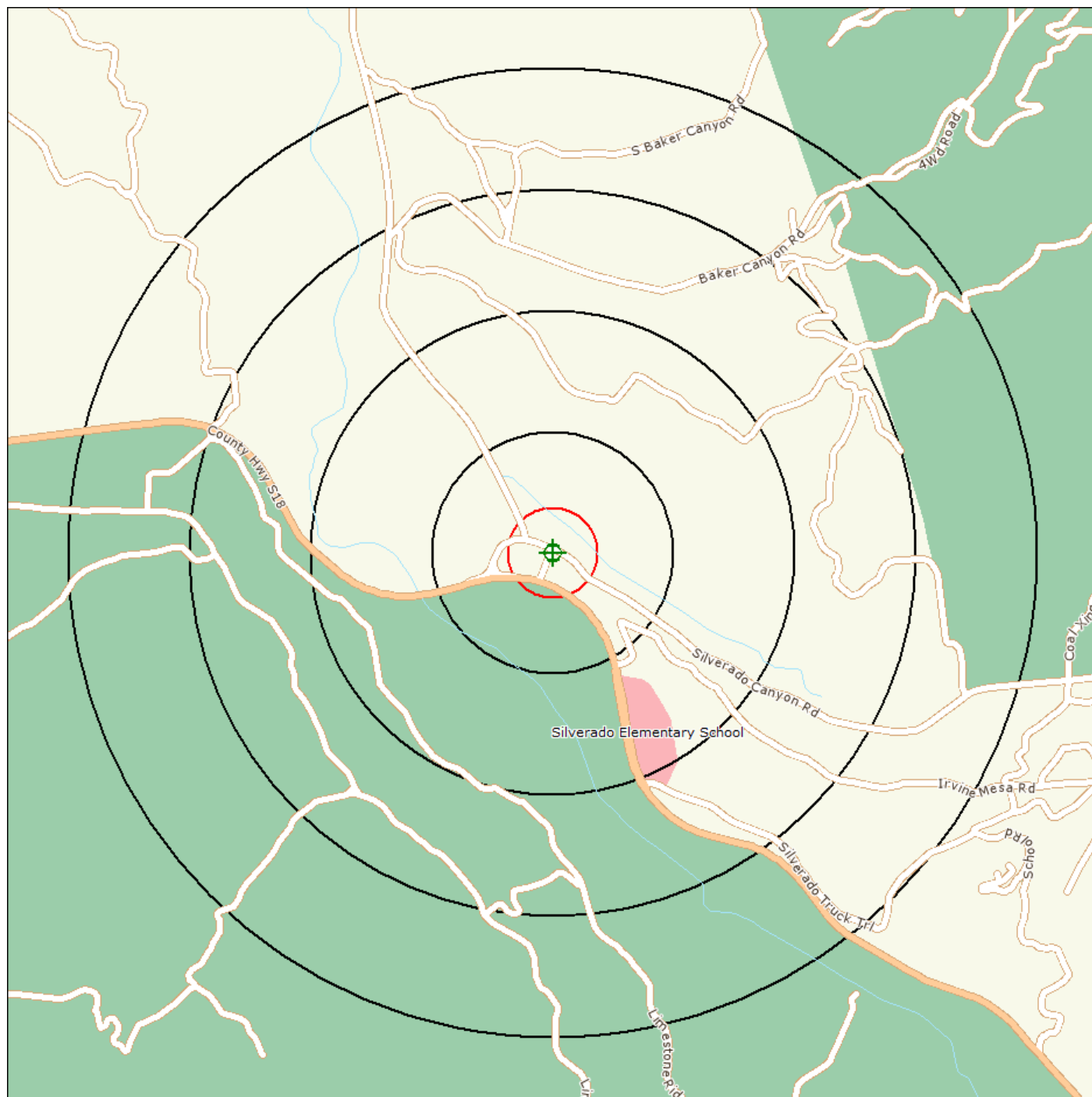
Environmental FirstSearch

1 Mile Radius

ASTM-05: NPL, RCRA COR, STATE



FLEMMING PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.748990 Longitude: -117.670909)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





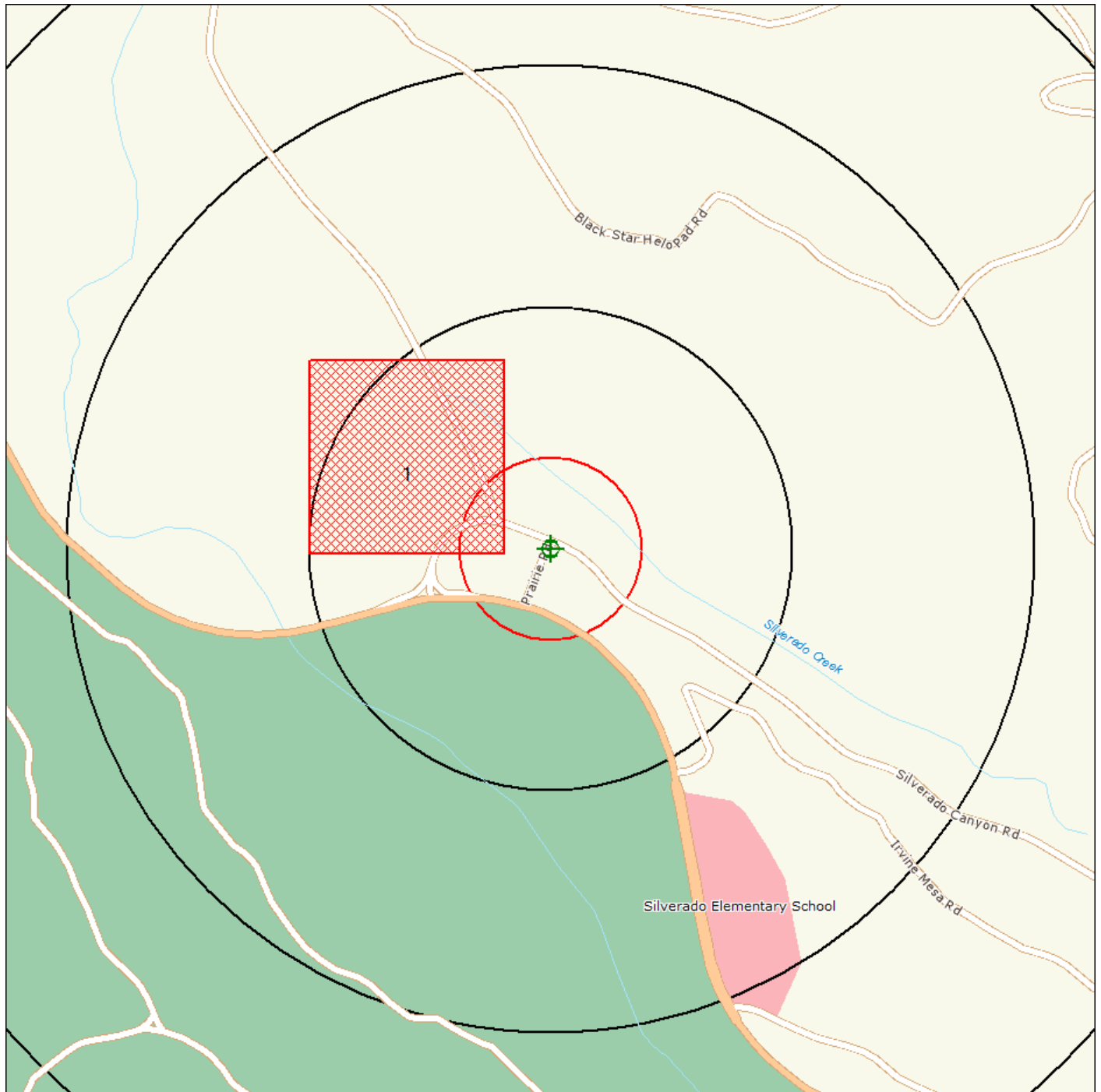
Environmental FirstSearch

.5 Mile Radius

ASTM-05: Multiple Databases



FLEMMING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.748990 Longitude: -117.670909)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





