

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

August 12, 2024

CALL TO ORDER 5:00 p.m.

PLEDGE OF ALLEGIANCE

ROLL CALL Directors LaMar, McLaughlin, Swan, Withers, and President Reinhart

PUBLIC COMMENT NOTICE

This meeting will be held in-person at the District’s headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=m5fc1735966012302d7dea60f165bb31d>

Meeting Number (Access Code): 2480 241 8846

Meeting Password: ZZcJxPua632

PLEASE NOTE: Webex observers of the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Board once the closed session has concluded. Observers joining the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to observe the meeting once the closed session has concluded.

Public comments are limited to three minutes per speaker on each subject. If you wish to address the Board of Directors on any item, you may attend the meeting in person and submit a “speaker slip” to the Secretary. Forms are provided outside of IRWD’s Board Room. If attending via Webex, please submit your request to speak, or your comment, via the “chat” feature and your remarks will be read into the record at the meeting. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 12:00 p.m. on Monday, August 12, 2024.

COMMUNICATIONS TO THE BOARD

1. Written:

2. Oral:

3. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

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

CONSENT CALENDAR, Items 4 through 10

4. BOARD MEETING MINUTES

Recommendation: That the minutes of the July 22, 2024 Regular Board meeting be approved as presented.

5. 2024 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: Receive and file.

6. RENEWAL OF GROUP MEDICAL, DENTAL, VISION, AND ANCILLARY PLAN SERVICES FOR CALENDAR YEAR 2025

Recommendation: That the Board authorizes the continuation of IRWD's health insurance coverage with CalPERS with changes in District and employee contribution rates as outlined, authorize the continuation of the District's dental insurance coverage with Delta Dental, authorize the continuation of the District's vision insurance coverage with EyeMed, authorize the renewal of the District's Employee Assistance Program with REACH, authorize the term life, accidental death and dismemberment, long-term disability and employee assistance program coverage with Reliance Standard, and contract with Inspira Financial to administer the Flexible Spending Account, Lifestyle Savings Account, Health Reimbursement Arrangement, COBRA, and Commuter Benefits.

7. ORANGE HEIGHTS SUPPLEMENTAL REIMBURSEMENT AGREEMENT

Recommendation: That the Board authorize the General Manager to execute a supplemental Reimbursement Agreement with Irvine Community Development Company, LLC for the Orange Heights Capital Facilities.

8. REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR THE FISCAL YEARS 2024-25 AND 2025-26 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT

Recommendation: That the Board authorize the General Manager to execute the Reimbursement Agreement between IRWD and the City of Irvine for adjustment of street utilities to grade for the Fiscal Years 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

9. SAN JOAQUIN RESERVOIR VALVE ACTUATOR PURCHASE AND BUDGET ADDITION

Recommendation: That the Board authorize the General Manager to approve a contract with Southwest Valve & Equipment in the amount of \$366,427 for the purchase of replacement valve actuators and authorize the addition of the San Joaquin Reservoir actuator replacement, Project 13111, in the amount of \$982,300 to the FY 2024-25 Capital Budget.

CONSENT CALENDAR, Items 4 through 10 (continued)

10. UTILITY BILL PRINTING, MAILING, AND ELECTRONIC BILL PRESENTMENT SERVICES CONTRACT

Recommendation: That the Board approve a two-year renewal period effective August 16, 2024, through August 15, 2026, with Infosend, Inc. for utility bill printing, mailing, and electronic bill presentment services, totaling approximately \$1,400,000.

ACTION CALENDAR

11. ADVANCED METERING INFRASTRUCTURE AND METER REPLACEMENT FEASIBILITY STUDY

Recommendation: That the Board approve budget increases to the AMI implementation for the domestic and recycled systems Projects 12514 and 12515 in the amount of \$125,000 each, for a combined amount of \$250,000, to the Fiscal Year 2024-25 Capital Budget to be used in developing a detailed AMI Implementation Plan.

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments. Pursuant to AB 1234 and Government Code Section 53232.3(d), a written draft report of the meetings that any Board member attended on behalf of IRWD since the last Board Meeting will be available at the table near the Board Room entrance, and will be amended verbally, if necessary, during Directors' Comments.

12. General Manager's Report

13. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and interests.

14. Directors' Comments and Meeting Reports

OTHER BUSINESS (continued)

15. Closed Session

A. CONFERENCE WITH REAL PROPERTY NEGOTIATORS – Pursuant to California Government Code Section 54956.8:

Property: APNs 839-150-002, 839-150-001, 821-160-010, 821-160-001, 815-180-018, 827-120-010-3, 827-130-005-0, 827-140-001-7, 830-050-004, 830-050-008, 830-050-010, 827-040-005, 827-040-004, 827-072-001, 827-072-002, 827-072-003, 827-072-004, 827-072-005, 827-072-010, 827-120-002-6, 827-120-001-5, 827-040-006-3, 827-040-003-0, 827-050-003-1, 827-050-007, 827-050-005, 827-050-001-9, 827-050-002-0, 827-120-003-7, 827-120-004-8, 827-120-007-1, 827-120-006-0, 827-120-005-9, 827-120-008-2, 827-120-009-3, 827-120-011-4, 827-130-012-6, 827-030-003-9, 827-030-003, 827-020-004-9, 827-020-018, 827-020-018-2, 827-020-002, 827-020-001, 827-020-003, 815-180-011, 815-180-006, 815-180-003, 827-040-001-8, 830-030-004

Agency Negotiators: Paul Cook, Paul Weghorst


Negotiating Parties: E&S Farming, Poole Farming, Red River Farms, Van Dyke Farms

Under Negotiation: Price and Terms of Payment

16. Open Session

17. Adjournment

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Board in connection with a matter subject to discussion or consideration at an open meeting of the Board are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

August 12, 2024
Prepared and
submitted by: K. Swan
Approved by: Paul A. Cook 

CONSENT CALENDAR

BOARD MEETING MINUTES

SUMMARY:

Provided are the minutes of the July 22, 2024 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JULY 22, 2024 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – July 22, 2024 Minutes

Note: This page is intentionally left blank.

Exhibit “A”

MINUTES OF REGULAR MEETING – JULY 22, 2024

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order by President Reinhart at 5:00 p.m. on July 22, 2024 at the District offices, 15600 Sand Canyon Avenue, Irvine.

Directors Present: LaMar, Swan, Withers, and President Reinhart.

Director(s) Absent: McLaughlin.

Also Present: General Manager Cook, Executive Director of Finance Adly, Executive Director of Technical Services Burton, Executive Director of Operations Chambers, Executive Director of Water Policy Weghorst, Director of Water Resources Sanchez, Director of Human Resources Mitcham, Director of Strategic Communications and Advocacy / Deputy General Counsel Compton, Director of Maintenance Manning, Director of Recycling Operations Zepeda, Director of Financial Planning and Data Analytics Smithson, Director of Accounting and Treasury Lin, Director of Information Technology Kaneshiro, Director of Water Quality and Regulatory Compliance Colston, Director of Safety and Security Choi, Water Maintenance Supervisor McCarter, Water Resources Manager Welch, Construction Services Manager Crowe, Field Services Manager Barreto, General Counsel Collins, Secretary Swan, and members of the staff and public.

Oral and Written Communications: None.

Items too late to be agendaized: None.

PRESENTATIONS – PROCLAMATIONS

General Manager Cook presented Proclamations to two long-standing IRWD employees:

- To Kellie Welch for her 24 years of service to the District; and
- To David McCarter for his 40 years of service to the District.

CONSENT CALENDAR

Item 9 was moved to the Action Calendar at the request of Director Swan. On MOTION by LaMar, seconded by Withers and unanimously carried (4-0), CONSENT CALENDAR ITEMS 5 THROUGH 8, AND 10 WERE APPROVED AS FOLLOWS:

5. BOARD MEETING MINUTES

Recommendation: That the minutes of the July 8, 2024 Regular Board meeting be approved as presented.

6. APPOINTMENT OF ASSISTANT TREASURER

Recommendation: That the Board appoint Eileen Lin as the Irvine Ranch Water District Assistant Treasurer effective July 22, 2024.

CONSENT CALENDAR (CONTINUED)

7. JUNE 2024 TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary report, the summary of fixed and variable rate debt, and the disclosure report of reimbursements to Board members and staff, approve the June 2024 summary of payroll ACH payments in the total amount of \$2,641,158, and approve the June 2024 accounts payable disbursement summary of warrants 443140 through 443803, Workers' Compensation distributions, ACH payments, virtual card payments, wire transfers, payroll withholding distributions, and voided checks in the total amount of \$24,889,013.

8. FISCAL YEAR 2023-24 IRWD GUIDING PRINCIPLES SCORECARD

Recommendation: Receive and file.

10. CONSTRUCTION SERVICES DUMP TRUCKS PURCHASE

Recommendation: That the Board authorize the General Manager to execute a purchase order with Inland Kenworth Inc. in the amount of \$764,179 for the purchase of two new dump trucks.

ACTION CALENDAR

9. PROPERTY TAX RESOLUTIONS FOR FISCAL YEAR 2024-25

Following discussion with the Board and Staff, on MOTION by LaMar, seconded by Withers, and carried (LaMar, Reinhart, and Withers voting aye and Swan voting no (3-1 vote), THE BOARD ADOPTED THE FOLLOWING RESOLUTIONS BY TITLE:

RESOLUTION NO. 2024-10

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
ESTABLISHING *AD VALOREM* TAX REVENUES FOR
FISCAL YEAR 2024-25

RESOLUTION NO. 2024-11

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
AMENDING ALLOCATION OF *AD VALOREM* PROPERTY
TAXES TO DEBT SERVICE, SUBJECT TO PLEDGE

11. CONSERVATION AS A WAY OF LIFE

Using a PowerPoint presentation, Director of Water Resources Sanchez provided the Board a summary of the Making Conservation a California Way of Life regulations, and how they will impact IRWD. Following discussion, the item was received and filed.

OTHER BUSINESS

12. General Manager's Report

General Manager Cook stated that with the global IT outage of CrowdStrike pushing out a defective update, IRWD was affected. He thanked the IRWD IT staff for their prompt response to pinpoint the issues and restore access to the affected programs and devices.

In addition, he asked Mr. Manning to introduce Verowin Hunting, the District's new Reliability Manager for the Asset Systems department.

13. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and interests.

Nothing to report on behalf of Consultant Newell.

14. Directors' Comments and Meeting Reports

Director Withers reported on his attendance at the NWRI Board of Directors' Meeting, the WACO Monthly meeting, and the OCWA Monthly Industry Insight Meeting.

Director Swan reported on his participation in the MWDOC Administration/Finance Issues Committee Meeting, the July WAKE UP! Newport Meeting featuring John Moorlach, the monthly WACO meeting, the WACO Planning Committee Meeting, and the MWDOC Board of Directors' Meeting.

Director LaMar reported on his attendance at: the CCEEB Water Quality Task Force meeting via teleconference; the Orange County Business Council Government Affairs Committee Meeting; the Southern California Water Coalition's Legislative Task Force meeting; the Natural Communities Coalition Board of Directors' Meeting; the Southern California Water Coalition's June 2024 Webinar: "Flowing Toward the Future;" a lunch meeting with Jim Sulentich and Danny Fry on NCC Projects; the Southern California Edison's Public Safety Power Shutoff Advisory Board meeting via teleconference; and the IRWD Connect 2024 Luncheon. In addition, he reported on his participation in the CCEEB Summer Issues Seminar in Olympic Valley and the WACO monthly meeting.

President Reinhart reported on his participation in the MWDOC Administration / Finance Issues Committee Meeting, the OCWD Water Issues Committee Meeting, the OCWD Administration / Finance Issues Committee Meeting, and the WACO Monthly meeting.

15. Adjournment

There being no further business, President Reinhart adjourned the meeting at 6:09 p.m.


APPROVED and SIGNED this 12th day of August 2024.

President, IRVINE RANCH WATER DISTRICT

Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, General Counsel
Hanson Bridgett LLP

August 12, 2024
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook 

CONSENT CALENDAR

2024 LEGISLATIVE AND REGULATORY UPDATE

SUMMARY:

This report provides an update on the 2023-2024 legislative session, regulatory issues, and IRWD priorities. As legislation and regulations develop, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee and the Board, as appropriate. Staff recommends the Board receive and file the update.

BACKGROUND:

The Legislature reconvened from its Summer Recess on August 5, 2024. August 16 is the last day for fiscal committees to meet and report bills. It is expected that the Appropriations Committees will hear additional measures between August 5 and August 16, and will hold their Suspense File hearings the week of August 16. Heading into the August 31 final day of session, the Legislature will have floor sessions only after August 19. August 23 is the last day to amend bills on the floor. A copy of the 2024 Legislative Matrix is attached as Exhibit “A”. Links to the bills discussed below are included within each discussion unless a separate exhibit is noted.

2024 State Legislative Update:

SB-1255 (Dodd, D-Napa) Public Water Systems: Needs Analysis:

SB 1255, as amended on June 19, would require the State Board to update its needs analysis of public water systems to include an assessment of the funds necessary to provide a 20 percent discount for low-income households served by community water systems with fewer than 3,300 service connections. As proposed to be amended, it would also require public water systems with more than 3,300 connections to establish a water Low-Income Rate Assistance (LIRA) program that would:

- Be funded with voluntary contributions, which would be collected through water bills on an opt-out-only basis unless the system could fund the minimum bill credit through an opt-in program;
- Require the system to establish a recommended voluntary contribution amount on the bill of each ratepayer, other than public entities, ratepayers that have opted out and ratepayers eligible for the program. The recommended contribution would be required to be set at a level sufficient to fund the discount to eligible ratepayers and pay for administrative costs; and
- Provide a bill credit to eligible ratepayers of no less than 20 percent of the water charges for consumption of up to the indoor water use standards association with “Making Conservation a California Way of Life.”

IRWD currently has an “oppose unless amended” position on SB 1255, and staff is actively engaged in seeking amendments to the bill that would make the bill workable for retail water suppliers. Staff provided the Committee with an update on these discussions and the amendments the sponsors have agreed to make to the bill to date.

Other 2024 State Legislative Updates:

Staff provided an oral update to the Committee regarding new developments related to the following:

- [AB 1827 \(Papan, D-San Mateo\) Local government: fees and charges: water: higher consumptive water parcels;](#)
- [SB 1218 \(Newman, D-Fullerton\) Emergency Water Supplies;](#) and
- Other legislative matters of interest to IRWD.

Other 2024 State and Regional Regulatory Updates:

The following is a list of state and regional regulations and agency reports staff are monitoring, tracking, or planning to engage in over the next three to 12 months. As the next drafts of the regulations or reports are released for public review and comment, staff will engage, as appropriate. Staff provided an oral update to the Committee regarding new developments related to these regulations and other regulations of interest to the District.

The pending regulations and reports actively being tracked include:

- [California Natural Resources Agency \(CNRA\) 30 x 30 California Implementation;](#)
- [CNRA’s Water Resilience Portfolio Implementation and Resiliency 2.0 Implementation;](#)
- [DWR Surface water and groundwater interconnection guidance;](#)
- [Housing and Community Development’s Surplus Land Act guidelines;](#)
- [State Board’s implementation of the Lead and Copper Rule;](#)
- [State Board’s Safe and Affordable Funding for Equity and Resilience \(SAFER\) Drinking Water Program;](#)
- [State Board’s Development of Maximum Contaminant Levels for PFAS;](#)
- [South Coast AQMD’s Cumulative Impacts from Air Toxics for CEQA Projects;](#)
- [South Coast AQMD’s Tier 4 Emergency Generator Testing Policy;](#)
- [South Coast AQMD’s Proposed Rule 317.1 - Clean Air Act Nonattainment Fees for 8-Hour Ozone Standards;](#)
- [South Coast AQMD’s PAR 1146.2 Control of NOx from Large Water Heaters, Small Boilers and Process Heaters;](#) and
- [South Coast AQMD’s Proposed Rule 1110.4, Emissions from Emergency Generators.](#)

Staff provided the Committee with an update on other regulatory matters of interest to the District.

2024 Federal Legislative and Regulatory Update:

Kern Fan Groundwater Storage Project Outreach:

IRWD's federal advocacy priority in 2024 focuses on seeking federal funding for the Kern Fan Groundwater Storage Project and advocating for an increased funding authorization for the federal Water Storage Program. Staff will provide an update on those efforts and IRWD's next steps, given the recent award of Small Storage Program grant funding to Phase 1 of the project.

Other Federal Regulatory Updates:

The following is a list of federal regulations and agency reports staff are monitoring, tracking, or planning to engage in over the next three to 12 months. As the next drafts of the regulations or report are released for public review and comment, staff will engage, as appropriate. Staff also provided an oral update to the Committee regarding new developments related to these regulations and other regulations of interest to the District. The pending regulations and reports actively being tracked include:

- U.S. Environmental Protection Agency's (U.S. EPA's) [Lead and Copper Rule Improvements](#); and
- Bureau of Reclamation's [Post-2026 Colorado River Reservoir Operational Guidelines and Strategies for Lake Powell and Lake Mead](#).

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on August 9, 2024.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – IRWD Legislative Matrix

Note: This page is intentionally left blank.

Exhibit “A”
IRWD 2024 LEGISLATIVE MATRIX
Updated: *July 23, 2024*

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 122 (Assembly Budget Committee)	Public Resources Trailer Bill		Expresses the intent of the Legislature that the administration conduct an assessment of offshore wind energy permitting and related resource needs across applicable State entities, including, but not limited to, the Energy Commission, the State Lands Commission, the California Coastal Commission, and the State Coastal Conservancy. States that the outcomes of the assessment may be considered as part of a future budget. Appropriates funds.	08/14/2023: Re-referred to SENATE Committee on BUDGET AND FISCAL REVIEW.
CA AB 270 (Lee (D))	Political Reform Act of 1974: Public Campaign Financing		Permits a public officer or candidate to expend or accept public funds, as defined, for the purpose of seeking elective office unless the funds are earmarked by a state or local entity for education, transportation, or public safety. Requires candidates to abide by specified expenditure limits and meet strict criteria, as defined, to qualify for public funds, and it also would prohibit public funds from being used to pay legal defense fees or fines.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 277 (Rodriguez (D))	Extreme Weather Forecast and Threat Intelligence Center		Establishes the State-Federal Flood Operations Center within the Department of Water Resources and authorizes the department to administer the center in the department's divisions, offices, or programs. Requires the department and the Office of Emergency Services, in consultation with cooperating agencies, to develop and submit a report to the Legislature on or before specified date that outlines necessary technological advancements for agile forecasting and gaps in data that would improve flood response.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 295 (Lowenthal (D))	Residential Real Property: Foreclosure		Provides that existing law prescribes various requirements to be satisfied before the exercise of a power of sale under a mortgage or deed of trust and prescribes a procedure for the exercise of that power. Prohibits a person from contacting, soliciting, or initiating communication with an owner to claim the surplus funds from a foreclosure sale of the owner's residence before a specified number of days after the trustee's deed has been required.	07/18/2024: Chaptered by Secretary of State. Chapter No. 2024-142

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 305 (Villapudua (D))	California Flood Protection Bond Act of 2024	Support	Enacts the California Flood Protection Bond Act of 2024 which, if approved by the voters, would authorize the issuance of bonds in the specified amount pursuant to the State General Obligation Bond Law for flood protection projects. Provides for the submission of these provisions to the voters at the specified statewide general election.	05/22/2024: Re-referred to SENATE Committee on NATURAL RESOURCES AND WATER.
CA AB 311 (Santiago (D))	Food Assistance Program: Eligibility and Benefits		Removes a specified age limitation and makes any individual eligible for the program if the individual's immigration status is the sole basis for their ineligibility for CalFresh benefits.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.
CA AB 347 (Ting (D))	Household Product Safety: Toxic Substances: Testing		Prohibits the manufacture, sale, delivery, holding, or offering for sale of adulterated foods, beverages, or cosmetics. Prescribes when a cosmetic is adulterated, including when it bears or contains a poisonous or deleterious substance that may render it injurious to users under the conditions of use prescribed in the labeling or advertisement of the cosmetic, under customary or usual conditions. Prescribes that a cosmetic is adulterated if it contains intentionally added PFAS.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 408 (Wilson (D))	Climate Resilient Farms		Enacts the Climate-Resilient Farms, Sustainable Healthy Food Access, and Farmworker Protection Bond Act of 2024, which, if approved by the voters, would authorize the issuance of bonds to finance programs related to, among other things, agricultural lands, food and fiber infrastructure, climate resilience, agricultural professionals, including farmers, ranchers, and farmworkers, workforce development and training, air quality, tribes, disadvantaged communities, nutrition, and food aid.	09/01/2023: In SENATE Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.
CA AB 437 (Jackson (D))	State Government: Equity		Provides that existing law requires the Chief Equity Officer to improve equity and inclusion throughout State government operations and authorizes the Chief Equity Officer to engage with State entities for these purposes. Requires State agencies and departments, in carrying out their duties, to consider the use of more inclusive practices to advance equity.	06/27/2024: In SENATE. From third reading. To Inactive File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 453 (Cervantes (D))	District-Based Elections		Requires a public hearing concerning district-based elections that is consolidated with a meeting of the governing body of the political subdivision that includes other substantive agenda items, to begin at a fixed time regardless of its order on the agenda.	06/26/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 460 (Bauer-Kahan (D))	State Water Resources Control Board: Water Rights		Increases the amount of civil liability for violations related to permits, licenses, certificates, or registrations issued by the State Water Resources Control Board, or orders or regulations adopted by the board. Provides that if the violation of a regulation or order adopted by the board constitutes a diversion of water contrary to a curtailment order adopted by the board, a person or entity may be liable in an amount not to exceed a specified amount for each day in which the violation occurs.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 518 (Wicks (D))	Paid Family Leave: Eligibility		Expands eligibility for benefits under the paid family leave program to include individuals who take time off work to care for a seriously ill designated person. Defines designated person to mean any individual related by blood or whose association with the employee is the equivalent of a family relationship. Authorizes the employee to identify the designated person when they file a claim for benefits.	09/13/2023: In SENATE. From third reading. To Inactive File.
CA AB 527 (Calderon (D))	Urban Forestry: School Greening Projects: Grants		Provides that the California Urban Forestry Act of 1978 requires the Department of Forestry and Fire Protection to implement a program in urban forestry to encourage better tree management and planting in urban areas. Requires funds to be administered to support school greening by providing grants to eligible local educational agencies, nonprofit organizations, cities, counties, and districts, through a competitive grant process developed by the department. Requires the department to develop guidelines.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 544 (Bryan (D))	Voting Pilot Program: County Jails		Requires, until the specified date, the Secretary of State to, upon appropriation of funds for this purpose, operate a pilot program to provide grants to a specified number of counties to improve voter participation in jail facilities. Requires grantees to facilitate in-person voting for all eligible incarcerated persons. Provides that participating counties would be required to meet specified requirements and permit any eligible incarcerated person to perform specified activities.	07/02/2024: From SENATE Committee on PUBLIC SAFETY: Do pass to Committee on APPROPRIATIONS.
CA AB 560 (Bennett (D))	Sustainable Groundwater Management Act		Requires the parties to an adjudication action to submit a proposed settlement agreement determining rights to water to the State Water Resources Control Board for a nonbinding advisory determination as to whether the proposed settlement agreement will substantially impair the ability of a groundwater sustainability agency, the board, or the Department of Water Resources to achieve sustainable groundwater management before filing the proposed settlement agreement with the court.	09/01/2023: In SENATE Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.
CA AB 573 (Garcia E (D))	Organic Waste: Meeting Recovered Organic Waste Product		Provides that existing law requires the State Air Resources Board to approve and begin implementing a comprehensive short-lived climate pollutant strategy to achieve a certain reduction in statewide emissions of methane. Requires the Department of Resources Recycling and Recovery to allow a local jurisdiction, in procuring recovered organic waste products to meet procurement requirements, to use California-derived recovered organic waste that the local jurisdiction sends for processing outside of the State.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 593 (Hancy (D))	Carbon Emission Reduction Strategy: Building Sector		Requires the State Energy Resources Conservation and Development Commission to adopt a strategy, with milestones, to reduce emissions of greenhouse gases for the building sector. Requires the commission, in developing the strategy, to consult and collaborate with certain entities, to hold at least a specified number of public workshops, and to convene stakeholder sessions.	09/01/2023: In SENATE Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 609 (Papan (D))	Office of Wildfire Technology Research and Development		Requires the Office of Wildfire Technology Research and Development to submit a report to the Legislature that assesses the feasibility of the Department of Forestry and Fire Protection and the Office of Emergency Services, working with the National Interagency Aviation Committee and the International Airtanker Board, to conduct an evaluation of innovative new aerial firefighting technologies and whether any new technologies exist that might meet CAL FIRE standards of water and retardant delivery systems.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 749 (Irwin (D))	State Agencies: Information Security: Uniform Standards		Requires every State agency, as defined and subject to specified exceptions, to implement Zero Trust architecture for all data, hardware, software, internal systems, and essential third-party software, including for on-premises, cloud, and hybrid environments, to achieve prescribed levels of maturity based on the Cybersecurity and Infrastructure Security Agency (CISA) Maturity Model by specified dates.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 754 (Papan (D))	Water Management Planning: Water Shortages		Relates to the Urban Water Management Planning Act. Requires a water shortage contingency plan to include, if, based on a description and quantification of each source of water supply, a single reservoir constitutes at least a specified percent of the total water supply, an identification of the dam and description of existing reservoir management operations, and, if the reservoir is owned and operated by the urban water supplier, a description of operational practices and approaches.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 805 (Arambula (D))	Sewer Service: Disadvantaged Communities	Watch	Authorizes the state board, until a specified date, and after it makes a specified finding or findings by resolution, to require a designated sewer system to contract with an administrator designated or approved by the state board for administrative, technical, operational, legal, or managerial services to assist a designated sewer system with the delivery of adequate sewer service, as defined.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 817 (Pacheco (D))	Open Meetings: Teleconferencing: Subsidiary Body		Authorizes a subsidiary body to use certain alternative teleconferencing provisions. Requires at least one staff member of the local agency to be present at a designated primary physical meeting location during the meeting. Requires the local agency to post the agenda at the primary physical meeting location. Requires the members of the subsidiary body to visibly appear on camera during the open portion of a meeting that is publicly accessible via the internet or other online platform.	06/05/2024: In SENATE Committee on LOCAL GOVERNMENT: Reconsideration granted.
CA AB 824 (Calderon (D))	Highway Greening: Statewide Strategic Plan		Enacts the Highway Greening Act, which would require the Department of Transportation to complete a statewide strategic plan to work to achieve at least a specified percent increase of green highways in urban areas, disadvantaged communities, and low-income communities by specified year. Requires the department to submit the plan to the Legislature and specified committees of the Legislature on or before specified date.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 828 (Connolly (D))	Sustainable Groundwater Management: Managed Wetlands		Provides that existing law requires a groundwater sustainability plan to contain certain information, including, among other things, control of saline water intrusion and the impacts on groundwater-dependent ecosystems. Requires the information regarding a groundwater sustainability plan to include, among other things, the plan's water supply and economic impacts on managed wetlands, managed wetland extractors, and small community water systems serving disadvantaged communities.	07/01/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 830 (Soria (D))	Lake and Streambed Alteration Agreements: Exemptions		Provides that existing law prohibits a person, a state or local governmental agency, or a public utility from substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake. Exempts the temporary operation of existing infrastructure or temporary pumps being used to divert flood stage flows or near-flood stage flows to groundwater recharge as long as certain conditions are met.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 841 (Berman (D))	State Energy Resources Conservation and Development		Requires the State Energy Resources Conservation and Development Commission to submit to the Legislature an Industrial Heat Electrification Roadmap. Authorizes the commission to consult with the State Air Resources Board to include in the roadmap an estimate of the reductions in emissions of greenhouse gases and criteria air pollutants, and commensurate health benefits, from electrifying the identified industrial subsectors.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 868 (Wilson (D))	Political Reform Act of 1974: Digital Political Ads		Enacts the Digital Advertisement Transparency and Accountability Act, or DATA Act. Requires a committee that pays for a digital advertisement to appear on an online platform to submit to the Fair Political Practices Commission a copy of the digital advertisement and specified information. Requires an online platform to transmit to the commission specified information regarding digital advertisements, and to retain the information for no less than a specified number of years for specified purposes.	09/01/2023: In SENATE Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.
CA AB 914 (Friedman (D))	California Environmental Quality Act: Review Time		Requires a State agency acting as the lead agency, until specified date, to complete its environmental review for an electrical infrastructure project and to approve or deny the project within a specified number of years of the submission and acceptance of a complete application for the issuance of a lease, permit, license, certificate, or other entitlement for use for electrical infrastructure to the State agency.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 923 (Bauer-Kahan (D))	Flood Plain Restoration Projects: Central Valley: Study		Requires the Central Valley Flood Protection Board, in coordination with the Department of Water Resources, to identify priority flood plain restoration or floodway expansion projects where increased flows due to climate change are likely to overwhelm existing flood protection infrastructure. Requires the department and the board to conduct broad stakeholder outreach to identify priority projects and would require that those projects provide at least a specified number of public benefits.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 930 (Friedman (D))	Local Government: Infrastructure Financing Districts		Authorizes the legislative bodies of 2 or more specified local governments to form a Reinvestment in Infrastructure for a Sustainable and Equitable California district. Requires at least one of the governments to be a city or county within the proposed boundaries. Authorizes a local government that lacks the authority to levy a property tax to join a RISE district. Prohibits a district from including territory in a participating local government unless the city or county is also a participating government.	07/02/2024: From SENATE Committee on HOUSING: Do pass to Committee on APPROPRIATIONS.
CA AB 1024 (Aguiar-Curry (D))	Water Rights: Small Irrigation Use		Exempts an entity from the requirement to enter into a lake or streambed alteration agreement with the Department of Fish and Wildlife if the entity submits a State Water Resources Control Board-approved registration or renewed or amended registration for water use in specified counties to the department and the department determines certain requirements are met. Limits the number of these registrations to a specified amount for the first year of implementation.	09/01/2023: In SENATE Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.
CA AB 1170 (Valencia (D))	Political Reform Act of 1974: Filing Requirements		Provides that the Political Reform Act of 1974 requires that public officials file periodic statements of economic interests. Requires public officials and candidates for whom the Fair Political Practices Commission is the filing officer to file their original statements of economic interests electronically with the Commission. Requires the Commission to redact the signature, personal address, and telephone number of a filer, and related information about a filer's business, tenant, or family member.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 1205 (Bauer-Kahan (D))	Water Rights: Sale, Transfer, or Lease: Agricultural		Requires the State Water Resources Control Board to, on or before specified date, conduct a study and report to the Legislature and appropriate policy committees on the existence of speculation or profiteering by an investment fund in the sale, transfer, or lease of an interest in any surface water right or groundwater right previously put to beneficial use on agricultural lands.	09/11/2023: In SENATE. From third reading. To Inactive File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1246 (Nguyen (D))	Public Employees' Retirement		Relates to the Public Employees' Retirement Law and the Public Employees' Retirement System. Permits, commencing on specified date, a member who elected to receive a specified optional settlement at retirement, if the member's former spouse was named as beneficiary and a legal judgment awards only a portion of the interest in the retirement system to the retired member, to elect to add their new spouse as the beneficiary of the member's interest, subject to meeting certain conditions.	06/19/2024: In SENATE. Read second time. To third reading.
CA AB 1272 (Wood (D))	State Water Resources Control Board: Drought Planning		Requires the State Water Resources Control Board, in consultation with the Department of Fish and Wildlife, to adopt principles and guidelines for diversion and use of water in coastal watersheds during times of water shortage for drought preparedness and climate resiliency. Authorizes the state board to issue a cease and desist order when a diversion or use violates or threatens to violate an applicable principle or guideline adopted by the state board for the diversion and use of water.	07/18/2024: Vetoed by GOVERNOR.
CA AB 1284 (Ramos (D))	Tribal Ancestral Lands and Waters: Cogovernance		Encourages the Natural Resources Agency to enter into cogovernance and comanagement agreements with federally recognized tribes. Authorizes the Secretary of the Agency or a delegate to enter into agreements with federally recognized tribes for the purposes of shared responsibility, decision making, and partnership in resource management and conservation within a tribes ancestral lands and waters. Requires the secretary or a delegate to be the signatory for the State for such agreements.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 1297 (Quirk-Silva (D))	Public Restrooms		Requires each local government to complete an inventory of public restrooms owned and maintained by the local government that are available to the general population in its jurisdiction. Requires governments to report their findings to the State Department of Public Health, which would be required to compile the information and to report the availability of public restrooms to the Legislature. Requires the Legislature to consider the report when evaluating the public's access to reliable public restrooms.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1348 (Grayson (D))	State Government: Controller: Claims Audits		Relates to the Government Claims Act, which requires the presentation of all claims for money or damages against local public entities and the State. Authorizes the Controller to conduct financial and compliance audits as the Controller's office deems as necessary for purposes of ensuring that any expenditures are expended in a manner consistent with the law and the voters' intent. Requires the Controller to provide a report with specified information from these audits to the Legislature.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 1465 (Wicks (D))	Nonvehicular Air Pollution: Civil Penalties		Provides that existing law establishes maximum civil penalties for a person who violates air pollution laws from nonvehicular sources. Requires, in assessing penalties, that health impacts, community disruptions, and other circumstances related to the violation be considered. Requires that civil penalties for a violation be assessed and recovered in a civil action brought by the Attorney General, by any district attorney, or by the attorney for any district in which the violation occurs.	07/02/2024: In SENATE. Read second time. To third reading.
CA AB 1546 (Gabriel (D))	CA Consumer Privacy Act of 2018: Statute of Limitations		Requires an action by the Attorney General to enforce the California Consumer Privacy Act to be commenced within a specified number of years after the cause of action accrued.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 1567 (Garcia E (D))	Safe Drinking Water, Wildfire Prevention, Drought Prep	Support if Amended	Enacts the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, Clean Energy, and Workforce Development Bond Act of 2024, which, if approved by the voters, would authorize the issuance of bonds in a specified amount to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, clean energy, and workforce development programs.	05/22/2024: Re-referred to SENATE Committee on NATURAL RESOURCES AND WATER.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1573 (Friedman (D))	Water Conservation: Landscape Design: Model Ordinance	Seek Amendments	Provides that the Water Conservation in Landscaping Act provides for a Model Water Efficient Landscape Ordinance that is adopted and updated at least every specified number of years. Requires the model ordinance, at the next update initiated after specified date, to require that all new or renovated nonresidential areas install in the project footprint not less than a specified percent of California native plants, and to prohibit the inclusion of nonfunctional turf in nonresidential landscape projects.	09/07/2023: In SENATE. From third reading. To Inactive File.
CA AB 1581 (Kalra (D))	The Restoration Management Permit Act		Relates to the Lake and Streambed Alteration Program. Provides for the Restoration Management Permit Act. Establishes the Restoration Management Permit Program Fund in the State Treasury. Requires the Department of Fish and Wildlife to post on its website a list and description of every qualifying restoration project permitted by the department and requires the department to submit a report that evaluates the impacts and outcomes of the act on the pace and scale of restoration projects.	06/27/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 1688 (Sanchez (R))	Voter Registration: Cancellation: Deceased Persons		Provides that existing law requires the Secretary of State to adopt regulations to facilitate the availability of death statistics from the State Department of Health Services for use by the Secretary of State and county elections officials to cancel affidavits of registration of deceased persons. Authorizes the Secretary of State to also seek an agreement with the federal Social Security Administration to facilitate the availability of death statistics from that agency.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
CA AB 1757 (Kalra (D))	Accessibility: Internet Websites		Provides that existing law imposes liability upon a person, firm, or corporation that denies or interferes with the rights of an individual with a disability for damages and attorney's fees. Prohibits, in a civil action seeking statutory damages under the Unruh Civil Rights Act on the basis of a specific accessibility barrier on an entity's website that is a violation of the Americans with Disabilities Act, the entity from being liable for damages if the entity establishes a certain affirmative defense.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1782 (Ta (R))	Redevelopment: Successor Agencies: Low and Moderate		Provides that existing law provides for the designation of successor agencies to wind down the affairs of dissolved redevelopment agencies. Provides that existing law requires the housing successor to maintain any funds transferred to it with any funds generated from housing assets in a separate Low and Moderate Income Housing Asset Fund. Increases the amount that a housing successor may expend per year on homeless prevention and rapid rehousing services, plus any percentage change in the cost of living.	07/15/2024: Chaptered by Secretary of State. Chapter No. 2024-085
CA AB 1784 (Pellerin (D))	Primary Elections: Candidate Withdrawals		Permits a candidate for any office other than a statewide office at a primary election to withdraw their nomination documents for that office during the applicable filing period. Establishes requirements for withdrawal, including that the candidate submit a statement under penalty of perjury that they are withdrawing their nomination documents and understand the withdrawal is irrevocable and that the filing fees are nonrefundable.	07/02/2024: From SENATE Committee on ELECTIONS AND CONSTITUTIONAL AMENDMENTS: Do pass to Committee on APPROPRIATIONS.
CA AB 1785 (Pacheco (D))	California Public Records Act		Prohibits a State or local agency from publicly posting the home address, telephone number, or both the name and assessor parcel number associated with the home address of any elected or appointed official on the internet without first obtaining the written permission of that individual. States the intent of the Legislature to enact legislation relating to such provisions to accomplish specified goals.	06/27/2024: In SENATE. From Consent Calendar. To third reading.
CA AB 1819 (Waldron (R))	Enhanced Infrastructure Financing Districts		Authorizes an enhanced infrastructure financing district that is at least partially in high or very high fire hazard severity zones to finance heavy equipment to be used for vegetation clearance and firebreaks. Prohibits districts from using the proceeds of certain bonds for heavy equipment to be used for vegetation clearance and firebreaks and equipment used for fire watch, prevention, and fighting.	06/27/2024: In SENATE. Read second time and amended. To third reading.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1820 (Schiavo (D))	Housing Development Projects: Applications: Fees	Watch	Authorizes a development proponent that submits a preliminary application for a housing development project to request a preliminary fee and exaction estimate. Requires a city, county, or city and county to provide the estimate within a specified number of business days of the submission of the preliminary application. Specifies that the preliminary fee and exaction estimate is for informational purposes only and does not affect the scope, amount, or time of payment of any fee or exaction.	07/02/2024: From SENATE Committee on HOUSING: Do pass to Committee on APPROPRIATIONS.
CA AB 1827 (Papan (D))	Local Government: Fees and Charges: Water	Sponsor/ Support	Relates to increases in wholesale charges for water, sewage treatment, or wastewater treatment or adjustments for inflation. Relates to higher water usage demand of parcels. Provides that the incrementally higher costs of water service associated with higher water usage demands, the maximum potential water use, or projected peak water usage may be allocated using any method that reasonably assesses the water service provider's cost of serving those parcels.	06/27/2024: In SENATE. Read second time. To third reading.
CA AB 1851 (Holden (D))	Drinking Water: Schoolsites: Lead Testing Pilot Program		Requires the Superintendent of Public Instruction to establish a pilot program to test for and remediate lead contamination in drinking water at participating local educational agency facilities with plumbing that was installed before the specified date. Provides that if sampling results show lead levels in excess of a specified number of parts per billion in water at any potable water system outlet, a participating an LEA is required to, among other things, notify the parents and guardians of pupils.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 1854 (Schiavo (D))	Service Member Protections		Provides that existing law authorizes a member of the U.S. Army Reserve or the National Guard who is called to active duty to defer payments on certain obligations while serving on active duty. Provides that existing law requires the reservist or their designee to deliver a written request for the deferral to the obligor in order to receive a deferral. Requires a request for deferral to be submitted not later than a specified number of days following the period of active duty on which the deferral is based.	07/18/2024: Chaptered by Secretary of State. Chapter No. 2024-144

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Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1868 (Friedman (D))	Property Taxation: Assessments: Affordable Housing		Provides that existing law requires the county assessor to consider, when valuing real property for property taxation purposes, the effect of any enforceable restrictions to which the use of the land may be subjected. Establishes, for purposes of valuing property by the county assessor, a rebuttable presumption that, at the time of purchase, an assessor shall not include the value of the deed of trust. Makes a technical, nonsubstantive change to those provisions.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 1879 (Gipson (D))	Property Taxation: Filing		Provides that existing law requires a person owning taxable personal property to file annually a signed property statement declared to be true under the penalty of perjury with the assessor. Provides that existing law authorizes a property statement to be filed with the assessor through the U.S. mail, properly addressed with postage prepaid. Authorizes the statement to be filed through U.S. mail provided it is mailed in a manner that includes a postmark and is properly addressed with postage prepaid.	06/26/2024: From SENATE Committee on REVENUE AND TAXATION: Do pass to Committee on APPROPRIATIONS.
CA AB 1881 (Davies (R))	California Coastal Commission: Scientific Panel		Provides that the California Coastal Act requires the California Coastal Commission, if it has sufficient resources, to establish one or more scientific panels to review technical documents and reports. Includes persons with expertise and training in the topic of coastal erosion as part of the composition of the panel. Encourages the commission to use innovative techniques to increase effective communication between the commission and the scientific community, including the use of existing grant programs.	07/15/2024: Chaptered by Secretary of State. Chapter No. 2024-088
CA AB 1889 (Friedman (D))	Conservation Element: Wildlife and Habitat Connectivity		Requires the conservation element of a city or county comprehensive general plan to consider the effect of development within the jurisdiction on the movement of wildlife and habitat connectivity. Requires the conservation element, upon the next update of one or more elements on or after specified date, to, among other things, identify and analyze connectivity areas, permeability, and natural landscape areas within the jurisdiction, and to identify and analyze existing or planned wildlife passage features.	06/25/2024: From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 1890 (Patterson J (R))	Public Works: Prevailing Wage		Relates to existing law which requires an entity awarding a public works contract to provide notice to the Department of Industrial Relations. Requires the awarding body to provide notice to the department if there is a change in the identity of a contractor or subcontractor performing the project or, within 30 days, if the total amount of the contract change exceeds \$10,000.	06/18/2024: In SENATE. Read second time. To third reading.
CA AB 1893 (Wicks (D))	Housing Accountability Act: Housing Disapprovals		Provides that the Housing Accountability Act allows a local agency to disapprove a housing development project that is inconsistent with the jurisdiction's zoning ordinances and general plan land use designation. Revises the definition of disapprove the housing development project. Provides that an agency disapproves the project if it undertakes an unjustified, dilatory, or egregious course of conduct from which a reasonable person would conclude that the agency effectively disapproves the proposed project.	07/03/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 1921 (Papan (D))	Energy: Renewable Electrical Generation Facilities		Revises the definition of renewable electrical generation facility to include a facility that uses fuel cells or linear generators that use specified fuels. Imposes a state-mandated local program.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 1976 (Haney (D))	Occupational Safety and Health Standards: First Aid		Requires the Occupational Safety and Health Standards Board to draft a rulemaking proposal to revise a regulation on first aid materials to require first aid materials in a workplace to include naloxone hydrochloride or another opioid antagonist approved by the Food and Drug Administration. Requires the standards board, in drafting the rulemaking proposal, to consider, and provide guidance to employers on, proper storage of the opioid antagonist.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 2001 (Gallagher (R))	Political Reform Act of 1974		Provides that existing law requires a local government agency to post a copy of any statement, report, or other document required to be filed with the agency under the Political Reform Act of 1974, within 72 hours of receiving the filing in paper format. Requires a local government agency that receives a filing that was required to be filed with a different agency or person, and not the agency that received the filing, to notify the filer of the error.	07/15/2024: Chaptered by Secretary of State. Chapter No. 2024-097

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2037 (Papan (D))	Weights and Measures: Electric Vehicle Chargers		Authorizes a county sealer to test and verify as correct any electric vehicle charger operated by a public agency that is located in the county. Requires a county sealer, upon testing and finding that a charger operated by a public agency is incorrect, to cause it to be marked out of order and requires the charger to be repaired or corrected. Exempts a charger from testing and verification by a sealer if it is owned by a local publicly owned electric utility and certain requirements are met.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2041 (Bonta M (D))	Political Reform Act of 1974: Campaign Funds: Security		Authorizes a candidate or elected officer to use campaign funds to pay or reimburse the State for the reasonable costs of installing and monitoring a home or office electronic security system or for another tangible item related to security. Requires the candidate or elected officer to maintain detailed accounts, records, bills, and receipts relating to an expenditure or reimbursement for security. Provides that the bill does not authorize campaign funds to be used to pay for firearms.	06/25/2024: In SENATE. Read second time. To third reading.
CA AB 2060 (Soria (D))	Lake and Streambed Alteration Agreements: Exemptions		Provides that existing law prohibits a person, government agency, or a public utility from substantially diverting or obstructing the natural flow of any river, stream, or lake unless prescribed requirements are met. Exempts the temporary operation of existing infrastructure or temporary pumps being used to divert water to groundwater recharge if certain conditions are met. Requires the State Water Resources Control Board to compile information on the diversions and post the information on its website.	07/01/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2091 (Grayson (D))	California Environmental Quality Act: Exemption		Provides that the California Environmental Quality Act requires a lead agency to prepare and certify the completion of an environmental impact report on certain projects. Exempts from CEQA a change in use approved by a lead agency that is a park district to allow public access to preexisting paved and natural surface roads, preexisting trails, preexisting pathways, and preexisting disturbed areas for vehicle parking in areas used exclusively for nonmotorized recreation, if certain conditions are met.	06/27/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2095 (Maienschein (D))	Publication: Newspapers of General Circulation		Requires any public notice that is legally required to be published in a newspaper of general circulation to be published in the newspaper's print publication on the newspaper's website or electronic newspaper available on the internet, and on a statewide website. Prohibits a newspaper from charging an additional fee or surcharge specifically for posting to the statewide website. Prohibits the statewide website from selling or sharing the personal information of consumers or using it for certain purposes.	06/27/2024: In SENATE. Read second time and amended. To third reading.
CA AB 2123 (Papan (D))	Disability Compensation: Paid Family Leave		Makes that authorization and related provisions inapplicable to any disability commencing on or after specified date. Provides as a condition of an employee's initial receipt of family temporary disability insurance benefits during any 12-month period in which an employee is eligible for these benefits, an employer may require an employee to take up to two weeks of earned but unused vacation leave prior to the employee's initial receipt of these benefits.	07/03/2024: In SENATE. Read third time and amended. To second reading.
CA AB 2135 (Schiavo (D))	Public Works Contracts: Wage and Penalty Assessment		Provides that existing law requires the Labor Commissioner to issue a civil wage and penalty assessment to a contractor or subcontractor if there has been a violation of the laws regulating public works contracts, including the payment of prevailing wages. Provides that existing law requires the assessment to be served not later than 18 months after the filing of a valid notice of completion. Extends the time period. Authorizes an extension for good cause, including ongoing investigation and assessment.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2149 (Connolly (D))	Gates: Standards: Inspection		Relates to electrified security fences. Requires a regulated gate to meet certain standards. Requires each building department to update its code requirements to ensure that any newly installed regulated gate in its jurisdiction meets those standards. Authorizes a district attorney, county counsel, or city attorney to file a complaint for injunctive relief, or seek a civil penalty, against an owner of a regulated gate for a violation of these provisions.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2182 (Haney (D))	Public Works		Provides that existing law requires the Labor Commissioner to investigate allegations that a contractor or subcontractor violated the law regulating public works projects. Requires job sites to give reasonable access to representatives of a joint labor-management committee in order to monitor compliance with the prevailing wage and apprenticeship requirements. Exempts an awarding body, contractor or subcontractor from liability for any violations of safety guidelines caused by a committee's representative.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2196 (Connolly (D))	Beaver Restoration		Establishes in the Department of Fish and Wildlife a program to promote beaver restoration across the State.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 2213 (Rubio (D))	Redevelopment: Oversight Boards		Provides that existing law dissolved redevelopment agencies and community development agencies as of specified date, and provides for the designation of successor agencies to wind down the affairs of the dissolved redevelopment agencies, subject to review by oversight boards. Requires, if a successor agency has territory located within more than one county board of supervisors' district, the county board of supervisors to determine which oversight board has jurisdiction over that successor agency.	07/02/2024: Chaptered by Secretary of State. Chapter No. 2024-063

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2214 (Bauer-Kahan (D))	Ocean Protection Council: Microplastics		Requires the Ocean Protection Council to establish and lead an interagency coordination group, and requires the council, in coordination with the interagency coordination group, to identify and recommend to the Legislature, on or before specified date, statutory changes that are needed to implement the recommendations described in the Statewide Microplastics Strategy. Requires the council to adopt a workplan outlining which participating agencies within the group will implement the recommendations.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 2216 (Haney (D))	Tenancy: Common Household Pets		Prohibits a landlord, before the landlord has accepted a prospective tenant's application for a dwelling unit, from asking the prospective tenant or otherwise inquiring into whether the prospective tenant plans to own or otherwise maintain a common household pet in the tenant's dwelling unit. Requires a prospective tenant, no later than specified hours before entering into a rental agreement, to inform the landlord if the prospective tenant plans to own or otherwise maintain a common household pet.	06/05/2024: To SENATE Committee on JUDICIARY.
CA AB 2232 (Maienschein (D))	Accessibility to emergency information and services		Specifies that, upon the next update to a city or county's emergency plan, whenever a city or county designates any number of emergency warming centers, that it also, to the extent practicable, designate at least one warming center that can accommodate persons with pets.	06/14/2024: Chaptered by Secretary of State. Chapter No. 2024-014
CA AB 2243 (Wicks (D))	Affordable Housing and High Road Jobs Act of 2022		Provides that the Affordable Housing and High Road Jobs Act of 2022 prohibits a housing development from being subject to the streamlined, ministerial approval process under certain conditions. Prohibits a housing development from being subject to the streamlined, ministerial approval process if it was designated for industrial use in the latest version of a local government's general plan adopted before the specified date, and residential uses are not principally permitted on the site.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2257 (Wilson (D))	Local Government: Property-Related Water and Sewer Fees	Support	Relates to requirements with respect to the levying of assessments and property-related fees and charges by a local agency. Prohibits, if an agency complies with specified procedures, a person or entity from bringing a judicial action or proceeding alleging noncompliance with such provisions for any new, increased, or extended fee or assessment, unless that person or entity has timely submitted to the agency a written objection to that fee or assessment that specifies the grounds for alleging noncompliance.	07/03/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass as amended.
CA AB 2278 (Carrillo (D))	Rent Increases: Percentage Change in the Cost of Living		Requires the Attorney General to, by the specified date of each year, publish the maximum allowable rent increase on its internet website for each metropolitan area.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.
CA AB 2285 (Rendon (D))	Natural Resources: Equitable Outdoor Access: 30x30 Goal		Relates to the goal to conserve at least 30 percent of State lands and waters by 2030. Provides that agencies and the Legislature, when distributing resources, shall aspire to recognize the goals and benefits of 30x30 and Outdoors for All, and maximize investment in historically underserved urban communities. Requires funding agencies, including the Wildlife Conservation Board, to allow the funding program's authorizing statutes for urban nature-based projects on degraded lands to be eligible for funds.	06/24/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.
CA AB 2302 (Addis (D))	Open Meetings: Local Agencies: Teleconferences		Relates to existing law which imposes prescribed restrictions on remote participation by a member of a legislative body of a local agency under alternative teleconferencing provisions. Revises the limits, instead prohibiting such participation for more than a specified number of meetings per year, based on how frequently the legislative body regularly meets.	06/06/2024: In SENATE. Read second time. To third reading.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2304 (Lee (D))	Unlawful Detainer: Case Records		Provides that existing law requires the court clerk to allow specified persons access to case records, including the court file, index, and register of actions, filed in unlawful detainer actions that are limited civil cases. Provides that existing law exempts from these requirements records in a case that seeks to terminate a mobilehome park tenancy under certain conditions. Deletes the exemption for access to case records for cases that seek to terminate a mobilehome tenancy.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2311 (Bennett (D))	Greenhouse Gas Reduction Fund: Grant Program		Expands the grant program promoting food waste prevention to provide financial assistance for the recovery of edible food, as specified. Specifies that eligible infrastructure projects includes the construction or expansion of facilities to help develop, implement, or expand edible food waste recovery operations.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 2318 (Papan (D))	State Water Pollution Cleanup and Abatement Account		Requires the State Water Resources Control Board to, no later than January 1 of each year, post on its internet website a report describing the receipts and expenditures of the State Water Pollution Cleanup and Abatement Account.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 2320 (Irwin (D))	Wildlife Connectivity and Climate Adaptation Act		Provides for the Wildlife Connectivity and Climate Adaptation Act. Makes it the policy of the State to preserve, protect and restore wildlife habitats and biodiversity through the acquisition and restoration of blocks of habitat and natural lands that are connected by wildlife corridors and the infrastructure that supports such corridors. Provides that acquire and acquisition for certain purposes do not refer to the use of eminent domain for certain lands identified by the State as having mineral resources.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2330 (Holden (D))	Endangered Species: Incidental Take: Wildfire		Provides that under the California Endangered Species Act, the Department of Fish and Wildlife may authorize the take of listed species by certain entities. Authorizes a city, county, special district, or other local agency to submit to the department a wildfire preparedness plan. Requires the plan to include a brief description of planned wildfire preparedness activities, the approximate dates for the activities, and a description of the candidate, endangered, and threatened species within the plan area.	07/01/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2346 (Lee (D))	Organic Waste Reduction Regulations: Procurement		Authorizes local jurisdictions to be credited for the procurement of recovered organic waste products through an agreement with a direct service provider, and allows the direct service provider agreement to include the procurement of recovered organic waste products on a prospective basis as long as the purchase of those products occurs during the year for which the local jurisdiction seeks credit, and under other specified circumstances.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2355 (Carrillo (D))	Political Reform Act of 1974: Political Advertisements		Requires a committee that creates, originally publishes, or originally distributes a qualified political advertisement to include in the advertisement a specified disclosure that the advertisement was generated or substantially altered using artificial intelligence. Specifies that any image, audio, video, or other media is generated or substantially altered using artificial intelligence if it is entirely created using artificial intelligence and would falsely appear to a reasonable person to be authentic.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2388 (Patterson J (R))	Information Practices Act of 1977: Personal Information		Provides that the Information Practices Act prescribes a set of requirements, prohibitions and remedies applicable to certain State agencies with regard to their collection, storage and disclosure of personal information. Revises the definition of personal information to mean any information that identifies, relates to, describes, or is capable of being associated with a particular individual including, among other things, any other financial information, medical information or health insurance information.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspend File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2421 (Low (D))	Employer-Employee Relations: Confidential Communication		Prohibits local public agency employer, a State employer, a judicial employer, a public school employer, a higher education employer, or certain districts from questioning any employee or employee representative regarding communications made in confidence between an employee and a representative. Provides that such communications would not be confidential if the representative was a witness or party to any of the events forming the basis of a potential administrative disciplinary or criminal investigation.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2427 (McCarty (D))	Electric Vehicle Charging Stations: Permitting		Requires the Governor's Office of Business and Economic Development to develop a model permitting checklist, model zoning ordinances, and best practices for permit costs and permit review timelines to help local governments permit curbside charging stations. Requires local agencies to, among other things, develop a checklist that includes all of the information required for a complete application for a permit or authorization to install an electric vehicle charging station within the public right-of-way.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 2440 (Reyes (D))	30x30 Goal: Partnering State Agencies		Requires the Natural Resources Agency to prioritize promoting and supporting partnering state agencies and departments, including, but not limited to, the Department of Parks and Recreation, in the acquisition and responsible stewardship of state land.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.
CA AB 2453 (Villapudua (D))	Weights and Measures: Electric Vehicle Supply Equipment		Relates to devices used to measure electricity sold as a motor vehicle fuel. Provides that existing law authorizes a device to be placed in service only by a sealer or a service agency. Prohibits requiring electric vehicle supply equipment to be retested or placed in service by a service agency or sealer, if the EVSE has previously been placed in service by a service agency or sealer, before the EVSE is used after receiving maintenance.	07/01/2024: From SENATE Committee on BUSINESS, PROFESSIONS AND ECON. DEVELOPMENT: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2493 (Pellerin (D))	Tenancy: Application Screening Fee		Provides that existing law authorizes a landlord or their agent, when they receive a request to rent a residential property, to charge an application screening fee to cover the cost of obtaining information about the applicant. Authorizes a landlord or their agent to charge the fee only if the landlord or their agent, at the time the fee is collected, offers an application screening process. Provides that the bill's provisions do not prevent a landlord from accepting a reusable tenant screening report.	06/24/2024: In SENATE. Read second time and amended. To third reading.
CA AB 2494 (Calderon (D))	Employer Notification: Continuation Coverage		Requires all employers, whether public or private, to provide a notice to employees, following termination or reduction in hours stating that the employee may be eligible for coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 and that the employee will receive an election notice from the plan administrator or group health plan. Authorizes an employer to provide the notification via hard copy or via email to an employee's email account.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2499 (Schiavo (D))	Employment: Unlawful Discrimination and Paid Sick Days		Provides that existing law, the Healthy Workplaces, Healthy Families Act of 2014, requires an employer to provide a specified employee who is a victim of domestic violence, sexual assault, or stalking with paid sick days for the above-described purposes for which existing law prohibits an employer from discharging, or in any manner discriminating or retaliating against, the employee. Expands this paid sick leave requirement.	07/03/2024: From SENATE Committee on LABOR, PUBLIC EMPLOYMENT AND RETIREMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 2501 (Alvarez (D))	Water Quality Control Plans: Donations and Grants		Authorizes the State Water Resources Control Board to accept moneys from donations, grants, or contributions, or through contractual agreements, from public agencies, for the purpose of planning, permitting, or providing technical support for projects of public benefit within the state board's or regional board's jurisdiction.	07/01/2024: In SENATE Committee on APPROPRIATIONS: To Suspense File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2515 (Papan (D))	Menstrual Products: Perfluoroalkyl and Polyfluoroalkyl	Support	Prohibits any person from manufacturing, distributing, selling, or offering for sale in the State any menstrual products that contain regulated PFAS. Authorizes the Department of Toxic Substances Control to issue a notice of violation under specified circumstances, including that the department has provided the manufacturer written notice of the alleged violation and the manufacturer has failed to take corrective or mitigating actions. Provides for civil penalties. Creates the T.A.M.P.O.N. Act Fund.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2522 (Carrillo (D))	Air Districts: Governing Boards: Compensation		Relates to the South Coast Air Quality Management District. Provides that existing law provides that the south coast district is governed by a district board and that each member of the board shall receive specified compensation. Raises limits of the compensation each member of the board receives to up to a specified amount for each day. Provides that the compensation of each member of the board may be increased beyond this amount by the board at an open regular meeting.	07/02/2024: In SENATE. Read second time and amended. To third reading.
CA AB 2533 (Carrillo J (D))	Accessory Dwelling Units: Junior Accessory Dwelling	Watch	Prohibits a local agency from denying a permit for an unpermitted accessory dwelling unit or junior accessory dwelling unit that was constructed before specified date for certain violations, unless the local agency makes a finding that correcting the violation is necessary to comply with conditions that would otherwise deem a building substandard. Prohibits a local agency from requiring a homeowner to pay impact fees or connection or capacity charges except under specified circumstances.	07/03/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 2552 (Friedman (D))	Pesticides: Anticoagulant Rodenticides		Prohibits the use of a first-generation anticoagulant rodenticide, defined as a pesticide product containing the active ingredients diphacinone, chlorophacinone, or warfarin, in a wildlife habitat area. Prohibits the use of chlorophacinone or warfarin in the State and requires chlorophacinone and warfarin to be considered restricted materials, unless the prohibition is suspended by the Director of Pesticide Regulation. Requires that certain civil penalties be deposited into the Poison-Free Wildlife Account.	06/27/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2557 (Ortega (D))	Local Agencies: Contracts for Special Services		Requires each board of supervisors that solicits for and enters into a specified contract for special services to post that contract and any related documents on its website. Requires each contract to include the objectives, desirables, and goals of the contract. Requires, before beginning a procurement process to contract for functions, duties, responsibilities, or services, the board to give reasonable written notice to the exclusive employee representative of the workforce affected by the contract.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2560 (Alvarez (D))	Density Bonus Law: California Coastal Act of 1976		Provides that the Density Bonus Law requires a city or county to provide a developer that proposes a housing development with a density bonus and other incentives if the developer agrees to construct specified percentages of units for lower income households. Provides that, in the coastal zone, the Law does not relieve a project from the requirement to obtain a coastal development permit. Requires any density bonus to be permitted in a manner that does not result in adverse impacts to coastal resources.	07/01/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2561 (McKinnor (D))	Local Public Employees: Vacant Positions		Relates to the Meyers-Milias-Brown Act. Requires each public agency with high vacancy rates for more than a specified number of days, at the request of the recognized employee organization, to promptly meet and confer with the representative of the recognized employee organization within a specified number of days about substantive strategies to fill vacancies and to hold a public hearing within a specified number of days about high vacancy rates and specified related matters.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2599 (Assembly Environmental Safety and Toxic Materials Committee)	Water: Public Beaches: Discontinuation	Support	Provides that existing law requires the State Department of Public Health to establish minimum standards for the sanitation of public beaches. Provides that existing law requires the testing of the waters adjacent to all public beaches for microbiological contaminants. Provides that a local health officer may only rely on data from test results from other parties if that data meets the same quality requirements that apply to local agencies pursuant to specified regulations and standards.	07/02/2024: In SENATE. Read second time. To Consent Calendar.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2622 (Carrillo J (D))	Contractors: Exemptions: Work and Advertisements		Provides that existing law exempts from the Contractors State License Law a work or operation on one undertaking or project by one or more contracts, if the aggregate contract price for labor, material, and all other items is under a specified amount. Revises the exemption by increasing the maximum aggregate contract price to a specified amount and specifying that the exemption would apply if the work or operation does not require a building permit.	07/01/2024: From SENATE Committee on BUSINESS, PROFESSIONS AND ECON. DEVELOPMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 2631 (Fong M (D))	Local Agencies: Ethics Training		Requires the Fair Political Practices Commission, in consultation with the Attorney General, to create, maintain, and make available to local agency officials an ethics training course.	07/02/2024: From SENATE Committee on ELECTIONS AND CONSTITUTIONAL AMENDMENTS: Do pass to Committee on APPROPRIATIONS.
CA AB 2661 (Soria (D))	Electricity: Transmission Facility Planning: Westlands		Authorizes the Westlands Water District to provide, generate, and deliver solar photovoltaic or hydroelectric electricity and to construct, operate, and maintain works, facilities, improvements, and property necessary or convenient for generating and delivering that electricity. Requires the district to report the amount of income, and the purposes for expenditure of that income, from these electricity facilities in a specified report.	07/03/2024: In SENATE. Read second time. To third reading.
CA AB 2663 (Grayson (D))	Inclusionary Housing: Fees: Reports		Provides that the Mitigation Fee Act imposes various requirements with respect to local agency fees as a condition of approval of a development project. Requires an agency that collects inclusionary housing in-lieu fees and has a website to annually post the amount of those fees collected in the previous year and whether those fees are intended to be used for a project. Defines inclusionary housing in-lieu fees as fees imposed as an alternative means of compliance with an inclusionary housing requirement.	07/03/2024: In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY for concurrence.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2684 (Bryan (D))	Safety Element: Extreme Heat		Provides that the Planning and Zoning Law requires the legislative body of a city or county to adopt a plan that includes various elements, including a safety element for the protection of the community from risks associated with the effects of various geologic and seismic hazards, flooding, and wildland and urban fires. Authorizes a city or county that has adopted an extreme heat action plan or other document that fulfills commensurate goals and objectives to use that information in the safety element.	06/18/2024: In SENATE. Read second time. To third reading.
CA AB 2696 (Rendon (D))	Labor-Related Liabilities: Direct Contractor		Authorizes a joint labor-management cooperation committee to bring an action in any court of competent jurisdiction against a direct contractor to enforce liability for any unpaid wage, fringe or other benefit payment or contribution, penalties or liquidated damages, and interest owed by the direct contractor on account of the performance of the labor on private work.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2705 (Ortega (D))	Labor Commissioner		Relates to work performed on a public works project. Provides that existing law requires the Labor Commissioner, after determining there has been a violation of minimum wage requirements, to issue a civil wage and penalty assessment to the contractor or subcontractor, or both. Provides for a limitations period for any action on a payment bond filed by the Labor Commissioner to be governed by the same timing requirements for the Labor Commissioner to serve a civil wage and penalty assessment.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 2715 (Boerner (D))	Ralph M. Brown Act: Closed Sessions		Provides that existing law authorizes a legislative body to hold a closed session with specified individuals on, among other things, matters posing a threat to the security of essential public services. Authorizes a legislative body to hold a closed session with other law enforcement or security personnel and to hold a closed session on a threat to critical infrastructure controls or critical infrastructure information relating to cybersecurity.	06/27/2024: In SENATE. Read second time. To third reading.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2716 (Bryan (D))	Oil and Gas: Low-Production Wells: Sensitive Receptors		Requires the Geologic Energy Management Division to identify all low-production wells that are located within a specified distance of a sensitive receptor, and determine the length of time each of those wells has continuously been a low-production well. Defines low-production wells. Requires the division to notify the owners of wells identified as low-production wells. Requires administrative penalties for operating low-production wells to be deposited into the Oil and Gas Environmental Remediation Account.	06/25/2024: From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
CA AB 2729 (Patterson J (R))	Residential Fees and Charges	Watch	Limits the utility service fees authorized to be collected at the time an application for utility service is received to utility service fees related to capacity charge connections. Authorizes a local agency to require payment of fees or charges at earlier times if certain circumstances are satisfied, including authorizing the local agency to require the payment of those fees and charges at the time the local agency issues a permit.	07/02/2024: From SENATE Committee on HOUSING: Do pass as amended.
CA AB 2747 (Haney (D))	Tenancy: Credit Reporting		Requires a landlord of a dwelling unit of residential real property to offer any tenant obligated on a lease the option of having the tenant's positive rental payment information reported to at least one nationwide consumer reporting agency. Authorizes a tenant who elects to have positive rental payment information reported to subsequently file a written request to stop that reporting and requires the landlord to comply with that request.	06/20/2024: In SENATE. Read second time. To third reading.
CA AB 2754 (Rendon (D))	Employment Contracts and Agreements: Sufficient Funds		Provides that existing law requires the Division of Labor Standards Enforcement to post on its internet web page a list of port drayage motor carriers that have violated a labor or employment law. Requires a customer that engages or uses a port drayage motor carrier to share with the carrier all civil legal responsibility and civil liability owed to a port drayage driver or the State arising out of the misclassification of the driver as an independent contractor.	07/02/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2801 (Friedman (D))	Tenancy: Security Deposits		Provides that existing law requires a landlord to notify, within a reasonable time after notification of either party's intention to terminate the tenancy, the tenant of the option to request an initial inspection. Provides that the inspection and related requirements do not prevent a landlord from using the security for specified purposes that occur between completion of inspection and when possession of the unit is returned or that were not identified during the inspection due to the tenant's possessions.	06/13/2024: In SENATE. Read second time. To third reading.
CA AB 2827 (Reyes (D))	Invasive Species: Prevention		Declares that it is a primary goal of the State to prevent the introduction, and suppress the spread, of invasive species within its borders. Requires, in carrying out this goal, the Department of Food and Agriculture, in collaboration with relevant State agencies and stakeholders, to develop and implement strategies to detect, control, monitor, and eradicate invasive species to protect the State's agriculture, environment, and natural resources.	06/25/2024: From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
CA AB 2875 (Friedman (D))	Wetlands: State Policy		Declares that it is the policy of the state to ensure no net loss and long-term gain in the quantity, quality, and permanence of wetlands acreage and values in California. Makes related legislative findings and declarations.	06/19/2024: In SENATE. Read second time. To third reading.
CA AB 2902 (Wood (D))	Organic Waste: Reduction Regulations: Exemptions		Provides that existing law requires the State Air Resources Board to implement a comprehensive strategy to reduce emissions of short-lived climate pollutants to reduce statewide methane emissions, and provides a certain exemption for rural jurisdictions. Extends the rural jurisdiction exemption. Requires the Department of Resources Recycling and Recovery to adopt regulations to establish a process to renew the exemption after specified date. Exempts bear bins from the collection bin lid color requirements.	06/20/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 2951 (Cervantes (D))	Voter Registration: Cancellation		Requires the Secretary of State to submit an update on the specified date, and on the first of each month thereafter until the specified date, to specified committees of the Legislature detailing its efforts and progress in fully implementing and achieving compliance with specified laws regarding voting rights disqualifications and restorations.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 2958 (Calderon (D))	State Air Resources Board: Board Members: Compensation		Repeals the prohibition on compensation of the members of the State Air Resources Board from air districts. Specifies that those members are to receive the annual salary provided to other members of the state board. Repeals the per diem amount provided to elected official members of the state board.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 2962 (Papan (D))	Wholesale Regional Water System Security		Provides that the Wholesale Regional Water System Security and Reliability Act requires the City and County of San Francisco to adopt a specified program of capital improvement projects designed to restore and improve the bay area regional water system. Extends the repeal date of the act and makes technical nonsubstantive changes.	06/26/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 3007 (Hoover (R))	California Environmental Quality Act		Provides that existing law requires project applicants and public agencies subject to the California Environmental Quality Act to pay a filing fee to the Department of Fish and Wildlife for each proposed project, and requires the county clerk of each county and the Office of Planning and Research to maintain a record of all environmental documents received. Requires the clerk and the office to maintain the record electronically. Authorizes the clerk and office to maintain the record on paper.	07/03/2024: From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
CA AB 3012 (Grayson (D))	Development Fees: Fee Schedule Template: Fee Estimate		Provides that the Permit Streamlining Act requires a city, county, or special district that has a website to make available on its website certain information, including its current schedule of fees and exactions. Requires a city or county that has a website to make a fee estimate tool that the public can use to calculate an estimate of fees and exactions for a proposed housing development project available on its website. Authorizes the city or county to choose the format of the fee estimate tool.	07/02/2024: From SENATE Committee on HOUSING: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 3013 (Maienschein (D))	Courts: Remote Court Reporting		Authorizes the Superior Courts of the Counties of Alameda, Los Angeles, Mendocino, Monterey, Orange, San Diego, San Joaquin, San Mateo, Santa Clara, Tulare, and Ventura to conduct pilot projects to study the potential use of remote court reporting to make the verbatim record of certain court proceedings. Requires, if the superior court elects to conduct a pilot project, the remote court reporting to be performed only by official reporters who meet specified qualifications and conditions.	06/25/2024: From SENATE Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA AB 3017 (Hart (D))	State-Funded Assistance Grants and Contracts		Provides that existing law authorizes specified State departments and authorities, upon determination that an advance payment is essential for the effective implementation of a program, to advance to a community-based private nonprofit agency with which it has contracted for the delivery of services funds. Includes within the definition of a recipient entity a federally recognized Indian tribe whose territorial boundaries lie wholly or partially within the State.	05/28/2024: From SENATE Committee on GOVERNMENTAL ORGANIZATION: Do pass to Committee on APPROPRIATIONS.
CA AB 3048 (Lowenthal (D))	California Consumer Privacy Act of 2018		Prohibits a business from developing or maintaining a browser that does not include a setting that enables a consumer to send an opt-out preference signal to businesses with which the consumer interacts through the browser and would, only upon adoption of certain regulations by the agency, prohibit a business from developing or maintaining a mobile operating system through which a consumer interacts with a business that does not include a setting that enables the consumer to send an opt-out preference.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 3057 (Wilson (D))	Environmental Quality Act: Exemption: Dwelling Units		Provides that the California Environmental Quality Act exempts from its requirements the adoption of an ordinance by a city or county to issue a zoning variance or a special use or conditional use permit for a dwelling unit to be constructed, or which is attached to or detached from, a primary residence on a parcel zoned for a single-family residence. Expands exemption to include the adoption of an ordinance to provide for the creation of junior accessory dwelling units in single-family residential zones.	07/02/2024: From SENATE Committee on HOUSING: Do pass to Consent Calendar.

