

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

January 9, 2023

CALL TO ORDER 5:00 p.m.

PLEDGE OF ALLEGIANCE

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

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=m25299e224b455d083f3dab51b0f88f41>
Meeting Number (Access Code): 2483 463 3306
Meeting Password: r8AvkPRPQ63

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 COMMENT NOTICE

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, January 9, 2023.

COMMUNICATIONS TO THE BOARD

1. A. Written:
2. B. Oral:
3. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

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

PRESENTATION

4. PRESENTATION OF PROCLAMATION

Staff will present a proclamation to Mr. Lars Oldewage commending him for his dedicated and loyal years of service to the District.

CONSENT CALENDAR, ITEMS 5-10

5. BOARD MEETING MINUTES

Recommendation: That the minutes of the December 12, 2022 Regular Board meeting be approved as presented.

6. 2023 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: That the Board adopt an "SUPPORT" position on AB 30 (Ward), and a "WATCH" position on SB 3 (Dodd) and SB 34 (Umberg).

7. MEMORANDUM ON OFFICERS OF THE BOARD, COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS

Recommendation: That the Board receive and file the memorandum dated on January 9, 2023, titled Officers of the Board, Committee Appointments, and Other Assignments and approve attendance for meetings and events for the Board's representation for calendar year 2023 as delineated.

8. RESIGNATION AND APPOINTMENT OF TREASURER

Recommendation: That the Board appoint Cheryl Clary as the Irvine Ranch Water District Treasurer effective immediately upon Treasurer Jacobson's retirement.

9. TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the summary of fixed and variable rate debt, and disclosure report of reimbursements to Board members and staff, approve the November 2022 summary of payroll ACH payments in the total amount of \$2,588,858, and approve the November 2022 accounts payable disbursement summary of warrants 431653 through 432314, workers' compensation distributions, ACH payments, virtual card payments, wire transfers, payroll withholding distributions and voided checks in the total amount of \$18,527,409.

CONSENT CALENDAR, ITEMS 5-10, continued

10. VERIFICATION OF SUFFICIENT WATER SUPPLY FOR THE MARKET PLACE DEVELOPMENT PROJECT

Recommendation: That the Board approve the verification of sufficient water supply for the Market Place Development Project.

ACTION CALENDAR

11. PRINCIPLES FOR AGREEMENT WITH UNIVERSITY OF CALIFORNIA, IRVINE

Recommendation: The Board authorize the General Manager to execute an agreement with University of California, Irvine, to delegate cross-connection control, backflow prevention, and recycled water use related roles and responsibilities to the University with the oversight by IRWD, based on the principles presented.

12. DISTRICT-WIDE GENERATOR FUEL STORAGE BUDGET INCREASE AND PRE-PURCHASE

Recommendation: That the Board authorize a budget increase in the amount of \$1,748,800, from \$819,000 to \$2,567,800, for Project 11536 and in the amount of \$1,473,800, from \$522,000 to \$1,995,800, for Project 11537; and authorize the General Manager to approve a purchase order with Quinn Power Systems in the amount of \$1,068,450 for the District-wide Emergency Generator Fuel Storage, Projects 11536 and 11537.

OTHER BUSINESS

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

13. General Manager's Report

14. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.

OTHER BUSINESS, continued

15. Directors' Comments

16. 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.

January 9, 2023
Prepared and
submitted by: L. Bonkowski
Approved by: Paul A. Cook 

CONSENT CALENDAR

BOARD MEETING MINUTES

SUMMARY:

Provided are the minutes of the December 12, 2022 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE DECEMBER 12, 2022 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – December 12, 2022 Minutes

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Exhibit "A"

MINUTES OF REGULAR MEETING –DECEMBER 12, 2022

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President LaMar on December 12, 2022 at the District offices, 15600 Sand Canyon Avenue, Irvine.

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

Directors Absent: None.

Written and Oral Communications: None.

Also Present: General Manager Cook, Executive Director of Operations Chambers, Executive Director of Finance and Administration Clary, Executive Director of Technical Services Burton, Executive Director of Water Policy Weghorst, Director of Treasury and Risk Management Jacobson, Director of Strategic Communications and Advocacy / Deputy General Counsel Compton, Director of Water Resources Sanchez, Director of Human Resources Mitcham, Director of Maintenance Manning, Director of Information Services Kaneshiro, Secretary Bonkowski, General Counsel Collins, Consultant Newell, Legislative Consultants, and members of the staff and public.

PRESENTATION

General Manager Cook presented Barbara Mourant a Proclamation commending her 15 years of service to the District in the General Manager's office.

WORKSHOP

REVIEW OF 2022 ADVOCACY ACTIVITIES AND 2023 LEGISLATIVE AND REGULATORY ISSUES PLANNING

Following a review of the 2022 advocacy activities and 2023 legislative and regulatory issues presented by the District's legislative consultants, Director Withers reported that this item was reviewed by the Water Resources Policy and Communications Committee on December 8, 2022, and on MOTION by Withers, seconded by McLaughlin and unanimously carried, THE BOARD RECEIVED AND FILED THE "INITIAL 2023 LEGISLATIVE AND REGULATORY RESOURCE ALLOCATION PLAN" AND THE "LEGISLATIVE / REGULATORY ISSUES AND ACTIVITIES OF HIGH CONCERN TO IRWD IN 2023."

CONSENT CALENDAR

Prior to voting, Legal Counsel Collins left the dais as item No. 10 relates to 2023 General Counsel services with her firm. On MOTION by Reinhart, seconded by McLaughlin and unanimously carried, CONSENT CALENDAR ITEMS 6 THROUGH 10 WERE APPROVED AS FOLLOWS:

CONSENT CALENDAR (Continued)

6. BOARD MEETING MINUTES

Recommendation: That the minutes of the November 28, 2022 Regular Board meeting be approved as presented.

7. FISCAL YEAR 2021-22 ANNUAL COMPREHENSIVE FINANCIAL REPORT

Recommendation: That the Board approve the FY 2021-22 Annual Comprehensive Financial Report.

8. 2022 GENERAL DISTRICT ELECTION RESULTS

Recommendation: That the Board adopt the following resolution by title declaring results of November 8, 2022 General District Election.

RESOLUTION NO. 2022-19

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE
RANCH WATER DISTRICT DECLARING RESULTS OF
NOVEMBER 8, 2022 GENERAL DISTRICT ELECTION

9. AUTHORIZATION FOR PURCHASING BACKHOES

Recommendation: That the Board authorize the General Manager to execute a contract with Coastline Equipment Company in the amount of \$309,858 for the replacement of two backhoe loaders.

10. IRWD GENERAL COUNSEL CONTRACT FOR 2023

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Hanson Bridgett LLP for general counsel legal services focused on municipal law, transactional and non-complex issues, and rate-setting with a term of January 1, 2023, to December 31, 2023, and a not-to-exceed value of \$1,155,000.

ACTION CALENDAR

Legal Counsel Collins returned to the dais.

TURTLE ROCK ZONE 3 RESERVOIR CHLORAMINE BOOSTER STATION
BUDGET INCREASE AND CONSTRUCTION AWARD

Executive Director of Technical Services Burton reported that this project includes the installation of a chloramine booster station at the Turtle Rock Zone 3 Reservoir and Zone 3 to 4 Pump Station site to improve water quality and reduce nitrification events by maintaining proper chlorine residual and mixing in the reservoir. Mr. Burton said that construction of these improvements will replace the existing in-pipe chloramine injection facility at the Turtle Rock Zone 1 to 3 Pump Station that has had operational issues due to chemical precipitation in the

injection line. The scope of work for this project includes a new chloramine booster station building with chemical storage and dosing facilities, reservoir mixing system, and miscellaneous site improvements.

Mr. Burton said that in April 2021, Lee & Ro was retained to design the new facilities and site improvements. He said that the new chemical building will be constructed within District property, adjacent to the Turtle Rock Zone 3 to 4 Pump Station, and the site improvements include modifying the existing block wall to incorporate the new building, widening the driveway, and replacing the existing chain link access gate with a new ornamental steel gate to provide better access for chemical deliveries and to improve the aesthetics of the facility. A new stairway will also be constructed to allow staff to access the reservoir roof from the Chloramine Booster Station building. The existing concrete access road to the reservoir will be widened and realigned to improve maintenance access.

Mr. Burton said that staff coordinated extensively with the Turtle Rock Crest Homeowners Association (HOA) throughout the design process to ensure that the new building roof and block wall will match the existing pump station wall and the aesthetics of the community as this project was proposed several years ago and it was put on hold due to various issues with the HOA.

Mr. Burton said that the project was advertised for construction bids in November 2022 to a select list of 21 mechanical contractors. He said that the bid opening was held with bids received from Pacific Hydrotech Corporation, RC Foster, Orion Construction, and GSE Construction Corporation, Inc. He said that Pacific Hydrotech Corporation is the apparent low bidder with a bid amount of \$2,881,680 which was below the Engineer's estimate of \$3,920,000. He further said that staff reviewed Pacific Hydrotech Corporation's bid and has determined that it is responsive.

Mr. Burton said that certain materials are routinely sole sourced on IRWD projects in order to match other products in use on a particular public improvement or in order to obtain a necessary item that is only available from one source. While most sole-sourced items are individually under \$35,000 and only require a single bid per the District's procurement policy, there are occasionally items that are of higher value. On this project, some of the higher value items were sole-sourced including submersible mixers sourced to Pax Water Technologies with an estimated value of \$141,570, and an Aqueous Ammonia System sourced to Superior Water Technologies with an estimated value of \$91,000. Director Swan left the Board room. On MOTION BY Withers, seconded by Reinhart and carried (Reinhart, Withers, McLaughlin and LaMar voting aye, and Swan absent) (4-0-1 vote), **THE BOARD AUTHORIZED A BUDGET INCREASE IN THE AMOUNT OF \$2,308,000, FROM \$1,705,000 TO \$4,013,000, AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PACIFIC HYDROTECH CORPORATION IN THE AMOUNT OF \$2,881,680 FOR THE TURTLE ROCK ZONE 3 RESERVOIR CHLORAMINE BOOSTER STATION, PROJECT 11840.**

Director Swan returned to the Board room.

CONCEPTUAL TERMS FOR SPECIAL ACTIVITIES AGREEMENT WITH THE GROUNDWATER BANKING JOINT POWERS AUTHORITY

General Manager Cook reported that the Groundwater Banking Joint Powers Authority (GBJPA), a collaboration between the Irvine Ranch Water District and the Rosedale-Rio Bravo Water Storage District, is planning, designing, and preparing to construct the Kern Fan

Groundwater Storage Project in concurrent phases. Mr. Cook said that near-term activities will involve construction of recharge and recovery facilities on properties secured for the project in 2021. He said that the agreement that formed the GBJPA provides for the implementation of Special Activities Agreements approving independent operating projects or programs. He further said that the full project is operational, and a Special Activities Agreement between the GBJPA and its members is needed to ensure that IRWD has access to existing conveyance facilities to utilize its share of the recharge and recovery facilities to be constructed on the secured properties.

Director Reinhart said that this item was reviewed at the December 6, 2022 Water Supply Reliability Programs Committee meeting. On MOTION by Withers, seconded by Swan and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A SPECIAL ACTIVITIES AGREEMENT WITH THE GROUNDWATER BANKING JOINT POWERS AUTHORITY AND ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT FOR USE OF THE WEST ENOS AND STOCKDALE NORTH FACILITIES BASED ON THE TERMS PRESENTED, SUBJECT TO NON-SUBSTANTIVE CHANGES.**

ELECTION OF OFFICERS FOR 2023

General Manager Cook reported that the Bylaws of the District provide that the President and Vice President shall be elected by the Board from among its members with the term of office for one year, or until the election and qualification of their successors. Mr. Cook, acting as temporary Chairman conducted the election for President. Director LaMar asked to nominate a slate with Director McLaughlin as President and Director Reinhart as Vice President. No other nominations were made. On MOTION by LaMar, seconded by Withers, and carried (Withers, Reinhart, LaMar and McLaughlin voting aye, and Swan abstaining (4-0 vote), **DIRECTOR MCLAUGHLIN WAS ELECTED PRESIDENT AND DIRECTOR REINHART WAS ELECTED VICE PRESIDENT.**

GENERAL MANAGER'S REPORT

General Manager Cook reported that two weeks ago the District received the potable award for the Best Tasting Membrane Water in the Southwest Region by the Southwest Membrane Operators Association.

ORAL COMMUNICATIONS

Consultant Newell reported that the recent rain event did not cause any major problems in the canyons.

DIRECTORS' COMMENTS

Director Withers updated the Board on the selection process for a new General Manager for the OCSD and said that they were down to one final candidate. He further reported that he attended the meetings on the list.

Director Swan said he attended the meetings on the list along with a PPIC water summit, and a MWDOC Board Workshop with MWD Directors. He further said he will be attending a Colorado River Water Users Association conference in Las Vegas this week.

Director Reinhart said he attended the meetings on the list but was unable to attend the WACO meeting.

Director LaMar said that he attended the meetings on the list but was unable to attend the two California Council for Environmental and Economic Balance meetings.

Director McLaughlin said she attended a WACO meeting and noted that the meeting with Irvine Councilmember Tammy Kim was cancelled.

CLOSED SESSION

Legal Counsel Collins said that the following Closed Session would be held:

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9(d)(1): *IRWD v. OCWD, et al.*, Case No. 30-2016-00858584-CU-WM-CJC.

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors LaMar, Reinhart, McLaughlin, Swan, and Withers present. General Counsel Collins reported that in closed session, the board authorized special counsel to pursue IRWD's appellate rights following entry of final judgment. The motion carried 4-1, with LaMar, Reinhart, McLaughlin and Withers voting yes, and Swan voting no.

ADJOURNMENT

There being no further business, President McLaughlin adjourned the meeting.

APPROVED and SIGNED this 9th day of January 2023.

President, IRVINE RANCH WATER DISTRICT

Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, General Counsel
Hanson Bridgett LLP

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January 9, 2023
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook 

ACTION CALENDAR

2023 LEGISLATIVE AND REGULATORY UPDATE

SUMMARY:

This report provides an update on the 2023 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 consider the following actions/positions:

- *AB 30 (Ward) – Atmospheric Rivers Research, Mitigation, and Climate Forecasting Program: “SUPPORT;”*
- *SB 3 (Dodd) – Discontinuation of Residential Water Service: “WATCH;”*
- *SB 34 (Umberg) – Orange County Surplus Land Disposal Violations: “WATCH.”*

BACKGROUND:

The 2023-2024 state legislative session convened on December 5, 2022. New members of the Legislature were sworn into office that day. The Legislature then recessed until January 4, 2023, when it will reconvene the first year of the 2023-2024 legislative session. January 20, 2023 is the last day for bill requests to be submitted to the Office of the of the Legislative Counsel. The bill introduction deadline this year is February 17, 2023, although resolutions and constitutional amendments can be introduced after that date. The first policy committee deadlines are in late April and early May 2023.

A copy of the Legislative Matrix is provided as Exhibit “A”. Links to the bills discussed below are included within each discussion unless a separate exhibit is noted.

2023 California State Budget:

Assembly Budget Blueprint 2023-24:

On December 7, 2022, Assembly Budget Committee Chair Phil Ting (D-San Francisco) unveiled the Assembly Budget Blueprint 2023-24, “[Serving California: Making Government Work](#)” (the Blueprint). In the context of the \$24 billion “budget problem” projected by the Legislative Analyst’s Office, the Blueprint downplays the budget deficit and cites 10 years of planning for revenue volatility with \$37 billion in General Fund and Rainy Day Fund Reserves available to address the shortfall. The Blueprint also proposes to protect the past 10 years of State investment made in education, homelessness, health, human services, resources, and public safety. To do this, it presents a budget balancing approach that would:

- Shift spending to special funds temporarily, when possible, and consider borrowing from special funds;

- Reevaluate the timing of planned one-time expenditures, expediting “key infrastructure investments that are ready to go,” adjusting budget plans to more accurately reflect the timing of other expenditures, and potentially shifting billions of dollars of 2020-2023 expenditures to later years;
- Use reserves, which are sufficient to preserve all core programs, as planned; and
- Evaluate inflation cost adjustments for state expenditures, when appropriate.

The Blueprint also proposes crafting a “modernized” Gann Limit for voters to consider in 2024. (The Gann Limit, approved by California voters in 1979, capped state and local government spending at 1978-1979 levels, as adjusted for changes in population and inflation.) The Blueprint’s changes purport to “encourage building reserves and reducing debts,” and revisit reserve laws and initiatives to encourage larger reserves in the future.

While the Assembly has released its budget strategy plan, the Senate has not yet released its budget strategy. It will probably not do so until Governor Gavin Newsom submits his proposed Fiscal Year 2023-2024 budget to the Legislature on January 10, 2023. Staff will discuss the Blueprint and key issues to follow in the development of the Fiscal Year 2023-2024 budget with the Committee.

2023 State Legislative Update:

AB 30 (Ward, D-San Diego) – Atmospheric Rivers Research, Mitigation, and Climate Forecasting Program:

AB 30 (Ward, D-San Diego), which is a reintroduction of AB 2078 (Flora, R-Ripon) from last year, proposes to rename the Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program, which is in the Department of Water Resources (DWR), the Atmospheric Rivers Research and Forecast Improvement Program: Enabling Climate Adaptation Through Forecast-Informed Reservoir Operations and Hazard Resiliency (AR/FIRO) Program. Additionally, the bill would require DWR to take certain actions to improve atmospheric river predictions and their impacts on water supply, flooding, post-wildfire debris flows, and environmental conditions. It would also require DWR to take all actions within its existing authority to operate reservoirs in a manner that improves flood protection and to reoperate flood control and water storage facilities to capture water generated by atmospheric rivers.

Staff recommends the Board adopt a “support” position on AB 30, which is consistent with the position adopted by IRWD on AB 2078 last year.

SB 3 (Dodd, D-Napa) – Discontinuation of Residential Water Service:

SB 3 (Dodd, D-Napa) would expand the applicability of the Water Shutoff Protection Act (a.k.a., SB 998) to community water systems with 200 or fewer service connections. Under existing law, the Water Shutoff Protection Act (established in 2018) requires public water systems with more than 200 service connections to have a written policy on the discontinuation of residential water service, prohibits the shutoff of water service until a customer’s bill has been delinquent for 60 days, and caps reconnection fees for restoring water service.

As presently drafted, SB 3 does not alter the applicability of the Water Shutoff Protection Act to water providers like IRWD, but there is a high likelihood that SB 3 will be substantially amended before it is heard in its first policy committee. Staff recommends the Board adopt a “watch” position on SB 3, in its current form. Staff will monitor the bill closely and engage, as appropriate, as amendments for the bill are discussed.

SB 23 (Caballero, D-Salinas) – Water Supply and Flood Risk Reduction Projects Expedited Permitting:

SB 23 (Caballero, D-Salinas) expresses the intent of the Legislature to enact subsequent legislation to expedite the regulatory permitting process for water supply and flood risk reduction projects, consistent with “California’s Water Supply Strategy, Adapting to a Hotter, Drier Future,” released by Governor Newsom’s administration in August 2022. SB 23 is sponsored by the Association of California Water Agencies (ACWA), and the association is currently working to develop substantive amendments for the bill. Staff will provide the Committee with an update on that effort.

SB 34 (Umberg, D-Santa Ana) – Orange County Surplus Land Disposal Violations:

SB 34 (Umberg, D-Santa Ana) seeks to amend the Surplus Land Act (SLA). Specifically, it would require the County of Orange and any Orange County city, if notified by the Department of Housing and Community Development (HCD) that its planned sale of surplus land is in violation of existing law, to cure or correct the alleged violation within 60 days. It would also prohibit the County or city from disposing of the land until HCD determines that the alleged violation has been cured or corrected.

Like Senator Umberg’s SB 361 from last year, SB 34 was introduced in response to the controversy over the City of Anaheim’s proposed sale of Angel Stadium. In contrast with SB 361, SB 34 does not include lands that are leased and only includes lands that are sold. As a result, SB 34, as currently drafted, does not make leases subject to the SLA. Should this bill be amended to include leases, which would make leases subject to the SLA and would impact IRWD, staff will work with IRWD’s Sacramento advocates to seek the removal of all references to leases from the bill. Given the bill’s current language, staff recommends the Board adopt a “watch” position on SB 34.

2023 State Regulatory Update:

The following is a list of some of the State regulations and agency reports staff is 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. The pending regulations, administrative actions and reports actively being tracked include the:

- Executive and regulatory actions on COVID-19;
- Executive and regulatory actions related to the drought;

- CARB's [Proposed Advanced Clean Fleets Regulation](#);
- [California Endangered Species Act Listing](#) for the Southern California Steelhead;
- California Natural Resources Agency (CNRA) [30 x 30 California Implementation](#);
- CNRA's [Water Resilience Portfolio Implementation](#) and [Resiliency 2.0 Implementation](#);
- DWR's [2023 California Water Plan Update](#);
- DWR and the State Board's implementation of the "[Making Water Conservation a California Way of Life](#)" legislation:
 - DWR and the State Board's Indoor Water Use Study and Indoor Water Use Standard Recommendations;
 - [DWR's Outdoor Water Use Recommendations](#); and
 - DWR's Work Group on CII performance measures;
- State Board's development of a "[Cross Connection Policy Handbook](#);"
- State Board's [Direct Potable Reuse Regulations](#);
- 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 a maximum contaminant levels for per- and polyfluoroalkyl substances (PFAS);
- State Board's [Proposed Vapor Intrusion Assessment Amendment to Resolution 92-49](#);
- The Governor's Office of Planning and Research (OPR)'s [Integrated Climate Adaptation and Resiliency Program \(ICARP\) Grant Programs](#); and
- South Coast AQMD's [Cumulative Impacts from Air Toxics for CEQA Projects](#).

2022 Federal Legislative and Regulatory Update:

Water Resources Development Act of 2022 (WRDA 2022):

On December 15, 2022, the United States Senate passed the [2022 Water Resources Development Act of 2022 \(WRDA 2022\)](#) on a bipartisan 83-11 vote. WRDA 2022 was as part of the [James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 \(H.R. 7776\)](#).

WRDA 2022 includes authorizations for 106 feasibility studies and the construction or modification of 31 projects. It also directs the U.S. Army Corps to expedite several ongoing studies and projects, and it authorizes or reauthorizes the environmental infrastructure authorities of the Corps pertinent to drinking water, wastewater, and stormwater management projects.

Among the provisions of interest to the District is the authorization of a Prado Basin ecosystem restoration project proposed in partnership with the Orange County Water District (OCWD) that

restores 606 acres of valuable riparian and associated habitats downstream of Prado Dam in San Bernardino, Riverside, and Orange Counties. This project has an estimated federal cost of \$35,265,100 and an estimated non-federal cost of \$22,373,900.

Kern Fan Groundwater Storage Project Outreach:

IRWD's federal advocacy efforts at the end of 2022 continued to largely focus 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.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT AN "SUPPORT" POSITION ON AB 30 (WARD), AND A "WATCH" POSITION ON SB 3 (DODD) AND SB 34 (UMBERG).

LIST OF EXHIBITS:

Exhibit "A" – IRWD Legislative Matrix

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EXHIBIT “A”
IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 9</u> Muratsuchi (D)	California Global Warming Solutions Act of 2006		Requires the State Air Resources Board to ensure that statewide greenhouse gas emissions are reduced to at least 55% below the 1990 level by no later than December 31, 2030.	12/05/2022 - INTRODUCED.
<u>AB 12</u> Haney (D)	Tenancy: Security Deposits		Prohibits a landlord from demanding or receiving security for a rental agreement for residential property in an amount or value in excess of an amount equal to one month's rent, regardless of whether the residential property is unfurnished or furnished, in addition to any rent for the first month paid on or before initial occupancy.	12/05/2022 - INTRODUCED.
<u>AB 30</u> Ward (D)	Atmospheric Rivers: Research, Mitigation, and Climate		Requires the Department of Water Resources to research, develop, and implement new observations, prediction models, novel forecasting methods, and tailored decision support systems to improve predictions of atmospheric rivers and their impacts on water supply, flooding, post-wildfire debris flows, and environmental conditions.	12/05/2022 - INTRODUCED.
<u>AB 34</u> Valencia (D)	Elections: Independent Redistricting Commissions		States the intent of the Legislature to enact legislation to establish an independent redistricting commission in the County of Orange.	12/05/2022 - INTRODUCED.
<u>AB 37</u> 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, and for the reasonable costs of providing personal security to a candidate, elected officer, or the immediate family and staff of a candidate or elected officer, if those costs are reasonably related to the candidate or elected officer's status as a candidate or elected officer.	12/05/2022 - INTRODUCED.
<u>AB 43</u> Holden (D)	Greenhouse Gas Emissions: Building Materials: Credits		Expresses the intent of the Legislature to enact future legislation establishing a Low Carbon Product Standard to facilitate a credit trading platform for building materials. The bill would express the further intent of the Legislature to enact future legislation to require that the LCPS establish a compliance system.	12/05/2022 - INTRODUCED.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 62</u> Mathis (R)	Statewide Water Storage: Expansion		Establishes a statewide goal to increase above- and below-ground water storage capacity by a total of 3,700,000 acre-feet by the year 2030 and a total of 4,000,000 acre-feet by the year 2040. The bill would require the State Water Resources Control Board, in consultation with the Department of Water Resources, to design and implement measures to increase statewide water storage to achieve the statewide goal.	12/06/2022 - INTRODUCED.
<u>AB 64</u> Mathis (R)	Fish and Wildlife: Beaver		States the intent of the Legislature to enact subsequent legislation that would improve beaver management and conservation across the state.	12/06/2022 - INTRODUCED.
<u>AB 66</u> Mathis (R)	Natural Resources Agency: Water Storage Projects		Requires the Natural Resources Agency, and each department, board, conservancy, and commission within the agency, to approve the necessary permits for specified projects within 180 days from receiving a permit application, and would deem those permits approved if approval does not occur within this time period.	12/06/2022 - INTRODUCED.
<u>AB 70</u> Rodriguez (D)	Emergency Response: Trauma Kits		Applies the requirement to place at least 6 trauma kits on the premises to certain structures that are constructed prior to January 1, 2023, and subject to subsequent modifications, renovations, or tenant improvements.	12/12/2022 - INTRODUCED.
<u>AB 78</u> Ward (D)	Grand Juries		Requires the fee for grand jurors to be equal to 70% of the county median daily income for each day's attendance. Requires the list of grand jurors to contain the person's gender, age, race or ethnicity, and residential ZIP Code or supervisorial district of the respective counties. Requires a separate list to be published in a newspaper containing each person's name and the name of the judge who selected the jurors.	12/15/2022 - INTRODUCED.
<u>AB 83</u> Lee (D)	Political Reform Act of 1974: Contributions		Expands the prohibition against foreign campaign contributions to include contributions, expenditures, or independent expenditures made by a foreign-influenced business entity, as defined, in connection with an election or ballot measure.	12/16/2022 - INTRODUCED.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>ACA 1</u> Aguiar-Curry (D)	Local Government Financing: Affordable Housing		Creates an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters of the city or county.	12/05/2022 - INTRODUCED.
<u>ACA 2</u> Alanis (R)	Public Resources: Water and Wildfire Resiliency Act		Establishes the Water and Wildfire Resiliency Fund within the State Treasury, and would require the Treasurer to annually transfer an amount equal to 3% of all state revenues that may be appropriated as described from the General Fund to the Water and Wildfire Resiliency Fund. Requires the moneys in the fund to be appropriated by the Legislature and requires that 50% of the moneys in the fund be used for water projects, and that the other 50% of the moneys in the fund be used for forest maintenance.	12/05/2022 - INTRODUCED.
<u>SB 3</u> Dodd (D)	Discontinuation of Residential Water Service		Expands the scope of the Water Shutoff Protection Act by requiring that it instead applies to a community water system, defined to have the same meaning as existing law. Requires a community water system that supplies water to 200 service connections or fewer to comply with the act's provisions on and after August 1, 2024.	12/05/2022 - INTRODUCED.
<u>SB 12</u> Stern (D)	Global Warming Solutions Act of 2006: Emissions Limit		Requires the State Air Resources Board to ensure that statewide greenhouse gas emissions are reduced to at least 55% below the 1990 level by no later than December 31, 2030.	12/05/2022 - INTRODUCED.
<u>SB 23</u> Caballero (D)	Water Supply and Flood Risk Reduction Projects		Expresses the intent of the Legislature to enact subsequent legislation to expedite the regulatory permitting process for water supply and flood risk reduction projects, as provided.	12/05/2022 - INTRODUCED.
<u>SB 29</u> Glazer (D)	Political Reform Act of 1974: Education Program		Relates to the Political Reform Act of 1974. Authorizes the Fair Political Practices Commission to establish and administer a political reform education program as an alternative to an administrative proceeding. Establishes eligibility requirements for the political reform education	12/05/2022 - INTRODUCED.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			program, including that the person has little or no experience with the act and that the violation resulted in minimal or no public harm.	
SB 31 Jones (R)	Encampments: Sensitive Areas: Penalties		Prohibits a person from sitting, lying, sleeping, or storing, using, maintaining, or placing personal property upon any street, sidewalk, or other public right-of-way within 1000 feet of a sensitive area. Specifies that a violation of this prohibition is a public nuisance that can be abated and prevented. The bill would also provide that a violation of the prohibition may be charged as a misdemeanor or an infraction, at the discretion of the prosecutor.	12/05/2022 - INTRODUCED.
SB 34 Umberg (D)	Surplus Land Disposal: Violations: Orange County		Requires the County of Orange, or any city located within Orange County, if notified by the Department of Housing and Community Development that its planned sale of surplus land is in violation of existing law, to cure or correct the alleged violation within 60 days. Prohibits an Orange County jurisdiction that has not cured or corrected any alleged violation from disposing of the parcel until the department determines that it has complied with existing law.	12/05/2022 - INTRODUCED.
SB 37 Caballero (D)	Tenancy		Makes findings and declarations relating to senior housing and would state the intent of the Legislature to subsequently amend this bill to include provisions that would enact meaningful tenancy reform to ensure that aging adults can remain safely housed.	12/05/2022 - INTRODUCED.
SB 38 Laird (D)	Battery Storage Facilities: Safety Systems		States the intent of the Legislature to enact future legislation to address the need for better safety systems at battery storage facilities.	12/05/2022 - INTRODUCED.
SB 48 Becker (D)	Building Performance Standards		Provides that it is the intent of the Legislature to enact subsequent legislation to create building performance standards for improvements in energy efficiency and reductions in the emissions of greenhouse gases in large buildings, including measures to ensure that making the necessary investments to improve these buildings will improve equity and avoid displacement or increased energy burdens, especially in disadvantaged communities.	12/05/2022 - INTRODUCED.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 55</u> Umberg (D)	Vehicles: Catalytic Converters		Prohibits a dealer or retailer from selling a new motor vehicle equipped with a catalytic converter unless the catalytic converter has been engraved or etched with the vehicle identification number of the vehicle to which it is attached.	12/06/2022 - INTRODUCED.
<u>SB 57</u> Gonzalez (D)	Utilities: Extreme Weather Events		States the intent of the Legislature to enact future legislation to prohibit shutting off utility service during extreme weather events.	12/16/2022 - INTRODUCED.
<u>HR 616</u> Tlaib (D)	Water Shutoffs Prohibition		Prohibits water shutoffs during the Coronavirus disease 2019 emergency period, provides drinking and waste water assistance to households.	01/28/2021 - To HOUSE Committee on EDUCATION AND LABOR.
<u>HR 737</u> Valadao (R)	California Operational Flexibility and Drought Relief		Extends the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing operational flexibility, drought relief, and other benefits to the State of California.	02/02/2021 - INTRODUCED.;02/02/2021 - To HOUSE Committee on NATURAL RESOURCES.
<u>HR 1015</u> Napolitano (D)	Water Recycling and Reuse Project Grants	SUPPORT	Establishes a grant program for the funding of water recycling and reuse projects.	02/11/2021 - INTRODUCED.;02/11/2021 - To HOUSE Committee on NATURAL RESOURCES.
<u>HR 1352</u> Lawrence (D)	Trust Fund for Water and Sewer Infrastructure		Establishes a trust fund to provide for adequate funding for water and sewer infrastructure.	04/05/2021 - In HOUSE Committee on AGRICULTURE: Referred to Subcommittee on CONSERVATION AND FORESTRY.
<u>HR 1848</u> Pallone (D)	National Infrastructure		Rebuilds and modernizes the Nation's infrastructure to expand access to broadband and Next Generation 9-1-1, rehabilitate drinking water infrastructure, modernize the electric grid and energy supply infrastructure, redevelop brownfields, strengthen health care infrastructure, create jobs, and protect public health and the environment.	01/20/2022 - In HOUSE Committee on NATURAL RESOURCES: Referred to Subcommittee on ENERGY AND MINERAL RESOURCES.
<u>HR 1915</u> DeFazio (D)	Federal Water Pollution Control Act		Amends the Federal Water Pollution Control Act to reauthorize certain water pollution control programs.	06/22/2021 - In HOUSE. Placed on HOUSE Union Calendar.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>HR 2238</u> Lowenthal A (D)	Single Use Plastic Production Reduction		Amends the Solid Waste Disposal Act to reduce the production and use of certain single-use plastic products and packaging, to improve the responsibility of producers in the design, collection, reuse, recycling, and disposal of their consumer products and packaging, to prevent pollution from consumer products and packaging from entering into animal and human food chains and waterways.	03/29/2021 - In HOUSE Committee on TRANSPORTATION & INFRASTRUCTURE: Referred to Subcommittee on WATER RESOURCES AND ENVIRONMENT.
<u>HR 2467</u> Dingell D (D)	Hazardous Substances		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.	07/22/2021 - In SENATE. Read second time.;07/22/2021 - To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.
<u>HR 2468</u> Garamendi (D)	Federal Infrastructure Aid Program Materials		Ensures that certain materials used in carrying out federal infrastructure aid programs are made in the United States.	06/07/2021 - In HOUSE Committee on AGRICULTURE: Referred to Subcommittee on COMMODITY EXCHANGES, ENERGY, AND CREDIT.
<u>HR 3291</u> Tonko (D)	Water System Assistance		Amends the Safe Drinking Water Act to provide assistance for states, territories, areas affected by natural disasters, and water systems and schools affected by PFAS or lead, and to require the Environmental Protection Agency to promulgate national primary drinking water regulations for PFAS, microcystin toxin, and 1,4-dioxane.	06/29/2021 - In HOUSE. Placed on HOUSE Union Calendar.
<u>HR 3292</u> Dingell D (D)	Residential Emergency Relief Program		Requires the Administrator of the Environmental Protection Agency to carry out a residential emergency relief program to provide payment assistance for households to retain water service.	05/19/2021 - In HOUSE Committee on ENERGY AND COMMERCE: Referred to Subcommittee on ENVIRONMENT.
<u>HR 3293</u> Blunt Rochester (D)	Drinking Water and Wastewater Service Assistance		Amends the Safe Drinking Water Act and the Federal Water Pollution Control Act to establish programs to assist low-income households in maintaining access to drinking water and wastewater services.	06/29/2021 - From HOUSE Committee on ENERGY AND COMMERCE: Reported as amended.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>HR 3404</u> Huffman (D)	Drought Preparedness	SUPPORT IF AMENDED	Provides drought preparedness and improved water supply reliability to the nation.	07/05/2021 - In HOUSE Committee on NATURAL RESOURCES: Referred to Subcommittee on WATER, OCEANS AND WILDLIFE.
<u>HR 3622</u> Pappas (D)	Water Quality Criteria		Requires the Administrator of the Environmental Protection Agency to develop effluent limitations guidelines and standards and water quality criteria for PFAS under the Federal Water Pollution Control Act, provides Federal grants to publicly owned treatment works to implement such guidelines and standards.	06/01/2021 - In HOUSE Committee on TRANSPORTATION & INFRASTRUCTURE: Referred to Subcommittee on WATER RESOURCES AND ENVIRONMENT.
<u>HR 4099</u> Napolitano (D)	Water Recycling and Reuse Projects		Directs the Secretary of the Interior to establish a grant program to provide grants on a competitive basis to eligible entities for large-scale water recycling and reuse projects.	06/29/2021 - Subcommittee on WATER, POWER AND OCEANS hearings held.
<u>HR 4602</u> Lowenthal A (D)	Do Not Flush Labeling	SUPPORT	Directs the Federal Trade Commission to issue regulations requiring certain products to have "Do Not Flush" labeling.	07/22/2021 - In HOUSE Committee on ENERGY AND COMMERCE: Referred to Subcommittee on DIGITAL COMMERCE AND CONSUMER PROTECTION.
<u>HR 5118</u> Neguse (D)	Continental Divide National Scenic Trail		Directs the Secretary of Agriculture to prioritize the completion of the Continental Divide National Scenic Trail, and for other purposes.	07/29/2022 - In HOUSE. HA Amendment offered by Representative Schrier.;07/29/2022 - In
<u>HR 5689</u> DeFazio (D)	Private Nonprofit Organizations	SUPPORT	Improves the provision of Federal resources to help build capacity and fund risk-reducing, cost-effective mitigation projects for eligible state, local, tribal, and territorial governments and certain private nonprofit organizations.	04/06/2022 - To SENATE Committee on HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS.

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>HR 6591</u> McClain (R)	Disposable Nonwoven Wipes Flushability	SUPPORT	Requires the Administrator of the Environmental Protection Agency to publish a rule that establishes standards for the flushability of disposable nonwoven wipes.	02/03/2022 - To HOUSE Committee on ENERGY AND COMMERCE.
<u>HR 6705</u> Blunt Rochester (D)	Improvements to Rivers and Harbors		Provides for improvements to the Rivers and harbors of the United States, to provide for the conservation and development of water and related resources.	02/14/2022 - In HOUSE Committee on TRANSPORTATION & INFRASTRUCTURE: Referred to Subcommittee on WATER RESOURCES AND ENVIRONMENT.
<u>HR 7900</u> Smith A (D)	Department of Defense Appropriations		Authorizes appropriations for Fiscal Year 2023 for military activities of the Department of Defense and for military construction, prescribes military personnel strengths for such fiscal year.	08/03/2022 - In SENATE. Read second time. Placed on Legislative Calendar under General Orders.
<u>S 914</u> Duckworth (D)	Safe Drinking Water Act		Amends the Safe Drinking Water Act and the Federal Water Pollution Control Act to reauthorize programs under those Acts.	04/29/2021 - In SENATE. Amendment SA 1469 proposed by Senator Kennedy
<u>S 1907</u> Gillibrand (D)	Water Quality Criteria		Requires the Administrator of the Environmental Protection Agency to develop effluent limitations guidelines and standards and water quality criteria for PFAS under the Federal Water Pollution Control Act, to provide Federal grants to publicly owned treatment works to implement such guidelines and standards.	05/27/2021 - To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.
<u>S 2334</u> Cortez-Masto (D)	Water Recycling and Reuse Project Grants		Directs the Secretary of the Interior to establish a grant program to provide grants on a competitive basis to eligible entities for large-scale water recycling and reuse projects, amends the Omnibus Public Land Management Act of 2009 to make certain modifications to the Cooperative Watershed Management Program, provides emergency drought funding.	05/25/2022 - Subcommittee on WATER AND POWER hearings held.
<u>S 2454</u> Padilla (D)	Alternative Water Source Projects		Amends the Federal Water Pollution Control Act to reauthorize the pilot program for alternative water source projects.	07/22/2021 - In SENATE. Read second time.;07/22/2021 - To SENATE Committee on

IRWD 2023 LEGISLATIVE MATRIX
Updated 12/22/2022

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
				ENVIRONMENT AND PUBLIC WORKS.
<u>S 3600</u> Peters G (D)	Cybersecurity Improvement		Improves the cybersecurity of the Federal Government.	03/01/2022 - In SENATE. Amendment SA 4954 proposed by Senator Peters for Senator Wicker.;03/01/2022 -
<u>S 3624</u> Carper (D)	Improvements to Rivers and Harbors		Provides for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources.	02/10/2022 - To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.
<u>S 3956</u> Merkley (D)	Do Not Flush Labeling Requirements	SUPPORT	Directs the Administrator of the Environmental Protection Agency to establish a grant program to improve the effectiveness of education and outreach on Do Not Flush labeling, and to require the Federal Trade Commission, in consultation with the Administrator, to issue regulations requiring certain products to have Do Not Flush labeling.	03/30/2022 - To SENATE Committee on COMMERCE, SCIENCE, AND TRANSPORTATION.
<u>S 4231</u> Feinstein (D)	Water Infrastructure	SUPPORT	Supports water infrastructure in reclamation States.	05/25/2022 - Subcommittee on WATER AND POWER hearings held.
<u>S 4669</u> Feinstein (D)	Western Riverside National Wildlife Refuge		Establishes the Western Riverside National Wildlife Refuge.	07/28/2022 - To SENATE Committee on ENVIRONMENT AND PUBLIC WORKS.

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January 9, 2023
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook 

CONSENT CALENDAR

MEMORANDUM ON OFFICERS OF THE BOARD,
COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS

SUMMARY:

Each year, the President of the Board of Directors provides the Board with a memorandum on the upcoming year's officers of the Board, Committee appointments and other assignments. As a result of changes implemented by President McLaughlin, the following actions are necessary:

- Receive and file the January 9, 2023, Memorandum on Officers of the Board, Committee Appointments and Other Assignments (Memorandum), and
- Approve attendance at meetings and events by Directors for the 2023 calendar year.

BACKGROUND:

IRWD Board members serve on various standing committees and ad hoc committees (when such a committee is created by the Board President), and also serve the District in various other assignments. President McLaughlin has reviewed and updated the Committee appointments and other District assignments for 2023; the updated Memorandum is provided as Exhibit "A". The changes from appointments and assignments memorandum for 2023 are highlighted in red text.

Approval of Attendance at Meetings and Events:

Pursuant to Resolution 2014-38, adopted on August 25, 2014, approval / ratification of attendance at events and meetings for non-IRWD Board or Committee meetings is required by the Board of Directors for certain meetings and events. For those meetings and events falling under Section 2(b) of Article II of Exhibit "A" to the Resolution, approval is requested to authorize attendance of the Board Members assigned as the District's representative/lead, and their alternates, as listed in the Memorandum, at meetings and events of governmental agencies and external organizations during the 2023 calendar year. Also provided in Exhibit "A" is a list of the approved organizations.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

Consent Calendar: Memorandum on Officers of the Board, Committee Appointments and Other Assignments
January 9, 2023
Page 2

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE MEMORANDUM DATED JANUARY 9, 2023, TITLED OFFICERS OF THE BOARD, COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS AND APPROVE ATTENDANCE FOR MEETINGS AND EVENTS FOR THE BOARD'S REPRESENTATION FOR CALENDAR YEAR 2023 AS DELINEATED.

LIST OF EXHIBITS:

Exhibit "A" – Memorandum from President McLaughlin dated January 9, 2023, titled Officers of the Board, Committee Appointments and Other Assignments

Exhibit "A"
MEMORANDUM

DATE: January 9, 2023 **DRAFT**
TO: Board of Directors
FROM: Karen McLaughlin, President
SUBJECT: MEMORANDUM RELATIVE TO OFFICERS OF THE BOARD, COMMITTEE APPOINTMENTS, AND OTHER ASSIGNMENTS

District Board of Directors:

- President Karen McLaughlin
- Vice President Doug Reinhart
- Directors Steve LaMar, Peer Swan, and John Withers

Officers of the District, Staff:

- District Treasurer Cheryl Clary
- Assistant District Treasurer Jennifer Davis
- District Secretary Leslie Bonkowski
- Assistant District Secretaries Kristine Swan, Christine Compton

Standing Committees Appointments:

Committee chair name shown first:

- Engineering and Operations Reinhart, McLaughlin (Alt. Withers)
- Finance and Personnel Swan, LaMar (Alt. Reinhart)
- Supply Reliability Programs Reinhart, Swan (Alt. LaMar)
- Water Resources Policy & Communications LaMar, Withers, (Alt. McLaughlin)
- Serrano Water District / IRWD Withers, Reinhart (Alt. Swan)

Governmental Agencies Representation and Assignments:

- Canyons Communities Withers (Representative), LaMar (Alternate)
- City of Costa Mesa Swan (District Lead), McLaughlin (Alternate)
- City of Irvine McLaughlin (District Lead), LaMar (Alternate)
- City of Lake Forest Withers (District Lead), Reinhart (Alternate)
- Municipal Water District of Orange County Swan (District Lead), Reinhart (Alternate)
- Natural Communities Coalition** LaMar (Director), McLaughlin (Alternate)
- City of Newport Beach Swan (District Lead), Reinhart (Alternate)
- Newport Bay Watershed Executive Cte.** Swan (Representative),
McLaughlin and Cook (Alternates)
- City of Orange / OPA Withers (District Lead), LaMar (Alternate)
- Orange County Sanitation District (OCSD)** Withers (Director), Reinhart (Alternate)
- Orange County Water District (OCWD) Reinhart (District Lead), LaMar (Alternate)
- Santiago Aqueduct Commission (SAC)** Withers (Director), McLaughlin (Alternate)

- South Orange County Watershed Management Area Executive Committee** McLaughlin (Representative), LaMar (Alternate)
- So. OC Wastewater Authority (SOCWA)** Reinhart (Director), Cook (First Alternate) and Burton (Second Alternate)
- City of Tustin LaMar (District Lead), McLaughlin (Alternate)

** Need to notify these agencies of any changes

External Organizations Assignments:

- Association of CA Water Agencies (ACWA) All Board Members
- ACWA/Joint Powers Insurance Authority Swan (District Lead), LaMar (Alternate)
- CA Association of San. Agencies (CASA) All Board Members
- CA Council for Environmental and Economic Balance (CCEEB) LaMar (District Lead); Compton and Colston (Alternates)
- County of Orange Area Safety Task Force LaMar (District Lead); Prewoznik (Alternate)
- El Toro Restoration Advisory Board McLaughlin (District Lead), Colston (Alt.)
- Independent Special Districts of OC (ISDOC) Withers (District Lead), Reinhart (Alt.), All
- Greater Irvine Chamber of Commerce LaMar (District Lead); McLaughlin (Alternate)
- Kern Fan Groundwater Banking Authority Same as members of IRWD SRP Committee
- Kern Fan GBA – Finance Committee Swan and Clary
- Kern Fan GBA – Project Committee Reinhart, Cook, and Clary
- National Water Research Institute (NWRI) Withers (District Lead), Reinhart (Alternate)
- Newport Chamber of Commerce Swan (District Lead), Reinhart (Alternate)
- Orange County Business Council (OCBC) LaMar (District Lead),
Withers (Infrastructure Committee)
Compton (Govt. Affairs & Advocacy)
- Orange County Water Association All Board Members
- Public Policy Institute of California Swan (District Lead), LaMar (Alternate)
- South Orange County Economic Coalition McLaughlin (District Lead), Van Dyke (Alt.)
- South Orange County Water Agencies Group Reinhart (District Lead), LaMar (Alternate)
- Southern California Water Dialogue Group Swan (District Lead), LaMar (Alternate)
- Southern California Water Coalition LaMar (District Lead), McLaughlin (Alternate)
- Urban Water Institute All Board Members
- Water Advisory Committee of OC (WACO) All Board Members
- Water Education Foundation All Board Members

IRWD-Associated Organizations Officers:

- Bardeen Partners, Inc. Withers, President; Swan, Vice President
LaMar, McLaughlin, & Reinhart as Members
Clary, Treasurer
Davis, Assistant Treasurer
L. Bonkowski, Secretary
- IRWD Water Service Corporation Reinhart, President;
Withers, Vice President
LaMar, McLaughlin, & Swan as Members
Clary, Treasurer
Davis, Assistant Treasurer
L. Bonkowski, Secretary
- Post-employment Benefits Retirement Trust Board Swan, Chairman; LaMar, Vice Chair
Cook, Member (Alt. Withers)
Clary, Treasurer
Davis, Assistant Treasurer
L. Bonkowski, Secretary

IRWD-Supported Organizations Representation:

- San Joaquin Wildlife Sanctuary, Inc. Swan, President;
McLaughlin, Director
L. Bonkowski, Treasurer, Director and Secretary
- Shadetree Partnership, Inc. T. Bonkowski, Director and Treasurer
L. Bonkowski, Director and Secretary
Cook, Director
Swift, Director

NOTE: The officers and directors of these two groups are selected by the Board of each organization, not IRWD.