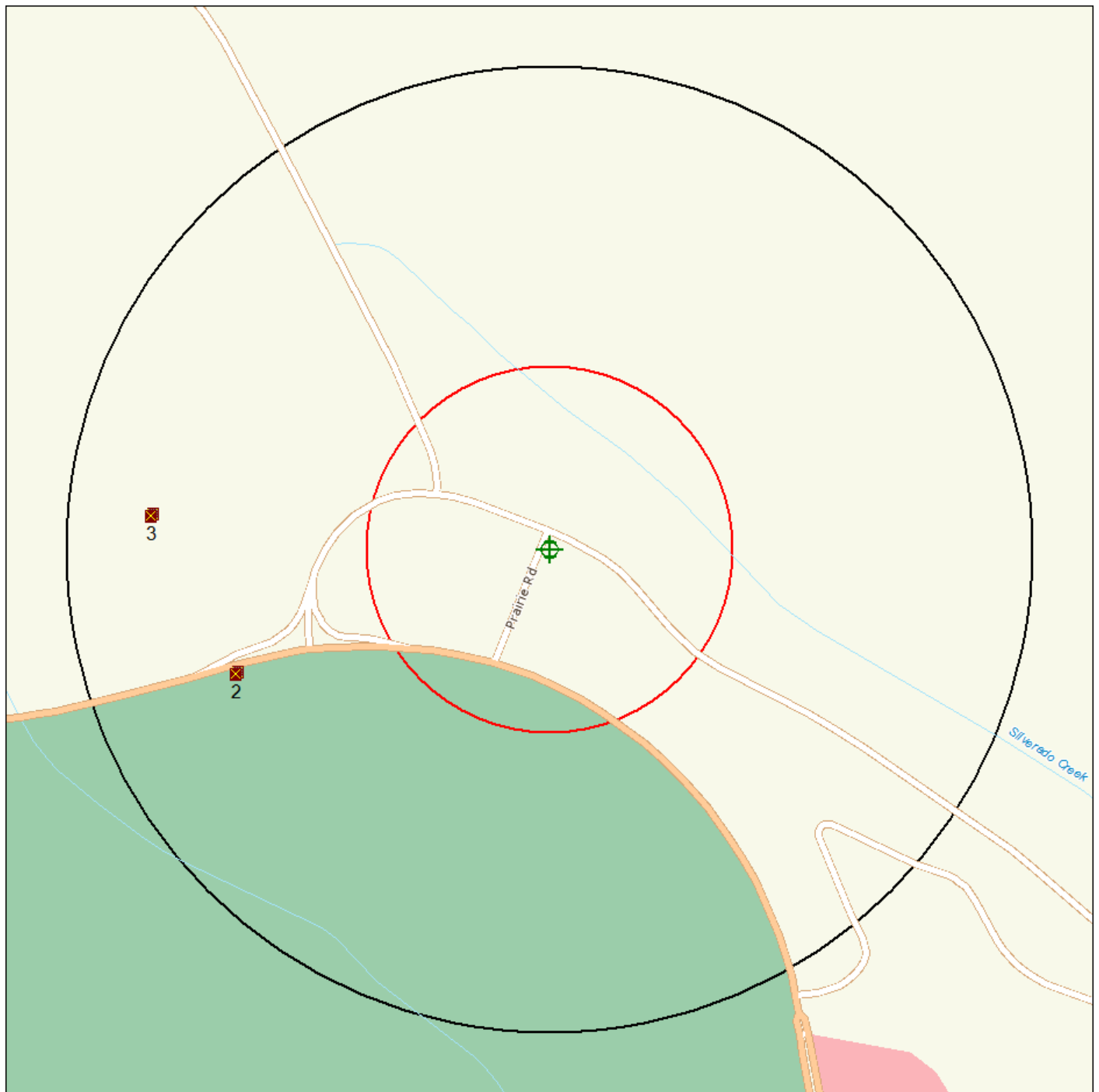
Environmental FirstSearch

.25 Mile Radius

ASTM-05: RCRA GEN, UST, OTHER



FLEMMING PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.748990 Longitude: -117.670909)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





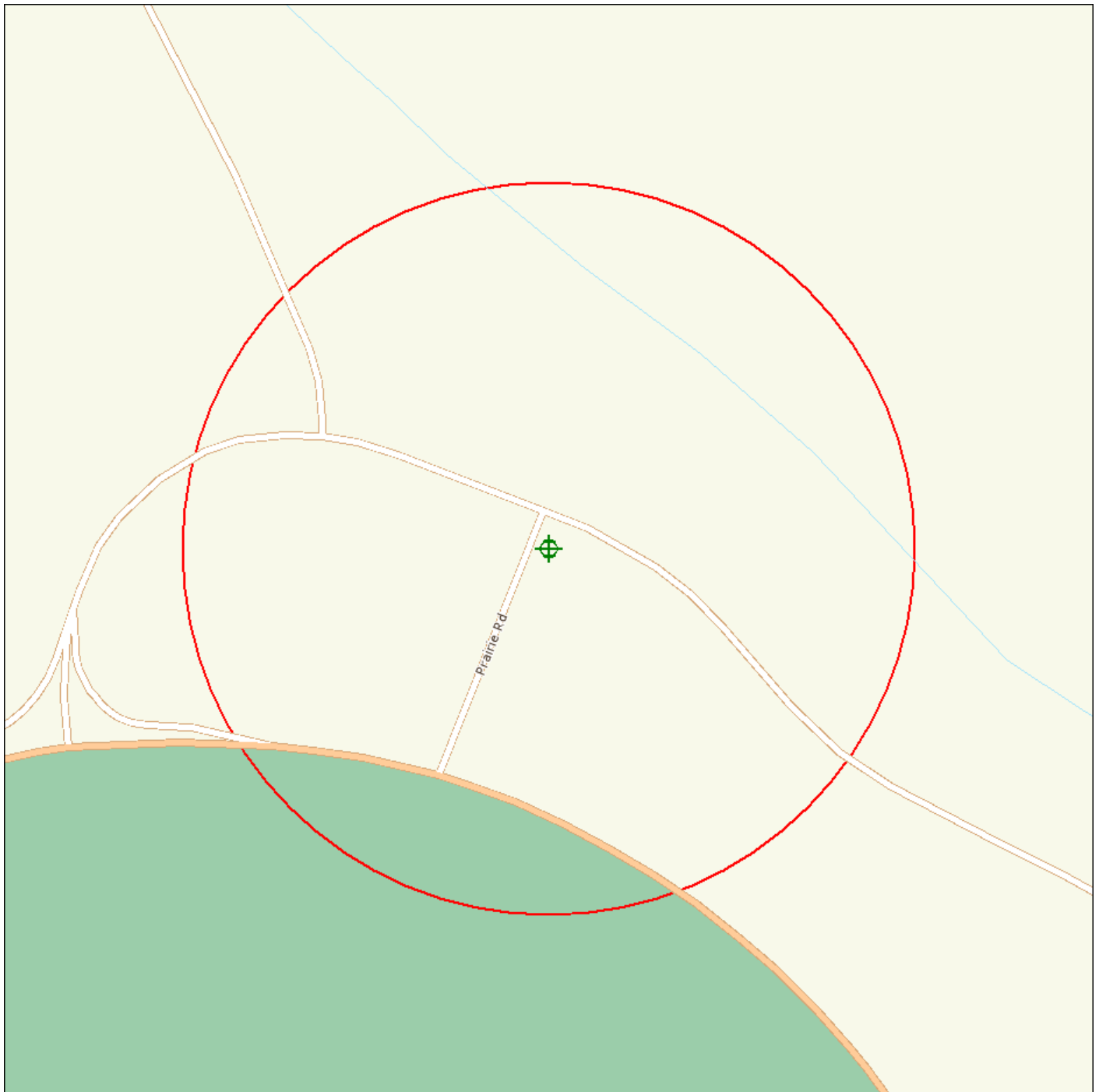
Environmental FirstSearch

.12 Mile Radius

ASTM-05: Multiple Databases



FLEMMING PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.748990 Longitude: -117.670909)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
- Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



Environmental FirstSearch
Sites Summary Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 7 **GEOCODED:** 5 **NON GEOCODED:** 2 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	SWL	ORANGE CITY DUMP #9 SWIS30-CR-0048/CLOSED	N OF CHAPMAN & YORBA N OF ORANGE CA	0.05 NW	N/A	1
2	UST	LOMA RIDGE COMMUNICATION/ EOC TISID4ORCO829/NOT REPORTED	2644 SANTIAGO CANYON RD SILVERADO CYN CA 92676	0.17 SW	- 29	2
2	UST	LOMA RIDGE COMMUNICATION/EOC ORCOCOMP08756/	2644 SANTIAGO CANYON RD SILVERADO CANYON CA	0.17 SW	- 29	3
3	UST	OR CO FIRE STATION #15 TISID-STATE33500/ACTIVE	3202 SANTIAGO CNYN ORANGE CA 92667	0.21 NW	- 36	4
3	UST	STATION #15 TISID-STATE34884/ACTIVE	3202 SANTIAGO CNYN ORANGE CA 92667	0.21 NW	- 36	5

***Environmental FirstSearch
Sites Summary Report***

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 7 **GEOCODED:** 5 **NON GEOCODED:** 2 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
SWL		SILVERADO CANYON DIPOSAL STATION # SWIS30-CR-0062/CLOSED	NEAR SANTIAGO AND SILVERAD SILVERADO CA	NON GC	N/A	6
TRIBALLAND		BUREAU OF INDIAN AFFAIRS CONTACT I BIA-92676/	UNKNOWN CA 92676	NON GC	N/A	7

Environmental FirstSearch
Site Detail Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

SWL

SEARCH ID: 1 **DIST/DIR:** 0.05 NW **ELEVATION:** **MAP ID:** 1

NAME:	ORANGE CITY DUMP #9	REV:	03/07/11
ADDRESS:	N OF CHAPMAN & YORBA N OF CHPMN G	ID1:	SWIS30-CR-0048
	ORANGE CA	ID2:	
	ORANGE	STATUS:	CLOSED
CONTACT:		PHONE:	
SOURCE:	CA IWMB		

SITE OPERATOR INFORMATION:

Operator:
Operator Address:
Permit Date:
Permit Status:
Land Use Name:
GIS Source for LAT and LONG: Map

SITE ACTIVITY INFORMATION:

Activity: Solid Waste Disposal Site
Accepted Waste:
Operational Status: Closed
Regulatory Status Pre-regulations
Program Type
Closure Date: 12/31/1967
Closure Type: Estimated
Permitted Throughput with Units:
Permitted Capacity with Units:
Remaining Capacity with Units (landfills only):
Permitted Total Acreage:
Permitted Disposal Acreage:
Last Tire Inspection Count:
Last Tire Inspection Count Date:
Inspection Frequency: Annual

SITE OWNER INFORMATION:

Owner: Irvine Company, The
Owner Phone: 9497202129
Owner Address: 550 Newport Center Drive

***Environmental FirstSearch
Site Detail Report***

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

UST

SEARCH ID: 2	DIST/DIR: 0.17 SW	ELEVATION: 982	MAP ID: 2
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NAME: LOMA RIDGE COMMUNICATION/ EOC	REV: 07/01/2008
ADDRESS: 2644 SANTIAGO CANYON RD	ID1: TISID4ORCO829
SILVERADO CYN CA 92676	ID2:
ORANGE	STATUS: NOT REPORTED
CONTACT:	PHONE:
SOURCE: ORANGE CO DEH	

ORANGE COUNTY UNDERGROUND STORAGE TANKS LIST INFORMATION

According to the Orange County Health Department s Custodian of Records Office the following information is current as of 11/04/08

Facility ID Number (where provided by agency): FA0025204

***Environmental FirstSearch
Site Detail Report***

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

UST

SEARCH ID: 3 **DIST/DIR:** 0.17 SW **ELEVATION:** 982 **MAP ID:** 2

NAME: LOMA RIDGE COMMUNICATION/EOC
ADDRESS: 2644 SANTIAGO CANYON RD
SILVERADO CANYON CA
ORANGE

REV: 04/13/2000
ID1: ORCOCOMP08756
ID2:
STATUS:
PHONE:

CONTACT:
SOURCE:

ORANGE COUNTY TANKS LIST INFORMATION
ISSUE DATE: 11/23/98

Environmental FirstSearch
Site Detail Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

UST

SEARCH ID: 4 **DIST/DIR:** 0.21 NW **ELEVATION:** 975 **MAP ID:** 3

NAME:	OR CO FIRE STATION #15	REV:	01/01/94
ADDRESS:	3202 SANTIAGO CNYN	ID1:	TISID-STATE33500
	ORANGE CA 92667	ID2:	
	ORANGE	STATUS:	ACTIVE
CONTACT:		PHONE:	
SOURCE:			

UST HISTORICAL DATA

This site was listed in the FIDS Zip Code List as a UST site. The Office of Hazardous Data Management produced the FIDS list. The FIDS list is an index of names & locations of sites recorded in various California State environmental agency databases. It is sorted by zip code and as an index, details regarding the sites were never included.

The UST information included in FIDS as provided by the Office of Hazardous Data Management was originally collected from the SWEEPS database. The SWEEPS database recorded Underground Storage Tanks and was maintained by the State Water Resources Control Board (SWRCB). That agency no longer maintains the SWEEPS database and last updated it in 1994. The last release of that 1994 database was in 1997.

Oversight of Underground Storage Tanks within California is now conducted by Certified Unified Program Agencies referred to as CUPA s. There are approximately 102 CUPA s and Local Oversight Programs (LOP s) in the State of California. Most are city or county government agencies. As of 1998, all sites or facilities with underground storage tanks were required by Federal mandate to obtain certification by designated UST oversight agencies (in this case, CUPA s) that the UST/s at their location were upgraded or removed in adherence with the 1998 RCRA standards.

Information from the FIDS/SWEEPS lists were included in this report search to help identify where underground storage tanks may have existed that were not recorded in CUPA databases or lists collected by us. This may occur if a tank was removed prior to development of recent CUPA UST lists or never registered with a CUPA.

Environmental FirstSearch
Site Detail Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

UST

SEARCH ID: 5 **DIST/DIR:** 0.21 NW **ELEVATION:** 975 **MAP ID:** 3

NAME:	STATION #15	REV:	01/01/94
ADDRESS:	3202 SANTIAGO CNYN	ID1:	TISID-STATE34884
	ORANGE CA 92667	ID2:	
	ORANGE	STATUS:	ACTIVE
CONTACT:		PHONE:	
SOURCE:			

UST HISTORICAL DATA

This site was listed in the FIDS Zip Code List as a UST site. The Office of Hazardous Data Management produced the FIDS list. The FIDS list is an index of names & locations of sites recorded in various California State environmental agency databases. It is sorted by zip code and as an index, details regarding the sites were never included.

The UST information included in FIDS as provided by the Office of Hazardous Data Management was originally collected from the SWEEPS database. The SWEEPS database recorded Underground Storage Tanks and was maintained by the State Water Resources Control Board (SWRCB). That agency no longer maintains the SWEEPS database and last updated it in 1994. The last release of that 1994 database was in 1997.

Oversight of Underground Storage Tanks within California is now conducted by Certified Unified Program Agencies referred to as CUPA s. There are approximately 102 CUPA s and Local Oversight Programs (LOP s) in the State of California. Most are city or county government agencies. As of 1998, all sites or facilities with underground storage tanks were required by Federal mandate to obtain certification by designated UST oversight agencies (in this case, CUPA s) that the UST/s at their location were upgraded or removed in adherence with the 1998 RCRA standards.

Information from the FIDS/SWEEPS lists were included in this report search to help identify where underground storage tanks may have existed that were not recorded in CUPA databases or lists collected by us. This may occur if a tank was removed prior to development of recent CUPA UST lists or never registered with a CUPA.

Environmental FirstSearch
Site Detail Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

SWL

SEARCH ID: 6	DIST/DIR: NON GC	ELEVATION:	MAP ID:
NAME: SILVERADO CANYON DIPOSAL STATION #9		REV: 03/07/11	
ADDRESS: NEAR SANTIAGO AND SILVERADO CYN SILVERADO CA ORANGE		ID1: SWIS30-CR-0062	
CONTACT:		ID2:	
SOURCE: CA IWMB		STATUS: CLOSED	
		PHONE:	

SITE OPERATOR INFORMATION:

Operator:
Operator Address:
Permit Date:
Permit Status:
Land Use Name: Open Space - Nonirrigated
GIS Source for LAT and LONG: Map

SITE ACTIVITY INFORMATION:

Activity: Solid Waste Disposal Site
Accepted Waste:
Operational Status: Closed
Regulatory Status Pre-regulations
Program Type
Closure Date: 12/31/1967
Closure Type: Estimated
Permitted Throughput with Units: 0
Permitted Capacity with Units: 0
Remaining Capacity with Units (landfills only): 0
Permitted Total Acreage: 0
Permitted Disposal Acreage: 0
Last Tire Inspection Count:
Last Tire Inspection Count Date:
Inspection Frequency: Annual

SITE OWNER INFORMATION:

Owner: Irvine Company, The
Owner Phone: 9497202129
Owner Address: 550 Newport Center Drive

Environmental FirstSearch
Site Detail Report

Target Property: FLEMMING PS
SILVERADO CA 92676

JOB: SantiagoArea

TRIBALLAND

SEARCH ID:	7	DIST/DIR:	NON GC	ELEVATION:	MAP ID:
NAME:	BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION	REV:	01/15/08	ID1:	BIA-92676
ADDRESS:	UNKNOWN	ID2:		STATUS:	
	CA 92676	PHONE:			
	ORANGE				
CONTACT:					
SOURCE:	BIA				

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE: Pacific Regional Office
CONTACT: CLAY GREGORY,REGIONAL DIRECTOR

OFFICE ADDRESS: 2800 Cottage Way
Sacramento CA 95825
OFFICE PHONE: Phone: 916-978-6000
OFFICE FAX: Fax: 916-978-6099

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.**FINAL** - Currently on the Final NPL**PROPOSED** - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.**DELISTED** - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.**PART OF NPL**- Site is part of NPL site**DELETED** - Deleted from the Final NPL**FINAL** - Currently on the Final NPL**NOT PROPOSED** - Not on the NPL**NOT VALID** - Not Valid Site or Incident**PROPOSED** - Proposed for NPL**REMOVED** - Removed from Proposed NPL**SCAN PLAN** - Pre-proposal Site**WITHDRAWN** - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.**NFRAP** – No Further Remedial Action Plan**P** - Site is part of NPL site**D** - Deleted from the Final NPL**F** - Currently on the Final NPL**N** - Not on the NPL**O** - Not Valid Site or Incident**P** - Proposed for NPL**R** - Removed from Proposed NPL**S** - Pre-proposal Site**W** – Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.**RCRAInfo** facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are

required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. **LGN** - Large Quantity Generators **SGN** - Small Quantity Generators **VGN** – Conditionally Exempt Generator. Included are **RAATS** (RCRA Administrative Action Tracking System) and **CMEL** (Compliance Monitoring & Enforcement List) facilities. **CONNECTICUT HAZARDOUS WASTE MANIFEST** – Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. **MASSACHUSETTES HAZARDOUS WASTE GENERATOR** – database of generators that are regulated under the MA DEP. **VQN-MA** = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. **SQN-MA** = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. **LQG-MA** = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. **CLEANUPS IN MY COMMUNITY** (subset) - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under ST are: 1. State Response Sites. 2. School Property Evaluation Program Properties (SCH) Please Note: Our reports list the above sites as DB Type (STATE). Other categories found in the SMBRPD are listed in our reports in the DB Types OT and VC. Each Category contains information on properties based upon the type of work taking place at the site. State Response Sites contains only known and potential hazardous substance release sites considered as posing the greatest threat to the public. School sites included in ST will be found within the SMBRPD's School Property Evaluation Program. CORTESE LIST-Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program to provide information about the location of hazardous materials release sites. Cortese List sites that fall under DTSC's guidelines for State Response sites are included in our reports in the ST category as are qualifying sites from the Annual Work Plan (formerly Bond Expenditure Plan) and the historic ASPIS databases.