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Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 3090 (Maienschein (D))	Drinking Water Standards: Emergency Notification Plan		Provides that existing law prohibits a person from operating a public water system without an emergency notification plan that has been approved by the State Water Resources Control Board. Authorizes and encourages a public water system, when updating a plan, to notify water users by means of certain communications technology, including, but not limited to, text messages, email, or social media. Provides that a permit, variance, or exemption may not be issued or amended until a plan has been approved.	07/02/2024: Chaptered by Secretary of State. Chapter No. 2024-068
CA AB 3111 (Calderon (D))	Distributed Energy Resources		Requires, as part of an application submitted for a permit to install or interconnect a distributed energy resource or an aggregated distributed energy resource, or at the time an aggregated distributed energy resource program is initiated, the applicant or aggregator to provide notice to the Energy Commission that contains specified information about the distributed energy resources, aggregated distributed energy resources, or aggregation program.	07/03/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 3121 (Hart (D))	Urban Retail Water Suppliers: Informational Order	Watch	Provides that existing law authorizes the State Water Resources Control Board to issue informational orders pertaining to water production, water use, and water conservation to an urban retail water supplier that does not meet its urban water use objective. Provides that the date the board is authorized to issue informational orders is on or after specified date, the date to issue a written notice is on or after specified date, and the date to issue a conservation order is on or after specified date.	06/27/2024: In SENATE. From Consent Calendar. To third reading.
CA AB 3130 (Quirk-Silva (D))	Public Officers: Contracts: Financial Interest		Provides that existing law prohibits certain public officials from being financially interested in any contract made by them in their official capacity, or by any body or board of which they are members. Requires a member of a board of supervisors to disclose a known family relationship with an officer or employee of a nonprofit entity before the board of supervisors appropriates money to that nonprofit entity.	06/27/2024: In SENATE. Read second time. To third reading.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 3150 (Quirk-Silva (D))	Fire Safety: Fire Hazard Severity Zones: Defensible		Revises and recasts the provisions applicable to fire hazard severity zones in state responsibility areas and in areas that are not state responsibility areas. Requires the State Fire Marshal, no less than once every five years, to both identify areas in the state as moderate, high, and very high fire hazard severity zones, and review and make recommendations relative to these designations.	06/25/2024: From SENATE Committee on GOVERNMENTAL ORGANIZATION: Do pass to Committee on APPROPRIATIONS.
CA AB 3177 (Carrillo (D))	Mitigation Fee Act: Land Dedications		Prohibits a local agency from imposing a land dedication requirement on a housing development to widen a roadway if the requirement is for the purpose of mitigating vehicular traffic impacts, achieving an adopted traffic level of service related to vehicular traffic, or achieving a desired road width. Authorizes a local agency to impose a land dedication requirement on a housing development if the development is not located in a transit priority area and the development has a certain linear street frontage.	07/02/2024: From SENATE Committee on HOUSING: Do pass to Committee on APPROPRIATIONS.
CA AB 3190 (Haney (D))	Public Works		Provides that existing law requires that not less than the general prevailing rate of per diem wages be paid to workers employed on public works projects. Expands the definition of paid for in whole or in part out of public funds to include projects paid using credits against a tax, including certain low-income housing tax credits. Exempts from public works provisions, private residential projects built on private property when the public funds are less than a specified amount for a certain project.	06/26/2024: From SENATE Committee on LABOR, PUBLIC EMPLOYMENT AND RETIREMENT: Do pass to Committee on APPROPRIATIONS.
CA AB 3198 (Garcia E (D))	Joint Powers Agreements: Retail Electric Services		Relates to the Joint Exercise of Powers Act. Authorizes a public agency with the authority to provide retail electric services to enter into a joint powers agreement with one or more public agencies with jurisdiction within the Coachella Valley Service Area to jointly exercise the authority to provide retail electric services notwithstanding an inability of a party to the joint powers agreement to exercise that power independently.	07/03/2024: From SENATE Committee on LOCAL GOVERNMENT: Do pass.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA AB 3227 (Alvarez (D))	California Environmental Quality Act: Exemption		Exempts, if certain conditions are met, from the provisions of the California Environmental Quality Act the routine maintenance of stormwater facilities that are fully concrete or that have a conveyance capacity of less than a 100-year storm event. Requires, if the lead agency determines that a project is not subject to CEQA and determines to approve or carry out the project, the agency to file a notice with the State Clearinghouse in the Office of Planning and Research and with the county clerk.	06/25/2024: From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
CA AB 3238 (Garcia E (D))	California Environmental Quality Act: Electrical		Provides that existing law prohibits an electrical corporation from beginning the construction of a line, plant, or system, or extensions of those facilities without first having to obtain from the Public Utilities Commission a certificate that the present or future convenience and necessity require or will require the construction. Designates, for electrical infrastructure projects, the commission as the lead agency for purposes of the California Environmental Quality Act.	07/08/2024: In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA AB 3277 (Assembly Local Government Committee)	Local Agency Formation Commission: Districts: Property		Provides that existing law requires proceedings for the formation of a district to be conducted as authorized by the principal act of the proposed district, and authorizes the local agency formation commission in each county to serve as the conducting authority. Requires a commission to determine the amount of property tax revenue to be exchanged by an affected local agency if the proposal includes the formation of a district and the applicant is seeking a share of the 1 percent ad valorem property taxes.	07/02/2024: Chaptered by Secretary of State. Chapter No. 2024-070
CA ACA 2 (Alanis (R))	Water Resiliency Act of 2024		Requires the Treasurer to annually transfer an amount equal to a specified percent of all State revenues from the General Fund to the State Water Resiliency Trust Fund. Appropriates moneys in the fund to the State Water Commission for its actual costs of specified water infrastructure projects. Requires the State Auditor to annually conduct a programmatic review and an audit of expenditures from the Trust Fund and to report those findings.	03/06/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA ACA 16 (Bryan (D))	Environmental Rights		Amends the California Constitution to declare that the people have a right to clean air and water and a healthy environment considering the general well-being and other needs of the people. Specifies that the principles inherent in these rights shall serve as a guide to all branches of government in the performance of their official duties and that these rights shall inure to all people in equal measure and shall not be construed or applied in a manner inconsistent with duly enacted laws.	06/06/2024: In ASSEMBLY. Read third time and amended. To third reading.
CA SB 74 (Dodd (D))	Office of Wildfire Technology Research and Development		Provides that existing law, until the specified date, establishes the Office of Wildfire Technology Research and Development in State government within the Department of Forestry and Fire Protection to study, test, and advise regarding procurement of emerging technologies and tools in order to more effectively prevent and suppress wildfires within the State. Deletes the specified sunset date.	06/24/2024: From ASSEMBLY Committee on EMERGENCY MANAGEMENT: Do pass to Committee on APPROPRIATIONS.
CA SB 231 (Hurtado (D))	Department of Water Resources: Water Supply Forecasting		Requires the Department of Water Resources to inventory its existing drought mitigation and response plans and submit a report to the Legislature identifying these plans and their purposes by specified date. Requires the report to include a recommendation on whether there is a need for a new comprehensive, long-term plan for mitigating and responding to the effects of drought at the State level.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 245 (Hurtado (D))	California Food Assistance Program: Eligibility		Provides that under existing law, to become operative on the date that the State Department of Social Services notifies the Legislature that the Statewide Automated Welfare System has been updated, makes an individual 55 or older eligible for CalFresh if the individual's immigration status is the sole basis for their ineligibility for CalFresh benefits. Makes, commencing on specified date, any individual eligible for the program if the individual's immigration status is the sole basis for ineligibility.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 248 (Newman (D))	Political Reform Act of 1974: Disclosures		Requires a candidate for elective office to file, when the candidate files a declaration of candidacy, a form to disclose the candidate's prior education and work history, and history of military service, if any. Requires the Fair Political Practices Commission to create a form for this purpose. Requires the Secretary of State to post on its website a copy of completed forms submitted by candidates, making such forms available to the public for a specified number of years from the date of the election.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 251 (Newman (D))	Candidates' Statements: False Statements		Provides that existing law prohibits a candidate for nonpartisan elective office, or an incumbent in a recall election, to knowingly make a false statement of material fact in the candidate's statement with the intent to mislead the voters in connection with the candidate's campaign for nomination or election to an office. Provides that a violation of this prohibition is punishable by a fine. Increases the maximum fine amount.	06/17/2024: In ASSEMBLY. From Consent Calendar. To third reading.
CA SB 265 (Hurtado (D))	Cybersecurity Preparedness: Critical Infrastructure		Requires the Office of Emergency Services to direct the California Cybersecurity Integration Center to prepare, and Cal OES to submit to the Legislature, a strategic, multiyear outreach plan to assist critical infrastructure sectors, in their efforts to improve cybersecurity and an evaluation of options for providing grants or alternative forms of funding to, and potential voluntary actions that do not require funding and that assist, that sector in their efforts to improve cybersecurity preparedness.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
CA SB 299 (Limon (D))	Voter Registration: California New Motor Voter Program		Requires the Secretary of State and the Department of Motor Vehicles to develop a process for the department to use information from the statewide voter registration database to determine whether a person who submits a driver's application is already registered or preregistered to vote. Prohibits the department from providing a person the opportunity to attest to meeting voter eligibility requirements if the person provides a document during the transaction demonstrating that the person is not a citizen.	07/01/2024: From ASSEMBLY Committee on TRANSPORTATION: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 308 (Becker (D))	Net Zero Greenhouse Gas Emissions Goal		Requires the State Air Resources Board to adopt regulations to ensure the State achieves a carbon dioxide removals equivalent to at least a specified percent of statewide greenhouse gas emissions in the specified year in order to achieve net zero and net negative greenhouse gas emissions goals. Requires the Board to only approve carbon dioxide removal processes that meet certain requirements. Requires the Board to adopt regulations to implement the Carbon Capture, Removal, Utilization, and Storage Program.	07/08/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 328 (Dodd (D))	Political Reform Act of 1974: Contribution Limits		Relates to the Political Reform Act of 1974, which prohibits a person, other than a small contributor committee or political party committee, from making to a candidate for elective state, county, or city office, and prohibits those candidates from accepting from a person, a contribution totaling more than \$3,000 per election. Applies those contribution limits to candidates for school district, community college district, and other special district elections.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 366 (Caballero (D))	The California Water Plan: Long-Term Supply Targets	Support	Requires the Department of Water Resources to coordinate with specified agencies to develop a comprehensive plan for addressing the State's water needs and meeting specified long-term water supply targets for purposes of the State Water Plan. Requires the plan to include specified components, including a discussion of various strategies that may be pursued in order to meet the water supply targets, a discussion of agricultural water needs, and an analysis of the costs and benefits of achieving the targets.	06/26/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 393 (Glazer (D))	Civil Actions: Housing Development Projects		Provides that existing law provides that in a civil action brought by a plaintiff to challenge a housing development project that meets or exceeds the requirements for low or moderate-income housing, a defendant may seek an order requiring the plaintiff to furnish an undertaking as security for costs and damages. Requires the motion to be made solely on the ground that the action was brought in bad faith, vexatiously, for the purpose of delay, or to thwart the low or moderate-income nature of the project.	07/03/2024: In ASSEMBLY. Read second time. To third reading.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 399 (Wahab (D))	Employer Communications: Intimidation		Prohibits, with specified exceptions, an employer from subjecting, or threatening to subject, an employee to discharge, discrimination, retaliation, or any other adverse action because the employee declines to attend an employer-sponsored meeting or affirmatively declines to participate in, receive, or listen to any communications with the employer or its agents or representatives, the purpose of which is to communicate the employer's opinion about religious or political matters.	06/19/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
CA SB 409 (Newman (D))	Elections: Candidate's Statement		Provides that existing law authorizes a candidate for statewide elective office who accepts the voluntary expenditure limits to purchase the space to place a statement in a State voter information guide. Requires the Secretary of State to establish, on or before specified date, a pilot program that would allow a candidate to include a QR code link to a video statement in the State voter information guide.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS. Held in committee and made a Two- year bill.
CA SB 422 (Portantino (D))	California Environmental Quality Act		Requires specified public agencies, at the time of adoption of a rule or regulation requiring the reduction in emissions of greenhouse gases, criteria air pollutants, or toxic air contaminants, to perform an environmental analysis of the reasonably foreseeable methods of compliance with the California Environmental Quality Act.	09/12/2023: In ASSEMBLY. To Inactive File.
CA SB 504 (Dodd (D))	Wildfires: Defensible Space: Grant Programs		Provides that existing law requires the Department of Forestry and Fire Protection to establish a local assistance grant program for fire prevention and home hardening education activities. Requires a person who owns, leases, controls, operates, or maintains a building or structure in the State responsibility area, regardless of location or forest and vegetation cover, to maintain defensible space of a specified number of feet from each side.	06/10/2024: From ASSEMBLY Committee on NATURAL RESOURCES: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 511 (Blakespear (D))	Greenhouse Gas Emissions Inventories		Provides that the California Global Warming Solutions Act requires the State Air Resources Board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan. Requires the Board to develop, and publish on its website, a report on greenhouse gas emissions inventories for the specified calendar year for each city, county, or city and county that requests inclusion in the report.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 518 (Wilk (R))	Elections: Certification of Results		Requires the elections official to submit the certified statement of the results of the election on the 30th calendar day following the election.	06/08/2023: To ASSEMBLY Committee on ELECTIONS.
CA SB 571 (Allen (D))	Fire Safety: Ingress and Egress Route Recommendations		Requires the Office of Planning and Research to conduct a study and prepare a report, including recommendations, that evaluates potential improvements to State standards for ingress and egress and evacuation routes for development in the event of a natural disaster. Requires the office to convene and consult with a working group that includes specified voluntary representatives, including from the Office of the State Fire Marshal.	07/08/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 597 (Glazer (D))	Building Standards: Rainwater Catchment Systems		Requires the Department of Housing and Community Development to conduct research and develop recommendations regarding building standards for the installation of rainwater catchment systems in newly constructed residential dwellings and authorizes the department to propose related building standards to the California Building Standards Commission for consideration. Authorizes the department to expend moneys from the Building Standards Administration Special Revolving Fund.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS. Held in committee and made a Two- year bill.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 611 (Menjivar (D))	Residential Rental Properties: Fees and Advertisements		Provides that existing law prohibits a landlord from demanding or receiving security in an amount or value in excess of an amount equal to one month's rent, in addition to any rent for the first month paid on or before initial occupancy. Requires, if a landlord or agent charges a service member a higher than standard or advertised security deposit, the lease agreement to include a statement of the amount of the higher fee and an explanation why the higher security deposit amount is being charged.	07/03/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 638 (Eggman (D))	Climate Resiliency and Flood Protection Bond Act	Support	Enacts the Climate Resiliency and Flood Protection Bond Act of 2024 which, if approved by the voters, would authorize the issuance of bonds in the amount of a specified amount pursuant to the State General Obligation Bond Law, for flood protection and climate resiliency projects. Provides that this bill is operative only if SB 867 of the 2023-24 Regular Session is enacted and takes effect on or before specified date.	06/28/2023: In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
CA SB 724 (Glazer (D))	Political Reform Act of 1974: Communications		Provides that the Political Reform Act of 1974 requires the disclosure of certain payments. Requires the disclosure of any payment of or promise to pay a specified amount or more for a communication that clearly identifies an elected State officer, and educates the public about the previous votes cast by the elected officer or about the source of campaign donations received by the elected officer, and that is disseminated, broadcast, or otherwise published within a specified number of days of an election.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS. Held in committee and made a Two-year bill.
CA SB 755 (Becker (D))	Energy Efficiency and Building Decarbonization Programs		Provides for the California's Layered Energy Applications for Residents (CLEAR) Act of 2023. Requires the State Energy Resources Conservation and Development Commission to develop and make publicly available an internet website for energy efficiency and building decarbonization programs administered by the Energy Commission, federal or local governmental agencies, and nonprofit organizations that are available in the State for residential buildings and residential electricity customers.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 769 (Gonzalez (D))	Local Government: Fiscal and Financial Training		Provides that existing law imposes ethics training and sexual harassment prevention training and education on specified local agency officials. Exempts a local agency official from the training requirements if they comply with specified criteria under existing law relating to eligibility for appointment or election to, and continuing education for, the office of county treasurer, county tax collector, or county treasurer-tax collector.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 778 (Ochoa Bogh (R))	Excavations: Subsurface Installations	Watch	Provides that existing law establishes the California Underground Facilities Safe Excavation Board for the enforcement and administration of the Dig Safe Act and requires the Governor to appoint a certain number of the board members. Revises the knowledge and experience requirements for a certain number of the members appointed by the Governor. Requires the operator to contact the excavator to gain clarification if the operator has a question about the location of the area proposed for excavation.	07/03/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 781 (Stern (D))	Methane Emissions: Natural Gas Producing Low Methane		Provides that existing law requires the State Air Resources Board to quantify and publish annually the amount of greenhouse gas emissions resulting from the loss or release of uncombusted natural gas to the atmosphere and emissions from natural gas flares during all processes associated with the production, processing, and transporting of natural gas imported into the State from out-of-state sources. Requires the board to request and incorporate certain information from utilities and other large gas users.	09/01/2023: In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
CA SB 830 (Smallwood-Cueva (D))	Public Works		Requires a contractor engaging a third-party, permanent, and offsite fabrication facility to fabricate custom sheet metal ducts for a public works project to enter into a contract with the facility that requires compliance with specified public works laws. Requires certified copies of payroll records for the offsite, custom fabrication of sheet metal ducts to be accompanied by a written time record of that work certified by each employee performing the work.	09/08/2023: In ASSEMBLY. To Inactive File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 863 (Allen (D))	Measures Proposed by the Legislature		Allows the Legislature to specify, in the text of a measure that proposes an amendment or revision of the Constitution, that the constitutional amendment or revision submitted to the people will appear on the ballot at an election other than the one described above if the election specified in the measure would occur at least 131 days after adoption of the measure by the Legislature.	06/27/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 900 (Umberg (D))	Common Interest Developments: Repair and Maintenance		Makes a common interest association responsible for repairs and replacements necessary to restore interrupted gas, heat, water, or electrical services that begin in the common area even if the matter extends into another area unless the service is required to be maintained, repaired, or replaced by a utility service provider. Authorizes, under certain circumstances, an association to obtain competitive financing to commence repairs without a vote and to levy an emergency assessment under certain conditions.	06/27/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 924 (Bradford (D))	Tenancy: Credit Reporting: Lower Income Households		Provides that existing law requires a landlord of an assisted housing development to offer tenants obligated on the lease of units in the development the option of having their rental payments reported to at least one consumer reporting agency through a written election of rent reporting. Permits a landlord, upon the agreement of the tenant, to provide the offer of rent reporting to the tenant by first-class United States mail or email.	06/20/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 937 (Wiener (D))	Development Projects: Permits and Other Entitlements	Watch	Provides that the Mitigation Fee Act regulates fees for development projects, fees for specific purposes, including water and sewer connection fees, and fees for solar energy systems, among others. Prohibits, for designated residential development projects, a local agency from requiring payment of fees or charges on the residential development for the construction of public improvements or facilities until the date the first certificate of occupancy or first temporary certificate of occupancy is issued.	06/27/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 942 (Becker (D))	California AI Transparency Act		Provides for the California AI Transparency Act. Requires a covered provider to create and make freely available an artificial intelligence detection tool that meets certain criteria. Requires a covered provider to offer the user an option to include a manifest disclosure in image, video, audio, or other digital content created or altered by the covered provider's generative artificial intelligence system that, among other things, identifies content as AI-generated content. Relates to civil action.	07/03/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 948 (Limon (D))	Political Reform Act of 1974: Contribution Limitations		Permits a candidate who receives a majority of the votes cast for an office at a primary election, where the candidate is elected to office without advancing to the general election, to carry over funds raised to a committee for any subsequent election to the same office without attributing funds to specific contributors. Specifies that a candidate who raises funds for the general election may transfer funds to a committee for any subsequent election, but funds must be attributed to specific contributors.	07/15/2024: Chaptered by Secretary of State. Chapter No. 2024-125
CA SB 958 (Dodd (D))	Surplus State Property: County of Napa		Authorizes the Director of General Services to sell or exchange the specified property by the specified date. Requires that the sale or exchange of the property known as Camp Coombs be separate from and subsequent to the sale or exchange. Makes legislative findings and declarations as to the necessity of a special statute for Napa County and the Napa County Regional Park and Open Space District. Appropriates funds.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
CA SB 961 (Wiener (D))	Vehicles: Safety Equipment		Provides that existing law prohibits a person from driving a vehicle upon a highway at a speed greater than the speed limit. Requires, commencing with the specified model year, certain new vehicles to be equipped with a passive intelligent speed assistance system that would utilize a brief, one-time, visual and audio signal to alert the driver each time the speed of the vehicle is more than a specified number of miles per hour over the speed limit. Provides that a violation would be a crime.	07/02/2024: From ASSEMBLY Committee on PRIVACY AND CONSUMER PROTECTION: Do pass to Assembly Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 984 (Wahab (D))	Public Agencies: Project Labor Agreements		Requires a state agency to identify and select a minimum of 3 major state construction projects that are required to be governed by a project labor agreement, as specified, and would define various terms for these purposes. Requires the Department of General Services, commencing specified date, to report to the Legislature about the use of project labor agreements, the advancement of community benefit goals, and apprenticeships, as specified.	06/24/2024: Re-referred to ASSEMBLY Committee on APPROPRIATIONS.
CA SB 1003 (Dodd (D))	Electrical Corporations: Wildfire Mitigation Plans		Provides that existing law requires electrical corporations to construct, maintain, and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. Requires those actions to take into account both the time required to implement the proposed mitigations and the amount of risk reduced for the cost and risk remaining.	07/01/2024: From ASSEMBLY Committee on UTILITIES AND ENERGY: Do pass to Committee on APPROPRIATIONS.
CA SB 1014 (Dodd (D))	Wildfire Safety: California Wildfire Mitigation		Requires the deputy director, on or before specified date, and every 3 years thereafter, to prepare a Wildfire Risk Mitigation Planning Framework sufficient to quantitatively evaluate wildfire risk mitigation actions. Requires the deputy director to make the framework available as a planning tool to specified entities and to, each year the framework is completed, of the framework to the Legislature, the Office of Energy Infrastructure Safety, and the Public Utilities Commission for review and consideration.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
CA SB 1027 (Menjivar (D))	Political Reform Act of 1974: Disclosures		Provides that the Political Reform Act of 1974 provides for the comprehensive regulation of campaign financing, including requiring the reporting of campaign contributions. Authorizes a campaign committee to redact the bank account number on a copy of a statement of organization filed with a local filing officer. Requires the Secretary of State to redact the bank account number on a statement of organization filed with the Secretary of State before making the statement available to the public in any form.	07/03/2024: In ASSEMBLY. Read second time. To Consent Calendar.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1034 (Seyarto (R))	California Public Records Act: State of Emergency		Revises the unusual circumstances under which the time limit may be extended to include the need to search for, collect, and appropriately examine records during a state of emergency, as defined, proclaimed by the Governor in the jurisdiction where the agency is located when the state of emergency currently affects, due to the state of emergency, the agency's ability to timely respond to requests due to staffing shortages or closure of facilities where the requested records are located, except as specified.	07/18/2024: Chaptered by Secretary of State. Chapter No. 2024-161
CA SB 1045 (Blakespear (D))	Composting Facilities: Zoning		Requires the Office of Planning and Research, in consultation with the Department of Resources Recycling and Recovery, to develop and post on their website a technical advisory reflecting best practices to facilitate the siting of composting facilities to meet organic waste reduction goals. Requires the office to consult with specified entities throughout the development of the advisory. Requires a city or county to consider the best practices reflected in the technical advisory during long-term planning.	06/26/2024: From ASSEMBLY Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA SB 1046 (Laird (D))	Organic Waste Reduction: Program Environmental Impact		Requires the Department of Resources Recycling and Recovery to prepare and certify a program environmental impact report that streamlines the process with which jurisdictions can develop and site small and medium compostable material handling facilities or operations for processing organic material.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
CA SB 1051 (Eggman (D))	Victims of Abuse or Violence: Lock Changes		Repeals, recasts, and revises these provisions to apply when a person is alleged to have committed abuse or violence against an eligible tenant or the immediate family or household member of an eligible tenant, and the person is not a tenant of the same dwelling unit as the eligible tenant. Requires the landlord to change the locks at their own expense, and additionally requires the landlord to reimburse the protected tenant for expenses the tenant incurred in changing the locks.	07/02/2024: Chaptered by Secretary of State. Chapter No. 2024-075

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Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1072 (Padilla (D))	Local Government: Proposition 218: Remedies		Provides for procedures and parameters for local compliance with the requirements of the State Constitution for assessments and property-related fees. Requires a local agency, if a court determines that a fee or charge for a property-related service violates the provisions of the State Constitution relating to fees and charges, to credit the amount of the fee or charge attributable to the violation against the amount required to provide the service, unless a refund is explicitly provided for by statute.	06/27/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1073 (Skinner (D))	State Acquisition of Goods and Services: Low-Carbon		Authorizes a State agency to enter into forward contracts to purchase low-carbon cement or concrete products up to a specified number of years in advance to facilitate the commercialization of concrete, cement, and supplementary cementitious materials and in furtherance of the policy, comprehensive strategy, or framework relating to greenhouse gas emissions.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
CA SB 1078 (Min (D))	Language Access		Establishes the Office of Language Access to ensure individuals with limited English proficiency have meaningful access to government programs and services. Requires the Office of Language Access to maintain an internet website containing specified information, including every current Language Action Plan and all corrective action plans.	06/27/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1088 (Alvarado-Gil (D))	Office of Emergency Services: State Matching Funds		Establishes, contingent on funding being appropriated pursuant to a bond act, the Rural Water Infrastructure for Community Wildfire Protection Program within the Office of Emergency Services for the distribution of State matching funds to communities within the Wildland Urban Interface in designated high fire hazard severity zones or very high fire hazard severity zones to improve water system infrastructure. Requires the office to develop criteria and a scoring methodology to prioritize fund distribution.	06/24/2024: From ASSEMBLY Committee on EMERGENCY MANAGEMENT: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1092 (Blakespear (D))	Coastal Resources: Multifamily Housing Development		Requires the commission, on or before specified date, to provide a report to the Legislature that provides information regarding appeals of local government coastal development permits to the commission, including, among other things, the percentage of local government coastal development permit actions that were appealed to the commission.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
CA SB 1100 (Portantino (D))	Discrimination: Driver's License and Car Ownership		Makes it an unlawful employment practice for an employer to include a statement in various employment materials that an applicant must have a driver's license unless the employer reasonably expects the duties of the position to require driving and the employer reasonably believes that satisfying that job function using an alternative form of transportation would not be comparable in travel time or cost to the employer.	07/02/2024: From ASSEMBLY Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
CA SB 1103 (Menjivar (D))	Tenancy of Commercial Real Properties: Agreements		Applies certain translation requirements to a tenancy agreement covering a nonresidential-zoned commercial space entered into between a landlord and a qualified commercial tenant. Prohibits a landlord of a commercial real property from charging a qualified commercial tenant a fee to recover building operating costs, unless specified conditions are met. Makes a landlord of a commercial real property who violates this provision liable to a qualified commercial tenant for specified damages.	06/27/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1110 (Ashby (D))	Water Reports: Urban Retail Water Suppliers	Support	Requires an urban retail water supplier to submit a report to the Department of Water Resources and State Water Resources Control Board annually based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year. Authorizes the department and board to update regulations adopted for urban water use objectives and water use reporting to address changes in statutory reporting requirements. Authorizes the board to adopt an enforcement policy.	06/26/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1134 (Caballero (D))	Surplus Land		Requires, with regard to surplus land, each parcel of land to be considered a distinct unit of surplus land, with certain exceptions. Specifies that any rule, policy, or standard of general application issued by the Department of Housing and Community Development in implementing the laws governing the disposal of land owned by local agencies is subject to the rulemaking provisions of the Administrative Procedure Act.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
CA SB 1137 (Smallwood-Cueva (D))	Discrimination Claims: Combination of Characteristics		Provides that existing law declares that it is the policy of the State to afford all persons in public schools, regardless of specified characteristics, equal rights and opportunities in the educational institutions of the State. Revises that policy statement to include remedies that will eliminate certain discriminatory acts, including discrimination not just because of one protected trait, but also because of the combination of 2 or more protected bases.	07/03/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1140 (Caballero (D))	Enhanced Infrastructure Financing District		Provides that existing law requires the public financing authority of an enhanced infrastructure financing district to hold a meeting and 3 public hearings on a proposed infrastructure financing plan. Requires the authority to hold a meeting and a specified number of public hearings. Makes findings and declarations that, among other things, public benefits will accrue if local agencies are provided a means to, among other things, improve air quality and fund port and harbor infrastructure.	06/18/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1143 (Allen (D))	Household Hazardous Waste: Producer Responsibility		Creates a producer responsibility program for products containing household hazardous waste and requires a producer responsibility organization (PRO) to provide a convenient collection and management system for covered products at no cost to residents or local governments. Revises and recasts the Architectural Paint Recovery Program as the Paint Product Recovery Program.	07/01/2024: From ASSEMBLY Committee on NATURAL RESOURCES: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1147 (Portantino (D))	Drinking Water: Bottled Water: Microplastics Level		Requires the State Department of Public Health to determine, upon adoption of a primary drinking water standard for microplastics in drinking water, whether requiring bottled water to meet a maximum contaminant level equivalent to the primary drinking water standard for microplastics in drinking water is necessary or appropriate for ensuring that bottled water presents no adverse effect on public health.	06/25/2024: From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: Do pass to Committee on APPROPRIATIONS.
CA SB 1151 (Hurtado (D))	Political Reform Act of 1974: Foreign Agents		Provides that under existing law, an individual or entity that receives compensation to influence legislative or administrative action is required to register as a lobbyist or lobbying firm. Requires certain individuals who engage in certain activities related to influencing legislative or administrative action to register as an agent of a foreign principal and to file periodic reports with the Secretary of State pursuant to the Political Reform Act of 1974, a violation of which is a misdemeanor.	06/26/2024: From ASSEMBLY Committee on ELECTIONS: Do pass to Committee on APPROPRIATIONS.
CA SB 1155 (Hurtado (D))	Political Reform Act of 1974: Postgovernment		Provides that under existing law, Members of the Legislature, elected State officers, and designated employees of State administrative agencies are subject to various restrictions on their activities following their departure from State service. Prohibits, for a specified period after leaving office, the head of an agency from engaging in any activity to influence legislative or administrative action by the Legislature or administrative agency that would require the individual to register as a lobbyist.	06/26/2024: From ASSEMBLY Committee on ELECTIONS: Do pass to Committee on APPROPRIATIONS.
CA SB 1156 (Hurtado (D))	Groundwater Sustainability Agencies: Conflicts		Requires members of the board of directors and the executive of a groundwater sustainability agency to file statements of economic interests, according to the specified filing requirements, with the Fair Political Practices Commission using the Commission's online system for filing statements of economic interests.	06/26/2024: In ASSEMBLY. Coauthors revised.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1158 (Archuleta (D))	Carl Moyer Memorial Air Quality Standards		Provides that existing law establishes the Carl Moyer Memorial Air Quality Standards Attainment Program to provide grants to offset the incremental cost of eligible projects that reduce emissions of air pollutants from sources in the State and for funding a fueling infrastructure demonstration program and technology development efforts. Provides that existing law requires that funds be allocated under the program to local air districts for liquidation. Extends the deadline for the period of liquidation.	06/24/2024: From ASSEMBLY Committee on NATURAL RESOURCES: Do pass to Committee on APPROPRIATIONS.
CA SB 1159 (Dodd (D))	Environmental Quality Act: Roadside Wildfire Risk		Relates to categorical exemptions to the requirements of the California Environmental Quality Act. Requires the Office of Planning and Research to evaluate, and the Secretary of the Natural Resources to consider, the inclusion of roadside projects no more than a specified number of road miles from a municipality or census-designated place that are undertaken solely for the purpose of wildfire risk reduction in the classes of projects subject to a categorical exemption.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
CA SB 1162 (Cortese (D))	Public Contracts: Employment Compliance Reports		Provides that existing law establishes requirements that apply when a public entity is required to obtain an enforceable commitment that a bidder, contractor, or other entity will use a skilled and trained workforce to complete a contract or project. Requires the Division of Labor Standards Enforcement to accept and investigate a complaint submitted by a joint labor management committee formed pursuant to existing federal law alleging that a contractor or subcontractor did not use a trained workforce.	07/02/2024: From ASSEMBLY Committee on PRIVACY AND CONSUMER PROTECTION: Do pass to Assembly Committee on APPROPRIATIONS.
CA SB 1170 (Menjivar (D))	Political Reform Act of 1974: Campaign Funds		Permits campaign funds to be used to pay or reimburse a candidate for reasonable and necessary mental healthcare expenses if the candidate does not have health insurance or their insurance does not cover the full cost of these mental healthcare expenses. Limits use of campaign funds for these purposes to circumstances in which the candidate has experienced prejudice, harassment, or a threat or other criminal act which resulted in the need for mental healthcare services.	07/02/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1174 (Min (D))	Elections: Voter Identification		Prohibits a local government from enacting or enforcing any charter provision, ordinance, or regulation requiring a person to present identification for the purpose of voting or submitting a ballot at any polling place, vote center, or other location where ballots are cast or submitted.	06/24/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1175 (Ochoa Bogh (R))	Organic Waste: Reduction Goals: Local Jurisdictions		Requires the department to revise the regulations to require the department to consider, in addition to census tracts, alternatives to those census tracts when deciding the geographic boundaries of a low-population or elevation waiver. Prohibits the department from considering those alternatives when deciding the boundaries for those waivers until it adopts the revised regulations.	06/19/2024: In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
CA SB 1181 (Glazer (D))	Campaign Contributions: Agency Officers		Provides that the Political Reform Act of 1974 prohibits certain contributions of more than \$250 to an officer of an agency by any party, participant, or party or participant's agent in a proceeding while a proceeding involving a license, permit, or other entitlement for use is pending before the agency. Clarifies when a proceeding is pending for purposes of these provisions, and when a person is considered to be an agent of a party to, or participant in, a pending proceeding.	06/27/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1205 (Laird (D))	Workers' Compensation: Medical Treatment		Relates to workers' compensation. Provides that existing law requires employers to provide medical, surgical, chiropractic, acupuncture, licensed clinical social worker, and hospital treatment reasonably required to cure or relieve the injured worker from the effects of the injury. Requires an employee, when possible, to make a reasonable effort to schedule treatment outside of work hours. Makes an employer denial of an employee request to attend scheduled treatment during regular work hours a misdemeanor.	06/27/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1209 (Cortese (D))	Local Agency Formation Commission: Indemnification		Provides that the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 continues in existence in each county a local agency formation commission. Authorizes a LAFCO to require, as a condition for, among other things, processing a change of organization or reorganization, that the applicant agrees to defend, indemnify, and hold harmless the LAFCO, its agents, officers, and employees from and against any claim, action, or proceeding, to attack, set aside, void or annul an approval by the LAFCO.	06/24/2024: In ASSEMBLY. Read second time. To third reading.
CA SB 1210 (Skinner (D))	New Housing Construction	Watch	Requires electrical corporations, gas corporations, sewer system corporations, and water corporations, for new housing construction, to publicly post on their websites the schedule of estimated fees for typical service connections for each housing development type. Exempts a utility with fewer than a specified number of service connections that does not establish or maintain a website due to a hardship, and authorizes the utility to establish that a hardship exists by annually adopting a resolution.	06/26/2024: From ASSEMBLY Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA SB 1211 (Skinner (D))	Land Use: Accessory Dwelling Units		Prohibits the local agency from requiring the replacement of off street parking spaces if an uncovered parking space is demolished in conjunction with the construction of, or is converted to, an accessory dwelling unit. Authorizes up to a specified number of detached ADUs to be created on a lot with an existing multifamily dwelling, provided that the number of ADUs does not exceed the number of existing units on the lot, and up to 2 detached ADUs on a lot with a proposed multifamily dwelling.	06/26/2024: In ASSEMBLY. Coauthors revised.
CA SB 1218 (Newman (D))	Water: Emergency Water Supplies	Support	Provides that the Urban Water Management Planning Act requires every public and private urban water supplier that provides water for municipal purposes to prepare and adopt an urban water management plan. Provides that the act requires such plan to include a water shortage contingency plan. Declares that it is the policy of the State to encourage, but not mandate, the development of emergency water supplies, and to support their use during times of drought or unplanned service or supply disruption.	06/25/2024: From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1255 (Durazo (D))	Public Water Systems: Needs Analysis: Water Rate	Oppose Unless Amended	Provides that existing law requires the State Water Resources Control Board to develop a plan for the funding and implementation of the Low-Income Water Rate Assistance Program. Requires qualified systems to begin providing water rate assistance to eligible ratepayers. Requires a qualified system to automatically enroll an eligible ratepayer in the water rate assistance program if available information indicates that they are qualified to receive assistance and provide a water bill credit.	07/01/2024: From ASSEMBLY Committee on UTILITIES AND ENERGY: Do pass to Committee on APPROPRIATIONS.
CA SB 1266 (Limon (D))	Product Safety: Bisphenol		Provides that existing law prohibits the manufacture, sale, or distribution in commerce of any bottle or cup that contains bisphenol A if the bottle or cup is designed or intended to be filled with any liquid, food, or beverage intended primarily for consumption by children 3 years of age or younger. Applies such prohibitions and requirements to any juvenile's feeding product or juvenile's sucking or teething product that contains any form of bisphenol at a detectable level above 0.1 parts per billion.	06/25/2024: From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: Do pass to Committee on APPROPRIATIONS.
CA SB 1325 (Durazo (D))	Public Contracts: Best Value Procurement: Goods		Authorizes a public entity to award contracts through a best value procurement method for the purchase of goods with a base value of a specified amount or more. Authorizes a public entity to award all contracts for the purchase of municipal fleets by using a best value procurement method.	06/26/2024: From ASSEMBLY Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
CA SB 1328 (Bradford (D))	Elections		Provides that under existing law, it is a felony punishable by imprisonment to interfere or attempt to interfere with the secrecy of voting or ballot tally software program source code. Specifies that the phrase interferes or attempts to interfere with includes knowingly, and without authorization, providing unauthorized access to, or breaking the chain of custody to, certified voting technology during the lifecycle of that certified voting technology, or any finished or unfinished ballot cards.	07/02/2024: From ASSEMBLY Committee on PUBLIC SAFETY: Do pass to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1330 (Archuleta (D))	Urban Retail Water Supplier: Water Use	Watch	Requires the Department of Water Resources to conduct necessary studies and investigations regarding the efficiency performance of newly constructed residential landscapes and landscape areas with dedicated irrigation meters in connection with CII water use. Requires the department to recommend to the State Water Resources Control Board for adoption a revised standard for existing residential landscapes and landscape areas with dedicated irrigation meters.	06/26/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1337 (Gonzalez (D))	Elections: Form of Petitions		Provides that existing law requires a petition for a State initiative or referendum to contain, among other things, each signer's signature, printed name, residence address, and the name of the signer's incorporated city or unincorporated community. Requires a petition for a statewide referendum measure to include, before the space for the signer's printed name, a box preceding the specified statement confirming review of the Official Top Funders.	07/01/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1340 (Smallwood-Cueva (D))	Discrimination		Requires the department, within 30 days of receiving that complaint, to determine whether to pursue the complaint or to issue a letter authorizing the complainant to pursue the complaint through a local agency or through a civil action. Requires the Civil Rights Department to establish and maintain a comprehensive database to track all infrastructure contracting and procurement activities by State agencies funded in whole or in part by certain federal laws.	07/03/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1366 (Hurtado (D))	Real Property Disclosure Requirements: Domestic Water		Provides that existing law authorizes the State Water Resources Control Board to provide grants to eligible applicants to be used to provide interim relief to households in which a private water well has gone dry, or has been destroyed, due to drought, wildfire, or other natural disaster. Requires a seller of any real property who received assistance or is aware the property received assistance and the property currently has the water storage tank to deliver a disclosure statement to the prospective buyer.	06/14/2024: Chaptered by Secretary of State. Chapter No. 2024-021

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1374 (Becker (D))	Net Energy Metering		Provides that existing law requires the Public Utilities Commission to develop a standard contract or tariff, which may include net energy metering, for eligible customer-generators with a renewable electrical generation facility that is a customer of a large electrical corporation. Requires the commission, no later than July 1, 2027, to ensure that any contract or tariff established by the commission pursuant to a specified commission decision meets specified requirements.	07/03/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1390 (Caballero (D))	Groundwater Recharge: Floodflows: Diversion		Provides that existing law provides that the diversion of floodflows for groundwater recharge does not require an appropriative water right if certain conditions are met, including that a local agency has adopted a local plan of flood control. Expands the conditions that are required for the diversion of floodwaters for groundwater recharge that do not require an appropriative water right. Requires diversions to cease no later than a certain number of days after commencing, unless they are renewed.	06/26/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1402 (Min (D))	30x30 Goal: State Agencies: Adoption		Provides that existing law provides that it is the goal of the State to conserve at least 30 percent of the State's lands and coastal waters by 2030, known as the 30x30 goal. Requires all State agencies, departments, boards, offices, commissions, and conservancies to consider the 30x30 goal when adopting, revising, or establishing plans, policies, or regulations that directly affect the use of coastal waters or land, management of natural resources, or biodiversity conservation.	07/01/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
CA SB 1404 (Glazer (D))	Political Reform Act of 1974: Audits		Provides that the Political Reform Act of 1974 requires the Franchise Tax Board to conduct audits and field investigations regarding the reports filed by lobbyists. Transfers, until specified date, the responsibility for conducting audits and investigations to the Fair Political Practices Commission. Requires the Secretary of State to impose a fee to lobbying firms and lobbyist employers subject to audit for deposit into the Field Audits and Investigations Fund. Appropriates funds.	06/27/2024: In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
CA SB 1522 (Senate Agriculture Committee)	Fertilizing Material		Revises the definition of fertilizing materials to instead mean any commercial fertilizer, agricultural mineral, beneficial substance, or organic input material. Eliminates the label registration requirement for auxiliary soil and plant substances and packaged soil amendments and would apply that requirement to beneficial substances.	06/26/2024: From ASSEMBLY Committee on AGRICULTURE: Do pass to Committee on APPROPRIATIONS.
CA SCA 2 (Stern (D))	Elections: Voter Qualifications		Provides that the California Constitution allows a United States citizen who is at least 18 years of age and a resident of the State to vote. Reduces the minimum voting age to a specified age.	09/01/2023: In SENATE. Ordered to third reading.
CA SCA 3 (Niello (R))	Elections: Initiatives and Referenda		Transfers from the Attorney General to the Legislative Analyst the duty of preparing the title and summary for a proposed initiative or referendum. Requires, for each measure that appears on a statewide ballot, the Legislative Analyst to prepare the ballot label and the ballot title and summary for the state voter information guide.	09/01/2023: In SENATE Committee on APPROPRIATIONS: Held in committee.
US H 1430 (Valadao (R))	National Environmental Policy Act Review Requirements	Support	Directs the Secretary of the Interior and the Secretary of Agriculture to use certain previously completed environmental assessments and environmental impact statements to satisfy the review requirements of the National Environmental Policy Act of 1969.	04/25/2023: In HOUSE Committee on AGRICULTURE: Referred to Subcommittee on FORESTRY.
US H 2964 (McClain (R))	Do Not Flush Labeling Requirements	Support	Requires the Federal Trade Commission to issue regulations requiring certain products to have Do Not Flush labeling.	06/12/2024: To SENATE Committee on COMMERCE, SCIENCE, AND TRANSPORTATION.
US H 3027 (Porter (D))	Reclamation Climate Change and Water Program Funding	Support	Reauthorizes funding for the Reclamation Climate Change and Water Program.	06/09/2023: In HOUSE Committee on NATURAL RESOURCES: Referred to Subcmt on WATER, WILDLIFE AND FISHERIES.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024


Bill No. Author	Title	IRWD Position	Summary/Effects	Status
US H 6805 (Dingell D (D))	PFAS Hazardous Substance Response and Liability		Requires the Administrator of the Environmental Protection Agency to designate per- and polyfluoroalkyl substances as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.	01/02/2024: In HOUSE Committee on TRANSPORTATION & INFRASTRUCTURE: Referred to Subcommittee on WATER RESOURCES AND ENVIRONMENT.
US H 7194 (Dean (D))	PFAS Exposure Legal Action and Research Codification		Amends the Toxic Substances Control Act to codify a Federal cause of action and a type of remedy available for individuals significantly exposed to per- and polyfluoroalkyl substances, to encourage research and accountability for irresponsible discharge of those substances.	02/01/2024: To HOUSE Committee on JUDICIARY.
US H 7944 (Curtis (R))	Liability Exemption for Certain Entities under CERCLA	Support	Exempts certain entities from liability under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 with respect to releases of perfluoroalkyl and polyfluoroalkyl substances.	04/11/2024: To HOUSE Committee on TRANSPORTATION AND INFRASTRUCTURE.
US H 8032 (Sorensen (D))	Low-Income Water Assistance Authorization		Authorizes the Low-Income Household Water Assistance Program.	04/16/2024: To HOUSE Committee on ENERGY AND COMMERCE.
US S 1350 (Merkley (D))	Do Not Flush Labeling Regulations	Support	Requires the Federal Trade Commission to issue regulations requiring certain products to have Do Not Flush labeling.	04/27/2023: To SENATE Committee on COMMERCE, SCIENCE, AND TRANSPORTATION.
US S 1429 (Lummis (R))	PFAS Substance Liability Exemptions	Support	Exempts certain entities from liability under the Comprehensive Environmental Response, Compensation, and Liability Act of specified year with respect to releases of perfluoroalkyl and polyfluoroalkyl substances (PFAS).	05/03/2023: To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.
US S 1430 (Lummis (R))	PFAS Substance Liability Exemptions		Exempts certain entities from liability under the Comprehensive Environmental Response, Compensation, and Liability Act of specified year with respect to releases of perfluoroalkyl and polyfluoroalkyl substances (PFAS).	05/03/2023: To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.

IRWD 2024 LEGISLATIVE MATRIX

Updated: July 23, 2024

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
US S 2162 (Feinstein (D))	Reclamation State Water Infrastructure Support		Supports water infrastructure in Reclamation States.	07/19/2023: Subcommittee on WATER AND POWER hearings held.
US S 3725 (Gillibrand (D))	PFAS Causes of Action		Amends the Toxic Substances Control Act to codify a Federal cause of action and a type of remedy available for individuals significantly exposed to per- and polyfluoroalkyl substances, and to encourage research and accountability for irresponsible discharge of those substances.	02/01/2024: To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.
US S 3830 (Padilla (D))	Low-Income Household Water Assistance Program		Authorizes the Low-Income Household Water Assistance Program.	02/28/2024: To SENATE Committee on HEALTH, EDUCATION, LABOR AND PENSIONS.

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August 12, 2024
Prepared and
submitted by: T. Mitcham
Approved by: Paul A. Cook 

CONSENT CALENDAR

RENEWAL OF GROUP MEDICAL, DENTAL, VISION AND
ANCILLARY PLAN SERVICES FOR CALENDAR YEAR 2025

SUMMARY:

IRWD contracts with the California Public Employees' Retirement System (CalPERS) and a brokerage service to market, negotiate, and implement its employee benefits programs. IRWD's employee benefits plan includes medical and dental benefits and ancillary benefits such as flexible spending accounts, employee assistance programs, long-term disability, life insurance, and accidental death and dismemberment. Staff recommends the Board approve the following:

- Continue IRWD's health insurance coverage with the California Public Employees' Retirement System (CalPERS) with changes in District and employee contribution rates as outlined in Exhibit "A";
- Continue the District's dental insurance coverage with Delta Dental;
- Continue the District's vision insurance coverage with EyeMed;
- Renew the District's term life, accidental death and dismemberment (AD&D), long-term disability (LTD), and Employee Assistance Program coverage with Reliance Standard;
- Continue the District's Employee Assistance Program (EAP) through REACH; and
- Contract directly with Inspira Financial as the third-party administrator for the District's Flexible Spending Account (FSA), Lifestyle Savings Account (LSA), Health Reimbursement Arrangement (HRA), COBRA, and Commuter Benefits.

BACKGROUND:

Below is a description of the medical, dental, vision, and other insurance coverage and related employee benefit programs:

CalPERS Medical Insurance Renewal Information:

IRWD contracts with the CalPERS medical insurance program to provide medical insurance coverage for District employees. Each year, in advance of the annual insurance benefit open enrollment period, the District receives the premium rates for each health insurance plan for the upcoming calendar year. The health care rate and plan changes for 2025 include an overall weighted premium increase of 10.79%, of which the average premium increase for the CalPERS Basic Health Maintenance Organization (HMO) plans is 8.72% and 9.82% for the Preferred Provider Organization (PPO) Basic plans. CalPERS attributed the overall 2025 premium increases to the higher cost of providing services and the increased use of high-cost specialty and brand-name drugs. Additionally, CalPERS will be completing its transition to a single risk pool between the HMO and PPO plans to stabilize the Basic PPO plans with the intent to stabilize the

enrollment between the HMO and PPO plans and price the plans based on the value of their benefits and network. For the 2025 calendar year, CalPERS has notified the District of premium rate changes for each specific plan from which IRWD employees may choose. CalPERS also notified the District that effective January 1, 2025, Blue Shield of California and Included Health will become the administrators for the CalPERS PPO programs.

Employer Health Insurance Contribution Rates:

IRWD has a long-standing practice of calculating the employer and employee contribution rates for health insurance premiums based on rates of the PPO plan which had the highest enrollment in the prior renewal year. The rates for this plan were then used to calculate the maximum District contribution rates for all plans offered. In 2024, the PPO plan with the highest enrollment was, once again, the PERS Platinum PPO (Region 2). Applying the final approved 2025 CalPERS premium rates to IRWD's current enrollment by tier, plan, and region results in a premium increase of approximately 12.6% for FY 2024-25.

Dental Coverage:

Delta Dental Plan of California provides IRWD's current employee dental insurance coverage. The 2025 monthly premium rates for the PPO plan with child and adult orthodontics include a premium increase of 5% for the 2025 plan year, totaling \$536,218. The calendar year maximum is \$1,750, and the premiums are \$41.32 for "employee only" coverage, \$82.94 for "employee + 1" coverage, and \$158.98 for "employee + family" coverage.

Vision Coverage:

EyeMed provides IRWD's current employee vision insurance coverage. The District's 2025 monthly premium rates for vision insurance will be \$9.27 for "employee only" coverage, \$17.63 for "employee + 1" coverage, and \$25.85 for "employee + family" coverage. These are the same rates from the 2023 plan year and are guaranteed through December 31, 2026.

Term Life, AD&D, LTD Insurance Coverage and Employee Assistance Program:

IRWD's current employee Term Life, AD&D, and LTD insurance coverage is provided by Reliance Standard, which offers an EAP in addition to the program offered by REACH. The 2025 rates are the same rates negotiated for 2023 and guaranteed through December 31, 2026.

FSA, HRA, COBRA, LSA, and TRP Administration:

IRWD currently contracts with third-party benefits administrator Chard Snyder for its FSA, HRA, COBRA, and TRP plans. The District's Retiree Health Costs Assistance Program (RHCRP) is the HRA plan administered through Chard Snyder. The plan provides qualified IRWD retirees and former Board members with a monthly monetary credit towards reimbursement of qualified retiree medical and health care expenses. Due to numerous customer service complaints and other challenges, staff recommends contracting with Inspira Financial as the third-party administrator for all existing programs and a Lifestyle Savings Account (LSA) to

replace IRWD's Shared Health and Fitness Reimbursement Program, which will reduce IRWD's administrative costs. The Inspira Financial fees for full program administration will be \$35,154 per year, with a five-year rate guarantee through December 31, 2029.

In summary, staff recommends the Board:

- Continue IRWD's health insurance coverage with CalPERS for the calendar year 2025 with changes in District and employee contribution rates as outlined in Exhibit "A";
- Continue IRWD's dental insurance with Delta Dental;
- Continue IRWD's contract with EyeMed for vision insurance;
- Continue to offer Reliance Standard for Term Life, AD&D, LTD, EAP, and other voluntary plan benefits;
- Continue the District's Employee Assistance Program (EAP) through REACH; and
- Contract with Inspira Financial as the third-party administrator for the FSA, LSA, HRA, COBRA, and TRP ancillary benefits.