Organization / Committee Staff Representation and Support:

- Association of CA Water Agencies (ACWA) Compton, Collins
- Bioenergy Association of CA Compton (Chair)
- California Assoc. of Sanitation Agencies Chambers, Zepeda, Colston, Compton
- California Municipal Utilities Assoc. (CMUA) Cook (Exec. Cte., Board Member), Compton
- California Special Districts Assoc. (CSDA) Compton
- California Water Environmental Assoc. Chambers, Zepeda
- National Water Research Institute (NWRI) Colston
- Newport Bay Watershed Mgmt. Comm. Tettermer (Representative), Cook (Alternate)
- Santiago Aqueduct Commission (SAC) Cook (General Manager), Burton (Engineer)
Clary (Treasurer)
- South Orange County Watershed Mgmt. Area Executive Committee Tettermer
- WaterReuse California Cook (Board member), Tettermer, Compton

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January 9, 2023
Prepared and
submitted by: L. Bonkowski
Approved by: Paul A. Cook 

CONSENT CALENDAR

RESIGNATION AND APPOINTMENT OF TREASURER

SUMMARY:

Due to the upcoming retirement of Treasurer Robert Jacobson, staff recommends that the Board appoint Ms. Cheryl Clary, Executive Director of Finance and Administration, as Treasurer of the Irvine Ranch Water District effective immediately upon Mr. Jacobson's retirement.

BACKGROUND:

Annually, the Board authorizes the Treasurer and any Assistant Treasurer to invest District funds in accordance with the Board-approved investment policy. Due to the anticipated retirement of Treasurer Jacobson in February 2023, staff recommends that Cheryl Clary, currently the Assistant Treasurer, be appointed as Treasurer of the District effective immediately upon Mr. Jacobson's retirement.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDED MOTION:

THAT THE BOARD APPOINT CHERYL CLARY AS THE IRVINE RANCH WATER DISTRICT TREASURER EFFECTIVE IMMEDIATELY UPON TREASURER JACOBSON'S RETIREMENT.

LIST OF EXHIBITS:

None.

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January 9, 2023

Prepared by: O. Mendoza / J. Davis

Submitted by: R. Jacobson / C. Clary

Approved by: Paul A. Cook 

CONSENT CALENDAR

NOVEMBER 2022 TREASURY REPORT

SUMMARY:

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

- A. The November 2022 Investment Summary Report. This Investment Summary Report conforms with the 2022 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A";
- B. The Summary of Fixed and Variable Rate Debt as of November 30, 2022, as outlined in Exhibit "B";
- C. The Monthly Interest Rate Swap Summary as of November 30, 2022, as outlined in Exhibit "C";
- D. The November 30, 2022 Disbursement Summary of warrants 431653 through 432314, Workers' Compensation distributions, ACH payments, virtual card payments, wire transfers, payroll withholding distributions, and voided checks in the total amount of \$18,527,409, as outlined in Exhibit "D";
- E. The Summary of Payroll ACH payments in the total amount of \$2,588,858 as outlined in Exhibit "E"; and
- F. The Disclosure Report of Reimbursements to Board members and staff for November 2022, detailing payments or reimbursements for individual charges of \$100 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of November 30, 2022, the book value of the investment portfolio was \$351,099,280, with a 1.84% rate of return and a market value of \$345,864,278. Based on IRWD's September 30, 2022, quarterly real estate investment rate of return of 12.44%, the weighted average return for the fixed income and real estate investments was 4.14%.

As of November 30, 2022, the outstanding principal amount of fixed and variable rate debt was \$612,895,000. The monthly weighted average all-in variable rate was 1.66%. Including IRWD's weighted average fixed rate bond issues of 3.71% and the negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.13%.

Payroll ACH payments totaled \$2,588,858 and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for November totaled \$18,527,409.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

This item was not submitted to a Committee; the investment and debt reports are submitted to the Finance and Personnel Committee monthly.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF, APPROVE THE NOVEMBER 2022 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,588,858, AND APPROVE THE NOVEMBER 2022 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 431653 THROUGH 432314, WORKERS' COMPENSATION DISTRIBUTIONS, ACH PAYMENTS, VIRTUAL CARD PAYMENTS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$18,527,409.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Interest Rate Swap Summary

Exhibit "D" – Monthly Summary of District Disbursements

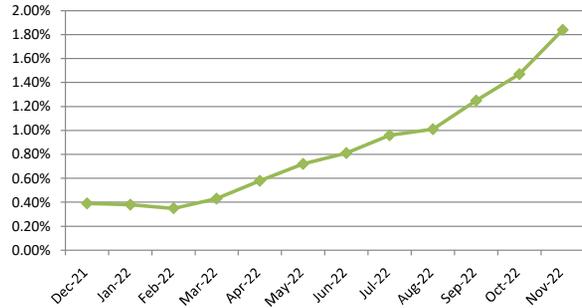
Exhibit "E" – Monthly Payroll ACH Summary

Exhibit "F" – Disclosure of Reimbursements to Board Members and Staff

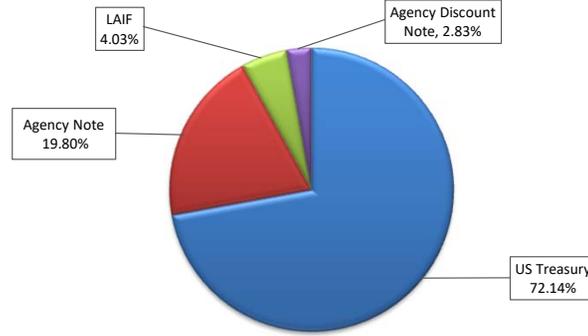
Exhibit "A"

Irvine Ranch Water District Investment Portfolio Summary November 2022

Monthly Fixed Income Yield



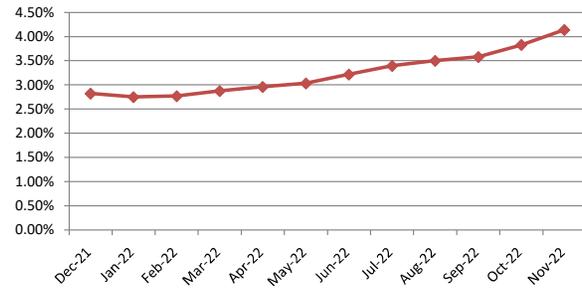
Portfolio Distribution



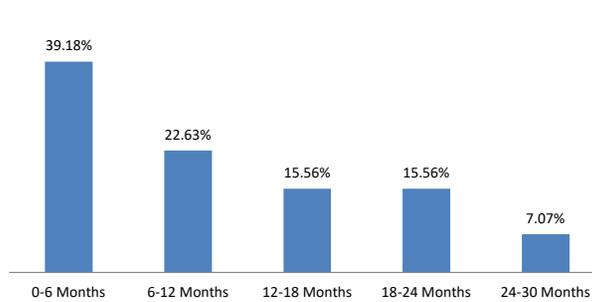
Investment Summary

Type	PAR	Book Value	Market Value
US Treasury	255,000,000	252,811,443	248,866,250
Agency Note	70,000,000	69,791,716	68,858,350
LAIF	18,500,000	18,500,000	18,144,078
Agency Discount Note	10,000,000	9,996,122	9,995,600
Grand Total	353,500,000	351,099,280	345,864,278

Weighted Average Return Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
US Treasury	255,000,000	72.14%
Fed Home Loan Bank	35,000,000	9.90%
Fed Farm Credit Bank	30,000,000	8.49%
State of California Tsy.	18,500,000	5.23%
Fed Home Loan Mortgage Corp	15,000,000	4.24%
Grand Total	353,500,000	100.00%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

11/30/22

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 11/30/2022	UNREALIZED ⁽²⁾ GAIN/(LOSS)
11/29/22			12/01/22		LAIF	State of California Tsy.	\$18,500,000		2.060%	\$18,500,000.00	\$18,500,000.00	18,144,077.80	(355,922.20)
11/29/22	NA	NA	12/05/22	NR	FHLMC - Discount Note	Fed Home Loan Mortgage Corp	10,000,000	3.490%	3.541%	9,994,183.33	9,996,122.22	9,995,600.00	(522.22)
11/30/22	NA	NA	12/08/22	Aaa/NR/AAA	Treasury - Bill	US Treasury	5,000,000	3.450%	3.501%	4,996,166.67	4,996,645.84	4,996,500.00	(145.84)
11/28/22	NA	NA	12/13/22	Aaa/NR/AAA	Treasury - Bill	US Treasury	5,000,000	3.550%	3.605%	4,992,604.17	4,994,083.34	4,994,100.00	16.66
11/30/22	NA	NA	12/13/22	Aaa/NR/AAA	Treasury - Bill	US Treasury	5,000,000	3.400%	3.451%	4,993,861.11	4,994,333.33	4,994,100.00	(233.33)
10/15/21	NA	NA	12/15/22	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	1.625%	0.140%	10,173,046.88	10,005,686.99	9,992,800.00	(12,886.99)
11/30/21	NA	NA	12/31/22	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.216%	9,990,234.38	9,999,260.18	9,968,400.00	(30,860.18)
09/30/21	NA	NA	01/31/23	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	0.143%	4,998,828.13	4,999,853.52	4,966,300.00	(33,553.52)
12/30/21	NA	NA	01/31/23	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.417%	9,968,359.38	9,995,138.34	9,932,600.00	(62,538.34)
02/28/22	NA	NA	01/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	1.070%	4,956,640.63	4,992,151.57	4,966,300.00	(25,851.57)
11/18/21	NA	NA	02/10/23	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.160%	0.285%	9,984,690.00	9,997,579.04	9,919,900.00	(77,679.04)
10/07/21	NA	NA	02/28/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.181%	9,992,187.50	9,998,633.96	9,895,200.00	(103,433.96)
09/09/21	NA	NA	03/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.153%	9,995,703.13	9,999,092.21	9,857,000.00	(142,092.21)
11/02/21	NA	NA	03/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	0.308%	4,987,109.38	4,996,990.52	4,928,500.00	(68,490.52)
09/30/21	NA	NA	04/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.202%	9,987,890.63	9,996,851.98	9,813,700.00	(183,151.98)
10/19/21	NA	NA	04/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.307%	9,972,265.63	9,992,544.52	9,813,700.00	(178,844.52)
08/31/22	NA	NA	05/05/23	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.375%	3.321%	4,902,050.00	4,938,533.40	4,910,250.00	(28,283.40)
11/16/21	NA	NA	05/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.385%	9,960,156.25	9,987,144.89	9,778,900.00	(208,244.89)
12/29/21	NA	NA	06/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	0.563%	4,967,187.50	4,987,365.99	4,867,200.00	(120,165.99)
04/21/22	NA	NA	06/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	1.375%	2.107%	9,914,062.50	9,958,315.37	9,811,700.00	(146,615.37)
01/11/22	NA	NA	07/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	0.710%	4,954,882.81	4,980,709.61	4,848,650.00	(132,059.61)
02/28/22	NA	NA	07/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	1.408%	4,909,960.94	4,957,935.42	4,848,650.00	(109,285.42)
01/13/22	NA	NA	08/15/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.769%	9,898,437.50	9,954,919.58	9,678,900.00	(276,019.58)
02/15/22	NA	NA	08/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	1.473%	4,898,046.88	4,950,474.73	4,831,050.00	(119,424.73)
08/23/22	NA	NA	09/15/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	3.154%	4,842,968.75	4,883,440.72	4,820,700.00	(62,740.72)
11/26/21	NA	NA	09/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	0.250%	0.572%	9,941,015.63	9,973,443.89	9,632,000.00	(341,443.89)
03/31/22	NA	NA	10/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	1.625%	2.155%	4,958,984.38	4,976,339.87	4,862,700.00	(113,639.87)
04/21/22	NA	NA	10/31/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	1.625%	2.380%	4,943,750.00	4,966,330.65	4,862,700.00	(103,630.65)
03/31/22	NA	NA	11/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.500%	2.210%	4,860,742.19	4,916,765.45	4,794,550.00	(122,215.45)
04/21/22	NA	NA	11/30/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.500%	2.462%	4,846,093.75	4,904,724.70	4,794,550.00	(110,174.70)
08/31/22	NA	NA	12/08/23	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	3.375%	3.576%	4,987,445.00	4,989,934.35	4,927,550.00	(62,384.35)
04/14/22	NA	NA	12/15/23	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	2.213%	4,829,687.50	4,894,182.89	4,767,000.00	(127,182.89)
03/22/22	NA	NA	01/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	0.875%	2.013%	4,896,484.38	4,935,150.51	4,785,550.00	(149,600.51)
08/31/22	NA	NA	01/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	2.500%	3.445%	4,935,156.25	4,946,672.90	4,876,000.00	(70,672.90)
03/22/22	NA	NA	02/29/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	1.500%	2.020%	4,950,781.25	4,968,413.92	4,809,950.00	(158,463.92)
03/10/22	NA	NA	03/08/24	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.875%	1.680%	10,038,080.00	10,024,185.24	9,648,200.00	(375,985.24)
04/21/22	NA	NA	04/30/24	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	2.000%	2.600%	9,882,421.88	9,918,013.09	9,637,100.00	(280,913.09)
05/31/22	NA	NA	05/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	10,000,000	2.500%	2.560%	9,988,281.25	9,991,230.98	9,694,100.00	(297,130.98)
08/17/22	NA	NA	06/14/24	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	3.125%	3.315%	4,983,200.00	4,985,869.86	4,887,800.00	(98,069.86)
08/17/22	NA	NA	07/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	3.000%	3.249%	4,976,562.50	4,980,042.02	4,879,100.00	(100,942.02)
08/31/22	NA	NA	08/26/24	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	3.375%	3.500%	4,988,050.00	4,989,564.33	4,898,500.00	(91,064.33)
S 09/09/22	One Time	11/28/2022	08/28/24	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	3.000%	3.950%	4,995,000.00	4,995,577.19	4,949,750.00	(45,827.19)
08/31/22	NA	NA	09/13/24	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	3.250%	3.530%	4,972,750.00	4,998,333.00	4,890,750.00	(107,583.00)
09/30/22	NA	NA	09/13/24	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	3.250%	4.340%	4,898,930.00	4,907,706.39	4,890,750.00	(16,956.39)
09/30/22	NA	NA	09/26/24	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	4.250%	4.334%	4,992,100.00	4,992,773.73	4,975,500.00	(17,273.73)
10/17/22	NA	NA	10/17/24	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	4.375%	4.535%	9,969,800.00	9,971,659.10	9,959,400.00	(12,259.10)
10/31/22	NA	NA	11/15/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	2.250%	4.489%	4,783,984.38	4,792,960.90	4,798,650.00	5,689.10
10/31/22	NA	NA	12/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	2.250%	4.471%	4,773,046.88	4,781,930.15	4,791,200.00	9,269.85
10/31/22	NA	NA	12/31/24	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	2.250%	4.483%	4,771,875.00	4,780,804.14	4,791,200.00	10,395.86
10/31/22	NA	NA	01/15/25	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	4.476%	4,651,562.50	4,664,947.34	4,674,400.00	9,452.66
10/31/22	NA	NA	01/31/25	Aaa/AA/AAA	Treasury - Note	US Treasury	5,000,000	2.500%	4.483%	4,789,843.75	4,797,916.67	4,810,550.00	12,633.33
SUB-TOTAL							\$353,500,000			\$350,337,152.55	\$351,099,280.49	\$345,864,277.80	(\$5,235,002.69)
TOTAL INVESTMENTS							\$353,500,000			\$350,337,152.55	\$351,099,280.49	\$345,864,277.80	(\$5,235,002.69)

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

11/30/22

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Municipal Bonds	US Treasury
11/22	18,500,000	5.23%	\$18,500,000				
12/22	45,000,000	12.73%			10,000,000		35,000,000
1/23	20,000,000	5.66%					20,000,000
2/23	20,000,000	5.66%		10,000,000			10,000,000
3/23	15,000,000	4.24%					15,000,000
4/23	20,000,000	5.66%					20,000,000
5/23	15,000,000	4.24%		5,000,000			10,000,000
6/23	15,000,000	4.24%					15,000,000
7/23	10,000,000	2.83%					10,000,000
8/23	15,000,000	4.24%					15,000,000
9/23	15,000,000	4.24%					15,000,000
10/23	10,000,000	2.83%					10,000,000
SUB-TOTAL	\$218,500,000	61.81%	\$18,500,000	\$15,000,000	\$10,000,000		\$175,000,000

13 Months - 3 YEARS							
11/01/2023 - 01/31/2024	\$30,000,000	8.49%		5,000,000			25,000,000
2/01/2024 - 4/30/2024	\$25,000,000	7.07%		10,000,000			15,000,000
5/01/2024 - 07/31/2024	\$20,000,000	5.66%		5,000,000			15,000,000
08/01/2024 - 10/31/2024	\$35,000,000	9.90%		35,000,000			
11/01/2024 +	\$25,000,000	7.07%					25,000,000
TOTALS	\$353,500,000	100.00%	\$18,500,000	70,000,000	10,000,000		255,000,000

% OF PORTFOLIO

5.23%

19.80%

2.83%

72.14%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Nov-22

MATURITIES/SALES/CALLS

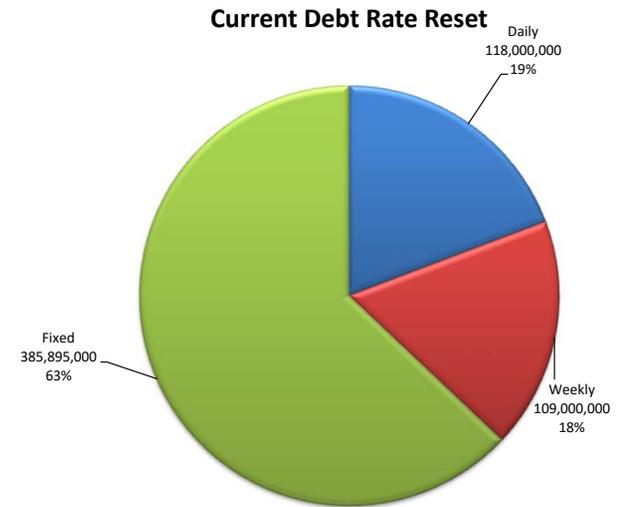
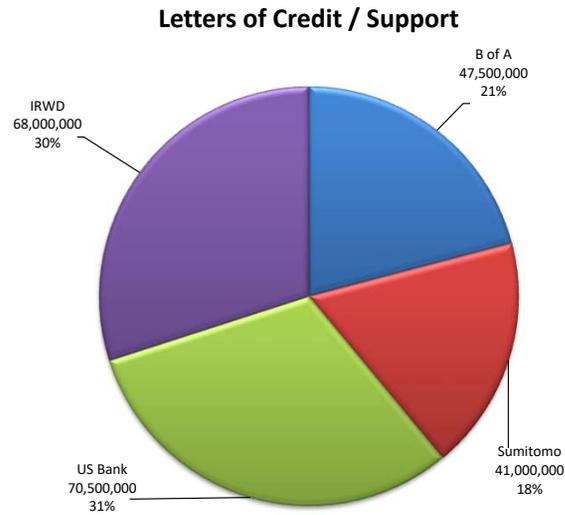
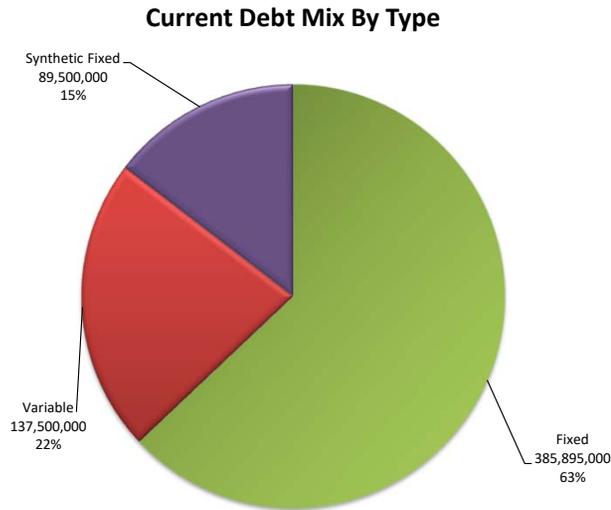
PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
11/9/2022	FHLB - Discount Note	\$10,000,000	3.58%	11/8/2022	11/9/2022	FHLB - Discount Note	\$10,000,000	3.58%
11/18/2022	FHLB - Discount Note	\$10,000,000	3.60%	11/10/2022	11/18/2022	FHLB - Discount Note	\$10,000,000	3.60%
11/28/2022	FHLB - Discount Note	\$5,000,000	3.61%	11/10/2022	11/28/2022	FHLB - Discount Note	\$5,000,000	3.61%
11/29/2022	FHLB - Discount Note	\$10,000,000	3.55%	10/18/2022	11/29/2022	FHLB - Discount Note	\$10,000,000	3.55%
11/30/2022	Treasury - Note	\$5,000,000	0.10%	11/28/2022	12/13/2022	Treasury - Bill	\$5,000,000	3.60%
11/30/2022	Treasury - Note	\$10,000,000	0.27%	11/29/2022	12/5/2022	FHLMC - Discount Note	\$10,000,000	3.54%
11/30/2022	Treasury - Note	\$5,000,000	0.40%	11/30/2022	12/8/2022	Treasury - Bill	\$5,000,000	3.50%
				11/30/2022	12/13/2022	Treasury - Bill	\$5,000,000	3.45%

Irvine Ranch Water District
Summary of Real Estate - Income Producing Investments
9/30/2022

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 6/30/2022	ANNUALIZED RATE OF RETURN QUARTER ENDED 9/30/2022
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 174,250,000	22.67%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 34,194,459	8.50%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 12,240,000	9.54%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 11,832,000	8.25%
Sand Canyon Professional Center - Medical Office	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 12,138,000	7.78%
Sand Canyon Professional Center - General Office	Sep-20	Office Building	Fee Simple	\$ 25,985,968	\$ 33,915,000	-0.21%
Total - Income Properties				\$ 98,555,794	\$ 278,569,459	12.44%

Exhibit "B"
Irvine Ranch Water District
Summary of Fixed and Variable Rate Debt
November 2022



Outstanding Par by Series

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit/Support	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$23,000,000	3.75%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$41,000,000	6.69%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$40,800,000	6.66%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$27,200,000	4.44%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$47,500,000	7.75%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$47,500,000	7.75%	B of A	Goldman	Variable	Daily
2016 COPS	09/01/16	03/01/46	\$109,650,000	17.89%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	28.55%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$101,245,000	16.52%	N/A	N/A	Fixed	Fixed
Total			\$612,895,000	100.00%				

**IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT**

November-22

ITN		GENERAL BOND INFORMATION																LETTER OF CREDIT INFORMATION										TRUSTEE INFORMATION													
Daily		Maturity Date		Principal Payment Date		Payment Date		Original Par Amount		Remaining Principal		Letter of Credit		Reimbursement Agreement Date		L/C Exp. Date		MOODY'S		S&P		FITCH		LOC Stated Amount		LOC Fee		Annual LOC Cost		Rmkt Agent		Reset		Rmkt Fees		Annual Cost		Trustee			
Weekly		Issue Date		Maturity Date		Principal Payment Date		Payment Date		Original Par Amount		Remaining Principal		Letter of Credit		Reimbursement Agreement Date		L/C Exp. Date		MOODY'S		S&P		FITCH		LOC Stated Amount		LOC Fee		Annual LOC Cost		Rmkt Agent		Reset		Rmkt Fees		Annual Cost		Trustee	
SERIES 1993	05/19/93	04/01/33	Apr 1	5th Bus. Day	\$38,300,000	\$23,000,000	US BANK	05/07/15	05/01/25	Aa3/VMIG1	AA-/A-1+	N/R	\$23,310,027	0.3000%	\$69,930	BAML	DAILY	0.10%	\$23,000	BANK OF NY																					
SERIES 2008-A Refunding	04/24/08	07/01/35	Jul 1	5th Bus. Day	\$60,215,000	\$41,000,000	SUMITOMO	04/01/11	05/28/25	A1/P-1	A-/A-1	A/F1	\$41,606,575	0.3150%	\$131,061	BAML	WED	0.07%	\$28,700	BANK OF NY																					
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$40,800,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$51,000	BANK OF NY																					
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$27,200,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$34,000	BANK OF NY																					
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$47,500,000	US BANK	04/01/11	05/01/25	Aa2/VMIG1	AA-/A-1+	AA/F1+	\$48,030,959	0.3000%	\$144,093	US Bank	DAILY	0.07%	\$33,250	US BANK																					
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$47,500,000	B of A	04/01/11	04/21/25	Aa2/VMIG1	A-/A-1	A1/F1+	\$48,030,959	0.2800%	\$134,487	Goldman	DAILY	0.10%	\$47,500	US BANK																					
\$349,430,000							\$227,000,000		SUB-TOTAL VARIABLE RATE DEBT										\$160,978,521		0.2979%		\$479,570		(Wt. Avg)																
FIXED RATE ISSUES																				0.10%		\$217,450		(Wt. Avg)																	
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	May (2025)	May/Nov	\$175,000,000	\$175,000,000	N/A	N/A	N/A	Aa1	AAA	NR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK				
2016 COPS	09/01/16	03/01/46	Mar 1	Mar/Sept	\$116,745,000	\$109,650,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK					
SERIES 2016	10/12/16	02/01/46	Feb 1	Feb/Aug	\$103,400,000	\$101,245,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY					
\$395,145,000					\$385,895,000		SUB-TOTAL FIXED RATE DEBT										\$744,575,000		\$612,895,000		TOTAL - FIXED & VARIABLE RATE DEBT																				
																				\$503,245,000																					

Remarketing Agents			GO VS COP's		
Goldman	115,500,000	51%	GO:	503,245,000	82%
BAML	64,000,000	28%	COPS:	109,650,000	18%
US Bank	47,500,000	21%	Total	612,895,000	
	<u>227,000,000</u>				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	41,000,000	Daily Issues	118,000,000 19%
BANK OF AMERICA	47,500,000	Weekly Issues	41,000,000 7%
US BANK	70,500,000	ITN Issues	68,000,000 11%
	<u>159,000,000</u>	Sub-Total	227,000,000
		Fixed Rate Issues	\$385,895,000 63%
		Sub-Total - Fixed	385,895,000
		TOTAL DEBT	
		FIXED & VAR.	612,895,000 100%

SUMMARY OF DEBT RATES

Nov-22

Rmkt Agent Mode	GOLDMAN		GOLDMAN		MERRILL LYNCH		US BANK
	DAILY	WEEKLY	WEEKLY	WEEKLY	DAILY	WEEKLY	DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	2011 A-2	1993	2008-A	2009-A
Par Amount	47,500,000	40,800,000	27,200,000	27,200,000	23,000,000	41,000,000	47,500,000
LOC Bank	BOFA	(SIFMA + 6)	(SIFMA + 6)	(SIFMA + 6)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday	Wednesday	Wednesday	Wednesday	
11/1/2022	1.15%	2.30%	2.30%	2.30%	1.16%	1.91%	1.30%
11/2/2022	1.10%	2.30%	2.30%	2.30%	1.11%	1.91%	1.25%
11/3/2022	1.04%	2.44%	2.44%	2.44%	1.08%	1.97%	1.20%
11/4/2022	1.04%	2.44%	2.44%	2.44%	0.94%	1.97%	1.10%
11/5/2022	1.04%	2.44%	2.44%	2.44%	0.94%	1.97%	1.10%
11/6/2022	1.04%	2.44%	2.44%	2.44%	0.94%	1.97%	1.10%
11/7/2022	0.92%	2.44%	2.44%	2.44%	0.90%	1.97%	1.00%
11/8/2022	0.87%	2.44%	2.44%	2.44%	0.84%	1.97%	0.93%
11/9/2022	0.82%	2.44%	2.44%	2.44%	0.79%	1.97%	0.80%
11/10/2022	0.77%	2.25%	2.25%	2.25%	0.74%	1.78%	0.80%
11/11/2022	0.77%	2.25%	2.25%	2.25%	0.74%	1.78%	0.80%
11/12/2022	0.77%	2.25%	2.25%	2.25%	0.74%	1.78%	0.80%
11/13/2022	0.77%	2.25%	2.25%	2.25%	0.74%	1.78%	0.80%
11/14/2022	0.70%	2.25%	2.25%	2.25%	0.72%	1.78%	0.77%
11/15/2022	0.68%	2.25%	2.25%	2.25%	0.65%	1.78%	0.72%
11/16/2022	0.60%	2.25%	2.25%	2.25%	0.65%	1.78%	0.65%
11/17/2022	0.54%	2.10%	2.10%	2.10%	0.57%	1.67%	0.60%
11/18/2022	0.54%	2.10%	2.10%	2.10%	0.53%	1.67%	0.55%
11/19/2022	0.54%	2.10%	2.10%	2.10%	0.53%	1.67%	0.55%
11/20/2022	0.54%	2.10%	2.10%	2.10%	0.53%	1.67%	0.55%
11/21/2022	0.52%	2.10%	2.10%	2.10%	0.53%	1.67%	0.55%
11/22/2022	0.50%	2.10%	2.10%	2.10%	0.50%	1.67%	0.52%
11/23/2022	0.50%	2.10%	2.10%	2.10%	0.50%	1.67%	0.52%
11/24/2022	0.50%	1.96%	1.96%	1.96%	0.50%	1.58%	0.52%
11/25/2022	0.50%	1.96%	1.96%	1.96%	0.50%	1.58%	0.51%
11/26/2022	0.50%	1.96%	1.96%	1.96%	0.50%	1.58%	0.51%
11/27/2022	0.50%	1.96%	1.96%	1.96%	0.50%	1.58%	0.51%
11/28/2022	0.50%	1.96%	1.96%	1.96%	0.50%	1.58%	0.50%
11/29/2022	0.50%	1.96%	1.96%	1.96%	0.58%	1.58%	0.58%
11/30/2022	0.60%	1.96%	1.96%	1.96%	0.67%	1.58%	0.70%
Avg Interest Rates	0.71%	2.20%	2.20%	2.20%	0.70%	1.76%	0.76%
Rmkt Fee	0.10%	0.13%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.28%				0.30%	0.32%	0.30%
All-In Rate	1.09%	2.32%	2.32%	2.32%	1.10%	2.15%	1.13%
Par Amount	88,300,000		27,200,000		64,000,000		47,500,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	51.98%	118,000,000	1.11%	0.73%
Weekly	48.02%	109,000,000	2.25%	2.03%
	100.00%	\$ 227,000,000	1.66%	1.35%
Fixed				
COPS 2016	28.41%	109,650,000	2.90%	
BABS 2010	45.35%	175,000,000	4.44%	(1)
SERIES 2016	26.24%	101,245,000	3.32%	
	100.00%	\$ 385,895,000	3.71%	
All-In Debt Rate Including \$60 Million Notional Amount of Swaps				3.13%

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 5.7%

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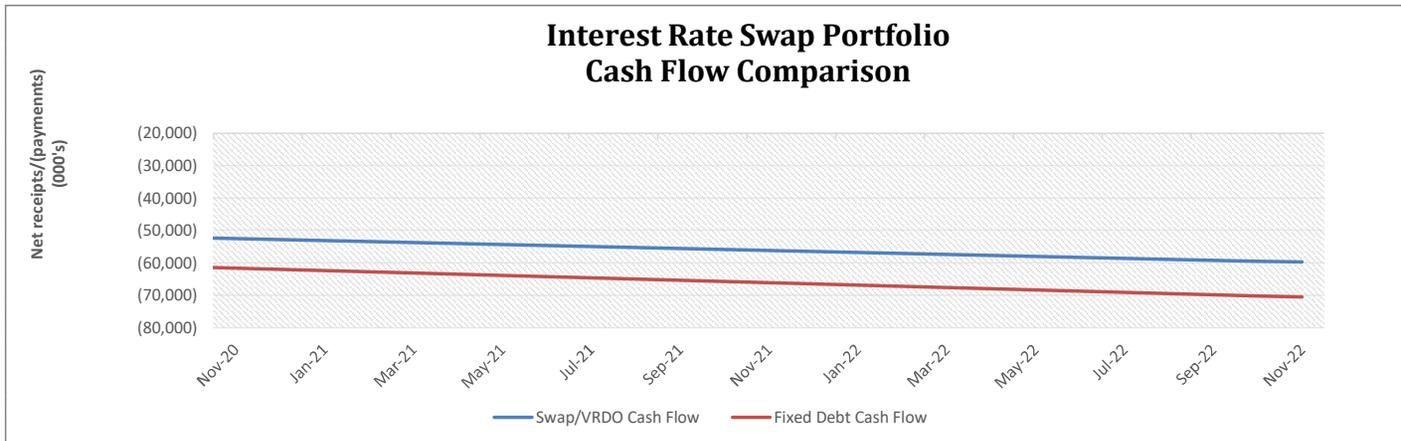
Exhibit "C"
Irvine Ranch Water District
Interest Rate Swap Summary
November 2022

	Prior Mo.	Current Mo.	12-Mo Avg
LIBOR Avg %	3.47%	3.94%	1.51%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual	Current Mark to Market	Notional Difference
Fixed Payer Swaps - By Effective Date													
3/10/2007	3/10/2029	6.3	ML	30,000,000	FXP	LIBOR	5.687%	(66,189)	(45,622)	(372,330)	(21,754,894)	26,478,497	(3,521,503)
3/10/2007	3/10/2029	6.3	CG	30,000,000	FXP	LIBOR	5.687%	(66,189)	(45,622)	(372,330)	(21,754,894)	26,474,743	(3,525,257)
Totals/Weighted Avgs				6.3	\$ 60,000,000		5.687%	\$ (132,378)	\$ (91,244)	\$ (744,660)	\$ (43,509,787)	\$ 52,953,240	\$ (7,046,760)
Total Current Year Active Swaps				\$ 60,000,000				\$ (132,378)	\$ (91,244)	\$ (744,660)	\$ (43,509,787)	\$ 52,953,240	\$ (7,046,760)

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

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
								Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual	Current Mark to Market	Notional Difference
Total Current Year Active & Terminated Swaps				\$ 60,000,000				\$ (132,378)	\$ (91,244)	\$ (744,660)	\$ (43,509,787)	\$ 52,953,240	\$ (7,046,760)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$59,707,948
Fixed Rate =	\$70,577,488
Assumptions:	
- Fixed rate debt issued at 4.93% in Mar-07 (estimated TE rate - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

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Exhibit "D"

IRVINE RANCH WATER DISTRICT AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
431653	3-Nov-22	A&Y ASPHALT CONTRACTORS, INC.	350,124.14	IRWD Wells Fargo Check No Print	Reconciled
431654	3-Nov-22	ABC ICE, INC	285.50	IRWD Wells Fargo Check No Print	Reconciled
431655	3-Nov-22	ADS CORP.	4,920.00	IRWD Wells Fargo Check No Print	Reconciled
431656	3-Nov-22	AGILENT TECHNOLOGIES, INC.	1,371.93	IRWD Wells Fargo Check No Print	Reconciled
431657	3-Nov-22	AMAZON CAPITAL SERVICES, INC.	17,046.94	IRWD Wells Fargo Check No Print	Reconciled
431658	3-Nov-22	AMIDI, MAHMOUD	47.53	IRWD Wells Fargo Check No Print	Reconciled
431659	3-Nov-22	ANTHONY N. LARSEN	825.00	IRWD Wells Fargo Check No Print	Reconciled
431660	3-Nov-22	AT&T	546.62	IRWD Wells Fargo Check No Print	Reconciled
431661	3-Nov-22	AT&T	137.12	IRWD Wells Fargo Check No Print	Reconciled
431662	3-Nov-22	AT&T	59.37	IRWD Wells Fargo Check No Print	Reconciled
431663	3-Nov-22	ATHAN, MARY	85.95	IRWD Wells Fargo Check No Print	Reconciled
431664	3-Nov-22	AUTOZONE PARTS, INC.	8.81	IRWD Wells Fargo Check No Print	Reconciled
431665	3-Nov-22	BATTERIES PLUS AND BATTERIES PLUS BULBS	2,707.09	IRWD Wells Fargo Check No Print	Reconciled
431666	3-Nov-22	BECERRA, FERNANDO	35.11	IRWD Wells Fargo Check No Print	Negotiable
431667	3-Nov-22	BERGSTROM, EVE	34.21	IRWD Wells Fargo Check No Print	Negotiable
431668	3-Nov-22	BEST DRILLING AND PUMP, INC.	24,650.00	IRWD Wells Fargo Check No Print	Reconciled
431669	3-Nov-22	BIOTAGE LLC	1,562.66	IRWD Wells Fargo Check No Print	Reconciled
431670	3-Nov-22	BORCHARD SURVEYING & MAPPING, INC.	3,000.00	IRWD Wells Fargo Check No Print	Reconciled
431671	3-Nov-22	BOYD, BROOKE	34.94	IRWD Wells Fargo Check No Print	Negotiable
431672	3-Nov-22	C WELLS PIPELINE MATERIALS INC	16,515.93	IRWD Wells Fargo Check No Print	Reconciled
431673	3-Nov-22	CALIFORNIA BARRICADE RENTAL, INC.	10,651.35	IRWD Wells Fargo Check No Print	Reconciled
431674	3-Nov-22	CALIFORNIA COUNCIL FOR ENVIRONMENTAL AND ECONOMIC BALANCE	39,000.00	IRWD Wells Fargo Check No Print	Reconciled
431675	3-Nov-22	CALIFORNIA SPECIAL DISTRICTS ASSOCIATION	8,810.00	IRWD Wells Fargo Check No Print	Reconciled
431676	3-Nov-22	CASHCO INC	349.23	IRWD Wells Fargo Check No Print	Reconciled
431677	3-Nov-22	CDW GOVERNMENT LLC	14,472.06	IRWD Wells Fargo Check No Print	Reconciled
431678	3-Nov-22	CHARLES P CROWLEY COMPANY INC	438.68	IRWD Wells Fargo Check No Print	Reconciled
431679	3-Nov-22	CHEM SERVICE INC.	269.10	IRWD Wells Fargo Check No Print	Reconciled
431680	3-Nov-22	CHEM TECH INTERNATIONAL INC	10,422.00	IRWD Wells Fargo Check No Print	Reconciled
431681	3-Nov-22	CHOU, ANNA	19.62	IRWD Wells Fargo Check No Print	Negotiable
431682	3-Nov-22	CITY OF ORANGE	240.72	IRWD Wells Fargo Check No Print	Reconciled
431683	3-Nov-22	COASTLINE EQUIPMENT COMPANY	251,046.73	IRWD Wells Fargo Check No Print	Reconciled
431684	3-Nov-22	CONSTELLATION NEWENERGY, INC.	179,735.48	IRWD Wells Fargo Check No Print	Reconciled
431685	3-Nov-22	COX COMMUNICATIONS, INC.	103.30	IRWD Wells Fargo Check No Print	Reconciled
431686	3-Nov-22	CURATIVE I.T. LLC	2,093.03	IRWD Wells Fargo Check No Print	Reconciled
431687	3-Nov-22	CV TECHNOLOGY, INC.	53,124.60	IRWD Wells Fargo Check No Print	Reconciled
431688	3-Nov-22	D & G SIGNS	3,393.73	IRWD Wells Fargo Check No Print	Reconciled
431689	3-Nov-22	D & H WATER SYSTEMS INC.	29,730.90	IRWD Wells Fargo Check No Print	Reconciled
431690	3-Nov-22	DELL MARKETING LP	3,313.31	IRWD Wells Fargo Check No Print	Reconciled
431691	3-Nov-22	DG INVESTMENT INTERMEDIATE HOLDINGS 2, INC.	28,607.75	IRWD Wells Fargo Check No Print	Reconciled
431692	3-Nov-22	DIGITAL SCEPTER CORPORATION	7,225.00	IRWD Wells Fargo Check No Print	Reconciled
431693	3-Nov-22	DIRECTV INC	153.24	IRWD Wells Fargo Check No Print	Reconciled
431694	3-Nov-22	DUDEK	1,282.49	IRWD Wells Fargo Check No Print	Reconciled
431695	3-Nov-22	E&M ELECTRIC AND MACHINERY, INC.	6,990.00	IRWD Wells Fargo Check No Print	Reconciled
431696	3-Nov-22	E.J. MEYER COMPANY	48,461.48	IRWD Wells Fargo Check No Print	Reconciled
431697	3-Nov-22	EAST ORANGE COUNTY WATER DISTRICT	1,922.72	IRWD Wells Fargo Check No Print	Reconciled
431698	3-Nov-22	ENDEMIC ENVIRONMENTAL SERVICES, INC.	960.00	IRWD Wells Fargo Check No Print	Reconciled
431699	3-Nov-22	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	12,335.00	IRWD Wells Fargo Check No Print	Reconciled
431700	3-Nov-22	ENVIRONMENTAL EXPRESS INC	225.65	IRWD Wells Fargo Check No Print	Reconciled
431701	3-Nov-22	ENVIRONMENTAL SCIENCE ASSOCIATES	2,208.31	IRWD Wells Fargo Check No Print	Reconciled
431702	3-Nov-22	FEDEX	583.52	IRWD Wells Fargo Check No Print	Reconciled
431703	3-Nov-22	FIRST CHOICE SERVICES	2,229.09	IRWD Wells Fargo Check No Print	Reconciled
431704	3-Nov-22	FISHER SCIENTIFIC COMPANY LLC	3,339.78	IRWD Wells Fargo Check No Print	Reconciled
431705	3-Nov-22	FLEET SOLUTIONS LLC	5,395.99	IRWD Wells Fargo Check No Print	Reconciled
431706	3-Nov-22	FRONTIER CALIFORNIA INC.	414.21	IRWD Wells Fargo Check No Print	Reconciled
431707	3-Nov-22	GANAHL LUMBER CO.	516.44	IRWD Wells Fargo Check No Print	Reconciled
431708	3-Nov-22	GARZA INDUSTRIES, INC	1,987.13	IRWD Wells Fargo Check No Print	Reconciled
431709	3-Nov-22	GCI CONSTRUCTION, INC.	19,564.18	IRWD Wells Fargo Check No Print	Reconciled
431710	3-Nov-22	GEA MECHANICAL EQUIPMENT US, INC.	114,975.53	IRWD Wells Fargo Check No Print	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
431711	3-Nov-22	GOFORTH & MARTI	405.48	IRWD Wells Fargo Check No Print	Reconciled
431712	3-Nov-22	GRAINGER	8,517.87	IRWD Wells Fargo Check No Print	Reconciled
431713	3-Nov-22	GRAYBAR ELECTRIC COMPANY	3,606.81	IRWD Wells Fargo Check No Print	Reconciled
431714	3-Nov-22	HACH COMPANY	5,292.06	IRWD Wells Fargo Check No Print	Reconciled
431715	3-Nov-22	HELPMATES STAFFING SERVICES LLC	21,461.51	IRWD Wells Fargo Check No Print	Reconciled
431716	3-Nov-22	HI-LINE INC	2,833.98	IRWD Wells Fargo Check No Print	Reconciled
431717	3-Nov-22	HILTI INC.	733.52	IRWD Wells Fargo Check No Print	Reconciled
431718	3-Nov-22	HOME DEPOT USA INC	626.86	IRWD Wells Fargo Check No Print	Reconciled
431719	3-Nov-22	HOME DEPOT USA INC	1,468.63	IRWD Wells Fargo Check No Print	Reconciled
431720	3-Nov-22	HONARVAR, BOB	23.58	IRWD Wells Fargo Check No Print	Reconciled
431721	3-Nov-22	HUANG, SHANGYI	91.46	IRWD Wells Fargo Check No Print	Negotiable
431722	3-Nov-22	INDUSTRIAL METAL SUPPLY CO	725.83	IRWD Wells Fargo Check No Print	Reconciled
431723	3-Nov-22	INTERPRO SOLUTIONS, LLC.	17,500.00	IRWD Wells Fargo Check No Print	Reconciled
431724	3-Nov-22	IRVINE PACIFIC	120.97	IRWD Wells Fargo Check No Print	Reconciled
431725	3-Nov-22	J M ELECTRICAL SERVICES	2,500.00	IRWD Wells Fargo Check No Print	Reconciled
431726	3-Nov-22	JOSE MARTINEZ TREE SERVICE INC.	3,500.00	IRWD Wells Fargo Check No Print	Reconciled
431727	3-Nov-22	KIMBALL MIDWEST	4,142.56	IRWD Wells Fargo Check No Print	Reconciled
431728	3-Nov-22	LANDCARE HOLDINGS, INC.	132,743.88	IRWD Wells Fargo Check No Print	Reconciled
431729	3-Nov-22	LEE, SARAH	444.56	IRWD Wells Fargo Check No Print	Negotiable
431730	3-Nov-22	LENNAR HOMES OF CALIFORNIA, INC.	46.76	IRWD Wells Fargo Check No Print	Reconciled
431731	3-Nov-22	LIEBERT CASSIDY WHITMORE	85.00	IRWD Wells Fargo Check No Print	Reconciled
431732	3-Nov-22	LINDE GAS & EQUIPMENT INC.	2,196.74	IRWD Wells Fargo Check No Print	Reconciled
431733	3-Nov-22	MATHESON, DEAN	21.31	IRWD Wells Fargo Check No Print	Reconciled
431734	3-Nov-22	MBC AQUATIC SCIENCES, INC.	1,400.00	IRWD Wells Fargo Check No Print	Reconciled
431735	3-Nov-22	MC MASTER CARR SUPPLY CO	177.40	IRWD Wells Fargo Check No Print	Reconciled
431736	3-Nov-22	MCCALL'S METERS, INC.	646.71	IRWD Wells Fargo Check No Print	Reconciled
431737	3-Nov-22	MCCLAINS FURNITURE	2,250.00	IRWD Wells Fargo Check No Print	Reconciled
431738	3-Nov-22	MILES CHEMICAL COMPANY, INC.	10,636.17	IRWD Wells Fargo Check No Print	Reconciled
431739	3-Nov-22	MSA SAFETY INCORPORATED	3,874.17	IRWD Wells Fargo Check No Print	Reconciled
431740	3-Nov-22	NEWPORT BEACH CHAMBER OF COMMERCE	500.00	IRWD Wells Fargo Check No Print	Reconciled
431741	3-Nov-22	NMG GEOTECHNICAL INC	9,643.84	IRWD Wells Fargo Check No Print	Reconciled
431742	3-Nov-22	O'REILLY AUTO ENTERPRISES, LLC	42.08	IRWD Wells Fargo Check No Print	Reconciled
431743	3-Nov-22	OCTA	662.00	IRWD Wells Fargo Check No Print	Reconciled
431744	3-Nov-22	OLIN CORPORATION	65,609.19	IRWD Wells Fargo Check No Print	Reconciled
431745	3-Nov-22	ON CALL EVENT RENTALS	1,777.09	IRWD Wells Fargo Check No Print	Reconciled
431746	3-Nov-22	ONESOURCE DISTRIBUTORS LLC	6,566.92	IRWD Wells Fargo Check No Print	Reconciled
431747	3-Nov-22	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	2,332.39	IRWD Wells Fargo Check No Print	Reconciled
431748	3-Nov-22	PACIFIC PARTS & CONTROLS INC	584.53	IRWD Wells Fargo Check No Print	Reconciled
431749	3-Nov-22	PACIFIC STAR CHEMICAL, LLC	4,391.88	IRWD Wells Fargo Check No Print	Reconciled
431750	3-Nov-22	PAX WATER TECHNOLOGIES, INC	19,608.80	IRWD Wells Fargo Check No Print	Reconciled
431751	3-Nov-22	PERKINELMER HEALTH SCIENCES INC	2,422.31	IRWD Wells Fargo Check No Print	Reconciled
431752	3-Nov-22	PHILLIPS PLYWOOD CO, INC.	3,297.92	IRWD Wells Fargo Check No Print	Reconciled
431753	3-Nov-22	PILAR ONATE	15,450.00	IRWD Wells Fargo Check No Print	Negotiable
431754	3-Nov-22	PILLSBURY WINTHROP SHAW PITTMAN LLP	1,950.00	IRWD Wells Fargo Check No Print	Reconciled
431755	3-Nov-22	R.F. MACDONALD CO.	5,688.85	IRWD Wells Fargo Check No Print	Reconciled
431756	3-Nov-22	RESA SERVICE, LLC	6,846.00	IRWD Wells Fargo Check No Print	Reconciled
431757	3-Nov-22	REXEL USA, INC.	32,704.28	IRWD Wells Fargo Check No Print	Reconciled
431758	3-Nov-22	SAFERITE SOLUTIONS, INC	45,416.63	IRWD Wells Fargo Check No Print	Reconciled
431759	3-Nov-22	SANTA MARGARITA FORD	1,641.76	IRWD Wells Fargo Check No Print	Reconciled
431760	3-Nov-22	SCHINDLER ELEVATOR CORPORATION	258.15	IRWD Wells Fargo Check No Print	Reconciled
431761	3-Nov-22	SEAL ANALYTICAL INC	2,645.29	IRWD Wells Fargo Check No Print	Reconciled
431762	3-Nov-22	SHAMROCK SUPPLY CO INC	3,252.53	IRWD Wells Fargo Check No Print	Reconciled
431763	3-Nov-22	SHAMSAI, BERNARD	27.47	IRWD Wells Fargo Check No Print	Reconciled
431764	3-Nov-22	SHIMMICK CONSTRUCTION INC.	44,863.75	IRWD Wells Fargo Check No Print	Reconciled
431765	3-Nov-22	SITEONE LANDSCAPE SUPPLY, LLC	3,598.45	IRWD Wells Fargo Check No Print	Reconciled
431766	3-Nov-22	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	1,241.22	IRWD Wells Fargo Check No Print	Reconciled
431767	3-Nov-22	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	52,935.00	IRWD Wells Fargo Check No Print	Reconciled
431768	3-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	169,624.50	IRWD Wells Fargo Check No Print	Reconciled
431769	3-Nov-22	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	3,688.88	IRWD Wells Fargo Check No Print	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
431770	3-Nov-22	SOUTHSIDE TOWING	3,537.50	IRWD Wells Fargo Check No Print	Reconciled
431771	3-Nov-22	STETSON ENGINEERS INC.	5,280.50	IRWD Wells Fargo Check No Print	Negotiable
431772	3-Nov-22	SUEZ TREATMENT SOLUTIONS INC.	1,537.35	IRWD Wells Fargo Check No Print	Reconciled
431773	3-Nov-22	T.E. ROBERTS, INC.	147,759.77	IRWD Wells Fargo Check No Print	Reconciled
431774	3-Nov-22	TANKVISIONS, INC	30.00	IRWD Wells Fargo Check No Print	Reconciled
431775	3-Nov-22	TEKDRAULICS	2,276.85	IRWD Wells Fargo Check No Print	Reconciled
431776	3-Nov-22	TK ELEVATOR CORPORATION	218.38	IRWD Wells Fargo Check No Print	Reconciled
431777	3-Nov-22	TRAFFIC MANAGEMENT, INC	1,598.00	IRWD Wells Fargo Check No Print	Reconciled
431778	3-Nov-22	TRI POINTE HOMES	300.00	IRWD Wells Fargo Check No Print	Reconciled
431779	3-Nov-22	TRIPAC MARKETING INC	1,896.93	IRWD Wells Fargo Check No Print	Reconciled
431780	3-Nov-22	UNITED PARCEL SERVICE INC	68.91	IRWD Wells Fargo Check No Print	Reconciled
431781	3-Nov-22	UNITED SITE SERVICES OF CALIFORNIA INC	1,169.80	IRWD Wells Fargo Check No Print	Reconciled
431782	3-Nov-22	US BANK NAT'L ASSOCIATION NORTH DAKOTA	66,697.55	IRWD Wells Fargo Check No Print	Reconciled
431783	3-Nov-22	VERIZON WIRELESS SERVICES LLC	13,742.95	IRWD Wells Fargo Check No Print	Reconciled
431784	3-Nov-22	VULCAN MATERIALS COMPANY	2,187.80	IRWD Wells Fargo Check No Print	Reconciled
431785	3-Nov-22	WALTERS WHOLESALE ELECTRIC	670.49	IRWD Wells Fargo Check No Print	Reconciled
431786	3-Nov-22	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	4,347.51	IRWD Wells Fargo Check No Print	Reconciled
431787	3-Nov-22	WATERSMART SOFTWARE INC	15,925.11	IRWD Wells Fargo Check No Print	Reconciled
431788	3-Nov-22	WAXIE'S ENTERPRISES, INC	1,372.94	IRWD Wells Fargo Check No Print	Reconciled
431789	3-Nov-22	WECK LABORATORIES INC	157.00	IRWD Wells Fargo Check No Print	Reconciled
431790	3-Nov-22	WEST COAST SAND & GRAVEL INC.	6,297.87	IRWD Wells Fargo Check No Print	Reconciled
431791	3-Nov-22	WIENHOFF & ASSOCIATES, INC	80.00	IRWD Wells Fargo Check No Print	Reconciled
431792	3-Nov-22	XU, ZIHE	46.77	IRWD Wells Fargo Check No Print	Negotiable
431793	3-Nov-22	AMWINS GROUP BENEFITS LLC	3,629.10	IRWD Wells Fargo Check	Reconciled
431794	3-Nov-22	Aryan, Stephen	232.81	IRWD Wells Fargo Check	Reconciled
431796	3-Nov-22	Coria, Alejandro (Alex)	292.00	IRWD Wells Fargo Check	Reconciled
431797	3-Nov-22	Daniel, Matthew (Matthew)	324.85	IRWD Wells Fargo Check	Reconciled
431798	3-Nov-22	Davis, Jennifer R (Jennifer)	200.00	IRWD Wells Fargo Check	Reconciled
431799	3-Nov-22	Garcia, Juan	100.00	IRWD Wells Fargo Check	Reconciled
431800	3-Nov-22	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	50.88	IRWD Wells Fargo Check	Reconciled
431801	3-Nov-22	IRWD-PETTY CASH CUSTODIAN	984.72	IRWD Wells Fargo Check	Reconciled
431802	3-Nov-22	KINGS COUNTY TAX COLLECTOR	22,812.18	IRWD Wells Fargo Check	Reconciled
431803	3-Nov-22	Lu, Michael	22.50	IRWD Wells Fargo Check	Reconciled
431804	3-Nov-22	McNulty, Amy K (Amy)	40.00	IRWD Wells Fargo Check	Reconciled
431805	3-Nov-22	Pascual, Allan	492.80	IRWD Wells Fargo Check	Reconciled
431806	3-Nov-22	Paulson, David	105.00	IRWD Wells Fargo Check	Negotiable
431807	3-Nov-22	Reynoso, Pio (Pio)	101.00	IRWD Wells Fargo Check	Reconciled
431808	3-Nov-22	SCAP	65.00	IRWD Wells Fargo Check	Reconciled
431809	3-Nov-22	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	14,020.46	IRWD Wells Fargo Check	Reconciled
431810	3-Nov-22	Zanetti, Enrique	460.22	IRWD Wells Fargo Check	Negotiable
431811	4-Nov-22	SUSAN E. SEROCKI	1,100.00	IRWD Wells Fargo Check	Reconciled
431812	4-Nov-22	AIR RESOURCES BOARD	735.00	IRWD Wells Fargo Check	Reconciled
431813	4-Nov-22	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	3,766.16	IRWD Wells Fargo Check	Reconciled
431814	4-Nov-22	PERS LONG TERM CARE	612.63	IRWD Wells Fargo Check	Reconciled
431815	10-Nov-22	COUNTY OF RIVERSIDE	204,156.54	IRWD Wells Fargo Check	Reconciled
431816	10-Nov-22	COUNTY OF RIVERSIDE	137,872.30	IRWD Wells Fargo Check	Reconciled
431817	10-Nov-22	8X8 INC	10,562.24	IRWD Wells Fargo Check No Print	Reconciled
431818	10-Nov-22	ABC ICE, INC	1,655.89	IRWD Wells Fargo Check No Print	Reconciled
431819	10-Nov-22	AECOM TECHNICAL SERVICES, INC.	70,867.50	IRWD Wells Fargo Check No Print	Reconciled
431820	10-Nov-22	AIRGAS, INC.	1,266.41	IRWD Wells Fargo Check No Print	Reconciled
431821	10-Nov-22	AM CONSERVATION GROUP, INC.	108.18	IRWD Wells Fargo Check No Print	Reconciled
431822	10-Nov-22	AMAZON CAPITAL SERVICES, INC.	584.50	IRWD Wells Fargo Check No Print	Reconciled
431823	10-Nov-22	ANDRITZ SEPARATION, INC.	870.87	IRWD Wells Fargo Check No Print	Reconciled
431824	10-Nov-22	AQUA-METRIC SALES COMPANY	804.26	IRWD Wells Fargo Check No Print	Reconciled
431825	10-Nov-22	ASHFORD, WALT	477.72	IRWD Wells Fargo Check No Print	Negotiable
431826	10-Nov-22	ASSEMBLED PRODUCTS CORPORATION	199.57	IRWD Wells Fargo Check No Print	Reconciled
431827	10-Nov-22	AT&T	3,501.45	IRWD Wells Fargo Check No Print	Reconciled
431828	10-Nov-22	AT&T	1,690.90	IRWD Wells Fargo Check No Print	Reconciled
431829	10-Nov-22	ATHENS SERVICES	5,058.93	IRWD Wells Fargo Check No Print	Reconciled
431830	10-Nov-22	AUTOZONE PARTS, INC.	146.29	IRWD Wells Fargo Check No Print	Reconciled
431831	10-Nov-22	AVI INTERNATIONAL INC	10,560.00	IRWD Wells Fargo Check No Print	Reconciled
431832	10-Nov-22	B & K ELECTRIC WHOLESALE	4,846.12	IRWD Wells Fargo Check No Print	Reconciled
431833	10-Nov-22	BATTERIES PLUS AND BATTERIES PLUS BULBS	982.95	IRWD Wells Fargo Check No Print	Reconciled