State Spills 90: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

State/Tribal SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM-The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field.. Please Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in our reports. WMUDS-The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

State/Tribal LUST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

State/Tribal UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING-The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. We have included the UST information from the FIDS database in our reports for historical purposes to help our clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9.CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: We collect and maintains information regarding Underground Storage Tanks from the majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

State/Tribal IC: CA EPA DEED-RESTRICTED SITES LISTING- The California EPA's Department of Toxic Substances Control Board maintains a list of deed-restricted sites, properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical or necessary at the site.

State/Tribal VCP: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The Voluntary Cleanup Program (VCP) category contains only those

properties undergoing voluntary investigation and/or cleanup and which are listed in the Voluntary Cleanup Program. Please Note: Our reports list the above sites as DB Type VC.

State Permits: CA EPA/COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. **SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS-** Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

State Other: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under OT are: 1. Unconfirmed Properties Referred to Another Local or State Agency (REF) 2. Properties where a No Further Action Determination has been made (NFA) Please Note: Our reports list the above sites as DB Type (OTHER). Other categories found in the SMBRPD are listed in our reports in the DB Types ST and VC. **LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG-** The County of Los Angeles Public Health Investigation Compliant Control Log. **ORANGE COUNTY INDUSTRIAL SITE CLEANUPS-** List maintained by the Orange County Environmental Health Agency. **RIVERSIDE COUNTY WASTE GENERATORS-**A list of facilities in Riverside County which generate hazardous waste. **SACRAMENTO COUNTY MASTER HAZMAT LIST-**Master list of facilities within Sacramento County with potentially hazardous materials. **SACRAMENTO COUNTY TOXIC SITE CLEANUPS-**A list of sites where unauthorized releases of potentially hazardous materials have occurred.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either engineering or an institutional control. The data includes the control and the media contaminated. **RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) –** RCRA site that have institutional controls.

State/Tribal HW: CA EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL HAZARDOUS WASTE MANIFEST INVENTORY-Records maintained by the CA DTSC of Hazardous Waste Manifests used to track and document the transport of hazardous waste from a generator's site to the site of its final disposition.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: CA EPA The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 For Cortese List information contact The CAL EPA, Department of Toxic Substances Control at (916) 445-6532

Updated quarterly/when available

State Spills 90: CA EPA The California State Water Resources Control Board For phone number listings of departments within each region visit their web sites at: <http://www.swrcb.ca.gov/regions.html>

Updated when available

State/Tribal SWL: CA IWMB/SWRCB/COUNTY The California Integrated Waste Management Board

Phone:(916) 255-2331

The State Water Resources Control Board

Phone:(916) 227-4365

Orange County Health Department

Phone:(714) 834-3536

Updated quarterly/when available

State/Tribal LUST: CA SWRCB/COUNTY The California State Water Resources Control Board Phone:(916) 227-4416

San Diego County Department of Environmental Health Phone:(619) 338-2242

Updated quarterly/when available

State/Tribal UST/AST: CA EPA/COUNTY/CITY The State Water Resources Control Board

Phone:(916) 227-4364

CAL EPA Department of Toxic Substances Control

Phone:(916)227-4404

US EPA Region 9 Underground Storage Tank Program

Phone: (415) 972-3372

ALAMEDA COUNTY CUPAS:

* County of Alameda Department of Environmental Health

* Cities of Berkeley, Fremont, Hayward, Livermore / Pleasanton, Newark, Oakland, San Leandro, Union

ALPINE COUNTY CUPA:

* Health Department (Only updated by agency sporadically)

AMADOR COUNTY CUPA:

* County of Amador Environmental Health Department

BUTTE COUNTY CUPA

* County of Butte Environmental Health Division (Only updated by agency biannually)

CALAVERAS COUNTY CUPA:

* County of Calaveras Environmental Health Department

COLUSA COUNTY CUPA:

* Environmental Health Dept.

CONTRA COSTA COUNTY CUPA:

* Hazardous Materials Program

DEL NORTE COUNTY CUPA:

* Department of Health and Social Services

EL DORADO COUNTY CUPAS:

* County of El Dorado Environmental Health - Solid Waste Div (Only updated by agency annually)

* County of El Dorado EMD Tahoe Division (Only updated by agency annually)

FRESNO COUNTY CUPA:

* Haz. Mat and Solid Waste Programs

GLENN COUNTY CUPA:

* Air Pollution Control District

HUMBOLDT COUNTY CUPA:

* Environmental Health Division

IMPERIAL COUNTY CUPA:

* Department of Planning and Building

INYO COUNTY CUPA:

* Environmental Health Department

KERN COUNTY CUPA:

* County of Kern Environmental Health Department

* City of Bakersfield Fire Department

KINGS COUNTY CUPA:

* Environmental Health Services

LAKE COUNTY CUPA:

* Division of Environmental Health

LASSEN COUNTY CUPA:

* Department of Agriculture

LOS ANGELES COUNTY CUPAS:

* County of Los Angeles Fire Department CUPA Data as maintained by the Los Angeles County Department of Public Works

* County of Los Angeles Environmental Programs Division

* Cities of Burbank, El Segundo, Glendale, Long Beach/Signal Hill, Los Angeles, Pasadena, Santa Fe Springs, Santa Monica, Torrance, Vernon

MADERA COUNTY CUPA:

* Environmental Health Department

MARIN COUNTY CUPA:

* County of Marin Office of Waste Management

* City of San Rafael Fire Department

MARIPOSA COUNTY CUPA:

* Health Department

MENDOCINO COUNTY CUPA:

* Environmental Health Department

MERCED COUNTY CUPA:

- * Division of Environmental Health

MODOC COUNTY CUPA:

- * Department of Agriculture

MONO COUNTY CUPA:

- * Health Department

MONTEREY COUNTY CUPA:

- * Environmental Health Division

NAPA COUNTY CUPA:

- * Hazardous Materials Section

NEVADA COUNTY CUPA:

- * Environmental Health Department

ORANGE COUNTY CUPAS:

- * County of Orange Environmental Health Department
- * Cities of Anaheim, Fullerton, Orange, Santa Ana
- * County of Orange Environmental Health Department

PLACER COUNTY CUPAS:

- * County of Placer Division of Environmental Health Field Office
- * Tahoe City
- * City of Roseville Roseville Fire Department

PLUMAS COUNTY CUPA:

- * Environmental Health Department

RIVERSIDE COUNTY CUPA:

- * Environmental Health Department

SACRAMENTO COUNTY CUPA:

- * County Environmental Mgmt Dept, Haz. Mat. Div.

SAN BENITO COUNTY CUPA:

- * City of Hollister Environmental Service Department

SAN BERNARDINO COUNTY CUPAS:

- * County of San Bernardino Fire Department, Haz. Mat. Div.
- * City of Hesperia Hesperia Fire Prevention Department
- * City of Victorville Victorville Fire Department

SAN DIEGO COUNTY CUPA:

- * The San Diego County Dept. of Environmental Health HE 17/58

SAN FRANCISCO COUNTY CUPA:

- * Department of Public Health

SAN JOAQUIN COUNTY CUPA:

- * Environmental Health Division

SAN LUIS OBISPO COUNTY CUPAS:

- * County of San Luis Obispo Environmental Health Division
- * City of San Luis Obispo City Fire Department

SAN MATEO COUNTY CUPA:

- * Environmental Health Department

SANTA BARBARA COUNTY CUPA:

- * County Fire Dept Protective Services Division
- SANTA CLARA COUNTY CUPAS:
 - * County of Santa Clara Hazardous Materials Compliance Division
 - * Santa Clara County Central Fire Protection District (Covers Campbell, Cupertino, Los Gatos, & Morgan Hill)
 - * Cities of Gilroy, Milpitas, Mountain View, Palo Alto, San Jose Fire, Santa Clara, Sunnyvale
- SANTA CRUZ COUNTY CUPA:
 - * Environmental Health Department
- SHASTA COUNTY CUPA:
 - * Environmental Health Department
- SIERRA COUNTY CUPA:
 - * Health Department
- SISKIYOU COUNTY CUPA:
 - * Environmental Health Department
- SONOMA COUNTY CUPAS:
 - * County of Sonoma Department Of Environmental Health
 - * Cities of Healdsburg / Sebastopol, Petaluma, Santa Rosa
- STANISLAUS COUNTY CUPA:
 - * Department of Environmental Resources Haz. Mat. Division
- SUTTER COUNTY CUPA:
 - * Department of Agriculture
- TEHAMA COUNTY CUPA:
 - * Department of Environmental Health
- TRINITY COUNTY CUPA:
 - * Department of Health
- TULARE COUNTY CUPA:
 - * Environmental Health Department
- TUOLUMNE COUNTY CUPA:
 - * Environmental Health
- VENTURA COUNTY CUPAS:
 - * County of Ventura Environmental Health Division
 - * Cities of Oxnard, Ventura
- YOLO COUNTY CUPA:
 - * Environmental Health Department
- YUBA COUNTY CUPA:
 - * Yuba County of Emergency Services

Updated quarterly/annually/when available

State/Tribal IC: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State/Tribal VCP: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State Permits: CA EPA/COUNTY The San Diego County Depart. Of Environmental Health Phone:(619) 338-2211 San Bernardino County Fire Department Phone:(909) 387-3080

Updated quarterly/when available

State Other: CA EPA/COUNTY The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 The Los Angeles County Hazardous Materials Division Phone: (323) 890-7806 Orange County Environmental Health Agency Phone: (714) 834-3536 Riverside County Department of Environmental Health, Hazardous Materials Management Division Phone:(951) 358-5055 Sacramento County Environmental Management Department Phone: (916) 875-8550

Updated quarterly/when available

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

State/Tribal HW: CA EPA CAL EPA, Department of Toxic Substances Control Phone:(916) 255-087

Updated annually/when available

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

WILLIAMS PS

SILVERADO CA 92676

Job Number: SantiagoArea

PREPARED FOR:

LSA Associates, Inc.