Open Enrollment Process for 2025:

The CalPERS health insurance open enrollment period is scheduled for September 16, 2024, through October 11, 2024. Staff will conduct an in-person Wellness and Open Enrollment Expo for all employees and Board members at the Sand Canyon Offices again this year. The event will be held on September 25, 2024, and IRWD's benefit plan representatives and other vendors have been invited to participate.

FISCAL IMPACTS:

The continuation of the CalPERS medical insurance plans will result in total projected expenses for FY 2024-25 of approximately \$8,809,258. This accounts for the premium increase and employee-only HMO coverage for temporary employees to ensure we comply with the Affordable Care Act. The annual dental insurance premium rates for the direct Delta Dental PPO Plan for FY 2024-25 will be approximately \$536,218. The annual vision insurance premium rates for FY 2024-25 will be approximately \$89,000. The annual Term Life, AD&D, LTD insurance, and EAP premium rates for FY 2024-25 will be approximately \$368,015, and the FSA, LSA, HRA, COBRA, and TRP administration fees through Inspira Financial will be \$35,154 for FY 2024-25. The total estimated cost for the 2025 annual premiums is \$9,802,491, approximately \$800,000 over what was budgeted for FY 2024-25. Staff budgeted an approximate 9.6% increase in medical premiums, which was lower than the weighted medical plan premium increase of 10.79%.

The CalPERS Public Employees' Medical and Hospital Care Act (PEMHCA) administrative fee decreased from 0.32% to 0.24% for FY 2024-25 starting July 1, 2024. The administrative fee is calculated based on total active and retiree gross health premiums and billed monthly to contracting agencies.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

The item was reviewed by the Finance and Personnel Committee on August 5, 2024.

RECOMMENDATION:

THAT THE BOARD AUTHORIZES THE CONTINUATION OF IRWD'S HEALTH INSURANCE COVERAGE WITH CALPERS WITH CHANGES IN DISTRICT AND EMPLOYEE CONTRIBUTION RATES AS OUTLINED IN EXHIBIT "A", AUTHORIZE THE CONTINUATION OF THE DISTRICT'S DENTAL INSURANCE COVERAGE WITH DELTA DENTAL, AUTHORIZE THE CONTINUATION OF THE DISTRICT'S VISION INSURANCE COVERAGE WITH EYEMED, AUTHORIZE THE RENEWAL OF THE DISTRICT'S EMPLOYEE ASSISTANCE PROGRAM WITH REACH, AUTHORIZE THE TERM LIFE, ACCIDENTAL DEATH AND DISMEMBERMENT, LONG-TERM DISABILITY AND EMPLOYEE ASSISTANCE PROGRAM COVERAGE WITH RELIANCE STANDARD, AND CONTRACT WITH INSPIRA FINANCIAL TO ADMINISTER THE FLEXIBLE SPENDING ACCOUNT, LIFESTYLE SAVINGS ACCOUNT, HEALTH REIMBURSEMENT ARRANGEMENT, COBRA, AND COMMUTER BENEFITS.

LIST OF EXHIBITS:

Exhibit "A" – CalPERS Medical Premium and IRWD Contribution Rates

Exhibit "A"



REGION 2 – ORANGE AND SAN DIEGO COUNTIES

Health Plan	Number of Employees Enrolled in 2024	2024 Plan Year			2025 Plan Year		
		Premium Rates	Employee Monthly Contribution	IRWD Monthly Contribution	Premium Rates	Employee Monthly Contribution	IRWD Monthly Contribution
Anthem Blue Cross Select HMO							
Employee Only	10	\$807.71	\$0.00	\$807.71	\$919.00	\$0.00	\$919.00
Employee + 1		\$1,615.42	\$0.00	\$1,615.42	\$1,838.00	\$0.00	\$1,838.00
Employee + Family		\$2,100.05	\$0.00	\$2,100.05	\$2,389.40	\$0.00	\$2,389.40
Anthem Blue Cross Traditional HMO							
Employee Only	9	\$1,034.38	\$0.00	\$1,034.38	\$1,110.97	\$0.00	\$1,110.97
Employee + 1		\$2,068.76	\$0.00	\$2,068.76	\$2,221.94	\$0.00	\$2,221.94
Employee + Family		\$2,689.39	\$0.00	\$2,689.39	\$2,888.52	\$0.00	\$2,888.52
Blue Shield Access+ HMO							
Employee Only	38	\$869.14	\$0.00	\$869.14	\$948.53	\$0.00	\$948.53
Employee + 1		\$1,738.28	\$0.00	\$1,738.28	\$1,897.06	\$0.00	\$1,897.06
Employee + Family		\$2,259.76	\$0.00	\$2,259.76	\$2,466.18	\$0.00	\$2,466.18
Blue Shield Trio HMO							
Employee Only	8	\$810.24	\$0.00	\$810.24	\$909.10	\$0.00	\$909.10
Employee + 1		\$1,620.48	\$0.00	\$1,620.48	\$1,818.20	\$0.00	\$1,818.20
Employee + Family		\$2,106.62	\$0.00	\$2,106.62	\$2,363.66	\$0.00	\$2,363.66
Health Net Salud y Más							
Employee Only	0	\$684.77	\$0.00	\$684.77	\$823.49	\$0.00	\$823.49
Employee + 1		\$1,369.54	\$0.00	\$1,369.54	\$1,646.98	\$0.00	\$1,646.98
Employee + Family		\$1,780.40	\$0.00	\$1,780.40	\$2,141.07	\$0.00	\$2,141.07
Kaiser Permanente							
Employee Only	116	\$904.95	\$0.00	\$904.95	\$944.34	\$0.00	\$944.34
Employee + 1		\$1,809.90	\$0.00	\$1,809.90	\$1,888.68	\$0.00	\$1,888.68
Employee + Family		\$2,352.87	\$0.00	\$2,352.87	\$2,455.28	\$0.00	\$2,455.28
Sharp Performance Plus							
Employee Only	0	\$833.24	\$0.00	\$833.24	\$868.45	\$0.00	\$868.45
Employee + 1		\$1,666.48	\$0.00	\$1,666.48	\$1,736.90	\$0.00	\$1,736.90
Employee + Family		\$2,166.42	\$0.00	\$2,166.42	\$2,257.97	\$0.00	\$2,257.97
United Healthcare Alliance							
Employee Only	18	\$837.88	\$0.00	\$837.88	\$890.66	\$0.00	\$890.66
Employee + 1		\$1,675.76	\$0.00	\$1,675.76	\$1,781.32	\$0.00	\$1,781.32
Employee + Family		\$2,178.49	\$0.00	\$2,178.49	\$2,315.72	\$0.00	\$2,315.72
United Healthcare Harmony							
Employee Only	7	\$792.65	\$0.00	\$792.65	\$819.64	\$0.00	\$819.64
Employee + 1		\$1,585.30	\$0.00	\$1,585.30	\$1,639.28	\$0.00	\$1,639.28
Employee + Family		\$2,060.89	\$0.00	\$2,060.89	\$2,131.06	\$0.00	\$2,131.06
PERS Gold							
Employee Only	42	\$799.44	\$0.00	\$799.44	\$864.75	\$0.00	\$864.75
Employee + 1		\$1,598.88	\$0.00	\$1,598.88	\$1,729.50	\$0.00	\$1,729.50
Employee + Family		\$2,078.54	\$0.00	\$2,078.54	\$2,248.35	\$0.00	\$2,248.35
PERS Platinum							
Employee Only	55	\$1,151.50	\$115.15	\$1,036.35	\$1,258.76	\$125.88	\$1,132.88
Employee + 1		\$2,303.00	\$230.30	\$2,072.70	\$2,517.52	\$251.75	\$2,265.77
Employee + Family		\$2,993.90	\$299.39	\$2,694.51	\$3,272.78	\$327.28	\$2,945.50



REGION 3 – LOS ANGELES, RIVERSIDE AND SAN BERNARDINO COUNTIES

Health Plan	Number of Employees Enrolled in 2024	2024 Plan Year			2025 Plan Year		
		Premium Rates	Employee Monthly Contribution	IRWD Monthly Contribution	Premium Rates	Employee Monthly Contribution	IRWD Monthly Contribution
Anthem Blue Cross Select HMO							
Employee Only	5	\$841.13	\$0.00	\$841.13	\$916.88	\$0.00	\$916.88
Employee + 1		\$1,682.26	\$0.00	\$1,682.26	\$1,833.76	\$0.00	\$1,833.76
Employee + Family		\$2,186.94	\$0.00	\$2,186.94	\$2,383.89	\$0.00	\$2,383.89
Anthem Blue Cross Traditional HMO							
Employee Only	2	\$1,012.67	\$0.00	\$1,012.67	\$1,065.46	\$0.00	\$1,065.46
Employee + 1		\$2,025.34	\$0.00	\$2,025.34	\$2,130.92	\$0.00	\$2,130.92
Employee + Family		\$2,632.94	\$0.00	\$2,632.94	\$2,770.20	\$0.00	\$2,770.20
Blue Shield Access+ HMO							
Employee Only	13	\$756.65	\$0.00	\$756.65	\$828.48	\$0.00	\$828.48
Employee + 1		\$1,513.30	\$0.00	\$1,513.30	\$1,656.96	\$0.00	\$1,656.96
Employee + Family		\$1,967.29	\$0.00	\$1,967.29	\$2,154.05	\$0.00	\$2,154.05
Blue Shield Trio HMO							
Employee Only	2	\$704.69	\$0.00	\$704.69	\$738.11	\$0.00	\$738.11
Employee + 1		\$1,409.38	\$0.00	\$1,409.38	\$1,476.22	\$0.00	\$1,476.22
Employee + Family		\$1,832.19	\$0.00	\$1,832.19	\$1,919.09	\$0.00	\$1,919.09
Health Net Salud y Más							
Employee Only	0	\$630.13	\$0.00	\$630.13	\$714.40	\$0.00	\$714.40
Employee + 1		\$1,260.26	\$0.00	\$1,260.26	\$1,428.80	\$0.00	\$1,428.80
Employee + Family		\$1,638.34	\$0.00	\$1,638.34	\$1,857.44	\$0.00	\$1,857.44
Kaiser Permanente							
Employee Only	50	\$865.41	\$0.00	\$865.41	\$926.52	\$0.00	\$926.52
Employee + 1		\$1,730.82	\$0.00	\$1,730.82	\$1,853.04	\$0.00	\$1,853.04
Employee + Family		\$2,250.07	\$0.00	\$2,250.07	\$2,408.95	\$0.00	\$2,408.95
United Healthcare Alliance							
Employee Only	4	\$826.44	\$0.00	\$826.44	\$866.40	\$0.00	\$866.40
Employee + 1		\$1,652.88	\$0.00	\$1,652.88	\$1,732.80	\$0.00	\$1,732.80
Employee + Family		\$2,148.74	\$0.00	\$2,148.74	\$2,252.64	\$0.00	\$2,252.64
United Healthcare Harmony							
Employee Only	0	\$734.76	\$0.00	\$734.76	\$756.28	\$0.00	\$756.28
Employee + 1		\$1,469.52	\$0.00	\$1,469.52	\$1,512.56	\$0.00	\$1,512.56
Employee + Family		\$1,910.38	\$0.00	\$1,910.38	\$1,966.33	\$0.00	\$1,966.33
PERS Gold							
Employee Only	8	\$785.28	\$0.00	\$785.28	\$868.15	\$0.00	\$868.15
Employee + 1		\$1,570.56	\$0.00	\$1,570.56	\$1,736.30	\$0.00	\$1,736.30
Employee + Family		\$2,041.73	\$0.00	\$2,041.73	\$2,257.19	\$0.00	\$2,257.19
PERS Platinum							
Employee Only	5	\$1,131.47	\$95.12	\$1,036.35	\$1,263.73	\$130.85	\$1,132.88
Employee + 1		\$2,262.94	\$190.24	\$2,072.70	\$2,527.46	\$261.69	\$2,265.77
Employee + Family		\$2,941.82	\$247.31	\$2,694.51	\$3,285.70	\$340.20	\$2,945.50

August 12, 2024
Prepared by: B. Rios / E. Akiyoshi
Submitted by: K. Burton
Approved by: Paul A. Cook *ACA*

CONSENT CALENDAR

ORANGE HEIGHTS SUPPLEMENTAL REIMBURSEMENT AGREEMENT

SUMMARY:

Irvine Community Development Company, LLC (ICDC) is proceeding with the residential development of Orange Heights, which includes the construction of streets, storm drains, domestic water, sanitary sewer, and recycled water improvements. As part of the development, ICDC will construct IRWD capital facilities under a proposed Supplemental Reimbursement Agreement (SRA). Staff recommends that the Board authorize the General Manager to execute a Supplemental Reimbursement Agreement with ICDC for the Orange Heights Capital Facilities.

BACKGROUND:

Over the past 20 years, ICDC has started and stopped the Orange Heights (formerly known as Santiago Hills II) development multiple times. It was most recently restarted in early 2022 and stopped again in 2023. In April 2024, ICDC approached IRWD and committed to restarting the development in the fall of 2024. The triangular site is bordered by Irvine Regional Park to the north, SR 261 to the east, and Jamboree Road to the west. A location map is provided as Exhibit "A". The new development consists of 1,180 new homes, and ICDC will build IRWD's capital domestic water, sanitary sewer and recycled water facilities under the proposed SRA. The required IRWD capital facilities are documented in the November 2022 Orange Heights Sub-Area Master Plan Update and all subsequent addendums and updates prepared by Michael Baker International.

The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement between IRWD and ICDC, which was approved by the Board in May 1997 and further refined in the SRA. The SRA, which covers capital facilities within the Orange Heights development, is shown as Exhibit "B" and has been reviewed by IRWD's legal counsel.

FISCAL IMPACTS:

The SRA exhibits show the required amount of capital reimbursable facilities as well as estimated costs associated with the improvements. The FY 2024-25 Capital Budget includes 10 capital projects for the improvements. As ICDC awards construction for the projects and IRWD staff presents them for Construction Concurrence, staff will request budget adjustments as necessary.

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic water, sanitary sewer and recycled water facilities for the Orange Heights development is subject to California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 an Environmental Impact Report (EIR) was certified by the City of Orange, the lead agency on April 11, 2000 (SCH# 2000041122). An Addendum to the EIR was approved by the City of Orange on July 15, 2016.

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on July 24, 2024.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A SUPPLEMENTAL REIMBURSEMENT AGREEMENT WITH IRVINE COMMUNITY DEVELOPMENT COMPANY, LLC FOR THE ORANGE HEIGHTS CAPITAL FACILITIES.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Supplemental Reimbursement Agreement with ICDC for Orange Heights Capital Facilities

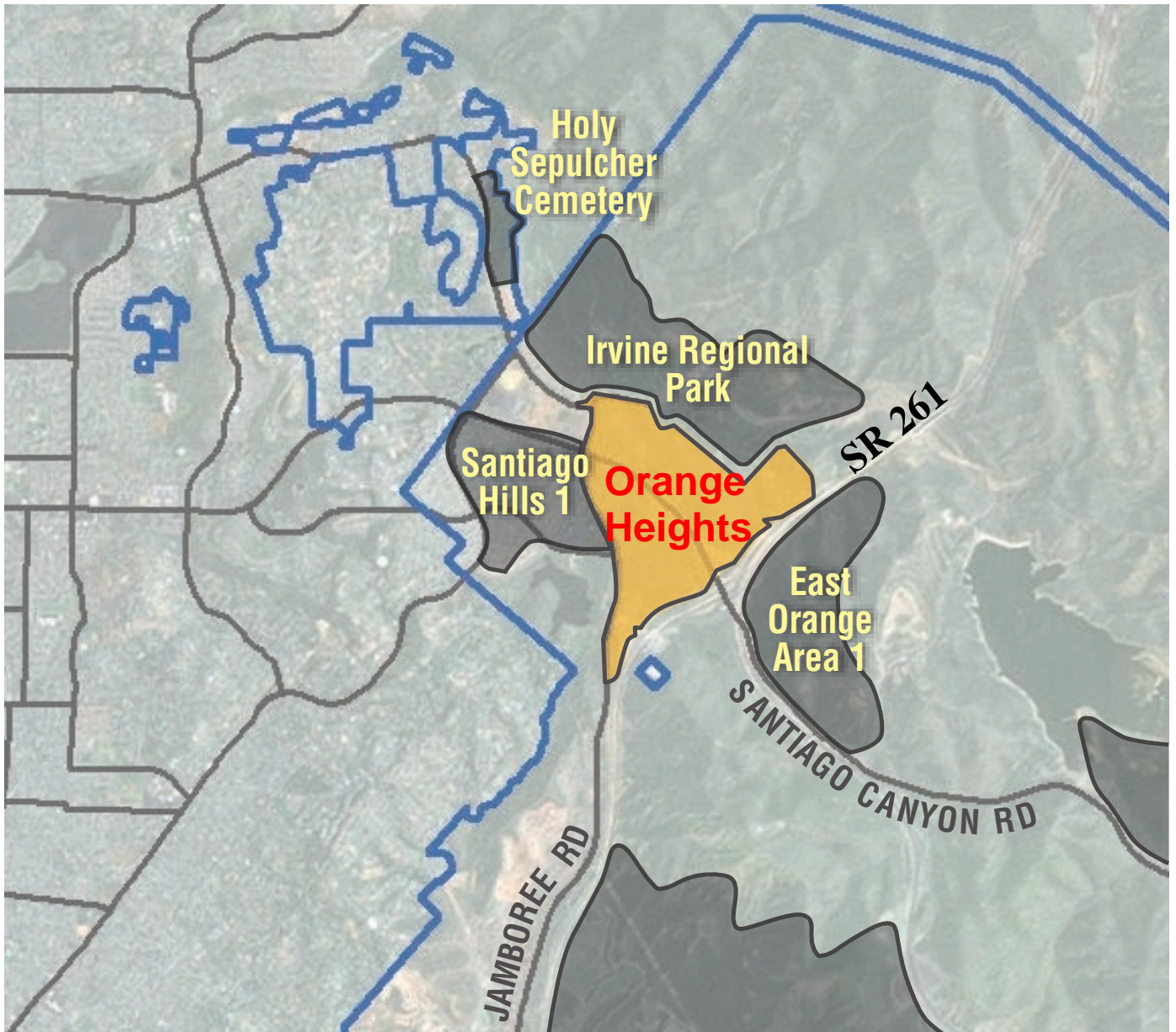


EXHIBIT A
LOCATION MAP
not to scale

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Exhibit "B"

SUPPLEMENTAL REIMBURSEMENT AGREEMENT

BY AND BETWEEN

IRVINE RANCH WATER DISTRICT

AND

IRVINE COMMUNITY DEVELOPMENT COMPANY

This SUPPLEMENTAL REIMBURSEMENT AGREEMENT ("Agreement") is entered into as of this ____ day of _____, 20____, by and between Irvine Ranch Water District, a California water district formed and existing pursuant to the California Water District Law of the state of California ("IRWD"), and Irvine Community Development Company ("ICDC"). All capitalized terms used herein and not otherwise defined shall have the meanings given such terms in the Reimbursement Agreement.

WHEREAS, IRWD and ICDC have previously entered into that certain Reimbursement Agreement dated May 21, 1997 ("Reimbursement Agreement") respecting the construction of certain Capital Facilities by ICDC, the costs of which will be reimbursed by IRWD; and

WHEREAS, said Reimbursement Agreement made reference to the fact that certain supplemental agreements would be entered into by the parties regarding construction of Capital Facilities and reimbursement therefor consistent with the provisions of said Reimbursement Agreement; and

WHEREAS, the parties now wish to enter this Agreement regarding the construction of Capital Facilities associated with the Orange Heights development as further described below, subject to all of the terms of the Reimbursement Agreement, except as provided herein.

NOW, THEREFORE, the parties hereto, in consideration of the mutual promises and covenants hereinafter set forth, do agree as follows:

1. Except as provided herein, the parties hereby incorporate by reference all of the terms and conditions of the Reimbursement Agreement into this Agreement.

2. The name of the Project to which this Agreement pertains is:
Orange Heights Capital Facilities .
The Project is depicted on Exhibit 1 attached to this Agreement.

3. The Capital Facilities to be constructed pursuant to this Agreement are as follows: Approximately 4,300 linear feet of 12-inch and 3,000 linear feet of domestic water pipeline, 1 domestic water pressure reducing station, 5,700 linear feet of 15-inch sewer pipeline, 1,900 linear feet of 4-inch reservoir sewer lateral, 700 linear feet of 12-inch sewer pipeline, and 17,000 linear feet of various sized recycled water pipeline ranging from 6-inch to 16-inch all as shown and described in Exhibit 3 . The Capital Facilities do / **do not** include any facilities that are a part of the Michelson/ Los Alisos Reclamation Plants Upgrades and Distribution System Expansion Project identified in the Agreement No. 61719 2003 LRP Local Resources Program Agreement, entered into as of June 13, 2005, by and between IRWD and the Metropolitan Water District of Southern California (the “MWD Local Project”).

4. The total costs for the Capital Facilities shall include, but not be limited to, the actual costs for construction, surveying, compaction testing, permits, construction bonds, legal fees and an administration fee equal to one percent (1%) of the actual cost of construction (all such actual costs are collectively referred to as the “Costs”). The estimated amount of the Costs is \$12,154,337 as shown in Exhibit 3.

5. The following special terms apply to the construction of the Capital Facilities under this Agreement and supersede the provisions of the original Reimbursement Agreement referenced above: “The “Costs” shall also include consultant design and consultant construction administration assistance.

6. In accordance with Section 10 of the Reimbursement Agreement, ICDC is executing concurrently herewith an Assignment Agreement in the form of Exhibit 2, to be effective upon the Effective Date specified in the Assignment Agreement.

IN WITNESS WHEREOF, the parties have entered this Agreement as of the date set forth above.

IRVINE RANCH WATER DISTRICT

IRVINE COMMUNITY
DEVELOPMENT COMPANY

By: _____
General Manager

By: _____
Title: _____

By: _____
Title: _____

Exhibit "1" to Supplemental Reimbursement Agreement

ORANGE HEIGHTS PRODUCT SUMMARY

APPROVED PRODUCT IN CURRENT DEVELOPMENT AGREEMENT

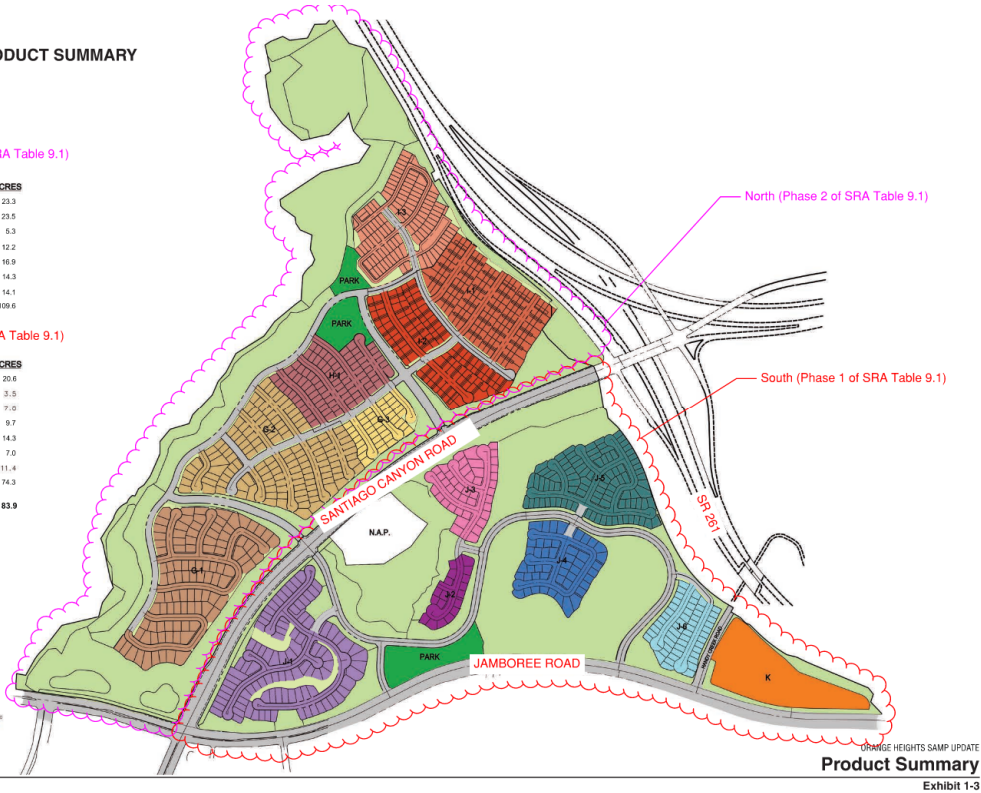
(Phase 2 of SRA Table 9.1)

NORTH			
PRODUCT	UNITS	ACRES	
B-1	60/90	101	23.3
B-2	50/90	129	23.5
B-3	48/75	37	5.3
H-1	48/75	85	12.2
I-1	SIX COURT	150	16.9
I-2	FOUR COURT	110	14.3
I-3		38/92	14.1
NORTH TOTAL		717	109.6

(Phase 1 of SRA Table 9.1)

SOUTH			
PRODUCT	UNITS	ACRES	
J-1	50/90	84	20.6
J-2	65/60	18	3.5
J-3	65/60	42	7.0
J-4	65/60	48	9.7
J-5	45/75	95	14.3
J-6	48/75	52	7.0
K	EASTWOOD TOWNS	114	11.4
SOUTH TOTAL		463	74.3
GRAND TOTAL		1180	183.9

PARK-NORTH 4.8 ACRES
PARK-SOUTH 4.7 ACRES



Depiction of Project

Exhibit "2"
to
Supplemental Reimbursement Agreement

Assignment Agreement

This ASSIGNMENT AGREEMENT is made as of _____, 20____, by and between IRVINE COMMUNITY DEVELOPMENT COMPANY, LLC (“Assignor”), to IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law of the State of California (“Assignee”) based upon the following recitals:

A. Assignor has previously (or will, prior to the Effective Date hereof, have) entered into that certain Construction Contract relating to the Project and Capital Facilities identified in Schedule A hereto (the “Construction Contract”).

B. Assignee desires to acquire (I) Assignor’s right, title and interest in and to the Capital Facilities constructed under the Construction Contract, and (II) the warranty rights of Assignor as to the Capital Facilities under the Construction Contract, and Assignor desires to assign such rights to Assignee.

NOW, THEREFORE, in consideration of the foregoing, the covenants and agreements contained herein and other valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. ASSIGNMENT. Effective upon the date specified in Section 2 hereof (the “Effective Date”), Assignor assigns and transfers to Assignee all of Assignor’s right, title, claim and interest in and to (a) the Capital Facilities constructed pursuant to the Construction Contract, and (b) the warranties and guarantees of contractor as to the Capital Facilities constructed pursuant to the Construction Contract. This Assignment is made by Assignor pursuant to the provisions of Section 10, entitled “Assignment of Interest”, contained in that certain Reimbursement Agreement between Assignor and Assignee dated as of May 21, 1997.

2. EFFECTIVE DATE. The Effective Date shall be the date of the filing of the Notice of Completion for the Construction Contract unless a different date is inserted in the following space: _____

3. TRANSFER OF DOCUMENTATION. On or prior to the Effective Date, Assignor shall provide Assignee with a copy of the Construction Contract.

IN WITNESS WHEREOF, Assignor has executed this Assignment Agreement as of the date first above written.

ASSIGNOR:

IRVINE COMMUNITY DEVELOPMENT
COMPANY, LLC

By: _____

Title: _____

By: _____

Title: _____

Schedule A
to
Assignment Agreement

This Schedule A to Assignment Agreement relates to the assignment of certain matters pursuant to the Supplemental Reimbursement Agreement between Assignor and Assignee dated _____ (“Supplemental Reimbursement Agreement”).

Agreement: Insert name of Project from Section 2 of Supplemental Reimbursement Agreement: Orange Heights Capital Facilities

Insert description of Capital Facilities from Section 3 of Supplemental Reimbursement Agreement: Approximately 4,300 linear feet of 12-inch and 3,000 linear feet of domestic water pipeline, 1 domestic water pressure reducing station, 5,700 linear feet of 15-inch sewer pipeline, 1,900 linear feet of 4-inch reservoir sewer lateral, 700 linear feet of 12-inch sewer pipeline, and 17,000 linear feet of various sized recycled water pipeline ranging from 6-inch to 16-inch all as shown and described in Exhibit 3.

Contractor’s Name: _____

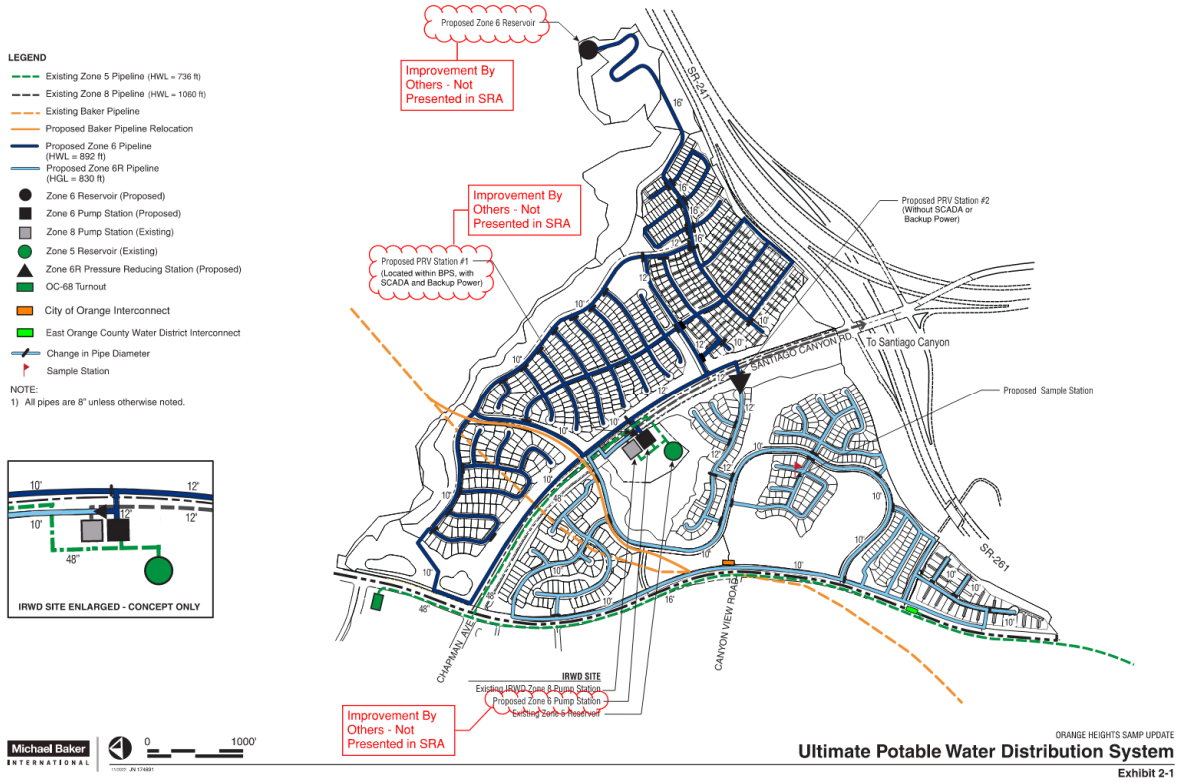
License No. _____

Address: _____

Phone #: _____ Fax #: _____

Contact Person: _____

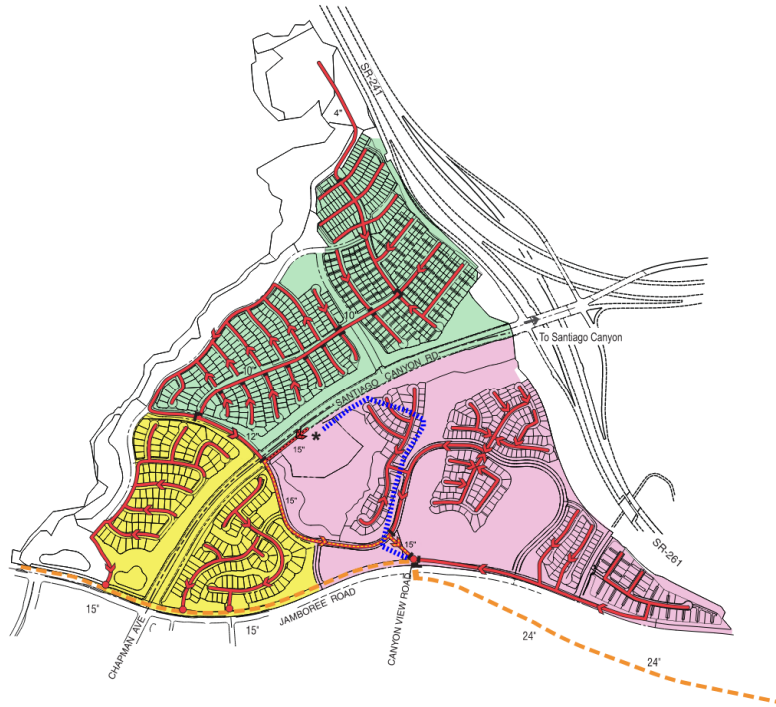
Exhibit "3" to Supplemental Reimbursement Agreement



Domestic Water Facilities

- LEGEND**
- Project Boundary
 - - - Existing Trunk Sewer
 - Existing Backwash Zone C+ Strainers Pipeline
 - Proposed Sewer Alignment
 - Proposed Backwash Zone C+ Strainers Pipeline
 - Proposed Sewer Alignment with Backwash Zone C+ Strainers Discharge
 - Connection to existing trunk sewer
 - North Sewershed
 - East Sewershed
 - South Sewershed
 - ★ Proposed service lateral for IRWD backwash facilities and restrooms

NOTE:
All pipes are 8" unless otherwise noted.

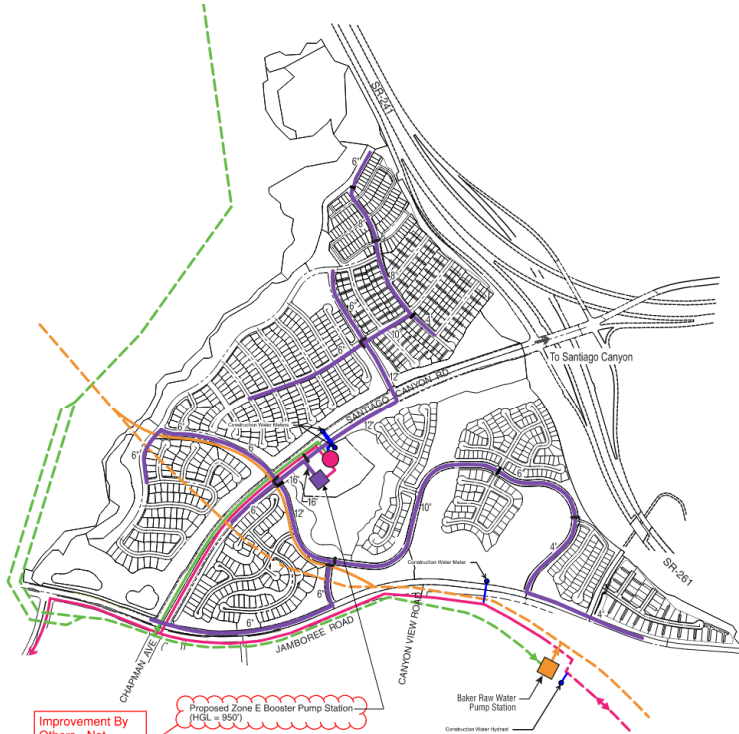


ORANGE HEIGHTS SAMP UPDATE
Proposed Sewer System
Exhibit 3-1

Sanitary Sewer Facilities

LEGEND

- Project Boundary
- - - Existing Irvine Lake 54" Pipeline (HGL = 750' to 790')
- - - Existing Baker (54") Pipeline
- - - Existing Irvine Lake Non-Potable Water Supply System (HGL = 750' to 790')
- - - Proposed Baker 54" Relocation
- - - Proposed SHII Non-Potable Water (Zone E, HGL = 950')
- - - Existing Irvine Lake 54" Pipeline Converted to Zone C+ (HGL = 700')
- - - Existing Zone C+ Pipelines (HGL = 700')
- Proposed Zone E Booster Pump Station (HGL = 950')
- Baker Raw Water Pump Station
- Existing Zone C+ Reservoir (HGL = 700')
- Proposed Temporary Construction Water Meter / Hydrant
- - - Proposed Construction Water from Zone C+ (HGL = 700') 6-inch DI Pipeline



Improvement By Others - Not Presented in SRA

Proposed Zone E Booster Pump Station (HGL = 950')

ORANGE HEIGHTS SAMP UPDATE
Proposed Non-Potable Water Distribution System
 Exhibit 4-2

Recycled Water Facilities

ORANGE HEIGHTS - IRWD SAMP 2022 UPDATE
Table 9-1: Proposed Facilities Cost Opinion Summary
Update for Supplemental Reimbursement Agreement (SRA)

Facility Description	Quantity	Unit Cost	Total Cost (2024 Dollars)	IRWD Cost Share	Developer Cost Share
Orange Heights Potable Water Facilities					
Phase 1 (Zone 6R)					
8-inch Pipe	16,555	\$ 180 /LF	\$ 2,979,900	-	\$ 2,979,900
10-inch Pipe	13,516	\$ 220 /LF	\$ 2,973,520	-	\$ 2,973,520
12-inch Pipe	2,478	\$ 310 /LF	\$ 768,180	\$ 768,180	-
Pressure Reducing Station (PRS-2)	1	\$ 125,000 /ea	\$ 125,000	\$ 125,000	-
East Orange County Water District Interconnect, City of Orange Interconnect, & SCR/JAMB Roadway IRWD Improvements	1	Lump Sum	\$ 1,500,000	-	\$ 1,500,000
Phase 1 Construction Subtotal			\$ 8,346,600	\$ 893,180	\$ 7,453,420
Phase 2 (Zone 6)					
4-inch Pipe	7,950	\$ 130 /LF	\$ 1,033,500	-	\$ 1,033,500
8-inch Pipe (Including House Laterals)	22,130	\$ 180 /LF	\$ 3,983,400	-	\$ 3,983,400
10-inch Pipe	6,220	\$ 220 /LF	\$ 1,368,400	-	\$ 1,368,400
12-inch Pipe	1,885	\$ 310 /LF	\$ 584,350	\$ 584,350	-
16-inch Pipe (PVC)	1,455	\$ 350 /LF	\$ 509,250	\$ 509,250	-
16-inch Pipe (CML&C Steel, Class 150)	1,455	\$ 400 /LF	\$ 582,000	\$ 582,000	-
Reservoir Grading	56,100	\$ 2.65 /CY	\$ 148,665	-	\$ 148,665
Phase 2 Construction Subtotal			\$ 8,209,565	\$ 1,675,600	\$ 6,533,965
Orange Heights Sewer Facilities					
Phase 1					
8-inch Pipe	18,520	\$ 200 /LF	\$ 3,704,000	-	\$ 3,704,000
15-inch Pipe	5,710	\$ 490 /LF	\$ 2,797,900	\$ 2,797,900	-
Phase 1 Construction Subtotal			\$ 6,501,900	\$ 2,797,900	\$ 3,704,000
Phase 2					
4-inch Pipe (Reservoir)	1,900	\$ 150 /LF	\$ 285,000	\$ 285,000	-
4-inch Pipe (House Laterals)	16,870	\$ 150 /LF	\$ 2,530,500	-	\$ 2,530,500
8-inch Pipe	30,650	\$ 200 /LF	\$ 6,130,000	-	\$ 6,130,000
10-inch Pipe (High % of Deep Sewer)	2,455	\$ 240 /LF	\$ 589,200	-	\$ 589,200
12-inch Pipe	700	\$ 340 /LF	\$ 238,000	\$ 238,000	-
Phase 2 Construction Subtotal			\$ 9,772,700	\$ 523,000	\$ 9,249,700
Orange Heights Non-Potable Water Facilities					
Phase 1					
4-inch Pipe	2,700	\$ 130 /LF	\$ 351,000	-	\$ 351,000
6-inch Pipe	4,411	\$ 150 /LF	\$ 661,650	\$ 661,650	-
10-inch Pipe	2,483	\$ 220 /LF	\$ 546,260	\$ 546,260	-
12-inch Pipe	2,400	\$ 310 /LF	\$ 744,000	\$ 744,000	-
16-inch Pipe	800	\$ 350 /LF	\$ 280,000	\$ 280,000	-
Phase 1 Construction Subtotal			\$ 2,582,910	\$ 2,231,910	\$ 351,000
Phase 2 (Zone E)					
4-inch Pipe	390	\$ 130 /LF	\$ 50,700	-	\$ 50,700
6-inch Pipe	4,600	\$ 150 /LF	\$ 690,000	\$ 690,000	-
8-inch Pipe	1,310	\$ 180 /LF	\$ 235,800	\$ 235,800	-
10-inch Pipe	570	\$ 220 /LF	\$ 125,400	\$ 125,400	-
12-inch Pipe	570	\$ 310 /LF	\$ 176,700	\$ 176,700	-
Phase 2 Construction Subtotal			\$ 1,278,600	\$ 1,227,900	\$ 50,700
Orange Heights Raw Water Facilities					
Baker Pipeline Relocation					
54-inch CML&C Steel Pipe	1	Lump Sum	\$ 4,100,000	-	\$ 4,100,000
Baker Pipeline Construction Subtotal (2023 Dollars)			\$ 4,100,000	\$ -	\$ 4,100,000
Peter's Canyon Sewer Encasement					
Peter's Canyon Sewer Encasement	1	Lump Sum	\$ 200,000	-	\$ 200,000
Peters Canyon Sewer Construction Subtotal (2023 Dollars)			\$ 200,000	\$ -	\$ 200,000
Phase 1 Construction Total			\$ 17,431,410	\$ 5,922,990	\$ 11,508,420
Construction Contingency @ 10%			\$ 1,743,141	\$ 592,299	\$ 1,150,842
Engr, Legal, Admin @20%			\$ 3,486,282	\$ 1,184,598	\$ 2,301,684
Total Phase 1 Capital Costs			\$ 22,660,833	\$ 7,699,887	\$ 14,960,946
Phase 2 Construction Total			\$ 19,260,865	\$ 3,426,500	\$ 15,834,365
Construction Contingency @ 10%			\$ 1,926,087	\$ 342,650	\$ 1,583,437
Engr, Legal, Admin @20%			\$ 3,852,173	\$ 685,300	\$ 3,166,873
Total Phase 2 Capital Costs			\$ 25,039,125	\$ 4,454,450	\$ 20,584,675
Baker Pipeline Relocation Costs (2023 Dollars)			\$ 4,100,000	\$ -	\$ 4,100,000
Peters Canyon Sewer Encasement Costs (2023 Dollars)			\$ 200,000	\$ -	\$ 200,000
Orange Heights Study Area Total Capital			\$ 51,999,958	\$ 12,154,337	\$ 39,845,621

- Unit construction costs include appurtenances, startup, testing, mobilization, demobilization, and performance bonds to reach final acceptance of the facilities.
- Phase 1 includes SCR, Jamboree Road, and all development south of SCR. Phase 2 includes all development north of SCR (see SAMP Exhibit 1-3).
- Improvements directly contracted by IRWD (Reservoir, Pump Station, PRS) are not included in the cost estimate.
- In-Tract IRWD facilities are provided and estimated on a per unit basis as plans were not available at this time.


Estimated Cost Exhibit

Exhibits to Supplemental Reimbursement Agreement:

Exhibit 1 - Depiction of Project

Exhibit 2 - Assignment Agreement

Exhibit 3 - Description of Capital Facilities (as needed)

August 12, 2024
Prepared by: B. Rios / E. Akiyoshi
Submitted by: K. Burton
Approved by: Paul A. Cook 

CONSENT CALENDAR

REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR THE FISCAL YEARS 2024-25 AND 2025-26 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT

SUMMARY:

The City of Irvine is proceeding with its pavement rehabilitation and slurry seal for the Fiscal Years (FY) 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Project. This project requires an individual Reimbursement Agreement (RA) since the estimated construction cost is over \$100,000. Staff recommends the Board authorize the General Manager to execute an RA with the City for the FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

BACKGROUND:

IRWD has had an RA in place with the City since 1995 for managing various street rehabilitation projects. Typically included in the City's Capital Improvement projects are alternate bid items for raising existing IRWD sewer manhole covers, sewer cleanouts, and water valve frames and lids to the new pavement grade. Any project up to \$100,000 in reimbursable costs can be authorized by the General Manager as an addendum to this "umbrella" RA.

IRWD and the City have also agreed that any City street improvement project that involves the construction, modification, or relocation of IRWD facilities with an estimated construction cost over \$100,000 will be administered through a separate RA. The City's FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Project has an estimated construction cost of \$4,558,500. Therefore, this project requires a project-specific RA. The terms of the current RA, including design, bidding requirements, reimbursement requirements, inspection, and administrative fees remain unchanged from previous annual street rehabilitation reimbursement agreements with the City.

This project includes replacement and adjustment to grade of approximately 1,400 domestic water valve cans and lids, 140 recycled water valve cans and lids, 55 sanitary sewer cleanout cans and lids, adjustment to grade of approximately 750 sewer manholes, and installation of approximately 275 sewer manhole plywood protection covers. The estimated construction cost is \$4,558,500 plus a City administrative fee equal to four percent of the actual construction cost per the terms of the RA. City bid results for the IRWD work is shown as Exhibit "A", a Location Map as Exhibit "B", and the RA as Exhibit "C". The RA has been reviewed by IRWD's legal counsel.

FISCAL IMPACTS:

Projects 11850, 11852, and 11851 are included in the FY 2024-25 Capital Budget and have adequate budgets to fund the project; they will be funded 100% by Water and Sewer Replacement Funds.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on July 24, 2024.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR ADJUSTMENT OF STREET UTILITIES TO GRADE FOR THE FISCAL YEARS 2024-25 AND 2025-26 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT, SUBJECT TO NON-SUBSTANTIVE CHANGES.

LIST OF EXHIBITS:

- Exhibit "A" – FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal City Bid Results
- Exhibit "B" – FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Vicinity Map
- Exhibit "C" – FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Reimbursement Agreement

Exhibit "A"

City of Irvine
 Bid Results for Project On-Call Street Rehabilitation and Slurry Seal Contract (ST-24-0016)
 Issued on 04/10/2024
 Bid Due on May 09, 2024 10:00 AM (PDT)
 Exported on 05/09/2024

Line Totals (Unit Price * Quantity)						Non-Responsive		Low Bidder					
Item Num	Section	Description	Reference	Unit of Measure	Quantity	Sully-Miller Contracting - Unit Price	Sully-Miller Contracting - Line Total	Excel Paving Co. - Unit Price	Excel Paving Co. - Line Total	All American Asphalt - Unit Price	All American Asphalt - Line Total	R.J. NOBLE COMPANY - Unit Price	R.J. NOBLE COMPANY - Line Total
1	Main Bid	Consistent Depth Cold Milling - Up to 0.2' Depth	Quantity Range per PO: Less than 10,000	SF	20000	\$3.12	\$62,400.00	\$3.08	\$61,600.00	\$3.80	\$76,000.00	\$3.65	\$73,000.00
2	Main Bid	Consistent Depth Cold Milling - Up to 0.2' Depth	Quantity Range per PO: 10,000 or More	SF	2750000	\$0.58	\$1,595,000.00	\$0.59	\$1,622,500.00	\$1.35	\$3,712,500.00	\$1.97	\$5,417,500.00
3	Main Bid	Additional cost for presence of pavement fabric in cold mill area	Quantity Range per PO: 1 or More	SF	2000000	\$0.08	\$160,000.00	\$0.24	\$480,000.00	\$0.12	\$240,000.00	\$0.05	\$100,000.00
4	Main Bid	Unclassified Excavation	Quantity Range per PO: Less than 100	CY	90	\$500.00	\$45,000.00	\$250.00	\$22,500.00	\$420.00	\$37,800.00	\$525.00	\$47,250.00
5	Main Bid	Unclassified Excavation	Quantity Range per PO: 100 or More	CY	600	\$390.00	\$234,000.00	\$235.00	\$141,000.00	\$350.00	\$210,000.00	\$335.00	\$201,000.00
6	Main Bid	Class 2 Aggregate Base	Quantity Range per PO: Less than 500	TON	200	\$220.00	\$44,000.00	\$138.00	\$27,600.00	\$340.00	\$68,000.00	\$172.00	\$34,400.00
7	Main Bid	Class 2 Aggregate Base	Quantity Range per PO: 500 or More	TON	600	\$150.00	\$90,000.00	\$85.00	\$51,000.00	\$315.00	\$189,000.00	\$180.00	\$108,000.00
8	Main Bid	Asphalt Concrete Overlay	Quantity Range per PO: Less than 500	TON	400	\$293.00	\$117,200.00	\$186.00	\$74,400.00	\$319.00	\$127,600.00	\$300.00	\$120,000.00
9	Main Bid	Asphalt Concrete Overlay	Quantity Range per PO: 500 or More	TON	42000	\$185.00	\$7,770,000.00	\$145.00	\$6,090,000.00	\$195.00	\$8,190,000.00	\$265.00	\$11,130,000.00
10	Main Bid	Arterial Street ARHM Paving	Quantity Range per PO: Less than 500	TON	400	\$245.00	\$98,000.00	\$210.00	\$84,000.00	\$378.00	\$151,200.00	\$310.00	\$124,000.00
11	Main Bid	Arterial Street ARHM Paving	Quantity Range per PO: 500 or More	TON	3000	\$211.00	\$633,000.00	\$171.00	\$513,000.00	\$255.00	\$765,000.00	\$295.00	\$885,000.00
12	Main Bid	Addition of Reinforcing Fibers to Asphalt or ARHM Pavement (measured per ton of asphalt or ARHM pavement that contains reinforcing fibers)	Quantity Range per PO: 1 or More	TON	45000	\$18.50	\$832,500.00	\$18.00	\$810,000.00	\$15.00	\$675,000.00	\$18.00	\$810,000.00
13	Main Bid	Install Paving Mat prior to AC overlay (Tensar GlasPave 25 or approved equal)	Quantity Range per PO: Less than 10,000	SF	9000	\$2.00	\$18,000.00	\$2.35	\$21,150.00	\$2.10	\$18,900.00	\$3.00	\$27,000.00
14	Main Bid	Install Paving Mat prior to AC overlay (Tensar GlasPave 25 or approved equal)	Quantity Range per PO: 10,000 or More	SF	1000000	\$0.90	\$900,000.00	\$0.40	\$400,000.00	\$0.40	\$400,000.00	\$0.55	\$550,000.00
15	Main Bid	Adjust Survey Monument Frame and Cover to Grade	Quantity Range per PO: 1 or More	EA	5	\$1,300.00	\$6,500.00	\$1,700.00	\$8,500.00	\$2,100.00	\$10,500.00	\$3,100.00	\$15,500.00
16	Main Bid	Adjust Storm Drain Manhole Frame and Cover to Grade after Paving	Quantity Range per PO: 1 or More	EA	80	\$1,930.00	\$154,400.00	\$1,700.00	\$136,000.00	\$2,900.00	\$232,000.00	\$2,400.00	\$192,000.00
17	Main Bid	Adjust Storm Drain Manhole Frame and Cover to Grade after Slurry Seal	Quantity Range per PO: 1 or More	EA	300	\$1,000.00	\$300,000.00	\$1,700.00	\$510,000.00	\$1,800.00	\$540,000.00	\$1,800.00	\$540,000.00
18	Main Bid	Replace 24" Storm Drain Manhole Frame and Cover per City of Irvine Std. Plan No. 311	Quantity Range per PO: 1 or More	EA	5	\$2,800.00	\$14,000.00	\$3,400.00	\$17,000.00	\$4,000.00	\$20,000.00	\$3,500.00	\$17,500.00
19	Main Bid	Replace 36" Storm Drain Manhole Frame and Cover per City of Irvine Std. Plan No. 311	Quantity Range per PO: 1 or More	EA	5	\$3,100.00	\$15,500.00	\$3,600.00	\$18,000.00	\$4,200.00	\$21,000.00	\$3,610.00	\$18,050.00
20	Main Bid	Install 6' Diameter Type E Traffic Signal Detector Loop and Connect to DLC	Quantity Range per PO: 1 or More	EA	50	\$2,250.00	\$112,500.00	\$650.00	\$32,500.00	\$1,200.00	\$60,000.00	\$700.00	\$35,000.00
21	Main Bid	Install 6' Diameter Type F Traffic Signal Detector Loop and Connect to DLC	Quantity Range per PO: 1 or More	EA	20	\$2,500.00	\$50,000.00	\$680.00	\$13,600.00	\$1,300.00	\$26,000.00	\$725.00	\$14,500.00
22	Main Bid	Install 3' Diameter Modified Type D Traffic Signal Detector Loop and Connect to DLC	Quantity Range per PO: 1 or More	EA	4	\$3,000.00	\$12,000.00	\$680.00	\$2,720.00	\$2,000.00	\$8,000.00	\$725.00	\$2,900.00
23	Main Bid	Micro-Mill AC Pavement Prior to Slurry	Quantity Range per PO: Less than 10,000	SF	5000	\$9.00	\$45,000.00	\$8.68	\$43,400.00	\$11.90	\$59,500.00	\$10.75	\$53,750.00
24	Main Bid	Micro-Mill AC Pavement Prior to Slurry	Quantity Range per PO: 10,000 or More	SF	200000	\$0.50	\$100,000.00	\$0.40	\$80,000.00	\$0.90	\$180,000.00	\$0.75	\$150,000.00
25	Main Bid	0.2' Cold Milling for Roadway Repairs Prior to Slurry Seal	Quantity Range per PO: Less than 1,000	SF	700	\$44.00	\$30,800.00	\$41.00	\$28,700.00	\$40.00	\$28,000.00	\$58.00	\$40,600.00
26	Main Bid	0.2' Cold Milling for Roadway Repairs Prior to Slurry Seal	Quantity Range per PO: 1,000 or More	SF	13000	\$6.25	\$81,250.00	\$4.81	\$62,530.00	\$7.00	\$91,000.00	\$3.40	\$44,200.00
27	Main Bid	AC Paving for Road Repairs Prior to Slurry Seal	Quantity Range per PO: Less than 20	TON	15	\$850.00	\$12,750.00	\$1,000.00	\$15,000.00	\$990.00	\$14,850.00	\$3,410.00	\$51,150.00
28	Main Bid	AC Paving for Road Repairs Prior to Slurry Seal	Quantity Range per PO: 20 or More	TON	200	\$380.00	\$76,000.00	\$350.00	\$70,000.00	\$280.00	\$56,000.00	\$375.00	\$75,000.00
29	Main Bid	Type I Emulsion Aggregate Slurry Seal	Quantity Range per PO: Less than 1,000	SY	800	\$45.00	\$36,000.00	\$50.00	\$40,000.00	\$83.00	\$66,400.00	\$53.00	\$42,400.00
30	Main Bid	Type I Emulsion Aggregate Slurry Seal	Quantity Range per PO: 1,000 or More	SY	250000	\$2.67	\$667,500.00	\$3.00	\$750,000.00	\$4.60	\$1,150,000.00	\$3.00	\$750,000.00

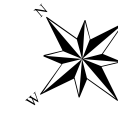
31	Main Bid	Polymer Modified Emulsion Type II RAP Slurry Seal	Quantity Range per PO: Less than 1,000	SY	900	\$40.00	\$36,000.00	\$46.00	\$41,400.00	\$88.00	\$79,200.00	\$49.00	\$44,100.00
32	Main Bid	Polymer Modified Emulsion Type II RAP Slurry Seal	Quantity Range per PO: 1,000 or More	SY	1000000	\$3.50	\$3,500,000.00	\$3.30	\$3,300,000.00	\$4.85	\$4,850,000.00	\$3.75	\$3,750,000.00
33	Main Bid	Polymer Modified Emulsion Type II RAP Slurry Seal on Arterial Street	Quantity Range per PO: Less than 1,000	SY	900	\$46.00	\$41,400.00	\$51.00	\$45,900.00	\$88.00	\$79,200.00	\$56.00	\$50,400.00
34	Main Bid	Polymer Modified Emulsion Type II RAP Slurry Seal on Arterial Street	Quantity Range per PO: 1,000 or More	SY	250000	\$4.25	\$1,062,500.00	\$4.20	\$1,050,000.00	\$4.85	\$1,212,500.00	\$4.50	\$1,125,000.00
35	Main Bid	Remove tree - up to 24" Diameter Trunk	Quantity Range per PO: 1 or More	EA	5	\$8,200.00	\$41,000.00	\$6,400.00	\$32,000.00	\$8,000.00	\$40,000.00	\$7,500.00	\$37,500.00
36	Main Bid	Remove tree - greater than 24" Diameter Trunk	Quantity Range per PO: 1 or More	EA	5	\$14,000.00	\$70,000.00	\$11,000.00	\$55,000.00	\$12,000.00	\$60,000.00	\$12,100.00	\$60,500.00
37	Main Bid	Furnish and Install 24" Box Tree	Quantity Range per PO: 1 or More	EA	15	\$2,750.00	\$41,250.00	\$1,850.00	\$27,750.00	\$3,850.00	\$57,750.00	\$2,200.00	\$33,000.00
38	Main Bid	Utility Potholing	Quantity Range per PO: 1 or More	EA	5	\$425.00	\$2,125.00	\$2,100.00	\$10,500.00	\$4,500.00	\$22,500.00	\$2,100.00	\$10,500.00
39	Main Bid	Curb Ramps (400 SF or less)	Quantity Range per PO: 3 or Less	EA	3	\$6,000.00	\$18,000.00	\$12,000.00	\$36,000.00	\$20,000.00	\$60,000.00	\$24,600.00	\$73,800.00
40	Main Bid	Curb Ramps (400 SF or less)	Quantity Range per PO: 4 or More	EA	150	\$4,900.00	\$735,000.00	\$11,000.00	\$1,650,000.00	\$15,500.00	\$2,325,000.00	\$16,000.00	\$2,400,000.00
41	Main Bid	Curb Ramps (Greater than 400 SF)	Quantity Range per PO: 3 or Less	EA	3	\$6,500.00	\$19,500.00	\$16,000.00	\$48,000.00	\$25,000.00	\$75,000.00	\$40,000.00	\$120,000.00
42	Main Bid	Curb Ramps (Greater than 400 SF)	Quantity Range per PO: 4 or More	EA	25	\$6,000.00	\$150,000.00	\$14,000.00	\$350,000.00	\$20,000.00	\$500,000.00	\$27,000.00	\$675,000.00
43	Main Bid	Install Detectable Warning Surface to Existing Ramp (Safety Step TD RampUp)	Quantity Range per PO: 1 or More	EA	10	\$780.00	\$7,800.00	\$1,100.00	\$11,000.00	\$2,000.00	\$20,000.00	\$1,100.00	\$11,000.00
44	Main Bid	PCC Curb and Gutter	Quantity Range per PO: Less than 50	LF	40	\$250.00	\$10,000.00	\$280.00	\$11,200.00	\$500.00	\$20,000.00	\$625.00	\$25,000.00
45	Main Bid	PCC Curb and Gutter	Quantity Range per PO: 50 or More	LF	2000	\$37.00	\$74,000.00	\$140.00	\$280,000.00	\$140.00	\$280,000.00	\$190.00	\$380,000.00
46	Main Bid	PCC Bikeway Separator	Quantity Range per PO: Less than 1000	LF	900	\$46.00	\$41,400.00	\$67.00	\$60,300.00	\$70.00	\$63,000.00	\$65.00	\$58,500.00
47	Main Bid	PCC Bikeway Separator	Quantity Range per PO: 1000 or More	LF	35000	\$21.00	\$735,000.00	\$45.00	\$1,575,000.00	\$30.00	\$1,050,000.00	\$42.00	\$1,470,000.00
48	Main Bid	8" Misc PCC Improvements	Quantity Range per PO: Less than 500	SF	400	\$29.00	\$11,600.00	\$44.00	\$17,600.00	\$80.00	\$32,000.00	\$143.00	\$57,200.00
49	Main Bid	8" Misc PCC Improvements	Quantity Range per PO: 500 or More	SF	12000	\$17.00	\$204,000.00	\$35.00	\$420,000.00	\$45.00	\$540,000.00	\$54.00	\$648,000.00
50	Main Bid	4" Misc PCC Improvements	Quantity Range per PO: Less than 500	SF	400	\$26.00	\$10,400.00	\$38.00	\$15,200.00	\$80.00	\$32,000.00	\$76.00	\$30,400.00
51	Main Bid	4" Misc PCC Improvements	Quantity Range per PO: 500 or More	SF	10000	\$14.00	\$140,000.00	\$22.00	\$220,000.00	\$25.00	\$250,000.00	\$22.00	\$220,000.00
52	Main Bid	Survey Monument Perservation- Pre and Post Construction Ties/Corner Records	Quantity Range per PO: 1 or More	EA	200	\$885.00	\$177,000.00	\$760.00	\$152,000.00	\$720.00	\$144,000.00	\$805.00	\$161,000.00
53	Main Bid	Paint - 6" Solid Single (White or Yellow)	Quantity Range per PO: 1 or More	LF	220000	\$0.48	\$105,600.00	\$0.65	\$143,000.00	\$0.60	\$132,000.00	\$0.76	\$167,200.00
54	Main Bid	Paint - 6" Skip/Broken (White or Yellow)	Quantity Range per PO: 1 or More	LF	550000	\$0.43	\$236,500.00	\$0.25	\$137,500.00	\$0.25	\$137,500.00	\$0.60	\$330,000.00
55	Main Bid	Paint - Double Yellow with Black (6"-3"-6")	Quantity Range per PO: 1 or More	LF	140000	\$0.60	\$84,000.00	\$1.40	\$196,000.00	\$1.25	\$175,000.00	\$1.80	\$252,000.00
56	Main Bid	Paint - Broken Double Yellow with Black	Quantity Range per PO: 1 or More	LF	7000	\$0.75	\$5,250.00	\$1.00	\$7,000.00	\$0.90	\$6,300.00	\$4.60	\$32,200.00
57	Main Bid	Paint - 8" Solid (White)	Quantity Range per PO: 1 or More	LF	130000	\$0.75	\$97,500.00	\$1.00	\$130,000.00	\$0.80	\$104,000.00	\$1.17	\$152,100.00
58	Main Bid	Paint - 8" Skip (White)	Quantity Range per PO: 1 or More	LF	15000	\$0.63	\$9,450.00	\$0.50	\$7,500.00	\$0.45	\$6,750.00	\$1.35	\$20,250.00
59	Main Bid	Paint - 12" Solid (White or Yellow)	Quantity Range per PO: 1 or More	LF	14000	\$3.75	\$52,500.00	\$3.00	\$42,000.00	\$2.65	\$37,100.00	\$3.40	\$47,600.00
60	Main Bid	Paint - 8" Letters or Numbers (White or Yellow)	Quantity Range per PO: 1 or More	EA	2300	\$32.50	\$74,750.00	\$25.00	\$57,500.00	\$22.70	\$52,210.00	\$31.50	\$72,450.00
61	Main Bid	Paint - Turn Arrows (White)	Quantity Range per PO: 1 or More	EA	275	\$100.00	\$27,500.00	\$50.00	\$13,750.00	\$45.00	\$12,375.00	\$143.00	\$39,325.00
62	Main Bid	Paint - Drop/Merge Lane Arrows (White)	Quantity Range per PO: 1 or More	EA	3	\$250.00	\$750.00	\$150.00	\$450.00	\$185.00	\$555.00	\$1,100.00	\$3,300.00
63	Main Bid	Paint - Bike Legend with Arrow (White)	Quantity Range per PO: 1 or More	EA	230	\$312.00	\$71,760.00	\$72.00	\$16,560.00	\$65.00	\$14,950.00	\$185.00	\$42,550.00
64	Main Bid	Paint - Railroad Crossing Legend (White)	Quantity Range per PO: 1 or More	EA	2	\$500.00	\$1,000.00	\$210.00	\$420.00	\$255.00	\$510.00	\$1,280.00	\$2,560.00
65	Main Bid	Paint - Ladder Cross Walk (Yellow or White)	Quantity Range per PO: 1 or More	LF	8200	\$10.00	\$82,000.00	\$5.00	\$41,000.00	\$4.35	\$35,670.00	\$6.25	\$51,250.00
66	Main Bid	Install Thermoplastic Green Pavement Markings	Quantity Range per PO: 1 or More	SF	15000	\$22.50	\$337,500.00	\$14.00	\$210,000.00	\$13.00	\$195,000.00	\$16.30	\$244,500.00
67	Main Bid	Reflective Pavement Markers	Quantity Range per PO: 1 or More	EA	25000	\$5.00	\$125,000.00	\$4.50	\$112,500.00	\$3.95	\$98,750.00	\$6.55	\$163,750.00