**IRVINE RANCH WATER DISTRICT
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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
431834	10-Nov-22	BENJAMIN REN	159.43	IRWD Wells Fargo Check No Print	Reconciled
431835	10-Nov-22	BIOTAGE LLC	14,053.54	IRWD Wells Fargo Check No Print	Reconciled
431836	10-Nov-22	BROWN AND CALDWELL	14,408.30	IRWD Wells Fargo Check No Print	Reconciled
431837	10-Nov-22	BRYAN INDUSTRIAL INC	116.69	IRWD Wells Fargo Check No Print	Reconciled
431838	10-Nov-22	BSI AMERICA PROFESSIONAL SERVICES INC.	60,057.57	IRWD Wells Fargo Check No Print	Reconciled
431839	10-Nov-22	CALIFORNIA BARRICADE RENTAL, INC.	3,192.00	IRWD Wells Fargo Check No Print	Reconciled
431840	10-Nov-22	CALIFORNIA MUNICIPAL STATISTICS INC	50.00	IRWD Wells Fargo Check No Print	Negotiable
431841	10-Nov-22	CANON SOLUTIONS AMERICA, INC.	25.87	IRWD Wells Fargo Check No Print	Reconciled
431842	10-Nov-22	CANON SOLUTIONS AMERICA, INC.	40.43	IRWD Wells Fargo Check No Print	Reconciled
431843	10-Nov-22	CDW GOVERNMENT LLC	4,895.62	IRWD Wells Fargo Check No Print	Reconciled
431844	10-Nov-22	CHAIREL CUSTOM HAY, INC.	3,634.67	IRWD Wells Fargo Check No Print	Reconciled
431845	10-Nov-22	CHEM SERVICE INC.	23.60	IRWD Wells Fargo Check No Print	Negotiable
431846	10-Nov-22	CHEM TECH INTERNATIONAL INC	22,118.83	IRWD Wells Fargo Check No Print	Reconciled
431847	10-Nov-22	CHWA, DANIEL	144.83	IRWD Wells Fargo Check No Print	Reconciled
431848	10-Nov-22	CIMARRON ENERGY, INC	33,361.11	IRWD Wells Fargo Check No Print	Reconciled
431849	10-Nov-22	CLEAN ENERGY	8,434.60	IRWD Wells Fargo Check No Print	Reconciled
431850	10-Nov-22	COASTLINE EQUIPMENT COMPANY	954.54	IRWD Wells Fargo Check No Print	Reconciled
431851	10-Nov-22	COLUMBIA COURT APTS	74.91	IRWD Wells Fargo Check No Print	Negotiable
431852	10-Nov-22	CONSTELLATION NEWENERGY, INC.	204,918.84	IRWD Wells Fargo Check No Print	Negotiable
431853	10-Nov-22	COOK, BLAINE	31.01	IRWD Wells Fargo Check No Print	Negotiable
431854	10-Nov-22	COUNTY OF ORANGE	99,733.09	IRWD Wells Fargo Check No Print	Reconciled
431855	10-Nov-22	COX COMMUNICATIONS, INC.	279.24	IRWD Wells Fargo Check No Print	Reconciled
431856	10-Nov-22	CUSTER, MICHAEL	33.46	IRWD Wells Fargo Check No Print	Reconciled
431857	10-Nov-22	D & G SIGNS	844.76	IRWD Wells Fargo Check No Print	Reconciled
431858	10-Nov-22	DE LA CRUZ, JULIO	97.64	IRWD Wells Fargo Check No Print	Negotiable
431859	10-Nov-22	DOWNSTREAM SERVICES, INC.	12,820.00	IRWD Wells Fargo Check No Print	Reconciled
431860	10-Nov-22	DUDEK	7,938.82	IRWD Wells Fargo Check No Print	Reconciled
431861	10-Nov-22	DXP ENTERPRISES, INC.	5,138.75	IRWD Wells Fargo Check No Print	Reconciled
431862	10-Nov-22	EAGLE PRINT DYNAMICS	5,866.35	IRWD Wells Fargo Check No Print	Reconciled
431863	10-Nov-22	EMD MILLIPORE CORP.	1,368.25	IRWD Wells Fargo Check No Print	Reconciled
431864	10-Nov-22	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	14,332.50	IRWD Wells Fargo Check No Print	Reconciled
431865	10-Nov-22	EUROFINS EATON ANALYTICAL, INC.	100.00	IRWD Wells Fargo Check No Print	Reconciled
431866	10-Nov-22	EUROFINS ENVIRONMENT TESTING AMERICA HOLDINGS, INC.	3,727.50	IRWD Wells Fargo Check No Print	Reconciled
431867	10-Nov-22	FARRELL & ASSOCIATES	376.96	IRWD Wells Fargo Check No Print	Reconciled
431868	10-Nov-22	FASTBLUE COMMUNICATIONS INC.	1,953.00	IRWD Wells Fargo Check No Print	Reconciled
431870	10-Nov-22	FELIX, STACEY	314.77	IRWD Wells Fargo Check No Print	Negotiable
431871	10-Nov-22	FISHER & PHILLIPS LLP	3,934.25	IRWD Wells Fargo Check No Print	Reconciled
431872	10-Nov-22	FISHER SCIENTIFIC COMPANY LLC	11,553.43	IRWD Wells Fargo Check No Print	Reconciled
431873	10-Nov-22	FOUGHT, CYNTHIA J.	3,047.42	IRWD Wells Fargo Check No Print	Reconciled
431874	10-Nov-22	GAO, CHENYU	1,409.46	IRWD Wells Fargo Check No Print	Reconciled
431875	10-Nov-22	GARY BALE REDI-MIX CONCRETE, INC.	1,160.70	IRWD Wells Fargo Check No Print	Reconciled
431876	10-Nov-22	GEI CONSULTANTS INC	9,770.25	IRWD Wells Fargo Check No Print	Reconciled
431877	10-Nov-22	GEIGER BROS	770.88	IRWD Wells Fargo Check No Print	Reconciled
431878	10-Nov-22	GENTERRA CONSULTANTS INC	24,754.74	IRWD Wells Fargo Check No Print	Reconciled
431879	10-Nov-22	GHD INC.	73,411.15	IRWD Wells Fargo Check No Print	Reconciled
431880	10-Nov-22	GRAINGER	6,588.44	IRWD Wells Fargo Check No Print	Reconciled
431881	10-Nov-22	GRAYBAR ELECTRIC COMPANY	5,146.93	IRWD Wells Fargo Check No Print	Reconciled
431882	10-Nov-22	GSRP ST SOLAR I LLC	9,946.27	IRWD Wells Fargo Check No Print	Reconciled
431883	10-Nov-22	HACH COMPANY	2,567.78	IRWD Wells Fargo Check No Print	Reconciled
431884	10-Nov-22	HADRONEX, INC.	1,039.85	IRWD Wells Fargo Check No Print	Reconciled
431885	10-Nov-22	HAKE, JOSEPH	14.31	IRWD Wells Fargo Check No Print	Reconciled
431886	10-Nov-22	HALIM, RAOUF	61.04	IRWD Wells Fargo Check No Print	Negotiable
431887	10-Nov-22	HARPER & ASSOCIATES ENGINEERING INC	5,890.00	IRWD Wells Fargo Check No Print	Negotiable
431888	10-Nov-22	HDR ENGINEERING INC	117,594.79	IRWD Wells Fargo Check No Print	Reconciled
431889	10-Nov-22	HE, TIANXI	20.11	IRWD Wells Fargo Check No Print	Reconciled
431890	10-Nov-22	HELPMATES STAFFING SERVICES LLC	6,662.79	IRWD Wells Fargo Check No Print	Reconciled
431891	10-Nov-22	HENSEL PHELPS CONSTRUCTION CO	1,469.08	IRWD Wells Fargo Check No Print	Negotiable
431892	10-Nov-22	HI-LINE INC	463.60	IRWD Wells Fargo Check No Print	Reconciled
431893	10-Nov-22	HOLLAND, TATE	32.07	IRWD Wells Fargo Check No Print	Negotiable
431894	10-Nov-22	HOME DEPOT USA INC	75.47	IRWD Wells Fargo Check No Print	Reconciled
431895	10-Nov-22	HOME DEPOT USA INC	455.28	IRWD Wells Fargo Check No Print	Reconciled

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431896	10-Nov-22	HOWDEN USA COMPANY	1,530.05	IRWD Wells Fargo Check No Print	Reconciled
431897	10-Nov-22	HU, MEIJUAN	50.31	IRWD Wells Fargo Check No Print	Reconciled
431898	10-Nov-22	HUO, HEITYUNG	1,192.36	IRWD Wells Fargo Check No Print	Negotiable
431899	10-Nov-22	ICE QUBE, INC.	3,597.36	IRWD Wells Fargo Check No Print	Reconciled
431900	10-Nov-22	IMPERIAL SPRINKLER SUPPLY, INC.	376.56	IRWD Wells Fargo Check No Print	Reconciled
431901	10-Nov-22	INDUSTRIAL SCIENTIFIC CORPORATION	884.54	IRWD Wells Fargo Check No Print	Reconciled
431902	10-Nov-22	INLAND POTABLE SERVICES, INC.	14,324.00	IRWD Wells Fargo Check No Print	Reconciled
431903	10-Nov-22	IRVINE PACIFIC	654.58	IRWD Wells Fargo Check No Print	Negotiable
431904	10-Nov-22	JOSE MARTINEZ TREE SERVICE INC.	9,600.00	IRWD Wells Fargo Check No Print	Reconciled
431905	10-Nov-22	KAESER COMPRESSORS, INC.	1,002.84	IRWD Wells Fargo Check No Print	Reconciled
431906	10-Nov-22	KIM, MINA	25.98	IRWD Wells Fargo Check No Print	Reconciled
431907	10-Nov-22	KIMBALL MIDWEST	1,616.84	IRWD Wells Fargo Check No Print	Reconciled
431908	10-Nov-22	KURZ INSTRUMENTS INC	8,910.48	IRWD Wells Fargo Check No Print	Reconciled
431909	10-Nov-22	LAGUNA BEACH COUNTY WATER DISTRICT	11,543.58	IRWD Wells Fargo Check No Print	Negotiable
431910	10-Nov-22	LANDCARE HOLDINGS, INC.	51,615.80	IRWD Wells Fargo Check No Print	Reconciled
431911	10-Nov-22	LENNAR HOMES OF CALIFORNIA, INC.	187.84	IRWD Wells Fargo Check No Print	Reconciled
431912	10-Nov-22	LILLESTRAND LEADERSHIP CONSULTING, INC.	18,197.50	IRWD Wells Fargo Check No Print	Reconciled
431913	10-Nov-22	LINDE GAS & EQUIPMENT INC.	3,687.38	IRWD Wells Fargo Check No Print	Reconciled
431914	10-Nov-22	LSA ASSOCIATES INC	5,620.00	IRWD Wells Fargo Check No Print	Negotiable
431915	10-Nov-22	MA, PHILIP	623.09	IRWD Wells Fargo Check No Print	Reconciled
431916	10-Nov-22	MARK THOMAS & COMPANY, INC.	1,345.28	IRWD Wells Fargo Check No Print	Reconciled
431917	10-Nov-22	MC FADDEN-DALE INDUSTRIAL	353.53	IRWD Wells Fargo Check No Print	Reconciled
431918	10-Nov-22	MC MASTER CARR SUPPLY CO	115.91	IRWD Wells Fargo Check No Print	Reconciled
431919	10-Nov-22	MCCROMETER, INC.	106.11	IRWD Wells Fargo Check No Print	Reconciled
431920	10-Nov-22	MEGGITT DEFENSE SYSTEMS, INC	600.00	IRWD Wells Fargo Check No Print	Reconciled
431921	10-Nov-22	MICROSOFT CORPORATION	24.00	IRWD Wells Fargo Check No Print	Reconciled
431922	10-Nov-22	MISSION COMMUNICATIONS, LLC	2,822.40	IRWD Wells Fargo Check No Print	Reconciled
431923	10-Nov-22	MSC INDUSTRIAL SUPPLY CO	1,218.00	IRWD Wells Fargo Check No Print	Reconciled
431924	10-Nov-22	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	13,792.70	IRWD Wells Fargo Check No Print	Reconciled
431925	10-Nov-22	NATIONAL READY MIXED CONCRETE SALES, LLC	688.53	IRWD Wells Fargo Check No Print	Reconciled
431926	10-Nov-22	NEW DIMENSION GENERAL CONSTRUCTION	34,460.24	IRWD Wells Fargo Check No Print	Reconciled
431927	10-Nov-22	NINYO & MOORE	570.50	IRWD Wells Fargo Check No Print	Reconciled
431928	10-Nov-22	NMG GEOTECHNICAL INC	2,642.20	IRWD Wells Fargo Check No Print	Reconciled
431929	10-Nov-22	O'REILLY AUTO ENTERPRISES, LLC	43.23	IRWD Wells Fargo Check No Print	Reconciled
431930	10-Nov-22	O.C. SUPERIOR CUSTOM CLEANING	3,600.00	IRWD Wells Fargo Check No Print	Reconciled
431931	10-Nov-22	ONESOURCE DISTRIBUTORS LLC	4,594.72	IRWD Wells Fargo Check No Print	Reconciled
431932	10-Nov-22	ORACLE AMERICA, INC.	3,642.13	IRWD Wells Fargo Check No Print	Reconciled
431933	10-Nov-22	PACIFIC HYDROTECH CORPORATION	2,049,610.94	IRWD Wells Fargo Check No Print	Reconciled
431934	10-Nov-22	PACIFIC HYDROTECH CORPORATION	13,550.85	IRWD Wells Fargo Check No Print	Reconciled
431935	10-Nov-22	PACIFIC HYDROTECH CORPORATION	88,440.03	IRWD Wells Fargo Check No Print	Negotiable
431936	10-Nov-22	PACIFIC HYDROTECH CORPORATION	5,883.37	IRWD Wells Fargo Check No Print	Negotiable
431937	10-Nov-22	PASCAL & LUDWIG CONSTRUCTORS	29,950.00	IRWD Wells Fargo Check No Print	Reconciled
431938	10-Nov-22	PATTEN SYSTEMS, INC.	1,217.72	IRWD Wells Fargo Check No Print	Reconciled
431939	10-Nov-22	PAYNE & FEARS LLP	2,157.50	IRWD Wells Fargo Check No Print	Reconciled
431940	10-Nov-22	PENN ARCHIVE SERVICES	86.57	IRWD Wells Fargo Check No Print	Reconciled
431941	10-Nov-22	PHAM, JOHN	1,070.10	IRWD Wells Fargo Check No Print	Reconciled
431942	10-Nov-22	PORTRAIT CONSTRUCTION, INC.	2,600.00	IRWD Wells Fargo Check No Print	Reconciled
431943	10-Nov-22	PRASAD, KARTHIK	31.11	IRWD Wells Fargo Check No Print	Reconciled
431944	10-Nov-22	PRUDENTIAL OVERALL SUPPLY	10,485.72	IRWD Wells Fargo Check No Print	Reconciled
431945	10-Nov-22	PSOMAS	5,864.25	IRWD Wells Fargo Check No Print	Reconciled
431946	10-Nov-22	PULTE GROUP	173.37	IRWD Wells Fargo Check No Print	Negotiable
431947	10-Nov-22	QUINCY COMPRESSOR LLC	4,092.16	IRWD Wells Fargo Check No Print	Reconciled
431948	10-Nov-22	RED WING SHOE STORE	600.00	IRWD Wells Fargo Check No Print	Reconciled
431949	10-Nov-22	RENTOKIL NORTH AMERICA, INC	1,200.00	IRWD Wells Fargo Check No Print	Negotiable
431950	10-Nov-22	RENTOKIL NORTH AMERICA, INC	4,168.00	IRWD Wells Fargo Check No Print	Reconciled
431951	10-Nov-22	RICHARD C. SLADE & ASSOCIATES LLC	1,168.50	IRWD Wells Fargo Check No Print	Negotiable
431952	10-Nov-22	SAFETY CENTER INCORPORATED	5,544.00	IRWD Wells Fargo Check No Print	Negotiable
431953	10-Nov-22	SANTA ANA WATERSHED PROJECT AUTHORITY	21,458.00	IRWD Wells Fargo Check No Print	Reconciled
431954	10-Nov-22	SANTA MARGARITA FORD	994.85	IRWD Wells Fargo Check No Print	Reconciled
431955	10-Nov-22	SANTA MARGARITA FORD	421.60	IRWD Wells Fargo Check No Print	Reconciled
431956	10-Nov-22	SERRANO WATER DISTRICT	8,133.37	IRWD Wells Fargo Check No Print	Reconciled
431957	10-Nov-22	SHAMROCK SUPPLY CO INC	1,121.95	IRWD Wells Fargo Check No Print	Reconciled

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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
431958	10-Nov-22	SOLIS, MAURICIO	74.87	IRWD Wells Fargo Check No Print	Reconciled
431959	10-Nov-22	SONG, FEIXIA	54.15	IRWD Wells Fargo Check No Print	Negotiable
431960	10-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	338,660.46	IRWD Wells Fargo Check No Print	Reconciled
431961	10-Nov-22	SOUTHERN CALIFORNIA GAS COMPANY	14.51	IRWD Wells Fargo Check No Print	Reconciled
431962	10-Nov-22	SPARKLETTS	416.72	IRWD Wells Fargo Check No Print	Reconciled
431963	10-Nov-22	SPECTRUM TERRACE PHASE 3	906.54	IRWD Wells Fargo Check No Print	Negotiable
431964	10-Nov-22	STANTEC CONSULTING SERVICES INC.	19,715.05	IRWD Wells Fargo Check No Print	Reconciled
431965	10-Nov-22	SU, YINYIN	91.31	IRWD Wells Fargo Check No Print	Reconciled
431966	10-Nov-22	SUN, LAUREN HSIAOHSIAO	793.96	IRWD Wells Fargo Check No Print	Negotiable
431967	10-Nov-22	SURF CITY OPTOMETRY	225.00	IRWD Wells Fargo Check No Print	Negotiable
431968	10-Nov-22	SUSAN A. SIROTA	4,850.00	IRWD Wells Fargo Check No Print	Reconciled
431969	10-Nov-22	TALLEY INC	649.24	IRWD Wells Fargo Check No Print	Reconciled
431970	10-Nov-22	TEKDRAULICS	2,847.82	IRWD Wells Fargo Check No Print	Negotiable
431971	10-Nov-22	TETRA TECH, INC	54,507.65	IRWD Wells Fargo Check No Print	Reconciled
431972	10-Nov-22	THE ADT SECURITY CORPORATION	550.00	IRWD Wells Fargo Check No Print	Reconciled
431973	10-Nov-22	THE IRVINE COMPANY LLC	764.98	IRWD Wells Fargo Check No Print	Reconciled
431974	10-Nov-22	THRYV, INC.	41.00	IRWD Wells Fargo Check No Print	Negotiable
431975	10-Nov-22	TINOSI, INC	800.00	IRWD Wells Fargo Check No Print	Reconciled
431976	10-Nov-22	TK ELEVATOR CORPORATION	1,800.00	IRWD Wells Fargo Check No Print	Reconciled
431977	10-Nov-22	UNITED PARCEL SERVICE INC	106.77	IRWD Wells Fargo Check No Print	Reconciled
431978	10-Nov-22	UNITED RENTALS (NORTH AMERICA), INC.	3,105.12	IRWD Wells Fargo Check No Print	Reconciled
431979	10-Nov-22	UNIVAR SOLUTIONS USA INC.	11,372.80	IRWD Wells Fargo Check No Print	Reconciled
431980	10-Nov-22	V&A CONSULTING ENGINEERS	15,096.00	IRWD Wells Fargo Check No Print	Reconciled
431981	10-Nov-22	VALLE, JOSE	41.22	IRWD Wells Fargo Check No Print	Reconciled
431982	10-Nov-22	VERIZON WIRELESS SERVICES LLC	9,401.58	IRWD Wells Fargo Check No Print	Reconciled
431983	10-Nov-22	VWR INTERNATIONAL, LLC	288.72	IRWD Wells Fargo Check No Print	Reconciled
431984	10-Nov-22	WALTERS WHOLESALE ELECTRIC	1,807.88	IRWD Wells Fargo Check No Print	Reconciled
431985	10-Nov-22	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	389.01	IRWD Wells Fargo Check No Print	Reconciled
431986	10-Nov-22	WATERLINE TECHNOLOGIES INC	3,315.00	IRWD Wells Fargo Check No Print	Reconciled
431987	10-Nov-22	WAXIE'S ENTERPRISES, INC	211.94	IRWD Wells Fargo Check No Print	Reconciled
431988	10-Nov-22	WEST COAST SAND & GRAVEL INC.	1,059.24	IRWD Wells Fargo Check No Print	Reconciled
431989	10-Nov-22	WEST YOST & ASSOCIATES, INC.	2,424.50	IRWD Wells Fargo Check No Print	Reconciled
431990	10-Nov-22	WESTINGHOFFER, THOMAS	13.61	IRWD Wells Fargo Check No Print	Negotiable
431991	10-Nov-22	WHITTINGHAM PUBLIC AFFAIRS ADVISORS	4,000.00	IRWD Wells Fargo Check No Print	Reconciled
431992	10-Nov-22	WINDWOOD GLEN	35.82	IRWD Wells Fargo Check No Print	Negotiable
431993	10-Nov-22	XYLEM WATER SOLUTIONS USA, INC.	9,814.99	IRWD Wells Fargo Check No Print	Reconciled
431994	10-Nov-22	YUNXUAN, SHI	32.76	IRWD Wells Fargo Check No Print	Negotiable
431995	10-Nov-22	ZHAO, YUEHAN	29.26	IRWD Wells Fargo Check No Print	Negotiable
431996	10-Nov-22	ZILLOW INC	100.00	IRWD Wells Fargo Check No Print	Negotiable
431997	10-Nov-22	Aguilar, Alan C	2,375.87	IRWD Wells Fargo Check	Reconciled
431998	10-Nov-22	Burton, Kevin L (Kevin)	112.30	IRWD Wells Fargo Check	Reconciled
431999	10-Nov-22	CALIFORNIA DEPT OF PUBLIC HEALTH	619.00	IRWD Wells Fargo Check	Reconciled
432000	10-Nov-22	Cascelli, Craig M (Craig)	302.00	IRWD Wells Fargo Check	Reconciled
432001	10-Nov-22	Cho, Harry K (Harry)	1,445.70	IRWD Wells Fargo Check	Reconciled
432002	10-Nov-22	COLONIAL LIFE & ACCIDENT INSURANCE CO.	652.98	IRWD Wells Fargo Check	Reconciled
432003	10-Nov-22	Corral, Edward Jr (Ed)	347.80	IRWD Wells Fargo Check	Reconciled
432004	10-Nov-22	COUNTY OF RIVERSIDE	225,821.80	IRWD Wells Fargo Check	Reconciled
432005	10-Nov-22	Garcia, Dorys Elizabeth	2,906.33	IRWD Wells Fargo Check	Reconciled
432006	10-Nov-22	Garcia, Juan	20.20	IRWD Wells Fargo Check	Reconciled
432007	10-Nov-22	IRWD-PETTY CASH CUSTODIAN	716.83	IRWD Wells Fargo Check	Reconciled
432008	10-Nov-22	Nash, Joel	71.88	IRWD Wells Fargo Check	Reconciled
432009	10-Nov-22	Seesangrit, Melody M	142.72	IRWD Wells Fargo Check	Reconciled
432010	10-Nov-22	Spangenberg, Carl W (Carl)	207.75	IRWD Wells Fargo Check	Reconciled
432011	10-Nov-22	Zamora, Victor A	82.69	IRWD Wells Fargo Check	Reconciled
432012	10-Nov-22	3SE	2,397.50	IRWD Wells Fargo Check No Print	Reconciled
432013	17-Nov-22	A&Y ASPHALT CONTRACTORS, INC.	99,999.00	IRWD Wells Fargo Check No Print	Negotiable
432014	17-Nov-22	ABC ICE, INC	2,080.15	IRWD Wells Fargo Check No Print	Negotiable
432015	17-Nov-22	ABRAHAM, BRYCE	4.44	IRWD Wells Fargo Check No Print	Negotiable
432016	17-Nov-22	ADS CORP.	2,460.00	IRWD Wells Fargo Check No Print	Reconciled
432017	17-Nov-22	AECOM TECHNICAL SERVICES, INC.	513,272.26	IRWD Wells Fargo Check No Print	Negotiable
432018	17-Nov-22	AERATION INDUSTRIES INTERNATIONAL INC	28,796.19	IRWD Wells Fargo Check No Print	Reconciled
432019	17-Nov-22	AGILENT TECHNOLOGIES, INC.	2,300.89	IRWD Wells Fargo Check No Print	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
432020	17-Nov-22	AHARA, YOSHIO	56.21	IRWD Wells Fargo Check No Print	Negotiable
432021	17-Nov-22	AIRGAS, INC.	1,261.45	IRWD Wells Fargo Check No Print	Reconciled
432022	17-Nov-22	AMAYA SOLUTIONS INC.	11,594.82	IRWD Wells Fargo Check No Print	Negotiable
432023	17-Nov-22	AMAZON CAPITAL SERVICES, INC.	911.95	IRWD Wells Fargo Check No Print	Reconciled
432024	17-Nov-22	AQUA-METRIC SALES COMPANY	49,524.31	IRWD Wells Fargo Check No Print	Reconciled
432025	17-Nov-22	AT&T	1,129.38	IRWD Wells Fargo Check No Print	Reconciled
432026	17-Nov-22	AT&T	178.46	IRWD Wells Fargo Check No Print	Reconciled
432027	17-Nov-22	AT&T	121.50	IRWD Wells Fargo Check No Print	Reconciled
432028	17-Nov-22	ATI RESTORATION, LLC	22,476.08	IRWD Wells Fargo Check No Print	Reconciled
432029	17-Nov-22	AUTOZONE PARTS, INC.	1,436.42	IRWD Wells Fargo Check No Print	Reconciled
432030	17-Nov-22	AVIAT U.S., INC	28,855.74	IRWD Wells Fargo Check No Print	Negotiable
432031	17-Nov-22	BAILEY VALVE INC.	5,734.08	IRWD Wells Fargo Check No Print	Reconciled
432032	17-Nov-22	BATTERIES PLUS AND BATTERIES PLUS BULBS	1,660.45	IRWD Wells Fargo Check No Print	Reconciled
432033	17-Nov-22	BORCHARD SURVEYING & MAPPING, INC.	1,320.00	IRWD Wells Fargo Check No Print	Negotiable
432034	17-Nov-22	BRIAN HOMSY	2,346.61	IRWD Wells Fargo Check No Print	Negotiable
432035	17-Nov-22	BRUCE HADLEY NEWELL	2,500.00	IRWD Wells Fargo Check No Print	Reconciled
432036	17-Nov-22	C WELLS PIPELINE MATERIALS INC	10,638.10	IRWD Wells Fargo Check No Print	Negotiable
432037	17-Nov-22	CABELA'S MARKETING AND BRAND MANAGEMENT INC	163.09	IRWD Wells Fargo Check No Print	Negotiable
432038	17-Nov-22	CALIFORNIA BARRICADE RENTAL, INC.	4,040.00	IRWD Wells Fargo Check No Print	Reconciled
432039	17-Nov-22	CALIFORNIA WATER EFFICIENCY PARTNERSHIP	4,522.12	IRWD Wells Fargo Check No Print	Negotiable
432040	17-Nov-22	CANON FINANCIAL SERVICES, INC	8,332.75	IRWD Wells Fargo Check No Print	Reconciled
432041	17-Nov-22	CDW GOVERNMENT LLC	8,849.02	IRWD Wells Fargo Check No Print	Negotiable
432042	17-Nov-22	CENTROID SYSTEMS, INC.	17,943.75	IRWD Wells Fargo Check No Print	Negotiable
432043	17-Nov-22	CENTURY PAVING INC	1,443.16	IRWD Wells Fargo Check No Print	Negotiable
432044	17-Nov-22	CILLIANI, INES S	44.79	IRWD Wells Fargo Check No Print	Negotiable
432045	17-Nov-22	CLIFFORD MORIYAMA	4,000.00	IRWD Wells Fargo Check No Print	Negotiable
432046	17-Nov-22	CNC ENGINEERING	1,890.00	IRWD Wells Fargo Check No Print	Negotiable
432047	17-Nov-22	COLEY, RON	46.10	IRWD Wells Fargo Check No Print	Negotiable
432048	17-Nov-22	CORELOGIC INC	6,827.96	IRWD Wells Fargo Check No Print	Reconciled
432049	17-Nov-22	CR & R INCORPORATED	495.83	IRWD Wells Fargo Check No Print	Negotiable
432050	17-Nov-22	CURATIVE I.T. LLC	531.57	IRWD Wells Fargo Check No Print	Negotiable
432051	17-Nov-22	CV TECHNOLOGY, INC.	77.25	IRWD Wells Fargo Check No Print	Reconciled
432052	17-Nov-22	DCS MANAGEMENT LLC	432.30	IRWD Wells Fargo Check No Print	Reconciled
432053	17-Nov-22	DRNDARSKI, VLADIMIR	56.32	IRWD Wells Fargo Check No Print	Negotiable
432054	17-Nov-22	EDWARDS LIFESCIENCES	5,105.55	IRWD Wells Fargo Check No Print	Negotiable
432055	17-Nov-22	ELLIS, JEAN T	223.43	IRWD Wells Fargo Check No Print	Negotiable
432056	17-Nov-22	EMD MILLIPORE CORP.	18,062.47	IRWD Wells Fargo Check No Print	Reconciled
432057	17-Nov-22	ENVIRONMENTAL RESOURCE ASSOCIATES	854.37	IRWD Wells Fargo Check No Print	Negotiable
432058	17-Nov-22	ESPERANZA APARTMENTS	672.37	IRWD Wells Fargo Check No Print	Negotiable
432059	17-Nov-22	EXECUTIVE LIGHTING & ELECTRIC	6,565.80	IRWD Wells Fargo Check No Print	Negotiable
432061	17-Nov-22	FEDEX	143.03	IRWD Wells Fargo Check No Print	Reconciled
432062	17-Nov-22	FEDEX NATIONAL LTL, INC	966.12	IRWD Wells Fargo Check No Print	Negotiable
432063	17-Nov-22	FISHER SCIENTIFIC COMPANY LLC	15,806.46	IRWD Wells Fargo Check No Print	Reconciled
432064	17-Nov-22	FRONTIER CALIFORNIA INC.	354.13	IRWD Wells Fargo Check No Print	Negotiable
432065	17-Nov-22	FULLER TRUCK ACCESSORIES	5,972.36	IRWD Wells Fargo Check No Print	Reconciled
432066	17-Nov-22	GEIGER BROS	3,477.11	IRWD Wells Fargo Check No Print	Negotiable
432067	17-Nov-22	GENUINE PROPERTY MANAGEMENT	47.35	IRWD Wells Fargo Check No Print	Reconciled
432068	17-Nov-22	GRACE BJORNSTAD	1,164.72	IRWD Wells Fargo Check No Print	Negotiable
432069	17-Nov-22	GRAINGER	14,592.16	IRWD Wells Fargo Check No Print	Reconciled
432070	17-Nov-22	GRAYBAR ELECTRIC COMPANY	4,317.75	IRWD Wells Fargo Check No Print	Reconciled
432071	17-Nov-22	GUO, JIALE	182.00	IRWD Wells Fargo Check No Print	Reconciled
432072	17-Nov-22	HACH COMPANY	1,919.49	IRWD Wells Fargo Check No Print	Reconciled
432073	17-Nov-22	HAMILTON, KURT	1,371.19	IRWD Wells Fargo Check No Print	Negotiable
432074	17-Nov-22	HARPER & ASSOCIATES ENGINEERING INC	1,140.00	IRWD Wells Fargo Check No Print	Negotiable
432075	17-Nov-22	HDR ENGINEERING INC	50,150.00	IRWD Wells Fargo Check No Print	Reconciled
432076	17-Nov-22	HELPMATES STAFFING SERVICES LLC	3,686.58	IRWD Wells Fargo Check No Print	Reconciled
432077	17-Nov-22	HI-LINE INC	196.40	IRWD Wells Fargo Check No Print	Reconciled
432078	17-Nov-22	HOME DEPOT USA INC	455.87	IRWD Wells Fargo Check No Print	Negotiable
432079	17-Nov-22	HOME DEPOT USA INC	363.43	IRWD Wells Fargo Check No Print	Negotiable
432080	17-Nov-22	HOME DEPOT USA INC	465.35	IRWD Wells Fargo Check No Print	Negotiable
432081	17-Nov-22	HUANG, HSING YU	4.65	IRWD Wells Fargo Check No Print	Negotiable
432082	17-Nov-22	INDUSTRIAL METAL SUPPLY CO	104.68	IRWD Wells Fargo Check No Print	Negotiable