20 Executive Park, Suite 200

Irvine, CA 92614

949-553-0666

05-02-11



Tel: (781) 551-0470

Fax: (781) 551-0471

Environmental FirstSearch Search Summary Report

Target Site: WILLIAMS PS
SILVERADO CA 92676

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	0	0
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	03-14-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	03-30-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	03-07-11	0.50	0	0	0	0	-	0	0
State/Tribal LUST	Y	03-30-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	10-27-10	0.25	0	0	0	-	-	0	0
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	03-09-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-14-11	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	NA	0.50	0	0	0	0	-	0	0
State Permits	Y	10-13-10	0.12	0	0	-	-	-	0	0
State Other	Y	03-14-11	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
HW Manifest	Y	08-02-10	0.12	0	0	-	-	-	0	0
-TOTALS-				0	0	0	0	0	1	1

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

***Environmental FirstSearch
Site Information Report***

Request Date: 05-02-11
Requestor Name: LSA_CARMEN LO
Standard: ASTM-05

Search Type: COORD
Job Number: SantiagoArea
Filtered Report

Target Site: WILLIAMS PS
 SILVERADO CA 92676

Demographics

Sites: 1	Non-Geocoded: 1	Population: NA
Radon: NA		

Site Location

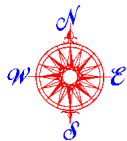
	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	-117.644085	-117:38:39	Easting: 440329.977
Latitude:	33.728936	33:43:44	Northing: 3732094.262
Elevation:	1235		Zone: 11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:					Services:	
<u>ZIP Code</u>	<u>City Name</u>	<u>ST</u>	<u>Dist/Dir</u>	<u>Sel</u>	<u>Requested?</u>	<u>Date</u>
					Fire Insurance Maps	No
					Aerial Photographs	No
					Historical Topos	No
					City Directories	No
					Title Search	No
					Municipal Reports	No
					Liens	No
					Historic Map Works	No
					Online Topos	No



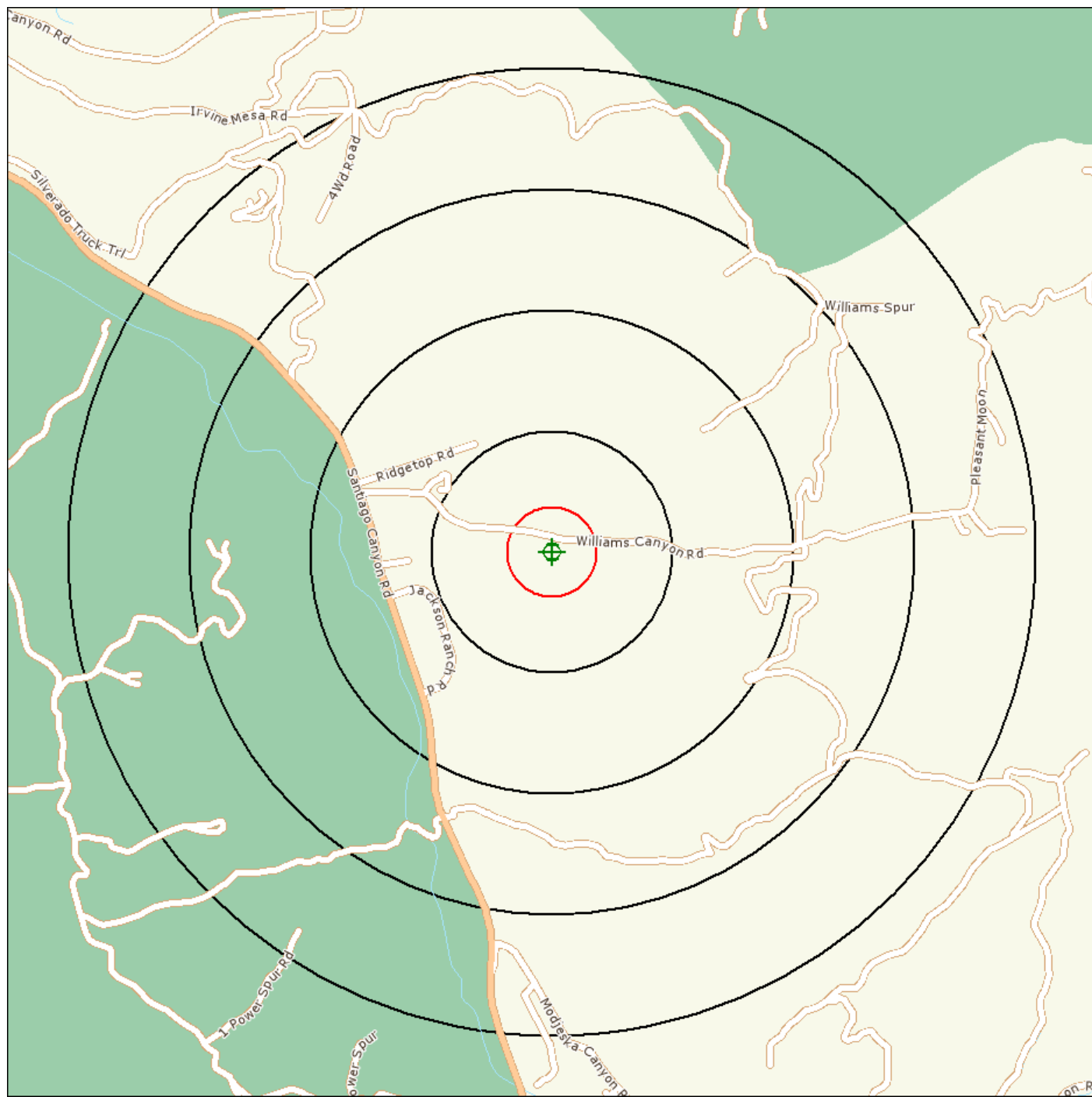
Environmental FirstSearch

1 Mile Radius

Single Map:



WILLIAMS PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.728936 Longitude: -117.644085)

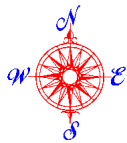
Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