68	Main Bid	Install Sign	Quantity Range per PO: 1 or More	EA	10	\$625.00	\$6,250.00	\$540.00	\$5,400.00	\$485.00	\$4,850.00	\$1,100.00	\$11,000.00
69	Main Bid	Traffic Control Plans	Quantity Range per PO: 1 or More	LF	500	\$9.50	\$4,750.00	\$39.00	\$19,500.00	\$12.00	\$6,000.00	\$23.00	\$11,500.00
70	Main Bid	Portable Changeable Message Sign	Quantity Range per PO: 1 or More	EA	10	\$110.00	\$1,100.00	\$2,000.00	\$20,000.00	\$1,400.00	\$14,000.00	\$2,530.00	\$25,300.00
71	Main Bid	48"x48" Construction Advisory Sign	Quantity Range per PO: 1 or More	EA	10	\$1,400.00	\$14,000.00	\$700.00	\$7,000.00	\$1,500.00	\$15,000.00	\$1,500.00	\$15,000.00
72	Main Bid	Mobilization for Traffic Striping, Pavement Markings, and Pavement Markers Installation Work per Purchase Order	Quantity Range per PO: 1	EA	10	\$3,100.00	\$31,000.00	\$7,700.00	\$77,000.00	\$8,500.00	\$85,000.00	\$10,000.00	\$100,000.00
Subtotal						\$22,809,435.00	\$22,879,630.00	\$30,349,920.00	\$34,894,435.00				
73	Alternate Items	Install New IRWD Water Valve Frame and Cover to Grade after Slurry Seal	Quantity Range per PO: 1 or More	EA	950	\$1,500.00	\$1,425,000.00	\$1,800.00	\$1,710,000.00	\$3,400.00	\$3,230,000.00	\$3,200.00	\$3,040,000.00
74	Alternate Items	Install New IRWD Reclaim Water Valve Frame and Cover to Grade After Slurry Seal	Quantity Range per PO: 1 or More	EA	95	\$1,000.00	\$95,000.00	\$1,800.00	\$171,000.00	\$3,400.00	\$323,000.00	\$3,200.00	\$304,000.00
75	Alternate Items	Install New IRWD Sewer Cleanout Frame and Cover to Grade After Slurry Seal	Quantity Range per PO: 1 or More	EA	50	\$1,100.00	\$55,000.00	\$1,800.00	\$90,000.00	\$3,400.00	\$170,000.00	\$3,200.00	\$160,000.00
76	Alternate Items	Adjust IRWD Sewer Manhole Frame and Cover to Grade After Slurry Seal	Quantity Range per PO: 1 or More	EA	475	\$1,900.00	\$902,500.00	\$1,700.00	\$807,500.00	\$2,100.00	\$997,500.00	\$3,200.00	\$1,520,000.00
77	Alternate Items	Install New IRWD Water Valve Frame and Cover to Grade After Paving	Quantity Range per PO: 1 or More	EA	450	\$1,500.00	\$675,000.00	\$1,800.00	\$810,000.00	\$3,400.00	\$1,530,000.00	\$3,200.00	\$1,440,000.00
78	Alternate Items	Install New IRWD Reclaim Water Valve Frame and Cover to Grade After Paving	Quantity Range per PO: 1 or More	EA	45	\$1,200.00	\$54,000.00	\$1,800.00	\$81,000.00	\$3,400.00	\$153,000.00	\$3,200.00	\$144,000.00
79	Alternate Items	Install New IRWD Sewer Cleanout Frame and Cover to Grade After Paving	Quantity Range per PO: 1 or More	EA	5	\$1,200.00	\$6,000.00	\$1,800.00	\$9,000.00	\$3,400.00	\$17,000.00	\$3,200.00	\$16,000.00
80	Alternate Items	Adjust IRWD Sewer Manhole Frame and Cover to Grade After Paving	Quantity Range per PO: 1 or More	EA	275	\$1,900.00	\$522,500.00	\$1,700.00	\$467,500.00	\$3,200.00	\$880,000.00	\$3,200.00	\$880,000.00
81	Alternate Items	Install Plywood Covers in IRWD manholes per IRWD Std Plan S-1.	Quantity Range per PO: 1 or More	EA	275	\$620.00	\$170,500.00	\$1,500.00	\$412,500.00	\$600.00	\$165,000.00	\$1,000.00	\$275,000.00
Subtotal						\$3,905,500.00	\$4,558,500.00	\$7,465,500.00	\$7,779,000.00				
Total						\$26,714,935.00	\$27,438,130.00	\$37,815,420.00	\$42,673,435.00				

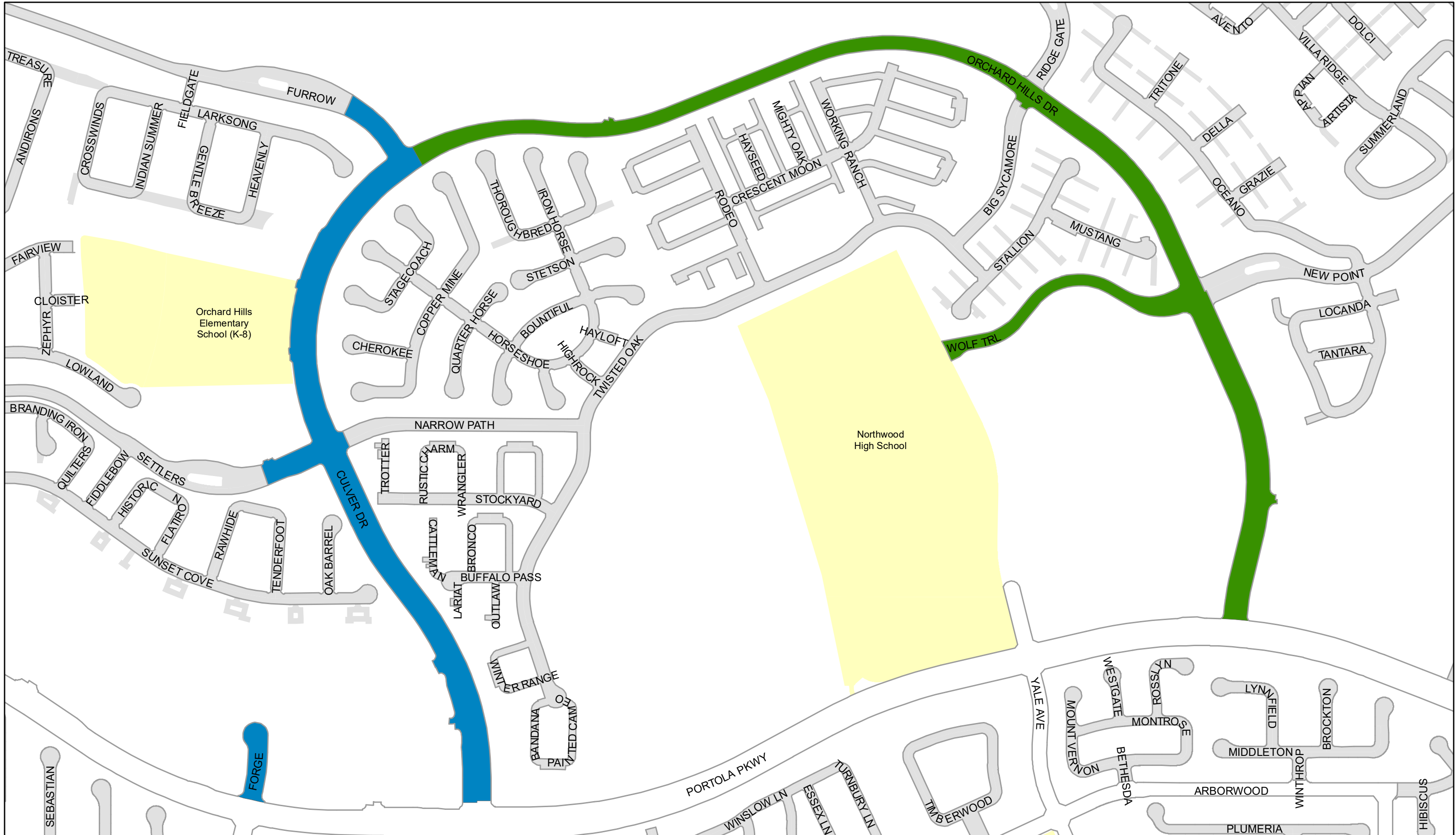
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Exhibit "B"
Orchard Hills (PA 01)

FY 23-24 Street Rehabilitation and Slurry Seal Project

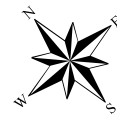


- | | |
|---|--|
|  | 0.2' grind and fiber reinforced AC overlay |
|  | Crack Seal / Type II Slurry Seal |
|  | Private Street |

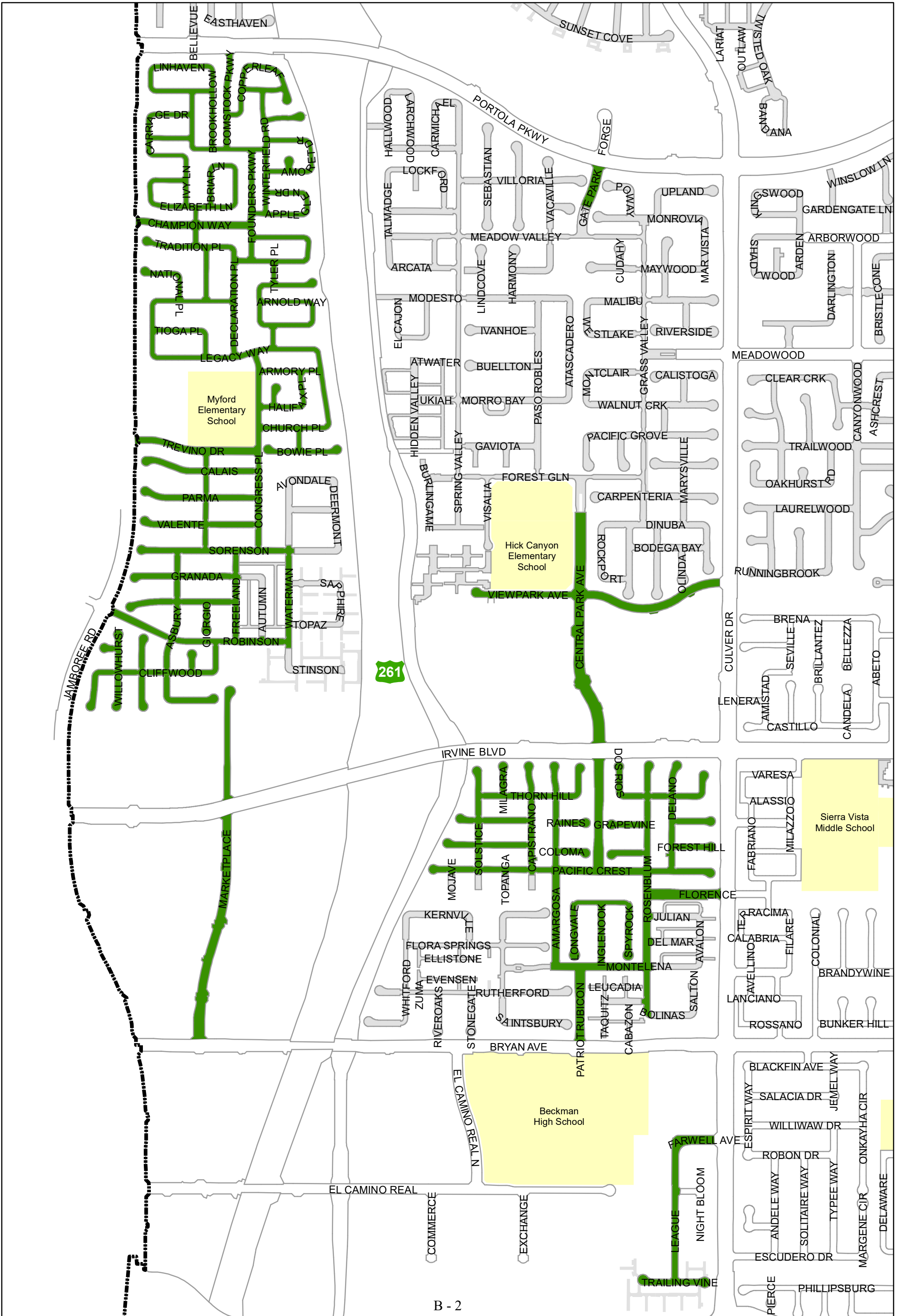


Lower Peters Canyon (PA 04)

FY 23-24 Street Rehabilitation and Slurry Seal Project

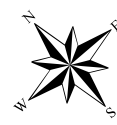


	Crack Seal / Type II Slurry Seal
	Private Street



Walnut (PA 10)

FY 23-24 Street Rehabilitation
and Slurry Seal Project

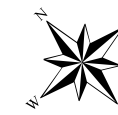


- 0.2' grind and fiber reinforced AC overlay
- Crack Seal / Type II Slurry Seal
- Private Street



Woodbridge North (PA 15)

FY 23-24 Street Rehabilitation and Slurry Seal Project



- Private Street
- 0.2' grind and fiber reinforced AC overlay
- Crack Seal / Type II Slurry Seal



REIMBURSEMENT AGREEMENT BETWEEN

IRVINE RANCH WATER DISTRICT

AND THE CITY OF IRVINE

FOR

INSTALLATION AND ADJUSTMENT OF STREET UTILITIES TO GRADE FOR

FISCAL YEARS 2024-25 AND 2025-26

ANNUAL STREET REHABILITATION AND SLURRY SEAL

BID NO. ST-24-0016

This Agreement is made and entered into as of this ____ day of _____, 2024, by and between IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law, hereinafter referred to as "DISTRICT," and the CITY OF IRVINE, a municipal corporation, hereinafter referred to as "CITY."

W I T N E S S E T H:

WHEREAS, CITY proposes to construct street and utility improvements within the area of the FY 2024-25 and 2025-26 Annual Street Rehabilitation and Slurry Seal Project, Bid No. ST-24-0016 (the "Project"), within the jurisdictional boundaries of DISTRICT and the City of Irvine; and

WHEREAS, such construction will necessitate the following construction work on DISTRICT facilities: replacement and adjustment to grade of approximately 1400 Domestic Water Valve cans and lids, replacement and adjustment to grade of approximately 140 Recycled Water Valve cans and lids, replacement and adjustment to grade of approximately 55 Sanitary Sewer Cleanout cans and lids, adjustment to grade of approximately 750 Sanitary Sewer Manholes, and installation of 275 Sewer manhole plywood protection covers, all as described on Exhibit "A" attached hereto and incorporated by reference (the infrastructure above collectively referred to as the "IRWD FACILITIES" and the construction work related to them is the "Work"); and

WHEREAS, the parties have determined that it would be more expedient for CITY to perform the IRWD FACILITIES Work rather than for DISTRICT to do so; and

WHEREAS, DISTRICT is amenable to the CITY performing the IRWD FACILITIES Work with the CITY agreeing to advance the costs; and

WHEREAS, DISTRICT intends to fully reimburse the CITY through payments billed by the CITY and approved by DISTRICT for the entire cost of the IRWD FACILITIES Work; and

WHEREAS, except as otherwise provided herein, upon the completion of the IRWD FACILITIES Work, the parties intend that any newly-installed IRWD FACILITIES shall become the property of DISTRICT in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties agree as follows:

SECTION 1. IRWD FACILITIES. In conjunction with the Project, CITY agrees to initiate and pursue to completion the design and construction of the IRWD FACILITIES Work pursuant to this Agreement.

SECTION 2. PLANS. CITY agrees that the IRWD FACILITIES Work shall be completed pursuant to project plans and specifications (the "Plans and Specifications") approved by DISTRICT. Prior to commencement of preparation of the Plans and Specifications, CITY shall submit its design engineer's proposed improvement plans for the IRWD FACILITIES to DISTRICT. DISTRICT will have a period of five (5) calendar days from its receipt of such design proposal to review and either indicate its approval or request changes. CITY shall cause its design engineer to review and respond to any requested changes. The Plans and Specifications must incorporate (directly or by reference) the applicable portions of DISTRICT's latest edition of *Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities* (the "Construction Manual"). CITY shall let the contract for the performance of the IRWD FACILITIES Work (together with non-reimbursable work to be completed by CITY within the Project) pursuant to the approved plans prepared by CITY's design engineer.

SECTION 3. BIDDING AND AWARD.

3.1 The parties agree that the performance of the IRWD FACILITIES Work shall be included in CITY's contract(s) awarded for the Project and that the IRWD FACILITIES Work shall be bid as a separate item or items that can be deleted. During the bidding process, CITY shall deliver to IRWD one (1) complete set of the bid documents that include the IRWD FACILITIES Work, including all related addenda concurrently with the distribution thereof to prospective bidders. Upon opening of bids by CITY, CITY will submit the bids or a spread sheet summary of the bids to DISTRICT. DISTRICT will have a period of ten (10) calendar days from its receipt of the bid results for review and approval of the IRWD FACILITIES Work bid item(s) submitted by the bidder identified to DISTRICT by CITY as CITY's proposed successful bidder. CITY agrees that bids received for the construction of the IRWD FACILITIES bid item(s) shall be subject to the approval of DISTRICT prior to award of the Project construction contract(s) that include the IRWD FACILITIES. If DISTRICT does not approve such bids, then either party may terminate this Agreement upon 24 hours' prior written notice, in which event CITY shall have no further obligation to perform the IRWD FACILITIES Work, and DISTRICT may elect to perform the IRWD FACILITIES Work with its own contractor. If DISTRICT approves of the IRWD FACILITIES bid item(s) of CITY's successful

bidder, then CITY shall cause the IRWD FACILITIES Work to be performed as part of the contract awarded to such bidder.

3.2 Estimated Costs. The total estimated construction cost for the IRWD FACILITIES Work is \$4,558,500, but the amount to be reimbursed by DISTRICT will be based on the actual costs of construction plus an administration fee as set forth in further detail in Section 5.

3.3 Contract Documents. Upon award of the construction contract, CITY shall provide DISTRICT with one original copy of the fully-executed contract documents and one copy of the bid package relating to the IRWD FACILITIES received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS.

4.1 DISTRICT agrees to reimburse CITY for any change order(s) for revision(s) requested by DISTRICT or otherwise required to perform the IRWD FACILITIES Work. CITY shall promptly furnish DISTRICT with copies of any proposed change order(s) to such contract within five (5) working days of the initiation of the changed conditions to such contract, which change orders will be subject to DISTRICT approval if and to the extent the IRWD FACILITIES are affected.

4.2 DISTRICT shall promptly review proposed change order(s) and provide CITY with a response within five (5) working days or sooner of receiving proposed change order(s) information from CITY. DISTRICT agrees not to unreasonably cause delay(s) to the construction schedule of the Project in reviewing proposed change order(s) for the IRWD FACILITIES Work. Notwithstanding any other provision herein, any approval required to be given by the DISTRICT under this Section 4 will be deemed given if no response to the CITY's request for such approval is received by the CITY within eight (8) working days following the written request for such approval, unless the parties agree otherwise in a writing executed by both parties.

SECTION 5. REIMBURSEMENT.

5.1 Costs. CITY shall keep a separate accounting of all costs incurred by CITY in relation to the IRWD FACILITIES Work. DISTRICT shall reimburse CITY for the following costs (collectively, the "**Costs**");

(1) Actual Costs: the actual costs of design, construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by CITY in connection with the design and construction of the IRWD FACILITIES;

plus

(2) Administration Fee: an administration fee which shall be equal to four percent (4%) of the actual cost of construction (costs paid directly to CITY's contractor for construction only, excluding any cost for design, surveying, geotechnical or other work) of the IRWD FACILITIES Work. This amount is deemed to cover all

costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering.

5.2 Invoicing & Payment. Within sixty (60) days of DISTRICT's acceptance of the installed, relocated, or adjusted IRWD FACILITIES as provided in Section 8, a final accounting of the Costs shall be made by CITY and submitted to DISTRICT along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of performing the IRWD FACILITIES Work. Amounts paid pursuant to progress payment invoices shall be subject to adjustment in the final accounting. Within 30 days after the DISTRICT's receipt of the final accounting, DISTRICT agrees to pay to CITY the total amount of the Costs.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. CITY shall require in its contract for the construction of the IRWD FACILITIES that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of DISTRICT, in connection with performing the IRWD FACILITIES Work.

SECTION 7. INSPECTION. DISTRICT shall have sole and absolute discretion as to all aspects of design and construction of the IRWD FACILITIES, and DISTRICT shall be entitled to inspect the construction of IRWD FACILITIES Work as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection thereof. DISTRICT shall have access to all phases of the Project work to be performed by CITY for the purpose of such inspection; provided, however, all questions regarding the work being performed will be directed to CITY's resident engineer. DISTRICT will promptly notify CITY of any portion of the Work on the IRWD FACILITIES which appears not to conform to the Plans and Specifications. The determination of DISTRICT as to conformity of the IRWD FACILITIES Work with the Plans and Specifications shall be made in DISTRICT's sole and absolute discretion. DISTRICT shall not unreasonably withhold its approval as to such conformity of the IRWD FACILITIES Work with the Plans and Specifications. CITY shall require its contractor to construct the IRWD FACILITIES so that the IRWD FACILITIES conform to the Plans and Specifications. CITY shall assume full responsibility for certifying or obtaining certification of the compaction of backfill material over the IRWD FACILITIES.

SECTION 8. ACCEPTANCE.

8.1 Acceptance. DISTRICT shall accept the IRWD FACILITIES, as installed, relocated, or adjusted when the IRWD FACILITIES Work has been completed by CITY in accordance with all requirements of the Plans and Specifications, including any change orders approved by DISTRICT as provided in Section 4.

8.2 As-Builts. At the time of completion and acceptance of the IRWD FACILITIES, CITY shall furnish DISTRICT with one copy of the contractor's redlined set of blue-line "record" drawings (showing all revisions, manufacturer and type of valves, pipe and

fittings as required by DISTRICT) and one copy of the compaction reports and certificate, survey notes, and cut sheets.

SECTION 9. OWNERSHIP. Notwithstanding the fact that CITY shall accomplish the construction of the IRWD FACILITIES subject to reimbursement, the IRWD FACILITIES to be completed hereunder, together with the necessary franchises, licenses, easements, rights-of-way, and other privileges, shall at all times be subject to the applicable rates, rules and regulations of DISTRICT, as modified or amended from time to time. CITY hereby disclaims any interest in the IRWD FACILITIES and hereby transfers and assigns to DISTRICT any and all right, title, and interest it may have in the IRWD FACILITIES upon their completion and acceptance. DISTRICT shall own, operate and maintain the IRWD FACILITIES following acceptance thereof.

SECTION 10. GUARANTEES. CITY will, pursuant to the requirement(s) of the Plans and Specifications, cause its contractor(s) for the IRWD FACILITIES to guarantee the IRWD FACILITIES against defects in workmanship and materials for a period of one (1) year from the date of acceptance by CITY, which acceptance shall be given only after acceptance by DISTRICT as provided in Section 8. It is further agreed that CITY shall cause the IRWD FACILITIES to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of the IRWD FACILITIES which during said one (1) year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from CITY's contractors or material manufacturers, with respect to the IRWD FACILITIES. The guarantee and obligations under this section shall in no way be relieved by DISTRICT's inspection and/or acceptance of the IRWD FACILITIES. This section sets forth the entire guarantee and warranty of CITY with respect to the IRWD FACILITIES Work. The express or implied warranties of other persons with respect to IRWD FACILITIES shall in no way be limited by the guarantee and warranty of CITY contained in this section. If requested by DISTRICT, CITY agrees to assign to DISTRICT the contractor's guarantee and/or any other guarantees or warranties relating to the IRWD FACILITIES Work.

SECTION 11. INDEMNIFICATION.

11.1 CITY shall indemnify, defend and hold DISTRICT, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of the IRWD FACILITIES as a result of any work or action performed by CITY or on behalf of CITY, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of DISTRICT, its officers, agents, employees or engineers or by any act or omission for which DISTRICT, its officers, agents, employees or engineers are liable without fault.

11.2 DISTRICT shall indemnify, defend and hold CITY, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by DISTRICT, its officers, agents, or employees, with respect to the IRWD FACILITIES construction; or (ii) following DISTRICT acceptance of the IRWD

FACILITIES, with respect to maintenance and operation of the IRWD FACILITIES, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any negligence of CITY, its officers, agents, employees or engineers, or by any act or omission for which CITY, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. CITY shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including the IRWD FACILITIES and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include DISTRICT, its officers, agents, employees and engineers, as additional insureds on all insurance policies that CITY requires its contractor(s) to provide. As evidence of such insurance coverage, CITY shall, prior to commencement of performance of the IRWD FACILITIES Work, provide DISTRICT with certificates of insurance and insurance endorsements from CITY's contractor(s) in a form acceptable to DISTRICT.

SECTION 13. TERMINATION.

13.1 DISTRICT shall have the right to terminate this Agreement at any time, subject to the provisions of this section, by providing five (5) business days' prior written notice to CITY, except as provided in Section 3 with respect to unapproved bids. If at the request or direction of a party other than CITY, the performance of the IRWD FACILITIES Work is not accomplished or completed, DISTRICT shall remain obligated for the actual amount of the Costs incurred by CITY to the date of termination.

13.2 If CITY's Project is canceled or modified so as to eliminate the necessity of the construction of the IRWD Facilities, CITY shall have the right to terminate this Agreement and thereby terminate its obligation to perform the IRWD FACILITIES Work, by providing five (5) business days' prior written notice to DISTRICT. In such case, DISTRICT will not be obligated for any design or any other Costs incurred by CITY. If IRWD elects to perform the IRWD FACILITIES Work, DISTRICT may, but shall not be obligated to, acquire the design or other work from CITY by separate agreement.

SECTION 14. NOTICE. Any notice or other written instrument required or permitted by this Agreement to be given to either party shall be deemed received when personally served or twenty-four (24) hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

DISTRICT: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

CITY: City of Irvine
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618
Attn: Allison Tran, Associate Engineer

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT. This Agreement shall be binding upon and inure to the benefit of the successor and assigns of CITY and DISTRICT. This Agreement constitutes the entire Agreement between CITY and DISTRICT and supersedes all prior understandings and agreements between the parties with respect to the subjects hereof. This Agreement may be modified only in writing signed by both parties hereto.

SECTION 16. LEGAL FEES. In the event of any declaratory or other legal or equitable action instituted between CITY and DISTRICT in connection with this Agreement, the prevailing party shall be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

SECTION 17. DEEMED APPROVAL. Any approval required to be given by either party pursuant to this Agreement shall be deemed given if no response to the party's request for such approval is received by the requesting party within fifteen (15) days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or otherwise unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

SECTION 19. APPLICABLE LAW. This Agreement shall be construed and enforced in accordance with the laws of the State of California.

SECTION 20. WAIVER. The waiver of any provision of this Agreement by either party shall not be deemed to be a waiver of any other provision or of any preceding or subsequent breach hereunder.

IN WITNESS WHEREOF, the parties to the Agreement have executed this Agreement on the date herein above written.

IRVINE RANCH WATER DISTRICT

By _____
Paul Cook, General Manager

Dated _____

ATTEST:

By _____
Secretary/Assistant Secretary

Dated _____

APPROVED AS TO FORM:

By _____
Legal Counsel, IRWD

Dated _____

CITY OF IRVINE
A Municipal Corporation

By _____
Farrah N. Khan
Mayor of the City of Irvine

Dated _____

By _____
Oliver C. Chi
City Manager of the City of Irvine

Dated _____

By _____
Jaimee Bourgeois
Director of Public Works and
Transportation

Dated _____

ATTEST:

By _____
Carl Petersen
City Clerk of the City of Irvine

Dated _____

APPROVED AS TO FORM:

By _____
Robert Owen, RUTAN & TUCKER, LLP
City Attorney of the City of Irvine


Dated _____

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August 12, 2024

Prepared by: H. Cho / J. Moeder

Submitted by: K. Burton

Approved by: Paul A. Cook 

CONSENT CALENDAR

SAN JOAQUIN RESERVOIR VALVE ACTUATOR PURCHASE AND BUDGET ADDITION

SUMMARY:

The San Joaquin Reservoir Valve Actuator Replacement project will replace the five valve actuators on the reservoir inlet / outlet pipe that have reached the end of their useful life. Staff recommends that the Board:

- Authorize the General Manager to approve a contract with Southwest Valve & Equipment in the amount of \$366,427 for the purchase of replacement valve actuators for the San Joaquin Reservoir Valve Actuator Replacement, and
- Authorize the addition of San Joaquin Reservoir Valve Actuator Replacement, Project 13111, in the amount of \$982,300 to the FY 2024-25 Capital Budget.

BACKGROUND:

The San Joaquin Reservoir, originally constructed in 1966 as a potable water reservoir, was converted in 2003 by IRWD to a recycled water reservoir. The reservoir connects to the recycled water system by a 60-inch inlet / outlet pipe with five inlet / outlet valves inside the reservoir, as shown in Exhibit “A”. The valves are configured with three 48-inch valves located along the side of the reservoir at various elevations and a 60-inch and 24-inch valve located on the bottom of the reservoir. Each of the valves are operated with hydraulic actuators. During the 2003 conversion to recycled water, the five valves were refurbished, and new hydraulic valve actuators were installed.

By 2014, three of the valves had been repaired, thereby extending the functional operation of the inlet / outlet system. Over the past four years, all five of the actuators have experienced varying degrees of hydraulic fluid leakage – all of which required additional maintenance. In October 2023, a diving contractor inspected these five valves and actuators to determine the extent of hydraulic fluid leakage. The diver also attempted to make repairs but was unsuccessful. Based on the diver’s inspection, the deepest and largest valve has the most severe fluid leakage, and this valve is considered inoperable at this time.

Staff has determined the best course of action for repairing the leaking valve actuators is to procure replacement valve actuators and perform the replacement work in September and October when the water level in the reservoir is typically at its lowest. This will allow the actuators at higher elevations to be repaired above the water level and minimize the number of actuators that require replacement with a diver. For the deep actuators, performing the work with a low water level also allows for maximum dive times, which is controlled by the total depth of submergence. Given the long lead time associated with purchasing actuators, staff recommends that the District procure the valve actuators at this time. While the actuators are

on-order, IRWD can then work to retain a contractor with diver repair work capabilities that would be prepared to complete the actuator replacement work in September and October of 2025.

Actuator Purchase:

The five valve actuators on the San Joaquin Reservoir inlet / outlet pipe are Bettis Subsea actuators and are compatible with the existing butterfly valves on the pipe. Staff requested proposals for Bettis Subsea actuators and received a proposal from Southwest Valve & Equipment for \$366,427, as shown in Exhibit “B”. Southwest Valve & Equipment is the only authorized Bettis actuator supplier in California, Nevada, and Arizona, also shown in Exhibit “B”. Since the last actuator replacement in 2014, Bettis has updated the Subsea actuators, and the updated Bettis actuators will be procured. Bettis valve actuators maintain a high-quality reputation among the industry and in underwater valve equipment. The actuators have a 34- to 36-week lead time after submittal approval, which aligns with installing the replacement actuators in September / October of 2025.

FISCAL IMPACTS:

This project will be funded 100% by the Sewer / Recycled Water Replacement Fund. Staff requests the addition of Project 13111 to the FY 2024-25 Capital Budget as follows:

Project No.	Current Budget	Addition / <Reduction>	Total Budget
13111	\$0	\$982,300	\$982,300

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on July 24, 2024.

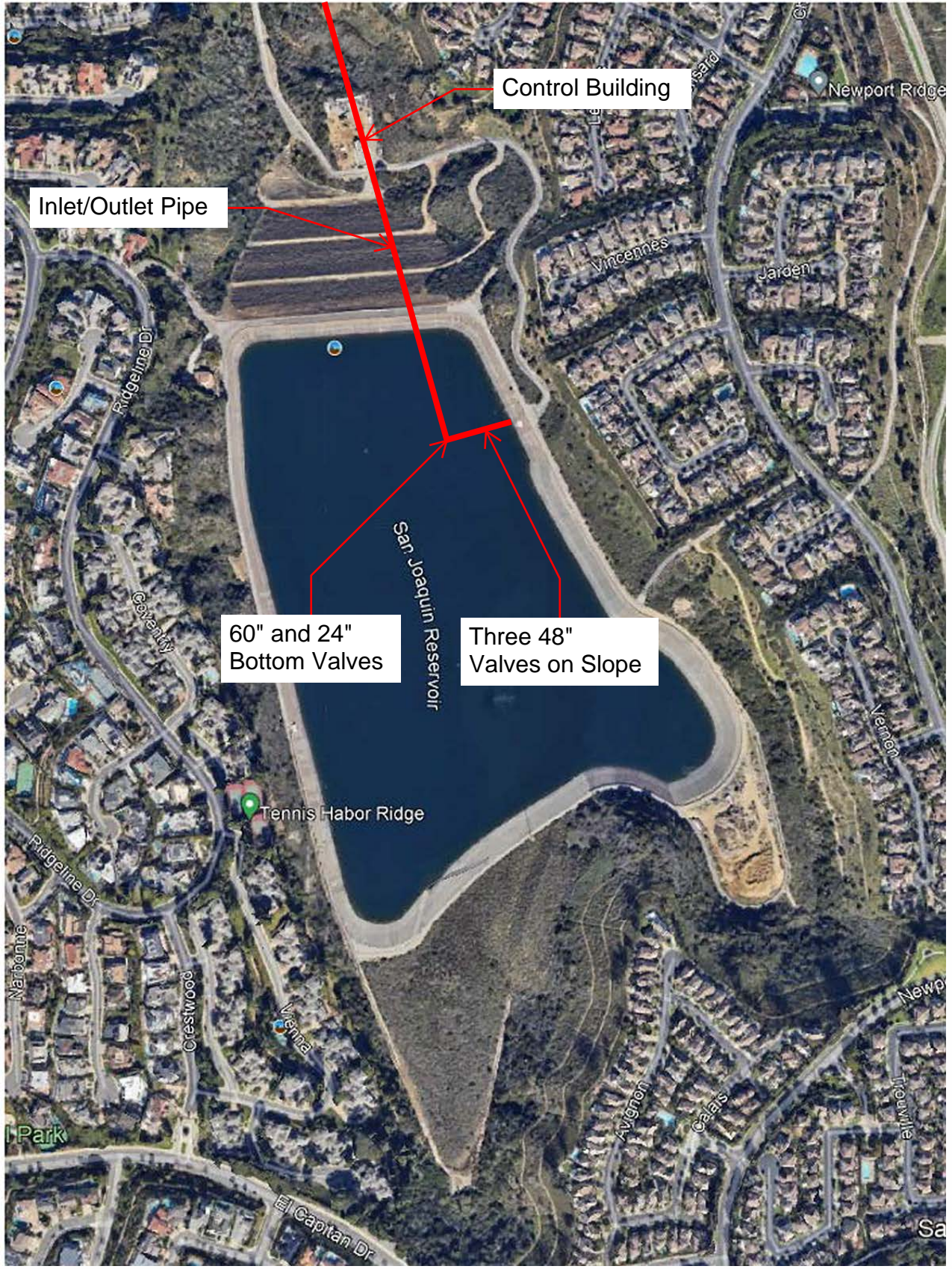
RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO APPROVE A CONTRACT WITH SOUTHWEST VALVE & EQUIPMENT IN THE AMOUNT OF \$366,427 FOR THE PURCHASE OF REPLACEMENT VALVE ACTUATORS AND AUTHORIZE THE ADDITION OF THE SAN JOAQUIN RESERVOIR ACTUATOR REPLACEMENT, PROJECT 13111, IN THE AMOUNT OF \$982,300 TO THE FY 2024-25 CAPITAL BUDGET.

LIST OF EXHIBITS:

- Exhibit “A” – San Joaquin Reservoir Map
- Exhibit “B” – Valve Actuator Proposal from Southwest Valve & Equipment

Exhibit "A"



Note: This page is intentionally left blank.

Exhibit "B"



FRESNO

402 W. Bedford #111,
Fresno, CA 93711
Tel 559.261.2703
Fax 559.261.2711

IRVINE

6440 Oak Canyon, Suite 150
Irvine, CA 92618
Tel 714-832-1090
Fax 714-832-1091

QUOTATION

Page 1 of 3

TO: Bidding Personnel	DATE: 06-27-2024
	QUOTE #: 115311
	DESC:
	JOB: IRWD - MORGAN (SAN JOAQUIN BETTIS ACTUATOR REPL.)
	LOCATION:
ATTN: Estimating	PHONE:
	EMAIL:
WE ARE PLEASED TO QUOTE ON THE FOLLOWING EQUIPMENT SUBJECT TO CONDITIONS PRINTED ON LAST PAGE HEREOF, THESE CONDITIONS MAY BE CHANGED ONLY BY A WRITTEN STATEMENT SIGNED BY AN OFFICER OF SOUTHWEST VALVE.	
	<input checked="" type="checkbox"/> F.O.B. FACTORY
	<input checked="" type="checkbox"/> F.F.A. TO FIRST DESTINATION

Line #	Valve Size	Item	Qty	Unit Price	Price
01	60	Bettis Model-G5024-S Hydraulic Cylinder Actuator For Continuous Submerged Service, To Mount On Existing 60" Butterfly Valve Supplied On Pratt Order#525131HP Item# 1, Existing Adaption To Be Reused, Mounting To Be Done In Field By Others	1	\$94,696	\$94,696
02	24	Bettis Model-G01010-S Hydraulic Cylinder Actuator For Continuous Submerged Service, To Mount On Existing 24" Butterfly Valve Supplied On Pratt Order#525131HP Item# 1, Existing Adaption To Be Reused, Mounting To Be Done In Field By Others	1	\$50,119	\$50,119
03	48	Bettis Model-G4020-S Hydraulic Cylinder Actuator For Continuous Submerged Service, To Mount On Existing 48" Butterfly Valve Supplied On Pratt Order#525131HP Item# 1, Existing Adaption To Be Reused, Mounting To Be Done In Field By Others	3	\$65,086	\$195,257
Total for Above Equipment:					\$340,072
Notes and Clarifications:					

(Tax Rate 7.750%) Total Tax:	\$26,356
Grand Total:	\$366,427
Notes: Lead Time: 32-34 Weeks After Receipt of Order	

Virgil Diaz Jr. - V.Diaz@southwestvalve.com

QUOTATION DOES NOT INCLUDE ANY SALES OR USE TAX PAYABLE UNDER ANY STATE OR FEDERAL STATURE. THIS QUOTATION PRICE IS FOR MATERIAL LISTED ABOVE. ANY ADDITIONS OR MODIFICATIONS THAT BECOME NECESSARY FOR APPROVED SUBMITTALS, UPON AWARDING OF THIS CONTRACT, MAY RESULT IN NECESSARY PRICE CHANGES.

NOTE: ITEMS NOT SPECIFIED ON THIS QUOTATION ARE NOT INCLUDED IN OUR PRICE AND ARE TO BE SUPPLIED BY OTHERS. PRICES ARE FOR IMMEDIATE ACCEPTANCE AND SUBJECT TO CHANGE WITHOUT NOTICE. SALE SUBJECT TO MANUFACTURERS STANDARD TERMS AND CONDITIONS. 30% RE-STOCKING FEE.

SOUTHWEST VALVE STANDARD TERMS AND CONDITIONS**1****ACCEPTANCE**

The following Terms and Conditions are an integral part of the offer to sell the equipment and/or services offered in this proposal. When the BUYER signifies acceptance of this quotation by submission of a Purchase Order or signed SELLER Quotation, it shall become a binding contract when accepted and signed by an authorized signer of the SELLER. Any changes or amendments to this proposal made by the BUYER must have SELLER's approval in writing to become a part of this contract. These Terms and Conditions and the accompanying Purchase Order or signed SELLER Quotation shall comprise the entire agreement between the parties and no course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any terms used in this contract. Unless stated otherwise, the terms and conditions of the manufacturers listed herein will apply to this quotation. Any attachments or listed documents are considered a part of this quotation and are made part of the agreement. **Quote is firm for thirty (30) days unless otherwise stated on the face of the attached quotation.**

APPROVAL DRAWINGS

All items listed are based on SELLER'S interpretation of the requirements in accordance with the plans and specifications. Any preliminary drawings or literature attached to our quotation are for illustration purposes only to show approximate arrangements. Specific drawings and submittal data will be furnished for approval as required after receipt and acceptance of the BUYER'S order. Any submittal or manuals when provided by SELLER will be in the form of a PDF electronic file only. Any form of media beyond the electronic file would be the responsibility of BUYER. Fabrication of products or equipment ordered will not begin until approval and direction to proceed is received in writing. No warranty is made regarding quantities, materials of construction or type of materials quoted. Operation, installation, and maintenance of materials quoted are the responsibility of the OWNER or CONTRACTOR.

DELIVERY

Any shipment or delivery date recited represents our best estimate, but no liability, direct or indirect, is assumed by SELLER for failure to ship or deliver on such dates. Unless otherwise directed, SELLER shall have the right to make early or partial shipments and invoices covering the same to BUYER shall be due and payable in accordance with payment terms hereof. FOB shall be origin unless stated otherwise on the front of these Terms and Conditions. Delivery schedule(s) will be contingent on supply-chain availability and variability for material components, therefore, lead-times are subject to change without notice. Published weights are careful estimates but are not guaranteed. SELLER will endeavor, insofar, as it is possible, to comply with shipping instructions specified by the Purchaser. However, SELLER reserves the right to ship merchandise by such means of transportation as it may select. The manufacturer will ship the equipment via best way. Demurrage shall be billed to the account of the Purchaser. **DAMAGE CLAIMS:** Care is taken in packaging all shipments. After BUYER has been given the receipt by the transportation company, all claims for breakage or shortages, whether concealed or obvious, must be made in writing by the BUYER to the carrier and SELLER within seven (7) days after receipt of shipment. When damage or shortages are obvious, written comments on the bill of lading are required before the driver is released. **RETURNED PRODUCTS:** In no instance is equipment to be returned without first obtaining SELLER'S written approval and returned materials authorization. If shipment is postponed at the request of the purchaser after manufacturing has been commenced, payment will be due on notice from us that the equipment is ready for shipment. Pro rata payments shall be made for partial shipments.

STORAGE

Any item of the product on which shipment is delayed by BUYER may be placed in storage by SELLER at BUYER'S expense and risk. If a delay in shipment is requested by BUYER after an order has been entered and accepted:

- a. No charge will be made if the request for delay is made more than six (6) weeks before acknowledged shipping date and the requested delay is for a period not in excess of thirty (30) days.
- b. A charge will be made if the requested delay exceeds a period of thirty (30) days or if the request is made within six (6) weeks of the acknowledged shipping date. SELLER will advise BUYER of the charge within ten (10) days of receiving BUYER'S request for delay.
- c. If the product is within six (6) weeks of the acknowledged shipping date, then SELLER has the option of completing, invoicing and storing the product and charging one and one-half percent (1.5%) per month, or the maximum percentage permitted by law, whichever is lesser, of the established price for such product, plus storage cost.

PAYMENT

Payment terms, upon credit approval, are of net thirty (30) days from the date of each invoice for material shipped (or when ready for shipment if shipment is deferred by BUYER) **unless stated otherwise on the face of the attached quotation.** Flow down provisions are not accepted and shall not be enforceable against SELLER. Retention is not allowed. In the event any payment becomes past due, a charge of one-half percent (1.5%) will be assessed monthly. These terms are completely independent from, and not contingent upon, when BUYER receives payment from the OWNER. A processing fee of up to four percent (4%) will be added for credit card payments. All merchandise sold is subject to lien laws. Partial or final payment shall constitute acceptance of delivered materials, products, or equipment.

FORCE MAJEURE

Neither Party will be liable for any failure or delay in performing an obligation under these Terms and Conditions that is due to any of the following causes, to the extent beyond its reasonable control: acts of God, accident, riots, war, terrorist act, epidemic, pandemic, quarantine, civil commotion, breakdown of communication facilities, breakdown of web host, breakdown of internet service provider, natural catastrophes, governmental acts or omissions, changes in laws or regulations, national strikes, fire, explosion, generalized lack of availability of raw materials or energy. For the avoidance of doubt, Force Majeure shall not include (a) financial distress nor the inability of either party to make a profit or avoid a financial loss, (b) changes in market prices or conditions, or (c) a party's financial inability to perform its obligations hereunder.

TAXES AND BONDS

Taxes and bonds are NOT included in our pricing. Any applicable taxes or bonds will be added to the price and shown separately on each invoice. All prices exclude sales, use, duties, excise, and other taxes in respect to manufacture, sale, or delivery, all of which are to be paid by the buyer unless a proper exemption certificate is furnished. BUYER agrees to reimburse our company for taxes SELLER must pay on BUYER'S behalf.

CLAIMS AND BACKCHARGES

BUYER agrees to examine all materials immediately upon delivery and report to SELLER in writing any defects or shortages noted no later than ten (10) days following the date of receipt. The parties agree that if no such claim is made within said time, it shall be considered acceptable and in good order with respect to any defect or shortage which would have been revealed by such an inspection. In no event will SELLER be responsible for any charge for modification, servicing, adjustment or for any other expense without written authorization from SELLER prior to the performance of any such work. **IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY THIRD PARTY FOR ANY LOSS OF USE, REVENUE OR PROFIT, OR FOR CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES, FOR ANY REASON, INCLUDING WITHOUT LIMITATION, DAMAGES ARISING OUT OF A DELAY IN OR FAILURE OF DELIVERY, DEFECTS IN MATERIAL AND WORKMANSHIP AND/OR FAILURE OF GOODS TO PERFORM TO APPLICABLE SPECIFICATIONS, DRAWINGS, BLUEPRINTS OR SAMPLES AS SET FORTH OR DESCRIBED HEREIN, IF ANY, OF A BREACH BY SELLER OF ANY OTHER TERM OR OBLIGATION OF SELLER UNDER THE CONTRACT.**

SOUTHWEST VALVE STANDARD TERMS AND CONDITIONS**2**

No penalty clauses of any description will be effective unless approved in writing over the signature of a principal of SELLER. Under no circumstances shall SELLER be liable for any consequential, special or incidental damages, including liquidated damages, arising from any breach by it in this transaction, AND ALL SUCH CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES, INCLUDING LIQUIDATED DAMAGES, ARE EXCLUDED FROM ANY REMEDIES AVAILABLE TO THE BUYER.

SECURITY INTEREST & TITLE

Until all amounts due SELLER have been paid in full, SELLER shall retain a security interest in the product and have all rights of a secured party under the Uniform Commercial Code and applicable law, including the right to repossess the product or equipment without legal process and the right to require the BUYER to assemble the equipment and make it available to SELLER at a place reasonably convenient to both parties.

WARRANTY

Equipment and parts not manufactured by the SELLER carry only the warranty of the manufacturer of said parts. SELLER does not make any express or implied warranty for equipment and/or parts it did not manufacture. Credits for defective material and workmanship in said equipment and/or parts are only in accordance with the underlying company policy of the manufacturer. SELLER makes no warranty whatsoever with respect to any equipment and/or parts as to their merchantability or fitness for a particular purpose. It is further agreed that the SELLER assumes no liability whatsoever for failure of equipment due to normal usage and wear.

INDEMNIFICATION

To the fullest extent permitted by the law in which the project is located, BUYER and SELLER shall indemnify and hold one another and their respective employees and agents harmless from and against all claims, damages, losses, liabilities, actions, causes of action, demands, fines, penalties, judgments, costs, and expenses, including but not limited to attorneys' fees, court costs, expert fees and costs, arising out of or resulting from BUYER's or SELLER's own negligent acts, omissions or misconduct, to the extent such negligence is covered by BUYER's and SELLER's respective insurance policies. In the event any third party asserts against SELLER a claim for patent infringement, royalties or licensing fees with respect to BUYER's use of the products, materials, or equipment provided hereunder, BUYER agrees to indemnify SELLER for all liability damages, costs and expenses in connection therewith.

CANCELLATION

Buyer may cancel this contract only in writing signed by BUYER's duly authorized agent and acknowledged in writing by SELLER's duly authorized agent. Should this order be cancelled, BUYER shall be obligated to pay for the level of work performed and products shipped. Work performed includes any engineering, calculations, preparation of submittals, drawings, and/or travel to job site in relation to this order. In addition to any other remedies provided under these Terms and Conditions, SELLER may terminate this contract with immediate effect by providing signed, written notice to BUYER, if BUYER: (i) fails to pay any amount when due under the contract and such failure continues for 30 days after BUYER's receipt of written notice of nonpayment; (ii) has not otherwise performed or complied with any of these Terms and Conditions; or (iii) becomes insolvent, files a petition for bankruptcy or commences or has commenced against it proceedings in bankruptcy, receivership, reorganization or assignment for the benefit of creditors.

FIELD WORK

Unless specifically stated on our quotation, installation, start-up service, field testing, supervision, operation, and training are not included in our pricing of product. In the event that SELLER or any of its employees or agents do perform work or services on-site at the project's location, BUYER agrees to hold SELLER and its employees or agents harmless for any injuries or damage to property caused by their acts or omission, except to the extent said injuries or property damage arise from gross negligence or intentional misconduct.

MODIFICATIONS

This contract can be modified only in writing which specifically states that it amends these Terms and Conditions and is signed by both parties and their duly authorized agents. It is further agreed that this contract shall not be modified in any respect except in writing signed by the party and their duly authorized agent against whom the modification is sought to be enforced.

AUTHORITY OF SELLER'S AGENTS

No agent, employee or representative of the SELLER has any authority to bind the SELLER to any affirmation, representation or warranty concerning the goods sold under this Contract, and unless an affirmation, representation or warranty made by an agent, employee, or representative is specifically included within this written contract, it shall not be enforceable by the BUYER.

NO THIRD-PARTY BENEFICIARIES

This contract is for the sole benefit of BUYER and SELLER and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of these Terms and Conditions.

GOVERNING LAW

All matters arising of or relating to the contract or the Terms and Conditions shall be governed by and construed in accordance with the laws of the state in which the project is located.

DISPUTE RESOLUTION

In the event of any dispute between BUYER and SELLER arising out of the terms of the contract and these Terms and Conditions, such dispute shall be decided by arbitration administered by the American Arbitration Association in accordance with the then-prevailing Commercial Arbitration Rules and Mediation Procedures of the American Arbitration Association. BUYER and SELLER mutually agree that any dispute involving claims valued at or above \$1,000,000.00 shall be heard by a panel of three (3) arbitrators. The venue for all arbitration proceedings shall be the State of California. The foregoing agreement to arbitrate shall be specifically enforceable in any court of competent jurisdiction. The award rendered by the arbitrators shall be final and judgment may be entered upon it in accordance with applicable law in any court of competent jurisdiction.

SEVERABILITY

The partial or complete invalidity of any one or more provisions of these Terms and Conditions shall not affect the validity or continuing force and effect of any other provision. If any provision is invalid, in whole or in part, the provision shall be considered reformed to reflect the intent thereof to the greatest extent possible consistent with applicable law.

ASSIGNMENT – DELEGATION

No right or interest in this Contract shall be assigned by the BUYER without the written permission of the SELLER, and no delegation of any obligation owed, or of the performance of any obligation by the BUYER shall be made without the written permission of the SELLER. Any attempted assignment or delegation shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.



Henry Pratt Company, LLC.
2048 Industrial Blvd.
Kimball, TN 37347

phone: 877-436-7977
www.prattvalve.com

June 26 ,2024

To Whom it May Concern:

RE: Pratt & Milliken brand products

Southwest Valve & Equipment is the sole manufacturer's representative for Pratt and Milliken brand products for the states of California, Nevada and Arizona.


If you should have any questions, please feel free to contact me directly.

Regards,

Tom Velkovich

V.P. Sales

tvelkovich@muellerwp.com

August 12, 2024
Prepared by: R. Matuska
Submitted by: N. Adly
Approved by: Paul A. Cook 

CONSENT CALENDAR

UTILITY BILL PRINTING, MAILING, AND ELECTRONIC BILL PRESENTMENT SERVICES CONTRACT

SUMMARY:

IRWD's contract for utility bill printing, mailing, and electronic presentment services with Infosend, Inc. was originally awarded in August 2017 for three years. Since that time, this contract with Infosend has been extended in two-year increments and is currently set to expire in August 2024. Staff recommends that the Board approve a two-year extension for utility bill printing, mailing, and electronic bill presentment services with Infosend effective August 16, 2024, in the approximate amount of \$700,000 per year for a total of \$1,400,000 (based on the current number of bills, printed notifications, correspondence and postage rates) over the period of August 16, 2024, to August 15, 2026.

BACKGROUND:

IRWD's contract for utility bill printing, mailing, and electronic bill presentment services with Infosend was originally awarded in August 2017 for a period of three years. In 2020 and in 2022, IRWD executed its option to extend this agreement in two-year increments.

Since 2017, Infosend has provided customers with on-time and flexible bill delivery options. Responsibilities of the District's bill print provider include the ability to send customers a secure link to access the payment processor portal and usage history, send a PDF image of the monthly electronic bill (eBill), United States Postal Service (USPS) bill presentment, pre-printed newsletters, ad-hoc messaging on bills, envelopes, and in IRWD's newsletter. Infosend's flexible and customizable bill messaging options allowed the District to communicate the "*We'll Help You Through This*" campaign during the Coronavirus pandemic and will be utilized to communicate future campaigns to educate customers about billing, payment options, conservation, State and Federally funded assistance programs, and delinquency information.

From August 2017 through December 1, 2021, Infosend did not increase its contract fees, other than pass-through costs for postage. Based on positive customer feedback, exceptional performance over the last seven years, appropriate cost controls, and enhanced technology, cybersecurity options, and extensive Paymentus integration requirements, staff recommends that the Board authorized a two-year contract extension of the Infosend contract for utility bill printing, mailing, and electronic presentment services.

FISCAL IMPACTS:

Funds for utility bill printing, mailing, and electronic bill presentment services for FY 2024-25 are included in the approved FY 2024-25 Operating Budgets.

Consent Calendar: Utility Bill Printing, Mailing, and Electronic Bill Presentment Services
Contract Award
August 12, 2024
Page 2

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD APPROVE A TWO-YEAR RENEWAL PERIOD EFFECTIVE AUGUST 16, 2024, THROUGH AUGUST 15, 2026 WITH INFOSEND, INC. FOR UTILITY BILL PRINTING, MAILING, AND ELECTRONIC BILL PRESENTMENT SERVICES, TOTALING APPROXIMATELY \$1,400,000.

LIST OF EXHIBITS:

Exhibit "A" – Infosend, Inc. Service Agreement
Exhibit "B" – Utility Bill Printing Fee Schedule



InfoSend Service Agreement

This Agreement entered into as of **August 15, 2017** in Anaheim, California, by and between **InfoSend, Inc.** having its main office at 4240 E. La Palma Ave, Anaheim, California 92807 and **Irvine Ranch Water District**, "Client" having its main office at: 15600 Sand Canyon Avenue, Irvine, CA 92618. InfoSend's primary phone number is (714) 993-2690.

Section 1. Term of Agreement

The "Initial Term" of this Agreement shall be a period of thirty-six (36) months. Subsequent twenty-four (24) month "Renewal Periods" Term shall automatically commence upon the expiration of any term (Initial Term or Renewal Period) unless either party shall:

- Execute a mutually agreeable Agreement Amendment prior to the expiration of the current term that documents a different mutually agreeable renewal period length.
- Give written notice of non-renewal at least 60 days prior to the end of the current term. The party giving non-renewal notice can indicate if it prefers for the contract to be terminated at the end of the current term or for it to continue on a month-to-month basis if mutually agreeable to the other party. This notice must be sent in writing via certified mail, FedEx, UPS, all with delivery signature requested to cancel the automatic renewal of the Agreement for Renewal Period should a mutually agreeable Agreement Amendment not be signed before the end of the current term.

This Agreement automatically terminates any prior contracts, terms or agreements previously executed between InfoSend and Client to cover the same services contained in this Agreement, unless specifically referenced herein.

Section 2. InfoSend Services

Subject to the terms and conditions of this Agreement, InfoSend will provide to Client, and Client will purchase from InfoSend, the services listed in Exhibit A ("Scope of Primary Services") to this Agreement for the pricing set forth in Exhibit B ("InfoSend Fees"). In the event Client requires other consulting, installation, development and/or customization services, InfoSend shall perform and Client shall purchase such services in accordance with the provisions of Exhibit C ("Professional Services") of this Agreement.

Section 3. Termination

This Agreement and any future amendments to the Agreement may be terminated for cause as follows:

- (a) If either party breaches any material term or condition of this Agreement, other than for Client's failure to pay and other than a failure to perform due to the causes described in Section 8, "Force Majeure," and fails either to substantially cure breach within thirty (30) days after receiving written notice specifying the breach, or, for those breaches which cannot reasonably be cured within thirty (30) days, to promptly commence curing such breach and thereafter proceed with all due diligence to substantially cure such breach, then the party not in breach may, by giving written notice to the breaching party, terminate this Agreement in its entirety, or as it pertains to a particular Product, Deliverable, Service or Professional Service, as of a date specified in such notice of termination. All of the obligations of the parties contained in this Agreement, except for Client's obligation to pay fees, shall be deemed to have been performed in an acceptable manner unless the party not in breach provides the breaching party with written notice as stated above within sixty (60) days of the event giving rise to the breach.
- (b) If Client fails to pay when due any payables owed hereunder within thirty (30) days of receiving written notice of such failure to pay thereof, InfoSend may, at InfoSend's option, terminate this Agreement in its entirety or only as it pertains to a particular Product, Deliverable, Service or Professional Service, by giving written notice to Client, as of a date specified in such termination notice.
- (c) In the event that either party hereto becomes or is declared insolvent or bankrupt, is the subject of any proceedings related to its liquidation, insolvency or for the appointment of a receiver or similar officer for it,

A handwritten signature in blue ink, appearing to be "Pa".

makes an assignment for the benefit of all or substantially all of its creditors, or enters into an agreement for the composition, extension or readjustment of all or substantially all of its obligations, then the other party hereto may, by giving written notice thereof to such party, terminate this Agreement as of the date specified in such notice of termination.

Upon termination of this Agreement or any portion hereof for any reason, all rights granted to Client under this Agreement with respect to terminated Products, Deliverables, Services and Professional Services, will cease and Client will promptly pay to InfoSend any and all charges due, including but not limited to payables that are due pursuant to this Agreement, the Discontinuance Fee set forth in Section 4 below and accrued finance charges; however, Client shall not be responsible for paying the Discontinuance Fee if this Agreement is terminated by InfoSend other than as a result of Client's breach of its obligations hereunder or is terminated by Client pursuant to Paragraph 3(a).

Section 4. Discontinuance Fee

The parties have mutually agreed upon the Fees for the Services to be provided hereunder based upon certain assumed volumes, and the Term of this Agreement. Because of the difficulty in ascertaining InfoSend's actual damages for Client's termination without cause or a termination of the Agreement due to a breach by Client prior to the expiration of the then-current Term, Client agrees that, prior to the effective date of such termination and in addition to all other payables then due and owing to InfoSend, Client will pay to InfoSend the following discontinuance fee:

The discontinuance fee is equal to two (2) months of the Client's average monthly billing for the previous 6 months of Service (excluding any postage charges and professional services fees that were invoiced in that time period).

Client shall not be required to pay the Discontinuance Fee if InfoSend terminates the Agreement pursuant to Section 3, Paragraph (a).

Section 5. Confidentiality of Information

All information and data relating to Client's business submitted by Client to InfoSend under this Agreement shall be treated as confidential by InfoSend and shall not, unless otherwise required by law, be disclosed to any third party by InfoSend without Client's written consent. InfoSend shall promptly notify Client should InfoSend be served with a summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, requests for admission, or other discovery request or court order from any third party regarding this Agreement and/or the Services performed under this Agreement.