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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
432083	17-Nov-22	INDUSTRIAL SCIENTIFIC CORPORATION	37,045.09	IRWD Wells Fargo Check No Print	Reconciled
432084	17-Nov-22	INFOSEND, INC.	53,195.06	IRWD Wells Fargo Check No Print	Reconciled
432085	17-Nov-22	IRVINE MANAGEMENT COMPANY	1,451.92	IRWD Wells Fargo Check No Print	Negotiable
432086	17-Nov-22	IRVINE PACIFIC	343.32	IRWD Wells Fargo Check No Print	Negotiable
432087	17-Nov-22	KAESER COMPRESSORS, INC.	4,224.05	IRWD Wells Fargo Check No Print	Reconciled
432088	17-Nov-22	KAN VENTURES, INC	6,500.00	IRWD Wells Fargo Check No Print	Negotiable
432089	17-Nov-22	KANG, ROBBY H	344.67	IRWD Wells Fargo Check No Print	Negotiable
432090	17-Nov-22	KOTHARI, GAURANG	425.10	IRWD Wells Fargo Check No Print	Negotiable
432091	17-Nov-22	LAIAO, BO-CHENG	50.00	IRWD Wells Fargo Check No Print	Negotiable
432092	17-Nov-22	LANDCARE HOLDINGS, INC.	11,140.75	IRWD Wells Fargo Check No Print	Negotiable
432093	17-Nov-22	LILLESTRAND LEADERSHIP CONSULTING, INC.	905.00	IRWD Wells Fargo Check No Print	Negotiable
432094	17-Nov-22	LINDE GAS & EQUIPMENT INC.	3,747.41	IRWD Wells Fargo Check No Print	Negotiable
432095	17-Nov-22	LINDSEY TEAL THOMSON	9,275.00	IRWD Wells Fargo Check No Print	Reconciled
432096	17-Nov-22	MC MASTER CARR SUPPLY CO	1,175.07	IRWD Wells Fargo Check No Print	Negotiable
432097	17-Nov-22	MILES CHEMICAL COMPANY, INC.	9,912.25	IRWD Wells Fargo Check No Print	Reconciled
432098	17-Nov-22	MILLIE AND SEVERSON INC.	1,449.56	IRWD Wells Fargo Check No Print	Negotiable
432099	17-Nov-22	MISSION COMMUNICATIONS, LLC	2,853.00	IRWD Wells Fargo Check No Print	Negotiable
432100	17-Nov-22	MSA SAFETY INCORPORATED	2,917.25	IRWD Wells Fargo Check No Print	Reconciled
432101	17-Nov-22	MSC INDUSTRIAL SUPPLY CO	221.34	IRWD Wells Fargo Check No Print	Reconciled
432102	17-Nov-22	NATIONAL READY MIXED CONCRETE SALES, LLC	624.96	IRWD Wells Fargo Check No Print	Reconciled
432103	17-Nov-22	NINYO & MOORE	13,795.00	IRWD Wells Fargo Check No Print	Reconciled
432104	17-Nov-22	O.C. SUPERIOR CUSTOM CLEANING	752.00	IRWD Wells Fargo Check No Print	Reconciled
432105	17-Nov-22	ONESOURCE DISTRIBUTORS LLC	3,170.36	IRWD Wells Fargo Check No Print	Reconciled
432106	17-Nov-22	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	2,482.94	IRWD Wells Fargo Check No Print	Negotiable
432107	17-Nov-22	PACIFIC HYDROTECH CORPORATION	1,215.98	IRWD Wells Fargo Check No Print	Negotiable
432108	17-Nov-22	PACIFIC PARTS & CONTROLS INC	1,262.14	IRWD Wells Fargo Check No Print	Negotiable
432109	17-Nov-22	PAVEMENT COATINGS CO.	1,638.01	IRWD Wells Fargo Check No Print	Negotiable
432110	17-Nov-22	PAYMENTUS CORPORATION	57,745.47	IRWD Wells Fargo Check No Print	Negotiable
432111	17-Nov-22	PERKINELMER HEALTH SCIENCES INC	516.09	IRWD Wells Fargo Check No Print	Negotiable
432112	17-Nov-22	PHILLIPS PLYWOOD CO, INC.	1,052.00	IRWD Wells Fargo Check No Print	Negotiable
432113	17-Nov-22	PINNACLE TOWERS LLC	842.76	IRWD Wells Fargo Check No Print	Reconciled
432114	17-Nov-22	PREMIER PAVING INC.	2,798.52	IRWD Wells Fargo Check No Print	Reconciled
432115	17-Nov-22	PSOMAS	27,940.00	IRWD Wells Fargo Check No Print	Reconciled
432116	17-Nov-22	PURE EFFECT INC	10,228.90	IRWD Wells Fargo Check No Print	Negotiable
432117	17-Nov-22	QUINN COMPANY	6,001.00	IRWD Wells Fargo Check No Print	Reconciled
432118	17-Nov-22	QUINTANA, WATTS & HARTMANN, LLC	5,150.00	IRWD Wells Fargo Check No Print	Negotiable
432119	17-Nov-22	RAMESH, AKSHAY	77.35	IRWD Wells Fargo Check No Print	Negotiable
432120	17-Nov-22	RANCHO SANTA FE APTS	63.38	IRWD Wells Fargo Check No Print	Negotiable
432121	17-Nov-22	RED WING SHOE STORE	1,285.00	IRWD Wells Fargo Check No Print	Reconciled
432122	17-Nov-22	REFRIGERATION SUPPLIES DISTRIBUTOR	6,467.27	IRWD Wells Fargo Check No Print	Reconciled
432123	17-Nov-22	RENTOKIL NORTH AMERICA, INC	1,179.40	IRWD Wells Fargo Check No Print	Negotiable
432124	17-Nov-22	REZAEI-KOUPAEI, HAMID	22.77	IRWD Wells Fargo Check No Print	Negotiable
432125	17-Nov-22	RIDDELL GENERAL CONTRACTING, INC.	1,737.33	IRWD Wells Fargo Check No Print	Negotiable
432126	17-Nov-22	RODNEY HARMSWORTH ASSOCIATES, INC.	2,704.00	IRWD Wells Fargo Check No Print	Reconciled
432127	17-Nov-22	SAFETY-KLEEN SYSTEMS, INC	275.00	IRWD Wells Fargo Check No Print	Reconciled
432128	17-Nov-22	SAN LEON APTS	145.74	IRWD Wells Fargo Check No Print	Negotiable
432129	17-Nov-22	SHEA HOMES LIMITED PARTNERSHIP	608.88	IRWD Wells Fargo Check No Print	Reconciled
432130	17-Nov-22	SOUTH COAST WATER CO.	95.00	IRWD Wells Fargo Check No Print	Negotiable
432131	17-Nov-22	SOUTH COAST WATER DISTRICT	996.02	IRWD Wells Fargo Check No Print	Negotiable
432132	17-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	1,021,312.09	IRWD Wells Fargo Check No Print	Negotiable
432133	17-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	28.57	IRWD Wells Fargo Check No Print	Negotiable
432134	17-Nov-22	SOUTHERN CALIFORNIA GAS COMPANY	24,660.01	IRWD Wells Fargo Check No Print	Negotiable
432135	17-Nov-22	SPARKLETTS	24.80	IRWD Wells Fargo Check No Print	Negotiable
432136	17-Nov-22	SPERBER COMPANIES	2,075.67	IRWD Wells Fargo Check No Print	Negotiable
432137	17-Nov-22	STEVEN WELCH	585.00	IRWD Wells Fargo Check No Print	Reconciled
432138	17-Nov-22	STRADLING YOCCA CARLSON & RAUTH	189.50	IRWD Wells Fargo Check No Print	Negotiable
432139	17-Nov-22	STREAKWAVE WIRELESS, INC.	2,340.28	IRWD Wells Fargo Check No Print	Reconciled
432140	17-Nov-22	SUEZ TREATMENT SOLUTIONS INC.	1,061.00	IRWD Wells Fargo Check No Print	Reconciled
432141	17-Nov-22	SYNAGRO-WWT, INC.	149,625.47	IRWD Wells Fargo Check No Print	Negotiable
432142	17-Nov-22	TAIT ENVIRONMENTAL SERVICES, INC.	1,115.55	IRWD Wells Fargo Check No Print	Negotiable
432143	17-Nov-22	TASSIN SCIENTIFIC SERVICES, LLC.	1,259.25	IRWD Wells Fargo Check No Print	Negotiable
432144	17-Nov-22	TELEDYNE INSTRUMENTS, INC.	856.72	IRWD Wells Fargo Check No Print	Reconciled

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432145	17-Nov-22	THE PAGE SEED COMPANY, INC.	838.23	IRWD Wells Fargo Check No Print	Reconciled
432146	17-Nov-22	THE PARKLANDS	67.39	IRWD Wells Fargo Check No Print	Negotiable
432147	17-Nov-22	THOMAS HARDER & CO	10,376.25	IRWD Wells Fargo Check No Print	Negotiable
432148	17-Nov-22	TIC-OFFICE PROPERTIES	3,408.61	IRWD Wells Fargo Check No Print	Negotiable
432149	17-Nov-22	TICIC SUB LLC	4,830.87	IRWD Wells Fargo Check No Print	Negotiable
432150	17-Nov-22	TIERRA VERDE INDUSTRIES	19.40	IRWD Wells Fargo Check No Print	Negotiable
432151	17-Nov-22	TIMOTHY W. HOGAN	378.40	IRWD Wells Fargo Check No Print	Reconciled
432152	17-Nov-22	TOP TEN REAL ESTATE INC	80.55	IRWD Wells Fargo Check No Print	Reconciled
432153	17-Nov-22	TURTLE ROCK CREST COMMUNITY ASSOCIATION	1,206.40	IRWD Wells Fargo Check No Print	Negotiable
432154	17-Nov-22	UNITED PARCEL SERVICE INC	128.77	IRWD Wells Fargo Check No Print	Reconciled
432155	17-Nov-22	UNITED PAVING CO.	1,597.19	IRWD Wells Fargo Check No Print	Negotiable
432156	17-Nov-22	USA WASTE OF CALIFORNIA, INC.	1,755.12	IRWD Wells Fargo Check No Print	Negotiable
432157	17-Nov-22	VICTAULIC COMPANY	921.42	IRWD Wells Fargo Check No Print	Reconciled
432158	17-Nov-22	VISTA PAINT CORPORATION	94.67	IRWD Wells Fargo Check No Print	Negotiable
432159	17-Nov-22	VULCAN MATERIALS COMPANY	2,793.16	IRWD Wells Fargo Check No Print	Reconciled
432160	17-Nov-22	VWR INTERNATIONAL, LLC	617.30	IRWD Wells Fargo Check No Print	Reconciled
432161	17-Nov-22	W.A. RASIC CONSTRUCTION COMPANY, INC.	2,600.00	IRWD Wells Fargo Check No Print	Negotiable
432162	17-Nov-22	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	2,836.14	IRWD Wells Fargo Check No Print	Negotiable
432163	17-Nov-22	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	2,361.22	IRWD Wells Fargo Check No Print	Negotiable
432164	17-Nov-22	WAXIE'S ENTERPRISES, INC	1,109.33	IRWD Wells Fargo Check No Print	Reconciled
432165	17-Nov-22	WEST COAST PRETROLEUM INC.	1,130.62	IRWD Wells Fargo Check No Print	Negotiable
432166	17-Nov-22	WEST COAST SAFETY SUPPLY INC	11,406.96	IRWD Wells Fargo Check No Print	Reconciled
432167	17-Nov-22	WEST COAST SAND & GRAVEL INC.	1,316.67	IRWD Wells Fargo Check No Print	Negotiable
432168	17-Nov-22	WISCONSIN STATE LABORATORY OF HYGIENE	1,010.00	IRWD Wells Fargo Check No Print	Negotiable
432169	17-Nov-22	AFLAC	2,087.42	IRWD Wells Fargo Check	Reconciled
432170	17-Nov-22	ARAG NORTH AMERICA, INC.	408.75	IRWD Wells Fargo Check	Reconciled
432171	17-Nov-22	Arana, Michael A	97.13	IRWD Wells Fargo Check	Reconciled
432172	17-Nov-22	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	38,857.20	IRWD Wells Fargo Check	Reconciled
432173	17-Nov-22	Borowski, Michael (Mike)	40.36	IRWD Wells Fargo Check	Reconciled
432174	17-Nov-22	CITY OF LAKE FOREST	3,525.00	IRWD Wells Fargo Check	Reconciled
432175	17-Nov-22	Cortez, Malcolm A (Malcolm)	180.00	IRWD Wells Fargo Check	Reconciled
432176	17-Nov-22	FIDELITY SECURITY LIFE INSURANCE COMPANY	827.21	IRWD Wells Fargo Check	Reconciled
432177	17-Nov-22	FIDELITY SECURITY LIFE INSURANCE COMPANY	51.66	IRWD Wells Fargo Check	Reconciled
432178	17-Nov-22	FIDELITY SECURITY LIFE INSURANCE COMPANY	6,630.68	IRWD Wells Fargo Check	Reconciled
432179	17-Nov-22	FIDELITY SECURITY LIFE INSURANCE COMPANY	225.17	IRWD Wells Fargo Check	Reconciled
432180	17-Nov-22	Graff, Jeff N	42.00	IRWD Wells Fargo Check	Reconciled
432181	17-Nov-22	HUMANA INSURANCE COMPANY	75.30	IRWD Wells Fargo Check	Reconciled
432182	17-Nov-22	IRWD-PETTY CASH CUSTODIAN	1,076.46	IRWD Wells Fargo Check	Reconciled
432183	17-Nov-22	JOHN MICHAEL COVAS	216.90	IRWD Wells Fargo Check	Negotiable
432184	17-Nov-22	Joseph, Brandon	307.00	IRWD Wells Fargo Check	Negotiable
432185	17-Nov-22	Li, Vladimir	97.13	IRWD Wells Fargo Check	Reconciled
432186	17-Nov-22	Perez, David M (David)	110.00	IRWD Wells Fargo Check	Reconciled
432187	17-Nov-22	REACH EMPLOYEE ASSISTANCE INC	1,066.80	IRWD Wells Fargo Check	Reconciled
432188	17-Nov-22	Rutherford, Allan	202.00	IRWD Wells Fargo Check	Reconciled
432189	17-Nov-22	Sciabica, Joseph	118.53	IRWD Wells Fargo Check	Reconciled
432190	17-Nov-22	Torres, Richard P (Richard)	105.00	IRWD Wells Fargo Check	Negotiable
432191	17-Nov-22	UNITED HEALTHCARE INSURANCE COMPANY	348.42	IRWD Wells Fargo Check	Reconciled
432192	17-Nov-22	Williams, Warren (Randy)	39.56	IRWD Wells Fargo Check	Reconciled
432193	17-Nov-22	Zamora, Victor A	87.17	IRWD Wells Fargo Check	Reconciled
432194	18-Nov-22	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	1,810.00	IRWD Wells Fargo Check	Reconciled
432195	18-Nov-22	PACIFIC HYDROTECH CORPORATION	18,379.88	IRWD Wells Fargo Check No Print	Negotiable
432196	18-Nov-22	PACIFIC HYDROTECH CORPORATION	2,990.46	IRWD Wells Fargo Check No Print	Negotiable
432197	18-Nov-22	PACIFIC HYDROTECH CORPORATION	406,036.33	IRWD Wells Fargo Check No Print	Negotiable
432198	18-Nov-22	PERS LONG TERM CARE	716.23	IRWD Wells Fargo Check	Reconciled
432199	18-Nov-22	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	3,724.68	IRWD Wells Fargo Check	Reconciled
432200	23-Nov-22	A&Y ASPHALT CONTRACTORS, INC.	22,588.80	IRWD Wells Fargo Check No Print	Negotiable
432201	23-Nov-22	AAF INTERNATIONAL	1,457.42	IRWD Wells Fargo Check No Print	Negotiable
432202	23-Nov-22	ABC ICE, INC	285.50	IRWD Wells Fargo Check No Print	Negotiable
432203	23-Nov-22	ADS CORP.	6,518.00	IRWD Wells Fargo Check No Print	Negotiable
432204	23-Nov-22	AECOM TECHNICAL SERVICES, INC.	108,372.50	IRWD Wells Fargo Check No Print	Negotiable
432205	23-Nov-22	AIR TECHNOLOGY LABORATORIES	717.00	IRWD Wells Fargo Check No Print	Negotiable
432206	23-Nov-22	AIRGAS, INC.	190.23	IRWD Wells Fargo Check No Print	Negotiable

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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
432207	23-Nov-22	AMAZON CAPITAL SERVICES, INC.	1,594.62	IRWD Wells Fargo Check No Print	Negotiable
432208	23-Nov-22	ANTHONY N. LARSEN	550.00	IRWD Wells Fargo Check No Print	Negotiable
432209	23-Nov-22	AT&T	12,203.36	IRWD Wells Fargo Check No Print	Negotiable
432210	23-Nov-22	ATI RESTORATION, LLC	2,025.81	IRWD Wells Fargo Check No Print	Negotiable
432211	23-Nov-22	AUTOZONE PARTS, INC.	174.32	IRWD Wells Fargo Check No Print	Negotiable
432212	23-Nov-22	BAI, YIYANG	7.72	IRWD Wells Fargo Check No Print	Negotiable
432213	23-Nov-22	BROWN AND CALDWELL	7,884.42	IRWD Wells Fargo Check No Print	Negotiable
432214	23-Nov-22	BROWN, EDWARD	54.05	IRWD Wells Fargo Check No Print	Negotiable
432215	23-Nov-22	BURNHAM BENEFITS INSURANCE SERVICES, LLC	5,833.33	IRWD Wells Fargo Check No Print	Negotiable
432216	23-Nov-22	C WELLS PIPELINE MATERIALS INC	6,389.58	IRWD Wells Fargo Check No Print	Negotiable
432217	23-Nov-22	CABELA'S MARKETING AND BRAND MANAGEMENT INC	366.95	IRWD Wells Fargo Check No Print	Negotiable
432218	23-Nov-22	CALIFORNIA BARRICADE RENTAL, INC.	2,085.00	IRWD Wells Fargo Check No Print	Negotiable
432219	23-Nov-22	CALIFORNIA PACIFIC HOMES	326.70	IRWD Wells Fargo Check No Print	Negotiable
432220	23-Nov-22	CANNON CORPORATION	23,825.00	IRWD Wells Fargo Check No Print	Negotiable
432221	23-Nov-22	CARBON SUPPLY INC.	17,456.25	IRWD Wells Fargo Check No Print	Negotiable
432222	23-Nov-22	CDW GOVERNMENT LLC	815.58	IRWD Wells Fargo Check No Print	Negotiable
432223	23-Nov-22	CHEM TECH INTERNATIONAL INC	16,066.95	IRWD Wells Fargo Check No Print	Negotiable
432224	23-Nov-22	CITY OF NEWPORT BEACH	5,129.84	IRWD Wells Fargo Check No Print	Negotiable
432225	23-Nov-22	COAST PLUMBING HEATING AND AIR, INC	699.00	IRWD Wells Fargo Check No Print	Negotiable
432226	23-Nov-22	COASTLINE EQUIPMENT COMPANY	128.92	IRWD Wells Fargo Check No Print	Negotiable
432227	23-Nov-22	CONSTELLATION NEWENERGY, INC.	50,729.09	IRWD Wells Fargo Check No Print	Negotiable
432228	23-Nov-22	COUNTY OF ORANGE	450.00	IRWD Wells Fargo Check No Print	Negotiable
432229	23-Nov-22	CURATIVE I.T. LLC	229.03	IRWD Wells Fargo Check No Print	Negotiable
432230	23-Nov-22	CYBRARY, INC.	1,250.00	IRWD Wells Fargo Check No Print	Negotiable
432231	23-Nov-22	D & H WATER SYSTEMS INC.	4,368.34	IRWD Wells Fargo Check No Print	Negotiable
432232	23-Nov-22	DCSE, INC.	30,212.00	IRWD Wells Fargo Check No Print	Negotiable
432233	23-Nov-22	DILYTICS INC	2,800.00	IRWD Wells Fargo Check No Print	Negotiable
432234	23-Nov-22	DIRECTV INC	146.99	IRWD Wells Fargo Check No Print	Negotiable
432235	23-Nov-22	DOUGLAS ENVIRONMENTAL GROUP INC	1,475.00	IRWD Wells Fargo Check No Print	Negotiable
432236	23-Nov-22	DOUGLAS FRANZ ARCHITECTS	1,200.00	IRWD Wells Fargo Check No Print	Negotiable
432237	23-Nov-22	DUDEK	9,614.38	IRWD Wells Fargo Check No Print	Negotiable
432238	23-Nov-22	DXP ENTERPRISES, INC.	47,861.45	IRWD Wells Fargo Check No Print	Negotiable
432239	23-Nov-22	E SOURCE COMPANIES LLC	2,500.00	IRWD Wells Fargo Check No Print	Negotiable
432240	23-Nov-22	ENTERPRISE HOLDINGS, INC.	52,333.06	IRWD Wells Fargo Check No Print	Negotiable
432241	23-Nov-22	EUROFINS ENVIRONMENT TESTING AMERICA HOLDINGS, INC.	7,659.75	IRWD Wells Fargo Check No Print	Negotiable
432242	23-Nov-22	EXECUTIVE LIGHTING & ELECTRIC	417.45	IRWD Wells Fargo Check No Print	Negotiable
432243	23-Nov-22	FABER BURNER CO.	2,738.81	IRWD Wells Fargo Check No Print	Negotiable
432244	23-Nov-22	FISHER SCIENTIFIC COMPANY LLC	2,716.24	IRWD Wells Fargo Check No Print	Negotiable
432245	23-Nov-22	FOOTHILL/EASTERN TRANSPORTATION	9,300.00	IRWD Wells Fargo Check No Print	Negotiable
432246	23-Nov-22	FRONTIER CALIFORNIA INC.	147.48	IRWD Wells Fargo Check No Print	Negotiable
432247	23-Nov-22	GANAHL LUMBER CO.	2,492.51	IRWD Wells Fargo Check No Print	Negotiable
432248	23-Nov-22	GARCIA, ENRIQUE	60.70	IRWD Wells Fargo Check No Print	Negotiable
432249	23-Nov-22	GARY BALE REDI-MIX CONCRETE, INC.	514.39	IRWD Wells Fargo Check No Print	Negotiable
432250	23-Nov-22	GEI CONSULTANTS INC	3,363.00	IRWD Wells Fargo Check No Print	Negotiable
432251	23-Nov-22	GEIGER BROS	448.93	IRWD Wells Fargo Check No Print	Negotiable
432252	23-Nov-22	GOLF COURSE SOLUTIONS	195.00	IRWD Wells Fargo Check No Print	Negotiable
432253	23-Nov-22	GOVERNMENTJOBS.COM, INC.	242.46	IRWD Wells Fargo Check No Print	Negotiable
432254	23-Nov-22	GRACE BJORNSTAD	395.43	IRWD Wells Fargo Check No Print	Negotiable
432255	23-Nov-22	GRAINGER	3,912.02	IRWD Wells Fargo Check No Print	Negotiable
432256	23-Nov-22	GRAYBAR ELECTRIC COMPANY	49.50	IRWD Wells Fargo Check No Print	Negotiable
432257	23-Nov-22	HACH COMPANY	5,126.40	IRWD Wells Fargo Check No Print	Negotiable
432258	23-Nov-22	HDR ENGINEERING INC	14,740.00	IRWD Wells Fargo Check No Print	Negotiable
432259	23-Nov-22	HELPMATES STAFFING SERVICES LLC	14,283.85	IRWD Wells Fargo Check No Print	Negotiable
432260	23-Nov-22	HI-LINE INC	206.98	IRWD Wells Fargo Check No Print	Negotiable
432261	23-Nov-22	HILTI INC.	333.14	IRWD Wells Fargo Check No Print	Negotiable
432262	23-Nov-22	HOME DEPOT USA INC	2,134.17	IRWD Wells Fargo Check No Print	Negotiable
432263	23-Nov-22	IDEA HALL	49,838.37	IRWD Wells Fargo Check No Print	Negotiable
432264	23-Nov-22	INDUSTRIAL SCIENTIFIC CORPORATION	18,524.29	IRWD Wells Fargo Check No Print	Negotiable
432265	23-Nov-22	INFINITY RESIDENTIAL INC	60.59	IRWD Wells Fargo Check No Print	Negotiable
432266	23-Nov-22	IRVINE PACIFIC	264.32	IRWD Wells Fargo Check No Print	Negotiable
432267	23-Nov-22	JL GROUP, LLC	16,791.00	IRWD Wells Fargo Check No Print	Negotiable
432268	23-Nov-22	KANG, SARAH	737.05	IRWD Wells Fargo Check No Print	Negotiable

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432269	23-Nov-22	KIM, HONG	52.24	IRWD Wells Fargo Check No Print	Negotiable
432270	23-Nov-22	LAGUNA BEACH COUNTY WATER DISTRICT	6,837.54	IRWD Wells Fargo Check No Print	Negotiable
432271	23-Nov-22	LANDCARE HOLDINGS, INC.	395.00	IRWD Wells Fargo Check No Print	Negotiable
432272	23-Nov-22	LEE & RO, INC.	54,773.50	IRWD Wells Fargo Check No Print	Negotiable
432273	23-Nov-22	LIFT-IT MANUFACTURING CO., INC.	859.88	IRWD Wells Fargo Check No Print	Negotiable
432274	23-Nov-22	LINDE GAS & EQUIPMENT INC.	32,887.37	IRWD Wells Fargo Check No Print	Negotiable
432275	23-Nov-22	LINE-X OF SOUTH COAST	627.75	IRWD Wells Fargo Check No Print	Negotiable
432276	23-Nov-22	LOZANO SMITH, LLP	10,739.05	IRWD Wells Fargo Check No Print	Negotiable
432277	23-Nov-22	MARK THOMAS & COMPANY, INC.	7,653.70	IRWD Wells Fargo Check No Print	Negotiable
432278	23-Nov-22	MESSER, KATHERINE	269.50	IRWD Wells Fargo Check No Print	Negotiable
432279	23-Nov-22	MICHAEL BAKER INTERNATIONAL, INC.	16,496.73	IRWD Wells Fargo Check No Print	Negotiable
432280	23-Nov-22	MICROSOFT CORPORATION	526.01	IRWD Wells Fargo Check No Print	Negotiable
432281	23-Nov-22	MISCOWATER	175,783.75	IRWD Wells Fargo Check No Print	Negotiable
432282	23-Nov-22	MSA SAFETY INCORPORATED	1,628.08	IRWD Wells Fargo Check No Print	Negotiable
432283	23-Nov-22	NATIONAL READY MIXED CONCRETE SALES, LLC	624.96	IRWD Wells Fargo Check No Print	Negotiable
432284	23-Nov-22	NEJAD, AZAR	19.12	IRWD Wells Fargo Check No Print	Negotiable
432285	23-Nov-22	ONESOURCE DISTRIBUTORS LLC	24,998.93	IRWD Wells Fargo Check No Print	Negotiable
432286	23-Nov-22	PACIFIC COAST BOLT CORP	6,197.83	IRWD Wells Fargo Check No Print	Negotiable
432287	23-Nov-22	PACIFIC MECHANICAL SUPPLY	337.26	IRWD Wells Fargo Check No Print	Negotiable
432288	23-Nov-22	PAYMENTUS CORPORATION	66,472.91	IRWD Wells Fargo Check No Print	Negotiable
432289	23-Nov-22	PAYNE & FEARS LLP	22,196.00	IRWD Wells Fargo Check No Print	Negotiable
432290	23-Nov-22	PROJECT PARTNERS LLC	50,010.00	IRWD Wells Fargo Check No Print	Negotiable
432291	23-Nov-22	PRONTO GYM SERVICES, INC.	345.00	IRWD Wells Fargo Check No Print	Negotiable
432292	23-Nov-22	PSOMAS	2,800.00	IRWD Wells Fargo Check No Print	Negotiable
432293	23-Nov-22	R. G. HELMER CO.,INC	2,485.00	IRWD Wells Fargo Check No Print	Negotiable
432294	23-Nov-22	RED WING SHOE STORE	1,050.00	IRWD Wells Fargo Check No Print	Negotiable
432295	23-Nov-22	SHOETERIA	200.00	IRWD Wells Fargo Check No Print	Negotiable
432296	23-Nov-22	SIDDIQI, AMMAR	32.76	IRWD Wells Fargo Check No Print	Negotiable
432297	23-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	60.92	IRWD Wells Fargo Check No Print	Negotiable
432298	23-Nov-22	SOUTHERN CALIFORNIA EDISON COMPANY	37,186.30	IRWD Wells Fargo Check No Print	Negotiable
432299	23-Nov-22	SOUTHERN CALIFORNIA GAS COMPANY	28.17	IRWD Wells Fargo Check No Print	Negotiable
432300	23-Nov-22	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	215.00	IRWD Wells Fargo Check No Print	Negotiable
432301	23-Nov-22	SOUTHWEST VALVE & EQUIPMENT INC	5,276.03	IRWD Wells Fargo Check No Print	Negotiable
432302	23-Nov-22	SPERBER LANDSCAPE COMPANIES	932.43	IRWD Wells Fargo Check No Print	Negotiable
432303	23-Nov-22	STREAKWAVE WIRELESS, INC.	269.66	IRWD Wells Fargo Check No Print	Negotiable
432304	23-Nov-22	TAIT ENVIRONMENTAL SERVICES, INC.	420.00	IRWD Wells Fargo Check No Print	Negotiable
432305	23-Nov-22	UNITED PARCEL SERVICE INC	51.59	IRWD Wells Fargo Check No Print	Negotiable
432306	23-Nov-22	US BANK NAT'L ASSOC N.DAKOTA	1,567.50	IRWD Wells Fargo Check No Print	Negotiable
432307	23-Nov-22	VWR INTERNATIONAL, LLC	283.76	IRWD Wells Fargo Check No Print	Negotiable
432308	23-Nov-22	WAXIE'S ENTERPRISES, INC	1,103.74	IRWD Wells Fargo Check No Print	Negotiable
432309	23-Nov-22	WELLINGTON LABORATORIES LLC	2,925.00	IRWD Wells Fargo Check No Print	Negotiable
432310	23-Nov-22	Aryan, Stephen	257.05	IRWD Wells Fargo Check	Reconciled
432311	23-Nov-22	IRWD-PETTY CASH CUSTODIAN	952.91	IRWD Wells Fargo Check	Reconciled
432312	23-Nov-22	Ruiz, Ricky (Ricky)	190.30	IRWD Wells Fargo Check	Reconciled
432313	23-Nov-22	Williams, Warren (Randy)	51.17	IRWD Wells Fargo Check	Reconciled
432314	28-Nov-22	FEDEX	464.07	IRWD Wells Fargo Check	Negotiable
SUB-TOTAL IRWD WELLS FARGO CHECK AND IRWD WELLS FARGO CHECK NO PRINT DISBURSEMENTS			11,002,887.50		
1000109	1-Nov-22	JCI JONES CHEMICALS INC	7,501.34	IRWD Wells Fargo ACH	Reconciled
1000110	3-Nov-22	CENTURY PAVING, INC.	60,463.00	IRWD Wells Fargo ACH	Reconciled
1000111	3-Nov-22	COASTAL OCCUPATIONAL MEDICAL GROUP, INC.	746.97	IRWD Wells Fargo ACH	Reconciled
1000112	3-Nov-22	COOMBS SERVICE GROUP	42,500.00	IRWD Wells Fargo ACH	Reconciled
1000113	3-Nov-22	COTTONS POINT DESIGN, INC.	1,651.51	IRWD Wells Fargo ACH	Reconciled
1000114	3-Nov-22	DRAKE TRAFFIC CONTROL SERVICES INC	3,062.50	IRWD Wells Fargo ACH	Reconciled
1000115	3-Nov-22	E.J. MEYER COMPANY	920,767.95	IRWD Wells Fargo ACH	Reconciled
1000116	3-Nov-22	GM SAGER CONSTRUCTION CO,INC.	41,359.00	IRWD Wells Fargo ACH	Reconciled
1000117	3-Nov-22	HAAKER EQUIPMENT COMPANY	633.70	IRWD Wells Fargo ACH	Reconciled
1000118	3-Nov-22	HILL BROTHERS CHEMICAL COMPANY	16,405.08	IRWD Wells Fargo ACH	Reconciled
1000119	3-Nov-22	LA HABRA FENCE COMPANY INC	1,494.00	IRWD Wells Fargo ACH	Reconciled
1000120	3-Nov-22	ORANGE COUNTY AUTO PARTS CO	3,142.25	IRWD Wells Fargo ACH	Reconciled
1000121	3-Nov-22	RAM AIR ENGINEERING INC	5,874.90	IRWD Wells Fargo ACH	Reconciled
1000122	3-Nov-22	RINCON TRUCK CENTER INC.	5,440.35	IRWD Wells Fargo ACH	Reconciled

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1000123	3-Nov-22	SUKLE ADVERTISING INC.	43,768.35	IRWD Wells Fargo ACH	Reconciled
1000124	3-Nov-22	SUN-STAR ELECTRIC, INC.	9,479.00	IRWD Wells Fargo ACH	Reconciled
1000125	3-Nov-22	VERTECH INDUSTRIAL SYSTEMS, LLC	4,031.45	IRWD Wells Fargo ACH	Reconciled
1000126	3-Nov-22	VSS SALES INC	28,860.49	IRWD Wells Fargo ACH	Reconciled
1000127	3-Nov-22	WESTAMERICA COMMUNICATIONS, INC.	1,200.00	IRWD Wells Fargo ACH	Reconciled
1000128	4-Nov-22	JCI JONES CHEMICALS INC	4,676.62	IRWD Wells Fargo ACH	Reconciled
1000129	7-Nov-22	HANSON BRIDGETT LLP	73,412.24	IRWD Wells Fargo ACH	Reconciled
1000131	10-Nov-22	ADAM'S FALCONRY SERVICE, LLC	3,587.50	IRWD Wells Fargo ACH	Reconciled
1000132	10-Nov-22	ARDURRA GROUP, INC.	49,005.00	IRWD Wells Fargo ACH	Reconciled
1000133	10-Nov-22	BRENNTAG PACIFIC INC	64,888.14	IRWD Wells Fargo ACH	Reconciled
1000134	10-Nov-22	CAROLLO ENGINEERS, INC	820.50	IRWD Wells Fargo ACH	Reconciled
1000135	10-Nov-22	DAYTON CERTIFIED WELDING, INC.	4,650.00	IRWD Wells Fargo ACH	Reconciled
1000136	10-Nov-22	DRAKE TRAFFIC CONTROL SERVICES INC	6,810.00	IRWD Wells Fargo ACH	Reconciled
1000137	10-Nov-22	EHS INTERNATIONAL, INC	6,755.00	IRWD Wells Fargo ACH	Reconciled
1000138	10-Nov-22	FLUID SOUND, INC.	3,105.29	IRWD Wells Fargo ACH	Reconciled
1000139	10-Nov-22	HILL BROTHERS CHEMICAL COMPANY	11,338.14	IRWD Wells Fargo ACH	Reconciled
1000140	10-Nov-22	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	13,160.14	IRWD Wells Fargo ACH	Reconciled
1000141	10-Nov-22	LABWORKS, LLC	2,750.00	IRWD Wells Fargo ACH	Reconciled
1000142	10-Nov-22	LCS TECHNOLOGIES, INC.	6,885.00	IRWD Wells Fargo ACH	Reconciled
1000143	10-Nov-22	MBF CONSULTING, INC.	17,670.00	IRWD Wells Fargo ACH	Reconciled
1000144	10-Nov-22	MERRIMAC PETROLEUM, INC.	37,610.87	IRWD Wells Fargo ACH	Reconciled
1000145	10-Nov-22	N1 CRITICAL TECHNOLOGIES, INC	637.64	IRWD Wells Fargo ACH	Reconciled
1000146	10-Nov-22	NATURALWELL, LLC	1,155.00	IRWD Wells Fargo ACH	Reconciled
1000147	10-Nov-22	NVS, INC.	22,320.00	IRWD Wells Fargo ACH	Reconciled
1000148	10-Nov-22	OLIN CORPORATION	54,996.02	IRWD Wells Fargo ACH	Reconciled
1000149	10-Nov-22	ORANGE COUNTY AUTO PARTS CO	352.76	IRWD Wells Fargo ACH	Reconciled
1000150	10-Nov-22	ORIGIN CONSULTING LLC	11,795.00	IRWD Wells Fargo ACH	Reconciled
1000151	10-Nov-22	PAPER DEPOT DOCUMENT DESTRUCTION LLC	906.00	IRWD Wells Fargo ACH	Reconciled
1000152	10-Nov-22	PYRO-COMM SYSTEMS INC	955.00	IRWD Wells Fargo ACH	Reconciled
1000153	10-Nov-22	RLG ENTERPRISES, INC	273.23	IRWD Wells Fargo ACH	Reconciled
1000154	10-Nov-22	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	4,440.26	IRWD Wells Fargo ACH	Reconciled
1000155	10-Nov-22	SADDLEBACK SURVEYS, INC.	14,214.00	IRWD Wells Fargo ACH	Reconciled
1000156	10-Nov-22	SMITH SYSTEM DRIVER IMPROVEMENT INSTITUTE, INC.	1,531.25	IRWD Wells Fargo ACH	Reconciled
1000157	10-Nov-22	SUNSHINE SUPPLY COMPANY, INC.	2,734.70	IRWD Wells Fargo ACH	Reconciled
1000158	10-Nov-22	TOTAL RESOURCE MANAGEMENT, INC	32,121.56	IRWD Wells Fargo ACH	Reconciled
1000159	10-Nov-22	VSS SALES INC	2,174.61	IRWD Wells Fargo ACH	Reconciled
1000160	10-Nov-22	WATER TREATMENT CHEMICALS INC	19,989.00	IRWD Wells Fargo ACH	Reconciled
1000161	10-Nov-22	WOODARD & CURRAN INC	4,402.50	IRWD Wells Fargo ACH	Reconciled
1000162	17-Nov-22	ACE INDUSTRIES, INC.	1,268.24	IRWD Wells Fargo ACH	Reconciled
1000163	17-Nov-22	ALEXANDER'S CONTRACT SERVICES, INC.	132,797.90	IRWD Wells Fargo ACH	Reconciled
1000164	17-Nov-22	ALLIANCE APPRAISAL, LLC	3,000.00	IRWD Wells Fargo ACH	Negotiable
1000165	17-Nov-22	CAROLLO ENGINEERS, INC	11,272.00	IRWD Wells Fargo ACH	Reconciled
1000166	17-Nov-22	CITY OF IRVINE	21,164.00	IRWD Wells Fargo ACH	Reconciled
1000167	17-Nov-22	CONSERV CONSTRUCTION INC.	1,400.00	IRWD Wells Fargo ACH	Reconciled
1000168	17-Nov-22	DAYTON CERTIFIED WELDING, INC.	1,015.00	IRWD Wells Fargo ACH	Reconciled
1000169	17-Nov-22	DEMARIA ELECTRIC MOTOR SERVICES, INC.	8,549.69	IRWD Wells Fargo ACH	Reconciled
1000170	17-Nov-22	EHS INTERNATIONAL, INC	1,320.00	IRWD Wells Fargo ACH	Reconciled
1000171	17-Nov-22	HAAKER EQUIPMENT COMPANY	221.66	IRWD Wells Fargo ACH	Reconciled
1000172	17-Nov-22	JCI JONES CHEMICALS INC	2,989.49	IRWD Wells Fargo ACH	Reconciled
1000173	17-Nov-22	JIG CONSULTANTS	1,954.00	IRWD Wells Fargo ACH	Reconciled
1000174	17-Nov-22	MARK KADESH	10,200.00	IRWD Wells Fargo ACH	Reconciled
1000175	17-Nov-22	OLIN CORPORATION	24,651.72	IRWD Wells Fargo ACH	Reconciled
1000176	17-Nov-22	ORANGE COUNTY AUTO PARTS CO	224.98	IRWD Wells Fargo ACH	Reconciled
1000177	17-Nov-22	PROBOLSKY RESEARCH LLC	13,125.00	IRWD Wells Fargo ACH	Reconciled
1000178	17-Nov-22	RAM AIR ENGINEERING INC	6,260.76	IRWD Wells Fargo ACH	Reconciled
1000179	17-Nov-22	RINCON TRUCK CENTER INC.	1,120.17	IRWD Wells Fargo ACH	Reconciled
1000180	17-Nov-22	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	3,746.32	IRWD Wells Fargo ACH	Reconciled
1000181	17-Nov-22	SPATIAL WAVE, INC.	8,960.00	IRWD Wells Fargo ACH	Reconciled
1000182	17-Nov-22	VSS SALES INC	768.00	IRWD Wells Fargo ACH	Reconciled
1000183	17-Nov-22	WOODARD & CURRAN INC	21,247.50	IRWD Wells Fargo ACH	Reconciled
1000184	23-Nov-22	ORANGE COUNTY SANITATION DISTRICT	215,777.74	IRWD Wells Fargo ACH	Reconciled
1000185	23-Nov-22	ACE INDUSTRIES, INC.	5,304.71	IRWD Wells Fargo ACH	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
1000186	23-Nov-22	ADAM'S FALCONRY SERVICE, LLC	3,660.00	IRWD Wells Fargo ACH	Reconciled
1000187	23-Nov-22	CAROLLO ENGINEERS, INC	1,944.00	IRWD Wells Fargo ACH	Reconciled
1000188	23-Nov-22	CITY OF IRVINE	14,375.96	IRWD Wells Fargo ACH	Reconciled
1000189	23-Nov-22	COASTAL OCCUPATIONAL MEDICAL GROUP, INC.	300.00	IRWD Wells Fargo ACH	Reconciled
1000190	23-Nov-22	DRAKE TRAFFIC CONTROL SERVICES INC	3,335.00	IRWD Wells Fargo ACH	Reconciled
1000191	23-Nov-22	HILL BROTHERS CHEMICAL COMPANY	15,698.23	IRWD Wells Fargo ACH	Reconciled
1000192	23-Nov-22	MBF CONSULTING, INC.	2,210.00	IRWD Wells Fargo ACH	Reconciled
1000193	23-Nov-22	MRO ELECTRIC & SUPPLY CO.	5,928.00	IRWD Wells Fargo ACH	Reconciled
1000194	23-Nov-22	NEWPORT WINDOW MAINTENANCE INC	3,160.00	IRWD Wells Fargo ACH	Reconciled
1000195	23-Nov-22	OLIN CORPORATION	20,780.57	IRWD Wells Fargo ACH	Reconciled
1000196	23-Nov-22	ORANGE COUNTY AUTO PARTS CO	539.76	IRWD Wells Fargo ACH	Reconciled
1000197	23-Nov-22	RAM AIR ENGINEERING INC	3,635.00	IRWD Wells Fargo ACH	Reconciled
1000198	23-Nov-22	RINCON TRUCK CENTER INC.	36.65	IRWD Wells Fargo ACH	Reconciled
1000199	23-Nov-22	SPATIAL WAVE, INC.	6,460.00	IRWD Wells Fargo ACH	Reconciled
1000200	23-Nov-22	VSS SALES INC	19,262.85	IRWD Wells Fargo ACH	Reconciled
1000201	23-Nov-22	WORKFORCE SAFETY LLC	4,500.00	IRWD Wells Fargo ACH	Reconciled
1000202	23-Nov-22	PACIFIC PARTS & CONTROLS INC	5,126.19	IRWD Wells Fargo ACH	Reconciled
1000203	30-Nov-22	JCI JONES CHEMICALS INC	12,342.06	IRWD Wells Fargo ACH	Negotiable
SUB-TOTAL IRWD WELLS FARGO ACH DISBURSEMENTS			2,302,137.96		
2000040	3-Nov-22	ABSOLUTE STANDARDS, INC.	105.00	IRWD Wells Fargo PC	Reconciled
2000041	3-Nov-22	ACCESS TECHNOLOGIES, INC.	7,485.91	IRWD Wells Fargo PC	Reconciled
2000042	3-Nov-22	ACCUSOURCE, INC.	218.85	IRWD Wells Fargo PC	Reconciled
2000043	3-Nov-22	AMERICAN GEOTECHNICAL, INC.	652.50	IRWD Wells Fargo PC	Reconciled
2000044	3-Nov-22	BEE EMERGENCY RESPONSE TEAM	700.00	IRWD Wells Fargo PC	Reconciled
2000045	3-Nov-22	BIOMAGIC INC	7,542.55	IRWD Wells Fargo PC	Reconciled
2000046	3-Nov-22	CAPTIVE AUDIENCE MARKETING INC.	79.00	IRWD Wells Fargo PC	Reconciled
2000047	3-Nov-22	FERGUSON ENTERPRISES, LLC	17,510.99	IRWD Wells Fargo PC	Reconciled
2000048	3-Nov-22	GOLF COURSE SOLUTIONS	100.00	IRWD Wells Fargo PC	Reconciled
2000049	3-Nov-22	HARRINGTON INDUSTRIAL PLASTICS LLC	10,874.10	IRWD Wells Fargo PC	Reconciled
2000050	3-Nov-22	IDEXX DISTRIBUTION, INC	11,810.01	IRWD Wells Fargo PC	Negotiable
2000051	3-Nov-22	IRVINE PIPE & SUPPLY INC	958.33	IRWD Wells Fargo PC	Reconciled
2000052	3-Nov-22	LUBRICATION ENGINEERS, INC.	4,619.64	IRWD Wells Fargo PC	Reconciled
2000053	3-Nov-22	NCL OF WISCONSIN INC	695.00	IRWD Wells Fargo PC	Reconciled
2000054	3-Nov-22	PARKHOUSE TIRE INC	3,762.54	IRWD Wells Fargo PC	Reconciled
2000055	3-Nov-22	S & J SUPPLY CO INC	18,763.00	IRWD Wells Fargo PC	Reconciled
2000056	3-Nov-22	THOMPSON & PHIPPS INC	16,568.33	IRWD Wells Fargo PC	Reconciled
2000057	3-Nov-22	UCT, LLC	430.40	IRWD Wells Fargo PC	Reconciled
2000058	3-Nov-22	WATERBORNE, INC	505.00	IRWD Wells Fargo PC	Reconciled
2000059	10-Nov-22	ACCUSOURCE, INC.	536.42	IRWD Wells Fargo PC	Reconciled
2000060	10-Nov-22	HARRINGTON INDUSTRIAL PLASTICS LLC	17,301.50	IRWD Wells Fargo PC	Reconciled
2000061	10-Nov-22	IRVINE PIPE & SUPPLY INC	4,220.51	IRWD Wells Fargo PC	Reconciled
2000062	10-Nov-22	S & J SUPPLY CO INC	1,585.61	IRWD Wells Fargo PC	Reconciled
2000063	10-Nov-22	THOMPSON & PHIPPS INC	3,671.26	IRWD Wells Fargo PC	Reconciled
2000064	10-Nov-22	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	5,261.87	IRWD Wells Fargo PC	Negotiable
2000066	17-Nov-22	FERGUSON ENTERPRISES, LLC	26,183.25	IRWD Wells Fargo PC	Negotiable
2000067	17-Nov-22	HARRINGTON INDUSTRIAL PLASTICS LLC	340.02	IRWD Wells Fargo PC	Negotiable
2000068	17-Nov-22	INNOVATIVE MACHINE TOOL REPAIR LLC	1,334.86	IRWD Wells Fargo PC	Negotiable
2000069	17-Nov-22	IRVINE PIPE & SUPPLY INC	5,350.16	IRWD Wells Fargo PC	Negotiable
2000070	17-Nov-22	LUBRICATION ENGINEERS, INC.	2,863.83	IRWD Wells Fargo PC	Negotiable
2000071	17-Nov-22	RESTEK CORPORATION	659.86	IRWD Wells Fargo PC	Negotiable
2000072	17-Nov-22	S & J SUPPLY CO INC	25,369.69	IRWD Wells Fargo PC	Negotiable
2000073	17-Nov-22	WECK LABORATORIES INC	2,429.00	IRWD Wells Fargo PC	Negotiable
2000074	23-Nov-22	ACCESS TECHNOLOGIES, INC.	136.09	IRWD Wells Fargo PC	Negotiable
2000075	23-Nov-22	FERGUSON ENTERPRISES, LLC	7,433.54	IRWD Wells Fargo PC	Negotiable
2000076	23-Nov-22	HARRINGTON INDUSTRIAL PLASTICS LLC	10,787.41	IRWD Wells Fargo PC	Negotiable
2000077	23-Nov-22	HARRINGTON INDUSTRIAL PLASTICS LLC	1,044.49	IRWD Wells Fargo PC	Negotiable
2000078	23-Nov-22	IRVINE PIPE & SUPPLY INC	2,227.23	IRWD Wells Fargo PC	Negotiable
2000079	23-Nov-22	NOREX, INC.	4,375.00	IRWD Wells Fargo PC	Negotiable
2000080	23-Nov-22	POLYDYNE INC	55,435.22	IRWD Wells Fargo PC	Negotiable
2000081	23-Nov-22	THOMPSON & PHIPPS INC	10,535.53	IRWD Wells Fargo PC	Negotiable
2000082	23-Nov-22	TONY DEMARIA ELECTRIC, INC (DBA TDE)	138,086.98	IRWD Wells Fargo PC	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
SUB-TOTAL IRWD WELLS FARGO PC			430,550.48		
100002	28-Nov-22	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	1,830,155.81	IRWD Wells Fargo Wire	Negotiable
SUB-TOTAL IRWD WELLS FARGO WIRE DISBURSEMENTS			1,830,155.81		
15182	4-Nov-22	CALPERS	591,140.43	IRWD BofA Wire	Negotiable
15183	4-Nov-22	CALPERS	3,540.36	IRWD BofA Wire	Negotiable
15184	4-Nov-22	INTERNAL REVENUE SERVICE	270,851.59	IRWD BofA Wire	Negotiable
15185	4-Nov-22	FRANCHISE TAX BOARD	87,932.57	IRWD BofA Wire	Negotiable
15186	4-Nov-22	EMPOWER RETIREMENT, LLC	194,759.10	IRWD BofA Wire	Negotiable
15187	4-Nov-22	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	4,017.65	IRWD BofA Wire	Negotiable
15188	4-Nov-22	EMPLOYMENT DEVELOPMENT DEPARTMENT	17,425.12	IRWD BofA Wire	Negotiable
15189	4-Nov-22	YORK RISK SERVICES GROUP, INC.	2,987.83	IRWD BofA Wire	Negotiable
15190	7-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	3,839.61	IRWD BofA Wire	Negotiable
15191	7-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	24,158.53	IRWD BofA Wire	Negotiable
15192	28-Nov-22	CALPERS	270,662.85	IRWD BofA Wire	Negotiable
15193	28-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	1,521.15	IRWD BofA Wire	Negotiable
15194	28-Nov-22	CALPERS	1,281.95	IRWD BofA Wire	Negotiable
15195	28-Nov-22	BANK OF NEW YORK MELLON TRUST COMPANY NA	132,404.38	IRWD BofA Wire	Negotiable
15196	28-Nov-22	U.S. BANK NATIONAL ASSOCIATION	73,774.66	IRWD BofA Wire	Negotiable
15197	28-Nov-22	BANK OF AMERICA	69,714.37	IRWD BofA Wire	Negotiable
15198	28-Nov-22	U.S. BANK NATIONAL ASSOCIATION	35,111.23	IRWD BofA Wire	Negotiable
15199	28-Nov-22	SUMITOMO MITSUI BANKING CORPORATION	73,103.57	IRWD BofA Wire	Negotiable
15200	28-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	5,947.96	IRWD BofA Wire	Negotiable
15201	28-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	6,337.35	IRWD BofA Wire	Negotiable
15202	28-Nov-22	ROBERTS, CAROL	28.41	IRWD BofA Wire	Negotiable
15203	28-Nov-22	GLEW, CHRISTOPHER	78.88	IRWD BofA Wire	Negotiable
15204	28-Nov-22	SARES REGIS GROUP	43.08	IRWD BofA Wire	Negotiable
15205	28-Nov-22	Wise, Maureen (Mo)	162.11	IRWD BofA Wire	Negotiable
15206	29-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	676.43	IRWD BofA Wire	Negotiable
15207	29-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	1,298.05	IRWD BofA Wire	Negotiable
15208	29-Nov-22	CALPERS	269,369.58	IRWD BofA Wire	Negotiable
15209	29-Nov-22	FRANCHISE TAX BOARD	104,549.38	IRWD BofA Wire	Negotiable
15210	29-Nov-22	EMPLOYMENT DEVELOPMENT DEPARTMENT	18,650.70	IRWD BofA Wire	Negotiable
15211	29-Nov-22	EMPLOYMENT DEVELOPMENT DEPARTMENT	9,879.91	IRWD BofA Wire	Negotiable
15212	29-Nov-22	EMPOWER RETIREMENT, LLC	238,212.05	IRWD BofA Wire	Negotiable
15213	29-Nov-22	INTERNAL REVENUE SERVICE	323,708.08	IRWD BofA Wire	Negotiable
15214	29-Nov-22	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	4,006.11	IRWD BofA Wire	Negotiable
15215	29-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	3,007.24	IRWD BofA Wire	Negotiable
15216	29-Nov-22	CHARD SNYDER & ASSOCIATES, INC.	1,639.98	IRWD BofA Wire	Negotiable
15217	29-Nov-22	YORK RISK SERVICES GROUP, INC.	8,171.37	IRWD BofA Wire	Negotiable
15218	29-Nov-22	YORK RISK SERVICES GROUP, INC.	8,986.18	IRWD BofA Wire	Negotiable
15219	29-Nov-22	YORK RISK SERVICES GROUP, INC.	5,754.25	IRWD BofA Wire	Negotiable
15220	29-Nov-22	YORK RISK SERVICES GROUP, INC.	13,781.76	IRWD BofA Wire	Negotiable
15221	30-Nov-22	Whittaker, Jerry A	450.00	IRWD BofA Wire	Negotiable
SUB-TOTAL IRWD BOFA WIRE DISBURSEMENTS			2,882,965.81		
SUB-TOTAL BOFA AND WELLS FARGO CHECK AND ELECTRONIC DISBURSEMENTS			18,448,697.56		
431795	3-Nov-22	Borowski, Michael (Mike)	40.36	IRWD Wells Fargo Check	Voided
431869	10-Nov-22	FEDEX	109.50	IRWD Wells Fargo Check No Print	Voided
432060	17-Nov-22	FEDEX	354.57	IRWD Wells Fargo Check No Print	Voided
118342	7-Nov-22	HANSON BRIDGETT LLP	73,412.24	IRWD Wells Fargo ACH	Voided
1000130	10-Nov-22	3SE	2,397.50	IRWD Wells Fargo ACH	Voided
2000065	10-Nov-22	3SE	2,397.50	IRWD Wells Fargo PC	Voided
SUB-TOTAL BOFA AND WELLS FARGO CHECK AND ELECTRONIC ISSUED AND VOIDED IN NOVEMBER 2022			78,711.67		
TOTAL AP DISBURSEMENTS AND VOIDS FOR NOVEMBER 2022			18,527,409.23		

Exhibit "E"

	AMOUNT	VENDOR	PURPOSE
11/4/2022	1,191,755.38	BANK OF AMERICA	ACH Payments for Payroll
11/18/2022	1,397,102.23	BANK OF AMERICA	ACH Payments for Payroll
	<u><u>\$2,588,857.61</u></u>		

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IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.