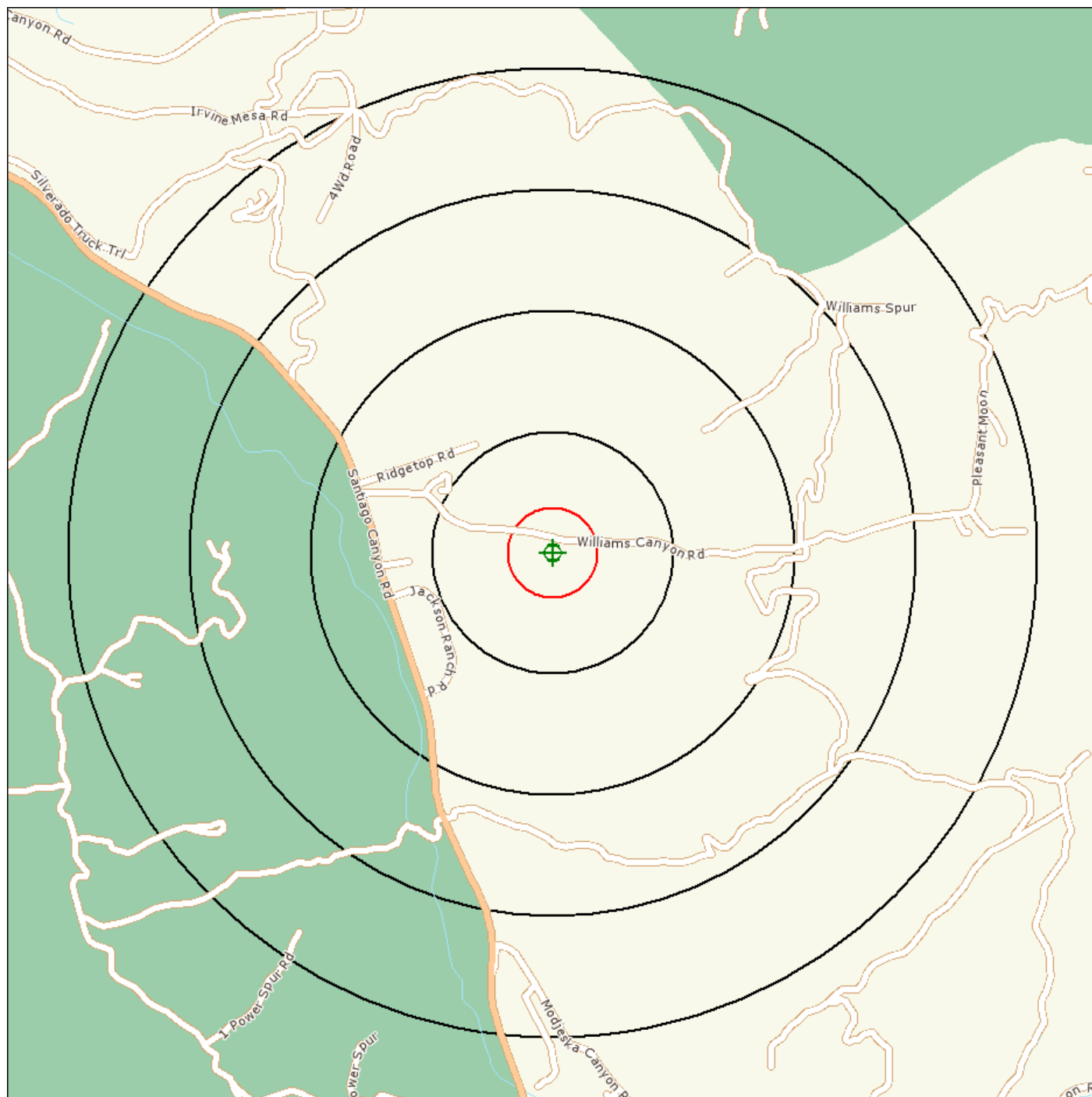
Environmental FirstSearch

1 Mile Radius

ASTM-05: NPL, RCRA COR, STATE



WILLIAMS PS , SILVERADO CA 92676



Source: Tele Atlas

Target Site (Latitude: 33.728936 Longitude: -117.644085)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





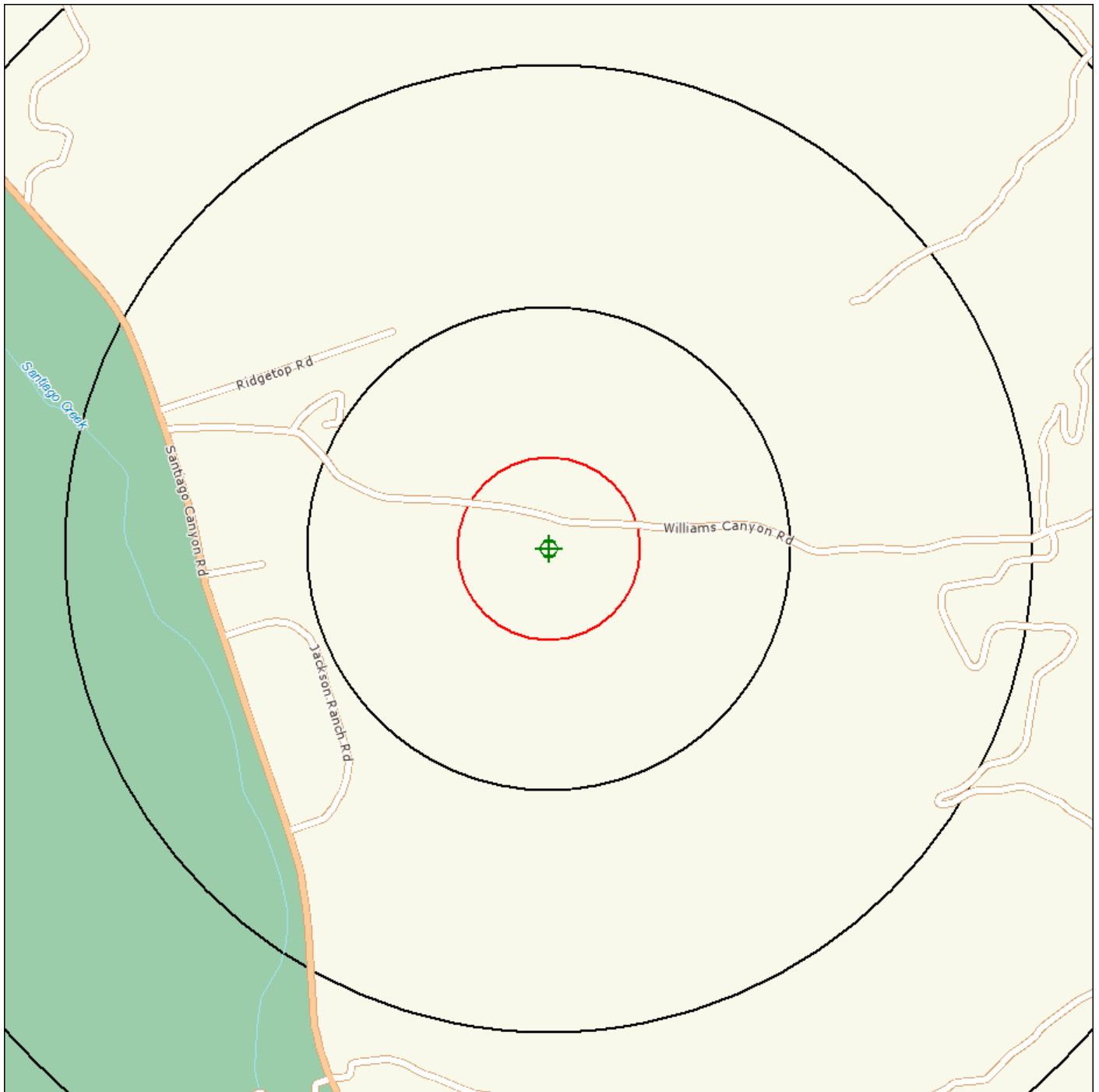
Environmental FirstSearch

.5 Mile Radius







ASTM-05: Multiple Databases



WILLIAMS PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.728936 Longitude: -117.644085) 
- Identified Site, Multiple Sites, Receptor   
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste 
- Triballand..... 
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



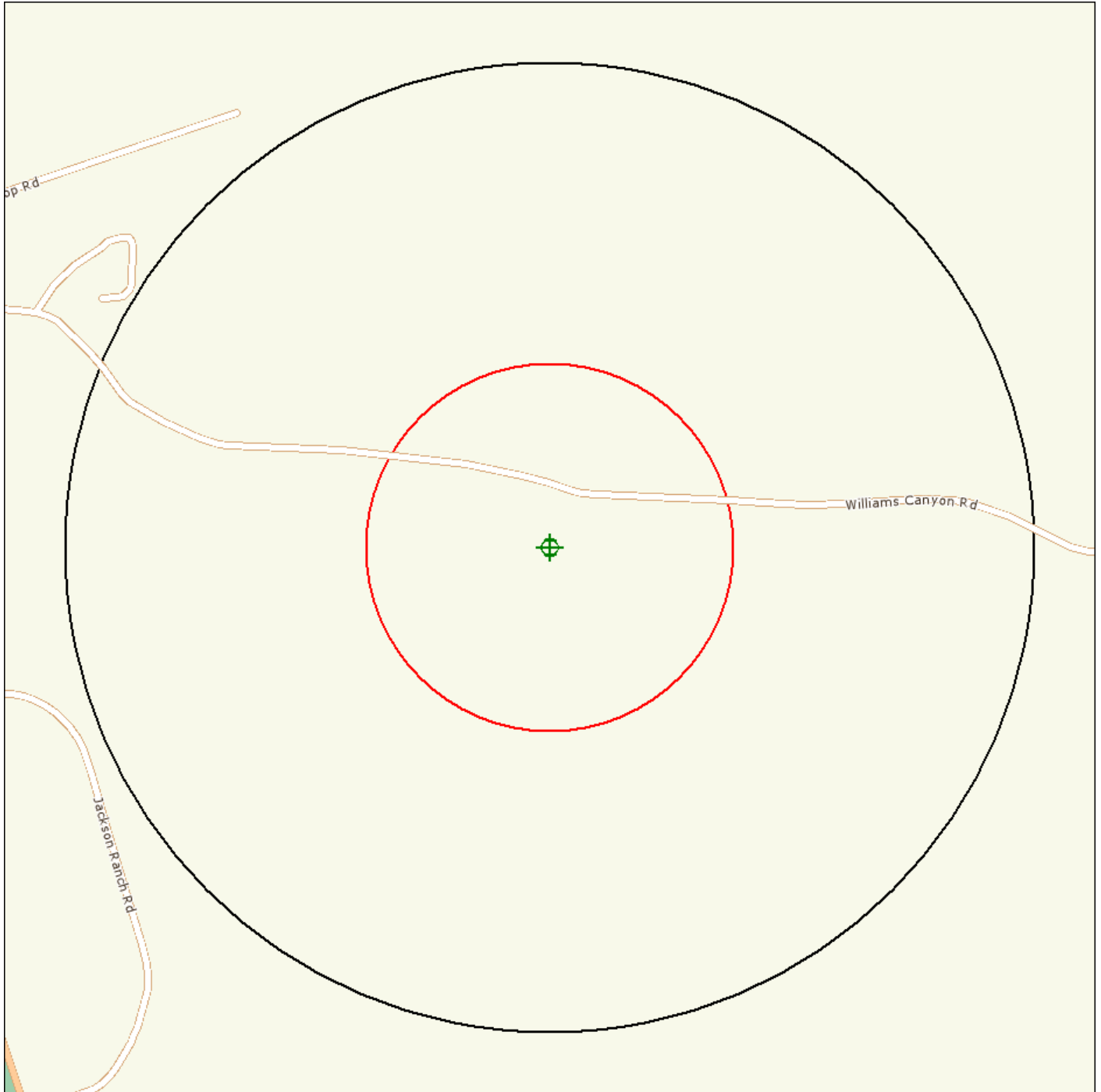
Environmental FirstSearch

.25 Mile Radius

ASTM-05: RCRA GEN, UST, OTHER



WILLIAMS PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.728936 Longitude: -117.644085)
 - Identified Site, Multiple Sites, Receptor
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
 - Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius





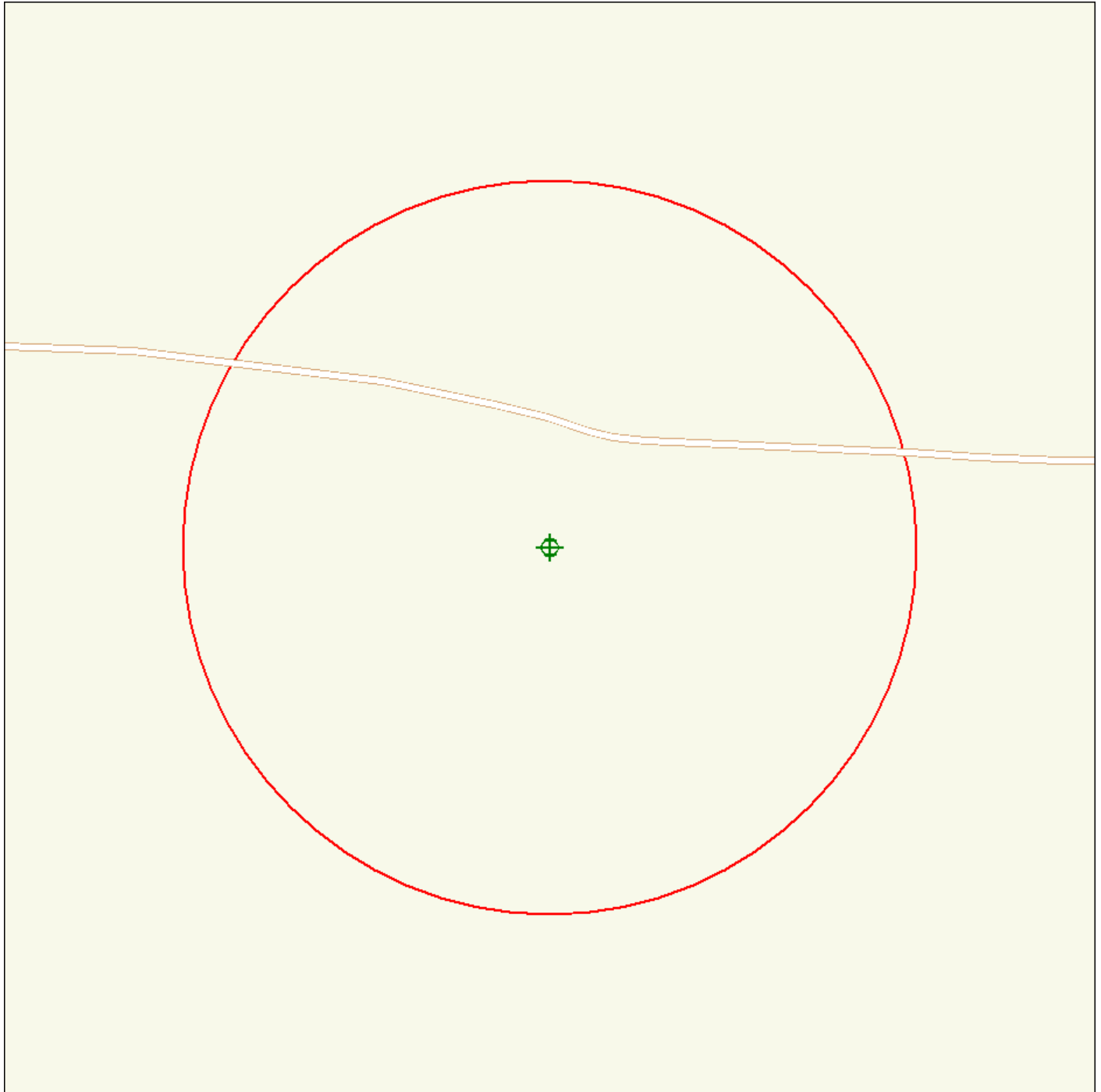
Environmental FirstSearch

.12 Mile Radius

ASTM-05: Multiple Databases



WILLIAMS PS , SILVERADO CA 92676



Source: Tele Atlas

- Target Site (Latitude: 33.728936 Longitude: -117.644085)
 - Identified Site, Multiple Sites, Receptor
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
 - Triballand.....
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



***Environmental FirstSearch
Sites Summary Report***

Target Property: WILLIAMS PS
SILVERADO CA 92676

JOB: SantiagoArea

TOTAL: 1 **GEOCODED:** 0 **NON GEOCODED:** 1 **SELECTED:** 1

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
	TRIBALLAND	BUREAU OF INDIAN AFFAIRS CONTACT I BIA-92676/	UNKNOWN CA 92676	NON GC	N/A	2

**Environmental FirstSearch
Site Detail Report**

Target Property: WILLIAMS PS
SILVERADO CA 92676

JOB: SantiagoArea

TRIBALLAND

SEARCH ID:	1	DIST/DIR:	NON GC	ELEVATION:	MAP ID:
NAME:	BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION	REV:	01/15/08	ID1:	BIA-92676
ADDRESS:	UNKNOWN	ID2:		STATUS:	
	CA 92676	PHONE:			
	ORANGE				
CONTACT:					
SOURCE:	BIA				

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE: Pacific Regional Office
CONTACT: CLAY GREGORY, REGIONAL DIRECTOR

OFFICE ADDRESS: 2800 Cottage Way
Sacramento CA 95825
OFFICE PHONE: Phone: 916-978-6000
OFFICE FAX: Fax: 916-978-6099

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.**FINAL** - Currently on the Final NPL**PROPOSED** - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.**DELISTED** - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.**PART OF NPL**- Site is part of NPL site**DELETED** - Deleted from the Final NPL**FINAL** - Currently on the Final NPL**NOT PROPOSED** - Not on the NPL**NOT VALID** - Not Valid Site or Incident**PROPOSED** - Proposed for NPL**REMOVED** - Removed from Proposed NPL**SCAN PLAN** - Pre-proposal Site**WITHDRAWN** - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.**NFRAP** – No Further Remedial Action Plan**P** - Site is part of NPL site**D** - Deleted from the Final NPL**F** - Currently on the Final NPL**N** - Not on the NPL**O** - Not Valid Site or Incident**P** - Proposed for NPL**R** - Removed from Proposed NPL**S** - Pre-proposal Site**W** – Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.**RCRAInfo** facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are

required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. **LGN - Large Quantity Generators** **SGN - Small Quantity Generators** **VGN – Conditionally Exempt Generator.** Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities. **CONNECTICUT HAZARDOUS WASTE MANIFEST –** Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. **MASSACHUSETTES HAZARDOUS WASTE GENERATOR –** database of generators that are regulated under the MA DEP. **VQN-MA =** generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. **SQN-MA =** generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. **LQG-MA =** generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. **CLEANUPS IN MY COMMUNITY (subset)** - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under ST are: 1. State Response Sites. 2. School Property Evaluation Program Properties (SCH) Please Note: Our reports list the above sites as DB Type (STATE). Other categories found in the SMBRPD are listed in our reports in the DB Types OT and VC. Each Category contains information on properties based upon the type of work taking place at the site. State Response Sites contains only known and potential hazardous substance release sites considered as posing the greatest threat to the public. School sites included in ST will be found within the SMBRPD's School Property Evaluation Program. CORTESE LIST-Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program to provide information about the location of hazardous materials release sites. Cortese List sites that fall under DTSC's guidelines for State Response sites are included in our reports in the ST category as are qualifying sites from the Annual Work Plan (formerly Bond Expenditure Plan) and the historic ASPIS databases.

State Spills 90: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

State/Tribal SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM-The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field.. Please Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in our reports. WMUDS-The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in our reports; therefore, it may not be possible to locate or plot some sites in reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

State/Tribal LUST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

State/Tribal UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING-The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. We have included the UST information from the FIDS database in our reports for historical purposes to help our clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9.CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: We collect and maintains information regarding Underground Storage Tanks from the majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

State/Tribal IC: CA EPA DEED-RESTRICTED SITES LISTING- The California EPA's Department of Toxic Substances Control Board maintains a list of deed-restricted sites, properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical or necessary at the site.

State/Tribal VCP: CA EPA SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The Voluntary Cleanup Program (VCP) category contains only those

properties undergoing voluntary investigation and/or cleanup and which are listed in the Voluntary Cleanup Program. Please Note: Our reports list the above sites as DB Type VC.