InfoSend takes great care in both data security and human resource security. InfoSend has a Human Resources policy that requires all new employees to pass a background check performed by an outside company. All new employees must pass a drug-screening test as well. These practices will remain in place for the duration of the Agreement.

Section 6. Limitation of Liability and Indemnification

InfoSend will not be responsible for actions or omissions resulting from receiving data and/or following instructions received from Client. No damages shall be assessed against InfoSend when any delay or breach on InfoSend's part is caused by failure of Client to perform Client's responsibilities or any other reason beyond the control of InfoSend.

InfoSend is a service provider, as such; Client acknowledges that data processing involves the risk of human and machine errors that InfoSend shall not be liable for any errors, omissions, delays or losses, except for damages or losses caused by the negligence or willful misconduct of InfoSend. InfoSend shall defend, hold harmless and indemnify Client from all claims, damages and losses, including reasonable attorney's fees, caused by the negligence or willful misconduct of InfoSend. In no event shall InfoSend be liable for indirect, special or consequential damages even if InfoSend has been advised of the possibility of such potential claim, loss or damage. The foregoing limitation of liability and exclusion of certain damages shall apply regardless of the success or effectiveness of other remedies. Notwithstanding anything to the contrary contained herein, InfoSend shall not be responsible for delays in receipt of Client information or processing Client information because of causes

beyond its reasonable control, including, without limitation, failures or limitations on the availability of third party telecommunications or other transmission facilities and Clients' failure to properly enter and/or transmit information.

Section 7. Invoicing and Payment ^{monthly pc}

InfoSend will issue ~~weekly~~ ^{30 pc} invoices. Invoice terms are NET 10. Should Client dispute any invoiced charges it must do so in a reasonable time frame. Disputes must be made within 3 months of the invoice date. Past due invoices are subject to a 1.5% per month finance charge.

Client acknowledges that past due invoices must be paid in a timely fashion to avoid service interruptions. The recurring nature of InfoSend's services result in a rapid rise in the Client's account balance if Client's accounts payable process is delayed. This is especially true if InfoSend is invoicing client for postage charges. It is therefore necessary for InfoSend to put service on hold if past due account balances are not paid in a timely manner. The Past Due Accounts Receivable notes and procedures are outlined below:

- InfoSend is at significant risk of financial loss if clients default on their past due debt. InfoSend's Accounts Receivable staff must therefore constantly monitor past due account balances and evaluate the risk of a client defaulting on debt if courtesy emails and finance charges do not reduce this risk. InfoSend reserves the right to reduce this risk by notifying Client's staff in writing that it must pay at least the portion of the account balance that is past due within five (5) days to avoid InfoSend's services being put on hold.
- Should a hold be instated it will immediately be removed once payment is received.
- Additionally, unpaid balances can result in cancellation of the agreement as per Section 3(b).


Section 8. Force Majeure

Neither party will be liable for any failure or delay in performing an obligation under this Agreement that is due to causes beyond its reasonable control, including, but not limited to, fire, explosion, epidemics, earthquake, lightning, failures or fluctuations in electrical power or telecommunications equipment, accidents, floods, acts of God, the elements, war, civil disturbances, acts of civil or military authorities or the public enemy, fuel or energy shortages, acts or omissions of any common carrier, strikes, labor disputes, regulatory restrictions, restraining orders or decrees of any court, changes in law or regulation or other acts of government authority, transportation stoppages or slowdowns or the inability to produce parts or materials. These causes will not excuse Client from paying accrued payables due to InfoSend through any available lawful means acceptable to InfoSend.

Section 9. Miscellaneous

The substantive laws of the state of California shall govern this Agreement. It constitutes the entire Agreement between the parties with respect to the subject matter hereof. No representations and agreements modifying or supplementing the terms of this Agreement will be valid unless in writing, signed by persons authorized to sign agreements on behalf of both parties. This Agreement is not intended to, and shall not be construed to, create or confer any right in or upon any person or entity not a party to it.

Irvine Ranch Water District

Name: Paul Cook
 Title: General manager
 Signature: 
 Date: August 17, 2017

InfoSend, Inc.

Name: Russ Rezai
 Title: President
 Signature: 
 Date: August 15, 2017

Exhibit A - Scope of InfoSend Primary Services

Client will select one or more of InfoSend's Primary Services from the list below by checking the box next to the Primary Service name. Any Primary Services not selected prior to the execution of this Agreement can be added at a later date via an Agreement Amendment. Optional Service Features can be turned on or off at any time without incurring a termination fee when turned off.

<input checked="" type="checkbox"/>	Data Processing, Printing and Mailing Service ("DPPM Service"): During the term of this Agreement, InfoSend will provide data processing, printing and mailing services. The Service consists of processing data, printing documents, mail preparation, applying postage (where applicable) and sending via the United States Postal Service. Document types include but are not limited to bills, postcards and letters.
<input checked="" type="checkbox"/>	InfoSend will provide eBusiness services (the "eBusiness Services"). During the term of this Agreement InfoSend can provide eBusiness Services. These services can include presenting bills online and/or accepting payment transaction information to facilitate ACH and/or credit card payments.

Section 1. Scope of DPPM Service:

Data Transfer and Processing

- Client to transmit data to InfoSend in an agreed upon format. Should Client make changes to data file format after initial setup is complete it agrees to pay for the professional services required to accommodate the new file format. See Exhibit C – Professional Services for information on initial setup and ongoing programming changes.
- A File Transfer Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.
- Client will have access to an online Job Tracking application that shows the progress of each file as it is processed and becomes a batch of documents to be printed and mailed. Client can see both the original input file name and the InfoSend-assigned "Job Code".
- InfoSend will process the mailing addresses and perform the following functions:
 - Apply CASS-certified address validation
 - Comply with USPS requirements to obtain pre-sort automation rates
 - InfoSend will stay current with all USPS regulations required to mail presorted first class mail
- InfoSend will provide proofs of the final print-ready PDF files to Client to be reviewed and approved before printing begins (if requested).

Document Printing and Mailing

- Batches are printed by InfoSend using a high-speed production process onto the agreed upon forms.
- Printed documents are put through a quality control process and then released to the mailing department to be inserted into outgoing envelope. The return envelope and any applicable inserts are included as well.
- After a batch of mail is completed in InfoSend's system it will be marked as such in the online Job Tracker and a Process Confirmation Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.

Exhibit B - InfoSend Fees

Section 1. Price Escalations to InfoSend Fees

InfoSend Fees can be adjusted once every twelve (12) months to account for increases in the cost of materials, labor, and other overhead costs. InfoSend reserves the right to increase InfoSend Fees on a yearly basis (starting with the first anniversary of the Agreement date). The Client will be notified, in writing, at least 30 days prior to such price increase. InfoSend fees will not be increased without the prior written consent of Client. An amendment to this Agreement will not be required if the Fees are changed, unless the terms or conditions of the Agreement have changed. Postage fees can change at any time per USPS regulations and do not require an Agreement amendment.

Section 2. DPPM Fees:

Client understands that print and mail production costs vary based on volume. The following InfoSend Fees are based on the estimated monthly volumes listed below. Should Client's actual continuous volume be less than 70% of the volume estimates Client has provided to InfoSend (listed below) then InfoSend reserves the right to invalidate the Fees listed in this Agreement. Should this rare situation arise then InfoSend will notify Client immediately and negotiate with Client in good faith to pass on any increased production costs to Client. If this circumstance arises and InfoSend invalidates the Fees listed in this Agreement, Client reserves the right to terminate this Agreement with no additional obligation or cost to InfoSend.

Sales tax is not included. Any applicable sales tax will be collected per government regulations.

Example Summary Service Fees for 2 Page Utility Bill – Custom Envelope Package

Summary of fee for a typical 2 page (2 physical sheets) bill including data processing, forms, printing, fold/insert, custom envelopes, Pipelines insert (physical and eInsert) mail preparation, delivery to USPS, account management, reports, and Web tools is **\$0.202** per bill package.

Item	Unit fee	Units	total
Processing	\$0.0145	2	\$0.029
Print 1 st page	\$0.025	1	\$0.025
Print 2 nd page	\$0.005	1	\$0.005
Forms	\$0.012	2	\$0.024
Bill page inserting	\$0.015	2	\$0.03
Archive	\$0.006	1	\$0.006
eInsert	\$0.002	1	\$0.002
Newsletter	\$0.047	1	\$0.047
Custom #10	\$0.018	1	\$0.018
Custom #9	\$0.016	1	<u>\$0.016</u>

\$0.202

Example Summary Service Fees for 2 Page Utility Bill – Standard Envelope Package

Summary of fee for a typical 2 page (2 physical sheets) bill including data processing, forms, printing, fold/insert, InfoSend standard envelopes, Pipelines insert (physical and eInsert) mail preparation, delivery to USPS, account management, reports, and Web tools is **\$0.194** per bill package.

Item	Unit fee	Units	total
Processing	\$0.0145	2	\$0.029
Print 1 st page	\$0.025	1	\$0.025
Print 2 nd page	\$0.005	1	\$0.005
Forms	\$0.012	2	\$0.024
Bill page inserting	\$0.015	2	\$0.03
Archive	\$0.006	1	\$0.006
eInsert	\$0.002	1	\$0.002
Newsletter	\$0.047	1	\$0.047

Custom #10	\$0.018	1	\$0.014
Custom #9	\$0.016	1	<u>\$0.012</u>
			\$0.194

5. Cost Proposal for Task 1 (Monthly Printing Services)

Display proposed cost per piece and pricing methodology on one page

Printing Services	Per Item	Options Below:
	<p>Bills, Correspondence & Notices Data Processing & Document Composition</p> <p>Price is per page produced, no cost for production of backer image, where applicable.</p>	\$0.0145
	<p>Bills, Correspondence & Notices Printing</p> <p>Approximately 64,000 mail pieces per month, the exact number of sheets produced is unknown but estimated to be 102,400 sheets per month. Price is per physical sheet of paper produced, no cost to print the backer image.</p>	<p>Per 1st Sheet \$0.025</p> <p>Per Additional Sheet \$0.005</p>
	<p>13 Months of Print Image Archive</p> <p>Per bill PDF. This is normally considered an optional service so the details (and additional retention options) are listed on the optional services page.</p>	\$0.006
	<p>Example Summary Printing Service Fees for 1 Page Utility Bill or other Notice (Excluding Materials & Postage)</p> <p>A utility bill or notice with 1 physical sheet of paper (with duplex printing) & 13 months of PDF archiving costs:</p> <p>\$0.0145 (processing) + \$0.025 (1st Page Printing) + \$0.006 (13 Month Archive)</p>	\$0.0455 for 1 Page Bill or Notice
	<p>Example Summary Printing Service Fees for 2 Page Utility Bill (Excluding Materials & Postage)</p> <p>A utility bill with 2 physical sheets of paper (with duplex printing) & 13 months of PDF archiving costs:</p> <p>\$0.0145 (processing) x 2 + \$0.025 (1st Page Printing) + \$0.005 (2nd Page Printing) + \$0.006 (13 Month Archive)</p>	\$0.065 for 2 Page Utility Bill

6. Cost Proposal for Task 2 (Monthly Mailing Services)

Display proposed costs per piece and pricing methodology on one page.

Mailing Services	Per Item	Options Below:
	Bills, Correspondence & Notices Mailing Mailing services required for folding, inserting, presorting, mailing via USPS. Price is per sheet mailed.	\$0.015
	Multiple Page Mail Piece Surcharge – Handwork This surcharge is assessed per mail piece (not per page). This surcharge only applies to multiple page bills that have too many pages to be inserted into the #10 envelope.	\$0.20
	Postage (for all job types) You will be invoiced for the exact postage used.	Pass Through
	Electronic Address Updates – NCOALink or ACS Per reported update. This is only charged if there is a change of address filed by the customer for the address you provided.	\$0.20 per hit
	Example Summary Mailing Service Fees for 1 Page Utility Bill or Notice (Excluding Materials & Postage) A utility bill with 1 physical sheet of paper \$0.015 (Mailing) x 1	\$0.015 for 1 Page Bill or Notice
	Example Summary Mailing Service Fees for 2 Page Utility Bill (Excluding Materials & Postage) A utility bill with 2 physical sheets of paper \$0.015 (Mailing Service) x 2	\$0.03 for 2 Page Utility Bill
	Example Summary Mailing Service Fees for 20 Page “House Holded” Utility Bill (Excluding Materials & Postage) A utility bill with 20 physical sheets of paper \$0.015 (Mailing Service) x 20 + \$0.20 (Multiple Mail Piece Handwork Surcharge)	\$0.50 for 20 Page Utility Bill

7. Cost Proposal for Task 3 (Electronic Bill Presentment Services)

Display proposed costs per piece and pricing methodology on one page.

eBill Loading and Storage Fee

Fee to load eBill PDFs in the eBusiness system and store for 13 months. \$0.023 each



8. Cost Proposal for Task 4 (Electronic Payment Services)

Display proposed costs per piece and pricing methodology on one page.

Payment Initiation & PCI Compliance Fee \$0.055 Each

Per payment initiated to one of InfoSend's preferred payment partners. This is for all payment initiations for ACH, credit card, auto pay, same day or scheduled payments made through the system. Processing costs will be covered under separate contract directly with processor.

9. Cost Proposal for Task 5 (Optional Newsletter Printing)

Display proposed costs per piece pricing methodology on one page.

Pipelines Newsletter Marketing Insert –

8.5" x 11", printed 4/4 on matte stock \$0.047 Each

10. Cost Proposal for Task 6 (Optional Special Direct Mail Services)

Display proposed costs per piece pricing methodology on one page.

We're sorry but there is no possible way to price optional special direct mail jobs up front. Pricing is provided upon request.

Direct mail has a myriad of different options such as paper stock, size of printed piece, type of postage used, etc. It cannot be priced up front unless IRWD provides some specific examples of direct mail job specifications and volumes.



Exhibit J – Pricing Detail

Bid Sheets for Utility Bill Printing, Mailing, and Electronic Bill Presentment Services for a Three Year Contract with Two Optional One Year Renewals

Company Name InfoSend Inc.

Year 1 of 3	BID PRICE
See assumptions document for detailed breakdown of quantities used to calculate totals	
Task 1 Perform printing services required for bill, correspondence, notice printing includes custom envelopes & PDF archiving of the printed pages for 13 months	<u>\$94,556.16</u>
Task 2 Perform mailing services required for folding, inserting, presorting, mailing excludes postage	<u>\$18,432.00</u>
Task 3 Perform electronic bill presentment services	<u>\$15,180.00</u>
Lump Sum Total Bid for Tasks 1-3 Year 1 of 3	<u>\$128,168.16</u>
 Optional Task 4 – Perform electronic payment services	 <u>\$25,410.00</u>
Optional Task 5 – Perform printing of monthly newsletter	<u>\$30,456.00</u>
Optional Task 6 – Perform Special Direct Mail Services There is no possible way to price this without specifications	<u>Need specs</u>
Lump Sum Total Bid for Optional Tasks 4-6 Year 1 of 3	<u>\$55,866.00</u>

Year 2 of 3	BID PRICE
Task 1 Perform printing services required for bill, correspondence, notice printing	<u>\$94,556.16</u>
Task 2 Perform mailing services required for folding, inserting, presorting, mailing	<u>\$18,432.00</u>
Task 3 Perform electronic bill presentment services	<u>\$15,180.00</u>
Lump Sum Total Bid for Tasks 1-3 Year 1 of 3	<u>\$128,168.16</u>
 Optional Task 4 – Perform electronic payment services	 <u>\$25,410.00</u>
Optional Task 5 – Perform printing of monthly newsletter	<u>\$30,456.00</u>
Optional Task 6 – Perform Special Direct Mail Services	<u>Need specs</u>
Lump Sum Total Bid for Optional Tasks 4-6 Year 1 of 3	<u>\$55,866.00</u>

Year 3 of 3

BID PRICE

Task 1 Perform printing services required for bill, correspondence, notice printing	<u>\$94,556.16</u>
Task 2 Perform mailing services required for folding, inserting, presorting, mailing	<u>\$18,432.00</u>
Task 3 Perform electronic bill presentment services	<u>\$15,180.00</u>
Lump Sum Total Bid for Tasks 1-3 Year 1 of 3	<u>\$128,168.16</u>
Optional Task 4 – Perform electronic payment services	<u>\$25,410.00</u>
Optional Task 5 – Perform printing of monthly newsletter	<u>\$30,456.00</u>
Optional Task 6 – Perform Special Direct Mail Services	<u>Need specs</u>
Lump Sum Total Bid for Optional Tasks 4-6 Year 1 of 3	<u>\$55,866.00</u>
Lump Sum Total Bid for Combined Years 1 through 3 Tasks 1 -3	<u>\$384,504.48</u>
Lump Sum Total Bid for Combined Years 1 through 3 Optional Tasks 4 - 6	<u>\$167,598.00</u>

Bid Submitted by:

Company: InfoSend, Inc.
(Print)

Name: Russ Rezai
(Print)

Name: 
(Signature)

Title: President
(Print)

Date: 4/28/2017

Pricing: Data Processing, Print & Mail Service Set-up Fee

The setup fee is waived.

Pricing: Data Processing, Print & Mail Service & Material Fees

Please note that the below pricing is not contingent on IRWD using InfoSend's Electronic Bill Presentment and Payment service. Either service can be purchased independently of the other. While we would be ecstatic to win the contract for both services we are totally comfortable with providing one or the other and we can provide archived bill images to a third party if needed via a secure API.

InfoSend's Fees – Turnkey Data Processing, Print & Mail Service:			
The individual prices shown in the table below apply only to the turnkey Data Processing Print & Mail service for the following document types. Other types of document printing and or mailing can be quoted later, if needed.			
	Per Item	Options Below:	
Primary Services	Turnkey Data Processing Print & Mail service Price is per physical page. Includes processing of your unique data, CASS address validation, presorting, printing, and mail insertion. Finished mail pieces are delivered to the USPS within the same) business day . If samples (proofs) are requested then the mailing will be completed within one day of sample approval. File upload deadline for same-day mailing is 10:00AM local time at the production facility designated for your account. If samples are required then they must be approved by 12:00PM for the file to be mailed by the same day. Excludes materials, sales tax (where applicable), and postage. A postage deposit will be required prior to go live. For the quoted prices to apply InfoSend must have the right to combine data files sent by your organization with other files you have sent, when possible. Higher pricing applies if files must be printed separately. <i>Pricing assumes the use of materials options listed in the below section.</i>	Bills, Correspondence & Notices Data Processing & Document Composition Price is per page produced, no cost for production of backer image, where applicable.	\$0.0145
	Bills, Correspondence & Notices Printing Approximately 64,000 mail pieces per month, the exact number of sheets produced is unknown but estimated to be 102,400 sheets per month. Price is per physical sheet of paper produced, no cost to print the backer image.	Per 1 st Sheet \$0.025 Per Additional Sheet \$0.005	
	Bills, Correspondence & Notices Mailing Mailing services required for folding, inserting, presorting, mailing via USPS. Price is per sheet mailed.		\$0.015
	Multiple Page Mail Piece Surcharge – Handwork This surcharge is assessed per mail piece (not per page). This surcharge only applies to multiple page bills that have too many pages to be inserted into the #10 envelope.		\$0.20
	Postage (for all job types) You will be invoiced for the exact postage used.		Pass Through
	Electronic Address Updates – NCOALink or ACS Per reported update.		\$0.20
	Pipelines Newsletter Marketing Insert – 8.5 x 11, printed 4/4 on matte stock		\$0.047
	13 Months of Print Image Archive Per bill PDF. This is normally considered an optional service so the details (and additional retention options) are listed on the optional services page.		\$0.006
	Example Summary Service Fees for 2 Page Utility Bill (Excluding Materials & Postage) A utility bill with 2 physical sheets of paper (with duplex printing) & 13 months of PDF archiving costs: \$0.0145 (processing) x 2 + \$0.025 (1 st Page Printing) + \$0.005 (2 nd Page Printing) + \$0.015 (Mailing) x 2 + \$0.006 (13 Month Archive)		\$0.095

Material Component Fees – Data Processing Print & Mail Service

Material Component Fees – Data Processing Print & Mail Service		
Statement, Invoice, or Letter Paper Stock		
All Documents: white paper stock with or without perforation. Paper is 8.5x11" and 24lb. Price includes all inventory costs.	Per Sheet	\$0.012
InfoSend Standard Window Envelopes		
Standard Window Envelopes	Per Standard Envelope	Options Below:
These envelopes include security tint printed on the inside of the paper stock and clear film that prevent the contents of the envelope from being viewed.	#10 InfoSend Standard Double Window Outgoing Envelope	\$0.014
These envelopes include security tint printed on the inside of the paper stock and clear film that prevent the contents of the envelope from being viewed. These envelopes also use sustainably logged paper (SFI).	#9 InfoSend Standard Single Window Return Envelope	\$0.012
	Flat Single Window Envelope – only used for multiple page statements that do not fit in the #10 envelope.	\$0.08
Other Envelopes		
IRWD Custom #10 Envelope printed 1/0 – order quantity of 50,000	Per Envelope	\$0.018
Tustin Custom #10 Envelope printed 1/0 – order quantity of 50,000	Per Envelope	\$0.018
IRWD Custom #10 Envelope printed 1/0 Version 2 – order quantity of 500,000	Per Envelope	\$0.018
IRWD Custom #10 Envelope printed 2/0 (urgent) – order quantity of 50,000	Per Envelope	\$0.018
IRWD Custom #9 Envelope printed 1/0 - order quantity of 500,000	Per Envelope	\$0.016
IRWD Custom Flat Envelope, 9" x 12", printed 1/0 – order quantity of 25,000	Per Flat Envelope	\$0.11

Materials



Pricing: Turnkey Data Processing Print & Mail Service Optional Services

Optional Services

<p>Drop-Shipped Inserts & Inserting of InfoSend-Printed Inserts Clients can print and fold inserts and ship them to InfoSend to be mailed with the statements. If folding is required add \$0.01 to the fee. InfoSend-printed inserts are quoted upon request. No additional service cost to use selective inserting to selectively include inserts with certain bill types as long as at least 3,000 customers are targeted (set-up costs can apply in some situations for advanced selective inserting criteria). Cost includes all inventory costs.</p>	Per Insert	\$0.006
<p>Enhanced Transactional Image Quality The baseline print image quality for transactional documents such as statements and invoices is 600 x 600 DPI. Work produced from the Anaheim facility can be printed at an enhanced image quality at an additional cost. This option uses high definition pigment ink & variable drop sizes to achieve a perceived 1200 x 1200 DPI image quality.</p>	Per Sheet	\$0.01
<p>Print Image Archive Each bill is stored as a PDF and indexed in a database. Search by account number or other key fields. You are charged one up-front fee per document to process it, index it, and store it for a set number of months. The PDFs are accessed using a browser-based application that is accessed by logging in to the InfoSend website. Third party applications can also access the PDFs via a lightweight API with no cost increase to the unit fees. Setup fees may apply depending on your configuration needs. <i>This service includes outbound mail tracking at no additional cost. You can view USPS-provided mail tracking data from the same interface that you use to view PDFs of the printed bills. <i>Only available with mail sent using 1st Class Postage, and not available in some cases with postcard mailings.</i></i></p>	Per PDF (No Set-up Fee)	\$0.006 - For 13 Months of Retention \$0.010 - For 18 Months of Retention \$0.013 - For 24 Months of Retention
<p>Electronic Inserts PDF copies of your physical inserts can be included in the Print Image Archive at an additional cost. This will let your team see exactly which inserts were delivered with each mail piece. This will also allow you to include the inserts in the eBill PDFs that are presented and/or emailed to customers if you use an InfoSend eBusiness service that delivers eBills to your customers or if you use a third-party application that pulls the PDFs from InfoSend's Print Image Archive API to present to your customers.</p>	Per Insert (No Set-up Fee)	\$0.002
<p>FinalDoc Transfer</p> <p>Option 1: Each completed InfoSend batch is indexed and transferred to you via FTP or SFTP to store on your own network. InfoSend will transmit each batch as one PDF file, and can provide an optional companion XML index file that provides a breakdown of the PDF's contents. All individual documents from the batch will be included in the file.</p> <p>Option 2: InfoSend is able to transfer individual PDF files for each document in the batch (it is not possible to just receive a subset of the documents), provide a customer file-naming scheme, or provide a custom index file. Additional Professional Service Fees may be required depending on the customizations requested.</p>	Per Document	Option 1: \$0.007 Option 2: \$0.012
<p>Professional Services Per hour and performed only upon request. For customizations made to document processing program or document format after go-live. Work is only started after receiving your approval of a formal quote. Please note that when you send billing files in PDF format and control your own document design there are no professional services charges when you modify the document template on your end.</p>	Per Hour	\$150.00



Pricing: Electronic Bill Presentation (EBP) or Electronic Bill Presentation & Payment (EBPP)

Please note that the below pricing is not contingent on IRWD using InfoSend's Data Processing, Print and Mail service. Either service can be purchased independently of the other. While we would be ecstatic to win the contract for both services we are totally comfortable with providing one or the other.

InfoSend's Fees – Initial Set-up Costs			
Implementation, professional services, and optional fees.			
Professional Services Fees	Electronic Bill Presentation (EBP) or Electronic Bill Presentation & Payment (EBPP) Initial Set-up Cost: Waived		
	One-time implementation fee. The above pricing includes: <ul style="list-style-type: none"> ▪ Branding of the portal with customized logo and banner, configuration of email templates ▪ InfoSend standard reports. A custom payment-posting file costs an additional \$750. ▪ Payment integration to one of InfoSend's existing preferred payment partners. Integration to a new bank/payment processor is not included and raises costs significantly (when available). <p>Please note: Clients must sign off on requirements documents (Statement of Work, project plan, etc.) before programming and system configuration can begin. Quoted implementation timeline begins upon approval of the SOW. Client can be charged additional fees and/or have the project go-live date delayed if requirements are changed after they have been finalized and signed off.</p>		
	Professional Services Fee Per hour and performed upon request. For customizations made to your Online BillPay configuration after go-live. Work is only started after receiving approval of a formal quote.	Per Hour	\$150.00

InfoSend's Monthly Transaction Fees – EBP or EBPP			
This pricing is based on an estimated number of eBills that are created and sent out each month equal to 55,000 Documents Per Month.			
Monthly Fees	eBill Loading and Storage Fee Fee to load eBill PDFs in the eBusiness system and store for 13 months.	Per eBill	\$0.023
	Optional Electronic Inserts - eInserts PDF copies of your physical inserts can be included in eBills at an additional cost. This will allow you to include the inserts in the eBill PDFs that are presented to your customers via the Online BillPay portal or emailed to the customer if you are not a healthcare organization and elect to let your customers decide whether they want their eBill PDFs attached to the new bill notification email.	Per Insert	\$0.0025
	Payment Initiation & PCI Compliance Fee (only applies for EBPP with payments) Per payment initiated to one of InfoSend's preferred payment partners. This is for all payment initiations for ACH, credit card, auto pay, same day or scheduled payments made through the system. Processing costs will be covered under separate contract directly with processor.	Per Payment	\$0.055
	Monthly Support Fee Per month fee to support the Online BillPay service.	Per Month	WAIVED

Please see the below table to understand how InfoSend came up with the annual totals. This worksheet has been provided on the CD as well. When comparing annual totals for each vendor who submitted a bid you will need to check to see if the same assumptions were made on what to include in the annual totals. For example, InfoSend included 13 months of print image archiving in the printing total (Task 1) because this seemed like a core requirement to IRWD. But some vendors may have excluded it. We would be happy to later re-adjust the annual totals with specific IRWD-provided line items and quantities to use, if requested.

IRWD Assumptions Document				
Printing & Mailing Year 1				
	Quantity	Unit Price	Extended Monthly	Extended Annually
Bills, Correspondence & Notices Data Processing & Document Composition	102,400	\$ 0.0145	\$ 1,484.80	\$ 17,817.60
Bills, Correspondence & Notices Printing: First Pages	64,000	\$ 0.0250	\$ 1,600.00	\$ 19,200.00
Bills, Correspondence & Notices Printing: Additional Pages	38,400	\$ 0.0050	\$ 192.00	\$ 2,304.00
Bills, Correspondence & Notices Mailing	102,400	\$ 0.0150	\$ 1,536.00	\$ 18,432.00
13 Months of Print Image Archive	64,000	\$ 0.0050	\$ 384.00	\$ 4,608.00
Bills, Correspondence & Notices 8.5" x 11" Paper Stock	102,400	\$ 0.0120	\$ 1,228.80	\$ 14,745.60
IRWD Custom #10 Envelope	102,400	\$ 0.0180	\$ 1,843.20	\$ 22,118.40
IRWD Custom #9 Envelope (assuming 30% AutoPay suppression)	71,680	\$ 0.0160	\$ 1,146.88	\$ 13,762.56
			Printing Total (Task 1)	\$ 94,556.16
			Mailing Total (Task 2)	\$ 18,432.00
			Grand Total	\$ 112,988.16
Electronic Bill Presentment (Task 3) Year 1	55,000	\$ 0.0230	\$ 1,265.00	\$ 15,180.00
Electronic Bill Presentment (Task 4) Year 1 (assuming 70% of eBill customers make payment)	38,500	\$ 0.0550	\$ 2,117.50	\$ 25,410.00
Printing of Monthly Newsletter (Task 5)	54,000	\$ 0.0470	\$ 2,538.00	\$ 30,456.00

Pricing Notes

Change requests and bill redesigns are handled utilizing InfoSend's Client Application Change Management process (detailed in Exhibit I). Additional costs vary based on total scope, however the Professional Services rate is defined in the pricing detail. New bill designs are determined according to the client application and billing workflow needs. However, InfoSend does provide notice when new application or printing technology becomes available that could enhance client bill designs. **Please note that when clients export batches in PDF format for InfoSend to process the ongoing professional services costs are dramatically reduced as the vast majority of changes are handled on the client's end.**

InfoSend's pricing includes environmentally friendly SFI® (Sustainable Forestry Initiative) Certified paper envelopes for all clients that use standard envelopes, InfoSend's standard double window #10 and single window #9 envelopes are sustainably produced and are provided at no additional cost to clients. The Sustainable Forestry Initiative ensures materials are sourced from sustainably managed forests. Please visit www.sfiprogram.com for more information.

InfoSend does not impose fees to accept and implement upgrades to IRWD's customer information and billing system.

InfoSend does not impose charges for monthly updates or software upgrades to our portal or software.

Section 2.1. Custom Forms/Envelopes

If Client has selected the Printing and Mailing Service and at any time requests that InfoSend Fees include the cost of custom Client-specific materials (either in this Agreement or since its execution), then Client understands and accepts that these materials will be purchased in bulk to achieve the lowest possible per-unit cost. Client agrees to purchase any remaining supplies of requested custom materials (normally forms or envelopes) if Client stops using InfoSend's Service for any reason. Client agrees to purchase the remaining supply of custom forms/envelopes upon Client's request to change the custom forms/envelopes before the supply has been depleted.

Section 2.2. USPS Postage Rates

Postage rates are determined by the United States Postal Service. All postage rate changes are determined directly by USPS and are independent of any InfoSend service or materials fees. In no event shall any change in the postage rates affect the InfoSend service or materials fees. The Client will be invoiced the amount of excess for overweight and foreign mail.

Section 2.3. Postage Deposit

InfoSend purchases the postage needed to mail Client documents on the day of mailing. The postage charges are later invoiced to Client based on the Client's payment terms. InfoSend requires Client to submit a postage deposit prior to the first mailing to facilitate the payment terms. This amount will remain in deposit for the duration of the Agreement. Upon Agreement expiration or termination Client must pay in full any outstanding invoices from InfoSend for payables created under this Agreement; the postage deposit will be refunded within fifteen (15) days of the date that the last open invoice is paid.

The postage deposit is subject to an annual review and may be adjusted to account for changes to Client average mailing volume or changes to USPS postage rates. There will be no more than one adjustment requested per year, if at all.

The postage deposit amount is calculated by multiplying the estimated number mail pieces per month by the current 5-Digit pre-sorted first class postage rate. The postage deposit amount due for your account is:

54,000 mail pieces per month x \$0.376 = \$20,304.

Exhibit C – Professional Services

Section 1. Price Escalations to InfoSend Professional Services Fees

InfoSend Professional Services Fees can be adjusted once every twelve (12) months to account for increases to the cost of providing these services. InfoSend reserves the right to increase Professional Services Fees on a yearly basis, starting with the first anniversary of the Agreement date, if needed. The Client will be notified, in writing, at least 30 days prior to such price increase. InfoSend fees will not be increased without the prior written consent of Client. An amendment to this Agreement will not be required if the Professional Services Fees are changed with Client's prior written consent, unless the terms or conditions of the Agreement have changed.

Section 2. Definition of Professional Services

InfoSend Professional Services are the technical services that are required to perform the initial setup of the InfoSend Primary Services defined in Exhibit A and the technical services required to make changes to these Primary Services after the initial setup is complete. Once any Primary Service is live and operational Professional Services will not be required unless Client requests a change or makes changes to its data file format or business rules which necessitates a change to InfoSend's system configuration or programming. Examples of InfoSend Professional Services:

- Project requirements gathering and analysis hours
- Project management and/or consulting hours
- Software development and system configuration hours related to the processing of Client's data
- Software development and system configuration hours related to document design, web portal setup, business rule configuration, or any other applicable technical services
- Application testing and deployment hours

Section 3. Professional Services Fee and Process for Approval and Payment of Fee

The current Professional Services Fee is \$175.00 per hour.

Anytime a project will incur billable Professional Services hours Client will be informed before work begins. Professional services shall not be performed without Client's prior written consent. InfoSend and Client will execute a Statement of Work for project that Client wants InfoSend to undertake. The payment terms for the project depend on the size and scope of the project. The Statement of Work can include payment terms that are different than the terms listed in this Agreement for InfoSend Fees, otherwise these terms will apply and the project fees will be invoiced upon project completion. Small projects that incur less than five (5) hours of Professional Services can be initiated without a Statement of Work if Client accepts and executes a Programming Quote for this work.

All projects that will take more than five (5) hours of Professional Services work will require both parties execute a formal Statement of Work. Depending on the nature of the work required InfoSend will provide one of the following quotation methods:

- Fixed Quote – a fixed project cost will be set. InfoSend may elect to waive this cost in some circumstances. Client understands and accepts that it must accept the terms and conditions of the Statement of Work for the project and that changes made to the project requirements, data file structure, etc. after the Statement of Work and any amendments to it have been finalized will require Client to pay for these changes on a Time and Materials basis. Client will be notified immediately if this scenario happens and given an option to keep the original project specifications to keep the fixed quote in place.
- Time and Materials quote – should it not be possible to provide a fixed quote due to the nature of a Client's requested project then InfoSend will provide an estimated number of hours to complete the project and bill the hours on a Time and Materials basis. The Statement of Work will include the terms and conditions for these project types and Client will be invoiced weekly for the hours spent on the project.

Section 4. Initial Setup Cost: InfoSend Primary Services

The Initial Setup cost for the InfoSend Primary Services selected in Exhibit A are listed below. These costs have been provided using a Fixed Quote process, explained in Section 3 above. Client understands and agrees to these terms and to the project-specific terms and conditions that will be provided in the Statement of Work that will be created to capture Client's specific requirements and data types.

Data Processing and Document Creation Initial Setup Fee This applies to the following services, unless client provides pre-rendered PDF files: DPPM Service, Online BillPay (EBPP) Service	
Project Fixed Initial Setup Cost:	\$WAIVED
Project Summary: This project will be completed to process Client's input data files and create the output to be used for the print or online delivery channel.	
Project Details: A requirements gathering process will be initiated to build the Statement of Work required to begin programming and system configuration. During the requirements gathering process the InfoSend and the Client will discuss: <ul style="list-style-type: none">• Client's custom data (if applicable). When custom data is provided by the Client a "field mapping" or "field description" document is required before project implementation can begin. This document is an absolute requirement; programming cannot be based on assumptions and all fields must be defined before programming can begin.• Document design. Client must sign-off on a document design "mockup" before programming can begin. The mockup is a visual representation of how the document will look after Client's custom data is processed by InfoSend's system.	
Project Schedule: Project is estimated to take 8-12 weeks to complete. The Statement of Work will contain all client deliverables and responsibilities. Both parties agree to dedicate adequate resources to the project to complete it in the shortest amount of time possible. Should Client make changes to the data file after programming has begun it must pay Professional Services Fees, on a Time and Materials basis, to cover the programming changes required to accept the new data. Should the document design be changed after the final mockup is accepted and signed off on by the Client then Professional Services Fees will apply, on a Time and Materials basis, to cover the cost of making these changes. Changes to the Client data file, document design, or other key specifics collected and finalized during the requirements gathering process will impact the project completion date. Changes made after the Client has executed the Statement of Work and any follow up documents can cause delays to the project completion.	



December 14, 2021

ATTN: Accounts Payable
IRVINE RANCH WATER DISTRICT
P.O. Box 57000
Irvine, CA 92619-7000

Dear Valued Client,

This letter is a detailed explanation of the rate increase emailed to you on November 1, by Russ Reza.

Our goal at InfoSend is to provide cost saving services to our clients in an accurate, reliable and timely manner- with a personal touch. We place a high value on each and every client and work hard to provide your organization with our services at the lowest possible cost.

Due to the increase in the cost of labor and materials we will be implementing a CPI price increase of 9.5% at this time. This is the change in CPI from 2018 to 2021, InfoSend's fees were held firm during that time period but we can no longer afford to keep your original fees intact due to extraordinarily high cost increases.

Effective December 1, 2021 your new rates will be reflected on the invoice as below:

\$0.0159 Statements Data Processing
\$0.0274 Enhanced Quality Printing Service - First Pages [IRL, IRM, IRN, IRX Files]
\$0.0055 Enhance Quality Printing Service - Additional Pages [IRL, IRM, IRN, IRX Files]
\$0.0383 Enhanced Quality Printing Service - First Pages [IRI, IRW Files]
\$0.0164 Enhance Quality Printing Service - Additional Pages [IRI, IRW Files]
\$0.0164 Mailing Service
\$0.0131 8.5 x 11 Forms
\$0.0153 ENV-INF-#10-RSR Outgoing Envelope
\$0.0876 9 x 12 Large Flat Envelope
\$0.0131 Standard #9 Return Envelope
\$0.2190 Multiple Page Mailpiece Surcharge
\$0.2190 Address Update
\$0.0142 Print Image Archiving (60 Months Retention)
\$0.0619 Inline Inserts


On behalf of the InfoSend Team, I would like to thank you for your valued business. We look forward to continuing to make your billing process as efficient as possible.

Please feel free to contact me with any questions or concerns regarding your new fee schedule.

Sincerely,

Lena Arrizon
Accounts Receivable Manager
lena.a@infosend.com
InfoSend, Inc.

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August 12, 2024
Prepared by: A. McNulty
Submitted by: F. Sanchez / P. Weghorst
Approved by: Paul A. Cook 

ACTION CALENDAR

ADVANCED METERING INFRASTRUCTURE AND METER REPLACEMENT FEASIBILITY STUDY

SUMMARY:

IRWD has been evaluating how the District could collect customer water consumption data in the future. Staff, with the assistance of consultants at Arcadis, completed an Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study. This study assessed the potential benefits and costs of implementing AMI throughout the IRWD service area. The study also analyzed the benefits of meter read accuracy improvements gained by replacing the District's existing mechanical meters with static meters, either with or without AMI. At the Board meeting, staff will present an overview of the study and a summary of the next steps related to developing a detailed AMI Implementation Plan. Staff recommends that the Board approve budget increases to Project 12514 and to Project 12515 in the amount of \$125,000 each, for a combined amount of \$250,000, to the FY 2024-25 Capital Budget to be used in developing a detailed AMI Implementation Plan.

BACKGROUND:

Accurately measuring and billing for customer water consumption is a core function for IRWD to recover the costs of providing its services. Metered water use data is also used to identify opportunities to improve water use efficiency as well as minimize water and revenue losses. The District's objectives in deploying a meter reading program were identified as:

- Measuring customer water use accurately;
- Collecting revenue tied to customer water use and cost of service;
- Monitoring and maintaining meter performance;
- Minimizing the need for meter rereads, estimated reads, and billing adjustments;
- Detecting customer water leaks and inefficient use and providing customer actionable information;
- Sustaining the approach to meter reading as the number of customers increases;
- Maintaining compatibility with IRWD's Customer Care and Billing system; and
- Validating cost effectiveness.

Current Meter Reading System:

IRWD has over 130,000 meters installed throughout its 181 square mile service area, and it continues to add more as development occurs. Customers are currently billed monthly based on manual meter reads collected by Alexander's Contract Services (ACS). ACS employs up to 22

staff that read each meter monthly. The manual read process generally works well, but sometimes results in issues with the timeliness and accuracy of data collection. Delays in the billing process are typically addressed by generating meter read estimates, with subsequent billing adjustments then made to reflect actual customer use.

Sustainability of Manual Meter Reading:

The water meter industry is transitioning away from manual meter reading toward AMI-based technologies. Some meter companies no longer manufacture direct read meters. A few years ago, IRWD's small meter supplier ceased production of direct read meters, forcing the District to find an alternative meter provider.

The meter reading service industry is also being impacted by the adoption of AMI technologies. As demand for manual meter reading services declines, fewer companies are offering this service. IRWD's most recent meter reading service procurement effort resulted in the District receiving only one proposal. These changes impact the sustainability of IRWD's current meter reading process and are driving the need to reconsider AMI based on current and future circumstances.

Advanced Metering Infrastructure:

AMI uses integrated smart meters, communications networks, and data management platforms that produce accurate meter data as frequently as desired. Typical equipment includes AMI compatible meters, data collectors, and repeaters. Data communication options typically consist of fixed networks that rely on radio frequencies or cellular networks. Software applications organize and process the meter data and integrate with billing applications. AMI software can also integrate with customer portals which can enhance the customer experience.

AMI and Static Meter Feasibility Study:

In March 2023, IRWD retained Arcadis to develop the AMI and Meter Replacement Feasibility Study to evaluate alternatives to the District's current manual meter reading processes. The evaluation identified that static meters, using ultrasonic or electromagnetic technologies, can provide more accurate measurement of low flow water use, which can significantly reduce lost revenues. The final feasibility study, provided as Exhibit "A", evaluated the following matters:

- Assessment of needs and opportunities for AMI;
- Assessment of AMI impacts to business processes;
- Assessment of static meter compatibility with IRWD's meter specifications;
- Research on the long-term performance of static meters;
- Cost-benefit analysis of improved accuracy of static meters;
- Cost-benefit analysis of several AMI deployment strategies; and
- A high-level roadmap for planning an AMI implementation.

The feasibility study evaluated a range of alternatives, including use of mechanical and static meters, options with and without AMI implementation, and an alternative that limited deployment of AMI to only large meters. In addition, staff prepared a financial analysis of implementing an in-house manual meter reading program to address a potential loss of meter reading services. The alternatives considered are described in the following table. A comparison of the costs and benefits of each alternative is provided as Exhibit “B”.

Meter Reading Alternatives

Alternative No.	Description
1	Continue contracting for manual meter reading of mechanical meters.
1A	Implement in-house manual meter reading of mechanical meters.
2	Replace existing mechanical meters with AMI capable mechanical meters.
3	Replace existing mechanical meters with static meters that are AMI capable.
4	Replace the oldest mechanical meters with mechanical AMI meters and retrofit newer mechanical meters to make them AMI capable. As mechanical meters are due for replacement, they would be replaced with mechanical AMI meters.
5	Replace mechanical meters with static meters that are <u>not</u> AMI compatible and continue with contracted manual meter reading.
6	Replace large meters (2 inch and above) with static meters that are AMI capable. All other meters would continue to be manually read through contract services.

Study Conclusions:

As more urban retail agencies convert to AMI, the availability of manual meter reading services will diminish over time. If IRWD were unable to contract for such services, it would have to implement an in-house manual meter reading program (Alternative 1A) that would cost the District a net present value of \$91.4 million over the next 15 years with no increased benefit. If IRWD were to change out all its mechanical meters with static meters that are not AMI capable (Alternative 5), the District would realize \$53.1 million in avoided costs and increased net revenue. If IRWD were to implement AMI along with installing static meters (Alternative 3), the District would realize \$46.6 million in avoided costs and increased revenue while achieving all the District’s meter reading objectives. Alternative 3 appears to be the most beneficial opportunity for IRWD. The presentation summarizing the feasibility study and the associated findings is provided as Exhibit “C”.

Next Steps:

The conclusions described above support the development of an AMI Implementation Plan in pursuit of Alternative 3. The first step towards the development of the Implementation Plan will be to assess what data communications technologies would work best in IRWD’s service area. This assessment would be followed by the development of a detailed AMI Implementation Plan,

which would specify IRWD requirements for static meters, AMI, and data communications technologies. The plan would provide an anticipated implementation schedule, phasing requirements, estimated costs, and a procurement strategy. In the future, staff will return to the Engineering and Operations Committee and Board of Directors with the results of the data communications technology assessment, an overview of the implementation plan, and associated recommendations.

FISCAL IMPACTS:

Staff requests \$250,000 in funds for consultant work and staff time be added to the Fiscal Year 2024-25 Capital Budget for projects 12514 and 12515, AMI Implementation to the Domestic and Recycled Water Systems.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item, absent the recommended budget increases, was reviewed at the July 24, 2024, Engineering and Operations Committee meeting.

RECOMMENDATION:

THAT THE BOARD APPROVE BUDGET INCREASES TO THE AMI IMPLEMENTATION FOR THE DOMESTIC AND RECYCLED SYSTEMS PROJECTS 12514 AND 12515 IN THE AMOUNT OF \$125,000 EACH, FOR A COMBINED AMOUNT OF \$250,000, TO THE FISCAL YEAR 2024-25 CAPITAL BUDGET TO BE USED IN DEVELOPING A DETAILED AMI IMPLEMENTATION PLAN.

LIST OF EXHIBITS:

- Exhibit "A" – AMI and Meter Replacement Feasibility Study
- Exhibit "B" – Comparison of Meter Reading Alternatives
- Exhibit "C" – Presentation on AMI and Meter Replacement Feasibility Study



Irvine Ranch Water District

Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study

Final Deliverable

June 2024



AMI and Meter Replacement Feasibility Study

Final Deliverable

June 2024

Prepared By:

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Prepared For:

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15600 Sand Canyon Avenue
Irvine, CA 92618

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Version Control

Issue	Revision No.	Date Issued	Page No.	Description	Reviewed By
1	1.0	06/28/2024		Draft Final Deliverable	Kristy Lavelle
1	2.0	07/18/2024		Finalized Final Deliverable after comments	Kristy Lavelle

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Executive Summary

Irvine Ranch Water District (IRWD) secured Arcadis's services to perform an Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study, which will be the foundation for a well-informed decision on whether or not to implement AMI. The key outcomes of this effort include: a comprehensive evaluation of readiness for AMI; an AMI business case and impact analysis; and a high-level AMI roadmap.

The initial project was divided into seven tasks:

1. Project Management and Meetings
2. AMI Needs Assessment
3. Business Case for AMI
4. Impact Assessment
5. High-Level Roadmap for AMI Implementation
6. Final Deliverables

Task 1 – **Project Management and Meetings** – consisted of general project management tasks necessary to maintain the project within the planned schedule and budget. This task also consisted of the kickoff meeting, in-person workshops, monthly reports, progress meetings, meeting notes and invoicing. The collaboration, coordination and communication between IRWD and Arcadis were also considered under this task throughout the duration of the project. The project kicked off in April 2023 (under the name AMI Feasibility Study and Business Development Plan), and in November of the same year a scope change (Variance 2) took place, in which an evaluation of static meters was added to Task 3 (project name changing to AMI and Meter Replacement Feasibility Study).

The kickoff meeting was held with IRWD, key members of the project team, subject matter experts, subcontractors and stakeholders and was facilitated by Arcadis. Following the kickoff meeting, a list of data needs (request for information – RFI) was submitted to IRWD, which helped guide the project team with key details related to meters and IT systems.

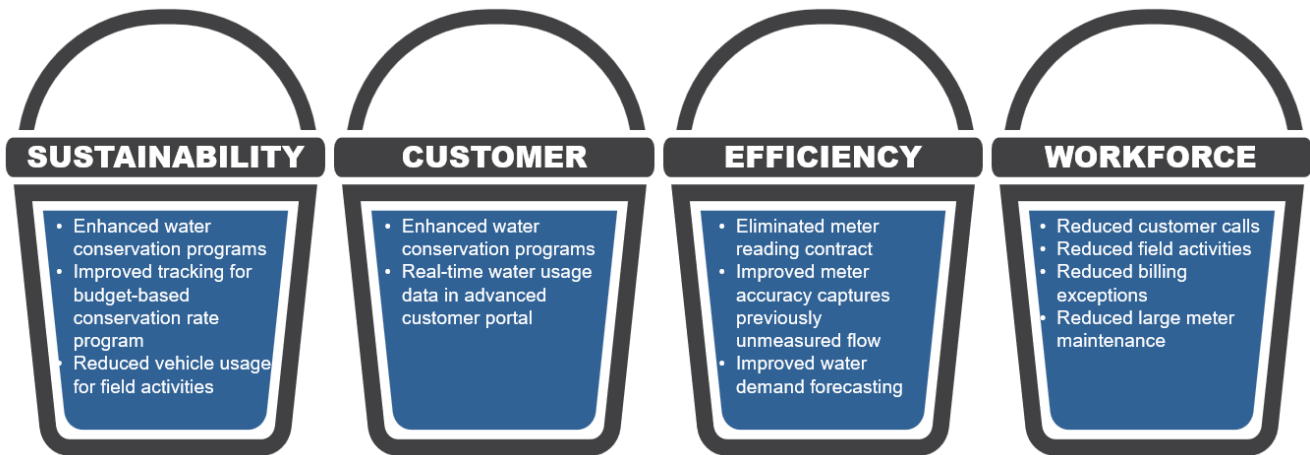
During Task 2 – **AMI Needs Assessment**, a comprehensive needs assessment was executed through a series of workshops with IRWD stakeholders focused on understanding the current landscape and identifying opportunities in several areas impacted by a future AMI project. The Needs Assessment is a critical component in evaluating the status of systems, processes, customer service and staff elements in place to determine the basis for future planning, procurement, and implementation of AMI. The workshops were:

- **AMI Technology Landscape** - Provided an unbiased overview of the current AMI landscape, including tools, systems, processes, and industry trends; the underlying goal was to level the knowledge and expertise for all stakeholders ahead of deeper conversations about specific elements of AMI programs.
- **Meters and Sensors** - Focused on evaluating the current state of IRWD's water meters to determine the most advantageous approach to implementing AMI and possibly modernizing IRWD's water meter population based on technical and economic considerations. The findings from this workshop, in addition to specific meter data supplied in the RFI informed the meter inventory analysis.
- **People, Processes, and Customer Needs** - Discussed business process improvement opportunities and enhancements to the customer experience that an AMI program would bring about, in addition to potential staff impacts and considerations.

- **Data Analysis and Data Management** – Directed towards understanding the current state of data management and analytics, and AMI best practices regarding data. A data management strategy and strong data governance is important to provide AMI stakeholders high quality, accessible data, embedding a data driven culture into the organization.
- **Data Collection, AMI Software and Integrations** – This workshop focused on two areas: Data Collection and AMI Software and Integration. The various deployment and ownership options of an AMI network were discussed, as well as integration points and data flows necessary for an AMI implementation.

The Needs Assessment summary consisted of current status aspects and AMI needs and opportunities. The summary report was divided into Customers, Water Conservation & Efficiency, Customer Service & Billing, Meters, Sensors, Communications Network, Software & Integrations, Data Analysis & Data Management categories.

In Task 3 – **Business Case for AMI** – the main objective was to provide an AMI implementation and meter replacement business case which calculates the return on investment (ROI) for various implementation scenarios by considering capital and operational costs, tangible and intangible benefits, economic indicators and identifies potential funding sources. This business case evaluates the quantitative and qualitative benefits, as well as the capital and operational costs for the adoption of AMI and static meters. The cost-benefit analysis has been applied to various implementation scenarios that were collaboratively developed by IRWD and Arcadis. All possible benefits were carefully evaluated and selected for inclusion in the business case as appropriate.



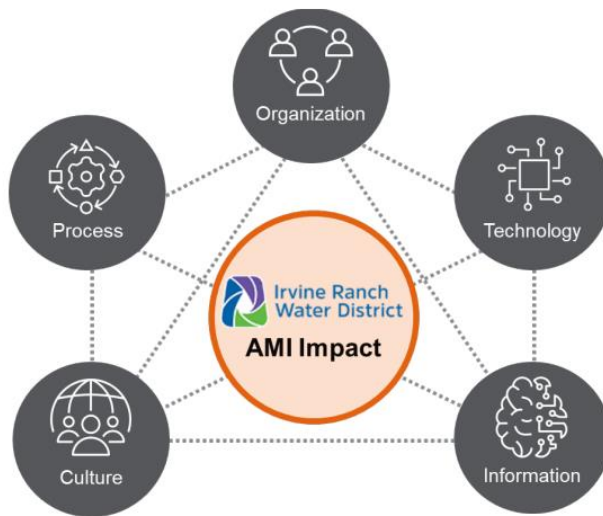
Initially, four business case alternatives were evaluated and delivered to the District in July 2023 – Stay the course; Mechanical Replacement with AMI; Static Replacement with AMI; Replace and Retrofit with AMI. The results of this initial analysis revealed significant revenue recovery when considering a full meter replacement using static metering technology along with AMI. This initial analysis only looked at the estimated revenue gains for small meters, not large meters. This is because of IRWD’s strong large meter maintenance and testing program. However, IRWD wanted to dive deeper and better understand the full estimated revenue gains including large meters. Therefore, a variance was introduced to perform more due diligence by taking a closer look at the large meters as well as the static metering technology in general. After the variance, the cost-benefit analysis was revisited and additional alternatives were added - Meter Replacement Only, No AMI; Large Meters Only with AMI. These alternatives reflect the request to evaluate the large meter revenue recovery from static meter replacement and to perform a large meter analysis and a breakdown of revenue recovery by meter size.

<p>Alternative 1</p> <p>Stay the Course</p> <ul style="list-style-type: none"> • Meters are replaced or maintained per IRWD’s schedule for meter maintenance • Meters continue to be read manually 	<p>Alternative 2</p> <p>Mechanical Replacement with AMI</p> <ul style="list-style-type: none"> • Replace meters using mechanical meters with encoder registers • Retain all large Omni meters (~1,700) • 100% AMI 	<p>Alternative 3</p> <p>Static Replacement with AMI</p> <ul style="list-style-type: none"> • Replace meters using static meters with encoder registers • Retain all large Omni meters • 100% AMI 	<p>Alternative 4</p> <p>Replace and Retrofit with AMI</p> <ul style="list-style-type: none"> • Replace meters 7+ years of age using mechanical meters with encoder registers • All meters retained are fitted with encoder register, manufactured by appropriate meter manufacturer • Retain all large Omni meters • 100% AMI
<p>Alternative 5</p> <p>Meter Replacement Only, No AMI</p> <ul style="list-style-type: none"> • Replace all meters using static meters with encoder registers, including large Omni meters • No AMI, all meters continue to be read manually 	<p>Alternative 6</p> <p>Large Meters Only with AMI</p> <ul style="list-style-type: none"> • Replace large meters (2” and greater) using static meters with encoder registers, including large Omni meters • AMI on large meters only, All small meters continue to be read manually 		

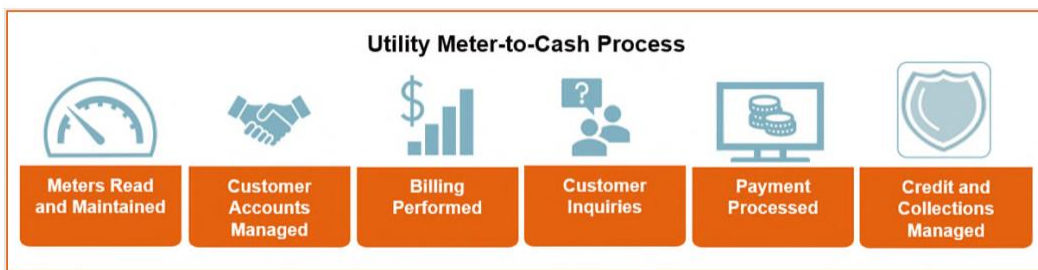
An evaluation of static meters was completed to explore the viability of a static meter replacement, as the revenue recovery analysis uncovered a significant benefit when considering this alternative. Static meter requirements, including straight line piping requirements, differ from those of mechanical meters, and thus, an understanding of

how these requirements compare to IRWD’s current design specifications and field installations was necessary for consideration of this alternative. A survey on other agencies’ experiences in deploying static meters was also conducted under this evaluation for further consideration of the alternative by IRWD. The survey was developed by the Arcadis team in collaboration with the IRWD project team. It was sent to 11 utilities to collect their experiences, pros and cons, and best practices related to the use of static meters. Questions were divided into three sections; Utility Profile and Background, Procurement and Implementation Considerations, and Field Performance.

Understanding how the AMI solution will impact IRWD’s business processes are key to the success of a project. Effective change management drives greater benefit realization and achievement of project goals and objectives. The **Impact Assessment** in Task 4 was carried out through a series of workshops in the key affected areas to assess and estimate the impacts.



Business process diagrams were developed for existing and future state with reference to Meter-to-Cash process areas.



The development of the **High-Level AMI Implementation Roadmap** in Task 5 was informed by the needs assessment and the business case results. The roadmap includes all project phases and was based on the practical experience with other water AMI projects where, typically, four major phases are expected – Planning, Procurement, Initial Deployment, and Full Deployment. The phased approach helps to mitigate and manage risk associated with the AMI project.

Finally, this **Final Deliverable** was completed in Task 6, compiling all aforementioned project deliverables into one cohesive document.

Needs Assessment

Irvine Ranch Water District

AMI Feasibility Study and Business Development Plan

Needs Assessment Report

June 2023



AMI Feasibility Study and Business Development Plan

Needs Assessment Report

June 2023

Prepared By:

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Prepared For:

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Our Ref:

30167699

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Version Control

Issue	Revision No.	Date Issued	Page No.	Description	Reviewed By
1	1.0	06/02/2023		Draft AMI Needs Assessment	Kristy Lavelle
1	1.1	06/15/2023		Final AMI Needs Assessment	Kristy Lavelle

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Acronyms and Abbreviations

AMI	Advanced Metering Infrastructure
C2M	Customer to Meter
CC&B	Customer Care & Billing
CCS	Customer Cloud Service
DCU	Data Collector Unit
gpcd	Gallons per capita per day
HES	Head End Software
IRWD	Irvine Ranch Water District
MaaS	Meter as a Service
NaaS	Network as a Service
SCADA	Supervisory Control and Data Acquisition

1 Project Background

Irvine Ranch Water District (IRWD) has secured Arcadis’s services to perform an Advanced Metering Infrastructure (AMI) Feasibility Study and provide a Business Development Plan, which will be the foundation for a well-informed decision on whether or not to implement AMI. The Needs Assessment is the first step in this process and is a critical component of the project as the findings will form the basis for project planning, procurement, and implementation.

2 AMI Needs Assessment Approach

The Needs Assessment is a critical component in evaluating the status of systems, processes, customer service and staff elements in place to determine the basis for future planning, procurement, and implementation of AMI. This step consisted of a comprehensive series of workshops that focused on understanding the current landscape, and identifying opportunities, in several areas impacted by future AMI projects.

The goal of this Needs Assessment report is to identify immediate and long-term needs for an AMI program for IRWD, detailing findings and evaluating current AMI vendors, technologies, and system architecture as they compare with IRWD AMI needs. These identified needs are the primary input into the financial analysis and evaluation of alternatives to be developed subsequently in the efforts of this project.

Business and technical requirements were discussed, taking into consideration the water conservation programs, current and future needs, industry trends, and financial and people aspects. The workshops were focused on the following topics and included the following IRWD attendees:

Table 1. Workshop dates and attendees

Topics	Date	IRWD Attendees
AMI Technology Landscape	May 02, 2023	<ul style="list-style-type: none"> • Dave Crowe • Ken Pfister • Christopher Smithson • Mohit Saini • Mike Mroczek • Amy McNulty • Enrique Zanetti • Ryan Matsuka • Mike Chaney • David Perez • Gus Barreto
Meters & Sensors	May 03, 2023	<ul style="list-style-type: none"> • Dave Crowe • Ryan Matuska • Michael Chaney • Mike Mroczek • Amy McNulty • Enrique Zanetti

		<ul style="list-style-type: none"> • David Perez • Gus Barreto
People, Processes and Customer Needs	May 04, 2023	<ul style="list-style-type: none"> • Sandra Garcia • Tiffany McBride • Amy McNulty • Enrique Zanetti • David Perez • Christopher Smithson • Gus Barreto • Mike Mroczek
Data Analysis and Data Management	May 08, 2023	<ul style="list-style-type: none"> • Amy McNulty • Enrique Zanetti • Josephine Shih • Michael Chaney • Mike Mroczek • Mohit Saini • Ryan Matuska • Christopher Smithson
Data Collection, AMI Software and Integrations	May 09, 2023	<ul style="list-style-type: none"> • Amy McNulty • Mike Mroczek • Mohit Saini • Joe Lam • Enrique Zanetti

2.1 AMI Technology Landscape

This workshop's goal was to provide an unbiased overview of the current AMI landscape, including tools, systems, processes, and industry trends. Considering that IRWD has conducted research on the matter and is actively invested in the subject, this session's underlying goal was to level the knowledge and expertise for all stakeholders ahead of deeper conversations about specific elements of AMI programs.

An AMI system is defined as an integrated system of meters & sensors, communication network(s), data management systems, and people & processes that enables two-way communication between the utility and its customers. All of these system components must work together for the AMI system to be successful and deliver the expected benefits.