01-NOV-22 to 30-NOV-22

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Aryan, Stephen	431794	3-Nov-22	154.16	Other(Misc)	Safety shoe allowance
Aryan, Stephen	432310	23-Nov-22	257.05	Breakfast <25	Canada pipe break in Lake Forest. Provided breakfast burritos for Dave Crowe's team (20 people)
Cascelli, Craig	432000	10-Nov-22	202.00	Membership	CWEA membership renewal
Cascelli, Craig	432000	10-Nov-22	100.00	Certification	CWEA Collections Systems Grade II
Cho, Harry	432001	10-Nov-22	368.21	Airfare	Witness Flow Test at Alden Labs, Worcester, MA - October 24-26, 2022
Cho, Harry	432001	10-Nov-22	279.09	Lodging	Witness Flow Test at Alden Labs, Worcester, MA - October 24, 2022
Cho, Harry	432001	10-Nov-22	279.09	Lodging	Witness Flow Test at Alden Labs, Worcester, MA - October 25, 2022
Cho, Harry	432001	10-Nov-22	229.17	Auto Rental	Witness Flow Test at Alden Labs, Worcester, MA - October 24-26, 2022
Coria, Alex	431796	3-Nov-22	192.00	Membership	CWEA membership renewal
Coria, Alex	431796	3-Nov-22	100.00	Certification	CWEA Collections Systems Grade II
Corral, Ed	432003	10-Nov-22	175.00	Certification	AWWA CEU Online Webinar course
Corral, Ed	432003	10-Nov-22	120.00	Certification	AWWA Distribution Grade III
Cortez, Malcolm	432175	17-Nov-22	180.00	Certification	California Professional Engineer License renewal
Daniel, Matthew	431797	3-Nov-22	324.85	Breakfast <25	Safety Tailgate meeting provided breakfast for 25 people
Davis, Jennifer	431798	3-Nov-22	200.00	Other(Misc)	National Security Retirement Month meeting supplies
Garcia, Juan	431799	3-Nov-22	100.00	Certification	AWWA certification renewal
Joseph, Brandon	432184	17-Nov-22	202.00	Membership	CWEA membership renewal
Joseph, Brandon	432184	17-Nov-22	105.00	Certification	CWEA Collections Systems Grade II
Pascual, Allan	431805	3-Nov-22	130.05	Lodging	AWWA 2022 WaterSmart Innovations Conference, Las Vegas, NV - October 5, 2022
Pascual, Allan	431805	3-Nov-22	156.88	Mileage	AWWA 2022 WaterSmart Innovations Conference, Las Vegas, NV - from Calif. - October 5, 2022
Pascual, Allan	431805	3-Nov-22	156.88	Mileage	AWWA 2022 WaterSmart Innovations Conference, Las Vegas, NV - to Calif. - October 6, 2022
Paulson, David	431806	3-Nov-22	105.00	Certification	SWRCB Water Treatment Operator Grade V
Perez, David	432186	17-Nov-22	110.00	Certification	SWRCB Water Treatment Grade II
Reynoso, Pio	431807	3-Nov-22	101.00	Certification	CWEA Mechanical Technologist Grade III
Ruiz, Ricky	432312	23-Nov-22	190.30	Other(Misc)	Safety shoe allowance
Rutherford, Allan	432188	17-Nov-22	202.00	Membership	CWEA membership renewal
Sciabica, Joseph	432189	17-Nov-22	118.53	Other(Misc)	Safety shoe allowance
Seesangrit, Melody	432009	10-Nov-22	102.25	Mileage	2022 ESRI User Conference, San Diego, CA - July 12, 2022
Spangenberg, Carl	432010	10-Nov-22	140.25	Lodging	SWMOA 2022 Annual Conference, Carlsbad, CA - November 1, 2022
Torres, Richard	432190	17-Nov-22	105.00	Certification	CWEA Collections Systems Grade III
Zanetti, Enrique	431810	3-Nov-22	130.05	Lodging	AWWA 2022 WaterSmart Innovations Conference, Las Vegas, NV - October 5, 2022
Total Amount:			\$5,315.81		

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January 9, 2023
Prepared by: K. Welch / E. Akiyoshi
Submitted by: F. Sanchez / P. Weghorst
Approved by: Paul A. Cook *PAC*

CONSENT CALENDAR

VERIFICATION OF SUFFICIENT WATER SUPPLY FOR THE MARKET PLACE DEVELOPMENT PROJECT

SUMMARY:

In October 2022, IRWD received a request from the City of Irvine to complete a Verification of Sufficient Water Supply (WSV) for the Market Place Development Project in Irvine. Staff has completed the WSV for the project and recommends the Board approve the document.

BACKGROUND:

The proposed Market Place Development Project is located within the City of Irvine between Jamboree Road, the 261 Eastern Transportation Corridor and Bryan Avenue in Planning Area 4. A location map of the project is provided as Exhibit "A". On July 12, 2022, the Board approved a Water Supply Assessment (WSA) for the proposed project. The WSA included the replacement of approximately 205,000 square feet of existing commercial use with up to 1,400 residential units. Since then, the proposed number of Market Place residential units has been reduced from 1,400 to 1,261 dwelling units.

As required under SB 221, and as part of the tract map approval process for projects with 500 or more dwelling units, the City has requested that IRWD prepare a WSV for the Market Place Development Project. A WSV has been completed for the proposed project and is provided as Exhibit "B". The WSV is based upon the approved WSA containing IRWD's determination that a sufficient water supply is available.

SB 221 requires several elements be included in the WSV that are not covered or required in the WSA. These elements are primarily covered in Sections 1(b)(ii), 1(b)(iii) and 1(b)(iv) of the "Detailed Verification" section in the attached WSV. This information, together with the WSA approved by IRWD in July 2022, reflects IRWD's confirmation that the project water demands, together with demands from any other developments that have previously received WSVs or will-serves, or other projects that have come to IRWD's attention either through developers or through the respective land use agency approval process, are, in the aggregate, within the demands identified by that WSA. In accordance with this procedure, the attached WSV is based on the WSA and on information contained in the WSV.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This study is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 which provides exemption for planning studies.

COMMITTEE STATUS:

This item was reviewed at the January 5, 2023, Water Resources Policy and Communications Committee meeting.

RECOMMENDATION:

THAT THE BOARD APPROVE THE VERIFICATION OF SUFFICIENT WATER SUPPLY FOR THE MARKET PLACE DEVELOPMENT.

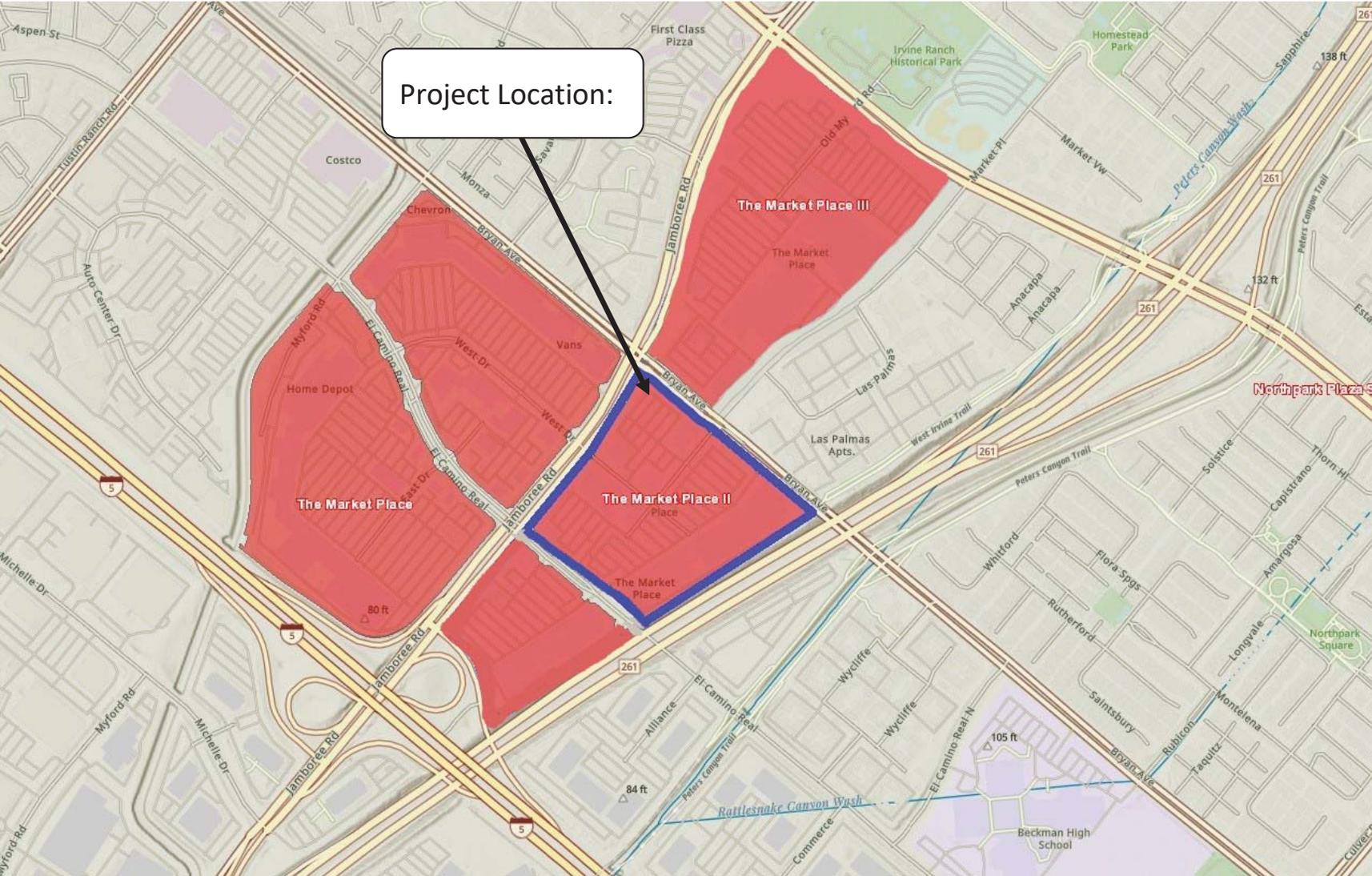
LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Verification of Sufficient Water Supply for the Market Place Development

Exhibit "A"

Market Place Development Project Location



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**IRVINE RANCH WATER DISTRICT
VERIFICATION OF SUFFICIENT WATER SUPPLY
Government Code §66473.7**

To: *(Lead Agency)*
City of Irvine
One Civic Center Plaza
Irvine, CA 92623-9575

(Applicant)
The Irvine Company
550 Newport Center Drive
Newport Beach, CA 92660

Project Information

Project Title: The Market Place (APN 104-351-32) (see Exhibit A)

Tentative Map Application No. 2022-162 Verification requested prior to tentative map application

Number of residential units in Project: 1,261

Uses in Project including non-residential (type, no. of employees, sq. ft. of floor space, acreage):
(see Exhibit B)

Acreage to be devoted to landscape (excluding individual residence yards): (see Exhibit B)

The projected water demand for the Project was included in IRWD's most recently adopted urban water management plan.

A Water Supply Assessment that included the Project was adopted by IRWD on July 11, 2022: The Market Place. A copy of the Assessment is attached hereto and incorporated herein by this reference (see Exhibit C).

Verification of Availability of Sufficient Water Supply

On _____, the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Verification and made the following determination regarding the above-described Project:

A sufficient water supply is available for the Project.
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.

A sufficient water supply is not available for the Project.

The foregoing determination is based on the following Water Supply Verification Information and supporting information in the records of IRWD.

Signature _____ *Date* _____ *Title* _____

WATER SUPPLY VERIFICATION INFORMATION

Purpose of Verification

Irvine Ranch Water District (“IRWD”) is the public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this verification (the “Project”). As a public water system, IRWD is required by Section 66473.7 of the Government Code (the “Verification Law”) to provide the City with a verification of the availability of a sufficient water supply for non-exempt subdivisions of more than 500 residential units in conjunction with (or prior to) the City’s approval of a tentative map. The City has found the Project to include a subdivision that is subject to verification and not exempt under the Verification Law.

The Verification Law provides that a verification shall be supported by substantial evidence, which may include, but is not limited to, any of the following (i) IRWD’s most recently adopted urban water management plan; (ii) a water supply assessment previously adopted for the project under Water Code 10910, *et seq.*; or (iii) other analytical information substantially similar to the assessment of service reliability required by Water Code Section 10635 to be included in the urban water management plan. The Verification Law also specifies the elements to be contained in a verification with respect to (i) supplies relied upon that are not currently available; (ii) reasonably foreseeable impacts of the subdivision on the availability of water resources for agricultural and industrial uses within IRWD’s service area that are not currently receiving water; and (iii) rights to extract additional groundwater needed to supply the subdivision.

A verification does not entitle the Project to service or to any right, priority or allocation in any supply, capacity or facility, or affect IRWD’s obligation to provide service to its existing customers or any potential future customers. In order to receive service, the Project applicant is required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD’s forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirements as specified therein.

Methodology of Verification for Project With Prior Water Supply Assessment

As referenced on the cover page of this verification (the “Verification”), the Project was included within an assessment of water supply approved by IRWD (the “Assessment”). The Assessment contained IRWD’s determination that a sufficient water supply is available for the Project. As described in the Assessment, IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. However, upon approval of an assessment containing a determination of a sufficient supply, IRWD attributes the demands identified by that assessment to IRWD’s existing and committed demand. Thereafter, each verification approved by IRWD for a subdivision covered by that assessment is based on the assessment and reflects IRWD’s confirmation that the water demands of the subdivision, together with any other subdivisions or developments that have previously received verifications, will-serves, or other approval by IRWD under the same assessment, are, in the aggregate, within the demand identified by that assessment. In accordance with that procedure, this Verification is based on the Assessment. The Assessment’s determination of sufficiency extends through 2042. In addition, this Verification includes the elements required by the Verification Law that are not included within the required contents of the Assessment.

Supporting Documentation

As noted above, the principal supporting documentation for this Verification is the Assessment. Other documentation supports the Assessment and this Verification: IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent 2020 UWMP was adopted in June 2021 and the next update for 2025 is anticipated in July 2026. The water demand for the Project will be included in IRWD's 2025 UWMP update.

In addition to the Assessment, the most recent WRMP and the 2020 UWMP mentioned above, other supporting documentation referenced herein is found in Section 5 of this Verification. This includes the most recent Metropolitan Water District of Southern California's (MWD) Urban Water Management Plan (MWD 2020 UWMP) detailing an evaluation by MWD, the wholesaler of IRWD's imported water supplies, of the reliability of MWD's supplies, adopted in May 2021.

The Verification Law requires written proof of entitlement for "not currently available" (referred to herein as "under development") supplies. The Assessment includes such information for both currently available and under development supplies. Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2 of the Assessment. Copies of the summarized items can be obtained from IRWD.

Sufficiency Calculation Methodology

The methodology for IRWD's comparison of its demands and supplies is set forth in the Assessment, in the section entitled "Assessment Methodology" and subsections thereof entitled "water use factors; dry-year increases;" "planning horizon;" "assessment of demands;" "assessment of supplies;" and "comparison of demand and supply."

Detailed Verification

1. Determination of sufficiency of water supply

(a) Supply and demand comparison

See the Assessment, Section 1, incorporated herein by reference.

(b) Factors considered in determining the sufficiency of the water supply:

(i) The availability of water supplies over a historical record of at least 20 years.

Quantities received in prior years from existing sources identified in (a)(1):

Source	1990	1995	2000	2005	2010	2015	2020
Potable – imported	44,401	28,397	36,777	19,306	15,227	13,674	15,904
Potable – groundwater	10,215	20,020	20,919	37,160	42,089	54,616	42,374
Nonpotable - recycled	11,589	10,518	14,630	15,296	20,847	21,770	26,412
Nonpotable - imported	24,899	2,333	16,343	5,304	5,562	7,869	1,528
Nonpotable – groundwater	816	1,834	2,890	2,285	3,761	3,462	4,795
Nonpotable – native	2,778	5,980	4,949	7,251	837	6,205	1,682
Total	94,698	69,082	96,508	86,602	88,323	107,596	92,695

See also the Assessment, Section 1, incorporated herein by reference.

(ii) The applicability of a water shortage contingency analysis prepared pursuant to Water Code Section 10632 that includes actions to be undertaken by IRWD in response to water supply shortages.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect the implementation of water shortage emergency measures. In February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan, which is a supporting document for Section 15. IRWD adopted an updated Water Shortage Contingency Plan on June 28, 2021 pursuant to Water Code Section 10632. As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and be used as necessary and appropriate during declared shortage levels. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment or Verification to account for any water savings that could be achieved by these measures.

(iii) Reduction by IRWD in water supply allocated to a specific water use sector, pursuant to a resolution, ordinance or contract uses.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect any allocated reductions by IRWD. As noted under the preceding item (ii), IRWD's water shortage contingency plan and Rules and Regulations provide

for voluntary and mandatory water conservation measures that could be invoked in declared water shortage emergencies. These include reductions to certain water uses. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment or Verification to account for water savings that could be achieved by any allocated reductions.

With respect to items (ii) and (iii) above, it is noted that MWD has in effect a management plan for dealing with periodic surplus and shortage conditions, known as Metropolitan Report No. 1150, *Water Surplus and Drought Management Plan*, and as also described in the 2020 MWD UWMP. MWD's demand projections account for the effects of long-term conservation best management practices.

(iv) The amount of water that IRWD can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including programs identified under federal, state and local water initiatives such as CALFED and Colorado River tentative agreements, based on the inclusion of information with respect to such supplies in Section 2, below.

Local. IRWD directly relies (for a portion of its full build-out annual demand in single and multiple dry-year projections) on the following under development supplies (see 1(a), above): the Irvine Wells (see the Assessment, Section 2(b)(1)(vi) – “POTABLE SUPPLY – GROUNDWATER”). In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan (“LTFP”) which provides updated information and was received by the OCWD Board in July 2009 and updated in 2014. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft which provides sufficient storage space to accommodate increased supplies from one wet year while also provides enough water in storage to offset decreased supplies during a two- to three year drought. (Source: “Evaluation of Orange County Groundwater Basin Storage and Operational Strategy”, as referenced in *2020-2021 Engineer’s Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*).

With the implementation of OCWD's preferred projects, the Basin yield in the year 2030 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage (“BPP”) that OCWD sets based on these factors.

IRWD's own recycled water expansion program is also shown as currently available in addition to its currently available recycled water supply from its own existing recycling program. The recycled water supplies are discussed in Section 2 below (see the Assessment, Section 1 – Figures 5, 6, 7 and 8 (supplies denominated “MWRP” and “LAWRP”) and Section 2(a), and Section 2(b)(1) - “NONPOTABLE SUPPLY – RECLAIMED”). Under the recently completed MWRP Phase II Capacity Expansion Project, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand of the Project through the year 2042. Additional recycling capacity will augment local nonpotable supplies and improve reliability.

As noted in the Assessment, IRWD's demand projections reflect the effect of IRWD's water conservation pricing and other conservation practices; in particular, IRWD's water use factors used to derive its demand projections are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other long-term water conservation programs. System losses at a rate of approximately 5% are built into the water use factors. As discussed above, IRWD's supply and demand projections do not take into account water savings that could be achieved by water shortage emergency measures.

Imported. MWD, the supplier of IRWD's imported supplies, relies upon several of the listed projects and programs. MWD supports and provides financial incentives to water reclamation, groundwater recovery, water conservation, ocean desalination and other local resource development programs. MWD calculates its demand forecast by first estimating total retail demand for the region and then factoring in impacts of conservation. Next, it derives projections of local supplies using data on current and expected local supply programs and Integrated Resource Planning (IRP) Local Resource Program Target. The difference between the resulting local demands is the expected regional demand on MWD. These estimates of demands on MWD were developed for average years, a single dry year, and five years of consecutive drought. (2020 MWD UWMP). In the MWD 2020 UWMP, MWD states that it has supply and storage capabilities sufficient to meet projected demands from 2025 through 2045 under a normal year, a single dry year, and five consecutive drought year conditions. See MWD 2020 UWMP Section 2.3 Water Reliability Assessment.

In January 2016, MWD adopted its 2015 IRP Update. In 2022-23, MWD is completing an update to this planning document. In the 2015 IRP Update, MWD continued its adaptive management strategy and integrated future supply actions to improve the viability of potential contingency resources as needed, and to position the region to effectively implement these resources in a timely manner.

2. Required information concerning *under-development* supplies

(a) Written contracts or other proof of valid rights to the identified supplies

See the Assessment, Section 2(b)(1), incorporated herein by reference. See also MWD's 2020 UWMP, Appendix A.3 Justifications for Supply Projections with respect to written contracts and other proof related to MWD's supplies.

(b) Adopted capital outlay program to finance delivery of the supplies

See the Assessment, Section 2(b)(2), incorporated herein by reference. With respect to future groundwater wells (PR Nos. 11828 and 11829), IRWD adopted its fiscal year 2022-23 capital budget on April 26, 2021 (Resolution No. 2021-5), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) IRWD has approximately \$585.5 million (water) and \$711.1 million (wastewater) of unissued, voter-approved bond authorization. See also MWD's 2020 UWMP, Section 3 and Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

(c) Federal, state and local permits to construct delivery infrastructure

See the Assessment, Section 2(b)(3), incorporated herein by reference. See also MWD's 2020 UWMP, Section 3 and Appendix A.3 Justifications for Supply Projections with

respect to permits related to MWD's supplies.

(d) Regulatory approvals for conveyance or delivery of the supplies

See the Assessment, Section 2(b)(4), incorporated herein by reference. See also MWD's 2020 UWMP, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Foreseeable impacts of the Project on the availability of water for agricultural and industrial uses in IRWD's service area not currently receiving water

Based on city planning and other information known to IRWD, there are no agricultural or industrial uses in IRWD's service area that are not within either existing and committed demand or future demand, both of which are included within the supply and demand comparison and determination of sufficiency (see 1(a)).

4. Information concerning the right to extract additional groundwater included in the supply identified for the Project:

Where the water supply for the Project includes groundwater, the verification is required to include an evaluation of the extent to which IRWD or the landowner has the right to extract the additional groundwater needed to supply the Project. See the Assessment, Section 2(b)(1), "POTABLE SUPPLY – GROUNDWATER" and "NONPOTABLE SUPPLY – GROUNDWATER," and Section 4, incorporated herein by reference.

5. References

Water Resources Master Plan, Irvine Ranch Water District, Updated 2017

Water Shortage Contingency Plan, Irvine Ranch Water District, June 2021

2020 Urban Water Management Plan, Irvine Ranch Water District, June 2021

2015 Integrated Resources Plan Update, Metropolitan Water District of Southern California, January 2016

2020 Urban Water Management Plan, Metropolitan Water District of Southern California, May 2021

Master Plan Report, Orange County Water District, April 1999

Groundwater Management Plan 2015 Update, Orange County Water District, June 2015

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

Long-Term Facilities Plan 2014 Update, Orange County Water District, November 2014

2020-2021 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2022

Exhibit A

Depiction of Project Area

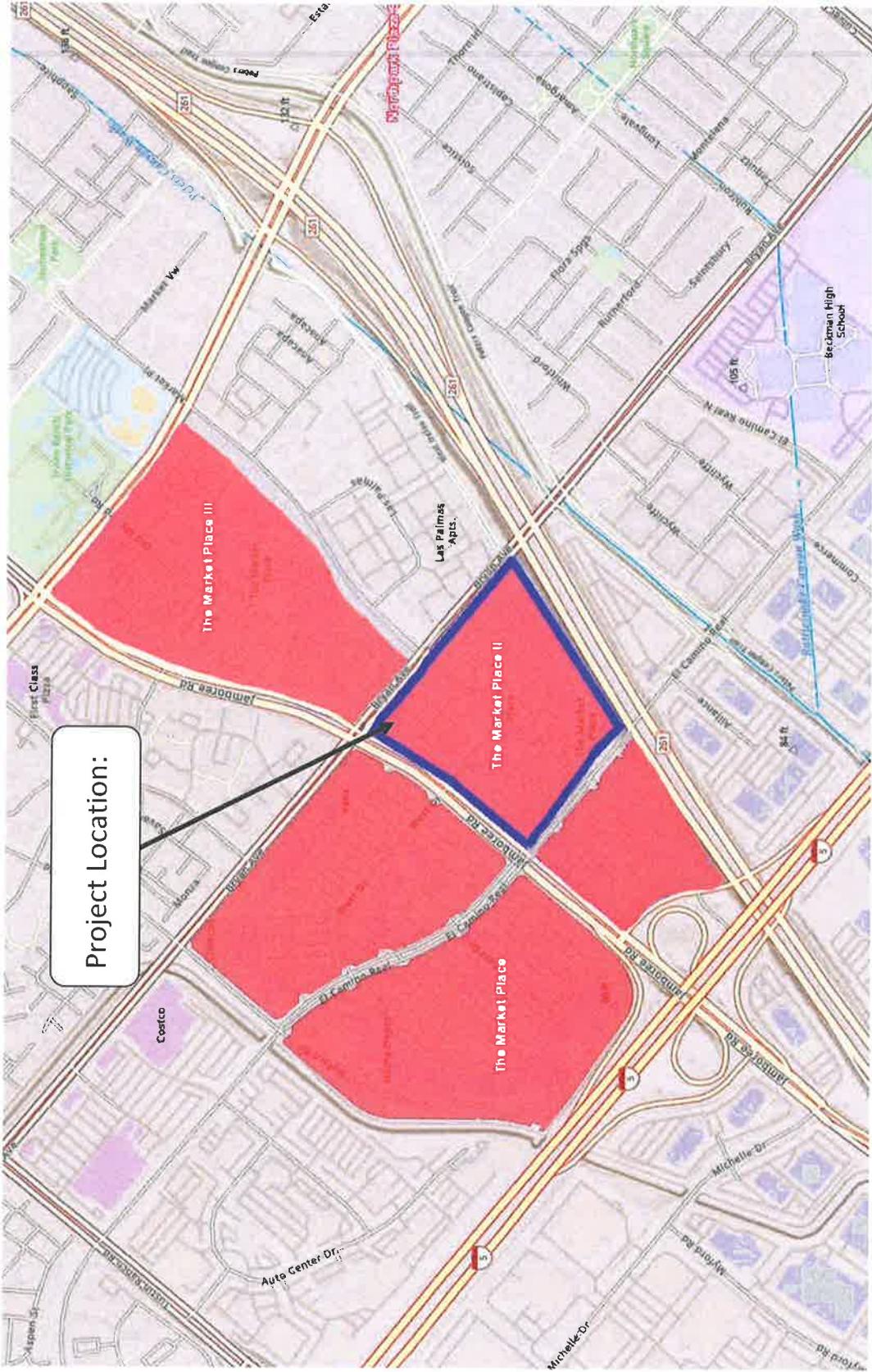


Exhibit B

Uses Included in Project



October 27, 2022

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000

Re: Request for Verification of Sufficient Water Supplies (Government Code §66473.7(b)(1))

The City of Irvine hereby requests verification of the availability of a sufficient water supply for the below-described project. Under Government Code §66473.7(b)(1), written verification of the availability of a sufficient water supply is required in conjunction with or prior to the approval of any tentative map that includes a residential subdivision of more than 500 dwelling units, subject to certain exemptions.

The City has determined that the subject project (1) includes a subdivision meeting the criteria requiring verification of availability of sufficient water supply and (2) does not fall within one of the statutory exemptions for previously developed urban sites, sites surrounded by urban use, or low-income housing sites.

Proposed Project Information

Project Title: The Market Place (APN 104-351-32)

Location of project: 13732 Jamboree Road, Irvine - Planning Area 4 (Lower Peters Canyon)

Planning Area(s): PA 4
(Enclose a project map and exhibits)

Was the project included as part of a previously completed Water Supply Assessment (Water Code §10910)? yes no

If yes, date and project title of Water Supply Assessment 7/12/2022 The Market Place

If no, state reason: CEQA documentation not requiring a Water Supply Assessment was completed prior to January 1, 2002 other: _____

Was a Water Supply Verification previously completed for the project? yes no

If yes, indicate reason for reverification: tract map expiration new Water Supply Assessment required due to project revisions, changed circumstances or new information

Tentative Map Application No.* _____ Tentative Tract No.* _____

Verification is being requested prior to tentative map application (Government Code §66473.7(1) (Indicate next project approval sought)

(*A copy of the tentative map application including the proposed subdivision was sent to IRWD on: October 27, 2022, (Government Code §66455.3))

Type of development included in the project:

- Residential: No. of dwelling units: 1261
- Shopping center or business: No. of employees _____ Sq. ft. of floor space _____
- Commercial office: No. of employees _____ Sq. ft. of floor space _____
- Hotel or motel: No. of rooms _____
- Industrial, manufacturing, processing or industrial park: No. of employees _____
No. of acres _____ Sq. ft. of floor space _____
- Mixed use (check and complete all above that apply)
- Other: _____

Total acreage of project: 16

Acreage devoted to landscape:

Greenbelt _____ golf course _____ parks 2.5
Agriculture _____ other landscaped areas _____

Other factors or uses that would affect the quantity of water needed, such as peak flow requirements:

None

Is the project included in the existing General Plan? No If no, describe the existing General Plan Designation Existing General Plan designation is Regional Commercial. Currently processing General Plan Amendment (00863325-PGA) to add residential entitlement to this designation within PA 4.

The City acknowledges that IRWD's verification will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional information to be submitted to enable IRWD to complete the verification, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project changes or the tentative map approval expires after the issuance of a Water Supply Verification, the City will request a new Water Supply Verification if required. In the event of changes in the project, circumstances or conditions of the availability of new information, it will be necessary for the City to request a new Water Supply Assessment prior to completion of the new Water Supply Verification.

The City acknowledges that the Water Supply Verification shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Verification shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the project applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

CITY OF _____/COUNTY OF ORANGE

By: _____

REQUEST RECEIVED:

Date: October 26, 2022

By: Kellie Welch

Irvine Ranch Water District

REQUEST COMPLETE:

Date: November 1, 2022

By: Kellie Welch

Irvine Ranch Water District

Exhibit C

Water Supply Assessment

Water Supply Assessment Information

Purpose of Assessment

Irvine Ranch Water District (“IRWD”) has been identified by the City as a public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this assessment (the “Project”). As the public water system, IRWD is required by Section 10910 *et seq.* of the Water Code to provide the City with an assessment of water supply availability (“assessment”) for defined types of projects. The Project has been found by the City to be a project requiring an assessment. The City is required to include this assessment in the environmental document for the Project, and based on the record, make a determination whether projected water supplies are sufficient for the Project and existing and planned uses.

Water Code Section 10910 *et seq.* (the “Assessment Law”) contains the requirements for the information to be set forth in the assessment.

Prior Water Supply Assessments

IRWD does not allocate particular supplies to any project but identifies total supplies for its service area. Because of IRWD’s aggregation of demands and supplies, each assessment completed by IRWD is expected to be generally similar to the most recent assessment, with changes as needed to take into account changes, if any, in demands and supplies, and any updated and corrected information obtained by IRWD. Previously assessed projects’ water demands will be included in the baseline. A newly assessed project’s water demand will have been included in previous water supply assessments for other projects (as part of IRWD’s “full build-out” demand) to the extent of any land use planning or other water demand information for the project that was available to IRWD.

The Project’s water demand was included (as part of IRWD’s “full build-out” demand) in previous water supply assessments performed by IRWD, based on land use planning information available to IRWD. In this water supply assessment, the Project demand will be revised in accordance with updated information provided by the applicant and included in the “with project” demand.

Supporting Documentation

IRWD prepares two planning documents to guide water supply decision-making. IRWD’s principal planning document is IRWD’s “Water Resources Master Plan” (“WRMP”). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan (“UWMP”), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631 *et seq.*), and, as a result, is more limited than the WRMP in the treatment of supply and demand issues. Therefore, IRWD primarily relies on its most recent WRMP. The UWMP is required to be updated in years ending with “five” and “zero,” and IRWD’s most recent update of that document (2020 UWMP) was adopted in June 2021.

In addition to the WRMP and the 2020 UWMP mentioned above, other supporting documentation referenced herein is found in Section 6 of this assessment.

Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2(b) of this assessment (written contracts/proof of entitlement). Copies of the summarized items can be obtained from IRWD.

Assessment Methodology

Water use factors; dry-year increases. IRWD employs water use factors to enable it to assign water demands to the various land use types and aggregate the demands. The water use factors are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other water use efficiency programs. The factors are derived from historical usage (billing data) and a detailed review of water use factors within the IRWD service areas conducted as a part of the WRMP. System losses at a rate of approximately 5% are built into the water use factors. Water demands also reflect normal hydrologic conditions (precipitation). Lower levels of precipitation and higher temperatures will temporarily result in higher water demands, due primarily to the need for additional water for irrigation. To reflect this, base (normal) WRMP water demands have been increased by 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with historical regional demand variation as documented in the Metropolitan Water District of Southern California's ("MWD's") Integrated Resources Plan (1996) (Volume 1). This increase in estimated demands is considered conservative and is also consistent with the Municipal Water District of Orange County's ("MWDOC") 2020 UWMP which assumes increased demands in single-dry and multiple dry years of 6% based on MWDOC's Orange County Reliability Study (MWDOC 2020 UWMP, pg. 7-2).

Planning horizon. In accordance with Water Code Section 10910, this assessment reviews demands and supplies covering a 20-year planning horizon. For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2042, which is considered to include build-out or "ultimate development".

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2042):

- Existing and committed demand (without the Project) ("baseline"). This provides a baseline condition as of the date of this assessment, consisting of demand from existing development, plus demand from development that has both approved zoning and (if required by the Assessment Law) an adopted water supply assessment.
- Existing and committed demand, plus the Project ("with-project"). This projection adds the Project water demands to the baseline demands.
- Full WRMP build-out ("full build-out"). In addition to the Project, this projection adds potential demands for all presently undeveloped areas of IRWD based on current general plan information, modified by more specific information available to IRWD, as more fully described in Chapter 2 of the WRMP.

Assessment of supplies. For comparison with demands, water supplies are classified as *currently available* or *under development*.

- *Currently available* supplies include those that are presently operational, and those that

will be operational within the next several years. Supplies expected to be operational in the next several years are those having completed or substantially completed the environmental and regulatory review process, as well as having necessary contracts (if any) in place to move forward. These supplies are in various stages of planning, design, or construction.

- In general, supplies *under development* may necessitate the preparation and completion of environmental documents, regulatory approvals, and/or contracts prior to full construction and implementation.

IRWD is also evaluating the development of additional supplies that are not included in either *currently available* or *under-development* supplies for purposes of this assessment. As outlined in the WRMP, prudent water supply and financial planning dictates that development of supplies be phased in over time consistent with the growth in demand.

Water supplies available to IRWD include several sources: groundwater pumped from the Orange County groundwater basin (including the Irvine Subbasin); captured local (native) surface water; recycled sewage; and supplemental imported water supplied by MWD through the MWDOC. The supply-demand comparisons in this assessment are broken down among the various sources and are further separated into potable and nonpotable water sources.

Comparison of demand and supply. The three demand projections noted above (baseline, with-project and full build-out) are compared with supplies in the following ways:

- On a total *annual* quantity basis (stated in acre-feet per year (“AFY”).
- On a *peak-flow* (maximum day) basis (stated in cubic feet per second (“cfs”).
- Under three climate conditions: base (normal) conditions and single-dry and multiple-dry year conditions. (Note: These conditions are compared for *annual* demands and not for *peak-flow* demands. *Peak-flow* is a measure of a water delivery system’s ability to meet the highest day’s demand of the fluctuating demands that will be experienced in a year’s time. Peak demands occur during the hot, dry season and as a result are not appreciably changed by dry-year conditions; dry-year conditions do affect *annual* demand by increasing the quantity of water needed to supplement normal wet-season precipitation.)

Summary of Results of Demand-Supply Comparisons

Listed below are Figures provided in this assessment, comparing projected potable and nonpotable water supplies and demands under the three development projections:

- Figure 1: Normal Year Supply and Demand – Potable Water
- Figure 2: Single Dry-Year Supply and Demand – Potable Water
- Figure 3: Multiple Dry-Year Supply and Demand – Potable Water
- Figure 4: Maximum-Day Supply and Demand – Potable Water
- Figure 5: Normal Year Supply and Demand – Nonpotable Water
- Figure 6: Single Dry-Year Supply and Demand – Nonpotable Water
- Figure 7: Multiple Dry-Year Supply and Demand – Nonpotable Water
- Figure 8: Maximum-Day Supply and Demand – Nonpotable Water

It can be observed in the Figures that IRWD's *supplies* remain essentially constant between normal, single-dry, and multiple-dry years. This result is due to the fact that groundwater and MWD imported water account for the majority of all of IRWD's potable supply, and recycled water, groundwater and imported water comprise all of IRWD's nonpotable supply. Groundwater production typically remains constant or may increase in cycles of dry years, even if overdraft of the basin temporarily increases, as groundwater producers reduce their demand on imported supplies to secure reliability. (See Section 4 herein.) As to imported water, MWD's 2020 Urban Water Management Plan (MWD 2020 UWMP) concludes that MWD has supply capabilities sufficient to meet expected demands from 2025 through 2045 under a single dry year condition and a period of drought lasting five consecutive water years, as well as in a normal water year hydrologic condition. (See also Section 2(b) (1) "IMPORTED SUPPLY - ADDITIONAL INFORMATION," below.) Recycled water production also remains constant and is considered "drought-proof" as a result of the fact that sewage flows remain virtually unaffected by dry years. Only a small portion of IRWD's supply, native water captured in Irvine Lake, is reduced in single-dry and multiple-dry years. The foregoing factors also serve to explain why there is no difference in IRWD's supplies between single-dry and multiple-dry years.

A review of the Figures indicates the following:

- *Currently available* supplies of potable water are adequate to meet annual demands for the *baseline*, *with-project* and *full build-out* scenarios projected under the normal year, and the single- and multiple-dry year conditions through the year 2042. (Figures 1, 2 and 3.) IRWD plans to proceed with the implementation of future potable supplies (*under development*), as shown in the Figures, to improve local reliability during dry-year conditions.
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2042. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under both dry-year conditions through the year 2042. (Figures 5, 6, 7 and 8.) IRWD has implemented all planned nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions.

The foregoing Figures provide an overview of IRWD potable and nonpotable water supply capabilities. More detailed information on the anticipated development and use of supplies, which incorporates source costs and reliability issues, is provided in the WRMP.

Margins of safety. The Figures and other information described in this assessment show that IRWD's assessment of supply availability contains several margins of safety or buffers:

- "Reserve" water supplies (excess of supplies over demands) will be available to serve as a buffer against inaccuracies in demand projections, future changes in land use, or alterations in supply availability.
- Conservative estimates of annual potable and nonpotable *imported* supplies have been made based on connected delivery capacity (by application of peaking factors as described below in Section 2, footnote 1); additional supplies are expected to be

available from these sources, based on legal entitlements, historical uses and information provided by MWD. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning operational limits on Delta pumping. See "**Actions on Delta Pumping**," below.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of reserves in its regional supply assessments. In addition to MWD's existing regional supply assessments, this assessment has considered MWD's information concerning operational limits on Delta pumping. See "**Actions on Delta Pumping**," below.
- Although groundwater supply amounts shown in this assessment assume production levels within applicable basin production percentages described herein, production of groundwater can exceed applicable basin production percentages on a short-term basis, which can provide additional reliability during dry years or emergencies.

Actions on Delta Pumping. The Sacramento/San Joaquin Delta ("Delta") is a vulnerable component in both the State and Federal systems to convey water from northern portions of California to areas south of the Delta. Issues associated with the Delta have generally been known for years; however, the continuing decline in the number of endangered Delta smelt resulted in the filing of litigation challenging permits for the operation of the Delta pumping facilities. On August 31, 2007, a Federal court ordered interim protective measures for the endangered Delta smelt, including operational limits on Delta pumping, which have an effect on State Water Project ("SWP") operations and supplies. On June 4, 2009, a federal biological opinion imposed rules that further restrict water diversions from the Delta to protect endangered salmon and other endangered fish species. At present, several proceedings concerning Delta operations are ongoing to evaluate options to address Delta smelt impacts and other environmental concerns. In addition to the regulatory and judicial proceedings to address immediate environmental concerns, the Delta Vision process and Bay-Delta Conservation Plan ("BDCP") process are defining long-term solutions for the Delta. In addition, State and federal agencies and water user entities are currently engaged in the development of the Delta Conveyance Project (previously California WaterFix), which is aimed at making physical and operational improvements in the Delta necessary to improve south of the Delta SWP water supplies and water quality and protect ecosystem health in the Delta (MWD 2020 UWMP). Prior to the 2007 court decision, MWD's Board approved a Delta Action Plan in May 2007, that described short, mid and long-term conditions and the actions to mitigate potential supply shortages and to develop and implement long-term solutions. To address uncertainties in expected SWP supplies, in October 2007, MWD prepared its 2007 Integrated Resources Plan ("IRP") Implementation Report, in which MWD estimated that it could see as much as up to a 22% reduction on average of its SWP supplies based on the court order. As part of its ongoing long term planning, in its 2010 IRP Update, MWD identified changes to the long-term plan and established direction to address the range of potential changes in water supply planning. The 2010 IRP also discusses dealing with uncertainties related to impacts of climate change (see additional discussion of this below), as well as actions to protect endangered fisheries. The 2010 IRP Update emphasizes an evolving approach and suite of actions to address the water supply challenges that are posed by uncertain weather patterns, regulatory and environmental restrictions, water quality impacts and changes in the state and the region. The 2010 IRP Update includes MWD's Adaptive Resource Management Strategy three components: Core Resources Strategy, Supply Buffer Implementation and Foundational Actions, which together provides the basis for the 2010 IRP Update. The 2010 IRP Update expands the concept of developing a planning buffer from the 2004 IRP Update by implementing a supply buffer equal

to 10 percent of the total retail demand.