State Permits: CA EPA/COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS- Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

State Other: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system called Envirostor with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), formerly known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories, two of which are found in ST. The categories listed under OT are: 1. Unconfirmed Properties Referred to Another Local or State Agency (REF) 2. Properties where a No Further Action Determination has been made (NFA) Please Note: Our reports list the above sites as DB Type (OTHER). Other categories found in the SMBRPD are listed in our reports in the DB Types ST and VC. LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG- The County of Los Angeles Public Health Investigation Compliant Control Log. ORANGE COUNTY INDUSTRIAL SITE CLEANUPS- List maintained by the Orange County Environmental Health Agency. RIVERSIDE COUNTY WASTE GENERATORS-A list of facilities in Riverside County which generate hazardous waste. SACRAMENTO COUNTY MASTER HAZMAT LIST-Master list of facilities within Sacramento County with potentially hazardous materials. SACRAMENTO COUNTY TOXIC SITE CLEANUPS-A list of sites where unauthorized releases of potentially hazardous materials have occurred.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either engineering or an institutional control. The data includes the control and the media contaminated. RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) – RCRA site that have institutional controls.

State/Tribal HW: CA EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL HAZARDOUS WASTE MANIFEST INVENTORY-Records maintained by the CA DTSC of Hazardous Waste Manifests used to track and document the transport of hazardous waste from a generator's site to the site of its final disposition.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: CA EPA The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 For Cortese List information contact The CAL EPA, Department of Toxic Substances Control at (916) 445-6532

Updated quarterly/when available

State Spills 90: CA EPA The California State Water Resources Control Board For phone number listings of departments within each region visit their web sites at: <http://www.swrcb.ca.gov/regions.html>

Updated when available

State/Tribal SWL: CA IWMB/SWRCB/COUNTY The California Integrated Waste Management Board

Phone:(916) 255-2331

The State Water Resources Control Board

Phone:(916) 227-4365

Orange County Health Department

Phone:(714) 834-3536

Updated quarterly/when available

State/Tribal LUST: CA SWRCB/COUNTY The California State Water Resources Control Board Phone:(916) 227-4416

San Diego County Department of Environmental Health Phone:(619) 338-2242

Updated quarterly/when available

State/Tribal UST/AST: CA EPA/COUNTY/CITY The State Water Resources Control Board

Phone:(916) 227-4364

CAL EPA Department of Toxic Substances Control

Phone:(916)227-4404

US EPA Region 9 Underground Storage Tank Program

Phone: (415) 972-3372

ALAMEDA COUNTY CUPAS:

* County of Alameda Department of Environmental Health

* Cities of Berkeley, Fremont, Hayward, Livermore / Pleasanton, Newark, Oakland, San Leandro, Union

ALPINE COUNTY CUPA:

* Health Department (Only updated by agency sporadically)

AMADOR COUNTY CUPA:

* County of Amador Environmental Health Department

BUTTE COUNTY CUPA

* County of Butte Environmental Health Division (Only updated by agency biannually)

CALAVERAS COUNTY CUPA:

* County of Calaveras Environmental Health Department

COLUSA COUNTY CUPA:

* Environmental Health Dept.

CONTRA COSTA COUNTY CUPA:

* Hazardous Materials Program

DEL NORTE COUNTY CUPA:

* Department of Health and Social Services

EL DORADO COUNTY CUPAS:

* County of El Dorado Environmental Health - Solid Waste Div (Only updated by agency annually)

* County of El Dorado EMD Tahoe Division (Only updated by agency annually)

FRESNO COUNTY CUPA:

* Haz. Mat and Solid Waste Programs

GLENN COUNTY CUPA:

* Air Pollution Control District

HUMBOLDT COUNTY CUPA:

* Environmental Health Division

IMPERIAL COUNTY CUPA:

* Department of Planning and Building

INYO COUNTY CUPA:

* Environmental Health Department

KERN COUNTY CUPA:

* County of Kern Environmental Health Department

* City of Bakersfield Fire Department

KINGS COUNTY CUPA:

* Environmental Health Services

LAKE COUNTY CUPA:

* Division of Environmental Health

LASSEN COUNTY CUPA:

* Department of Agriculture

LOS ANGELES COUNTY CUPAS:

* County of Los Angeles Fire Department CUPA Data as maintained by the Los Angeles County Department of Public Works

* County of Los Angeles Environmental Programs Division

* Cities of Burbank, El Segundo, Glendale, Long Beach/Signal Hill, Los Angeles, Pasadena, Santa Fe Springs, Santa Monica, Torrance, Vernon

MADERA COUNTY CUPA:

* Environmental Health Department

MARIN COUNTY CUPA:

* County of Marin Office of Waste Management

* City of San Rafael Fire Department

MARIPOSA COUNTY CUPA:

* Health Department

MENDOCINO COUNTY CUPA:

* Environmental Health Department

MERCED COUNTY CUPA:

- * Division of Environmental Health

MODOC COUNTY CUPA:

- * Department of Agriculture

MONO COUNTY CUPA:

- * Health Department

MONTEREY COUNTY CUPA:

- * Environmental Health Division

NAPA COUNTY CUPA:

- * Hazardous Materials Section

NEVADA COUNTY CUPA:

- * Environmental Health Department

ORANGE COUNTY CUPAS:

- * County of Orange Environmental Health Department
- * Cities of Anaheim, Fullerton, Orange, Santa Ana
- * County of Orange Environmental Health Department

PLACER COUNTY CUPAS:

- * County of Placer Division of Environmental Health Field Office
- * Tahoe City
- * City of Roseville Roseville Fire Department

PLUMAS COUNTY CUPA:

- * Environmental Health Department

RIVERSIDE COUNTY CUPA:

- * Environmental Health Department

SACRAMENTO COUNTY CUPA:

- * County Environmental Mgmt Dept, Haz. Mat. Div.

SAN BENITO COUNTY CUPA:

- * City of Hollister Environmental Service Department

SAN BERNARDINO COUNTY CUPAS:

- * County of San Bernardino Fire Department, Haz. Mat. Div.
- * City of Hesperia Hesperia Fire Prevention Department
- * City of Victorville Victorville Fire Department

SAN DIEGO COUNTY CUPA:

- * The San Diego County Dept. of Environmental Health HE 17/58

SAN FRANCISCO COUNTY CUPA:

- * Department of Public Health

SAN JOAQUIN COUNTY CUPA:

- * Environmental Health Division

SAN LUIS OBISPO COUNTY CUPAS:

- * County of San Luis Obispo Environmental Health Division
- * City of San Luis Obispo City Fire Department

SAN MATEO COUNTY CUPA:

- * Environmental Health Department

SANTA BARBARA COUNTY CUPA:

- * County Fire Dept Protective Services Division
- SANTA CLARA COUNTY CUPAS:
 - * County of Santa Clara Hazardous Materials Compliance Division
 - * Santa Clara County Central Fire Protection District (Covers Campbell, Cupertino, Los Gatos, & Morgan Hill)
 - * Cities of Gilroy, Milpitas, Mountain View, Palo Alto, San Jose Fire, Santa Clara, Sunnyvale
- SANTA CRUZ COUNTY CUPA:
 - * Environmental Health Department
- SHASTA COUNTY CUPA:
 - * Environmental Health Department
- SIERRA COUNTY CUPA:
 - * Health Department
- SISKIYOU COUNTY CUPA:
 - * Environmental Health Department
- SONOMA COUNTY CUPAS:
 - * County of Sonoma Department Of Environmental Health
 - * Cities of Healdsburg / Sebastopol, Petaluma, Santa Rosa
- STANISLAUS COUNTY CUPA:
 - * Department of Environmental Resources Haz. Mat. Division
- SUTTER COUNTY CUPA:
 - * Department of Agriculture
- TEHAMA COUNTY CUPA:
 - * Department of Environmental Health
- TRINITY COUNTY CUPA:
 - * Department of Health
- TULARE COUNTY CUPA:
 - * Environmental Health Department
- TUOLUMNE COUNTY CUPA:
 - * Environmental Health
- VENTURA COUNTY CUPAS:
 - * County of Ventura Environmental Health Division
 - * Cities of Oxnard, Ventura
- YOLO COUNTY CUPA:
 - * Environmental Health Department
- YUBA COUNTY CUPA:
 - * Yuba County of Emergency Services

Updated quarterly/annually/when available

State/Tribal IC: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State/Tribal VCP: CA EPA The California EPA Department of Toxic Substances Control.Phone:(916) 255-3745

Updated Updated quarterly/annually/when available

State Permits: CA EPA/COUNTY The San Diego County Depart. Of Environmental Health Phone:(619) 338-2211 San Bernardino County Fire Department Phone:(909) 387-3080

Updated quarterly/when available

State Other: CA EPA/COUNTY The CAL EPA, Depart. Of Toxic Substances Control Phone: (916) 323-3400 The Los Angeles County Hazardous Materials Division Phone: (323) 890-7806 Orange County Environmental Health Agency Phone: (714) 834-3536 Riverside County Department of Environmental Health, Hazardous Materials Management Division Phone:(951) 358-5055 Sacramento County Environmental Management Department Phone: (916) 875-8550

Updated quarterly/when available

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

State/Tribal HW: CA EPA CAL EPA, Department of Toxic Substances Control Phone:(916) 255-087

Updated annually/when available