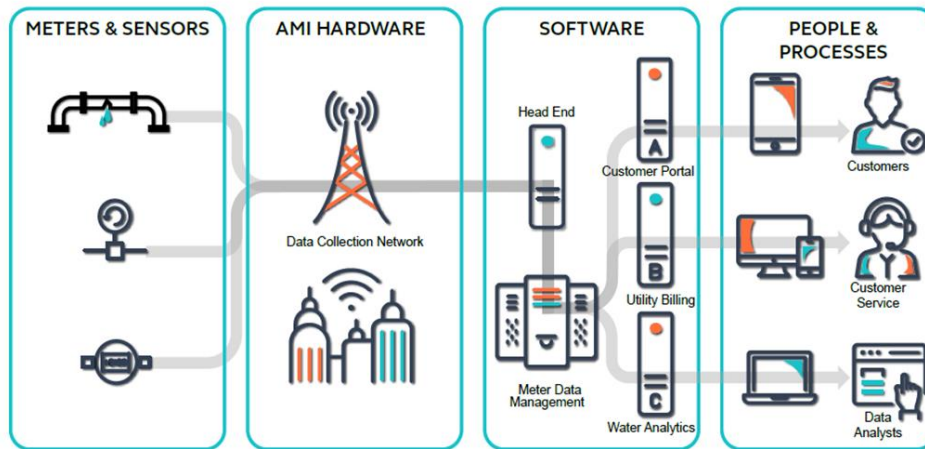









Figure 1: AMI Solution Overview

2.1.1 AMI Vendor Technologies

AMI water solution vendors continue to advance their solutions. This is an ever-changing space within which these vendors continue to innovate to remain competitive, and emerging technology providers in AMI continue to develop. The table below provides a high-level view of the leading vendors and related technologies.

Table 2. Top AMI Technology Providers (listed in alphabetical order)

Vendor	Solution	Network Type	Radio Frequency
 Aclara	Aclara RF	Fixed - Proprietary	Licensed 450 – 475 MHz
 Badger Meter, Inc.	Beacon	Cellular	N/A
 Itron	Gen5	Cellular	N/A
 MASTER METER	Allegro	Fixed – Proprietary	Licensed 450 – 470 MHz
 Mueller SYSTEMS	MiNet	Fixed – Proprietary & LoRaWAN	Unlicensed 902 MHz – 928 MHz
 NEPTUNE TECHNOLOGY GROUP	R900	Fixed – Proprietary & Cellular	N/A
 sensus a xylem brand	FlexNet	Fixed - Proprietary	Licensed 900 – 904 MHz

2.1.2 Meter Interface Unit (MIU)

AMI systems incorporate a meter interface unit (MIU), which could be separate from, integrated into, or attached to the meter register. The MIU interrogates the encoded register of the meter and transmits this and other information to AMI data collectors using radio frequency (RF) communications. The effectiveness of communications between the MIU or transmitter and the data collector is critical for the successful performance of the AMI system. The level of interoperability between an MIU and a meter register has implications to the overall AMI system costs. Provided a meter is accurate, if a utility can connect an existing register to an MIU, or replace the register without meter replacement, installation costs are lower.

2.1.3 AMI Network Communications and Data Collection

There are several AMI network communication options, each with specific advantages and disadvantages. At the high level, there are two network types:

- **Fixed Network** – Fixed networks require network equipment (data collectors) to be deployed to provide a means to collect meter data wirelessly. Traditionally, AMI systems that have fixed networks are owned by the utility. Lately there is a trend where AMI vendors are marketing their fixed network as a Network as a Service (NaaS) offering where the vendor is responsible for the deployment and maintenance of the network.

AMI Data Collector Units (DCUs) receive information from the MIU. DCUs are typically mounted on utility poles, building rooftops, communicating towers, radio masts, or elevated water tanks. They use antennas and transmitters/receivers for communicating with MIUs as well as the AMI's head-end system. Collectors are powered by AC power with a battery backup, or use batteries recharged by solar panels. The electronic components of the collectors are housed in a weatherproof enclosure or are designed for installation inside a building. Collection systems are designed for overlapping coverage, commonly referred to as network redundancy, so that loss of a single DCU does not result in serious loss of data. Fixed networks require backhaul for the collected meter data at the DCU to make its way to the AMI Head end.

Backhaul

Data collectors aggregate information coming from thousands of MIUs. They transmit data back to the AMI head end system through a backhaul communication method. For fixed AMI systems with dispersed data collectors, a wide area network (WAN) is needed, and broadband communication is required. Backhaul communication include one, or a combination of, several wireless communications systems, including general packet radio service (GPRS), cellular digital packet data (CDPD), IEEE 802.11 (Wi-Fi), 802.16 (WiMax), 802.15.4 (Zigbee) or 802.15.3 (ultrawideband) networks. Backhaul communication can also be provided over fiber optics, landline switched telephone networks, ethernet or even broadband over power line (BPL) systems.

Open Protocol Fixed Networks

There are new fixed network offerings that use an open protocol for communications. In the U.S. for water AMI solutions, Low Range Wide Area Network (LoRaWAN) is the most common open protocol. LoRaWAN is based on a standard protocol that endpoint technology vendors design to these interoperability standards. This approach is particularly appealing to municipalities who are also looking for ways to use the network infrastructure for smart city uses. A few examples of these use cases include smart lighting, smart parking, people counting, intrusion alerts and a host of various sensor technologies. Smart City technologies using

LoRaWAN networks are rapidly emerging providing utilities opportunities to expand the use of their network for other needs.

- **Cellular Network** – Cellular networks are networks owned and operated by one of many telecommunication companies such as AT&T, Verizon, and Sprint. Some AMI vendors have been approved and certified on the FirstNet network which is a protected cellular network for government organizations and first responders. All cellular network communication services are offered as NaaS. One advantage of cellular networks is that there is no network to deploy. Assuming cellular coverage is strong, this allows the utility freedom to deploy AMI meters and endpoints within the service area without significant additional investment in network infrastructure.

2.1.4 Two-way Mode Communication

In two-way mode, both the MIU and the data collector can transmit and receive information (more than just a wake-up alert). Two-way systems minimize data traffic, improve reliability, and enable firmware upgrades in MIUs. In two-way systems, data can be “pulled” as well as “pushed.” In some systems, individual MIUs may be selectively queried or given commands, such as remote control shut-off meters, update firmware on the MIU, and on demand meter read. The ability to update MIU firmware is important to extending the long-term life of the MIU.

Generally fixed networks have more two-way communication capabilities than cellular AMI solutions. However, the capabilities of cellular AMI solutions are rapidly improving as customers purchase and deploy these technologies. See table below for a summary of two-way capabilities currently available.

Table 3. AMI Network and Two-Way Feature Comparison

		Fixed Network	Fixed Network - LoRaWAN	Cellular
	Required Network Infrastructure to be Installed	Yes	Yes	No
	Meter/Endpoint Data Intervals	Standard is Hourly See Note 1	Standard is Hourly	Standard is 15-minute
	Transmission Rates	4-6 times per day	4-6 times per day	4-6 times per day See Note 2
Two-Way Communication Capabilities	Real Time - On Demand Read	Yes	Yes	No See Note 3
	Remote Firmware Updates	Yes	Yes	Yes
	Remote Alert Configuration	Yes	Yes	No See Note 4

Note 1 – Data intervals can be increased for short periods of time. Shorter interval rates for long periods of time will degrade the MIU battery life.

Note 2 – One cellular AMI vendor indicated that transmission rates for their solution can be increased to 2 – 3 times per day during weekdays. Sometimes transmission rates decrease on weekends down to 1x/day.

Note 3 – Utilities with cellular AMI systems find it acceptable to use the closest read to the midnight read for resolving issues with meter read data gaps.

Note 4 – Alert configuration changes require visit to the premise to update the configuration using a handheld device.

2.2 Meters & Sensors Workshop

This workshop focused on evaluating the current state of IRWD’s water meters to determine the most advantageous approach to implementing AMI and possibly modernizing IRWD’s water meter population based on technical and economic considerations. Using the meter data received from IRWD, Arcadis began developing a Meter Inventory Analysis that:

- Summarizes water meter inventory data based on key parameters such as meter manufacturer, size, age, location, and cumulative flow,
- Estimates current water meter accuracies, using readily available IRWD data and published meter accuracy test literature, and
- Determines the total value of water lost due to meter inaccuracy based on existing water rates for IRWD. This information will be used during implementation scenario development to compute the economic opportunity of replacement for the various meter sizes based on cumulative flow through the water meter.

Table 4: Meter Summary

Metering Applications	• Total water meters: 130,576
	• Small meters (<=2" + 2" nutating disc meters): 128,320 (assumes all unknown meters are small)
	• Large meters (>=3" + 2" turbo meters): 2,256

- Most small meters are disc meters
- Most large meters are turbo
- Compound meters no longer in use
- IRWD does not plan to use single jet meters

Technology in Place

METER_TYPE	Count of [METER_ID]
COMPOUND	638
DISC	127677
DISC - TEMP	2
MAG METER	6
PROPELLER	100
PROPELLER (IRWD INTERNAL ONLY)	21
SINGLE JET	3
TURBO	1953
TURBO - TEMP	161
TURBO OMNI F-2	8
Total	130576

Based on the meter inventory analysis that focused on meter accuracy and AMI compatibility:

In-Service Meter Population Summary

- Average meter age: 7.52 years
- Manufacturers with largest number of meters installed: Neptune, model T-10 (118,407)
- Nearly all meters have direct read registers, except for Omni meter types
- Irrigation meters:
 - Dedicated meters. Billed separately.
 - One bill per meter.
- Fire meters:
 - Street hydrants are not metered.
 - Commercial fire lines have a bypass meter. Small meter to detect theft only.
 - Some residential homes have fire sprinklers, where 1-inch meters are installed.
- Low Flow Meter:
 - Indoor usage average is about 50 gpcd. Used to be 75 gpcd.
 - Low flow component in residential customers is increasing.

Lids:

**Meter Boxes
and Lids, and
Other
Appurtenances**

- Polymer Concrete with fiber glass reinforcement.
- Available with cutouts. No need for drilling

Expansion couplers are not used.

Most meters setup have the specified 90 angle.

**Past and
Current Efforts**

- Small Meter Testing, using AWWA M6 methodology in 2016. 299 meters tested.
- Large Meter Testing Program
- Meter Replacement Program. The following is IRWD'S schedule for meter maintenance:
 - 5/8" – 2" disc meters – 17 year cycle.
 - 2" turbo meters – 5 year cycle.
 - 3" turbo meters – 3 year cycle.
 - 4" turbo meters – 2 year cycle.
 - 6", 8" and 10" turbo meters – annual cycle.
 - All propeller meters – annual cycle.
- Conservation potential study in 2019.

2.3 People and Processes & Customer Needs

AMI programs and systems bring significant changes to meter reading, meter maintenance, operations, billing, conservation, non-revenue water management, and analytical business improvements. These changes directly impact business processes and staff activities.

AMI also provides the opportunity for IRWD to enhance their customer's experience. Self-service online tools provide significant enhancements and customers can benefit from:

- Improved offerings to support water conservation or other customer service programs.
- Ability to view detailed usage and patterns.
- Enrolling in improved proactive alerts for possible leak or abnormal consumption and bill-to-date thresholds.
- Improved customer analytics (hourly usage comparison, usage vs. neighborhood average, etc.).
- Streamlined response to customer concerns.

This workshop discussed business process improvement opportunities and enhancements to the customer experience that an AMI program would bring about. The main findings from the workshop are:

- Estimated bills at IRWD are a very low number.
- CC&B can estimate bills based on previous usage and other factors. Manual intervention is sometimes necessary.
- WaterSmart customer portal is in place. Online bill pay is available through Paymentus. There are links in each system that connects each other. Single sign-on is in place on the IRWD website.
- Payments are quickly reflected on CC&B.
- Every start/stop service requires a truck roll.

2.3.1 Roles and Responsibility Impacts Post Implementation

AMI can impact roles and responsibilities within the organization. The following roles and responsibilities should be considered in preparation for implementing the AMI solution. These roles can be folded into existing roles, expanding responsibilities or these roles may be new roles.

AMI System Manager

Manage Advanced Meter Infrastructure (AMI) Section responsible for the administration and support of AMI proprietary systems, applications, and integrations. Handles ongoing program management, supporting project oversight, roadmap monitoring and updates, and ongoing governance. The AMI System Manager is responsible for managing the Section team as well as championing the solution throughout the Utility Management.

AMI System Administrator

Participates in the planning, management, and administration of the AMI system, ensuring that meter data is correctly transmitted to the proper entities. Maintains the read performance of the AMI system, ensuring the integrity, reliability, accuracy and availability of meter data are always maintained. Troubleshoot issues to provide for optimal system performance. Collaborate with outside vendors and service providers, IT, and data users across the District. Leads the transformation of business needs into technical requirements.

AMI Business System Analyst

Discover the information hidden in vast amounts of data available. Help the District make smarter decisions to deliver even better service to customers. Focused on applying data mining techniques, doing statistical analysis, and building high quality prediction systems. Make connections across data sets. Perform advanced reporting. Ensure data integrity. Play a key role on special projects. Critical thinking and problem-solving skills are essential for interpreting data. A passion for machine-learning and research.

Meter Reading Analyst

Analyzes the AMI system to identify field issues including missing reads, failed equipment, alerts, and more. Direct field teams to resolve issues in a timely manner. Manage inventory and functionality of equipment in the field.

2.4 Data Analysis and Data Management

AMI generates data in small intervals that are synchronized daily, creating thousands of reads per month per customer. A data management strategy and strong data governance is important to provide AMI stakeholders high quality, accessible data, embedding a data driven culture into the organization.

This workshop focused on understanding the current state of data management and analytics, and AMI best practices regarding data.

Current data strategies involve the weekly export of data from CC&B into an external water efficiency data warehouse. Query Tools is then used to analyze the data and create reports. Another tool available for Customer Service use is Oracle Utilities Analytics (OUA). However, it is not fully utilized, and they don't use any vendor provided web tools for data access. Customer Service primarily uses BI Publisher for custom reports.

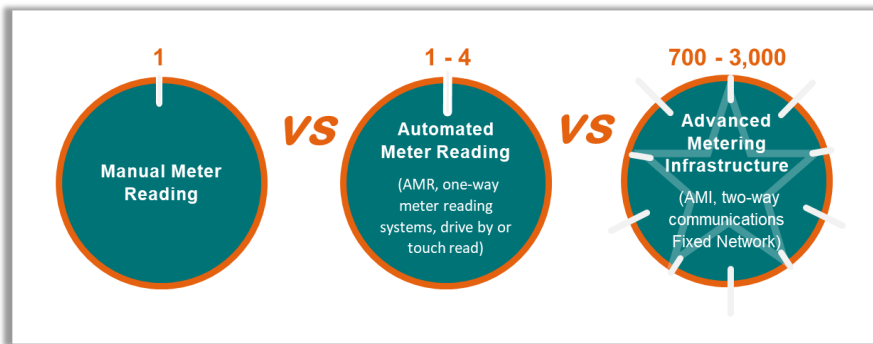


Figure 2: AMI Meter Read Data Quantities

GIS data is kept on premise and the assets are frequently updated. There is a GIS master plan, and it is close to completion. There are plans for a separate data warehouse for GIS, but no firm timeline is currently set.

Python is the preferred programming language. In addition, SQL and R languages are utilized.

AMI best practices involve:

- Development of AMI-derived Key Performance Indicators (KPIs)
- Mapping out priority AMI use cases
- Development of rules for data management

2.5 Data Collection, AMI Software and Integration Workshop

This workshop focused on two areas: Data Collection and AMI Software and Integration. These two areas were combined into the same workshop because the stakeholders for each topic were the same.

2.5.1 Data Collection

Data Collection was the first topic discussed. There are several different ownership and maintenance options available for an AMI network. These options are defined below. For reference, Network as a Service is NaaS, and Meter as a Service is MaaS. A cellular AMI solution is considered a NaaS.

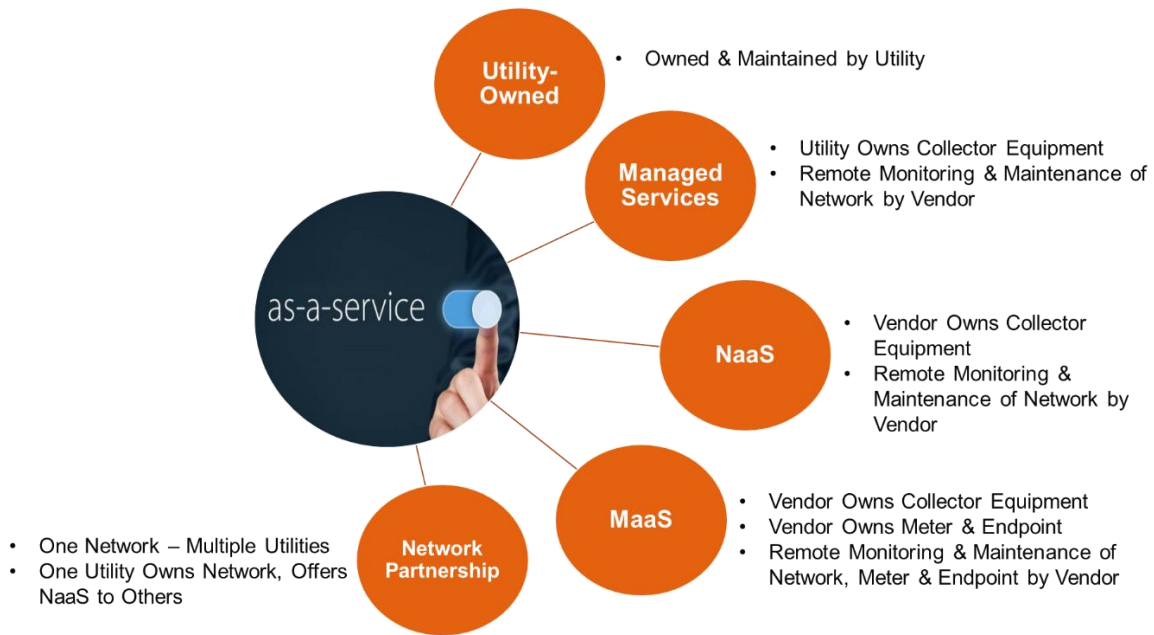


Figure 3: Network Deployment & Ownership Options

Some of these ownership options do not require an up-front capital expenditure for the network. The table below more clearly identifies what IRWD would be responsible for in each option. The Network OpEx, or Operational Expenditures, is defined such that IRWD would not be paying a vendor for ongoing operations and maintenance of the AMI network. However, in the IRWD-owned option, please note that IRWD would have internal OpEx for this responsibility.

Table 5. Network Ownership Options

Network Ownership Options	Network CapEx	Network OpEx (Annual Maintenance Fees)	AMI Network Maintained by IRWD	AMI Network Maintained by Vendor	Meters & AMI Endpoints Owned & Maintained by IRWD	Meters & AMI Endpoints Owned & Maintained by Vendor
IRWD-Owned	X		X		X	
IRWD-Owned with Network Managed Services	X	X		X	X	
NaaS		X		X	X	
MaaS		X		X		X
Network Partnership		X		X	X	

During our workshop, MaaS was identified as an option that IRWD is not interested in considering.

2.5.2 AMI Software & Integration

AMI Software and Integration was the second topic discussed during the workshop. New software components will be part of an AMI implementation. A preliminary AMI reference architecture is provided below and was discussed during the workshop as a way for IRWD stakeholders to get a sense of how the AMI information flows. This architecture represents an implementation with the existing Oracle CC&B system. The components in blue are new components because of AMI.

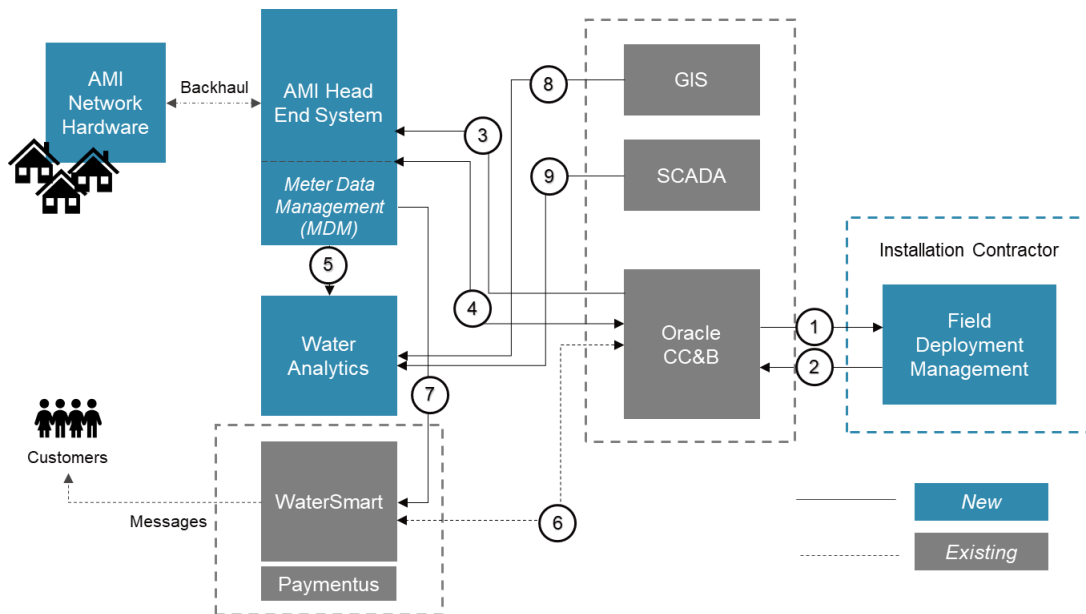


Figure 4: Preliminary AMI Reference Architecture

The new AMI software components are defined as:

- **AMI Head End System** – Software provided by the AMI vendor that receives AMI data brought back to the utility from the AMI endpoints.
- **Meter Data Management (MDM)** – A single repository and long-term data storage for processing and managing meter and meter operations data as well as meter read data.
- **Field Deployment Management** – System used by the installation contractor to manage the field installations of meters and AMI endpoints.
- **Water Analytics** – Vendor-provided or custom tools for analyzing and reporting on meter data, often combined with other utility data sets.

MDMs are not required for AMI solutions. Some AMI Head End Systems have built in MDMs or MDM-like features and functions. MDMs can be purchased separately as well. During the workshop, there was discussion on upgrading to Oracle Customer to Meter, (C2M) or Customer Cloud Service, (CCS), as these solutions have built-in MDMs. An integration example of this was presented during the workshop for reference.

Software and data integration is a critical piece of an AMI project. Without proper planning and execution, it can quickly become the most complicated piece of an AMI project. As part of preliminary planning, this workshop included discussions around:

- How IRWD uses their existing customer portal (WaterSmart/VXsmart).
- New needs and requirements that may require additional configuration and setup.
- How IRWD will use existing data and systems to support the implementation.
- Required AMI interfaces and the overall integration architecture that will be needed to get the most from the AMI system, specifically with IRWD's Oracle CC&B and Maximo systems.

3 Needs Assessment Summary

Below is a summary of findings for each of the core AMI-impacted areas. The table describes the current status as well as the identified AMI needs and opportunities.

Table 6. Needs Assessment Summary

Category	Current Status	AMI Needs & Opportunities
Customers	<ul style="list-style-type: none"> • WaterSmart customer portal in place • Online bill pay through Paymentus • Misreads cause concern and distrust • Read exceptions often require a re-read, or truck roll 	<ul style="list-style-type: none"> • Improved customer experience with interval data available on portal and an improved water use scorecard • Timely and more confident leak alerts • Provide transparency on data and usage, increasing public trust • Provide “smart meter” data to better align with the data visualization customers see for electric and gas • Significantly improve time to resolve customer issues
Water Conservation & Efficiency	<ul style="list-style-type: none"> • Leak detection performed using monthly meter read data • Budget-based billing to drive conservation 	<ul style="list-style-type: none"> • Significantly improved customer-side leak detection • Opportunity for AMI-enabled distribution leak detection • Improved budget-based billing adherence due to customers being presented with detailed usage data • Improved marketability of conservation programs based on customer usage data
Customer Service & Billing	<ul style="list-style-type: none"> • Read data manually downloaded from ACS and uploaded into CC&B daily • Route data manually uploaded to ACS • Quantity of estimated reads is low • Every start/stop service requires a truck roll 	<ul style="list-style-type: none"> • Achieve 100% read accuracy, providing accurate water bills to customers consistently • Eliminate bill estimation • Automated upload and download of data for meter reads and routes • Significantly reduce truck rolls, or eliminate altogether for certain business processes such as misreads/re-reads • Significantly reduce call volumes • Reduce bill adjustments

- Nearly all registers currently installed are direct-read registers
- IRWD has mostly positive displacement meters in the field
- All meters manually read by ACS
- Nearly all registers must be replaced with encoder registers to be AMI compatible
- Opportunity to capture revenue for unbilled usage due to meter inaccuracy
- Opportunity to capture low-flow revenue in particular with static meter technology
- All meters automatically read, minimum of hourly interval data
- Updated inventory of meter locations, sizes, types, etc.
- Opportunity to read additional data such as pressure and temperature

Meters

Sensors

- To provide granular data for high use customers, there are several devices that have been utilized such as Flume, Barnacles, SWiM meters, and Water Pigeon devices.
- Opportunity to implement sensors for distribution leak detection, overflow, water quality, pressure, temperature

Communications Network

- IRWD owns private radio network (for SCADA system only)
- 80-90% of terrain is flat, but there is some concern about the terrain of the remainder (canyons)
- IRWD has bucket trucks with certified operators, and at least 1 certified climber
- Network ownership and maintenance preference is to be determined, but IRWD does seem to have the capability to maintain the network
- Opportunity to use energy utility poles at no cost for network deployment
- Interest in understanding costs for cellular networks

Software & Integrations

- Oracle CC&B version 2.8 in place currently, supported until 2027
- Possible upgrade to Oracle C2M or CCS, which will include an MDM
- MDM requirement is to be determined
- If required, consider an Oracle upgrade to C2M or CCS vs a stand-alone MDM
- Changes to existing WaterSmart portal or potential new portal
- Introduction of AMI Head End

Data Analysis & Data Management

- There is currently no performance of ad-hoc analysis on CC&B data by Customer Service - tools are there but knowledge is limited to use them, (OUA for example)
- Ability for Customer Service and other roles to run ad-hoc reports
- Opportunity for training so every role knows how to best take advantage of the AMI data and business systems

- Lack of granular meter read data makes it difficult to analyze and resolve customer issues
- Data analytics are performed in several separate systems
- Data exports are manually performed to move data into a data warehouse and Power BI tools for analysis and reporting
- Access to AMI hourly interval data that will be readily available to Customer Service personnel and customers directly
- Opportunity to establish roles for each system and develop a streamlined approach to data management and analysis

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Business Case

Irvine Ranch Water District

Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study

Business Case Report

May 2024



AMI Feasibility Study and Business Development Plan

Business Case Report

May 2024

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Attachments

Attachment A – IRWD AMI Cost Benefit Analysis (Excel Workbook)

Acronyms and Abbreviations

AMI	Advanced Metering Infrastructure
CCF	centum cubic feet
FY	Fiscal year
gph	gallons per hour
GPM	gallons per minute
IRR	Internal Rate of Return
IRWD	Irvine Ranch Water District
ROI	Return on Investment
USU	Utah State University
YoY	year over year
NaaS	Network as a Service

1 Task Overview and Objectives

This task's main objective is to provide an Advanced Metering Infrastructure (AMI) and meter replacement business case which calculates the return on investment (ROI) for various implementation scenarios by considering capital and operational costs, tangible and intangible benefits, economic indicators and identifies all potential funding sources.

This business case evaluates the quantitative and qualitative benefits, as well as the capital and operational costs for the adoption of AMI and static meters. The cost-benefit analysis has been applied to various implementation scenarios that were collaboratively developed by IRWD and Arcadis. The requirements identified in Task 2 helped inform the scenario selection. IRWD has a budget-based rate structure in place, as well as water use efficiency and water loss programs. Due to these established and effective programs, the evaluation of benefits went beyond real losses such as leaks. Some examples of those benefits are presented in Figure 1. All possible benefits were carefully evaluated and selected for inclusion in the business case as appropriate.

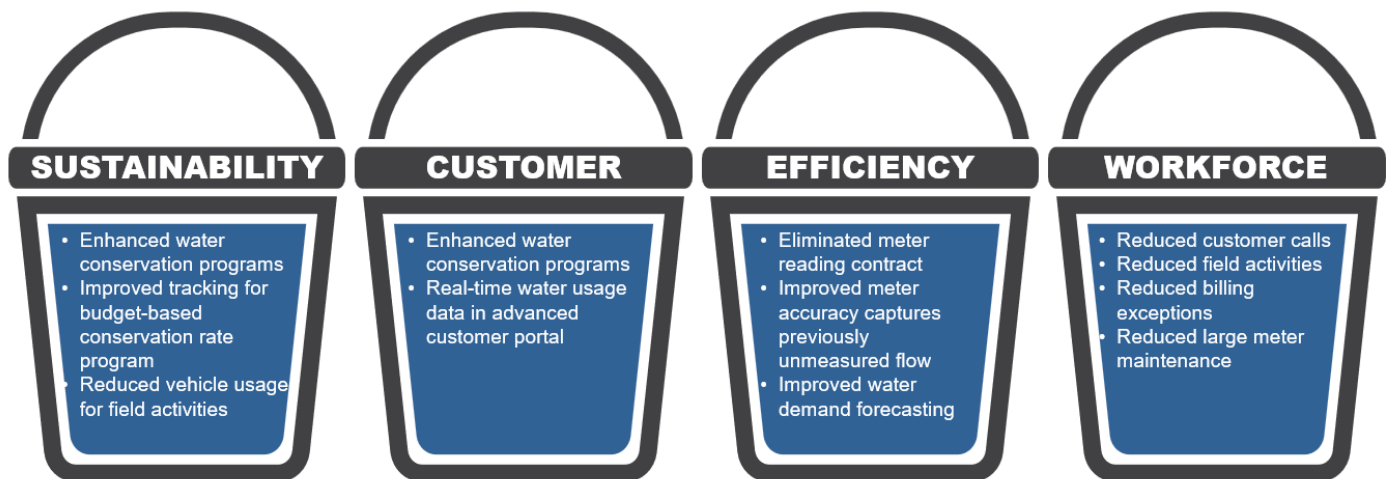


Figure 1. Benefits of AMI Implementation

2 Business Case Alternatives

Arcadis and IRWD originally developed four alternative scenarios for the business case as presented in Figure 2.

Alternative 1	Alternative 2	Alternative 3	Alternative 4
Stay the Course	Mechanical Replacement with AMI	Static Replacement with AMI	Replace and Retrofit with AMI
<ul style="list-style-type: none"> • Meters are replaced or maintained per IRWD's schedule for meter maintenance • Meters continue to be read manually 	<ul style="list-style-type: none"> • Replace meters using mechanical meters with encoder registers • Retain all large Omni meters (~1,700) • 100% AMI 	<ul style="list-style-type: none"> • Replace meters using static meters with encoder registers • Retain all large Omni meters • 100% AMI 	<ul style="list-style-type: none"> • Replace meters 7+ years of age using mechanical meters with encoder registers • All meters retained are fitted with encoder register, manufactured by appropriate meter manufacturer • Retain all large Omni meters • 100% AMI

Figure 2. Initial Alternative Scenario Details

Nearly all meters have direct read registers. These direct read registers are not AMI compatible and must be replaced with encoder registers, regardless of whether the meter is replaced.

After initial review of the business case results, a follow-on analysis was requested that included additional large meter analysis and two more alternatives as presented in Figure 3.

Alternative 5	Alternative 6
<p>Meter Replacement Only, No AMI</p>	<p>Large Meters Only with AMI</p>
<ul style="list-style-type: none"> • Replace all meters using static meters with encoder registers, including large Omni meters • No AMI, all meters continue to be read manually 	<ul style="list-style-type: none"> • Replace large meters (2" and greater) using static meters with encoder registers, including large Omni meters • AMI on large meters only, All small meters continue to be read manually

Figure 3. Additional Alternative Scenario Details

3 Cost Benefit Analysis First Draft

The initial business case alternatives were analyzed and delivered to the District in July 2023. This section details the assumptions, approach, and conclusions drawn from the initial analysis. Descriptions of additions and changes made in the follow-on analysis can be seen in Section 4.

3.1 Water Meter Assumptions

Research about the current state of water meters was conducted in preparation for the cost benefit analysis. A number of key details and assumptions about water meters of varying types are described in this section to provide context for the analyses that follow.

3.1.1 Mechanical Meters

Mechanical meters have been widely used by water utilities for years. These meters will measure flow either by accounting for the velocity of the water actively passing through and the rotational speed of the meter moving part (e.g. rotor or propeller), or by calculating the volume of water passing through the meter’s chambers. Positive displacement, nutating disc, piston, multi or single-jet, and turbine are some examples of mechanical meters.

Mechanical water meters are known to become less accurate as a function of both age and the cumulative flow through the meter. Mechanical wear generally causes the meters to lose accuracy (i.e., to “slow”) and results in under-registration of water consumption. This apparent loss results in non-revenue water, or water that passes

through the meter (and is therefore used by the customer) but not billed for. At a certain level of inaccuracy, the cost of this under-registration outweighs the cost to replace the meter with a new, more accurate meter.

It is generally understood that the typical service life for small, mechanical meters used by water utilities in the U.S. ranges from 12 to 25 years, although low flow accuracy degrades fairly early in the life of a mechanical meter. **In this analysis, new mechanical meter accuracy was assumed to be 98%.** This was derived from the comparative performance of new 5/8" x 3/4" meters (Sumrak et al., 2016), compared with the residential end uses studies performed by DeOreo et al. (2016) and Craig (2017).

Research has established a correlation between mechanical meter registration accuracy and both age and total cumulative volume (or throughput). To establish this correlation, samples of meters are accuracy tested in accordance with AWWA testing methods, then regression analysis is performed against the resultant dataset. This produces equations for accuracy correlated to either meter age or cumulative volume, which can be used to estimate the accuracy of a given meter population. The best results are achieved when the accuracy curves are derived based on a statistically significant random sample of meter accuracy tests from the meter population in question.

3.1.2 Static Meters

Static meters, also known as solid state meters, are a type of water meter that uses solid-state electronics to measure the flow of water and does not have moving parts in the body of the meters. The most common static meters use either electromagnetic or ultrasonic technology and are available in sizes 5/8-inch and larger. Electromagnetic meters use principles from Faraday's law of induction to calculate flow. An electromagnetic coil is used inside the meters to generate a magnetic field where an electromotive force can be measured and used to calculate flow. The electromagnetic coil is not seen in the body of the meter and, therefore, there are no obstructions as water passes through electromagnetic meters.

Transit-time ultrasonic meters use sound waves to pass through the body of the meter to determine flow. Two points in the meter body are used to measure time for sound waves to travel across the flow. Resistance from the water will affect the travel time of the sound wave and allows for a wide range of flow to be measured. There are also some types of ultrasonic meters that measure the doppler shift caused by the moving water and use that to determine the flow.

Electromagnetic water meters have been used in treatment plant processes for decades and small static meters for revenue application were introduced in the late 2000s. They have steadily gained acceptance within the water industry since and are quickly becoming the standard best available technology.

Static meters are generally battery powered. Small static meters have a stated battery life of between 15 and 20 years and the batteries are not replaceable. Large ultrasonic water meters (3-inch and up) are typically powered with a lithium-ion battery that has an average 10-year life expectancy. At that point the large meter will require a major service to replace the battery and possibly other components. No other maintenance should be required for the life of the meter.

Static meters provide a number of advantages over traditional mechanical meters:

- Static meter accuracy remains constant over the entire life of the meter. This is a major advantage when compared to mechanical meters whose accuracy will degrade over time. **In this analysis, static meter accuracy was assumed to be 99.4%.** This was derived from the same studies referenced above for mechanical meter accuracy.

- Static meters allow for measurement of “ultra-low flow”, or flow rates below the AWWA low flow threshold that cannot be detected by traditional positive displacement meters. While various studies are underway to confirm the magnitude of ultra-low flow and the ability of static meters to measure in this range, early estimates indicate that it can account for 3%-7% unregistered water consumption. See Section 3.1.2.1 for further details.
- No maintenance is required over the life of the meter, with the exception of a battery replacement at the 10-year age mark for large meters. Large static meters generally have a replaceable battery and therefore, do not require replacement of the entire meter to address the battery.

Because static meters use newer technology and are just now being widely adopted, there are a number of application-specific considerations:

- Some static meters require a specific length of upstream and downstream straight piping to achieve the warranted accuracy. Large meter sizes are more likely to require straight pipe.
- Static meters typically have a specified limit for ambient operating temperature, commonly 140 degree F with some meters rated slightly higher.
- While water quality has been known to adversely impact positive displacement meter by fouling the internal measuring chamber, the impact of water quality on static meters is not as well understood. Meter manufacturers have not indicated that static meters are negatively impacted by water quality and the fact that they have no moving parts may make them less susceptible to fouling.

The follow-on analysis included an evaluation of static meters. It involved a comparison of the District’s current design specifications and field installations with specifications for static meters available on the market. The evaluation also included a survey of agencies that have deployed static meters to gain insight into their experiences. The static meter evaluation was delivered to the District as a Technical Memorandum on April 19, 2024.

3.1.2.1 Small Meter Low Flow Considerations

More research comparing the accuracy of mechanical meters vs static meters has indicated that residential mechanical meters may be missing an average of 5% of total flow passing through customer service lines.

Small mechanical meters are specified to be accurate within their standard operating range, down to ¼ of a gallon per minute (GPM). Meter accuracy starts to significantly drop for flows lower than ¼ GPM. The ultra-low flow range (0 – ¼ GPM) is the range in which accuracy concerns are the greatest. Static meters are capable of measuring ultra-low flows much more accurately than mechanical meters. As a result, revenue recovery increases when the meter replacement is performed with static meters.

A review of the latest industry research was conducted to determine the estimated impact of unmeasured ultra-low flow rates. DeOreo (2016) and Craig (2017) studied the trends of residential water end uses at 8 utilities across North America. Their research showed that low and ultra-low flow usage is increasing for the average residential water user in North America. Their studies published the average percentage of residential water use in buckets from 0 – ¾ GPM, seen in Table 1.

Notably, flows between ¼ and ¾ GPM account for 8.85% of residential end usage. This flow range is within the AWWA testing standards for 5/8” mechanical meters, but not for 1” mechanical meters. The District has recently

begun installing 1” meters at new residential services to accommodate fire sprinkler systems. Continuing to install 1” mechanical meters at residential services would lead to increased unmeasured flow and revenue loss.

Table 1. Ultra-Low Flow Residential End Uses

Low Flow Range (GPM)	Percent of Total Residential Flow
0-1/50	2.19
1/50-1/16	2.67
1/16-1/8	3.04
1/8-1/4	3.68
1/4-1/2	4.75
1/2-3/4	4.1

Barfuss et al. (2011) published a study through the Water Research Foundation at Utah State University (USU) about the accuracy of new and in-service mechanical water meters. It includes small mechanical meter accuracy percentages at each of the ultra-low flow ranges for new and end-of-life meters. This accuracy data was combined with the average residential end uses at ultra-low flow ranges to determine the percentage of unmeasured flow at each flow range, seen below in Table 2. On average, 5/8”x3/4” mechanical meters miss 3.8% of total flow due to ultra-low flow inaccuracy, 3/4” meters miss 4.6% of total flow and 1” meters miss 8.2% of total flow.

Table 2. Ultra-Low Flow Accuracy and Unmeasured Flow

Low Flow Range (GPM)	New Accuracy % per USU 5/8 x 3/4"	New Accuracy % per USU 3/4"	New Accuracy % per USU 1"	New Meter Unmeasured Flow % 5/8 X 3/4	New Meter Unmeasured Flow % 3/4"	New Meter Unmeasured Flow % 1"
0-1/50	10	0	0	1.971	2.19	2.19
1/50-1/16	45	40	10	1.4685	1.602	2.403
1/16-1/8	90	82	30	0.304	0.5472	2.128
1/8-1/4	98	95	70	0.0736	0.184	1.104
1/4-1/2	100	99	95	0	0.0475	0.2375
1/2-3/4	100	100	97	0	0	0.123
				3.8171	4.5707	8.1855

For regular residential customers, certain water efficiency devices can cause low and ultra-low flows at meters, such as faucet aerators. In addition, toilet leaks, faucet drips and leaks, plumbing joint/connection weeps and leaks, and irrigation drip heads (1-4 gallons per hour) can also cause low and ultra-low flows at residential meters. In locations where water efficiency is paramount and incentivized, it is expected that a higher frequency of low and ultra-low flows is occurring in the residential sector, as customers install devices and appliances to reduce water usage.

3.2 Business Case Approach

This section presents the business case methodology based on IRWD’s identified needs in Task 2. The business case identifies projected lifecycle cost of alternatives using economic indicators. The approach to developing this business case included the following activities:

- Define project alternatives, based on the needs identified by IRWD during Task 2 workshops.
- Estimate the acquisition and lifecycle costs related to each project alternative.
- Identify sources of tangible benefits that are applicable to each alternative, considering the capabilities of AMI systems. Estimate the monetary value of the potential tangible benefits.
- Estimate project economics, including Internal Rate of Return (IRR), Simple Payback Period, Net Present Value, and Benefit/Cost ratio.

The following base assumptions are used for the financial model:

- Benefits Multiplier – 1.5
- Cost Escalation Factor – 3%
- Cost of Capital – 3.5%
- Water and Sewer Rates – FY 2022-23
- Average Annual Rate Increases – 6%
 - IRWD’s base potable water rate increased by an average of 6.2% YoY from FY 2008 to FY 2022. A 6% annual rate increase was assumed in the financial model.

The detailed business case economic analysis tables are included in Attachment A.

3.2.1 Costs

The acquisition and lifecycle cost estimates were developed using a bottom-up approach based on estimated unit costs for major AMI system components, which were then extrapolated to a 15-year cash flow projection. Major cost categories used include:

- New Water Meters
- New Water Meter Endpoints
- Meter Installations and Register Retrofits
- Meter Pit Lids and Miscellaneous Equipment
- AMI Software-as-a-Service
- Customer Portal Software-as-a-Service (i.e. WaterSmart)
- AMI Network-as-a-Service
- AMI Vendor Project Management and Training
- Software Set-Up and Integration

Water meters and AMI systems typically have a stated expected useful life of 20 years. In practice, systems can begin to require upgrade between 15-20 years after installation. As such, the **15-year timeframe** for the lifecycle economic analysis is based on a conservative useful life for the investment.

A conservative approach was taken when establishing both the costs and benefits.

A 10% contingency has been used in the business case cost estimates. Cost estimates are expected to be accurate to +/- 10% at the completion of the business case development. This contingency is used to account for market fluctuations in labor and materials costs, potential project unknowns, and to account for uncertainty associated with variable site conditions as is typical for this type of project. Arcadis recommends establishment of a 10% contingency in the project contract based on the contract price to account for project uncertainties associated with varying field conditions and other approved project changes.

Detailed project cost estimating worksheets are included in Attachment A.

3.2.2 Benefits

Benefits are defined as either 1) Tangible Benefits are those that can be measured or estimated in monetary terms, or 2) Intangible Benefits cannot be easily expressed in monetary terms but are positive outcomes that do have a significant business impact.

3.2.2.1 Tangible Benefits

The following tangible benefits were estimated for each alternative as applicable:

1. Under Registration Recovery Water and Sewer - Small Meters

This is an estimate of the amount of revenue recovery that results from replacing meters with improved overall accuracy. Small meters were classified as 5/8 x 3/4-inch, 3/4-inch, 1-inch, 1.5-inch, and 2-inch disc meters. A regression analysis was performed on IRWD's meter testing data to establish accuracy degradation curves that estimate existing meter accuracy based on the cumulative volume of water that has passed through the meter. As mentioned in Sections 3.1.1 and 3.1.2, an average new meter accuracy of 98% for mechanical meters and 99.4% for static meters was derived from multiple published studies. Estimated meter accuracy was individually calculated and compared with published new meter accuracy data to determine the volume of unbilled water recovered after a meter replacement.

In addition to the revenue recovery due to accuracy degradation, static meters capture previously unmeasured ultra-low flows, as mentioned in Section 3.1.2.1. The unmeasured flow for residential mechanical meters was assumed to be recovered with 99.4% accuracy when replaced with a new static meter.

An estimate of the amount of sewer revenue recovery that results from replacing meters with improved overall accuracy was also estimated. IRWD has a tiered sewer rate structure with residential services billed at a fixed rate based on the average monthly water use for the lowest three months of the prior calendar year. The meter replacement will bump many customers to higher rate tiers due to increased flow measurements from improved meter accuracy. To be conservative, this benefit was not recognized as the rates will likely be adjusted to reflect the customers shifting tiers. However, the model recognizes a benefit from the increase in quantity charges for non-residential services. Most non-residential accounts are billed a quantity charge of \$2.19 per CCF for consumption beyond 10 CCF, with the exception of industrial accounts that are billed at a \$2.297 quantity charge rate. The improved accuracy from meter replacement will increase the quantity charges for small non-residential meters. This sewer revenue recovery value is calculated in the financial model.

Large meters – 2" turbine meters and all meters > 2" – were not initially included in this tangible benefit due to the District's robust preventative meter maintenance plan. The large meters in the inventory are pulled for testing and calibration at the manufacturer's specified intervals, confirming their accuracy yearly or bi-yearly. This minimizes accuracy degradation over the life of the meters and screens for meters that are due for replacement. Though

these meters are not degrading at the rate of the small mechanical meters, an upgrade to large static meters would result in an increase in ultra-low flow capture. This benefit was explored further in the follow-on analysis.

2. Bill Adjustments Reduction

AMI would provide data necessary for IRWD to implement processes for customer-side leak monitoring and notifications. Proactive leak notifications are assumed to reduce the number of leak and courtesy adjustments done on an annual basis. The value is assumed at a 50% reduction in leak adjustments but does not include bill adjustments from re-reads. The 50% reduction in bill adjustments is a conservative yet realistic value typically used across all business cases performed by Arcadis unless the utility specifies otherwise.

3. Meter Reading Contractor

Direct benefit of reducing and ultimately eliminating the need for a third-party meter reading contract. The cost of meter reading was calculated over the 15-year lifecycle, accounting for cost escalations and increasing services in the District. A cost per read price increase of 20% every 5 years is assumed based on the current meter reading contract. Additionally, 2,000 meter reads are added per year based on averages from meter read data dating back to May 2020.

The benefits are phased in as applicable and persist for the complete lifecycle timeframe, escalated accordingly on an annual basis. Benefits are estimated at +/- 30% as is typical for the business case level of project development. This range is driven largely by the uncertainty in the meter accuracy estimation and the challenges related to attaining business process improvements.

3.2.2.2 Intangible Benefits

In addition to the benefits described above, several potential intangible benefits were also identified that would be recognized once AMI is installed.

- Water use reduction achieved by reducing customer-side leaks through the use of improved water metering and an advanced customer portal.
- Distribution leak reduction (Real Loss Reduction) using AMI data and potentially AMI-supported acoustic leak detection. IRWD specific system leaks can be further quantified after the installation of AMI.
- Carbon footprint reduction resulting from less vehicular usage and water demand reductions.
- Improved water demand forecasting and hydraulic modeling using AMI data. The AMI interval and daily read data can be utilized to develop a diurnal pattern for a single meter or for groups of meters as needed. This data can also be used to feed a continuous model, or digital twin.
- Increased customer satisfaction due to real-time water usage data in the advanced customer portal.
- Reduction in customer call volumes due to consistent and accurate bills and improved portal usage.
- Field activities that involve manually reading the meter, such as start/stops and re-reads, could eventually be replaced with remote reads through the AMI system.
- The large meter maintenance program to calibrate turbine meters at the manufacturer's specified intervals will not be needed for any static meter replacements.
- Overall improvement in resource allocation efficiency by reducing manual processes and introducing more data driven workflows.

Quantifying water conservation program savings from AMI meters could be a separate study to further define appropriate assumptions.

3.3 Initial Results and Conclusions

Based on the initial analysis *Alternative 3 – Static Replacement* was the best solution, which is based on the District replacing a majority of existing water meters with static meters and pursuing business process changes to fully leverage the AMI. Alternative 3 was the only option with a benefit/cost greater than 1 and a payback period within the 15-year project lifecycle.

The key takeaway of the initial analysis was the impact of a static meter replacement. The ultra-low flow considerations introduced an unexpected significant revenue recovery benefit from replacing small mechanical meters with static meters. IRWD was immediately interested in expanding this analysis to include the impact of ultra-low flow improvements on large meters. This led to the expanded analysis described in Section 4.

4 Cost Benefit Analysis Final Draft

The District requested that the Cost Benefit Analysis be re-visited after the initial draft was submitted in July 2023. The requested changes were:

- Analysis of large meter revenue recovery from static meter replacement.
- A cost benefit analysis alternative for a full static meter replacement without AMI.
- A cost benefit analysis alternative for a large meter-only static meter replacement with AMI.
- An updated Business Case Report including the large meter analysis, new alternatives, and a breakdown of revenue recovery by meter size.

These changes are detailed in the following sections.

4.1 Additional Large Meter Low Flow Analysis

The results of the small meter low flow analysis in Section 3.1.2.1 led IRWD to question whether there are additional savings to be found from replacing large mechanical meters with static meters. A follow-on analysis of large meters that was not captured by the initial analysis was requested.

Initially, large meters were not included as a tangible benefit due to the District's robust preventative meter maintenance plan. The large meters in the inventory are tested and calibrated at the manufacturer's specified intervals, confirming their accuracy every one to five years depending on the meter size. This minimizes accuracy degradation over the life of the meters and screens for meters that are due for replacement. The District's turbo meter test data from calibrations performed between 2019 and 2022 was further analyzed for degradation rates related to aging. The average accuracy of these meters pulled for calibration was ~99% before calibration, confirming that the meter maintenance plan is successfully keeping the large meters accurate at the standard operating ranges for which they are tested. It was concluded that the lone tangible benefit of a large static meter replacement must be derived from previously unmeasured low flow.

A summary of the analyzed meters that were not captured in the initial low flow analysis (1.5" – 10") can be seen in Table 3.

Irrigation meters were excluded from the analysis because it was determined that most flows to these meters fall within their standard operating range. Residential drip irrigation systems have low flows but were already accounted for in the initial small meter analysis.

Table 3. Large Meters Analysed

Service Type	Meter Count
Multi-Family	2,907
Commercial	4,095
Industrial	880

At the time of this analysis, there was limited research about end use flow range percentages for intermediate and large multi-family, commercial, and industrial meters. A review of existing literature was conducted to identify any publicly available large meter end use data that could be analyzed for the purposes of the large meter low flow analysis. Two data sources were found with some volume-of-use data that could support the analysis:

Attallah et al. (2021) published a study of water end uses at six nonresidential facilities in Logan, Utah. The study monitored water use at four manufacturing facilities and two assisted-care facilities in Logan for up to one year. Water consumption data was collected at 5-second intervals, making GPM flowrate capture possible. The assisted-care facilities each had more than 70 residents and their water use “resembled that of the multi-family residential use sector.” In the absence of additional data, this data was used to infer multi-family volume-of-use percentages. Data from the manufacturing facilities was used to infer industrial volume-of-use percentages.

Mayer et al. (2019) published a study titled *Assessing Water Demand Patterns to Improve Sizing of Water Meters and Service Lines* that monitored water use at a variety of commercial end use locations in Scottsdale, Arizona for multiple weeks. Water consumption data was collected at 10 and 30 second intervals, making GPM flowrate capture possible. The commercial locations studied were diverse, including grocery stores, shopping centers, hotels, medical centers, and ice rinks. The Scottsdale commercial end use data was used to infer commercial volume-of-use percentages.

It should be noted that these sources were deemed to be sufficient for the purposes of this desktop analysis, but the data is quite limited. Each service type analyzed (multi-family, commercial, and industrial) only has data from one agency, and there are only a few service points per category. Comparatively, the Small Meter Low Flow Analysis is based on a much more robust study that includes residential end use data from eight agencies across North America.

In the absence of a study about the accuracy of intermediate and large mechanical meters at different flow ranges, some assumptions had to be made. Each meter in IRWD’s inventory has a standard operating range defined in the product data sheet, which has a stated accuracy range of 98.5% – 101.5%. Below the standard operating range, there is a “Low Flow” range that has a stated accuracy of 95%. The data sheets do not make any accuracy claims below the low flow range. IRWD’s Turbo Meter Test Results between 2019 and 2022 were analyzed to determine the average meter accuracy for each meter size. The average accuracy was assumed to apply to the standard operating range of each meter. The stated 95% low flow accuracy was applied to the low flow range of each meter. Since there was no stated ultra-low flow accuracy below the low flow range, a very conservative assumption was made that this flow was captured with 80% accuracy. An example of the assumed accuracies applied to the flow ranges of a 3-inch Sensus OMNI T2 Turbo Meter can be seen in the following figure.

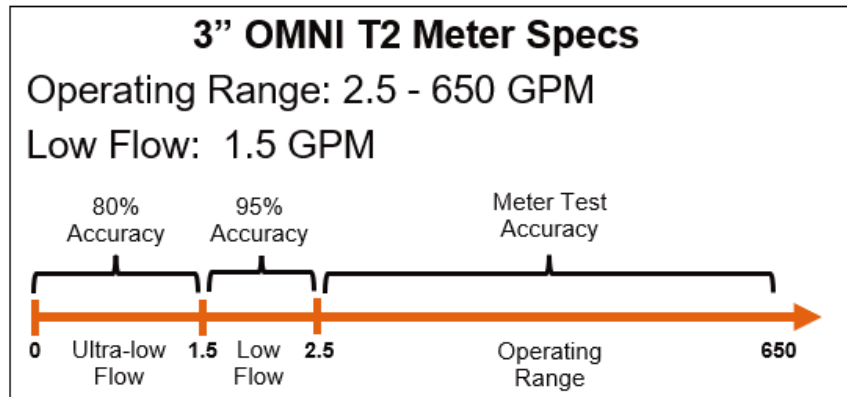


Figure 4. 3-inch Sensus OMNI T2 Accuracy Assumptions

Assumptions about meter accuracy are also considered for static meters to enable comparison before and after meter replacement and determine how much flow is recovered. The accuracy assumptions change slightly for static meters, but the main difference is a low flow range much closer to zero GPM. The Neptune MACH-10 ultrasonic meter was chosen to be used in the calculations, as its low flow threshold is generally in the middle of the pack compared to other industry standard static meters. It was established in Section 3.2 that 99.4% is the assumed static meter accuracy in this analysis, so that is applied to the standard operating range. The MACH-10 data sheets establish an extended low flow accuracy of 97%, which is applied to the low flow range. Any flow below the low flow range is assumed to be captured with 80% accuracy, consistent with the conservative assumption made for mechanical meters.

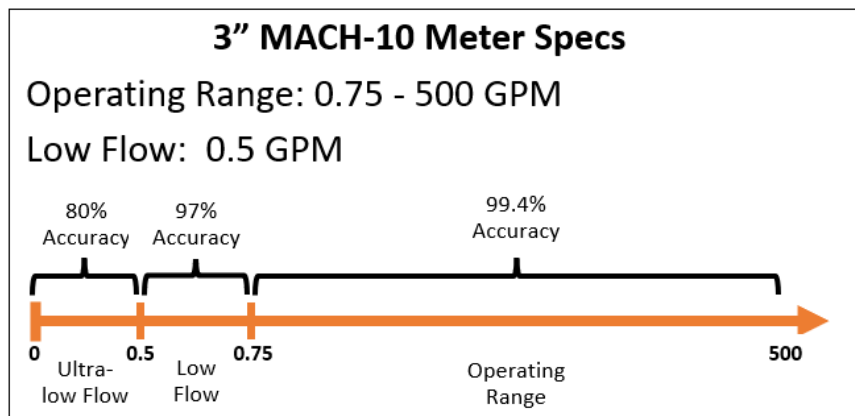


Figure 5. 3-inch Neptune MACH-10 Accuracy Assumptions

These accuracy assumptions were applied to operating ranges of each intermediate and large meter in the analysis, then compared to the end use percentages derived from the two volume-of-use studies mentioned above. The result is a unique unmeasured ultra-low flow percentage that is applied to each meter in the analysis based on its meter type, meter size, and service type. These unmeasured ultra-low flow percentages drive the Large Meter Under Registration Recovery benefit in Section 4.2.

4.2 Benefits Adjustments

Under Registration Recovery Water and Sewer – Large Meters

The follow-on analysis included a deep dive into the previously unmeasured ultra-low flows for large meters, which was described in Section 4.1. An unmeasured ultra-low flow percentage was established for each Multi-family, Commercial, and Industrial meter sizes 1.5" through 10" based on the meter type, meter size, and service type. The same unmeasured flow percentage was calculated for the new static meters used in the meter replacement. The District's rate structure was used to calculate total revenue before and after the meter replacement, then compared to determine the amount of revenue recovered from the increased low flow capture of static meters.

The sewer revenue recovery was also determined by calculating the quantity charges before and after static meter replacement, mirroring the small meter benefit methodology described in Section 3.2.2.1.

There was an additional request to break out the total under registration revenue recovery benefit by meter size. Table 4 shows the total year 1 revenue gain from a full static meter replacement. The figures include both water and sewer revenue recovery.

Table 4. Year 1 Revenue Recovery by Meter Size

Meter Size	Average Meter Age (years)	Total Year 1 Revenue Gain
5/8"	9.3	\$1,227,520
3/4"	6.9	\$239,876
1"	6.9	\$972,465
1-1/2"	8.9	\$270,809
2"	9.6	\$275,747
3"	4.5	\$160,735
4"	4.4	\$460,471
6"	4.5	\$198,601
8"	10.6	\$16,771
10"	10.9	\$108,035

4.3 Final Results and Conclusions

The following table presents the summary results of the final cost benefit economic analysis. Acquisition costs are organized by the major goods and services categories and the total net-present value of all lifecycle costs is shown. The major tangible benefits are shown as the net-present value of all lifecycle benefits. These values then form the basis for the computation of the primary economic indicators (Benefit/Cost Ratio, Internal Rate of Return, and Simple Payback Period). The table is presented in two images to maximize visibility.

Table 5. Final Cost Benefit Analysis Summary (1/2)

Scope Item	Costs		
	Alternative 1 - Continue Current	Alternative 2 - Mechanical Replacement with AMI	Alternative 3 - Static Replacement with AMI
New Water Meters	\$ 1,430,053	\$ 26,198,561	\$ 27,114,694
New Water Meter Endpoints	\$ -	\$ 16,112,304	\$ 16,112,304
Meter/MIU Installation + Retrofit	\$ 741,880	\$ 9,959,420	\$ 9,959,420
Meter Pit Lids + Misc Equipment	\$ -	\$ 7,120,586	\$ 7,120,586
Software-as-a-Service	\$ -	\$ 167,837	\$ 167,837
Customer Portal	\$ 191,000	\$ 191,000	\$ 191,000
Network-as-a-Service	\$ -	\$ 812,329	\$ 812,329
Meter Data Management	\$ -	\$ -	\$ -
Installation Project Management + Training (Vendor)	\$ -	\$ 416,000	\$ 416,000
Integration and Software Set-Up	\$ -	\$ 624,000	\$ 624,000
Subtotal (Acquisition Cost)	\$ 2,362,933	\$ 61,602,036	\$ 62,518,169
Meter Salvage	\$ (1,291,255)	\$ (1,097,022)	\$ (1,097,022)
Contingency @ 10%		\$ 5,503,697	\$ 5,585,547
Total Net Present Value (Lifecycle Cost)	\$ 31,819,988	\$ 74,808,561	\$ 75,708,910
Benefit Item	Benefits		
Unbilled Water due to Meter Inaccuracy - Small Meters	\$ 737,438	\$ 3,144,063	\$ 38,289,413
Unbilled Sewer due to Meter Inaccuracy - Small Meters	\$ 145,919	\$ 622,126	\$ 5,128,648
Unbilled Water due to Meter Inaccuracy - Large Meters	\$ -	\$ -	\$ 12,830,603
Unbilled Sewer due to Meter Inaccuracy - Large Meters	\$ -	\$ -	\$ 3,988,524
Meter Reading Contract	\$ -	\$ 20,625,031	\$ 20,625,031
Bill Adjustment Reduction	\$ -	\$ 6,979,779	\$ 6,979,779
Total Net Present Value (Lifecycle Benefit)	\$ 883,358	\$ 31,370,999	\$ 87,841,999
Benefit - Cost	\$ (30,936,630)	\$ (43,437,562)	\$ 12,133,089
Benefit/Cost Ratio	0.03	0.42	1.16
Internal Rate of Return	N/A	-12.3%	8.0%
Simple Payback Period (years)	0.0	0.0	10.2

Table 6. Final Cost Benefit Analysis Summary (2/2)

Scope Item	Costs		
	Alternative 4 - Replace and Retrofit with AMI	Alternative 5 - Meter Replacement Only, No AMI	Alternative 6 - Large Meter Only with AMI
New Water Meters	\$ 18,387,038	\$ 28,217,952	\$ 7,704,970
New Water Meter Endpoints	\$ 16,112,304	\$ -	\$ 1,289,933
Meter/MIU Installation + Retrofit	\$ 7,892,206	\$ 10,243,558	\$ 2,896,338
Meter Pit Lids + Misc Equipment	\$ 7,120,586	\$ -	\$ 699,872
Software-as-a-Service	\$ 167,837	\$ -	\$ 13,437
Customer Portal	\$ 191,000	\$ 191,000	\$ 191,000
Network-as-a-Service	\$ 812,329	\$ -	\$ 65,034
Meter Data Management	\$ -	\$ -	\$ -
Installation Project Management + Training (Vendor)	\$ 416,000	\$ -	\$ 416,000
Integration and Software Set-Up	\$ 624,000	\$ -	\$ 624,000
Subtotal (Acquisition Cost)	\$ 51,723,300	\$ 38,652,510	\$ 13,900,583
Meter Salvage	\$ (594,992)	\$ (1,259,626)	\$ (439,351)
Contingency @ 10%	\$ 4,621,103	\$ 3,865,251	\$ 1,390,058
Total Net Present Value (Lifecycle Cost)	\$ 65,602,061	\$ 39,366,956	\$ 17,626,534
Benefit Item	Benefits		
Unbilled Water due to Meter Inaccuracy - Small Meters	\$ 2,745,790	\$ 38,289,413	\$ -
Unbilled Sewer due to Meter Inaccuracy - Small Meters	\$ 596,769	\$ 5,128,648	\$ -
Unbilled Water due to Meter Inaccuracy - Large Meters	\$ -	\$ 13,808,823	\$ 14,890,783
Unbilled Sewer due to Meter Inaccuracy - Large Meters	\$ -	\$ 4,407,811	\$ 4,651,038
Meter Reading Contract	\$ 20,625,031	\$ -	\$ 1,863,943
Bill Adjustment Reduction	\$ 6,979,779	\$ -	\$ 1,669,859
Total Net Present Value (Lifecycle Benefit)	\$ 30,947,369	\$ 61,634,696	\$ 23,075,622
Benefit - Cost	\$ (34,654,692)	\$ 22,267,740	\$ 5,449,088
Benefit/Cost Ratio	0.47	1.57	1.31
Internal Rate of Return	-10.7%	13.9%	9.8%
Simple Payback Period (years)	0.0	8.5	8.5

The economic indicators at the bottom of these tables reveal that three out of the six project alternatives are financially viable. Table 7 zooms in on the economic indicators of these three viable alternatives.