In January 2016, MWD adopted its 2015 IRP Update. In the 2015 IRP Update, MWD continued its Adaptive Resource Management Strategy and integrated future supply actions to improve the viability of potential contingency resources as needed, and to position the region to effectively implement these resources in a timely manner. The 2015 IRP finds that additional actions are needed in investments in conservation, local supplies, the California WaterFix, and stabilizing Colorado River supplies. Among the supply actions, MWD will continue to work collaboratively with state and federal agencies on the California WaterFix, maximize its storage and transfer approach, and continue to develop and protect local supplies and conservation. MWD is currently developing its 2020 IRP Update which proposes to strengthen the Adaptive Management Approach and scenario planning to allow for the evaluation of investments and actions needed to achieve desired reliability under a diverse range of future conditions.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: In the MWD 2020 UWMP, MWD states it has supply capability that would be sufficient to meet expected demands from 2025 to 2045 under single dry year and multiple dry year conditions.¹

Based on the prior MWD 2007 IRP Implementation Report, MWD estimated that it could receive reduction of SWP supplies of up to 22% on average until a long term solution was implemented. For purposes of ensuring a conservative analysis, IRWD made an evaluation of the effect of the 22% estimated reduction of MWD's SWP supplies on its overall imported supplies. IRWD estimates that 22% reduction of SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2025 through 2045. For this purpose, it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. Based on this estimate, this assessment uses a 16% reduction in MWD supplies available to IRWD for the years 2025 through 2045, using IRWD's connected capacity without any water supply allocation imposed by MWD. This reduction in MWD supplies is reflected in Figures 1, 2, 3, 5, 6, and 7.

Per the MWD 2020 UWMP, MWD performs water shortage planning in its Water Surplus and Drought Management ("WSDM") Plan (1988) which guides MWD's planning and operations during both shortage and surplus conditions. Furthermore, MWD developed the Water Supply Allocation Plan ("WSAP") (dated February 2009, updated December 2014) which provides standardized methodology for allocation of MWD's supplies during times of shortage. The WSDM Plan distinguishes between shortages, severe shortages, and extreme shortages. These terms have specific meanings relating to MWD's ability to deliver water and the actions it takes. In June 2008, MWD's Board adopted a Water Supply Condition Framework to communicate the urgency of the region's water supply situation and the need for further water conservation to reduce regional demands, MWD uses the WSDM Plan and Framework to determine if a WSAP is recommended.

¹ The MWD 2020 UWMP utilized DWR's 2019 SWP Delivery Capability Report to estimate future SWP supplies for 2025 through 2045. These estimates incorporate the effect of regulatory requirements in accordance with biological opinions and also reflect potential impacts of climate change on SWP operations. Tables A.3-7 of the MWD 2020 UWMP reflect a reduction of approximately 7% in MWD's expected average year SWP entitlement supplies. This amount is a smaller percentage reduction than MWD's 2007 estimate of 22% that was used by IRWD for purposes of this analysis. For purposes of a conservative analysis, IRWD has used the 22% reduction cited by MWD in its October 2007 IRP Implementation Report as the basis of IRWD's analysis.

As an alternative means of analyzing the effect of reduced MWD supplies on IRWD, listed below are Figures provided comparing projected potable water supplies and demands in all of the five year increments, under a temporary MWD allocation scenario:

Figure 1a: Normal Year Supply and Demand (MWD Allocated) – Potable Water
Figure 2a: Single Dry-Year Supply and Demand (MWD Allocated) – Potable Water
Figure 3a: Multiple Dry-Year Supply and Demand (MWD Allocated) – Potable Water

Figures 1a, 2a, and 3a show IRWD’s estimated supplies (average and single and multiple dry years) under a short-term MWD water supply allocation scenario whereby MWD declares a shortage stage under its WSAP, and a cutback is applied to IRWD’s actual usage rather than its connected capacity. IRWD’s evaluation of reduced MWD supplies to IRWD as shown in Figures 1a, 2a and 3a conservatively analyzes the effect of up to a MWD level 5 Regional Shortage Level. In addition, these Figures do not reflect a reduction in demands, thus representing a more conservative view of IRWD’s supply capability. (see “**Recent Actions Related to Drought Conditions**” below)

On April 14, 2015, MWD approved the implementation of its WSAP at a level 3 Regional Shortage Level and an effective 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. As a result of IRWD’s diversified water supplies, IRWD is reliant on MWD for only 20% of its total supplies. IRWD’s evaluation of reduced MWD supplies to IRWD as shown in Figures 1a, 2a and 3a includes MWD’s 2015 actions to implement a level 3 Regional Shortage Level and 15% reduction.

Under shortage scenarios, IRWD may need to supplement supplies with production of groundwater, which can exceed the applicable basin production percentage on a short-term basis, providing additional reliability during dry years or emergencies.²

In addition, IRWD has developed water banking projects in Kern County, California which may be called upon for delivery of supplemental banked water to IRWD under a MWD WSAP.³ IRWD may also convert non-potable water uses to recycled water as a way to conserve potable water. In addition, if needed, resultant net shortage levels can be addressed by demand reduction programs as described in IRWD’s updated Water Shortage Contingency Plan adopted in 2021. IRWD’s Water Shortage Contingency Plan provides procedures for responding to various levels of supply shortages through a combination of supply augmentation

² In these scenarios, it is anticipated that other water suppliers who produce water from the Orange County Basin will also experience cutbacks of imported supplies and will increase groundwater production and that Orange County Water District (“OCWD”) imported replenishment water may also be cutback. The OCWD’s “2020-2021 Engineer’s Report on the Groundwater Conditions, Water Supply and Basin Utilization” references a report (OCWD Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy, 2007) which recommends a basin management strategy that provides general guidelines for annual basin refill or storage decrease based on the level of accumulated overdraft. It states: “Although it is considered to be generally acceptable to allow the basin to decline to 500,000 AF overdraft for brief periods due to severe drought conditions and lack of supplemental water...an accumulated overdraft of 100,000 AF best represents an optimal basin management target. This optimal target level provides sufficient storage space to accommodate anticipated recharge from a single wet year while also providing water in storage for at least 2 or 3 consecutive years of drought.” MWD replenishment water is a supplemental source of recharge water and OCWD estimates other main supply sources for recharge are available.

³ IRWD has developed water banking projects (“Water Bank”) in Kern County, California and has entered into a 30-year water banking partnership with Rosedale-Rio Bravo Water Storage District to operate IRWD’s Strand Ranch and Stockdale West portions of the Water Bank. The Water Bank can improve IRWD’s water supply reliability by capturing lower cost water available during wet hydrologic periods for use during dry periods. The Water Bank can enhance IRWD’s ability to respond to drought conditions and potential water supply interruptions.

and demand management measures. As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are used as necessary and appropriate during declared shortage levels.

It can be noted that IRWD's above approach is conservative, in that IRWD evaluates the effect of the 16% reduction through 2042 and shows the effect of current allocation scenarios in all of the five-year increments. However, MWD reports that it has made significant progress in other water resource categories such as transfers, groundwater storage and developing other local resources, and supplies will be available from these resources over the long-term.

Climate Change. The California Department of Water Resources ("DWR") released a report "Progress on Incorporating Climate Change into Management of California's Water Resources" (July 2006), considering the impacts of climate change on the State's water supply. In 2012, DWR adopted phase 1 of its Climate Action Plan, its department-wide plan for reducing greenhouse gas emissions (GHG). In September 2018, the DWR released phase 2 of its Climate Action Plan, which is DWR's guide to addressing climate change in the programs, projects, and activities over which it has authority. Per this guidance, California's climate policy focuses on reducing GHG emissions, preparing for climate change impacts, and supporting climate-related research to inform policy responses and decision-making processes.

In MWD's 2015 IRP Update, MWD recognizes there is additional risk and uncertainty associated with climate change that may affect future supply and demands. MWD plans to hedge against supply and demand uncertainties by implementing a long-term plan that recognizes the risk and provides resource development to offset the risk. Per the MWD 2020 UWMP, for longer term risks, like climate change, MWD established a Robust Decision Making ("RDM") approach that can show how vulnerable the region's reliability is to the longer-term risks and can also establish "signposts" that can be monitored to see when crucial changes may be happening. MWD has stated in its 2020 UWMP that the RDM analysis was valuable in identifying vulnerabilities to its 2015 IRP approach to long-term reliability and in understanding how climate change would best be incorporated into the 2020 IRP.

Per the MWD 2020 UWMP, MWD continues to incorporate current climate change science into its planning efforts. Per the MWD 2020 UWMP, MWD has made great efforts to implement greenhouse gas mitigation programs and policies for its facilities and operations. MWD is developing a Climate Action Plan which sets the target and guides future actions to reduce emission levels and complements MWD's IRP. Potential climate change impacts on state, regional and local water supplies and relevant information for the Orange County hydrologic basin and Santa Ana Watershed have not been sufficiently developed at this time to permit IRWD to assess and quantify the effect of any such impact on its conclusions in the Assessment.

Catastrophic Supply Interruption Planning. MWD has developed Emergency Storage Requirements (MWD 2020 UWMP) to safeguard the region from catastrophic loss of water supply. MWD has made substantial investments in emergency storage and has based its planning on a 100% reduction in its supplies for a period of six months. The emergency plan outlines that under such a catastrophe, non-firm service deliveries would be suspended, and firm supplies would be restricted by a mandatory cutback of 25 percent from normal year demand deliveries. In addition, MWD discusses DWR's investments in improvements on the SWP and the long term Delta plan in the MWD 2020 UWMP (pages 3-19 to 3-23). IRWD has also addressed supply interruption planning in its WRMP and 2020 UWMP.

Recent Actions Related to Drought Conditions. In response to historically dry conditions throughout the state of California, on April 1, 2015, Governor Brown issued an Executive Order directing the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25 percent reduction in potable water use through February 2016. The Governor's Order also included mandatory actions aimed at reducing water demands, with a particular focus on outdoor water use. On May 5, 2015, the SWRCB adopted regulations which required that IRWD achieve a 16% reduction in potable water use from its 2013 potable water use levels. On November 13, 2015, Governor Brown issued an Executive Order directing the SWRCB to extend the 2015 Emergency Regulation through October 31, 2016, if drought conditions continued. On February 2, 2016, the SWRCB adopted an extended and modified Emergency Regulation. As a result of the modification, IRWD's mandated reduction was changed from 16% to 9% effective March 1, 2016. On April 14, 2015, MWD approved actions to implement its WSAP at a level 3 Regional Shortage Level and a 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. During this period, IRWD continued to implement actions to reduce potable water demands during the drought; however, this did not affect IRWD's long-term supply capability to meet the demands.

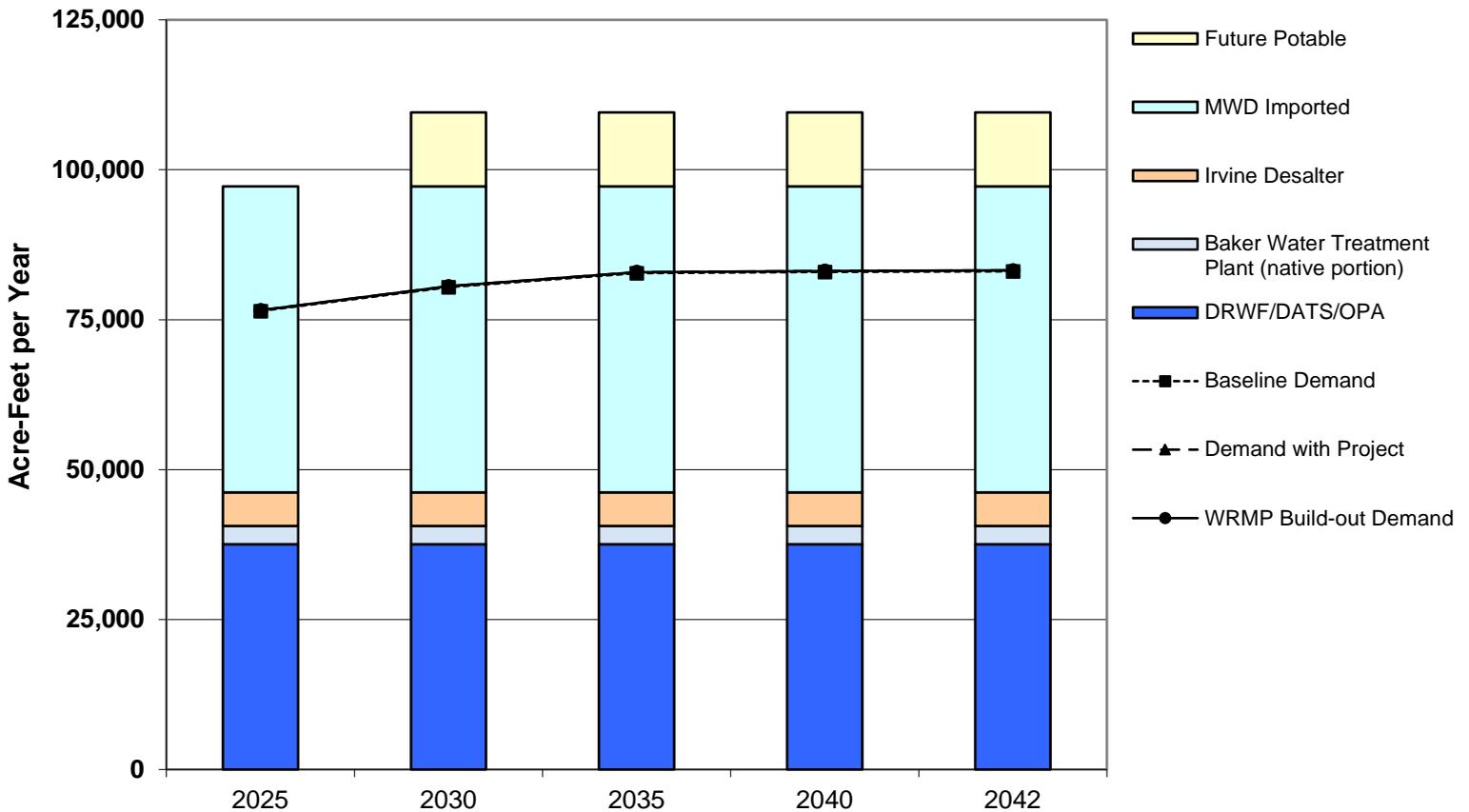
As discussed under "*IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD*" (see above), IRWD has effectively analyzed an imported water supply reduction up to a level 5 Regional Shortage Stage in Figures 1a, 2a, 3a. These Figures, however, do not reflect a reduction in demands, thus representing a more conservative view of IRWD's supply capability. In particular, the reduction in demand mandated by Senate Bill 7 in 2010, requiring urban retail water suppliers to establish water use targets to achieve a 20% reduction in daily per capita water use by 2020, has not been factored into the demands in this analysis. Similarly, notwithstanding the Governor's 2015 order, IRWD's conservative supply-sufficiency analysis in Figures 1a, 2a and 3a does not include the ordered reduction in potable demands. On April 7, 2017, Governor Brown rescinded the Executive Order in all but four counties in California.

Detailed Assessment

1. **Supply and demand comparison**

Comparisons of IRWD's average annual and peak (maximum day) demands and supplies, under *baseline* (existing and committed demand, without the Project), *with-project* (baseline plus Project), and *full build-out* development projections, are shown in the following Figures 1-4 (potable water), Figures 5-8 (nonpotable water) and Figures 1a, 2a, and 3a (short term MWD allocation potable water). See also the "Actions on Delta Pumping" above.

**Figure 1
IRWD Normal-Year Supply & Demand - Potable Water**



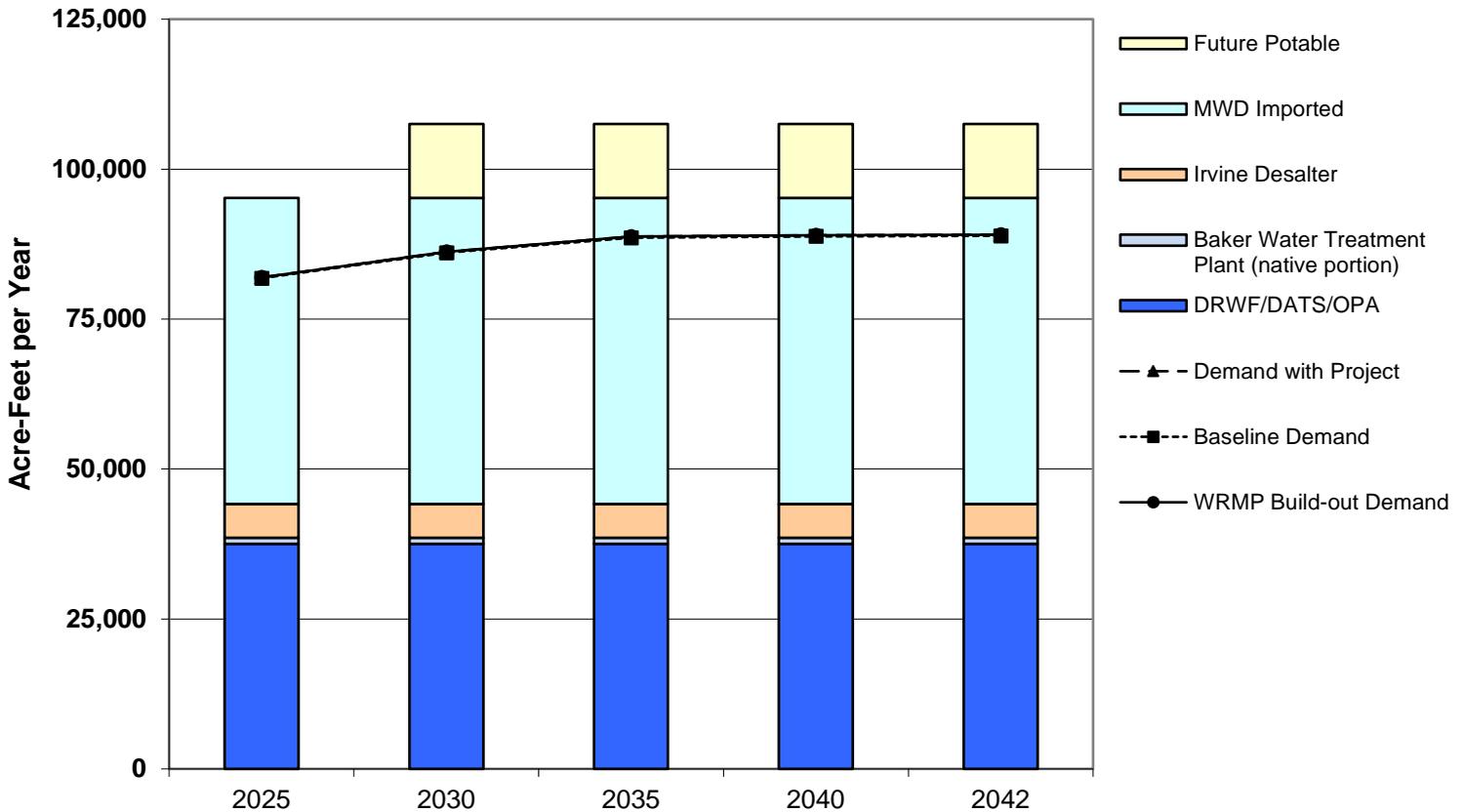
(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	51,027	51,027	51,027	51,027	51,027
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	3,048	3,048	3,048	3,048	3,048
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	103,554	115,907	115,907	115,907	115,907
Baseline Demand	76,450	80,421	82,770	82,977	83,060
Demand with Project	76,577	80,591	82,939	83,147	83,230
WRMP Build-out Demand	76,577	80,591	82,939	83,147	83,230
Reserve Supply with Project	26,977	35,316	32,968	32,760	32,677

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.

**Figure 2
IRWD Single Dry-Year Supply & Demand - Potable Water**



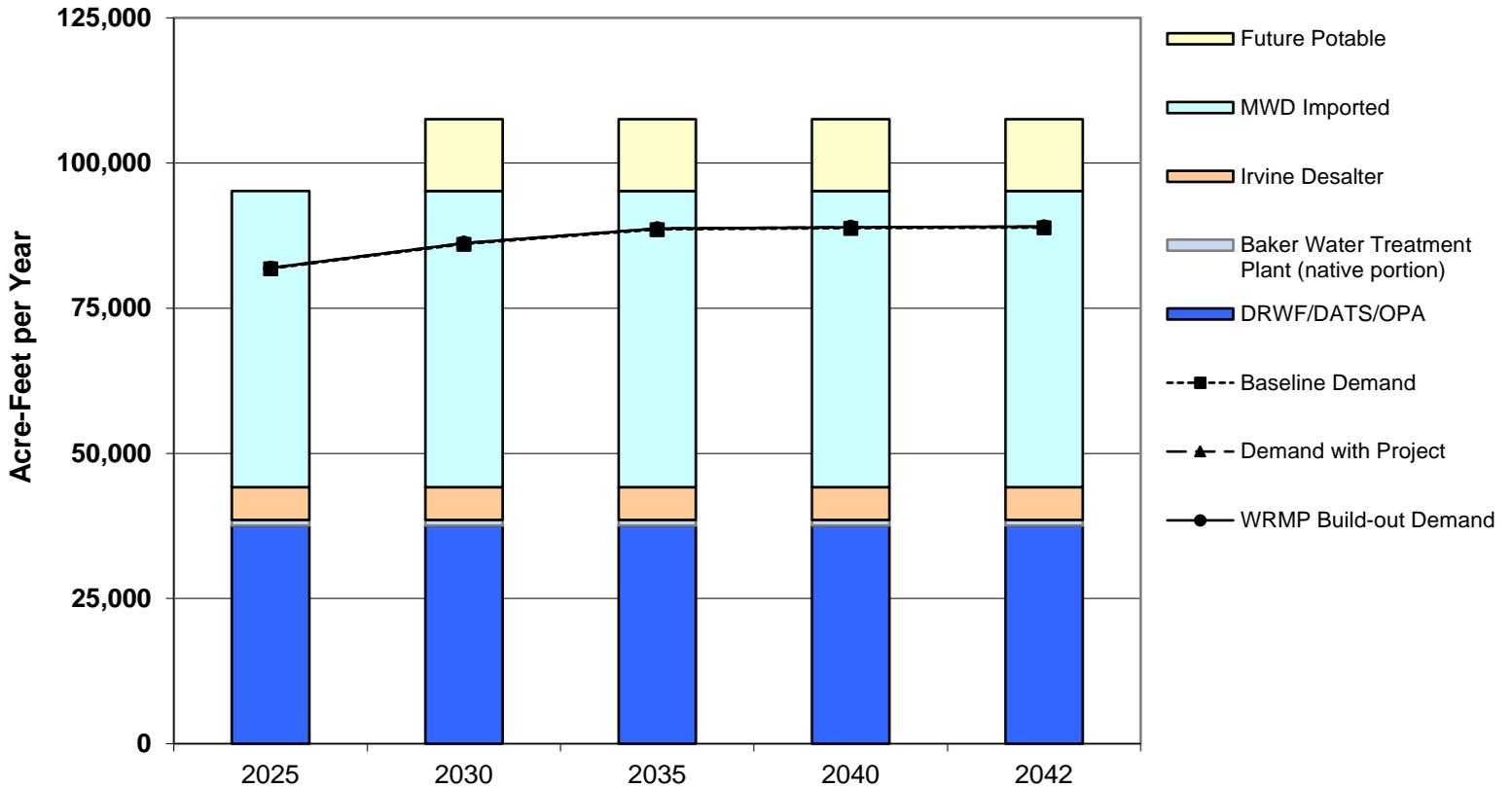
(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	51,027	51,027	51,027	51,027	51,027
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	101,506	113,859	113,859	113,859	113,859
Baseline Demand	81,801	86,051	88,563	88,785	88,874
Demand with Project	81,937	86,232	88,745	88,967	89,056
WRMP Build-out Demand	81,937	86,232	88,745	88,967	89,056
Reserve Supply with Project	19,569	27,626	25,114	24,892	24,803

Notes: Supplies identical to Normal-Year based on Metropolitan's Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.

**Figure 3
IRWD Multiple Dry-Year Supply & Demand - Potable Water**



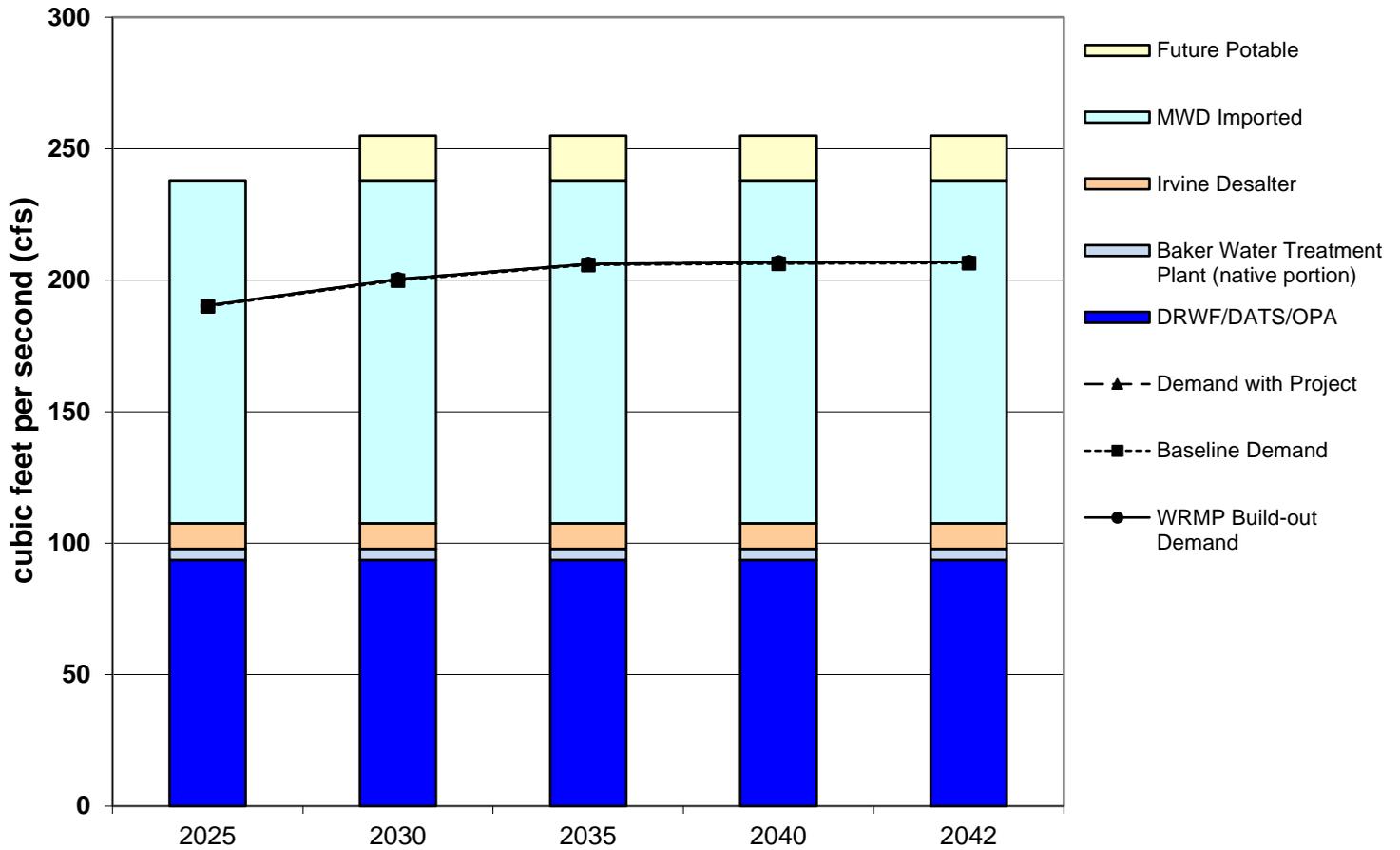
(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Bake	51,027	51,027	51,027	51,027	51,027
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	101,506	113,859	113,859	113,859	113,859
Baseline Demand	81,801	86,051	88,563	88,785	88,874
Demand with Project	81,937	86,232	88,745	88,967	89,056
WRMP Build-out Demand	81,937	86,232	88,745	88,967	89,056
Reserve Supply with Project	19,569	27,626	25,114	24,892	24,803

Notes: Supplies identical to Normal-Year based on Metropolitan's Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

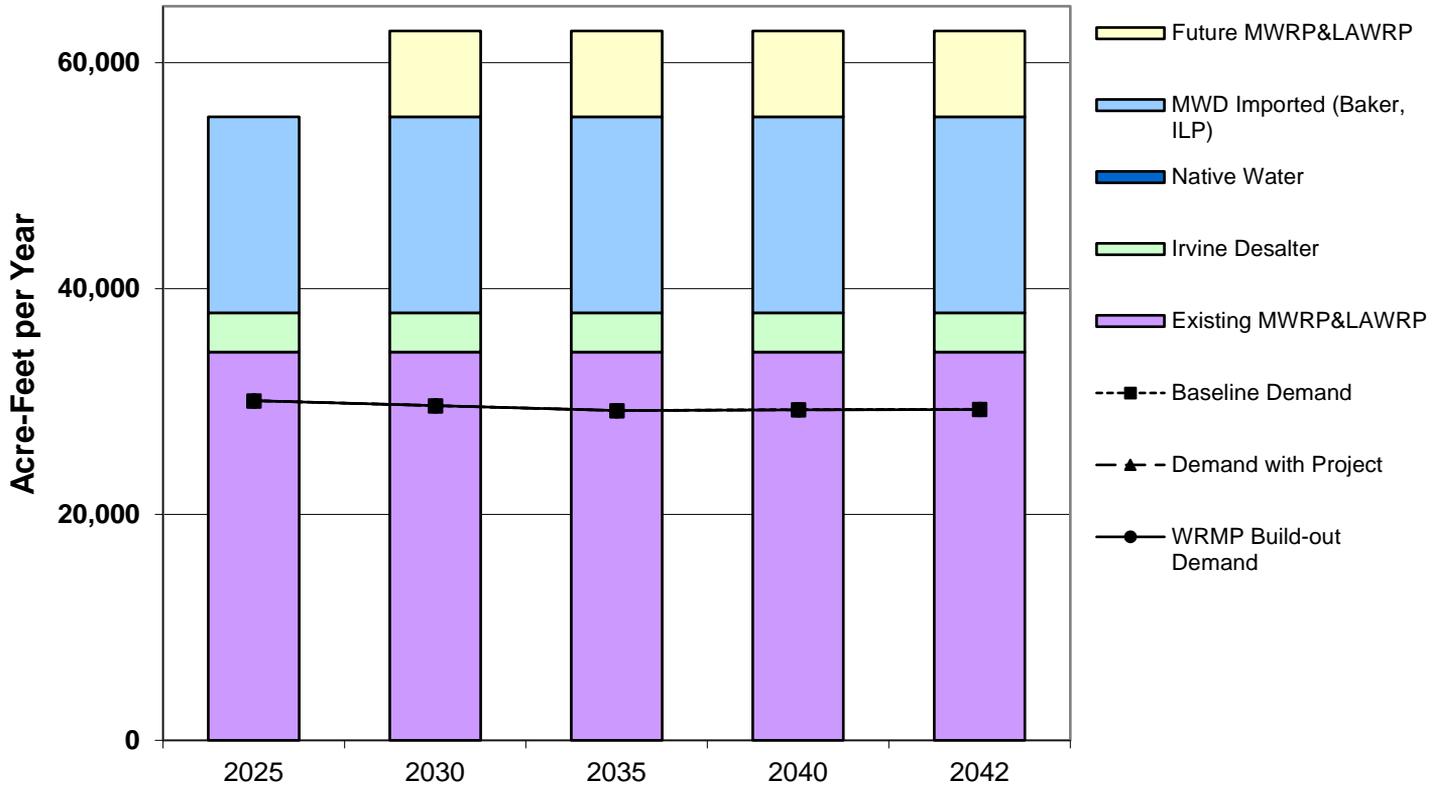
Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.

**Figure 4
IRWD Maximum-Day Supply & Demand - Potable Water**



(in cfs)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	130.4	130.4	130.4	130.4	130.4
DRWF/DATS/OPA	93.7	93.7	93.7	93.7	93.7
Irvine Desalter	9.7	9.7	9.7	9.7	9.7
Wells 21 & 22	8.6	8.6	8.6	8.6	8.6
Baker Water Treatment Plant (native portion)	4.2	4.2	4.2	4.2	4.2
Supplies Under Development					
Future Potable	-	17.0	17.0	17.0	17.0
Maximum Supply Capability	246.6	263.6	263.6	263.6	263.6
Baseline Demand	190.1	199.9	205.8	206.3	206.5
Demand with Project	190.4	200.4	206.2	206.7	206.9
WRMP Build-out Demand	190.4	200.4	206.2	206.7	206.9
Reserve Supply with Project	56.2	63.2	57.3	56.8	56.6

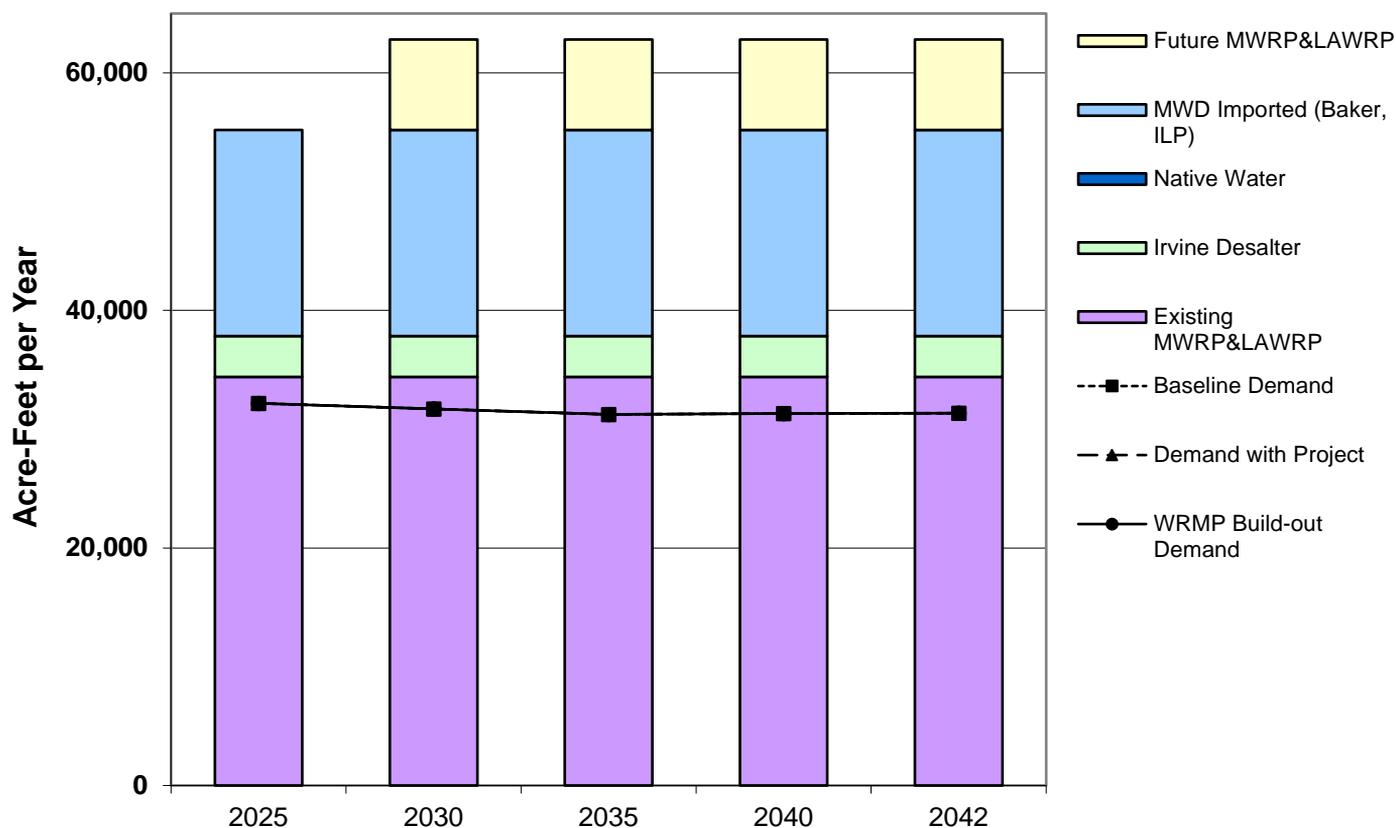
**Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Nonpotable Supplies					
Existing MWRP&LAWRP	34,389	34,389	34,389	34,389	34,389
Future MWRP&LAWRP	-	7,623	7,623	7,623	7,623
MWD Imported (Baker, ILP)	17,347	17,347	17,347	17,347	17,347
Irvine Desalter	3,461	3,461	3,461	3,461	3,461
Native Water	-	-	-	-	-
Maximum Supply Capability	55,197	62,820	62,820	62,820	62,820
Baseline Demand	30,076	29,639	29,201	29,275	29,304
Demand with Project	30,074	29,636	29,199	29,272	29,301
WRMP Build-out Demand	30,074	29,636	29,199	29,272	29,301
Reserve Supply with Project	25,123	33,184	33,621	33,548	33,519

Note: Downward trend reflects reduction in agricultural use over time.
 After 2016, native water is treated to potable through the Baker Water Treatment Plant.
 MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

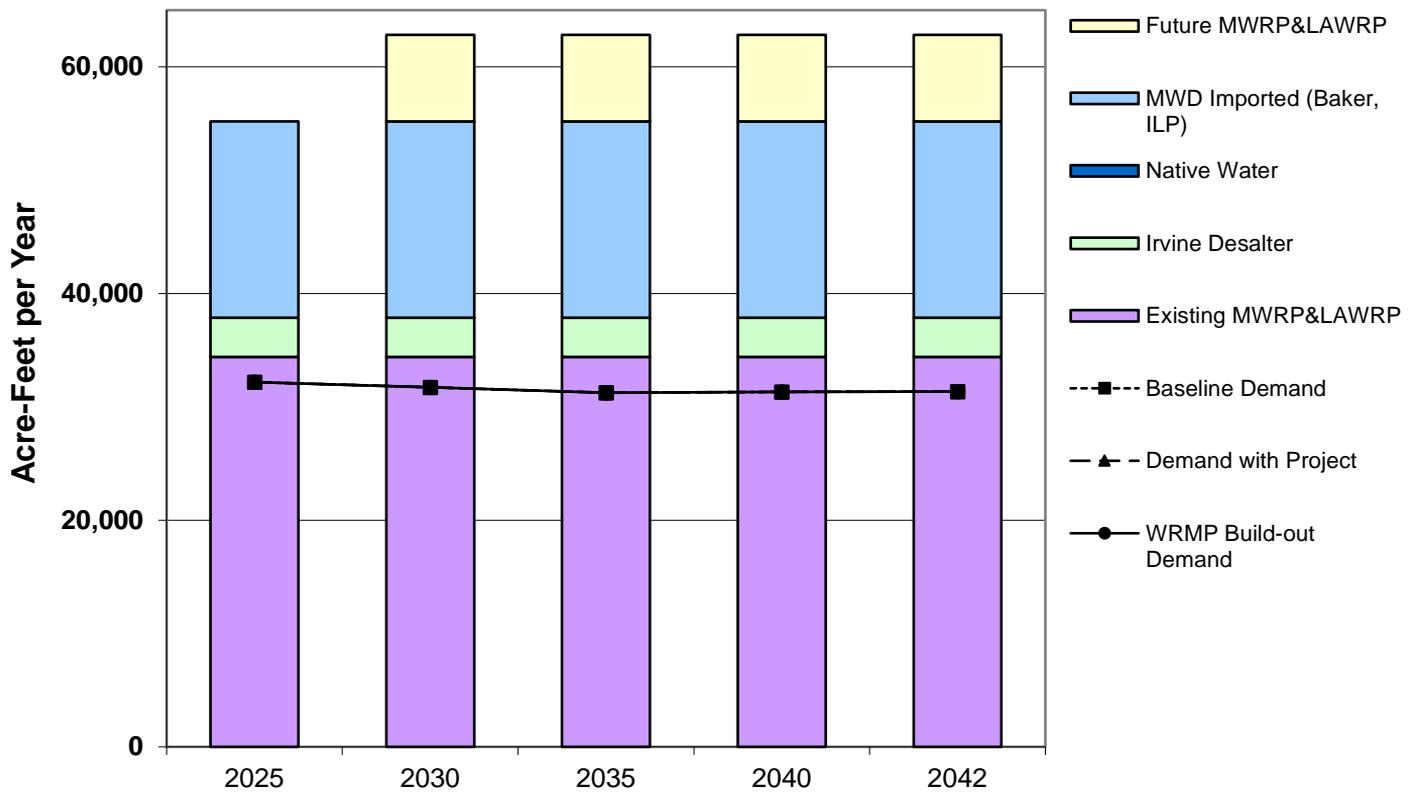
**Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Nonpotable Supplies					
Existing MWRP&LAWRP	34,389	34,389	34,389	34,389	34,389
Future MWRP&LAWRP	-	7,623	7,623	7,623	7,623
MWD Imported (Baker, ILP)	17,347	17,347	17,347	17,347	17,347
Irvine Desalter	3,461	3,461	3,461	3,461	3,461
Native Water	-	-	-	-	-
Maximum Supply Capability	55,197	62,820	62,820	62,820	62,820
Baseline Demand	32,181	31,713	31,246	31,324	31,355
Demand with Project	32,179	31,711	31,243	31,321	31,352
WRMP Build-out Demand	32,179	31,711	31,243	31,321	31,352
Reserve Supply with Project	23,018	31,109	31,577	31,499	31,468

Note: Downward trend reflects reduction in agricultural use over time.
 After 2016, native water is treated to potable through the Baker Water Treatment Plant.
 MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

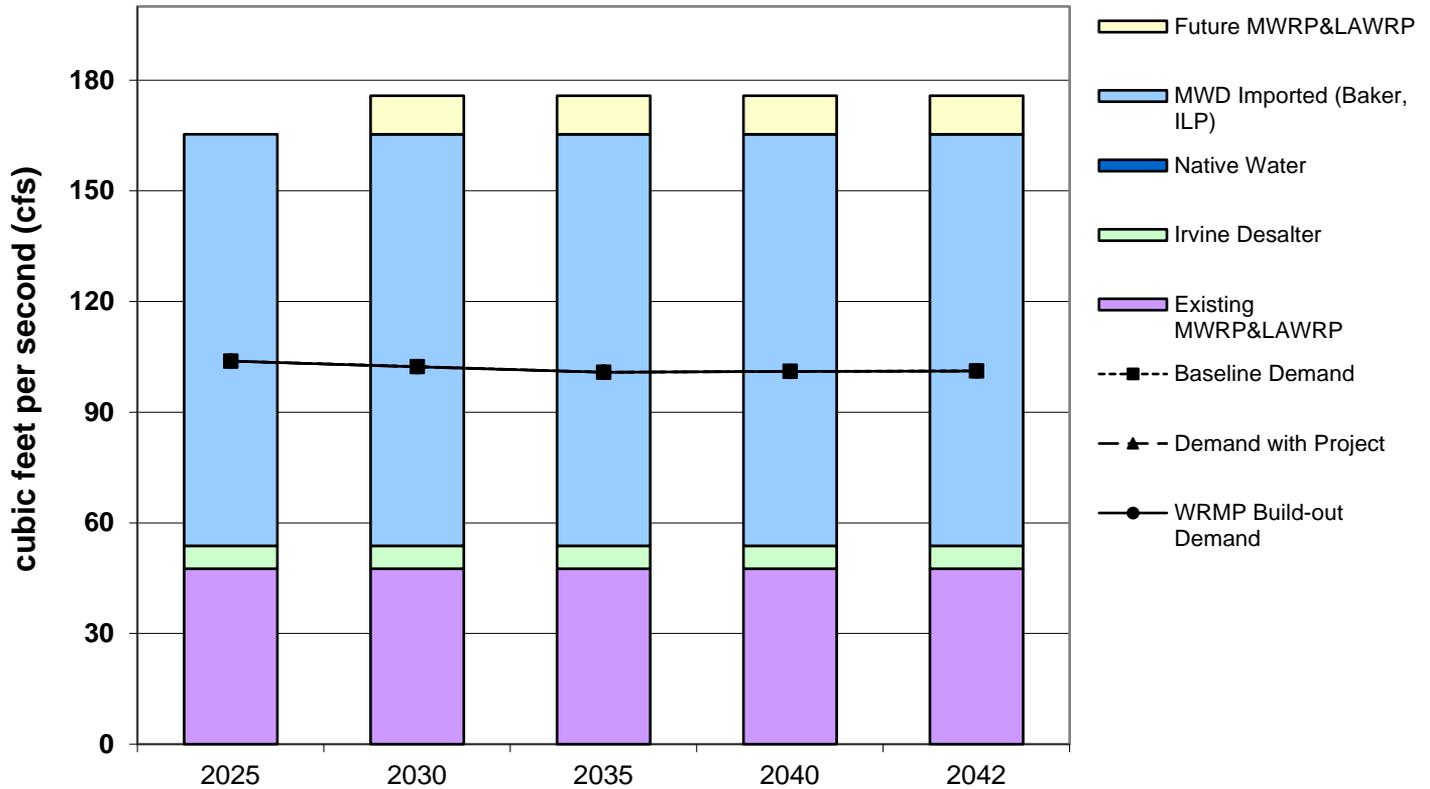
Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Nonpotable Supplies					
Existing MWRP&LAWRP	34,389	34,389	34,389	34,389	34,389
Future MWRP&LAWRP	-	7,623	7,623	7,623	7,623
MWD Imported (Baker, ILP)	17,347	17,347	17,347	17,347	17,347
Irvine Desalter	3,461	3,461	3,461	3,461	3,461
Native Water	-	-	-	-	-
Maximum Supply Capability	55,197	62,820	62,820	62,820	62,820
Baseline Demand	32,181	31,713	31,246	31,324	31,355
Demand with Project	32,179	31,711	31,243	31,321	31,352
WRMP Build-out Demand	32,179	31,711	31,243	31,321	31,352
Reserve Supply with Project	23,018	31,109	31,577	31,499	31,468

Note: Downward trend reflects reduction in agricultural use over time.
 After 2016, native water is treated to potable through the Baker Water Treatment Plant.
 MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

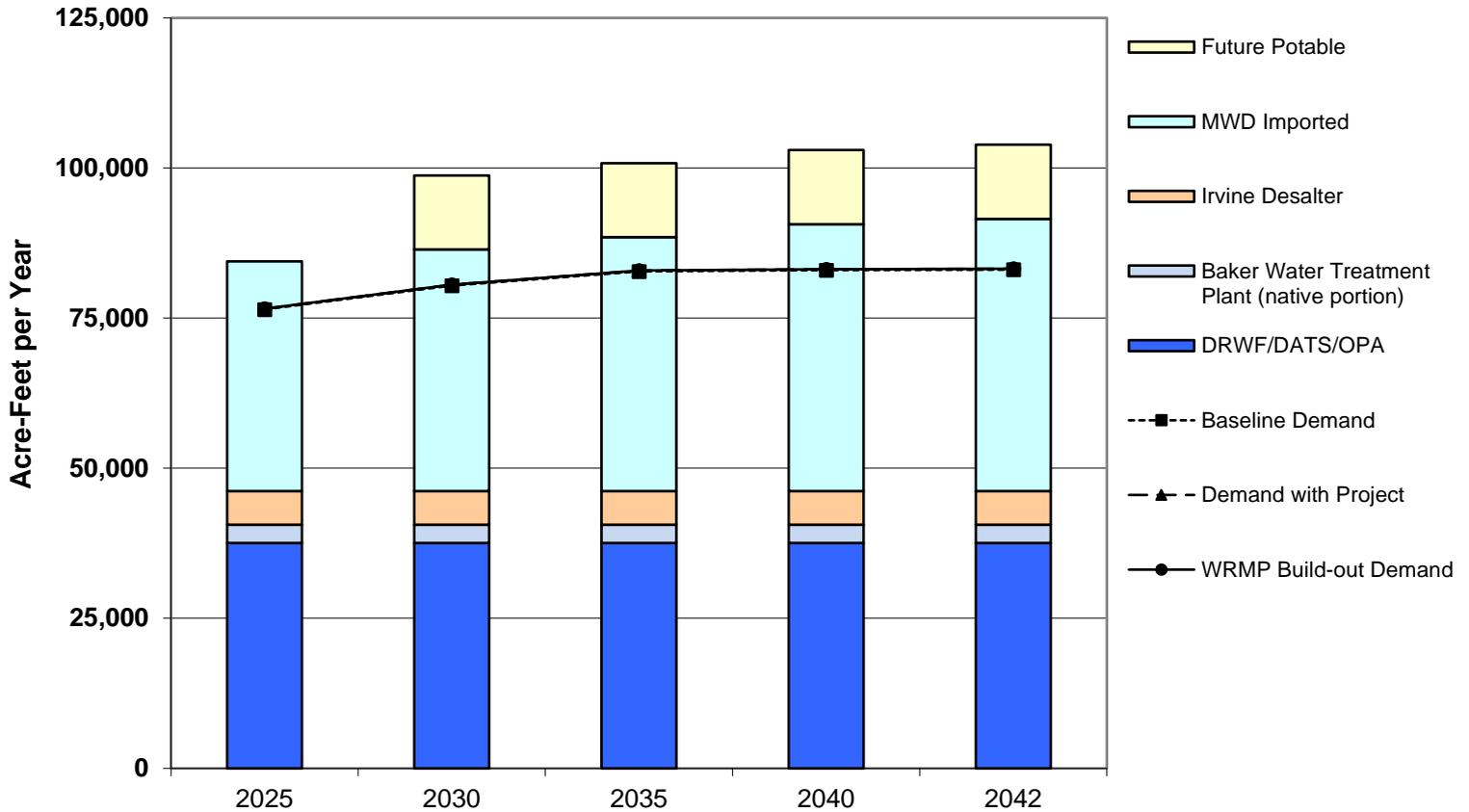
Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water



(in cfs)	2025	2030	2035	2040	2042
Current Nonpotable Supplies					
Existing MWRP&LAWRP	47.6	47.6	47.6	47.6	47.6
Future MWRP&LAWRP	-	10.5	10.5	10.5	10.5
MWD Imported (Baker, ILP)	111.5	111.5	111.5	111.5	111.5
Irvine Desalter	6.2	6.2	6.2	6.2	6.2
Native Water	-	-	-	-	-
Maximum Supply Capability	165.3	175.8	175.8	175.8	175.8
Baseline Demand	103.9	102.3	100.8	101.1	101.2
Demand with Project	103.8	102.3	100.8	101.1	101.2
WRMP Build-out Demand	103.8	102.3	100.8	101.1	101.2
Reserve Supply with Project	61.5	73.5	75.0	74.8	74.7

Note: Downward trend reflects reduction in agricultural use over time.
 After 2016, native water is treated to potable through the Baker Water Treatment Plant.