Table 7. Viable Alternative Economic Indicators

	Alternative 3 - Static Replacement with AMI	Alternative 5 - Meter Replacement Only, No AMI	Alternative 6 - Large Meter Only with AMI
Benefit - Cost	\$ 12,133,089	\$ 22,267,740	\$ 5,449,088
Benefit/Cost Ratio	1.16	1.57	1.31
Internal Rate of Return	8.0%	13.9%	9.8%
Simple Payback Period (years)	10.2	8.5	8.5

There are significant pros and cons to each of the viable project alternatives. Intangible factors beyond financial indicators will need to be considered when choosing a path forward.

Alternative 3 – Static Replacement with AMI was highlighted as the best solution in the initial cost benefit analysis. This alternative is based on the District replacing a majority of existing water meters with static meters, excluding OMNI turbine meters, and pursuing business process changes to fully leverage the AMI. By nature of being the “all-in approach,” this option has the highest acquisition cost of the three alternatives. Consequently, Alternative 3 also has the greatest tangible lifecycle benefit value. The District will also be able to fully leverage the intangible benefits listed in Section 3.2.2.2 that come from capturing AMI data from each meter in the inventory. To restate, those benefits include:

- Water use reduction achieved by reducing customer-side leaks through the use of improved water metering and an advanced customer portal.
- Distribution leak reduction (Real Loss Reduction) using AMI data and potentially AMI-supported acoustic leak detection. IRWD specific system leaks can be further quantified after the installation of AMI.
- Carbon footprint reduction resulting from less vehicular usage and water demand reductions.
- Improved water demand forecasting and hydraulic modeling using AMI data.
- Increased customer satisfaction due to real-time water usage data in the advanced customer portal.
- Reduction in customer call volumes due to consistent and accurate bills and improved portal usage.
- Field activities that involve manually reading the meter, such as start/stops and re-reads, will eventually be eliminated from the business process and replaced with remote reads through the AMI system.
- The large meter maintenance program to calibrate turbine meters at the manufacturer's specified intervals will not be needed for any static meter replacements.
- Overall improvement in resource allocation efficiency by reducing manual processes and introducing more data driven workflows.

Alternative 3, however, has the lowest Benefit/Cost Ratio of the three viable alternatives.

Alternative 5 – Meter Replacement Only, No AMI is a new alternative requested by the District that considers replacing the full meter inventory with static meters without an AMI implementation. This option explores the simple benefits of improving meter accuracy and low flow capture without any of the tangible or intangible benefits of AMI. There would be minimal business process changes, and the District would continue to pay a contractor for all meter reading.

Alternative 6 – Large Meter Only with AMI is also a new alternative requested by the District that considers isolating large meters (identified as all meters 2" and greater) for static meter replacement and AMI. By targeting large meters only, the acquisition cost for this alternative is significantly lower than the other two options. However, the tangible and intangible benefits of AMI are limited by excluding small, generally residential, meters from the effort. The District would need to adjust some business processes to fully leverage the AMI data from their large meters but would still be paying a contractor to read the remainder of the meters in the inventory. The impact of the intangible benefits is greatly reduced when the entire inventory is not connected to the AMI system. In addition, consideration for the type of AMI system is recommended. IRWD's large meters are spread across the District. A fixed network AMI solution will require a network to cover most of the District's territory, even though only a small number of meters will be utilizing the network. Therefore, a cellular AMI solution may be more advantageous for a large meter only AMI system. A cellular AMI solution is financially structured as a Network as a Service (NaaS), which is described in Section 5 below. Alternatively, the District could consider a phased approach to deployment, targeting large meters first, followed by small meters at a later time.

Continued analysis will be done through on-going project activities to refine the meter replacement approach and counts. Updates to the quantities and cost estimates are typically done prior to procurement advertisement and possibly during contract negotiations and project planning. The District might consider testing static meters while the meter replacement project is further developed to confirm the in-field performance of these meters relative to the business case assumptions, as well as the District's acceptance of this new metering technology.

5 Network as a Service

There are several AMI network deployment and ownership options. The most common are:

- Utility-Owned Fixed Networks
 - The District would pay for the network data collector equipment and its installation. The Vendor would be responsible for installation. In addition, the District may be responsible for site preparation/modifications such as planting a pole or tower, electrical work, etc. The District would be responsible for monitoring and maintaining the network for the life of the system.
- Managed Services Fixed Networks
 - The District would pay for the network data collector equipment and its installation. The Vendor would be responsible for installation. In addition, the District may be responsible for site preparation/modifications such as planting a pole or tower, electrical work, etc. The Vendor would be responsible for monitoring and most of the maintenance of the data collectors for the agreed upon service terms. The District would pay an annual fee for the Managed Services.
- Network as a Service (NaaS)
 - For a fixed network AMI solution, there would be no up-front cost for the network data collector equipment and its installation. The Vendor would be responsible for installation. The District may be responsible for site preparation/modifications such as planting a pole or tower, electrical work, etc. The Vendor would be responsible for monitoring and maintaining the network to an agreed upon performance for the life of the system. The District would pay an annual fee for NaaS for the life of the system as defined in the agreement.
 - Cellular AMI solutions are considered NaaS in nature as the District would pay an annual fee for cellular service for each meter, and the Vendor (and ultimately the cellular provider) would be responsible for monitoring and maintenance of the network.

Evaluation of these options should be considered from a financial and budgetary perspective as well. Refer to Figure 6 below for an illustration of this information. Utility-Owned has the most up-front capital expense and is generally monitored and maintained using existing utility resources (who of course receive proper training). Managed Services has the same up-front capital expense as Utility-Owned but introduces an operational expense to pay the Vendor to monitor and maintain the data collectors for utilities who do not have the staff to do this or do not want the responsibility. NaaS has the least up-front capital expense (possibly site preparation expenses), but the highest operational expense. Consideration of whether the District prefers the AMI network to be a capital cost or an operational cost may have an impact on the decision.

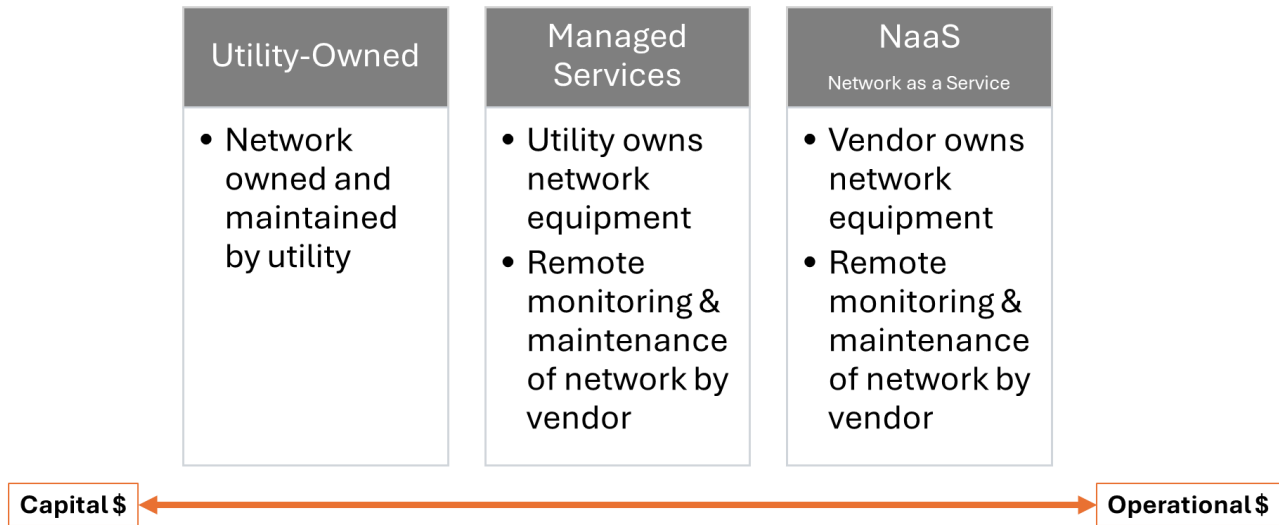


Figure 6. Network Deployment and Ownership Options

6 Funding Options

Arcadis understands the importance of funding and the impacts that financial assistance has on the direction the AMI program would take moving forward. There is a significant amount of funding available at the state and federal levels with new programs emerging monthly. The following section describes available grants that can be leveraged for AMI implementation.

In addition, several utilities have been awarded grant funding to support their AMI efforts, including implementation activities. Section 6.2 contains descriptions of these efforts and how much has been awarded, however funding amounts vary every year. Further details in phasing the project for funding maximization will be included in Task 5 – Roadmap.

6.1 Funding sources

The team has highlighted select funding sources that may align with the goals of IRWD and warrant further investigation. It is worth noting that the narrative associated with various grant programs will vary slightly to relate AMI program to the goals and intent of the funding source (i.e. energy efficiency, resilience, etc). Other examples of water utilities and projects that have benefited from grants applied towards AMI efforts have also been included.

State of California Grants:

California Department of Water Resources (DWR) - Water-Energy Grant Program: This program provides funding for projects that improve water and energy efficiency in California. AMI projects that increase water conservation and reduce energy consumption may be eligible for funding.

- <https://water.ca.gov/work-with-us/grants-and-loans/water-energy-grant-programs>

California State Water Resources Control Board (SWRCB) - Proposition 1 Grant Program: This program provides funding for projects that improve water quality, supply, and reliability in California. AMI projects that improve water management and conservation may be eligible for funding.

- https://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1/groundwater_sustainability.html

California Energy Commission (CEC) - Electric Program Investment Charge (EPIC) Grant Program: This program provides funding for projects that advance clean energy technologies and reduce greenhouse gas emissions in California. AMI projects that reduce energy consumption and improve grid efficiency may be eligible for funding. Pilot projects that serve as research might also be eligible for funding.

- <https://www.energy.ca.gov/programs-and-topics/programs/electric-program-investment-charge-epic-program>

Federal Grants:

WaterSMART Water and Energy Efficiency: This grant provides funding for projects that results in quantifiable water savings, implement renewable energy components, and support broader sustainability benefits. This particular grant has been issued on an annual basis for the past few years and has been awarded to meter replacement and AMI projects similar to IRWD's planned project. A summary of the grant is as follows:

- Administered by the Department of the Interior/Bureau of Reclamation.
- Eligible Recipients: States, Indian Tribes, irrigation Districts, and water Districts; state, regional or local authorities whose members include one or more organizations with water or power deliver authority; and other organizations with water or power delivery. Must be located in the Western U.S.
- Individual Allocations up to \$5M.
- Cost-Share: 50% of the project costs.

Building Resilient Infrastructure and Communities (BRIC): The Building Resilient Infrastructure and Communities (BRIC) program supports public agencies as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards.

- FEMA program
- Notice of Funding Opportunity (NOFO) Summer
- Key principles:
 - Community capability and capacity building
 - Encouraging innovation
 - Enabling large infrastructure projects

US Department of Energy program: Approximately \$3.4 billion was awarded to 99 projects in 2009 as part of the American Recovery and Reinvestment Act (ARRA). Under this program over \$287M was awarded specifically to AMI projects with more being awarded to Smartgrid programs.

- Department of Energy program
- Approximately \$3 billion is expected to be available from FY 2022 through FY 2026
- A 50% match is required.

HUD Community Development Block Grant - Mitigation (CDBG-MIT): The Community Development Block Grant Mitigation (CDBG-MIT) Program is an opportunity for grantees to invest in areas impacted by recent disasters to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. The

program aims to increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship by lessening the impact of future disasters.

Hazard Mitigation Grant Program (HMGP): HMGP assists in implementing hazard mitigation projects following a Presidential major disaster declaration. FEMA's hazard mitigation assistance provides funding for long term mitigation measures that reduce disaster losses in the future, including retrofits to utilities and other infrastructure to enhance resistance to natural hazards.

- FEMA program
- Amounts vary depending upon the annual disaster declarations
- Potential uses for "Retrofits to utilities and other infrastructure to enhance resilience to natural hazards"

6.2 Funding Uses Examples

The following examples showcase AMI projects that have been awarded grant funding. These examples highlight the option to phase in AMI projects, with the possibility for grants application at each phase, thus increasing the dollar amount awarded to the utility.

City of Santa Barbara 2020 Grant was a Phase 2 and they were awarded \$1.5 M.

City of Santa Barbara, Santa Barbara Advanced Metering Infrastructure Project (Phase 2) Reclamation Funding: \$1,500,000. Total Project Cost: \$7,149,346. The City of Santa Barbara, located in southern California, will install advanced metering infrastructure (AMI) equipment and implement a data management system, along with a customer portal that will support 27,000 primarily residential water meters that were installed in a previous phase of this overall AMI project. By providing real-time water use data about leaks and abnormal use patterns, the project is expected to result in annual water savings of 631 acre-feet and will better prepare the City for extended drought conditions. The water conserved will offset groundwater pumping and reduce the City's dependence on water imported through the State.

- https://www.usbr.gov/watersmart/weeg/docs/2020/2020_WEEG_Project_Descriptions.pdf

City of Santa Barbara 2021 Grant was Phase 3 and they were awarded \$0.5M

City of Santa Barbara, Advanced Metering Infrastructure Project (Phase III) Reclamation Funding: \$500,000. Total Project Cost: \$1,436,211. The City of Santa Barbara, located in southern California, will undertake Phase III of its ongoing advanced metering infrastructure (AMI) project by upgrading 25,500 primarily residential meter registers from 6-dial low resolution registers to 8-dial high resolution registers. The project will enable the meters to transmit data on smaller volumes of water through the AMI networks, providing more accurate water measurement and allowing for early leak detection within the water system. The project is expected to result in annual water savings of 215 acre-feet, which will offset groundwater pumping, reduce the City's dependence on water imported through the State Water Project, and better prepare the City for extended drought conditions.

- <https://www.usbr.gov/watersmart/weeg/docs/2021/2021WEEGProjectDescriptions.pdf>

City of Santa Cruz 2022 Grant was awarded \$0.5M

City of Santa Cruz Advanced Metering Infrastructure Replacement Project Reclamation Funding: \$500,000. Total Project Cost: \$6,429,290. The City of Santa Cruz, located on the coast in central California, will install 15,050 advanced metering infrastructure (AMI) meters and endpoints throughout its service area for residential, business, industrial, and municipal customers as part of a system-wide effort to consolidate the City's meter reading system into a single AMI platform. The project is expected to result in annual water savings of 556 acre-feet by providing

customers with detailed usage and leak detection information. The conversion to AMI meters will enable the City to reduce surface water diversions and offset groundwater pumping in summer months and critical dry years, reduce treatment, and reduce vehicle miles driven for meter reading each year.

- [FY 2022 WaterSMART Water and Energy Efficiency Grants \(usbr.gov\)](https://usbr.gov)

7 References

The following references were used in the development of this business case:

1. Stoker et al. (2012). *Flow Measurement accuracies of in-service residential water meters*. AWWA Journal.
2. Sumrak et al. (2016). *Comparing Low-Flow Accuracy of Mechanical and Electronic Meters*. AWWA Journal.
3. Barfuss et al. (2011). *Accuracy of In-Service Water Meters at Low and High Flow Rates*. Water Research Foundation.
4. DeOreo et al. (2016). *Residential End Uses of Water Study, Version 2*. Water Research Foundation.
5. Craig (2017). *Residential End Uses Analysis*. Presented at AWWA ACE.
6. Attallah et al. (2021). *Water End-Use Disaggregation for Six Nonresidential Facilities in Logan, Utah*. Journal of Water Resources Planning and Management.
7. Mayer et al. (2019). *Assessing Water Demand Patterns to Improve Sizing of Water Meters and Service Lines*. Water Research Foundation.

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Evaluation of Static Meters

Technical Memorandum



SUBJECT
Evaluation of Static Meters

TO
Amy McNulty, IRWD

DATE
April 19, 2024
Rev1: May 29, 2024

OUR REF
30167699

COPIES TO
Amy McNulty, IRWD
Mike Mroczek, IRWD

ATTACHMENT
A – Compatible Meters by Size

Introduction

This technical memorandum (TM) describes the evaluation of static meters completed under the Irvine Ranch Water District (IRWD) Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study. The evaluation was completed to explore the option of a meter replacement using static meters, as the revenue recovery analysis for small meters uncovered a significant benefit when considering this alternative. Static meter requirements, including straight line piping requirements, differ from those of mechanical meters, and thus, an understanding of how these requirements compare to IRWD’s current design specifications and field installations is necessary for consideration of this alternative. A survey on other agencies’ experiences in deploying static meters was also conducted under this evaluation for further consideration of the alternative by IRWD.

Static Meter Research

During the first part of the static meter evaluation, Arcadis conducted research on the various static meters available on the market. After compiling a list of static meter models available from key manufacturers in the industry, the specifications for each meter were documented and reviewed for compatibility with IRWD’s system, including comparisons to standard details, as-built field installations, pressure zones, and standard specifications.

As part of the research process, 24 total static meters from 9 manufacturers were reviewed. The static meters reviewed ranged in size from 5/8 inches to 24 inches, largely in accordance with the distribution of meter sizes IRWD currently has installed in the field. However, the focus of the evaluation was primarily on meters up to 12 inches in size. The list of static meters was divided into two categories: small and large meters, with small meters including sizes 5/8 inches to 1 inch, and large meters including 1.5 inches to 24 inches.

The small meters that were included in the evaluation are listed in the below table.

Manufacturer	Meter Name	Type	Sizes
Sensus	iPERL Smart Water Meter	Electromagnetic	5/8", 5/8"x3/4", 3/4", 1"
	ally Water Meter	Electromagnetic	5/8", 5/8"x3/4", 3/4", 1"
Badger	E-Series Ultrasonic Meter	Ultrasonic	5/8", 5/8"x3/4", 3/4", 1"
	E-Series Industrial	Ultrasonic	5/8"x3/4", 3/4", 1"
	E-Series Ultrasonic Plus	Ultrasonic	5/8"x3/4", 3/4"
Neptune	Mach 10)R900i Ultrasonic Meter (Mach 10 meter with integrated R900 system endpoint)	Ultrasonic	5/8", 5/8"x3/4", 3/4", 1"
	Mach 10 Ultrasonic Meter	Ultrasonic	5/8", 5/8"x3/4", 3/4", 1"
Mueller	Solid State Meter	Ultrasonic	5/8"x3/4", 3/4", 1"

Diehl	Hydrus Ultrasonic Meter	Ultrasonic	5/8"x1/2", 5/8"x3/4", 3/4", 1"
Master Meter	Sonata Residential Ultrasonic	Ultrasonic	5/8"x1/2", 5/8"x3/4", 3/4", 1"
Kamstrup	flowIQ 2200	Ultrasonic	5/8"x1/2", 5/8"x3/4", 3/4", 1"
Zenner	ZSUR Stealth Ultrasonic Meter	Ultrasonic	5/8"x1/2", 5/8"x3/4", 3/4", 1"

The large meters that were included in the evaluation are listed in the below table.

Manufacturer	Meter Name	Type	Sizes
Master Meter	Octave	Ultrasonic	1.5", 2", 3", 4", 6", 8", 10", 12"
Badger	E-Series Commercial	Ultrasonic	3", 4", 6", 8"
	E-Series Industrial	Ultrasonic	3", 4", 6", 8"
	E-Series	Ultrasonic	1.5", 2"
Honeywell	Q4000	Electromagnetic	2", 3", 4", 6", 8", 10"
	evoQ4	Electromagnetic	1.5", 2", 3", 4", 6", 8", 10", 12"
Sensus	Hydroverse	Electromagnetic	1.5", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20", 24"
	Cordonel	Ultrasonic	1.5", 2", 3", 4"
ZENNER	ZSU Stealth Commercial	Ultrasonic	2", 3", 4", 6", 8", 10", 12"
Diehl	Hydrus	Ultrasonic	1.5", 2"
	Hydrus Bulk	Ultrasonic	2", 3", 4", 6", 8"
Neptune	Mach 10)R900 <i>i</i> Ultrasonic Meter (Mach 10 meter with integrated R900 system endpoint)	Ultrasonic	1.5", 2", 3", 4", 6", 8", 10", 12"
	Mach 10 Ultrasonic Meter	Ultrasonic	1.5", 2"
	Mach 10 C&I	Ultrasonic	3", 4", 6", 8", 10", 12"
Mueller	Solid State Meter	Ultrasonic	1.5", 2"
	HbMAG Meter	Electromagnetic	3", 4", 6", 8", 10", 12", 16", 20"
Kamstrup	flowIQ 3200	Ultrasonic	1.5", 2", 3", 4"
	flowIQ 4200	Ultrasonic	6", 8", 10", 12"

Specifications for each meter were documented in Excel tables for each meter size, with standardized categories and filter functionality to allow for easy comparison and navigation. The specifications that were compiled for each meter included the following categories:

- Type
- Register
- Register resolution (digits)
- Operating range (gallons per minute [gpm])
- Accuracy
- Maximum flow (gpm)
- Low flow (gpm)
- Maximum operating pressure (pounds per square inch [psi])
- Pressure loss (psi at gpm)
- Water operating temperature range
- Environmental (ambient air) operating range
- Dimensions

- Weight (pounds [lbs])
- Straight line pipe requirements
- Connection type
- Available materials of construction
- Warranty
- Battery life (years)
- Irrigation meter
- Fire service rated

This compiled information was then used to determine if there were any potential conflicts with IRWD's standard details, as-built field installations, and standard specifications. In addition, system operating pressures from the geographic information systems (GIS) database were analyzed to determine if any high pressures found across the pressure zones and system could exceed any of the meters' maximum operating pressures. It was confirmed that the pressure regulating stations across the distribution system maintain operating pressures on the customer side well below the lowest maximum operating pressure of 150 psi found in the meters evaluated.

Filterable columns were added to the table for each meter size that identified any potential conflicts. The first column lists potential conflicts with the IRWD standard details and as-built drawings, and the other column includes any conflicts with the IRWD standard specifications. Each meter has details on any conflicts specific to the meter included in these columns in the Excel tables and are otherwise noted if there are no conflicts for any of the compiled data. Across the meters evaluated, the main two areas of potential conflicts were the materials of construction and the straight pipe requirements.

After a review of all potential conflicts, a summary of all the compatible meters by size for IRWD was assembled. The summary table is included in Attachment A. It is important to note that for many of the meters, and many of the large meters in particular, there were either potential conflicts with the IRWD standard specifications or standard details. Thus, the meters that had only minor deviations from either the IRWD standard specifications or standard details were also included in the summary of compatible meters, with any deviations noted in the tables. These minor deviations from the IRWD standard specifications or standard details included if the meter material was not bronze or plastic, if the manufacturer warranty does not cover 5 years of accuracy, or if there may not be sufficient straight pipe length upstream or downstream of the meter, depending on its requirements. Further review by IRWD of these trade-offs will be necessary.

For the small meters evaluated, the following meters did not have any deviations from either the IRWD standard specifications or the standard details:

1. Badger E-Series G2
2. Badger E-Series G2 Industrial
3. Badger E-Series Plus
4. Neptune Mach 10/Mach10)R900i
5. Diehl Hydrus
6. Mueller Solid State Meter

For meters sized 1.5 and 2 inches within the large meters evaluated, the following meters did not have any deviations from either the IRWD standard specifications or standard details:

1. Neptune Mach 10 Intermediate/Mach10)R900i
2. ZENNER ZSUR Stealth
3. Badger E-Series G2

For the rest of the large meters evaluated, sized 3 inches and up, the following meters had minor deviations from the IRWD standard specs in regard to the meter material or warranty:

4. Diehl Hydrus Bulk
5. Sensus Hydroverse
6. Mueller HbMAG

The static meter specification tables and the compatible meter summary tables contain details to provide a better understanding of static meter requirements in relation to the IRWD system while considering the option of a meter replacement using static meters. While some meters’ specifications have slight deviations from the IRWD specifications or standard details, the evaluation shows that a selection of static meters from various manufacturers have the potential to work within the IRWD system.

Survey

A survey was developed by the Arcadis team in conjunction with the IRWD project team. It was sent to 11 utilities to collect their experience, pros and cons and best practices related to the use of static meters. The survey was open from 02/26/2024 to 03/29/2024 and all 11 responses were collected, as detailed in the table below.

Utility Name	Location	Representative, Title
Orlando Utilities Commission	Orlando, FL	Charlie Wright, <i>Manager, Meter and Field Operations - Water</i>
Laguna Beach County Water District	Laguna Beach, CA	Jose Gallardo, <i>WUE Specialist</i>
Long Beach Utilities	Long Beach, CA	Jared Mataalii, <i>Manager of Water Service</i>
City of Huntington Beach	Huntington Beach, CA	Rudy Ocampo, <i>Utilities Superintendent</i>
Alameda County Water District	Fremont, CA	Stephanie Nevins, <i>Water Use Efficiency/Water Resources Planning</i>
City of Fountain Valley	Fountain Valley, CA	Mark Sprague, <i>Field Services Manager</i>
Moulton Niguel Water District	Laguna Hills, CA	Justin Finch, <i>Water Efficiency Manager</i> , Andrew Bedford, <i>Senior Field Customer Service Technician</i> , Matt Smith, <i>Field Customer Service Supervisor</i> , Dan West, <i>Superintendent of Operations</i>
City of Davis	Davis, CA	Dawn Calciano, <i>Conservation Coordinator</i>
City of Santa Ana	Santa Ana, CA	Leif Lovegren, <i>Management Analyst</i>
Eastern Municipal Water District	Perris, CA	David Gayneaux, <i>Meter Services Manager</i>
Madison County Water Department	Huntsville, AL	Phillip McDoniel, <i>Water System Engineer</i>

Questions were divided into three sections consisting of Utility Profile and Background, Procurement and Implementation Considerations and Field Performance. The questions, followed by results, are summarized as follows. Questions with an asterisk were required.

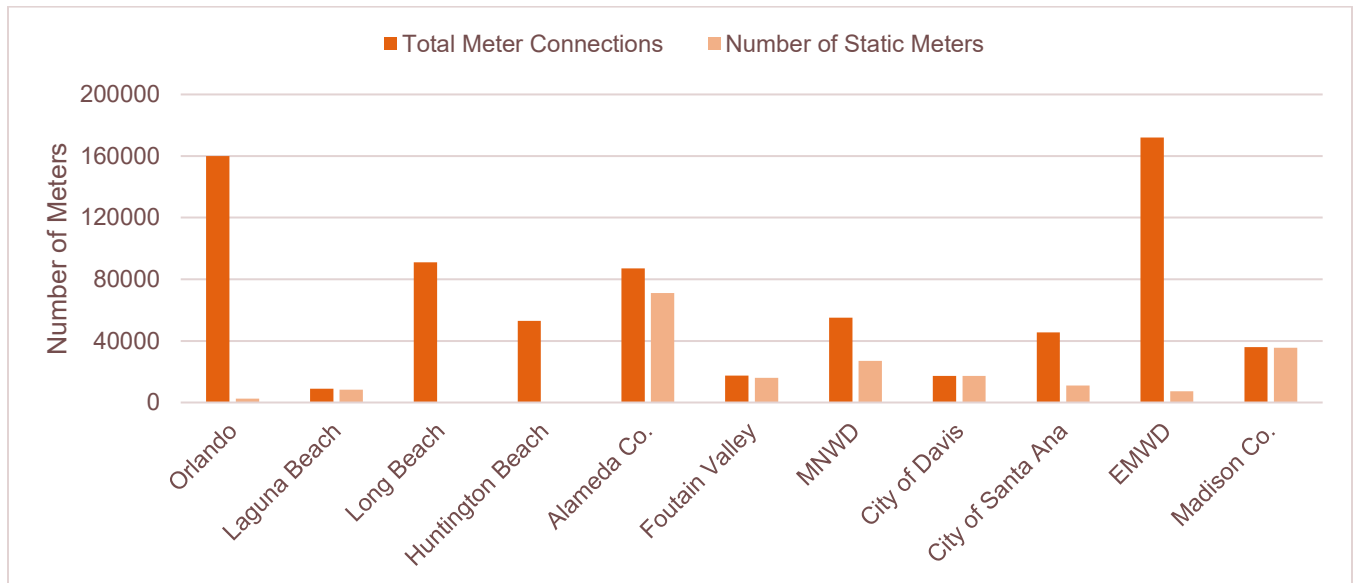
Section 1 – Utility Profile and Background

The purpose of this survey is to collect information on static meter procurement, implementation, and performance from utilities that have deployed or are currently in the process of deploying static meters in their system. This information will be used for Irvine Ranch Water District (IRWD)'s evaluation of the feasibility of replacing their meters with static meters.

1. *What is your name?**
2. *What is your position within your utility?**
3. *What is the name and location of your utility?**

4. How many metered service connections do you have?*
5. How many of your meters are static meters?*
6. When did you begin installing static meters?
7. What was the main driver to make the decision to install static meters?

The respondents had a number of metered service connections varying from 172,000 (EMWD) to 17,320 (City of Davis). Within their number of connections, the number of static meters varied from 71,000 (Alameda County) to as low as 25 (Long Beach).



Some respondents provided specific comments on the number of static meters:

Utility	Comments
Orlando	Initially 150,000 but replacing meters now and will be left with about 2,600
Long Beach	We have 25 ultra sonic, with 90% being PD meters
Alameda Co.	Approximately 71,000 – Badger E-Series in sizes ¾” through 2”.
MNWD	27000. The remaining are positive displacement, that were retrofitted for AMI.
City of Santa Ana	Currently ~11,000; will be ~41,000 after AMI project completion

Respondents began using static meters in 2011, with the latest installation occurring just one year ago.

Utility	Beginning of Installation
Orlando	2013 - Initial AMI deployment
Laguna Beach	2017
Long Beach	2019
Huntington Beach	1 year ago (2023)
Alameda County	2021
Fountain Valley	2014/2015
MNWD	2011 – Pilot program

City of Davis	2018
City of Santa Ana	2020
EMWD	2012
Madison County	2019

When asked about the main driver for the decision to install static meters, responses were mostly related to the AMI capabilities and advantages as reporting capabilities, accuracy, low flow detection capabilities, and lower maintenance requirements.

Utility	Comments
Orlando	Initial decision was made by upper management to go mostly all electronic metering in the 1" and smaller sizes for the reporting capabilities and accuracy
Laguna Beach	AMI technology and capabilities
Long Beach	We wanted to try this technology specifically 6,8,10 replacing our high demand compound and FM meters.
Huntington Beach	We're also in test mode.
Alameda Co.	In support of the District's AMI Deployment Project, a significant quantity of the existing small meter population (3/4" through 2") was beyond their useful life and did not have an AMI upgrade pathway. Replacement of approximately 71,000 meters was required. The District performed a business case for the meter replacement component of the AMI Deployment Project and identified that ultrasonic meters had the most favorable projected return on investment in support of our AMI Business Drivers, primarily in meeting revenue continuity, operational improvements, conservation goals. The District only considered C715 Ultrasonic meters and C700 positive displacement meters in this assessment, due to other technical and O&M requirements.
Fountain Valley	Switch to AMI from manual read - Technology, more information/data/alarms, improved water loss recovery and leak detection, and existing meters already needed to be replaced due to age
MNWD	Newer technology replaced majority of metering tech that Sensus offered. MNWD wanted to utilize newer technology that would address meter accuracy, meter maintenance, and revenue collection concerns.
City of Davis	City-wide meter replacement project to replace aging meters with new meters and adding AMI technology.
City of Santa Ana	Available AMI-related features of Sensus ally and iPerl products.
EMWD	New technology, promise of greater accuracy and low flow detection
Madison Co.	Better low flow detection, fewer moving parts, AMI and acoustic leak detection.

Section 2 – Procurement and Implementation Considerations

This section includes questions focused on experience with the procurement process, installation, and implementation of static meters.

8. *Did you run a pilot test with static meters?*
 - Yes
 - No

If yes, please describe the pilot test, including the number of meters included. If no, were any studies or reports used to support the decision to install static meters?

9. *Does your utility current use AMI? Did you or are you installing static meters and AMI at the same time?*

10. *What type of service points did you install static meters on? Select all that apply.*

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Recycled |
| <input type="checkbox"/> Multi-family | <input type="checkbox"/> Dedicated Irrigation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Fire Line |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Other: |

11. *What are the material(s) of your static meter bodies?*

- | | |
|--|---|
| <input type="checkbox"/> Bronze | <input type="checkbox"/> Thermal Plastic |
| <input type="checkbox"/> Copper | <input type="checkbox"/> Engineered Polymer |
| <input type="checkbox"/> Ductile Iron | <input type="checkbox"/> Composite |
| <input type="checkbox"/> Stainless Steel | <input type="checkbox"/> Other: |

12. *What static meter vendor(s) are you using?*

13. *Were your static meters installed by in-house staff or by a third party?*

- In-house staff
- Third party
- Combination of both

If installed by a third party or combination of both, please elaborate if possible.

14. *How did you select your static meter vendor? What were the selection criteria?*

15. *Did any of the following occur when installing the static meters in the field?*

Changes to the current piping layout were needed to install

- Yes
- No

If yes, please elaborate.

Additional equipment was needed to install

- Yes
- No

If yes, please elaborate.

Meter settings needed to be modified to install

- Yes
- No

If yes, please elaborate.

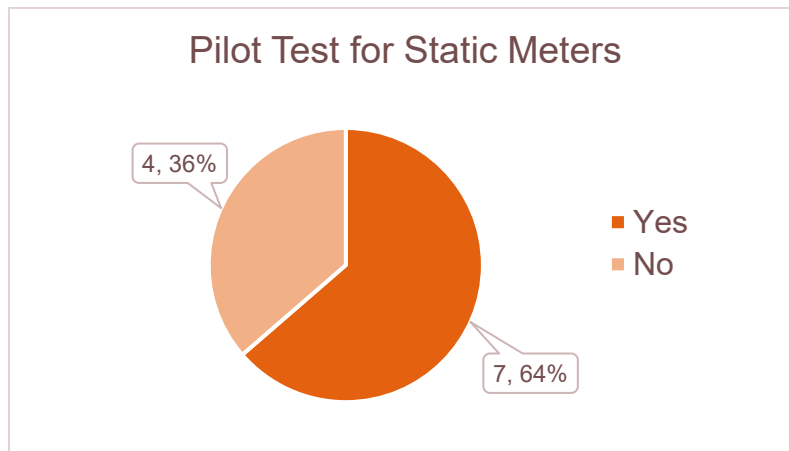
Other

- Yes
- No

If yes, please elaborate.

16. *Would you do this project again? What worked well? What would you do differently during procurement and implementation?*

Most respondents executed a pilot test ahead of large-scale implementation of static meters.



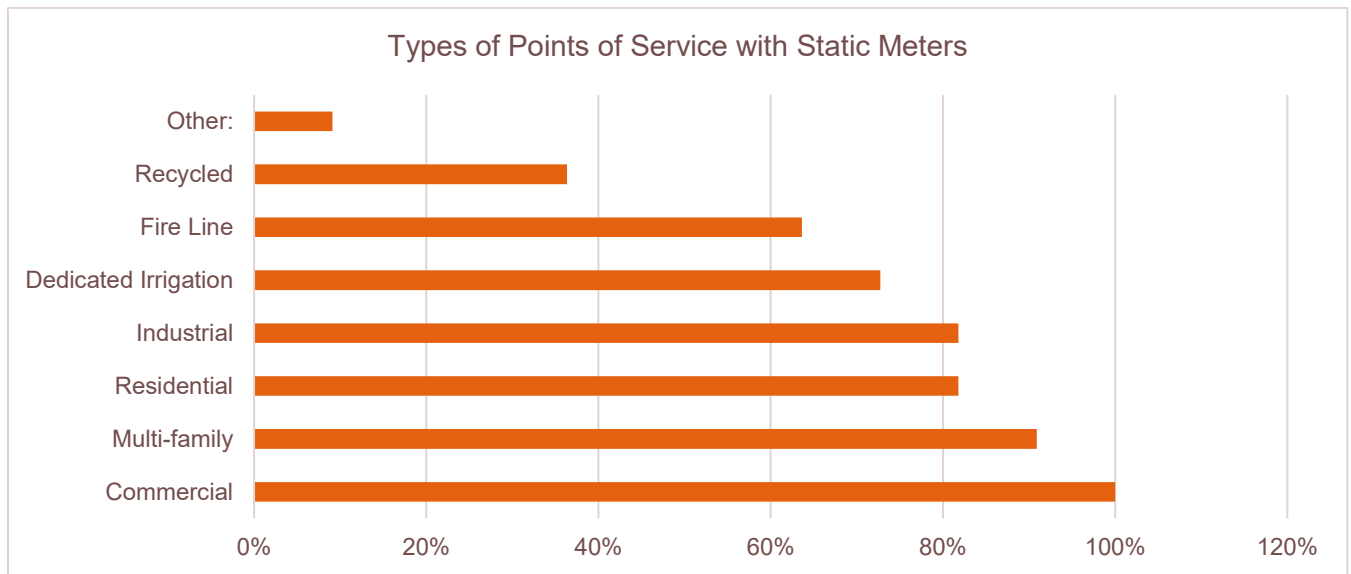
Utility	Comments
Orlando	This was a mistake to not pilot the meters to validate the overall performance.
Huntington Beach	Currently in pilot mode
Alameda Co.	We conducted an AMI Deployment Proof of Concept (POC) prior to issuing the Notice To Proceed for the AMI full deployment. The proof of concept started in March 2021. Approximately 2,883 meters were installed during that phase. Included in the POC evaluation was the meter efficacy in supporting the District’s AMI Business Drivers. The evaluation identified the Badger E-Series meter’s successful support via the increased metering precision and enhanced compatibility with the District’s selected AMI system.
Fountain Valley	Had 3 vendors, Sensus, Neptune, and Mueller complete pilot study over seven months with about 50 meters each. Main driver was switching to an AMI system
MNWD	Approximately 50 qty 0.75” iPerl meters were installed in a single-family residential tract.
City of Davis	In 2015, The City installed Sensus endpoints and AMI equipment on water meters at City facilities as part of a pilot project to test AMI technology. 300 City meters were included in the pilot study.
EMWD	Internal pilot of 30 meters. Bench tested for accuracy from factory, submersion in water for moisture intrusion, exposure to sun for LCD screen durability
Madison Co.	Our pilot began with 550 in house installs around our office. This included 1 AMI collector at our office. We had success with ease of install and meter readability.

When inquired about current use of AMI and pairing the static meters with AMI, all respondents indicated that AMI is in place.

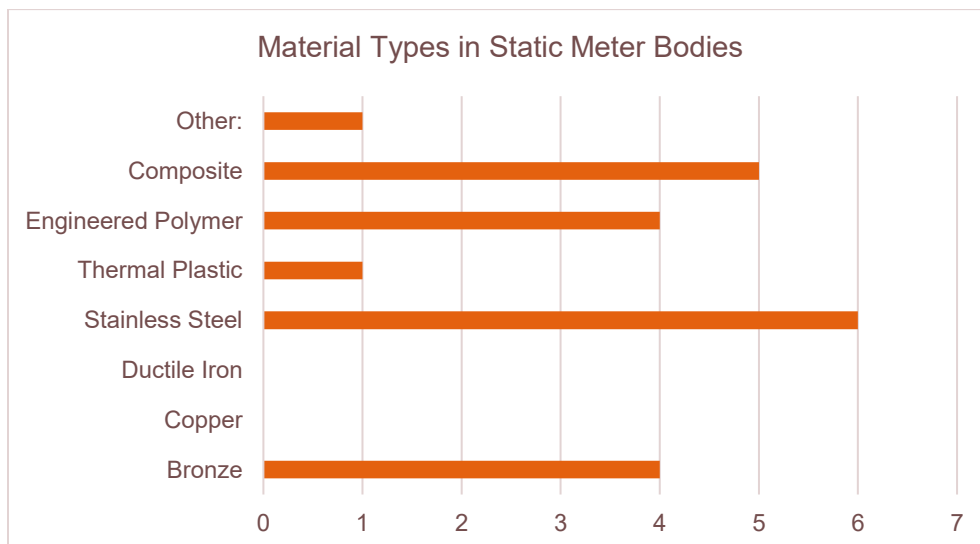
Utility	Comments
Orlando	We are currently in the process of replacing our current AMI water meters with the next generation water meters. We are replacing most of the static meters with non-battery operated nutating disc meters with mechanical dial and encoded outputs. We are eliminating the risk associated with most of the water meter population having battery operated registers that prematurely fail or begin to act inaccurately. Although not as accurate, we want a more reliable long-term solution that is still reasonably accurate that can still produce a reliable water meter reading. Premature failures is an issue difficult to manage on a mass basis which we want to avoid. If we had a small meter population, then the static meter would be more manageable. We did pilot and RFPs for the meters and the headend system

Long Beach	Yes, Sensus Flex-net RNI
MNWD	Yes, however static meter installation occurred prior to AMI rollout. At the time meters were read via touch-read and AMR.
City of Davis	City of Davis does currently use AMI. The installation of ultrasonic meters and AMI did occur at the same time as part of a city-wide water meter replacement project.

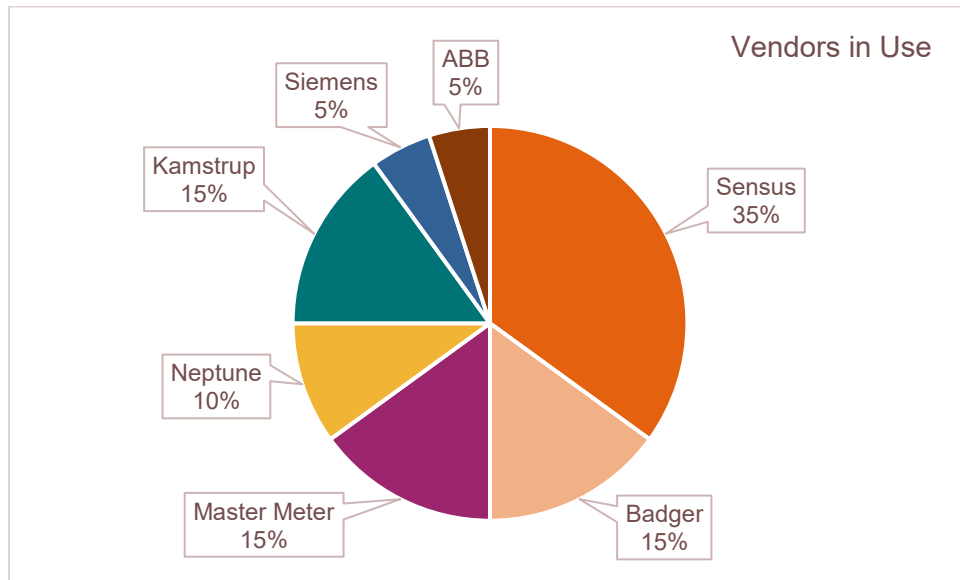
As for the type of service points where static meters are installed, all respondents have static meters in commercial installations. Orlando has static meters in chilled air (Air Conditioning) installations (shown under "Other").



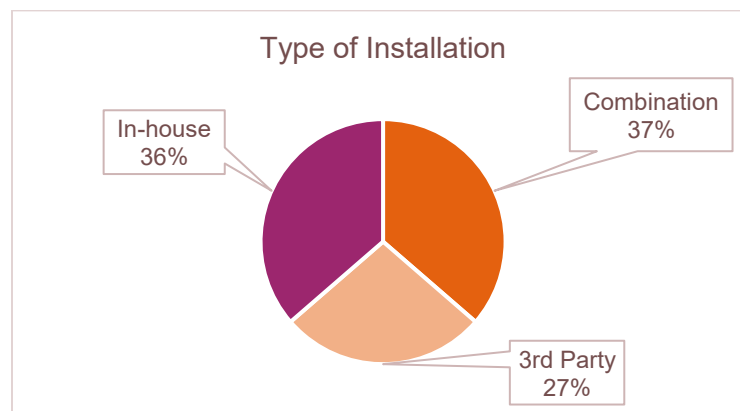
Regarding the material(s) for the static meter bodies, ductile iron and cooper were not in place in any of the respondent's area of service. Stainless steel was the material most used, followed by composite. It is important to note that some respondents had multiple materials installed.



Several vendors are being used, with some respondents having more than one vendor installed. Of the utilities surveyed, Sensus is the most commonly used, followed equally by Badger, Master Meter and Kamstrup.



Installation of static meters were mainly performed by a combination of in-house staff and a third party, however in-house installation followed very closely. Additional comments on installation were provided by some respondents.



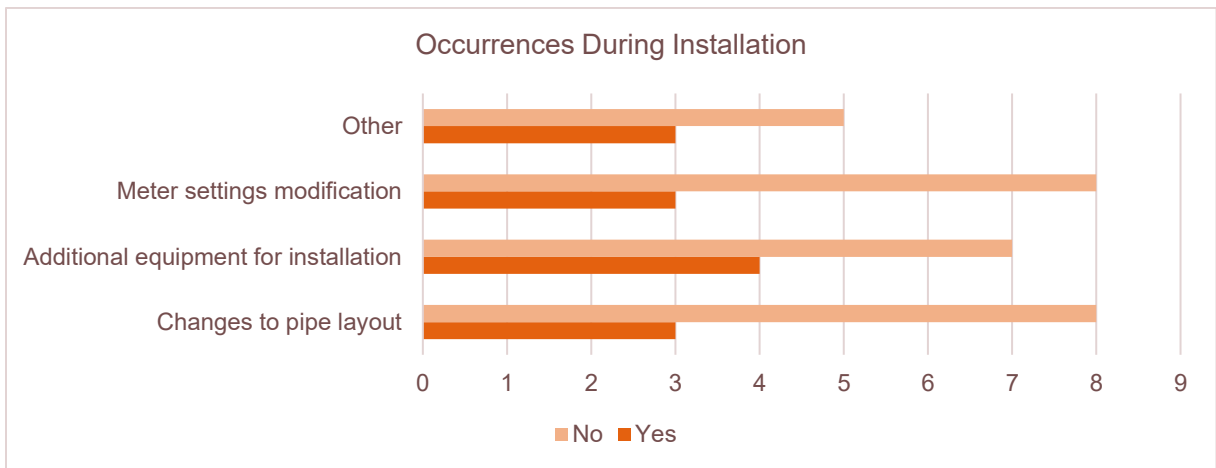
Utility	Comments
Orlando	During deployment iPERLs by contractor and thereafter, maintenance in-house. Badger E Series are in-house and used on a limited basis for specialty applications
Laguna Beach	Installed by Aquametrics
Alameda Co.	Most meters were installed by a third-party installer, but meters installed due to reactive meter maintenance or new meter sets for development are installed by in-house O&M staff.
Fountain Valley	Utility Partners of America (UPA) and Concord Utility Services were utilized to replace all meters within a 6 month goal period. Services were included in the scope for the overall AMI RFP
City of Davis	As part of the city-wide meter replacement project, a third-party contractor was hired to install the meters and AMI. City staff did quality control on the installations.

City of Santa Ana	The majority of our static meters are being installed by a contractor as part of our AMI project. However, in-house staff is also installing static meters at locations where a meter exchange is necessary, but outside of the project's scheduled work.
Madison Co.	Any new construction installs and emergency changeouts were handled in-house. The majority of our changeout (~25,000) were handled by third party. All meter installs going forward are handled in-house.

Selection method and criteria were diverse. Most respondents used RFPs, in which technical specifications were presented. Others also indicated that familiarity with capabilities and compatibility were important aspects to select meters. Detailed comments were provided:

Utility	Comments
Orlando	They were chosen by management
Laguna Beach	RFP
Long Beach	Master Meter met our specifications and were our lowest bid.
Huntington Beach	The length of their meters fits what we currently have in place.
Alameda Co.	ACWD initiated an RFP process to select the vendor. [We can share the RFP]
Fountain Valley	Based mainly on AMI technology and features of the iPerl Meter. Most powerful and robust network, dedicated FCC License, two-way communication feature (on demand reads), 20 year warranty, limited infrastructure required, meter sustained accuracy and low flow minimum accuracy.
MNWD	Meter manufacturers are chosen based on: compatibility with existing Sensus Protocol (Flexnet AMI system), reliability of the devices, and cost. Due to supply chain issues availability has also been a selection criteria. Fortunately, multiple manufacturers are relatively compatible with the Sensus network.
City of Davis	A RFP was posted and sent out in February 2016. Four proposals were received. The proposals included the project team, proposed cost and project 20-year life cycle cost. The RFP required that transmitters that are a part of the AMI system operate on a FCC-licensed reading frequency or use cellular technology. The RFP required that "meter casing must be made of brass, stainless steel, or copper alloy material." The project team included construction management and meter installation including the installation of AMI, the meter data management system and the customer water-use portal. The project team coordinated with Public Works staff including engineering staff (as well as an engineering consultant), water crew staff and public relations staff. More information on the meter contract award can be found in a November 15, 2016 Staff Report to City Council (https://documents.cityofdavis.org/Media/Default/Documents/PDF/CityCouncil/CouncilMeetings/Agendas/20161115/05A-Automated-Meter-Contract-Award.pdf).
City of Santa Ana	The vendor was selected based on prior performance and familiarity of Sensus products, as well AMI-related capabilities.
EMWD	Compatibility with Sensus Flex Net. Siemens and ABB communicate through SCADA only.
Madison Co.	We had an RFP process where we had certain criteria that were needed: meet all AWWA standards, AMI capable, easily programmable, Info codes reported, secure, easily installable, minimum 20-year battery life, lowest bidder meeting requirements.

During the installation, respondents explained the occurrences related to changes in piping layout, the need for additional equipment for meter installation, and the need to modify meter settings faced by them at the time.



Changes to current piping layout

Utility	Comments
MNWD	Generally this isn't an issue, lay length can be specified during the ordering process. In very few circumstances lay-length of the larger 3+ inch meters required some retrofitting.
City of Davis	Some piping for residential meters had to be modified due to meter installation orientation.
EMWD	Some of the 3" and larger meters had different lay lengths (shorter) that required spooling for proper installation.
Madison Co.	On small meters, 3/4" and 1" meters, typically no changes needed to be made. On larger meters, 2" and larger, occasionally there would need to be an additional spool piece where the old mechanical meter lay length differed from the new ultrasonic meter.

Additional equipment needed for installation

Utility	Comments
Fountain Valley	Using with AMI, so needed handheld to program each meter. Threading Die, if composite threads needed to be rethreaded if stripped
City of Davis	There was an issue with the antenna for AMI and fitting them into some of the older-style meter box lids that the City had (a small portion of the meter box lids).
EMWD	Spools for the 3" and larger meters
Madison Co.	Occasional spool pieces for larger meters.

Modification of Meter Settings

Utility	Comments
Laguna Beach	Very few meters needed to be recalibrated to send the reads over in cf vs ccf
Long Beach	For our 6,8,10 meters we required a specific lay length, built into the bid that was submitted was additional piping epoxy coated steel delivered completely assembled by Master Meter.
Fountain Valley	On maybe a dozen or so services, angle meter stop alignments needed to be adjusted.

Other Occurrences

Utility	Comments
Orlando	In 2013, we used Sensus OMNI turbo meters which had a wide range of accuracy and replace all the dual range assemblies with these for the 4" and larger sizes which had to be modified. This second round of AMI exchanges, the meter housing is still retained and only the meter chamber and register are being exchanged which reduces material cost and labor for that population all done in-house. For the AMI static iPERL meters, at the time the couplings were plastic and many instances of cross threading was an issue and the meter had to be discarded.
Alameda Co.	Anticipate typical accommodations to be required to on-board any new type. As water meter inventory are required to be competitively bid by most agencies, I would expect these accommodations are already well known – billing system adjustments (number of dials, multipliers, etc), inventory system updates, meter reading and O&M staff training, asset management system updates, etc.
EMWD	Some composite body meters have broken under pressure due to service line misalignment.

Respondents were, in general, satisfied with the project despite obstacles. Aspects that could have gone better include staff training, staff augmentation to process the AMI data being collected, better meter inventory management, need of SOPs for installation, integration difficulties, and need for longer pilot testing period.

For early adopters, issues that may have been present at the time of installation have been resolved by the manufacturer through warranties or the evolution of the product, in which the issues have been addressed.

Utility	Comments
Orlando	We went from the iPERL mag meter to the Badger HRE mechanical dial M25 and M55 meters with Sensus encoded output which are still reasonably accurate and are reliable over the long term to still produce a reading. To make the AMI proforma work financially, we need a 15-year life cycle and also assurance that a reading can still be produced even if manually read. We are staying with the Sensus Turbo meters and using Badger E Series where there are high volumes of use and or history of meter burn out. We opted to go with the Badger Orion cellular solution to have ubiquitous data sets for our water only areas and electric area and in doing so we will eliminate our drive-by water meter reading operations.
Laguna Beach	The project went well and we are happy with the implementation. The only thing I would improve on is training for staff to understand how the meters work and how to troubleshoot various issues.
Long Beach	Yes, we lacked staffing that would be able to process all the additional data AMI provides. We have slowly built out our AMI team to both field and office staff, needed to run an AMI program.
Huntington Beach	Yes. The installation process went well due to the length and size of the meter.
Alameda Co.	In short - yes. An AMI Deployment Project is a large and holistic undertaking for a water agency, however onboarding the meter product was one of the least impactful components of the program.
Fountain Valley	Yes, more related to AMI change - determine accurate inventory of all meters and meter box lids required for change out to have better inventory management and tracking for actuals vs. estimates. Storage for inventory and mobilization. Require written SOP for installs and programming with good QA/QC follow up - verify installation procedures in a sample area before allowing full scale installations.
MNWD	Yes. The main problems we experienced included receiving some bad batches of meters that had manufacturer flaws that had not been identified or addressed. For example, some batches had water intrusion which caused meters to malfunction. However, the newer meters we are getting do not have the issue we saw 5-10 years ago. Installation is relatively straightforward and same process as positive displacement meters.

City of Davis	The meters in the City had reached the end of their useful life so it made sense to add AMI as part of the project because the meters needed to be replaced. It worked well to have the meters installed and AMI at the same time so that the customers saw a benefit to the project more quickly. It was difficult to integrate the finance system with the MDM and the water use portal, this took more time than anticipated.
City of Santa Ana	While we would do the project again, a more robust alpha phase/pilot project prior to fully committing to certain products/technologies/platforms would have been beneficial to allow for discovery of some issues that have arisen. Additionally, conducting a full meter asset/infrastructure audit would have saved us from issues we were not aware of at the time of contract award.
EMWD	Yes. The static meters have continued to test accurately and have provided a greater range of usage detection. Would have done more extreme testing of the display screens. (Moisture intrusion, fading from the sun, blank screens after 2-3 years in some cases) This is a weak point of the LCD screens which are becoming much more common.
Madison Co.	Yes. Changing to ultrasonic helped capture greater low flow and going with Acoustic Leak Detection meters has found a significant number of leaks. With implementation, setting up the AMI network more before deployment to make sure meter readability was greater during deployment could make things easier. Changing out old meter pits to full polymer boxes and lids and not just lids would also have been more helpful.

Section 3 – Field Performance

This section includes questions specific to the performance and impact of static meters once installed in the field.

17. *Have you experienced any issues or challenges with the static meters that have been installed?*

Performance

Yes

No

If yes, please elaborate.

Battery life

Yes

No

If yes, please elaborate.

Water quality (including specifically for any recycled water service points and any general water quality issues)

Yes

No

If yes, please elaborate.

Other

Yes

No

If yes, please elaborate.

18. *What were the expected benefits of static meter implementation? Has your agency realized, or is it on track to realize, the expected benefits?*

19. *Was there a change in consumption recorded on the meter after static meter installation?*

Yes

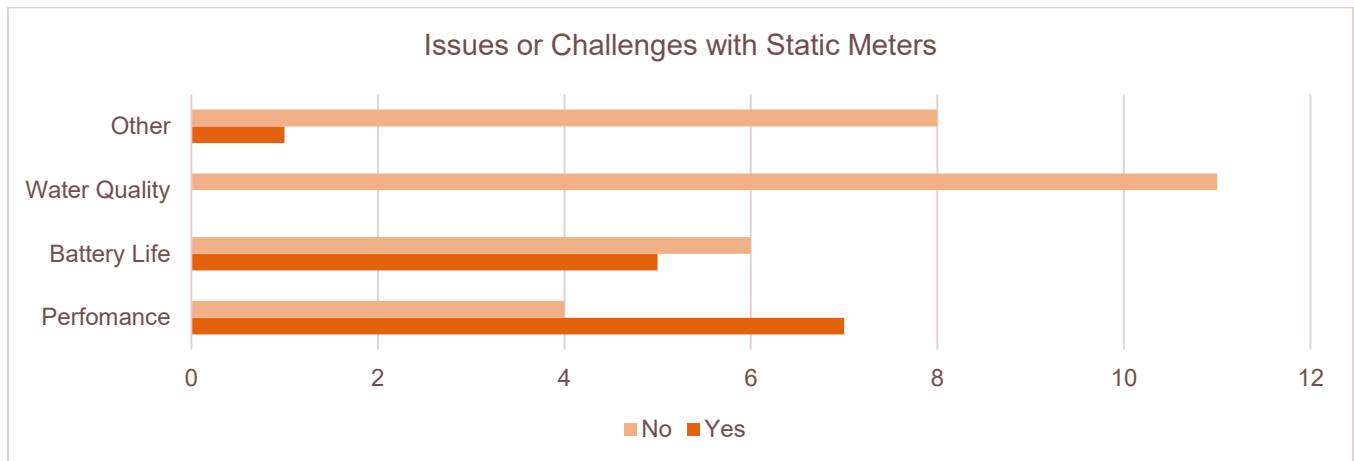
No

If yes, please elaborate.

- 20. Are there any additional benefits that you have seen or plan to see with the static meters (e.g., reduced meter testing needs, reduced maintenance, etc.)?
- 21. Are you open to having follow-up conversations on this topic?
 - Yes
 - No
- 22. Please provide your email address if you are interested in receiving the results of this survey. Note that your responses will be anonymized in the survey results.

All respondents have experienced some type of challenge with the static meters that have been installed. These challenges were mainly related to battery life and performance. However, the City of Davis reported that: *When changes are made to the cellular network from which the reads are transferred, the City did not have AMI reads for approximately one month while the DCUs were being updated (this was a change from a 4G to 5G network). An additional DCU also needed to be installed early in the project to adequately cover the area.* This issue was classified under “Other”.

Water quality issues were not reported by any respondents. This category included any recycled water service points and any general water quality issues.



Performance

Utility	Comments
Orlando	First versions of iPERL meters high failure rates of erratic behavior, dead display, no way to verify if accurate or if water is actually being used if the meter display dials drift since these are to the 100th of a gallon. Instances of backflow due to erratic behavior. Later versions seem to be more reliable with on occasional failure but when the customer say we didn't use the water, we cannot 100% eliminate that the meter may be faulty.
Long Beach	The dial displays have needed to be replaced. This is covered by the manufacture but, due to these dials being wet dials our customers service is interrupted during repair.
Alameda Co.	We do not have the experience of a full lifecycle for this meter type, however the meter selection was based on a business case not O&M criteria alone.
Fountain Valley	We were an early adopter so had warranty issues at the beginning which have since been corrected in manufacturing.
MNWD	We've had multiple batches of malfunctioning iPerl meters over the years. Common problems involve meter not registering flow, continuously running with no water going through it, negative flow, and meter not communicating with radio. With positive displacement

City of Santa Ana	We experienced some issues with testing accuracy, programming the meters for AMI integration, as well as some register read issues. Firmware updates have resolved most issues, but it took lots of testing and legwork by both City staff, the vendor and manufacturer to find resolutions. Additionally, cross-threading of the composite body has been an issue due to field conditions like small meter boxes and service line deflection.
EMWD	Issues are mostly due to the LCD screens going blank and moisture intrusion. Composite bodies have broken under pressure due to service line misalignment.
Madison Co.	We had concrete and metal boxes and lids and radio performance can struggle. We also have difficult topography and foliage for radio performance, but Kamstrup has provided additional solutions for our problems.

Battery Life

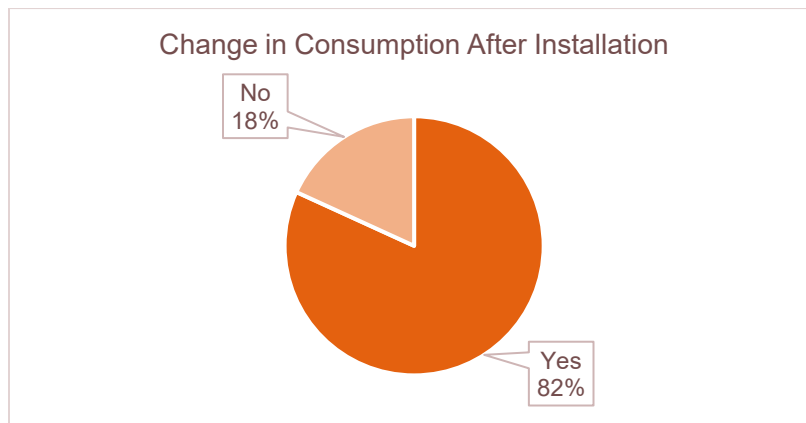
Utility	Comments
Orlando	The iPERL meters initially 10 full/20 prorated year warranty which is now a 15/20 warranty. We have been experiencing erratic meter behavior with the initial population since 2013 and have experienced meters in larger quantities prematurely going dead in the last 3 years and escalating monthly. We see about 200 to 500 failures a month now. No issues with the E Series yet as it is still new in the field.
Fountain Valley	Nothing major there have been a few that have been covered by warranty.
MNWD	Meter batteries seem to last closer to 10 years than 20 years as specified.
City of Santa Ana	We have experienced some meters already fail due to dead batteries. While the warranty will cover these, having to uninstall and reinstall a meter, send it back to the manufacturer, and then wait for a replacement has been burdensome.
EMWD	Not a concerning issue, but LCD screens have gone blank after just 2-3 years in some cases/

The main benefits observed by respondents so far include high quality data for decision-making and customer awareness, ease of maintenance, improved accuracy of measurements, leak detection.

Utility	Comments
Orlando	For the chilled water population, we are staying with the iPERL for the cold temperatures, indoor dry environment, and they do not have to be insulated because of the plastic housing. We are replacing those like for like and have good success in that application. The E Series will continue to be used in limited applications where there is high usage or burn out history. The larger meters do not require a meter exchange and can be managed with a cheaper chamber/register exchange.
Laguna Beach	Benefits are increased data and taking action on the data. Customer portal was also a priority and we are currently in the process of updating the portal.
Long Beach	We have since removed these meters from our meter bid specifications. Preferring the FM, compound and turbine meters due to their easy in repair.
Huntington Beach	Less parts and Accuracy
Alameda Co.	Yes, we are finding and getting customers to fix leaks and alerting them to high usage. Increased precision of the static meters supports the correction of these issues.
Fountain Valley	AMI and improved/sustained accuracy over the life of the meter. So far, we have been realizing these benefits
MNWD	Main benefits include higher read resolution (number of dial read and low flow accuracy) and the various alarms like burst pipe, empty pipe, pressure, leaks, etc.

City of Davis	The City has realized benefits from the project including automating the meter readings (which were previously read by a contractor monthly), providing hourly water use data to customers to track their water usage and repair leaks more quickly (the City currently bills water two months in arrears) and increased revenue due to the higher accuracy of new meter installs and finding unmetered water service that are now billed for consumption.
City of Santa Ana	It is too early to tell, as we are still working through AMI technology integration. The main benefit of being able to remotely turn off water meters (allys) for account closure or delinquent payment has yet to be implemented.
EMWD	Accuracy, improved leak detection
Madison Co.	We have decreased unaccounted-for water through low-flow capture and Acoustic Leak Detection. We are able to provide greater customer service through AMI meter reading.

Most respondents indicated a change in consumption recorded after static meter installation. This can be explained by improved accuracy in low flow detection, as well as replacement of outdated meters.



Utility	Comments
Orlando	Yes, more revenue initially which eventually is adjusted into the rate base, but that is offset with cost to install and manage all the following field, billing, and back office management of all the issues we experienced. I am not comfortable from a reliability standpoint to have 100% of all our water meters be battery operated and have a huge problem in the outer years that cannot be remedied in a short time frame, and then mass bill estimations would have to be employed risking the company's satisfaction with customers and its reputation. We are finding the right balance for us using both static and non-static to mitigate risk and at the end of the day produce a bill and customer satisfaction. We are still able to enjoy all the benefits of the AMI data that comes from the non-static population, leak detection, backflow, interval usage, usage portal, etc.
Huntington Beach	Accuracy
Alameda Co.	We have not conducted a post-deployment analysis on this yet, but anecdotally, some customers are experiencing a more representative bill which supports the belief that old meters were under reading consumption.
Fountain Valley	We didn't look at individual meters, but system wide, annual water losses have been improved.
MNWD	Generally speaking, we have not yet calculated this specific data point. However, anecdotally we have seen individual accounts that replace a positive displacement meter with a static meter and recorded consumption increases (e.g., is more accurate). Additionally, we have

seen the District's water loss decrease over the last few years as we've increased static meter implementation, which could be supporting that change.

City of Davis	The meters were likely under-registering because they had been in place since 1995 so more accurate meter readings were anticipated.
City of Santa Ana	Some customers have noticed increased reads since installation of the static meters. However, this has been due to the old positive displacement meters not reading accurately.
EMWD	In a few cases, customers with older meters showing no consumption, immediately identified small leaks at properties.
Madison Co.	Our consumption reported number increased while our water produced number stayed the same. We attribute this to more accurate low flow capture as well as more accurate meter reading via AMI.

Additional benefits that are still to be observed or achieved are:

Utility	Comments
Orlando	We will be reducing maintenance and back office labor (billing, CS, management) and increasing reliability by removing the vast majority of the iPERL mag meters and going back to a reasonably accurate static non battery operated meter.
Laguna Beach	Less verifying high/low customer reads. Ability to contact customers regarding large flows of water. AMI data helps us track water waste more accurately.
Long Beach	Too early to tell.
Huntington Beach	Maintenance
Fountain Valley	We have seen reduced testing needs; we sample a small population to continue to verify.
MNWD	In general no reduction in meter testing or maintenance, due to State requirements for random meter testing anyway. Not much meter maintenance is performed any longer, underperforming meters are removed from service and replaced.
City of Davis	The maintenance is different now with there being more of a focus on the technology and programming for the meters and AMI. The City has a crew within the Water Division that focuses on meters.
City of Santa Ana	We anticipate seeing decreased maintenance needs for static meters, though it is still too early to gauge if this will be realized.
EMWD	No tangible evidence of reduced testing needs, or reduced maintenance.
Madison Co.	The greater availability of data and more accurate data has helped in capital planning and district metering which leads to us being more proactive and less reactive in our engineering and operations.

Respondents were open and willing in keep the conversation going on this topic. They were also interested in receiving the results collected in this survey.

Utility	Representative	Email Address
Orlando	Charlie Wright	charles_wright@ouc.com
Laguna Beach	Jose Gallardo	jgallardo@lbcwd.org
Long Beach	Jared Mataalii	jared.mataalii@lbwater.org
Huntington Beach	Rudy Ocampo	rocampo@surfcity-hb.org
Alameda Co.	Stephanie Nevins	Stephanie.nevins@acwd.com
Fountain Valley	Mark Sprague	Mark.sprague@fountainvalley.gov

MNWD	Justin Finch	jfinch@mnwd.com
City of Davis	Dawn Calciano	dcalciano@cityofdavis.org
City of Santa Ana	Leif Lovegren	llovegren@santa-ana.org
EMWD	David Gayneaux	gayneaud@emwd.org
Madison Co.	Phillip McDoniel	pmcdoniel@madisoncountyal.gov

Conclusions

The static meter research and analysis took a deep dive into the manufacturer specifications and comparing them to IRWD meter specifications, standard details, and as-built drawings. While some meters' specifications have slight deviations from the IRWD specifications or standard details, the evaluation shows that a selection of static meters from various manufacturers have the potential to work within the IRWD system. In conclusion, the output provides IRWD with a list of static meters that may be considered for use (Attachment A).

The static meter survey results provided several insights related to procurement, implementation, and field performance, such as drivers for adoption, selection criteria, types of uses, materials, installation preferences and challenges, and others.

Key Survey Takeaways:

- Most respondents have deployed static meters simultaneously with AMI efforts.
- The majority of respondents piloted static meters.
- Most respondents procured the static meters by means of technical specifications and RFP, not low bid.
- Early adopters of the static meters seem to be the respondents reporting the most issues.

The survey results provide IRWD with valuable information and bring awareness on what to expect of static meters and their implementation, allowing for proper planning ahead of time and minimizing potential issues.

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study
Evaluation of Static Meters
Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
5/8" Meters				
Sensus	iPERL	Electromagnetic	Flowtube option is made of bronze alloy but has composite polymer internal core.	
Badger	E-Series	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2	Ultrasonic		
Neptune	Mach 10	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
5/8" x 1/2" Meters				
Diehl	Hydrus	Ultrasonic		
Master Meter	Sonata	Ultrasonic	Bronze alloy option has polymer liner.	
ZENNER	ZSUR Stealth	Ultrasonic		
5/8" x 3/4" Meters				
Sensus	iPERL	Electromagnetic	Flowtube is made of bronze alloy but has composite polymer internal core.	
Badger	E-Series	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2	Ultrasonic		
Badger	E-Series G2 Industrial	Ultrasonic		
Badger	E-Series Plus	Ultrasonic		
Neptune	Mach 10	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
Diehl	Hydrus	Ultrasonic		
Master Meter	Sonata	Ultrasonic	Bronze alloy option has polymer liner.	
Mueller	Solid State Meter	Ultrasonic		
Kamstrup	flowIQ 2200	Ultrasonic	Meter housing and flow part made of stainless steel.	
ZENNER	ZSUR Stealth	Ultrasonic		

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study
Evaluation of Static Meters
Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
3/4" Meters				
Sensus	iPERL	Electromagnetic	Flowtube is made of bronze alloy but has composite polymer internal core.	
Badger	E-Series	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2	Ultrasonic		
Badger	E-Series UL Certified	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2 Industrial	Ultrasonic		
Badger	E-Series Plus	Ultrasonic		
Neptune	Mach 10	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
Diehl	Hydrus	Ultrasonic		
Mueller	Solid State Meter	Ultrasonic		
Master Meter	Sonata	Ultrasonic	Bronze alloy option has polymer liner.	
Kamstrup	flowIQ 2200	Ultrasonic	Meter housing and flow part made of stainless steel.	
ZENNER	ZSUR Stealth	Ultrasonic		
1" Meters				
Sensus	iPERL (Bronze Option)	Electromagnetic	Flowtube is made of bronze alloy but has composite polymer internal core.	
Badger	E-Series	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2	Ultrasonic		
Badger	E-Series UL Certified	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2 Industrial	Ultrasonic		
Neptune	Mach 10	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
Diehl	Hydrus	Ultrasonic		

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study
Evaluation of Static Meters
Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
Mueller	Solid State Meter	Ultrasonic		
Master Meter	Sonata	Ultrasonic	Bronze alloy option has polymer liner.	
Kamstrup	flowIQ 2200	Ultrasonic	Meter housing and flow part made of stainless steel.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
1.5" Meters				
Diehl	Hydrus	Ultrasonic	Measuring pipe is made of stainless steel.	
ZENNER	ZSUR Stealth	Ultrasonic		
Master Meter	Octave	Ultrasonic	Made of stainless steel.	
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Badger	E-Series Intermediate	Ultrasonic	Meter housing is stainless steel.	
Badger	E-Series Intermediate UL-Certifi	Ultrasonic	Meter housing is stainless steel.	
Neptune	Mach 10 Intermediate	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
2" Meters				
Diehl	Hydrus	Ultrasonic	Measuring pipe is made of stainless steel.	
Diehl	Hydrus Bulk	Ultrasonic	Body is made of epoxy-coated cast iron.	
ZENNER	ZSUR Stealth	Ultrasonic		
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Badger	E-Series Intermediate	Ultrasonic	Meter housing is stainless steel.	Straight pipe requirements
Badger	E-Series Intermediate UL-Certifi	Ultrasonic	Meter housing is stainless steel.	Straight pipe requirements
Neptune	Mach 10 Intermediate	Ultrasonic		

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study
Evaluation of Static Meters
Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
Neptune	Mach 10)R900i	Ultrasonic		
Sensus	iPERL	Electromagnetic	Flowtube is made of bronze alloy but has composite polymer internal core.	
Badger	E-Series	Ultrasonic	Meter housing made of stainless steel.	
Badger	E-Series G2	Ultrasonic		
Neptune	Mach 10	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
3" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Badger	E-Series Commercial	Ultrasonic		Straight pipe requirements
Badger	E-Series G2 Industrial	Ultrasonic		Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		Straight pipe requirements
Neptune	Mach 10)R900i	Ultrasonic		Straight pipe requirements
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	Straight pipe requirements
Diehl	Hydrus Bulk	Ultrasonic	Body is made of epoxy-coated cast iron.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
4" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Badger	E-Series Commercial	Ultrasonic		Straight pipe requirements
Badger	E-Series G2 Industrial	Ultrasonic		Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		Straight pipe requirements
Neptune	Mach 10)R900i	Ultrasonic		Straight pipe requirements

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study
Evaluation of Static Meters
Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	Straight pipe requirements
Diehl	Hydrus Bulk	Ultrasonic	Body is made of epoxy-coated cast iron.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
6" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Badger	E-Series Commercial	Ultrasonic		Straight pipe requirements
Badger	E-Series G2 Industrial	Ultrasonic		Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		Straight pipe requirements
Neptune	Mach 10)R900i	Ultrasonic		Straight pipe requirements
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
Diehl	Hydrus Bulk	Ultrasonic	Body is made of epoxy-coated cast iron.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
8" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Badger	E-Series Commercial	Ultrasonic		Straight pipe requirements
Badger	E-Series G2 Industrial	Ultrasonic		Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		Straight pipe requirements
Neptune	Mach 10)R900i	Ultrasonic		Straight pipe requirements
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
Diehl	Hydrus Bulk	Ultrasonic	Body is made of epoxy-coated cast iron.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements

Irvine Ranch Water District - AMI and Meter Replacement Feasibility Study

Evaluation of Static Meters

Attachment A - Compatible Meters by Size

Manufacturer	Meter Name	Meter Type	Minor Deviations from IRWD Specs	Potential Conflicts with Standard Details
10" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	Straight pipe requirements
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		Straight pipe requirements
Neptune	Mach 10)R900i	Ultrasonic		Straight pipe requirements
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
ZENNER	ZSU Stealth	Ultrasonic		Recommended straight pipe requirements
12" Meters				
Master Meter	Octave	Ultrasonic	Made of stainless steel.	
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Neptune	Mach 10 C&I	Ultrasonic		
Neptune	Mach 10)R900i	Ultrasonic		
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
ZENNER	ZSU Stealth	Ultrasonic		
14" Meters				
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
16" Meters				
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
18" Meters				
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
20" Meters				
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	
Mueller	HbMAG	Electromagnetic	Maincase is made of epoxy-coated steel. Warranty doesn't include 5 years for accuracy.	
24" Meters				
Sensus	Hydroverse	Electromagnetic	Measuring tube is made of steel. Warranty doesn't include 5 years for accuracy.	

Impact Assessment

Irvine Ranch Water District

AMI Feasibility Study and Business Development Plan

Impact Assessment Report

December 2023



AMI Feasibility Study and Business Development Plan

Impact Assessment Report

December 2023

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Version Control

Issue	Revision No.	Date Issued	Page No.	Description	Reviewed By
1	1.0	08/31/2023		Draft AMI Impact Assessment	Kristy Lavelle
1	1.1	09/29/2023		Comments and feedback from IRWD addressed	Kristy Lavelle
1	1.2	12/8/2023		Final comments and feedback from IRWD addressed	Kristy Lavelle

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Attachment A-2 – Meter Maintenance

Attachment B – Customer Account Managed – Meter Establishment or Move-In/Move-Out

Attachment C – Billing Performed

Attachment D – Customer Inquiries

Attachment E – Payment Processed

Attachment F – Collection and Credit Managed

Acronyms and Abbreviations

ACS	Alexander's Contract Services
AMI	Advanced Metering Infrastructure
CC&B	Customer Center and Billing
DWR	California Department of Water Resources
CIS	Customer Information System
CS	Customer Service
CSS	Customer Service Specialist
ET	Evapo-Transfer
FA	Field Activity
FTE	Full Time Employee
IRWD	Irvine Ranch Water District
IT	Information Technology
MDM	Meter Data Management System
NaaS	Network as a Service
SaaS	Software as a Service
SLA	Service Level Agreement
UAT	User Acceptance Testing
WO	Work Order
WUE	Water Use Efficiency

1 Task Overview and Objectives

This task’s main objective is to provide a comprehensive assessment and report on the organizational impact of AMI on applicable IRWD business processes, people, and technology.

Understanding how the AMI solution will impact IRWD’s business processes is key to the success of a project. Effective change management drives greater benefit realization and achievement of project goals and objectives. Arcadis assessed five major business areas – Culture, Process, Organization, Technology, and Information – and their associated processes to identify areas of impact, as pictured in Figure 1.

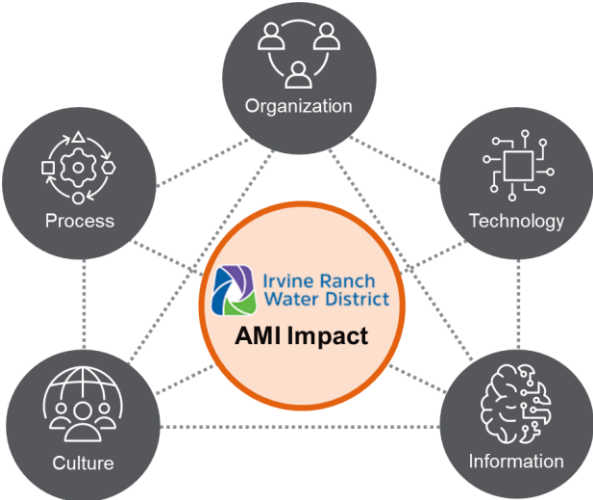


Figure 1. Impacted Business Areas

2 Process Maps

Arcadis interviewed key staff from several departments during workshops, reviewed business process diagrams provided by IRWD, and held follow-on meetings throughout the project to discuss and understand the current processes for meter-to-cash. Based on the outcome, summary level current state business process diagrams were developed with reference to the Utility Meter-to-Cash Process Areas shown in Figure 2.

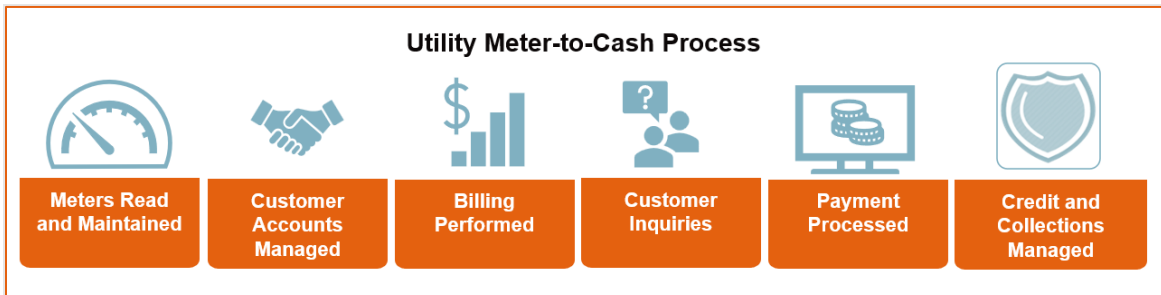


Figure 2. Utility Meter-to-Cash Process Areas

The process diagrams depict a summary of the current state but are additionally annotated to indicate areas that will be improved or changed as a part of the adoption of AMI. Table 1 provides a summary of these improvement opportunities.

Table 1. Process Areas and Improvement Opportunities

Process Area	Improvement Opportunities
Meters Read and Maintained	<ul style="list-style-type: none"> • The contracted manual meter reading services could be eliminated; reads are obtained from AMI. A very small number of manual or mobile reads may be required monthly. • Re-reads: The number of re-read service orders should be reduced (refer to Task 3, Business Case Report, Section 4 for further detail). A desktop analysis of historical data can be performed before issuing a work order. • Accounts with no billing read or zero consumption when consumption is expected should be detected and addressed before billing. • New Service: when a new endpoint is installed, there will be a new field procedure developed by the AMI vendor for verifying connectivity to the AMI network. IRWD staff will be trained by the AMI vendor on this new process.
Customer Accounts Managed	<ul style="list-style-type: none"> • Change of Ownership (move-in/move-out) will not require a field activity to obtain the start and stop reads. These can be gathered from the office. • Remote Shut-off or Virtual Shut-off – When a customer moves out, instead of physically shutting off the service, the account can be virtually shut-off. The system will alert if there is usage on the account and a service order can be created to

physically shut off the account. Most accounts will not require a physical shut off.

Billing Performed	<ul style="list-style-type: none"> • Meter reading error checking is significantly different. All meters are continuously monitored for read performance and any issues are addressed prior to the billing window opening. There should be no more need to reactively address missed reads and estimated bills will be reduced significantly. Meter read exceptions should be identified through reports from the AMI headend software and/or external analytic software, and any problems should be addressed in a timely manner. • Customers can be notified of potential on-property leaks, so that they can be fixed before the customer incurs substantial water charges. Multiple communication channels should be considered including web portal, outbound dialing, and mailers. • Billing cycles can be optimized.
Customer Inquiries	<ul style="list-style-type: none"> • Billing disputes can be mediated with the use of interval data and the customer portal. • High reads can be identified and corrected prior to billing, reducing high-bill complaints. • Water use efficiency benefits in locating leaks and notifying customers, and reducing site meter checks. • AMI would reduce the need for bill adjustments.
Payment Processed	<p>The existing payment channels will remain the same with no change due to AMI.</p>
Credit and Collections Managed	<p>Remotely shutting off delinquent accounts can be made possible with AMI. Rather than deploying in-person field staff to perform this task, the potential use of remote shut-off valves would eliminate the majority of this process, allowing for quicker and a more efficient process at the click of a button.</p>

The District maintains a water efficiency program that is responsible for monitoring water usage and working with customers on efficiency and water use. Through discussions with staff it was determined that the District would benefit from the advanced water analytics enabled by AMI and inclusion of AMI data into the advanced customer portal (including water efficiency functions) to help enable and measure the effects of the District's efficiency programs.

In addition to the meter-to-cash processes listed above, the District is required to submit non-revenue water reporting to the California Department of Water Resources (DWR). An annual water loss audit is submitted to show lost and unaccounted for water. The audit is developed as a "top-down" analysis of non-revenue water by assessing water source, water treatment (production), and billed revenue. Overall, the non-revenue water and water usage reporting processes could be significantly improved through the use of AMI data and advanced water analytics. Advanced water analytics can be achieved by developing in-house, developing by means of outsourcing, or acquiring a 3rd party platform. Business needs should be evaluated and advanced water analytics use cases should be identified and prioritized as inputs into the water analytics strategy. Consideration for an MDM is recommended when integrating the AMI data into systems beyond CIS.

Attachments A-F illustrate the key meter-to-cash business processes in their current state and annotate the future state of the processes, post AMI implementation.

3 New Processes and Roles

AMI projects require intentional planning for people, as well as process impacts. This section encompasses topics that could help to prepare IRWD for a future AMI project including:

- New processes
- Resource planning considerations during implementation
- Roles and responsibility impacts post implementation

3.1 New Processes

As discussed previously, AMI will enable a more proactive meter-to-cash operating model where meter reading issues can be identified and corrected in advance of the billing window. To accomplish this, a number of new business processes will be required:

1. **Proactive Meter Read Monitoring**
 - a. Daily monitoring of meter reading reports and dashboards using the AMI headend and other applicable systems to determine the reading Service Level Agreement (SLA).
 - b. Identify endpoints that are not reading and create repair service orders; track these orders to resolution.
2. **Reporting and Analytics**
 - a. Develop custom reports and dashboards.
 - b. Analyze data on a routine and ad-hoc basis.
3. **Meter Alarm Monitoring**
 - a. Monitor meter alarms and initiate appropriate actions when alarms are observed:
 1. Leak and High Usage
 2. Reverse Flow
 3. Meter and AMI Endpoint Health and Battery
 4. Tampering or Theft

5. Zero Consumption
6. Temperature or Pressure

4. Network Monitoring

- a. Review the AMI headend system to verify proper operation of the data collectors, work with maintenance resources (internal if utility-owned or vendor if NaaS) to correct issues.
- b. Verify the system as a whole is receiving data as expected, use the AMI headend to monitor network health and performance.

5. Software and Service Monitoring for AMI System

- a. Verify that AMI software is functioning as expected and work with the SaaS vendor and IT staff to correct issues.

3.2 Resource Needs During Implementation

An AMI implementation project requires commitment of resources to support the implementation process. In Figure 3, the resource needs are summarized by phase. It is important that IRWD assign a Project Manager which will be about 50% of an FTE. IRWD's PM would be a central point of contact for coordinating internal resources and vendor project resources. IRWD's Core Team (approximately 6 – 8 members) should include functional leads from the key departments in IRWD that will be using the AMI solution.

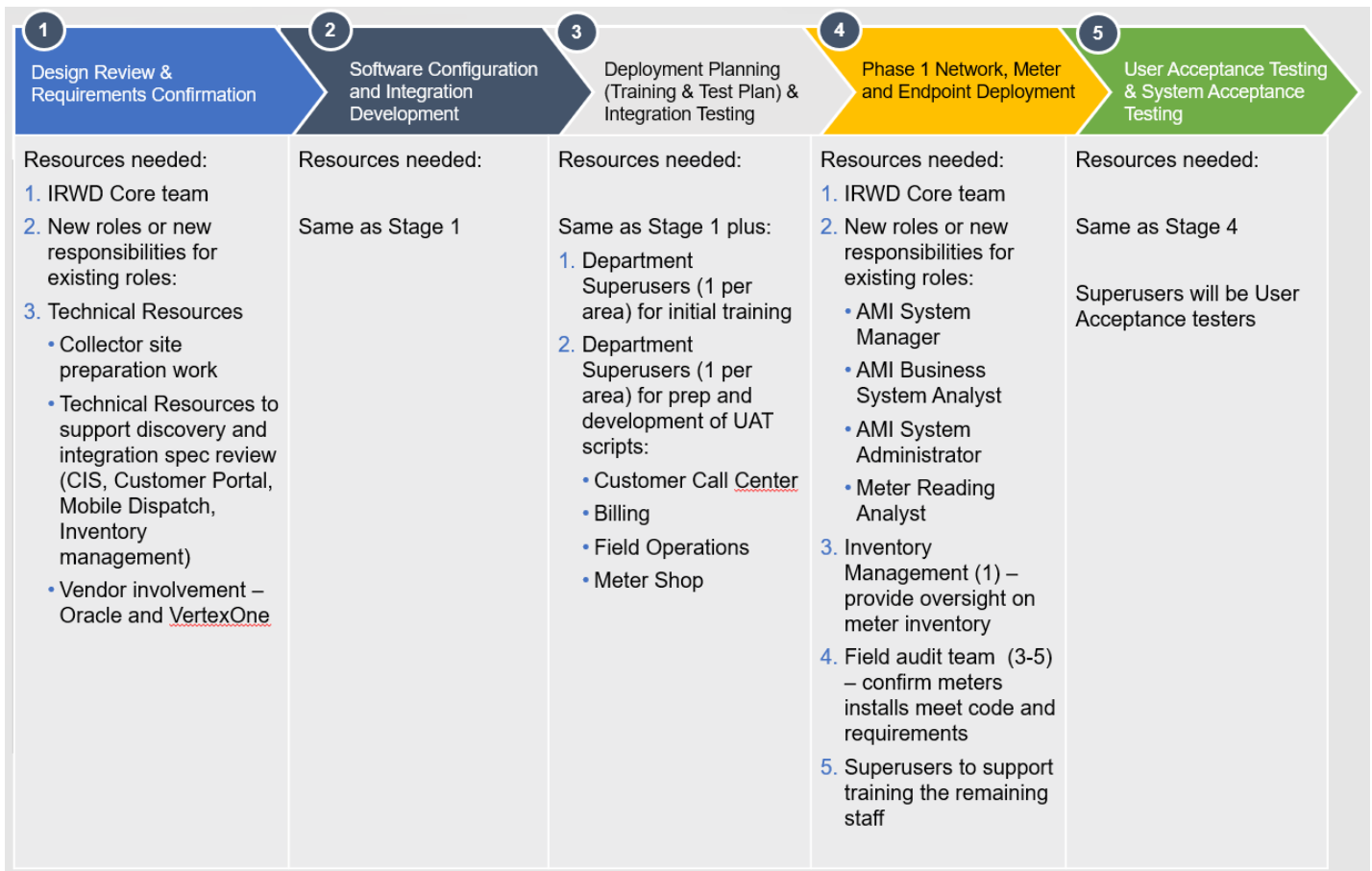


Figure 3. Resources by Implementation Phase

3.3 AMI Roles and Responsibilities

AMI will have impacts on people – the roles and responsibilities within the organization. Not all these example roles are required. These roles can be folded into existing roles by expanding responsibilities, or these roles may be new. The needs are dependent upon IRWD’s AMI strategy and should be planned accordingly. The following examples of roles and responsibilities may be considered in preparation for implementing an AMI solution.

3.3.1 AMI System Manager

Manages AMI Section responsible for the administration and support of AMI proprietary systems, applications, and integrations. Handles ongoing program management, supporting project oversight, roadmap monitoring and updates, and ongoing governance. The AMI System Manager is responsible for managing the Section team as well as championing the solution throughout IRWD.

Desired skills and qualifications for this position would include:

- Deep understanding of the AMI strategy and business case, elements, and needs.
- Project management and communication skills for stakeholder engagement to drive timely decision making.

- Ability to analyze program trends, generate quality reports, define goals and abide to regulatory requirements.
- Coordination of cross-functional resources

3.3.2 AMI System Administrator

Participates in the planning, management, and administration of the AMI system, ensuring that meter data is correctly transmitted to the proper entities. Maintains the read performance of the AMI system, ensuring the integrity, reliability, accuracy, and availability of meter data are always maintained. Troubleshoot issues to provide for optimal system performance. Collaborate with outside vendors and service providers, IT, and data users across IRWD. Leads the transformation of business needs into technical requirements.

Desired skills and qualifications for this position would include:

- Understanding of the AMI strategy and business case, elements, and needs.
- Experience in the IT environment, AMI hardware and software.
- Knowledge of technical requirements of installed system, collaborating closely with vendors and providers to solve problems, maintain system integrity and define functional requirements for AMI system upgrades.
- Ability to spot and manage issues related to hardware, server resources, systems, and key AMI processes.

3.3.3 AMI Business System Analyst

Process the AMI data to uncover hidden information in order to help IRWD make smarter decisions to deliver even better service to customers and improve efficiency program measurement. Focuses on applying data mining techniques, doing statistical analysis, and building high quality prediction systems. Makes connections across data sets. Performs advanced reporting. Ensures data integrity. Plays a key role on special projects. Critical thinking and problem-solving skills are essential for interpreting data. A passion for machine-learning and research.

Desired skills and qualifications for this position would include:

- Savvy about data extraction, cleansing and analysis, deploying sophisticated analytical tools, queries, and other similar programs to high volume of data.
- Ability to proactively identify and solve problems of varying complexity that may arise when managing data.
- Extreme attention to detail, providing data to various stakeholders, including customers, maintaining the integrity of data and confidentiality.
- Background in mathematics, engineering, statistics, or computer science.

3.3.4 Meter Reading Analyst

Analyzes the AMI system to identify field issues including missing reads, failed equipment, alerts, and more. Directs field teams to resolve issues in a timely manner. Manages inventory and functionality of equipment in the field.

Desired skills and qualifications for this position would include:

- Understanding of AMI hardware technology.
- Ability to identify and solve problems, escalating the issue when necessary.
- Organization skills, attention to detail, proactivity, and good communication skills.

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AMI High-Level Roadmap

Irvine Ranch Water District

AMI High-Level Roadmap

July 2024



AMI High-Level Roadmap

July 2024

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Version Control

Issue	Revision No.	Date Issued	Page No.	Description	Reviewed By
1	1.0	06/24/2024		Draft AMI Roadmap	Kristy Lavelle
2	2.0	7/18/2024		Final AMI High-Level Roadmap	Kristy Lavelle

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Acronyms and Abbreviations

AMI	Advanced Metering Infrastructure
CC&B	Customer Care and Billing
CDWR	California Department of Water Resources
CIS	Customer Information System
IRWD	Irvine Ranch Water District
MDM	Meter Data Management System
SOW	Scope of Work
USBR	United States Bureau of Reclamation

1 Task Overview and Objectives

This task's main objective is to provide an AMI high-level roadmap, which is a high-level project plan, specific to IRWD. The Needs Assessment and Business Case results, as well as meeting discussions and feedback throughout the project, have informed the AMI high-level roadmap.

Based on practical experience with other water AMI projects, there are typically four major phases as illustrated in Figure 1. The phased approach helps to mitigate and manage risk associated with the AMI project.

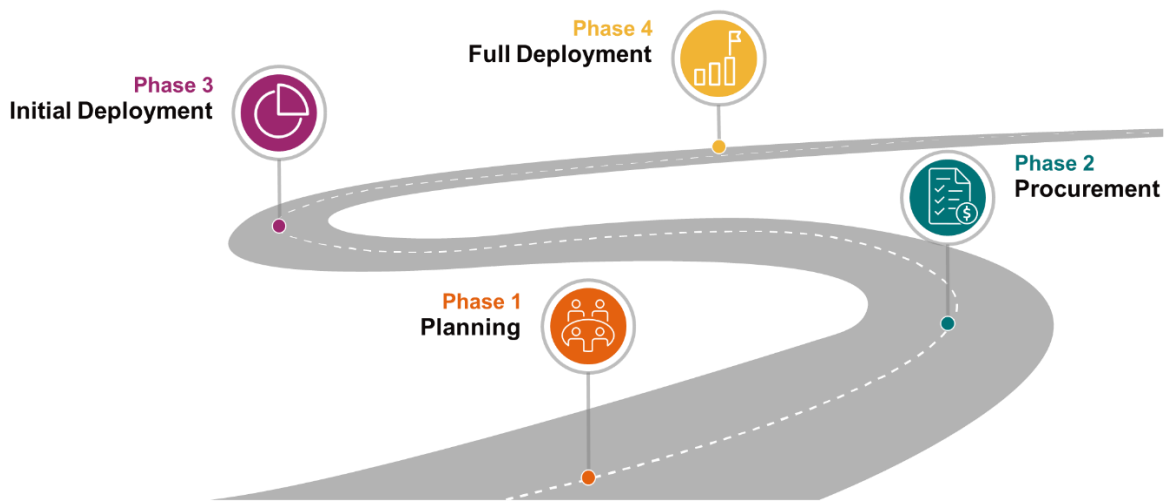


Figure 1. AMI Project Phases

2 AMI High-Level Roadmap

Arcadis has developed the IRWD AMI High-Level Roadmap by taking into consideration IRWD's AMI needs, the results of the business case, as well as Arcadis' experience with AMI projects. The roadmap aligns with the four major phases outlined in Figure 1.

AMI High-Level Roadmap

IRWD AMI High-Level Roadmap		Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7															
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4												
Phase	Task Description																																								
1	Technology & Telecommunications Assessment, Customer Portal & MDM Planning	█																																							
1	AMI Funding Planning		█																																						
2	AMI Procurement - RFP, Selection, Contract					█				Signed Contract with AMI Vendor & Installation Contractor																															
3	Initial Deployment - Software & Integrations									█				Software Installation & Integrations Complete																											
4	Full Deployment - Network Installation ¹													█				Network Fully Deployed																							
4	Full Deployment - All Meters Installed																																								

1 - if applicable (if cellular AMI, no network deployment is needed)

Figure 2. IRWD AMI High-Level Roadmap

2.1 Year 1 – Continued Planning

Year 1 focuses on the continuation of the Planning phase. This includes an assessment of the type of AMI technology and telecommunications that would be suitable for IRWD’s service area. It would also include evaluating potential software applications including the Customer Portal and Meter Data Management (MDM). The continued planning also evaluates and identifies project funding strategies, including available and applicable grants.

2.1.1 AMI Technology and Telecommunications

IRWD provides water and sewer service to a diverse geographic area which includes a large valley and canyons near the coast and inland foothills of its 181 square mile service area. The core function of AMI systems is meter data collection and transmission so determining the viability of AMI technologies and communication strategies is an important part of planning for the procurement phase and would be an initial step in the development of an implementation plan.

2.1.2 Customer Portal

IRWD has implemented the WaterSmart Customer Portal. VertexOne acquired WaterSmart in 2020 and has rebranded it to VXsmart. WaterSmart is one of the more advanced customer portals available on the market. However, without AMI data, IRWD is not able to take advantage of the key features. Arcadis recommends that IRWD evaluate the latest version of VXsmart as well as the features that will be available with AMI data. During the evaluation process it is important to consider the customer engagement strategy including future desired activities. After evaluation, IRWD should decide whether to remain with the VXsmart customer portal or choose to elicit proposals from other capable and qualified vendors.

2.1.3 Meter Data Management (MDM)

AMI data management requires proper evaluation and planning as the sheer amount of data can quickly become overwhelming. It is recommended this is done up front and early in the project to form a more proactive solution. An MDM is a common and viable solution for many water agencies. An MDM solution offers long-term data storage, pre-processing of meter read data such as validation, editing, and estimation, as well as dashboards and analytic tools. There are many solutions available, including Oracle C2M. Since IRWD utilizes Oracle Customer Care & Billing (CC&B), Arcadis suggests that IRWD evaluate the Oracle C2M solution, as well as reviewing other MDM solutions available on the market. IRWD should decide whether to utilize an MDM solution and if so, decide on a procurement strategy.

2.1.4 AMI Funding Planning

AMI projects are costly and how these projects are funded should be thoroughly evaluated. Bonds, as well as low-interest loans such as State Revolving Fund (SRF), are common options. Fortunately, IRWD has many grants available to pursue, as discussed in the Business Case Report. Arcadis recommends evaluating the WaterSMART grant as we believe it to be one of the most viable options. Below are some tips to be successful with obtaining USBR grant funding:

Timeline:

- The next USBR WaterSMART Grant application deadline is October 30, 2024. (Review this link for additional details - <https://www.usbr.gov/watersmart/weeg/index.html>).
- It is recommended to allow at least 2 months to work on the grant application.
- As an example, the City of Santa Barbara has significant experience with the WaterSMART grant. They have received four WaterSMART grants in the past decade, and they use a team of staff to work on the effort. Each staff person is assigned to different parts based on expertise and availability. Many hands make the task more doable.

Content:

Review the list of past awardees (available on the website included in 1a) and their projects, many of which are AMI, and many of these AMI projects are phased, to see who else has been awarded grant funds and how they structured their phases. Consider reaching out to the agency and ask them for their grant application. The City of Santa Barbara reached out to Moulton Niguel Water District who was awarded the grant before them. Contacting a successful recipient can be very helpful.

Options for phasing of the AMI project:

- Funding group 1: up to \$500k in 2 years
- Funding group 2: up to \$2 million in 3 years
- Funding group 3: up to \$5 million in 5 years

Most agencies tend to go for grant funding in one round of funding for the full installation of the meters. The City of Santa Barbara's project did not include meter installations, so they went after two phases of funding but not full meter installation.

The key element is that all phases must prove they save water. A possible project phasing could be the following:

- Phase 1 is network installation
- Phase 2 is 50% of meters (perhaps selected by the oldest average age of meters by route)
- Phase 3 is remaining 50% of meters

Another possible project phasing could be:

- Phase 1 is network installation and customer portal updates
- Phase 2 is large meters
- Phase 3 is small meters

Application recommendations:

- The City of Santa Barbara spoke to the USBR for feedback on their grant application after successfully being awarded the AMI grant in 2020. The City was kind enough to share this feedback from the meeting with USBR staff, highlighted below:
 - Group 1 funding tends to be less competitive since they can spread funding out to more projects as Group 1 projects are for smaller amounts. Some applicants apply under both funding groups. For example, apply under Group 2 for the full project and under Group 1 for a phase of the project. It can be the same project in both funding groups. You would have to submit two separate applications. In the event that both applications score well enough, they will ask you which funding amount you want as you cannot ultimately have both. The City of Santa Barbara

- has never done both funding groups at the same time. This is just something that the USBR shared with the City.
- Quantifiable water savings is the most important part by far. This earns the most points, and the review committee needs to see all calculations and info clearly spelled out for them. It helped that the City had a pilot with info to share in that section. If doing phases, keep the water savings in mind. Each portion of the AMI project that is applied for needs to have substantial water savings for it to be eligible. The acre-feet per year of water saved are not scaled to the size of the water agency. IRWD is a large water agency, so this may not be an issue. However, since the City of Santa Barbara's service area (and thus, water savings) is so small, the City was ranked lower. The City of Santa Barbara barely made the cut for awarding in the year they applied.
 - The non-federal cost share is also important. Priority is given to projects that are picking up much more than half of the cost. For example, 80% versus 55% water utility cost share would score higher.
 - The review committee is supposed to come into the room as essentially a blank slate. Therefore, you need to fully explain everything and take nothing for granted. i.e. explain that it is an arid climate, that it is drought prone, that water supplies come from x, y, and z. Do not be afraid to repeat yourself. Do not reference another section and assume they will look at it; repeat and explain all over again, even if it seems redundant to you. They do not read the sections in order. Even if they do have knowledge of the area, they are only supposed to give points based on what's put in the application.
 - Projects that have benefits to a greater region (rather than just your customers) rank higher. That is also why they collaborate regionally on grants when possible (besides just needing more agencies to boost water savings amounts).
 - Bureau priorities section requires significant detail. The City of Santa Barbara did not rank high on this one. Be sure to discuss project specifics and tie to the USBR priorities. The review committee is not going to make the connections for you. Also, be sure to link priorities to the project and explain.
 - The implementation and results section tends to score well if you have funding available, and that the project is ready to proceed. One thing noted was reviewers were looking for a more detailed schedule like a Gantt chart with all the milestones broken down.

If your application is successful and your funding is awarded, it is recommended that you track your expenses in detail by month or quarter and reporting year. The City of Santa Barbara was audited on their AMI grant, and it was based on a July 1 Fiscal Year, even though USBR's required reporting was based on 6-month status reports starting Sept 1 and March 1.

2.2 Year 2 – Procurement

Phase 2, the Procurement phase, can take anywhere from 6-18 months. IRWD's roadmap indicates a 12-month procurement phase, which is the average time for AMI procurement. There are several things that may be procured as part of an AMI project. They are:

- Water Meters
- AMI Technology
 - AMI Endpoints
 - AMI Data Collection Equipment

- AMI Software
- Professional Services
 - Software Integration
 - Project Management
 - Meter & AMI Installation
- Vendor Services
 - CIS Integration
 - Software Modifications
- Additional Software
 - Customer Portal
 - MDM
 - Analytics

There are several steps throughout the Procurement phase, as illustrated in Figure 3.



Figure 3. Procurement Steps

There are two ways to procure AMI. One way is a turn-key procurement strategy. Turn-key procurement means one procurement for all AMI equipment, software, and services. This procurement results in one prime business responsible for all aspects of the project. This is generally the fastest procurement approach and makes one party fully accountable for the project, meaning there is one vendor for IRWD to manage. IRWD will still need to assign a Project Manager and be heavily involved in the day-to-day activities. The other procurement strategy involves separate procurements for the various equipment, software, and services required of an AMI project. This procurement approach generally takes more time and results in multiple vendors to manage, and therefore, introduces more risk for the utility.

There are advantages and disadvantages associated to each strategy which are described in Table 1.

Table 1. Procurement Approach Advantages and Disadvantages

	Advantages	Disadvantages
Turn-Key Procurement	Single contract with IRWD	Sometimes prices are marked-up
	Avoids "finger pointing"	Time - Prime has to develop contracts with their subcontractors
	Ensures solution components are and remain compatible	
	Prime contractor selects their own team members	
	Prime will manage the installation vendor	

Separate Procurements	IRWD has more control to procure services from the firms and suppliers with which they have experience	IRWD will feel like a General Contractor, managing multiple vendors and contractors
	Potentially better pricing (no mark-ups)	Time - Requires multiple contracts
		More risk due to IRWD having to manage multiple vendors and coordinate activities such as software integrations and installations logistics (e.g. ordering equipment to maintain installation schedule)

Neither procurement option is necessarily better than the other. It ultimately depends on how the agency wants to manage the project, and what risk they are willing to take on.

AMI proposals are typically evaluated based on ability to meet technical requirements, software capabilities, references, and price. It is not recommended that an award be made solely on price.

Contract negotiations can take a significant amount of time. It is important to clearly understand the responsibilities and liabilities of all parties as defined in the project scope, as well as network support and warranties that will become critical later in the life of the AMI system.

2.3 Year 3 – Initial Deployment

Phase 3, Initial Deployment, focuses on implementing the software, establishing and testing the integrations and data flows thoroughly. This involves the deployment of a small percentage of the network (if applicable), as well as meters and endpoints, approximately 5%.

Data integrations are typically the most challenging due to the involvement of IRWD’s vendor resources, specifically for the Oracle CC&B billing system. Multiple vendors must be closely coordinated as their integration activities become dependent upon one another. Arcadis recommends using this initial deployment approach to test and confirm data from the various meter and endpoint combinations across the network. Additionally, the initial deployment is an opportunity to confirm the solution configurations using new business processes. The testing phase also provides a great hands-on learning experience for IRWD personnel to become familiar with the AMI equipment and software.

2.4 Years 4-7 – Full Deployment

During Phase 4, the remainder of the AMI network (if applicable to the chosen AMI solution) will be deployed. This can begin as the Initial Deployment is wrapping up.

At the beginning of full deployment, there will be a ramp-up period as the installation contractor completes the necessary training for the installation technicians and establishes the standard operating procedures for the project. Full deployment will get into a steady-state rhythm and near the end, there will be a ramp down period as the final installations are completed.

For meter replacements, IRWD can consider using factors such as revenue, meter age, number of work orders, etc., to create a ranking system to prioritize routes. Mass meter deployments are typically installed by route, and once a route is completed, mass manual reads of that route can be abandoned.

Arcadis recommends a full system acceptance evaluation be conducted before the project is complete and the system is handed off to IRWD. This system acceptance should validate meter functionality and performance, AMI read performance including interval data, and software functionality. System acceptance criteria should be clearly stated in the contract. This acceptance ensures that IRWD receives a system that meets expectations established in the contract and SOW.

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“Exhibit “B”

Comparison of Meter Reading Alternatives

Item	BASELINE (Million Dollars)	METER READING ALTERNATIVES (Million Dollars)					
	Alternative 1 - Contracted Meter Reading "Current Conditions"	Alternative 1A - In-House Meter Reading "Plan B"	Alternative 2 - AMI w/Mechanical Meter Replacement " Mechanical Meter AMI"	Alternative 3 - AMI w/Static Meter Replacement "All-In AMI"	Alternative 4 – Replace Oldest Meters/Retrofit Newer Meters "Age Based AMI"	Alternative 5 - Static Meter Replacement Only "No AMI"	Alternative 6 - AMI Large Meters Only "Size Based AMI"
Meter Reading Cost NPV	\$24.2	\$60.5	\$0.0	\$0.0	\$0.0	\$24.2	\$22.3
Equipment & Implementation Cost NPV	\$31.8	\$31.8	\$74.8	\$75.7	\$65.6	\$39.4	\$17.6
Lifecycle Cost NPV	\$56.0	\$92.3	\$74.8	\$75.7	\$65.6	\$63.6	\$39.9
Lifecycle Benefit NPV	\$0.9	\$0.9	\$10.7	\$67.2	\$10.3	\$61.6	\$21.2
Net Lifecycle NPV	\$55.1	\$91.4	\$64.1	\$8.5	\$55.3	\$2.0	\$18.7
Financial Impact of Alternative		\$36.3	\$9.0	(\$46.6)	\$0.2	(\$53.1)	(\$36.4)
Meets IRWD Objectives	No	No	No	Yes	No	No	No

Conclusions:

- A. As more urban retail agencies convert to AMI, contracting for manual meter reading services may become increasingly difficult.
- B. The cost of IRWD conducting its own meter reading program (Alt. 1A) would be \$91.4 million over 15 years and offer no additional benefit.
- C. The financial benefits of changing out all meters in IRWD's service area to static meters (Alt. 5) would outweigh the costs to IRWD and result in \$53.1 million in avoided costs and increased revenue to the District.
- D. For \$6.5 million in reduced avoided costs and increased revenue over 15 years as compared to Alt. 5, IRWD could realize the benefits of static meters and AMI together by implementing Alternative 3.
- E. Changing out all meters in IRWD's service area to static meters with AMI with Alternative 3 would result in a \$46.6 million in avoided costs and increased revenue over 15 years compared to current conditions (Alt. 1).
- F. Alternative 3 would allow IRWD to achieve all of its objectives for deploying a meter reading program.

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IRWD ADVANCED METERING INFRASTRUCTURE AND STATIC METER REPLACEMENT FEASIBILITY STUDY

IRWD BOARD OF DIRECTORS
AUGUST 12, 2024

AGENDA

Meter Reading System Objectives

Advanced Metering Infrastructure (AMI) Overview

AMI and Static Meter Replacement Feasibility Study

Study Findings and Conclusions

Next Step



IRWD METER READING SYSTEM OBJECTIVES

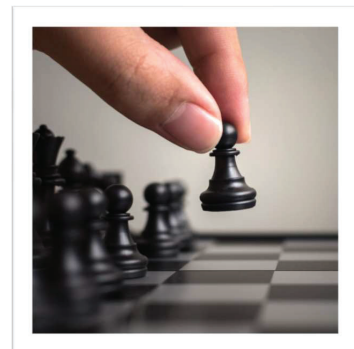
1. Water use measurement accuracy.
2. Revenue generation based on actual water use and cost of service.
3. Maintaining meter performance.
4. Meter reading reliability.
5. Actionable information for customer water use.
6. Long-term sustainability.
7. Compatibility with IRWD's billing system.
8. Cost-effectiveness.



3

HOW MIGHT AMI ALIGN WITH IRWD'S TARGET ACTIVITIES?

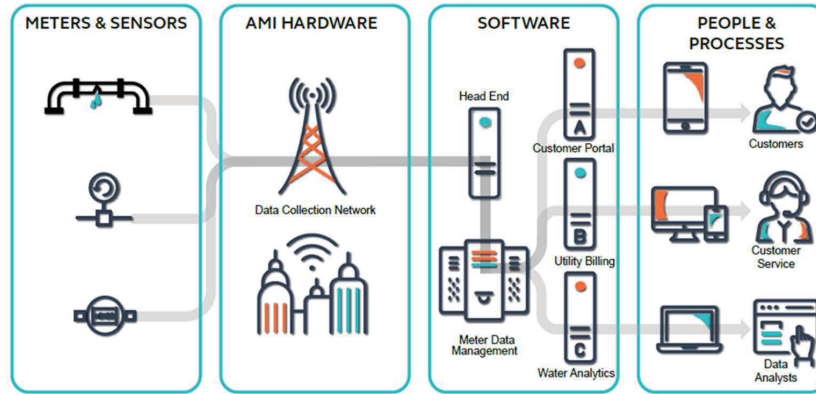
- #8. Maximize water use efficiency in the community.
- #9. Maximize watershed protection.
- #10. Evaluate and invest in projects and programs that will enhance future long-term water supply reliability and resiliency to climate change.
- #14. Identify, assess, and implement new technologies, systems, and facilities to improve operating efficiency.
- #16. Collaborate with other agencies and entities through leadership and innovation.
- #17. Enhance customer communications and community outreach.



4

ADVANCED METERING INFRASTRUCTURE OVERVIEW

Smart meters, communications networks, and data management platforms produce more frequent and more accurate usage data.

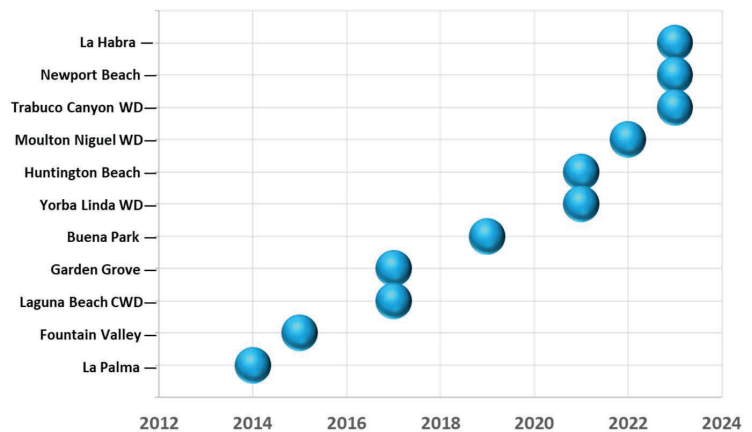


HISTORY OF AMI

- Automated meter reading (AMR)
 - Implemented in 1980's
 - Walk-by or drive-by meter data collection
 - One-way communication
- AMI technology first implemented in early 2000's
 - Two-way communication
- Other large agencies
 - Eastern Municipal Water District
 - San Francisco PUC
 - East Bay MUD

Results from MWDOC survey

When was your AMI/AMR installed (approximately)?



TYPICAL BENEFITS ASSOCIATED WITH AMI SYSTEMS

- Expedited identification of customer-side leaks.
- Can support identification of distribution system leaks.
- Improved water demand forecasting and hydraulic modeling.
- Carbon footprint reduction:
 - Reduced vehicle usage; and
 - Reduced water usage (embedded energy).
- Increase customer satisfaction from “real-time” data in the customer portal.
- Reduce large meter maintenance requirements.
- Improved allocation of resources:
 - Reduce manual processes; and
 - Increase automated, data-driven workflows.



AMI and Static Meter Replacement Feasibility Study



AMI AND STATIC METER REPLACEMENT FEASIBILITY STUDY

Study Elements:

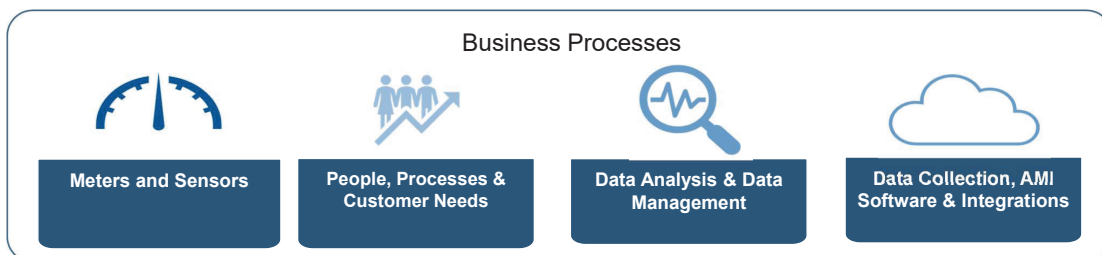
- AMI needs assessment;
- AMI impact assessment;
- Static meter evaluation;
- Meter reading alternatives;
- Cost-benefit analysis of alternatives; and
- High-level roadmap for implementation.



AMI NEEDS ASSESSMENT

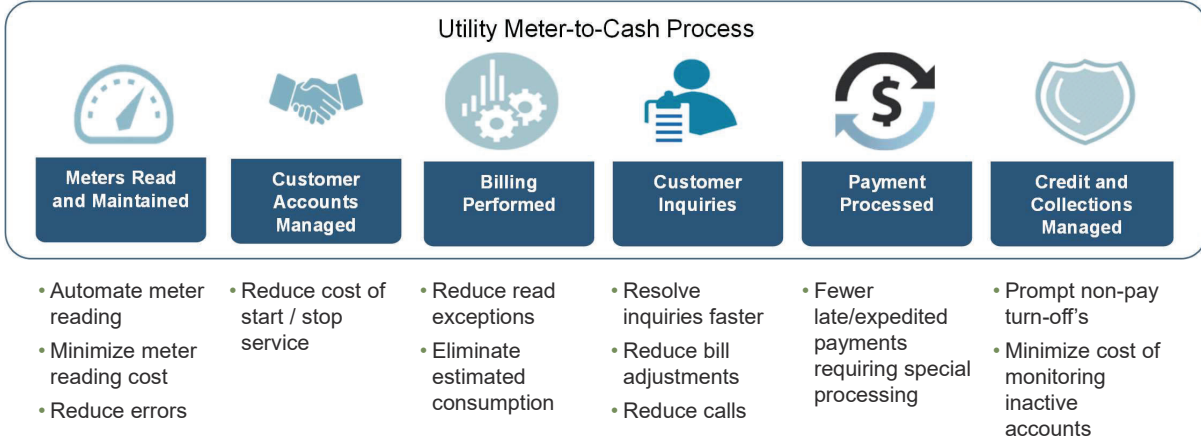
- Manual readings increase potential for errors and billing delays;
- Manual readings limit data points to once per month;
- Development / redevelopment continues to generate new metered connections;
- Current meter reading service provider is the only company available; and
- Fewer companies are producing manually-read water meters.

How could AMI help?



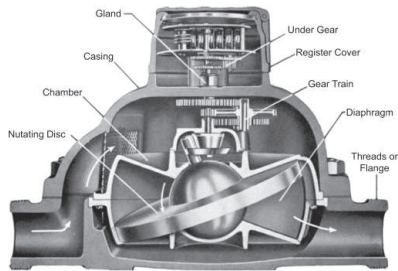
AMI IMPACT ASSESSMENT

What would AMI change?



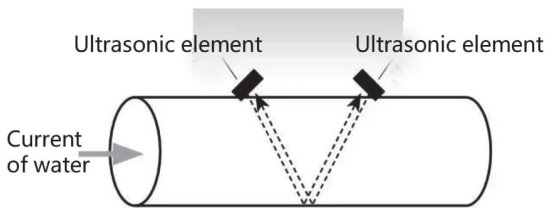
METER DESIGN

Mechanical Meters Positive Displacement



Badger Recordall (positive displacement)

Static Meters Ultrasonic & Electromagnetic



Neptune Mach 10 (Ultrasonic)



Badger e-series (Ultrasonic)



STATIC METER EVALUATION

- Compared static meter specifications with IRWD’s existing standard specifications.
- Surveyed 11 agencies currently using static meters.
- IRWD has already initiated bench- and field-testing of static meters.



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STATIC METER SURVEY

Utility*	Total Meters	Static Meters	Date Started
Eastern Municipal Water District	172,000	7,200	2012
Moulton Niguel Water District	55,000	27,000	2011
Laguna Beach County Water District	9,037	8,373	2017
City of Santa Ana	45,610	11,000, soon 41,000	2020
City of Fountain Valley	17,400	16,000	2014
Long Beach Utilities	91,000	25	2019
City of Huntington Beach	53,000	10	2023
Alameda County Water District	86,000	71,000	2021
City of Davis	17,320	17,320	2018
Orlando Utilities Commission	160,000	2600, future 15000	2013
Madison County Water Department	36,000	35,640	2019

*All utilities also had AMI systems deployed



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METER READING ALTERNATIVES

Alternative No.	Description
1	Continue contracting for manual meter reading of mechanical meters.
1A	Implement in-house manual meter reading of mechanical meters.
2	Replace existing mechanical meters with AMI capable mechanical meters.
3	Replace existing mechanical meters with static meters that are AMI capable.
4	Replace the oldest mechanical meters with mechanical AMI meters and retrofit newer mechanical meters to make them AMI capable. As mechanical meters are due for replacement, they would be replaced with mechanical AMI meters.
5	Replace mechanical meters with static meters that are <u>not</u> AMI compatible and continue with contracted manual meter reading.
6	Replace large meters (2 inch and above) with static meters that are AMI capable. All other meters would continue to be manually read through contract services.

Study Findings and Conclusions



STUDY FINDINGS: STATIC METER ACCURACY BENEFITS

Category	Estimated Annual Unmeasured Flow (CCF)	Estimated Annual Water Revenue Gain	Estimated Annual Sewer Revenue Gain
Small Meters	902,159	\$2,416,975	\$323,740
Multi-Family	113,743	\$284,700	N/A
Commercial Meters	147,328	\$382,644	\$231,561
Industrial Meters	106,695	\$204,322	\$46,677
TOTALS	1,269,925	\$3,288,641	\$601,978

Total Revenue Gain (Water + Sewer)	\$3,890,619
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STUDY FINDINGS: METER READING COST COMPARISON

15-year lifecycle cost with a 5-year implementation

	Alternative 1 - Contracted Meter Reading "Business as Usual"	Alternative 1A - In-House Meter Reading "Plan B"	Alternative 2 - AMI w/Mechanical Meter Replacement "AMI, Mech. Meters"	Alternative 3 - AMI w/Static Meter Replacement "All-In"	Alternative 4 - AMI w/Age-Based Static Meter Replace and Retrofit "Age Based AMI"	Alternative 5 - Static Meter Replacement Only "No AMI"	Alternative 6 - AMI Large Meters Only "Size Based AMI"
Meter Reading Cost NPV	\$24.2	\$60.5	\$0.0	\$0.0	\$0.0	\$24.2	\$22.3



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STUDY FINDINGS: METER READING COST COMPARISON

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Financial Impact of Alternative		\$ 36.3	\$ 9.0	\$ (46.6)	\$ 0.2	\$ (53.1)	\$ (36.4)
Meets IRWD Objectives	No	No	No	Yes	No	No	No

Alternative 3 meets all District meter reading objectives.



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STUDY CONCLUSIONS

1. AMI will reduce / eliminate need for manual meter reading services.
2. In-house meter reading is the most expensive alternative and offers no additional benefits.
3. IRWD could realize \$53.1 million in avoided costs and increased revenues by changing from mechanical to static meters (Alternative 5).
4. For \$6.5 million less in avoided costs and increased revenues, IRWD could realize all the benefits of AMI and static meters (Alternative 3).
5. IRWD could realize \$46.6 million over 15 years by changing to static meters and implementing AMI (Alternative 3).
6. Alternative 3 would allow IRWD to achieve all meter reading system objectives.
7. Provides multiple other benefits that align with IRWD's Goals and Target Activities.

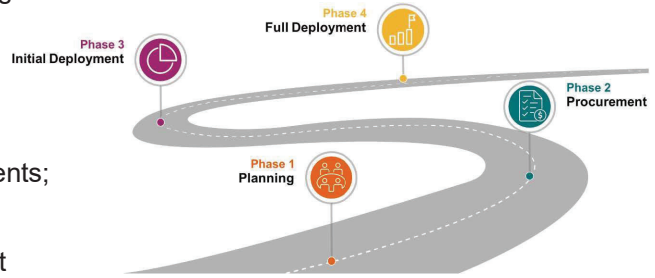


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NEXT STEP

Develop a detailed Implementation Plan with the following elements:

- A. Determine IRWD requirements for static meters, AMI, and data communications technologies;
- B. Prepare detailed cost estimates;
- C. Develop anticipated implementation schedule, including phasing requirements; and
- D. Identify IRWD's preferred procurement strategy.



RECOMMENDATION

- Approve a budget increase to Projects 12514 and 12515 in the amount of \$125,000 each, for a combined amount of \$250,000, to the FY 2024-25 Capital Budget to be used in developing a detailed AMI Implementation Plan.

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