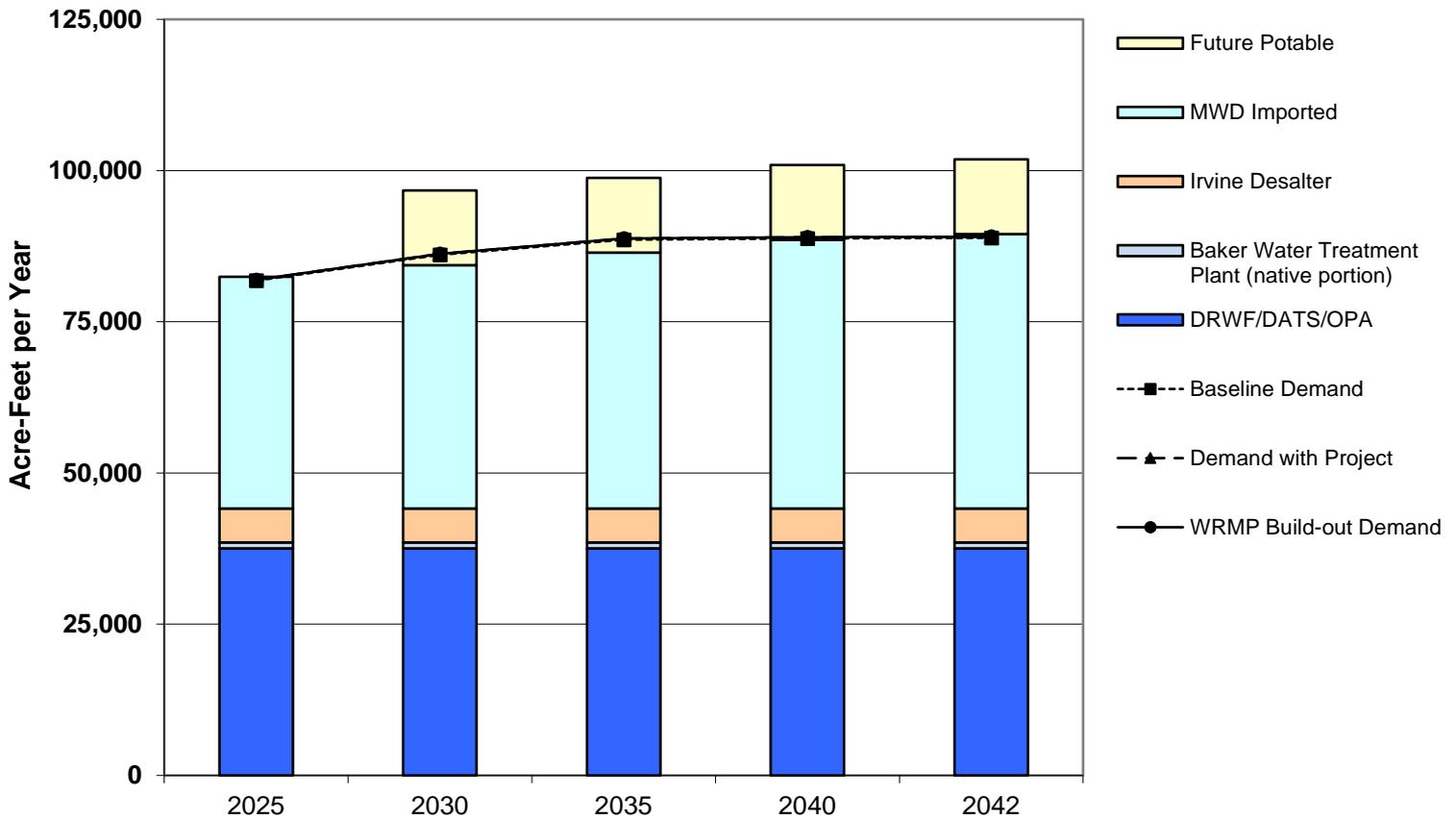
Figure 1a
IRWD Normal-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	3,048	3,048	3,048	3,048	3,048
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	90,798	105,102	107,154	109,310	110,203
Baseline Demand	76,450	80,421	82,770	82,977	83,060
Demand with Project	76,577	80,591	82,939	83,147	83,230
WRMP Build-out Demand	76,577	80,591	82,939	83,147	83,230
Reserve Supply with Project	14,221	24,511	24,215	26,164	26,974

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 in all of the 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the 2020 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water.

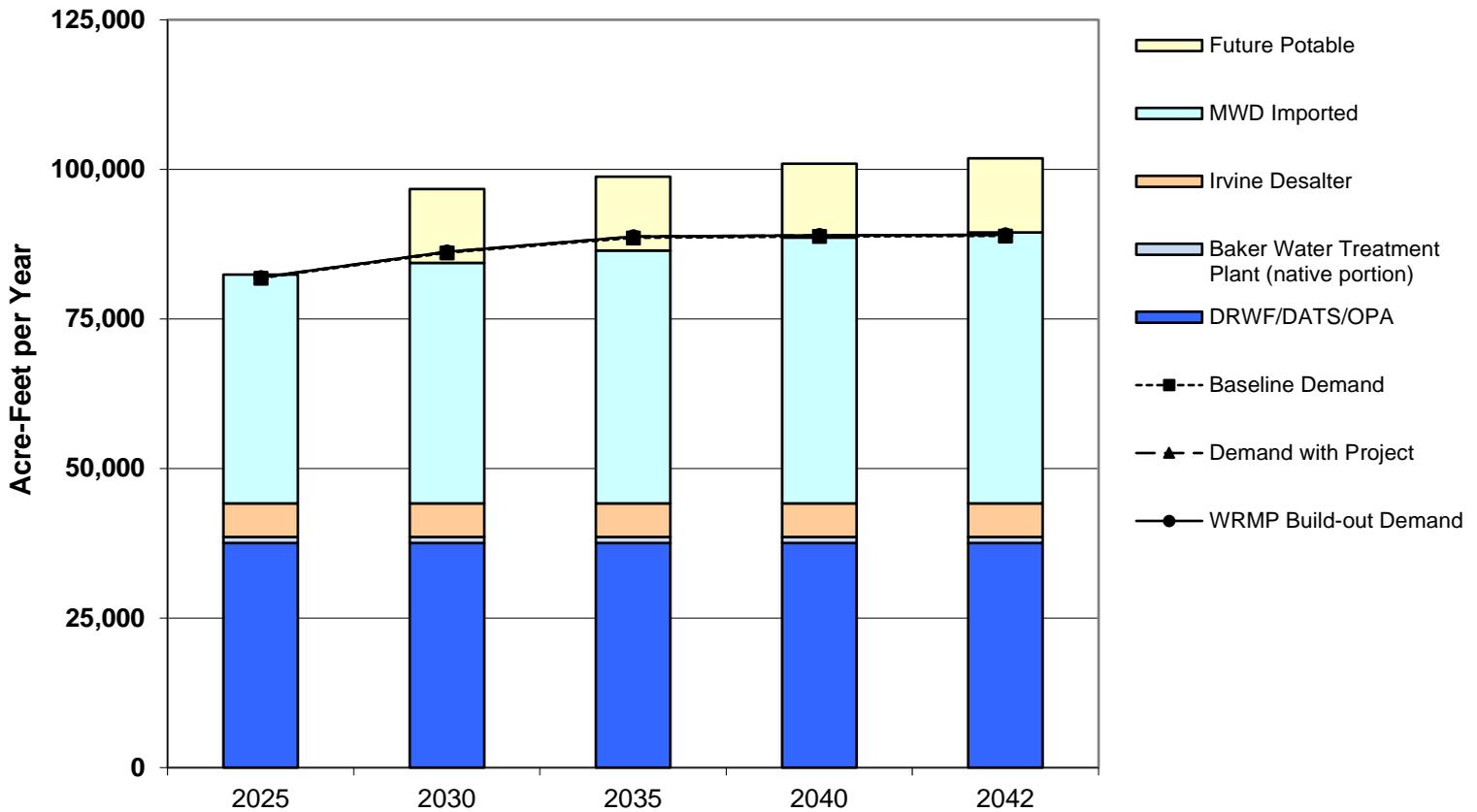
Figure 2a
IRWD Single Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	88,749	103,054	105,106	107,262	108,155
Baseline Demand	81,801	86,051	88,563	88,785	88,874
Demand with Project	81,937	86,232	88,745	88,967	89,056
WRMP Build-out Demand	81,937	86,232	88,745	88,967	89,057
Reserve Supply with Project	6,812	16,822	16,361	18,295	19,099

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 in all of the 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the 2020 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water.

**Figure 3a
IRWD Single Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation***



(in acre-feet per year)	2025	2030	2035	2040	2042
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	37,532	37,532	37,532	37,532	37,532
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	12,352	12,352	12,352	12,352
Maximum Supply Capability	88,749	103,054	105,106	107,262	108,155
Baseline Demand	81,801	86,051	88,563	88,785	88,874
Demand with Project	81,937	86,232	88,745	88,967	89,056
WRMP Build-out Demand	81,937	86,232	88,745	88,967	89,056
Reserve Supply with Project	6,812	16,822	16,361	18,295	19,099

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 in all of the 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the 2020 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water.

Existing sources of identified water supply for the proposed project: IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area, as updated in the following table:

	Max Day (cfs)	Avg. Annual (AFY)	Annual by Category (AFY)
Current Supplies			
Potable - Imported ¹⁰			
East Orange County Feeder No. 2	41.4	18,746	1
Allen-McColloch Pipeline*	64.7	29,296	1
Orange County Feeder	18.0	8,150	1
	<u>124.1</u>	<u>56,192</u>	
			56,192
Potable - Treated Surface			
Baker Treatment Plant (Imported) ¹⁰	6.3	4,554	6
Baker Treatment Plant (Native)	4.2	3,048	6
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000	2
OPA Well	1.4	914	
Deep Aquifer Treatment System-DATS	12.3	8,618	2
Wells 21 & 22	8.6	6,329	2
Irvine Desalter	9.7	5,618	3
	<u>9.7</u>	<u>5,618</u>	
Total Potable Current Supplies	246.6		113,273
Nonpotable - Recycled Water			
MWRP (25.2 mgd)	39.1	28,228	4
LAWRP (5.5 mgd)	8.5	6,161	4
Future MWRP & LAWRP	10.6	7,623	5
			42,012
Nonpotable - Imported ¹⁰			
Baker Aqueduct	40.2	11,651	6
Irvine Lake Pipeline	65.0	9,000	7
	<u>105.2</u>	<u>20,651</u>	
			20,651
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	6.2	3,461	8
Nonpotable Native			
Irvine Lake (see Baker Treatment Plant above)	4.2	3,048	6,9
Total Nonpotable Current Supplies (Excludes Native)	169.6		66,124
Total Combined Current Supplies	416.2		179,397
Supplies Under Development			
Potable Supplies			
Future Groundwater Production Facilities	17.0	12,352	
Total Under Development	17.0	12,352	12,352
Total Supplies			
Potable Supplies	263.6		125,626
Nonpotable Supplies	169.6		66,124
Total Supplies (Current and Under Development)	433.2		191,750

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.6. Max Day is equivalent to Treatment Plant Production

2 Contract amount - See Assessment Potable Supply-Groundwater(iii).

3 Contract amount - See Assessment Potable Supply-Groundwater (iv) and (v). Maximum day well capacity is compatible with contract amount.

4 MWRP 28.0 mgd treatment capacity (28,228 AFY RW production) with 90% plant efficiency (25.2 mgd) and LAWRP permitted 5.5 mgd tertiary treatment capacity (6,161 AFY)

5 Future estimated MWRP & LAWRP recycled water production. Includes biosolids and expansion to 33 mgd

6 Since 2017, Baker Water Treatment Plant (WTP) treats imported and native water. Baker Aqueduct capacity has been allocated to Baker WTP participants and IRWD owns 46.50 cfs in Baker Aqueduct, of which, 10.5 cfs is for for potable treatment. IRWD has 36 cfs remaining capacity for non-potable uses. The nonpotable average use is based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 2.5 (see Assessment Footnote 8, page 27).

7 Based on IRWD's proportion of Irvine Lake imported water storage; Actual ILP capacity would allow the use of additional imported water from MWD through the Santiago Lateral.

8 Contract amount - See Assessment Nonpotable Supply-Groundwater (i) and (ii). Maximum day well capacity (cfs) is compatible with contract amount.

9 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake. Since 2020, native water is treated through Baker WTP.

10 Supplies in this table are total and are not adjusted to account for any reductions in imported water.

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 25 (b)(1)(iii))

(b) Required information concerning currently available and under-development water supply entitlements, water rights and water service contracts:

(1) Written contracts or other proof of entitlement.^{4 5}

• POTABLE SUPPLY - IMPORTED⁶

Potable imported water service connections (currently available).

(i) Potable imported water is delivered to IRWD at various service connections to the imported water delivery system of The Metropolitan Water District of Southern California (“MWD”): service connections CM-01A and OC-7 (Orange County Feeder); CM-10, CM-12, OC-38, OC-39, OC-57, OC-58, OC-63 (East Orange County Feeder No. 2); and OC-68, OC-71, OC-72, OC-73/73A, OC-74, OC-75, OC-83, OC-84, OC-87 (Allen-McColloch Pipeline). IRWD’s entitlements regarding service from the MWD delivery system facilities are described in the following paragraphs and summarized in the above Table ((2)(a)(1)). IRWD receives imported water service through Municipal Water District of Orange County (“MWDOC”), a member agency of MWD.

Allen-McColloch Pipeline (“AMP”) (currently available).

(ii) Agreement For Sale and Purchase of Allen-McColloch Pipeline, dated as of July 1, 1994 (Metropolitan Water District Agreement No. 4623) (“AMP Sale Agreement”). Under the AMP Sale Agreement, MWD purchased the Allen-McColloch Pipeline (formerly known as the “Diemer Intertie”) from MWDOC, the MWDOC Water Facilities Corporation and certain agencies, including IRWD and Los Alisos Water District (“LAWD”),⁷ identified as “Participants” therein. Section 5.02 of the AMP Sale Agreement obligates MWD to meet IRWD’s and the other Participants’ requests for deliveries and specified minimum hydraulic grade lines at each connection serving a Participant, subject to availability of water. MWD agrees to operate the AMP as any other MWD pipeline. MWD has the right to operate the AMP on a “utility basis,” meaning that MWD need not observe

⁴ In some instances, the contractual and other legal entitlements referred to in the following descriptions are stated in terms of flow capacities, in cubic feet per second (cfs). In such instances, the cfs flows are converted to volumes of AFY for purposes of analyzing supply sufficiency in this assessment, by dividing the capacity by a peaking factor of 1.8 (potable) or 2.5 (nonpotable), consistent with maximum day peaking factors used in the WRMP. The resulting reduction in assumed available annual AFY volumes through the application of these factors recognizes that connected capacity is provided to meet peak demands and that seasonal variation in demand and limitations in local storage prevent these capacities from being utilized at peak capacity on a year-round basis. However, the application of these factors produces a conservatively low estimate of annual AFY volumes from these connections; additional volumes of water are expected to be available from these sources.

⁵ In the following discussion, contractual and other legal entitlements are characterized as either potable or nonpotable, according to the characterization of the source of supply. Some of the nonpotable supplies surplus to nonpotable demand could potentially be rendered potable by the addition of treatment facilities; however, except where otherwise noted, IRWD has no current plans to do so.

⁶ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

⁷ IRWD has succeeded to LAWD’s interests in the AMP and other LAWD water supply facilities and rights mentioned in this assessment, by virtue of the consolidation of IRWD and LAWD on December 31, 2000.

capacity allocations of the Participants but may use available capacity to meet demand at any service connection.

The AMP Sale Agreement obligates MWD to monitor and project AMP demands and to construct specified pump facilities or make other provision for augmenting MWD's capacity along the AMP, at MWD's expense, should that be necessary to meet demands of all of the Participants (Section 5.08).

(iii) Agreement For Allocation of Proceeds of Sale of Allen-McColloch Pipeline, dated as of July 1, 1994 ("AMP Allocation Agreement"). This agreement, entered into concurrently with the AMP Sale Agreement, provided each Participant, including IRWD, with a capacity allocation in the AMP, for the purpose of allocating the sale proceeds among the Participants in accordance with their prior contractual capacities adjusted to conform to their respective future demands. IRWD's capacity under the AMP Allocation Agreement (including its capacity as legal successor agency to LAWD) is 64.69 cfs at IRWD's first four AMP connections, 49.69 cfs at IRWD's next five downstream AMP connections and 35.01 and 10.00 cfs, respectively at IRWD's remaining two downstream connections. The AMP Allocation Agreement further provides that if a Participant's peak flow exceeds its capacity, the Participant shall "purchase" additional capacity from the other Participants who are using less than their capacity, until such time as MWD augments the capacity of the AMP. The foregoing notwithstanding, as mentioned in the preceding paragraph, the allocated capacities do not alter MWD's obligation under the AMP Sale Agreement to meet all Participants' demands along the AMP, and to augment the capacity of the AMP if necessary. Accordingly, under these agreements, IRWD can legally increase its use of the AMP beyond the above-stated capacities but would be required to reimburse other Participants from a portion of the proceeds IRWD received from the sale of the AMP.

(iv) Improvement Subleases (or "FAP" Subleases) [MWDOC and LAWD; MWDOC and IRWD], dated August 1, 1989; 1996 Amended and Restated Allen-McColloch Pipeline Subleases [MWDOC and LAWD; MWDOC and IRWD], dated March 1, 1996. IRWD subleases its AMP capacity, including the capacity it acquired as successor to LAWD. To facilitate bond financing for the construction of the AMP, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership of the pipeline, and the Participants would be sublessees. As is the case with the AMP Sale Agreement, the subleases similarly provide that water is subject to availability.

East Orange County Feeder No. 2 ("EOCF#2") (currently available).

(v) Agreement For Joint Exercise of Powers For Construction, Operation and Maintenance of East Orange County Feeder No. 2, dated July 11, 1961, as amended on July 25, 1962, and April 26, 1965; Agreement Re Capacity Rights In Proposed Water Line, dated September 11, 1961 ("IRWD MWDOC Assignment Agreement"); Agreement Regarding Capacity Rights In the East Orange County Feeder No. 2, dated August 28, 2000 ("IRWD Coastal Assignment Agreement"). East Orange County Feeder No. 2 ("EOCF#2"), a feeder linking Orange County with MWD's feeder system, was constructed pursuant to a joint powers agreement among MWDOC (then called Orange County Municipal Water District), MWD, Coastal Municipal Water District ("Coastal"), Anaheim and Santa

Ana. A portion of IRWD's territory is within MWDOC and the remainder is within the former Coastal (which was consolidated with MWDOC in 2001). Under the IRWD MWDOC Assignment Agreement, MWDOC assigned 41 cfs of capacity to IRWD in the reaches of EOCF#2 upstream of the point known as Coastal Junction (reaches 1 through 3), and 27 cfs in reach 4, downstream of Coastal Junction. Similarly, under the IRWD Coastal Assignment Agreement, prior to Coastal's consolidation with MWDOC, Coastal assigned to IRWD 0.4 cfs of capacity in reaches 1 through 3 and 0.6 cfs in reach 4 of EOCF#2. Delivery of water through EOCF#2 is subject to the rules and regulations of MWD and MWDOC and is further subject to application and agreement of IRWD respecting turnouts.

Orange County Feeder (currently available)

(vi) Agreement, dated March 13, 1956. This 1956 Agreement between MWDOC's predecessor district and the Santa Ana Heights Water Company ("SAHWC") provides for delivery of MWD imported supply to the former SAHWC service area. SAHWC's interests were acquired on behalf of IRWD through a stock purchase and IRWD annexation of the SAHWC service area in 1997. The supply is delivered through a connection to MWD's Orange County Feeder designated as OC-7.

(vii) Agreement For Transfer of Interest In Pacific Coast Highway Water Transmission and Storage Facilities From The Irvine Company To the Irvine Ranch Water District, dated April 23, 1984; Joint Powers Agreement For the Construction, Operation and Maintenance of Sections 1a, 1b and 2 of the Coast Supply Line, dated June 9, 1989; Agreement, dated January 13, 1955 ("1955 Agreement"). The jointly constructed facility known as the Coast Supply Line ("CSL"), extending southward from a connection with MWD's Orange County Feeder at Fernleaf Street in Newport Beach, was originally constructed pursuant to a 1952 agreement among Laguna Beach County Water District ("LBCWD"), The Irvine Company (TIC) and South Coast County Water District. Portions were later reconstructed. Under the above-referenced transfer agreement in 1984, IRWD succeeded to TIC's interests in the CSL. The CSL is presently operated under the above-referenced 1989 joint powers agreement, which reflects IRWD's ownership of 10 cfs of capacity. The 1989 agreement obligates LBCWD, as the managing agent and trustee for the CSL, to purchase water and deliver it into the CSL for IRWD. LBCWD purchases such supply, delivered by MWD to the Fernleaf connection, pursuant to the 1955 Agreement with Coastal (now MWDOC).

Baker Water Treatment Plant (currently available)

IRWD recently constructed the Baker Water Treatment Plant (Baker WTP) in partnership with El Toro Water District, Moulton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP is supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD owns 10.5 cfs of treatment capacity rights in the Baker WTP.⁸

•**POTABLE SUPPLY - GROUNDWATER**

(i) Orange County Water District Act (“OCWD”), Water Code App., Ch. 40 (“Act”). IRWD is an operator of groundwater-producing facilities in the Orange County Groundwater Basin (the “Basin”). Although the rights of the producers within the Basin vis a vis one another have not been adjudicated, they nevertheless exist and have not been abrogated by the Act (§40-77). The rights consist of municipal appropriators’ rights and may include overlying and riparian rights. The Basin is managed by OCWD under the Act, which functions as a statutorily-imposed physical solution. The Act empowers OCWD to impose replenishment assessments and basin equity assessments on production and to require registration of water-producing facilities and the filing of certain reports; however, OCWD is expressly prohibited from limiting extraction unless a producer agrees to such limitation (§ 40-2(6) (c)) and from impairing vested rights to the use of water (§ 40-77). Thus, producers may install and operate production facilities under the Act; OCWD approval is not required. OCWD is required to annually investigate the condition of the Basin, assess overdraft and accumulated overdraft, and determine the amount of water necessary for replenishment (§40-26). OCWD has studied the Basin replenishment needs and potential projects to address growth in demand through 2035 in its Final Draft Long-Term Facilities Plan (January 2006), last updated November 19, 2014. The Long-Term Facilities Plan is updated approximately every five years.

(ii) *Irvine Ranch Water District v. Orange County Water District*, Orange County Superior Court Case No. 795827. A portion of IRWD is outside the jurisdictional boundary of OCWD. IRWD is eligible to annex the Santa Ana River Watershed portion of this territory to OCWD, under OCWD’s current annexation policy (OCWD Resolution No. 86-2-15, adopted on February 19, 1986, and reaffirmed on June 2, 1999). This September 29, 1998, Superior Court ruling indicates that IRWD is entitled to deliver groundwater from the Basin to the IRWD service area irrespective of whether such area is also within OCWD.

Dyer Road Wellfield (“DWRF”) / Deep Aquifer Treatment System (“DATS”) (currently available)

(iii) Agreement For Water Production and Transmission Facilities, dated March 18, 1981, as amended May 2, 1984, September 19, 1990, and November 3, 1999 (the “DRWF Agreement”). The DRWF Agreement, among IRWD, OCWD and Santa Ana, concerns the development of IRWD’s Dyer Road Wellfield

⁸ The Baker WTP is supplied nonpotable imported water through the existing Baker Pipeline. IRWD’s existing Baker Pipeline capacity (see Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) has been apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD retains 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and retains 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply.

(DRWF), within the Basin. The DRWF consists of 16 wells pumping from the non-colored water zone of the Basin and 2 wells (with colored-water treatment facilities) pumping from the deep, colored-water zone of the Basin (the colored-water portion of the DRWF is sometimes referred to as the Deep Aquifer Treatment System or DATS.) Under the DRWF Agreement, an “equivalent” basin production percentage (“BPP”) has been established for the DRWF, currently 28,000 AFY of non-colored water and 8,000 AFY of colored water, provided any amount of the latter 8,000 AFY not produced results in a matching reduction of the 28,000 AFY BPP. Although typically IRWD production from the DRWF does not materially exceed the equivalent BPP, the equivalent BPP is not an extraction limitation; it results in imposition of monetary assessments on the excess production. The DRWF Agreement also establishes monthly pumping amounts for the DRWF. With the addition of the Concentrated Treatment System (“CATS”), IRWD has increased the yield of DATS.

Irvine Subbasin / Irvine Desalter (currently available)

(iv) First Amended and Restated Agreement, dated March 11, 2002, as amended June 15, 2006, restating May 5, 1988 agreement (“Irvine Subbasin Agreement”). TIC has historically pumped agricultural water from the Irvine Subbasin. (As in the rest of the Basin of which this subbasin is a part, the groundwater rights have not been adjudicated and OCWD provides governance and management under the Act.) The 1988 agreement between IRWD and TIC provided for the joint use and management of the Irvine Subbasin. The 1988 agreement further provided that the 13,000 AFY annual yield of the Irvine Subbasin (“Subbasin”) would be allocated 1,000 AFY to IRWD and 12,000 AFY to TIC. Under the restated Irvine Subbasin Agreement, the foregoing allocations were superseded as a result of TIC’s commencement of the building its Northern Sphere Area project, with the effect that the Subbasin production capability, wells and other facilities, and associated rights have been transferred from TIC to IRWD, and IRWD has assumed the production from the Subbasin. In consideration of the transfer, IRWD is required to count the supplies attributable to the transferred Subbasin production in calculating available supplies for the Northern Sphere Area project and other TIC development and has agreed that they will not be counted toward non-TIC development.

A portion of the existing Subbasin water production facilities produce water which is of potable quality. IRWD could treat some of the water produced from the Subbasin for potable use, by means of the Desalter and other projects. Although, as noted above, the Subbasin has not been adjudicated and is managed by OCWD, TIC reserved water rights from conveyances of its lands as development over the Subbasin has occurred, and under the Irvine Subbasin Agreement TIC has transferred its rights to IRWD.

(v) Second Amended and Restated Agreement Between Orange County Water District and Irvine Ranch Water District Regarding the Irvine Desalter Project, dated June 11, 2001, and other agreements referenced therein. This agreement provides for the extraction and treatment of subpotable groundwater from the Irvine Subbasin, a portion of the Basin. As is the case with the remainder of the Basin, IRWD’s entitlement to extract this water is not adjudicated, but the use of the entitlement is governed by the OCWD Act. (See also, discussion of Irvine Subbasin in the preceding paragraph.) A portion of the product water has been

delivered into the IRWD potable system, and the remainder has been delivered into the IRWD nonpotable system.

Orange Park Acres (currently available)

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including its well (“OPA Well”). The well is operated within the Basin.

Wells 21 and 22 (currently available)

In early 2013, IRWD completed construction of treatment facilities, pipelines, and wellhead facilities for Wells 21 and 22. Water supplied through this project became available in 2013. The wells are operated within the Basin.

Irvine Wells (under development)

(vi) IRWD is pursuing the installation of production facilities in the west Irvine, Tustin Legacy and Tustin Ranch portions of the Basin. These groundwater supplies are considered to be under development; however, four wells have been drilled and have previously produced groundwater, three wells have been drilled but have not been used as production wells to date, and a site for an additional well and treatment facility has been acquired by IRWD. These production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. Appropriate environmental review has or will be conducted for each facility. See discussion of the Act under Potable Supply - Groundwater, paragraph (i), above.

• **NONPOTABLE SUPPLY - RECYCLED**

Water Recycling Plants (currently available)

Water Code Section 1210. IRWD supplies its own recycled water from sewage collected by IRWD and delivered to IRWD’s Michelson Water Recycling Plant (“MWRP”) and Los Alisos Water Recycling Plant (“LAWRP”). Under the recently completed MWRP Phase II Capacity Expansion Project, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand through the year 2042. MWRP currently has a permitted tertiary capacity of 28 million gallons per day (“MGD”) and LAWRP currently has a permitted tertiary capacity of 5.5 MGD. Water Code Section 1210 provides that the owner of a sewage treatment plant operated for the purposes of treating wastes from a sanitary sewer system holds the exclusive right to the treated effluent as against anyone who has supplied the water discharged into the sewer system. IRWD’s permits for the operation of MWRP and LAWRP allow only irrigation and other customer uses of recycled water, and do not permit stream discharge of recycled water under normal conditions; thus, no issue of downstream appropriation arises, and IRWD is entitled to deliver all of the effluent to meet contractual and customer demands. Additional reclamation capacity will augment local nonpotable supplies and improve reliability.

•NONPOTABLE SUPPLY - IMPORTED⁹

Baker Pipeline (currently available)

Santiago Aqueduct Commission (“SAC”) Joint Powers Agreement, dated September 11, 1961, as amended December 20, 1974, January 13, 1978, November 1, 1978, September 1, 1981, October 22, 1986, and July 8, 1999 (the “SAC Agreement”); Agreement Between Irvine Ranch Water District and Carma-Whiting Joint Venture Relative to Proposed Annexation of Certain Property to Irvine Ranch Water District, dated May 26, 1981 (the “Whiting Annexation Agreement”); service connections OC-13/13A, OC-33/33A. The imported untreated water pipeline initially known as the Santiago Aqueduct and now known as the Baker Pipeline was constructed under the SAC Agreement, a joint powers agreement. The Baker Pipeline is connected to MWD’s Santiago Lateral. IRWD’s capacity in the Baker Pipeline includes the capacity it subleases as successor to LAWD, as well as capacity rights IRWD acquired through the Whiting Annexation Agreement. (To finance the construction of AMP parallel untreated reaches which were incorporated into the Baker Pipeline, replacing original SAC untreated reaches that were made a part of the AMP potable system, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership, and the participants would be sublessees.) IRWD’s original capacities in the Baker Pipeline include 52.70 cfs in the first reach, 12.50 cfs in each of the second, third and fourth reaches and 7.51 cfs in the fifth reach of the Baker Pipeline. These existing Baker Pipeline capacities have been apportioned to the Baker WTP participants based on Baker WTP capacity ownership. IRWD retains 10.5 cfs of the pipeline capacity for potable supply through the Baker WTP and retains 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply (See also footnote 8, page 27). Water is subject to availability from MWD.

•NONPOTABLE SUPPLY - NATIVE

Irvine Lake (currently available)

(i) Permit For Diversion and Use of Water (“Permit No. 19306”) issued pursuant to Application No. 27503; License For Diversion and Use of Water (“License 2347”) resulting from Application No. 4302 and Permit No. 3238; License For Diversion and Use of Water (“License 2348”) resulting from Application No. 9005 and Permit No. 5202. The foregoing permit and licenses, jointly held by IRWD (as successor to The Irvine Company (“TIC”) and Carpenter Irrigation District (“CID”)) and Serrano Water District (“SWD”), secure appropriative rights to the flows of Santiago Creek. Under Licenses 2347 and 2348, IRWD and SWD have the right to diversion by storage at Santiago Dam (Irvine Lake) and a submerged dam, of a total of 25,000 AFY. Under Permit No. 19306, IRWD and SWD have the right to diversion by storage of an additional 3,000 AFY by flashboards at Santiago Dam (Irvine Lake). (Rights under Permit No. 19306 may be junior to an OCWD permit to divert up to 35,000 AFY of Santiago Creek flows to spreading

⁹ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

pits downstream of Santiago Dam.) The combined total of native water that may be diverted to storage under these licenses and permit is 28,000 AFY. A 1996 amendment to License Nos. 2347, 2348 and 2349 [replaced by Permit No. 19306 in 1984] limits the withdrawal of water from the Lake to 15,483 AFY under the licenses. This limitation specifically references the licenses and doesn't reference water stored pursuant to other legal entitlements. The use and allocation of the native water is governed by the agreements described in the next paragraph.

(ii) Agreement, dated February 6, 1928 ("1928 Agreement"); Agreement, dated May 15, 1956, as amended November 12, 1973 ("1956 Agreement"); Agreement, dated as of December 21, 1970 ("1970 Agreement"); Agreement Between Irvine Ranch Water District and The Irvine Company Relative to Irvine Lake and the Acquisition of Water Rights In and To Santiago Creek, As Well As Additional Storage Capacity in Irvine Lake, dated as of May 31, 1974 ("1974 Agreement"). The 1928 Agreement was entered into among SWD, CID and TIC, providing for the use and allocation of native water in Irvine Lake. Through the 1970 Agreement and the 1974 Agreement, IRWD acquired the interests of CID and TIC, leaving IRWD and SWD as the two co-owners. TIC retains certain reserved rights. The 1928 Agreement divides the stored native water by a formula which allocates to IRWD one-half of the first 1,000 AF, plus increments that generally yield three-fourths of the amount over 1,000 AF.¹⁰ The agreements also provide for evaporation and spill losses and carryover water remaining in the Lake at the annual allocation dates. Given the dependence of native water on rainfall, for purposes of this assessment only a small portion of IRWD's share of the 28,000 AFY of native water rights (3,048 AFY in normal years and 1,000 AFY in single and multiple-dry years) is shown in currently available supplies, based on averaging of historical data. However, IRWD's ability to supplement Irvine Lake storage with its imported untreated water supplies, described herein, offsets the uncertainty associated with the native water supply.

• NONPOTABLE SUPPLY - GROUNDWATER

Irvine Subbasin / Irvine Desalter (currently available)

(i) IRWD's entitlement to produce nonpotable water from the Irvine Subbasin is included within the Irvine Subbasin Agreement. See discussion of the Irvine Subbasin Agreement under Potable Supply - Groundwater; paragraph (iv), above.

(ii) See discussion of the Irvine Desalter project under Potable Supply - Groundwater, paragraph (v), above. The Irvine Desalter project will produce nonpotable as well as potable water.

¹⁰ The 1956 Agreement provides for facilities to deliver MWD imported water into Irvine Lake, and grants storage capacity for the imported water. By succession, IRWD owns 9,000 AFY of this 12,000 AFY imported water storage capacity. This storage capacity does not affect availability of the imported supply, which can be either stored or delivered for direct use by customers.

•IMPORTED SUPPLY - ADDITIONAL INFORMATION

As described above, the imported supply from MWD is contractually subject to availability. To assist local water providers in assessing the adequacy of local water supplies that are reliant in whole or in part on MWD's imported supply, MWD has provided information concerning the availability of the supplies to its entire service area. In the MWD 2020 UWMP, MWD has extended its planning timeframe out through 2045 to ensure that the MWD 2020 UWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the MWD 2020 UWMP includes "Justifications for Supply Projections" (Appendix A-3) that details the planning, legal, financial, and regulatory basis for including each source of supply in the plan. The MWD 2020 UWMP summarizes MWD's planning initiatives over the past 15 years, which includes the Integrated Resources Plan (IRP), the IRP 2015 Update, the WSDM Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's 2015 IRP Update shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period through 2040. The MWD 2020 UWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2045. MWD has also identified buffer supplies, including additional State Water Project groundwater storage and transfers that could serve to supply the additional water needed.

It is anticipated that MWD will revise its regional supply availability analysis periodically, if needed, to supplement the MWD 2020 UWMP in years when the MWD UWMP is not being updated.

IRWD is permitted by the statute (Wat. Code, § 10610 *et seq.*) to rely upon the water supply information provided by the wholesaler concerning a wholesale water supply source, for use in preparing its UWMPs. In turn, the statute provides for the use of UWMP information to support water supply assessments and verifications. In accordance with these provisions, IRWD is entitled to rely upon the conclusions of the MWD UWMP. As referenced above under Summary of Results of Demand-Supply Comparisons - **Actions on Delta Pumping**, MWD has provided additional information on its imported water supply.

MWD's reserve supplies, together with the fact that IRWD relies on MWD supplies as supplemental supplies that need not be used to the extent IRWD operates currently available and under-development local supplies, build a margin of safety into IRWD's supply availability.

- (2) Adopted capital outlay program to finance delivery of the water supplies.

All necessary delivery facilities currently exist for the use of the *currently available* and *under-development* supplies assessed herein, with the exception of future groundwater wells, and IRWD sub-regional and developer-dedicated conveyance facilities necessary to complete the local distribution systems for the Project. IRWD's turnout at each MWD connection and IRWD's regional delivery facilities are sufficiently sized to deliver all of the supply to the sub-regional and local distribution systems.

With respect to future groundwater well projects (PR Nos. 11828 and 11829), IRWD adopted its fiscal year 2022-23 capital budget on April 26, 2021 (Resolution No. 2021-5), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) For these facilities, as well as unbuilt IRWD sub-regional conveyance facilities, the sources of funding are previously authorized general obligation bonds, revenue-supported certificates of participation and/or capital funds held by IRWD Improvement Districts. IRWD has maintained a successful program for the issuance of general obligation bonds and certificates of participation on favorable borrowing terms, and IRWD has received AAA public bond ratings. IRWD has approximately \$585.5 million (water) and \$711.1 million (recycled water) of unissued, voter-approved general obligation bond authorization. Certificates of participation do not require voter approval. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development.

See also the MWD 2020 UWMP, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

(3) Federal, state and local permits for construction of delivery infrastructure.

Most IRWD delivery facilities are constructed in public right-of-way or future right-of-way. State statute confers on IRWD the right to construct works along, under or across any stream of water, watercourse, street, avenue, highway, railway, canal, ditch, or flume (Water Code Section 35603). Although this right cannot be denied, local agencies may require encroachment permits when work is to be performed within a street. If easements are necessary for delivery infrastructure, IRWD requires the developer to provide them. The crossing of watercourses or areas with protected species requires federal and/or state permits as applicable.

See also the MWD 2020 UWMP, Appendix A.3 Justifications for Supply Projections with respect to permits related to MWD's supplies.

(4) Regulatory approvals for conveyance or delivery of the supplies.

See response to preceding item (3). Additionally, in general, supplies under development may necessitate the preparation and completion of environmental documents and/or regulatory approvals prior to full construction and implementation. IRWD obtains such approvals when required, and copies of documents pertaining to approvals can be obtained from IRWD.

See also the MWD 2020 UWMP, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Other users and contractholders (identified supply not previously used).

For each of the water supply sources identified by IRWD, if no water has been received from that source(s), IRWD is required to identify other public water systems or water service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, that source(s):

Water has been received from all listed sources. A small quantity of Subbasin water is used by Woodbridge Village Association for the purpose of supplying its North and South Lakes. There are no other public water systems or water service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, the Irvine Subbasin.

4. Information concerning groundwater included in the supply identified for the Project:

(a) Relevant information in the Urban Water Management Plan (UWMP):

See Irvine Ranch Water District 2020 UWMP, section 6.2.

(b) Description of the groundwater basin(s) from which the Project will be supplied:

The Orange County Groundwater Basin ("Basin") is described in the Orange County Water District Groundwater Management Plan ("GMP") 2015 Update, dated June 17, 2015¹¹. The rights of the producers within the Basin vis a vis one another have not been adjudicated. The Basin is managed by the Orange County Water District ("OCWD") for the benefit of municipal, agricultural, and private groundwater producers. OCWD is responsible for the protection of water rights to the Santa Ana River in Orange County as well as the management and replenishment of the Basin. Current production from the Basin is approximately 282,000 AFY.

The DWR has not identified the Basin as "critically overdrafted," and has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (2003) and 2016 Bulletin 118 Interim Update. The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD GMP 2015 Update and OCWD Master Plan Report ("MPR"), including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. OCWD has also prepared a Long Term Facilities Plan ("LTFP") which was received by the OCWD Board in July 2009 and was last updated in November 2014. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. See also following section on "***Sustainable Groundwater Management Act***".

Although the water supply assessment statute (Water Code Section 10910(f)) refers to elimination of "long-term overdraft," overdraft includes conditions which may be managed for optimum basin storage, rather than eliminated. OCWD's Act defines annual groundwater overdraft to be the quantity by which production exceeds the natural replenishment of the Basin. Accumulated overdraft is defined in the OCWD Act to be the quantity of water needed in the groundwater basin forebay to prevent landward movement of seawater into the fresh groundwater body. However, seawater intrusion control facilities have been constructed by OCWD since the Act was written and have been effective in preventing landward movement of seawater. These facilities allow greater

¹¹ OCWD has also prepared a Long-Term Facilities Plan which was received and filed by its Board in July 2009, and last updated in November 2014.

utilization of the storage capacity of the Basin.

OCWD has invested over \$250 million in seawater intrusion control (injection barriers), recharge facilities, laboratories, and Basin monitoring to effectively manage the Basin. Consequently, although the Basin is defined to be in an “overdraft” condition, it is actually managed to allow utilization of up to 500,000 acre-feet of storage capacity of the basin during dry periods, acting as an underground reservoir and buffer against drought. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft provides sufficient storage space to accommodate increased supplies from one wet year while also provide enough water in storage to offset decreased supplies during a two- to three year drought. If the Basin is too full, artesian conditions can occur along the coastal area, causing rising water and water logging, an adverse condition. Since the formation of OCWD in 1933, OCWD has made substantial investment in facilities, Basin management and water rights protection, resulting in the elimination and prevention of adverse long-term “mining” overdraft conditions. OCWD continues to develop new replenishment supplies, recharge capacity and basin protection measures to meet projected production from the basin during normal rainfall and drought periods. (OCWD GMP, OCWD MPR and LTFP)

OCWD’s efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD’s management of overdraft to maximize the Basin’s use for annual production and recharge operations, overdraft varies over time as the Basin is managed to keep it in balance over the long term. The Basin is not operated on an annual safe-yield basis. (OCWD GMP, OCWD MPR, section 3.2 and LTFP, section 6). See also the following section on “**Sustainable Groundwater Management Act**”.

(c) Description and analysis of the amount and location of groundwater pumped by IRWD from the Basin for the past five years:

The following table shows the amounts pumped, by groundwater source since the year 2002:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD ¹²
2021	38,722	3,644	0	0
2020	33,975	4,005	0	0
2019	38,603	3,961	0	0
2018	38,196	4,619	0	0
2017	39,787	4,077	0	169

¹² The water produced from IRWD’s Los Alisos wells is not included in this assessment. IRWD is presently evaluating the future use of these wells.

2016	37,216	4,672	0	307
2015	40,656	9,840	0	336
2014	42,424	10,995	0	376
2013	38,617	8,629	0	282
2012	37,059	7,059	0	0
2011	34,275	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16
2007	37,864	5,407	0	6
2006	37,046	2,825	0	268
2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598
2002	25,855	2,533	5,075	744

(d) Description and analysis of the amount and location of groundwater projected to be pumped by IRWD from the Basin:

IRWD has a developed groundwater supply of 35,200 AFY from its Dyer Road Wellfield (including the Deep Aquifer Treatment System), in the main portion of the Basin.

Although TIC's historical production from the Subbasin declined as its use of the Subbasin for agricultural water diminished, OCWD's and other historical production records for the Subbasin show that production has been as high as 13,000 AFY. Plans are also underway to expand IRWD's main Orange County Groundwater Basin supply (characterized as *under-development* supplies herein). (See Section 2 (a) (1) herein). IRWD anticipates the development of potential additional production facilities within both the main Basin and the Irvine Subbasin. However, such additional facilities have not been included or relied upon in this assessment. Additional groundwater development will provide an additional margin of safety as well as reduce future water supply costs to IRWD.

The following table summarizes future IRWD groundwater production from currently available and under-development supplies.

(In AFY)

Year (ending 6/30)	DRWF¹³	Future GW¹⁴	IDP (Potable)	IDP (Nonpotable)
2025	43,861	12,352	5,618	3,461
2030	43,861	12,352	5,618	3,461
2035	43,861	12,352	5,618	3,461
2040	43,861	12,352	5,618	3,461

(e) If not included in the 2020 UWMP, analysis of the sufficiency of groundwater projected to be pumped by IRWD from the Basin to meet the projected water demand of the Project:

See responses to 4(b) and 4(d).

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. With the implementation of OCWD’s preferred projects, the Basin yield in the year 2025 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage (“BPP”) that OCWD sets based on these factors.¹⁵ Sufficient replenishment supplies are projected by the OCWD MPR to be available to OCWD to meet the increasing demand on the Basin. These supplies include capture of increasing Santa Ana River flows, purchases of replenishment water from MWD, and development of new local supplies. In 2008, OCWD began operating its replenishment supply project, the Groundwater Replenishment System project (“GWRS”). The GWRS currently produces approximately 100,000 AFY of new replenishment supply from recycled water (OCWD GMP).

Production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or

¹³ See Potable Supply - Groundwater, paragraph (iii), above. DRWF non-colored production above 28,000 AFY and colored water production above 8,000 AFY are subject to contractually-imposed assessments. In addition, seasonal production amounts apply. This also includes 914 AFY for the OPA well and 6,329 AFY for Wells 21 & 22.

¹⁴ Under-development.

¹⁵ OCWD has adopted a basin production percentage of 77% for 2022-23. In prior years OCWD has maintained a basin production percentage that is lower than the current percentage, and IRWD anticipates that such reductions may occur from time to time as a temporary measure employed by OCWD to encourage lower pumping levels as OCWD implements other measures to reduce the current accumulated overdraft in the Basin. Any such reductions are not expected to affect any of IRWD’s currently available groundwater supplies listed in this assessment, which are subject to a contractually-set equivalent basin production percentage as described or are exempt from the basin production percentage.

emergencies. Additional groundwater production is anticipated by OCWD in the Basin in dry years, as producers reduce their use of imported supplies, and the Basin is “mined” in anticipation of the eventual availability of replenishment water. (OCWD MPR, section 14.6.)

See also, Figures 1-8 hereto. IRWD assesses sufficiency of supplies on an aggregated basis, as neither groundwater nor other supply sources are allocated to particular projects or customers. Under the Irvine Subbasin Agreement, IRWD is contractually obligated to attribute the Subbasin supply only to TIC development projects for assessment purposes; however, the agreement does not allocate or assign rights in the Subbasin supply to any project.

Sustainable Groundwater Management Act. Pursuant to the Sustainable Groundwater Management Act (“SGMA”), the DWR has designated the Orange County groundwater basin, Basin 8-1, as a medium priority basin for purposes of groundwater management. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the groundwater sustainability agency or “GSA”. The SGMA allows Special Act Districts created by statute, such as OCWD, to prepare and submit an alternative to a Groundwater Sustainability Plan (“GSP”) that is “functionally equivalent” to a GSP. Basin 8-1 includes the OCWD service area and several fringe areas outside of OCWD that are within the Basin 8-1 boundary. Per the requirements of SGMA, an Alternative Plan must encompass the entire groundwater basin as defined by DWR. On January 1, 2017, OCWD and the overlying agencies within Basin 8-1, including IRWD, jointly prepared and submitted an alternative plan in compliance with SGMA (Basin 8-1 Alternative). The Basin 8-1 Alternative was updated in January 2022.

5. This Water Supply Assessment is being completed for a project included in a prior water supply assessment. Check all of the following that apply:

- Changes in the Project have substantially increased water demand.
- Changes in circumstances or conditions have substantially affected IRWD’s ability to provide a sufficient water supply for the Project.
- Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment.

6. References

Water Resources Master Plan, Irvine Ranch Water District, Updated 2017

Water Shortage Contingency Plan, Irvine Ranch Water District, June 2021

2020 Urban Water Management Plan, Irvine Ranch Water District, June 2021

Southern California’s Integrated Water Resources Plan, Metropolitan Water District of Southern California, March 1996

Proposed Framework for Metropolitan Water District's Delta Action Plan, Metropolitan Water District of Southern California, May 8, 2007

2007 IRP Implementation Report, Metropolitan Water District of Southern California, October 7, 2007

Board Letter, Action plan for updating the Integrated Resources Plan, Metropolitan Water District of Southern California, December 11, 2007

2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010

2015 Integrated Resources Plan Update, Metropolitan Water District of Southern California, January 2016

2020 Urban Water Management Plan, Metropolitan Water District of Southern California, June 2021

2020 Urban Water Management Plan, Municipal Water District of Orange County, May 2021

Climate Action Plan Phase 2: Climate Change Analysis Guidance, California Department of Water Resources, September 2018

Master Plan Report, Orange County Water District, April 1999

Groundwater Management Plan 2015 Update, Orange County Water District, June 2015

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

Long-Term Facilities Plan 2014 Update, Orange County Water District, November 2014

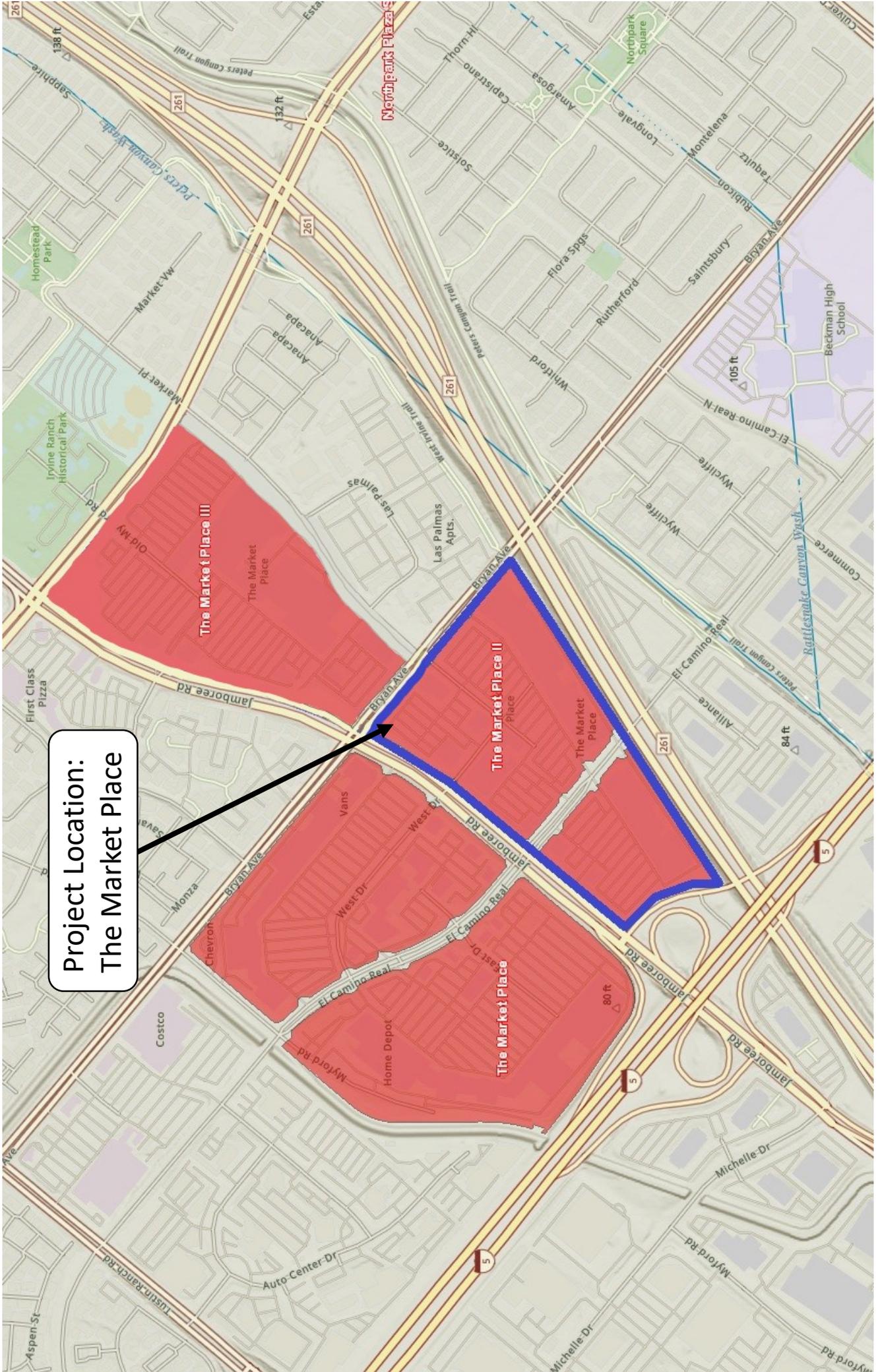
2020-2021 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2022

Basin 8-1 Alternative, Orange County Water District, January 2017

Basin 8-1 Alternative 2022 Update, Orange County Water District, January 2022

Exhibit A

Depiction of Project Area



Project Location:
The Market Place

Exhibit B

Uses Included in Project



April 14, 2022

Irvine Ranch Water District
15600 Sand Canyon Avenue
PO Box 57000
Irvine, CA 92619-7000

Re: **Request for Water Supply Availability Assessment (Water Code §10910 et seq.)**

The City of Irvine hereby requests an assessment of water supply availability for the below-described project. The City has determined that the project is a “project” as defined in Water Code §10912, and has determined that an environmental impact report is required for the project.

Proposed Project Information

Project Title: **The Market Place (104-351-32)**

Location of project: **13732 Jamboree Road, Planning Area 4 (Lower Peters Canyon)**

- (For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on:_____. This application requests a new Water Supply Assessment, due to the following (check all that apply):
- Changes in the project have substantially increased water demand
- Changes in circumstances or conditions have substantially affected IRWD’s ability to provide a sufficient water supply for the project
- Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment

(Enclose maps and exhibits of the project)

Type of Development:

- Residential: No. of dwelling units: **1,400 dwelling units**
- Shopping center or business: No. of employees____ Sq. ft. of floor space _____
- Commercial office: No. of employees_____ Sq. ft. of floor space _____
- Hotel or motel: No. of rooms _____
- Industrial, manufacturing, processing or industrial park: No. of employees_____ No. of acres _____Sq. ft. of floor space _____
- Mixed use (check and complete all above that apply)
- Other: _____

Total acreage of project: **16**

Acreage devoted to landscape:

Greenbelt **Approximately 2 acres** Golf Course _____

Parks **Approximately 1.0 acre**

Agriculture _____ Other landscaped areas _____

Number of schools _____ Number of public facilities _____



Other factors or uses that would affect the quantity of water needed, such as peak flow requirements or potential uses to be added to the project to reduce or mitigate environmental impacts:

What is the current land use of the area subject to a land use change under the project?
Current land use is Regional Commercial. Proposed units will replace approximately 205,000 sf of existing commercial structures (to be removed) in Planning Area 4.

Is the project included in the existing General Plan? No. If no, describe the existing General Plan Designation **Land is designated Regional Commercial which currently permits residential uses. Application submitted for General Plan Amendment to add 1,400 residential units to the current allocation otherwise allowed in Planning Area 4.**

The City acknowledges that IRWD's assessment will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional information to be submitted to enable IRWD to complete the assessment, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project, circumstances or conditions change or new information becomes available after the issuance of a Water Supply Assessment, the Water Supply Assessment may no longer be valid. The City will request a new Water Supply Assessment if it determines that one is required.

The City acknowledges that the Water Supply Assessment shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority, or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Assessment shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees, charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

CITY OF IRVINE

By: *Stephanie Frady*

Stephanie Frady, AICP, Principal Planner

REQUEST RECEIVED:

Date: April 17, 2022

By: *Kelli Wilson*
Irvine Ranch Water District

REQUEST COMPLETE:

Date: May 2, 2022

By: *Kelli Wilson*
Irvine Ranch Water District

January 9, 2023
Prepared by: M. Tetteimer
Submitted by: P. Weghorst
Approved by: Paul A. Cook 

ACTION CALENDAR

PRINCIPLES FOR AGREEMENT WITH UNIVERSITY OF CALIFORNIA, IRVINE

SUMMARY:

The Irvine Ranch Water District (IRWD) operates its drinking water and recycled water service programs in compliance with permits issued by the State Water Resources Control Board (State Board) and the Santa Ana Regional Water Quality Control Board. The permits require IRWD to perform certain tasks throughout its service area that are associated with use of recycled water, cross-connection control, and backflow prevention.

The University of California, Irvine (UCI/University) has requested that IRWD delegate to UCI permit-related tasks that would normally be performed by IRWD on the UCI campus. These delegated tasks would be performed with oversight by IRWD staff. Staff recommends that the Board authorize the General Manager to execute an agreement with UCI, based on the principles described below, to delegate permit-related roles and responsibilities to the University.

BACKGROUND:

IRWD provides domestic and recycled water services to the UCI campus. Accordingly, UCI must comply with IRWD's Domestic Water Supply as well as Waste Discharge Requirements and Master Reclamation Permits. UCI must also comply with IRWD's rules and regulations, procedural guidelines, and general design requirements pertaining to cross-connection control, backflow prevention and recycled water use. In the near future, UCI will also need to comply with the requirements of IRWD's Cross-Connection Control Plan, which will be prepared in compliance with the State Board's new Cross-Connection Control Policy Handbook.

Domestic Water Supply Permit Requirements:

IRWD's drinking water service program is operated in compliance with a Domestic Water Supply Permit issued by the State Board. This permit requires IRWD to comply with Title 17 of the California Code of Regulations. Title 17 requires permit holders to perform various tasks to ensure the public water supply is protected from contamination, which is referred to as cross-connection control. A summary of the cross-control requirements of IRWD's Domestic Water Supply Permit is provided as Exhibit A.

Waste Discharge and Master Reclamation Permit Requirements:

IRWD's Waste Discharge Requirements and Master Reclamation Permit, issued by the Santa Ana Regional Board, requires IRWD to operate its recycled water service program in compliance with Title 22 of the California Code. The permit provides requirements for IRWD customers'

use of recycled water. These requirements avoid cross-connections, provide for inspections, and avoid unapproved uses. A summary of these requirements is provided as Exhibit "B".

Cross-Connection Control Policy Handbook:

Currently, the State Board is in the process of finalizing a Cross-Connection Control Policy Handbook, which will replace Title 17. Once the Handbook is adopted by the State Board, each Domestic Water Supply Permit holder including IRWD, will have one year to prepare and submit a written Cross-Connection Control Plan to the State Board's Division of Drinking Water for approval. Exhibit "C" provides a list of the 10 elements found in the draft Handbook that will need to be incorporated into IRWD's Cross-Connection Control Plan.

UCI Compliance with Permit Requirements:

UCI has requested that IRWD delegate tasks to the University that will ensure campus compliance with the described requirements. To facilitate the requested delegations and to ensure compliance, an agreement between IRWD and UCI is proposed to articulate the roles and responsibilities of the University. Principles for the proposed agreement are provided as Exhibit "D". The work to be conducted by UCI would be performed with the oversight of IRWD staff. Staff recommends the execution of an agreement based on these principles.

FISCAL IMPACTS:

The execution of the proposed agreement with UCI will reduce the need to increase staffing to conduct recycled water, cross-connection control, and backflow prevention inspection work upon implementation of the State Board's Cross-Connection Control Plan.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the January 5, 2023, Water Resources Policy and Communications Committee meeting.

RECOMMENDATION:

THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT WITH UNIVERSITY OF CALIFORNIA, IRVINE, TO DELEGATE CROSS-CONNECTION CONTROL, BACKFLOW PREVENTION, AND RECYCLED WATER USE RELATED ROLES AND RESPONSIBILITIES TO THE UNIVERSITY WITH THE OVERSIGHT BY IRWD, BASED ON THE PRINCIPLES PRESENTED.

LIST OF EXHIBITS:

Exhibit “A” – Summary of IRWD’s Domestic Water Supply Permit

Exhibit “B” – Summary of Conditions in IRWD’s Waste Discharge Requirements and Master Reclamation Permit Related to Customer’s Recycled Water Facilities

Exhibit “C” – Elements of State Board’s Cross-Connection Control Policy Handbook

Exhibit “D” – Principles for Agreement between UCI and IRWD

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Exhibit “A”

Summary of IRWD’s Domestic Water Supply Permit (Condition #8)

IRWD operates its drinking water program based on a *Domestic Water Supply Permit* issued by the State Water Resources Control Board. Condition #8 in the permit requires IRWD to comply with Title 17 of the California Code of Regulations. Title 17 requires permit holders to perform various tasks to ensure the public water supply is protected from contamination, also referred to as Cross-Connection Control. Title 17 requires IRWD to:

- Adopt Rules and Regulations to implement a cross-connection control program;
- Conduct site surveys to identify water user premises where cross-connections are likely to occur;
- Ensure proper backflow prevention assemblies are in place (either at the meter or within the customers property) to protect the public water supply;
- Have at least one person trained in cross-connection control to oversee the program;
- Establish a system to ensure backflow prevention assemblies are tested at least annually;
and
- Maintain records regarding the testing, repairing, or replacement of backflow prevention assemblies.

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**Summary of Conditions in
IRWD’s Waste Discharge Requirements and Master Reclamation Permit
Related to Customer’s Recycled Water Facilities**

IRWD operates its recycled water program based on a *Waste Discharge Requirements and Master Reclamation Permit* issued by the Santa Ana Regional Water Quality Control Board. This Regional Board permit requires IRWD to comply with Title 22 of the California Code of Regulations as well as conditions in the permit itself. Title 22 and IRWD’s Regional Board permit requires IRWD to:

- Confirm there are no cross-connections (Title 22);
- Confirm hose bibs are not on the recycled water system (Title 22);
- Confirm there are recycled water use signs (Title 22);
- Confirm that drinking fountains are protected from recycled water spray (Title 22);
- Confirm that recycled water is not discharged from the use site (Title 22 and Regional Board permit);
- Conduct periodic inspections of all recycled water use sites (Regional Board permit);
- Establish and enforce Rules and Regulations for recycled water users (Regional Board permit);
- Confirm there is a Site Supervisor which is required for each recycled water use site (Regional Board permit);
- Confirm that uses are consistent with Title 22 and there are no un-approved uses of recycled water (Regional Board permit); and
- Submit annual reports providing some customer information, types of use for recycled water, amounts of recycled water used, amounts of nitrogen applied, and results of inspections conducted at recycled water use sites (Regional Board permit).

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Exhibit “C”

**Elements of the State Water Resources Control Board’s
Cross-Connection Control Policy Handbook to be Addressed
By IRWD’s Cross Connection Control Plan**

IRWD’s Cross-Connection Control Plan will address the following ten elements included in the State Board’s Cross-Connection Control Policy Handbook. Six of the 10 elements included in the Handbook come from Title 17 while four are new elements.

1. Operating Rules and Ordinances;
2. Cross-Connection Control Program Coordinators;
3. Hazard Assessments;
4. Backflow Prevention;
5. Certified Backflow Prevention Assembly Testers and Certified Cross-Connection Control Specialists (New Element);
6. Backflow Preventer Testing;
7. Recordkeeping;
8. Backflow Incident Response, Reporting and Notification (New Element);
9. Public Outreach and Education (New Element); and
10. Local Entity Coordination (New Element).

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**Principles for Agreement
Between University of California, Irvine (UCI) and Irvine Ranch Water District (IRWD)
Regarding UCI Performing Tasks Related to Recycled Water and
Cross-Connection Control on the UCI Campus**

January 5, 2023 – DRAFT

Background:

- IRWD’s Domestic Water Supply Permit (Permit #05-08-08P-012), issued by the State Water Resources Control Board, contains conditions that IRWD must fulfill. One condition is that “IRWD shall comply with Title 17 of the CCR [California Code of Regulations] to prevent the water system and treatment facilities from being contaminated from possible cross-connections. IRWD shall maintain a program for the protection of the domestic water system against backflow from premises having dual or unsafe water systems in accordance with Title 17” (page 9, Condition 8);
- Title 17 will be replaced by the State Board’s Cross-Connection Control Policy Handbook. Once the State Board adopts the Handbook, IRWD will have one year to prepare and submit a written Cross-Connection Control Plan to the State Board’s Division of Drinking Water;
- IRWD’s Waste Discharge Requirements and Master Reclamation Permit (Order #R8-2015-0024, NPDES No. CA8000326), issued by the Santa Ana Regional Water Quality Control Board, contain conditions that IRWD must fulfill. One condition is that “The Discharger [IRWD] shall be responsible for ensuring that recycled water is delivered and utilized in conformance with this Order, the recycling criteria contained in Title 22, Division 4, Chapter 3, Section 60301 through 60355, California Code of Regulations. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.” (page 20, Condition 3);
- IRWD administers programs to ensure customer compliance with Title 17, Title 22, the California Plumbing Code, IRWD’s Domestic Water Supply Permit, IRWD’s Waste Discharge Permit, IRWD’s Rules and Regulations, and IRWD’s Procedural Guidelines and General Design Requirements. This includes reviewing design drawings, conducting field inspections during construction, conducting on-going inspection and testing of recycled water use sites, and conducting Site Supervisor training;
- UCI is a customer of IRWD located within IRWD’s service area and must comply with IRWD’s permits and programs including IRWD’s Cross-Connection Control Plan; and
- UCI has requested that IRWD delegate tasks to the University that will ensure campus compliance with IRWD’s permits and programs including IRWD’s Cross-Connection Control Plan with the oversight of IRWD.

Agreement Principles:

UCI and IRWD will collaborate on the preparation of an agreement that describes the roles and responsibilities of each party related to ensuring compliance on the University campus with IRWD's permits and programs regarding cross-connection control, backflow prevention and use of recycled water:

1. IRWD supports UCI performing mutually acceptable recycled water, cross-connection control and backflow prevention related tasks on the University with oversight by IRWD;
2. UCI acknowledges the scope of IRWD's responsibilities associated with recycled water use, backflow prevention and cross-connection control and that the University must comply with IRWD permits, rules, and regulations as well as procedural guidelines, design requirements and IRWD's Cross-Connection Control Plan;
3. IRWD will consult with UCI during the preparation of IRWD's Cross-Connection Control Plan on elements applicable to the University campus;
4. UCI will conduct mutually agreed upon tasks normally required to be performed by IRWD on the campus in compliance with IRWD's permits, rules, and regulations as well as procedural guidelines, design requirements, and IRWD's Cross-Connection Control Plan;
5. UCI has or will have the proper certified staff resources to conduct tasks performed to comply with established certification standards;
6. IRWD will work with UCI to develop field inspection forms to use when conducting field inspection work;
7. All field inspection forms will be electronically transmitted to IRWD;
8. UCI will provide regular reports to IRWD describing the work completed and any corrective actions taken;
9. IRWD will review the regular reports and provide recommendations for corrective actions;
10. IRWD staff will periodically shadow UCI inspectors and cross-connection specialists to ensure that field work is being performed in compliance with IRWD's requirements;
11. UCI and IRWD will meet periodically during the term of the agreement to address matters of mutual interest and to revise inspection, backflow prevention and cross-connection control procedures to ensure compliance with IRWD requirements; and
12. UCI shall insure and indemnify IRWD relative to the work performed by UCI.

January 9, 2023

Prepared by: H. Cho / J. Moeder

Submitted by: K. Burton

Approved by: Paul A. Cook *PA*

ACTION CALENDAR

DISTRICT-WIDE EMERGENCY GENERATOR FUEL STORAGE BUDGET INCREASE AND PRE-PURCHASE

SUMMARY:

The District-wide Emergency Generator Diesel Fuel Storage project will increase the diesel fuel storage at emergency generators serving three domestic water pump stations to provide 72-hours of operation. It will also replace existing emergency generators at seven domestic water pump stations and sewage lift stations with new generators that have 72-hours of diesel fuel storage.

Staff recommends that the Board:

- Authorize the General Manager to approve a purchase order with Quinn Power Systems in the amount of \$1,068,450 for the District-wide Emergency Generator Fuel Storage project;
- Authorize a budget increase in the amount of \$1,748,800, from \$819,000 to \$2,567,800 for Generator Fuel Storage – DW, Project 11536; and
- Authorize a budget increase in the amount of \$1,473,800, from \$522,000 to \$1,995,800 for Generator Fuel Storage – SS, Project 11537.

BACKGROUND:

IRWD operates many of its critical water and sewer conveyance and treatment facilities with on-site emergency generators to provide electrical power in the event of a power outage. These generators typically have enough fuel (diesel) to power each facility for 24 hours. This project will increase the fuel stored at the generators at domestic water pump stations and sewage lift stations to provide 72 hours of operation.

Project Evaluation and Design:

In July 2021, IRWD retained Psomas to evaluate District generator sites and develop the design for the project. Originally, 18 domestic water pump stations and sewage lift stations were included in the scope of work. Psomas and staff completed a comprehensive evaluation of the generator sites and determined that four of the sites should remain as-is and be removed from the project due to the minimal benefit for additional incremental fuel storage compared to the overall cost of the improvements.

Staff evaluated the remaining (14) generators' condition, age, and operational history at these sites, and determined IRWD should proceed with improvements as follows:

Action Calendar: District-wide Emergency Generator Fuel Storage Budget Increase and Pre-Purchase

January 9, 2023

Page 2

Replace Generator and Add Fuel Storage	Add Fuel Storage Only for Existing Generators
1. Cabinland Pump Station	1. Lake Forest Zone 5-6 West (2-3 West) Pump Station
2. Cañada Lift Station	2. Portola Zone 6-8 Pump Station
3. Coastal Ridge Lift Station	3. Portola Zone 8-9 Pump Station
4. Coyote Canyon Lift Station	
5. Foothill Zone 4-6 Pump Station	
6. Newport Coast Lift Station	
7. University Lift Station	

Fuel storage improvements are needed at four additional sites, but these improvements will be performed under separate projects due to other planned construction at the sites or due to the complexity of the improvements. These four sites are the Santiago Hills Zone 5-8 Pump Station, the Baker Water Treatment Plant, the Michelson Water Recycling Plant/Operations Center, and the Zone A to Rattlesnake Reservoir Pump Station. A location map of all 14 generator and/or fuel storage project sites is shown in Exhibit “A”.

Generator Pre-Purchase:

Psomas recently completed the 75 percent design and is scheduled to complete design by March 2023 for the new generators and/or fuels storage improvements listed in the table above. Discussions with generator suppliers indicate that the lead time for procurement is currently 50 to 55 weeks. To minimize construction delays associated with extended lead times, staff requested bids to pre-purchase the generators from Caterpillar’s representative, Quinn Power Systems, and Cummins – the two generator suppliers that have equipment installed across the District. Staff received a bid from Quinn Power Systems in the amount of \$1,068,450 as shown in Exhibit “B”; Cummins declined to submit a bid despite numerous follow-up requests from staff.

As a check on prices, staff compared the bid from Quinn Power Systems to a bid for three Caterpillar generators from Quinn Power Systems dated December 10, 2021, for the Santiago Canyon Pump Station Improvements project. Both projects included 100 kW generators. The 100 kW generators for the Santiago Canyon Pump Station Improvements project cost \$58,750 each, and the 100 kW generators for this project were quoted at \$76,400. This generator cost increased \$17,650 in one year and is driven by material shortages and inflation. Based on this analysis, staff has determined that the pricing provided by Quinn Power Systems is appropriate.

FISCAL IMPACTS:

Projects 11536 and 11537 are included in the FY 2022-23 Capital Budget. Project 11536 will be funded 80% by the potable replacement fund and 20% by the regional potable water fund. Project 11537 will be funded 90% by the sewer replacement fund and 10% by the regional sewer

fund. Staff developed the customized split by categorizing portions of the project as replacement of aging infrastructure rather than strictly enhancement of existing facilities. Budget increases are required to fund the generator pre-purchase and construction phases for the projects as shown in the following table. Projects 11536 and 11537 will also fund design and construction of the generator replacement at Santiago Hills Zone 5-8 Pump Station which will be designed with the Orange Heights Zone 5-6 Pump Station project.

Project No.	Current Budget	Addition <Reduction>	Total Budget
11536	\$819,000	\$1,748,800	\$2,567,800
11537	\$522,000	\$1,473,800	\$1,995,800
Total	\$1,341,000	\$3,222,600	\$4,563,600

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 (Class 1 Exemption, “Existing Facilities”) and Section 15302 (Class 2 Exemption, “Replacement or Reconstruction”). The Class 1 Exemption provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency’s determination. The Class 2 Exemption provides exemption for replacement of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose. A Notice of Exemption for the project was filed with the Orange County Clerk Recorder on December 6, 2022.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

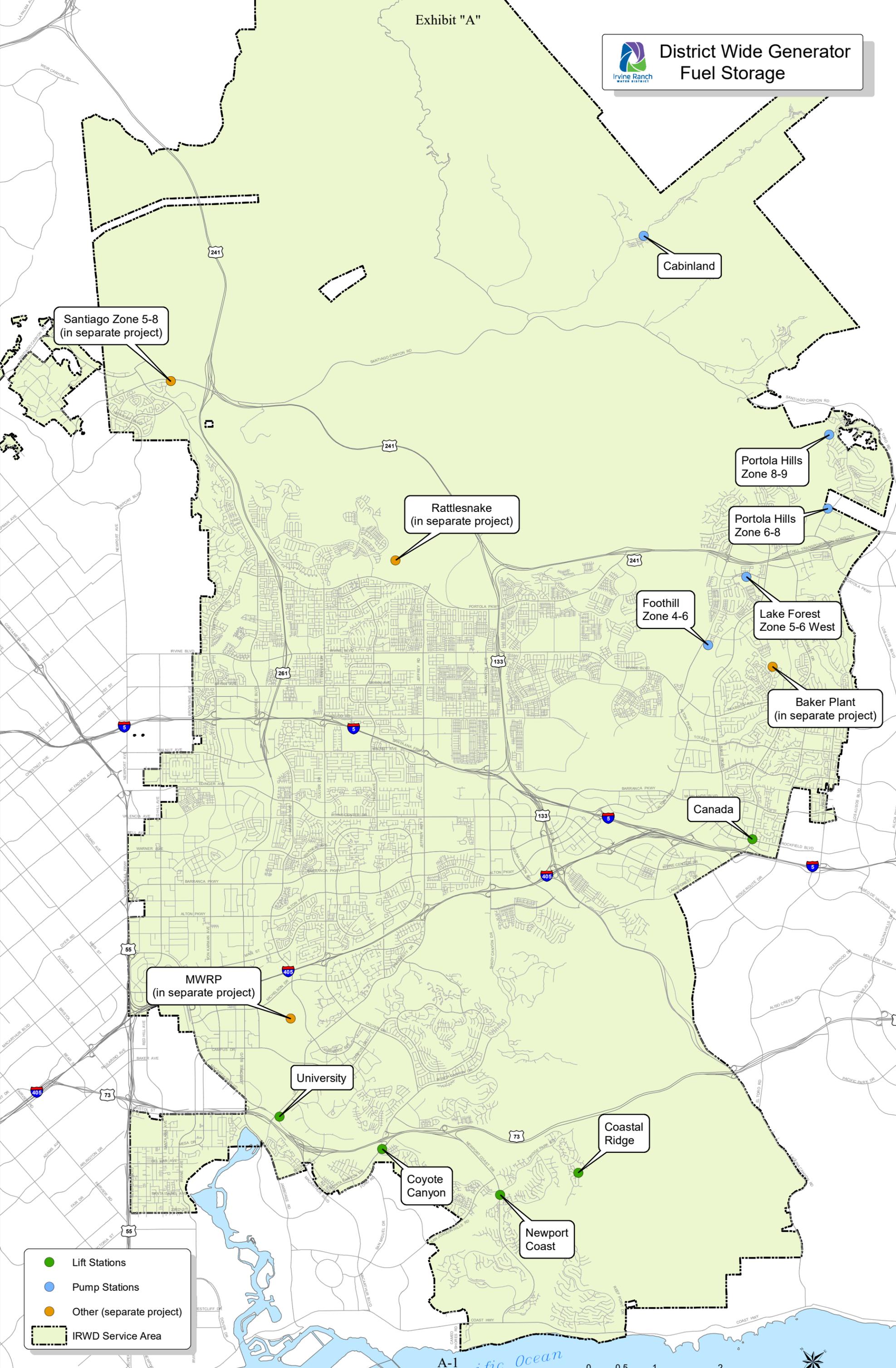
THAT THE BOARD AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$1,748,800, FROM \$819,000 TO \$2,567,800, FOR PROJECT 11536 AND IN THE AMOUNT OF \$1,473,800, FROM \$522,000 TO \$1,995,800, FOR PROJECT 11537; AND AUTHORIZE THE GENERAL MANAGER TO APPROVE A PURCHASE ORDER WITH QUINN POWER SYSTEMS IN THE AMOUNT OF \$1,068,450 FOR THE DISTRICT-WIDE EMERGENCY GENERATOR FUEL STORAGE, PROJECTS 11536 AND 11537.

LIST OF EXHIBITS:

- Exhibit “A” – Location Map
- Exhibit “B” – Generator Quotations

Note: This page is intentionally left blank.

Exhibit "A"



Santiago Zone 5-8
(in separate project)

Cabinland

Portola Hills
Zone 8-9

Rattlesnake
(in separate project)

Portola Hills
Zone 6-8

Foothill
Zone 4-6

Lake Forest
Zone 5-6 West

Baker Plant
(in separate project)

Canada

MWRP
(in separate project)

University

Coastal
Ridge

Coyote
Canyon

Newport
Coast

- Lift Stations
- Pump Stations
- Other (separate project)
- IRWD Service Area



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Exhibit "B" QUOTATION

NO. 220045

3500 Shepherd Street, City of Industry, California 90601
 Box 226789, Los Angeles, California 90022-0744
 (562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

Page: 1 of 11

To: Contact: Harry Cho
 Company: Irvine Ranch Water District
 Address: 15600 Sand Canyon Avenue
 City, Zip: Irvine, CA 92618
 Phone: _____ Email: _____

Terms: Net 30, see T&C's
 F.O.B. Quinn Power Inc, City of Industry
 Sales Rep.: Pete Vainoris
 Contact #: 562-201-3428
 Email: pvainoris@quinnpower.com

Project Name: IRWD Standby Diesel Engine Generator Sets Pre-Purchase

Qty:	Description	Unit Price	Extension
1	<u>University LS</u> New Caterpillar, Model D100-8 Diesel Standby Generator Set. Rated 100 kW, w/fan, 60Hz, 3Ph, 277/480V at 1800 RPM. No DPF required. Includes Level 2 sound enclosure rated 76 dBA @ 23 ft., and 394-gallon subbase tank.	\$ 76,400.00 Sales Tax 7.75%	\$ 76,400.00 \$ 5,921.00
1	<u>Coyote Canyon LS</u> New Caterpillar, Model D80-8 Diesel Standby Generator Set. Rated 80 kW, w/fan, 60Hz, 3Ph, 277/480V at 1800 RPM. No DPF required. Includes Level 2 sound enclosure rated 75 dBA @ 23 ft., and 394-gallon subbase tank.	\$ 74,100.00 Sales Tax 7.75%	\$ 74,100.00 \$ 5,742.75
1	<u>Coastal Ridge LS</u> New Caterpillar, Model D175-8 Diesel Standby Generator Set. Rated 175kW, w/fan, 60Hz, 3Ph, 277/480V at 1800 RPM. No DPF required. Includes Level 2 sound enclosure rated 74 dBA @ 23 ft., and 402-gallon subbase tank. Any additional fuel systems by others	\$ 83,600.00 Sales Tax 7.75%	\$ 83,600.00 \$ 6,479.00
1	<u>Canada LS</u> New Caterpillar, Model D125-8 Diesel Standby Generator Set. Rated 125kW, w/fan, 60Hz, 3Ph, 277/480V at 1800 RPM. Includes Active Type RYPOS DPF, and mounting stand. Includes Level 1 sound enclosure rated 74 dBA @ 23 ft. and 402-gallon tank.	\$ 150,200.00 Sales Tax 7.75%	\$ 150,200.00 \$ 11,640.50
1	<u>Newport Coast LS</u> New Caterpillar, Model D175-8 Diesel Standby Generator Set. Rated 175kW, w/fan, 60Hz, 3Ph, 277/480V at 1800 RPM. Includes ship loose Active Type RYPOS DPF, open unit/no enclosure, and 402 gallon subbase fuel tank. Any additional fuel and exhaust systems by others including plumbing, piping, and mounting	\$ 121,300.00 Sales Tax 7.75%	\$ 121,300.00 \$ 9,400.75
<p>Quinn Power Systems will store these units for 6 months at no cost as long as IRWD pays for the equipment when it arrives at Quinn Power System's yard. IRWD will be required to sign the Quinn storage agreement. -Freight and offloading is included to Quinn Power Systems, City of Industry, CA Only.</p> <p>Freight to jobsite is not included and is by others</p> <p><u>Pricing valid for purchase orders received by 1/31/2023 days and equipment released by 4/28/2023</u></p> <p><i>Optional adders listed below.</i></p> <p><i>Includes standard features as listed in product data sheet and additional accessories as listed herein...</i></p>			
Buyer responsible for all taxes including any applicable tire fees. The quotation provided herein is for information only, and is not a valid offer to sell unless signed by an officer of Quinn Power Systems in the space provided below. Any offer to sell or any offer accepted shall be subject to the Terms and Conditions page. Unless expressly stated on the face of this quotation, all prices, delivery schedules and product specifications are subject to change without notice. Quotation is good for orders placed by January 31, 2023.		Total Price Including Applicable Sales Tax:	\$ 544,784.00



QUOTATION

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BILL OF MATERIALS

University LS Genset

Description

- EPA STATIONARY EMERGENCY
- 60HZ 3PH 480/277V VOP601
- STANDBY POWER
- 60 Hz, 100 kW
- D100-8 60HZ 480V
- ENGLISH PANEL LANGUAGE
- UL 2200 LISTED PACKAGE GEN SET
- IBC_SEISMIC CERT OF COMPLIANCE
- ENGLISH INSTRUCTION LANGUAGE
- GENERAL EPG
- PUBLIC OR CIVIL SERVICES
- STANDBY POWER
- ALT SPACE HEATER
- 105C TEMP RISE OVER 40C AMB
- LC3114F 60Hz SE ALT Z6
- PERMANENT MAGNET EXCITATION
- SKID WITH FUEL TANK
- FUEL SUB-BASE TANK 394 GALLON
- OVERFILL PREV & DROP TUBE 48HR
- NO TANKS RISER
- STANDARD VENT PIPE 12ft EXTENS
- Fuel Level Alarms / SD
- EMERGENCY FUEL VENT PIPE UL-4"
- L2 SOUND ATTENUATED (B)
- IBC CERTIFICATION WIND ENCLOSURE
- CAT WHITE
- WIRING FOR CANOPY SPACE HEATER
- CONTROL PANEL
- NFPA BUNDLE
- DISCRETE I/O MODULE
- GROUND FAULT RELAY INDICATION
- STANDARD BATTERY
- NFPA BATT CHARGER UL10A 120VAC
- JACKET WATER HEATER
- EXTERNAL EMERGENCY STOP
- OIL TEMP GAUGE AND SENDER
- VOLT FREE CONTACTS GENSET RUN
- LOW COOLANT LEVEL SHUTDOWN 1
- OVERLOAD ALARM SWITCH PPo1_I
- SEISMIC VIBRATION ISOLATOR (C)
- LOW COOLANT TEMP ALARM
- CONTROL PANEL OPTIONS BOX
- PANEL MOUNTED AUDIBLE ALARM
- SINGLE CIRCUIT BREAKER
- 150A LSI 100% RATED BREAKER
- AUXILIARY CONTACTS
- CARTRIDGE TYPE AIR FILTER
- STANDARD RADIATOR
- ENCLOSURE SILENCER



3500 Shepherd Street, City of Industry, California 90601
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QUOTATION

NO. 220045

Date: December 14, 2022

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- PRODUCT LINK 4G LTE TELEMATICS
- CAN2 SERVICE CONNECTOR HARNESS
- STD TEST - PKG GEN SET 0.8 PF
- ALTERNATOR TEST REPORT
- 4 HOUR TEST REPORT @ 0.8PF
- PGS TEST REPORT @ 0.8 PF

Coyote Canyon LS Genset

Description

- EPA STATIONARY EMERGENCY
- 60HZ 3PH 480/277V VOP601
- STANDBY POWER
- 60 Hz, 80 kW
- D80-8 60HZ 480V
- ENGLISH PANEL LANGUAGE
- UL 2200 LISTED PACKAGE GEN SET
- IBC_SEISMIC CERT OF COMPLIANCE
- PUBLIC OR CIVIL SERVICES
- STANDBY POWER
- ALT SPACE HEATER
- 105C TEMP RISE OVER 40C AMB
- LC3114F 60Hz SE ALT Z6
- PERMANENT MAGNET EXCITATION
- SKID WITH FUEL TANK
- FUEL SUB-BASE TANK 394 GALLON
- OVERFILL PREV & DROP TUBE 48HR
- NO TANKS RISER
- STANDARD VENT PIPE 12ft EXTENS
- Fuel Level Alarms / SD
- EMERGENCY FUEL VENT PIPE UL-4"
- L2 SOUND ATTENUATED (B)
- IBC CERTIFICATION WIND ENCLOSURE
- CAT WHITE
- WIRING FOR CANOPY SPACE HEATER
- CONTROL PANEL
- NFPA BUNDLE
- DISCRETE I/O MODULE
- GROUND FAULT RELAY INDICATION
- STANDARD BATTERY
- NFPA BATT CHARGER UL10A 120VAC
- JACKET WATER HEATER
- EXTERNAL EMERGENCY STOP
- OIL TEMP GAUGE AND SENDER
- VOLT FREE CONTACTS GENSET RUN
- LOW COOLANT LEVEL SHUTDOWN 1
- OVERLOAD ALARM SWITCH PPo1_I
- SEISMIC VIBRATION ISOLATOR (C)
- LOW COOLANT TEMP ALARM
- CONTROL PANEL OPTIONS BOX
- PANEL MOUNTED AUDIBLE ALARM
- ENGINE OPTION HARNESS
- NO POWER TERMINAL STRIP
- SINGLE CIRCUIT BREAKER



QUOTATION

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150A LSI 100% RATED BREAKER
AUXILIARY CONTACTS
SUSE FOR 1ST CB 125A TO 400A

CARTRIDGE TYPE AIR FILTER
STANDARD RADIATOR
ENCLOSURE SILENCER
PRODUCT LINK 4G LTE TELEMATICS
AMERICAS BAND
ACCEPT - REVIEW LINK IN DESC
CAN2 SERVICE CONNECTOR HARNESS
STD TEST - PKG GEN SET 0.8 PF
ALTERNATOR TEST REPORT
4 HOUR TEST REPORT @ 0.8PF
PGS TEST REPORT @ 0.8 PF

Coastal Ridge LS Genset

Description

EPA STATIONARY EMERGENCY
60HZ 3PH 480/277V VOP601
STANDBY POWER
60 Hz, 175 kW
D175 60HZ 480V
ENGLISH PANEL LANGUAGE
UL 2200 LISTED PACKAGE GEN SET
IBC SEISMIC CERT OF COMPLIANCE
ENGLISH INSTRUCTION LANGUAGE
GENERAL EPG
ALT SPACE HEATER
105C TEMP RISE OVER 40C AMB
LC5014F 60Hz SE ALT AC
PERMANENT MAGNET EXCITATION
SKID WITH FUEL TANK
SUB BASE TANK 408 GAL
OVERFILL PREV & DROP TUBE 24HR
NO TANKS RISER
STANDARD VENT PIPE 12ft EXTENS
Fuel Level Alarms / SD
EMERGENCY FUEL VENT PIPE UL-4"
L2 SOUND ATTENUATED ENC (c)
IBC CERTIFICATION WIND ENCLOSURE
CAT WHITE
STANDARD PANEL DOOR WITH ENC
WIRING FOR CANOPY SPACE HEATER
CONTROL PANEL
NFPA BUNDLE
DISCRETE I/O MODULE
GROUND FAULT RELAY INDICATION
WET BATTERY (B1W)
NFPA BATT CHARGER UL10A 120VAC
JACKET WATER HEATER
EXTERNAL EMERGENCY STOP
VOLT FREE CONTACTS GENSET RUN
LOW COOLANT LEVEL SHUTDOWN 1



QUOTATION

NO. 220045

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- OVERLOAD ALARM SWITCH PPO1_I
- SEISMIC VIBRATION ISOLATOR (C)
- CONTROL PANEL OPTIONS BOX
- PANEL MOUNTED AUDIBLE ALARM
- ENGINE OPTION HARNESS
- SINGLE CIRCUIT BREAKER
- 400A 100% RATED BREAKER
- NO 2ND CIRCUIT BREAKER
- SUSE DECALS AND FILMS
- AUXILIARY CONTACTS
- SUSE FOR 1ST CB 125A TO 400A
- NOT REQUIRED.
- STD AIR CLEANER
- STANDARD RADIATOR
- ENCLOSURE SILENCER
- QTY REMOTE ANNUNC
- PRODUCT LINK 4G LTE TELEMATICS
- AMERICAS BAND
- ACCEPT - REVIEW LINK IN DESC
- CAN2 SERVICE CONNECTOR HARNESS
- STD TEST - PKG GEN SET 0.8 PF
- ALTERNATOR TEST REPORT
- 4 HOUR TEST REPORT @ 0.8PF
- PGS TEST REPORT @ 0.8 PF

Canada LS Genset

Description

- EPA STATIONARY EMERGENCY
- 60HZ 3PH 480/277V VOP601
- STANDBY POWER
- 60 Hz, 125 kW
- D125-8 60Hz 480V
- ENGLISH PANEL LANGUAGE
- UL 2200 LISTED PACKAGE GEN SET
- IBC SEISMIC CERT OF COMPLIANCE
- ENGLISH INSTRUCTION LANGUAGE
- STANDBY POWER
- ALT SPACE HEATER
- 130C TEMP RISE OVER 40C AMB
- LC3114H 60Hz SE ALT Z7
- PERMANENT MAGNET EXCITATION
- SKID WITH FUEL TANK
- SUB BASE TANK 408 GAL
- OVERFILL PREV & DROP TUBE 24HR
- NO TANKS RISER
- STANDARD VENT PIPE 12ft EXTENS
- Fuel Level Alarms / SD
- EMERGENCY FUEL VENT PIPE UL-4"
- L1 SOUND ATTENUATED ENC (c)
- IBC CERTIFICATION WIND ENCLOSURE
- CAT WHITE
- STANDARD PANEL DOOR WITH ENC
- WIRING FOR CANOPY SPACE HEATER
- CONTROL PANEL



QUOTATION

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- NFPA BUNDLE
- DISCRETE I/O MODULE
- GROUND FAULT RELAY INDICATION
- WET BATTERY (B1W)
- NFPA BATT CHARGER UL10A 120VAC
- JACKET WATER HEATER
- EXTERNAL EMERGENCY STOP
- VOLT FREE CONTACTS GENSET RUN
- LOW COOLANT LEVEL SHUTDOWN 1
- OVERLOAD ALARM SWITCH PPO1_I
- SEISMIC VIBRATION ISOLATOR (C)
- CONTROL PANEL OPTIONS BOX
- PANEL MOUNTED AUDIBLE ALARM
- ENGINE OPTION HARNESS
- NO POWER TERMINAL STRIP
- SINGLE CIRCUIT BREAKER
- 400A 100% RATED BREAKER
- NO 2ND CIRCUIT BREAKER
- SUSE DECALS AND FILMS
- AUXILIARY CONTACTS
- STD AIR CLEANER
- STANDARD RADIATOR
- ENCLOSURE SILENCER
- QTY REMOTE ANNUNC
- PRODUCT LINK 4G LTE TELEMATICS
- AMERICAS BAND
- ACCEPT - REVIEW LINK IN DESC
- CAN2 SERVICE CONNECTOR HARNESS
- STD TEST - PKG GEN SET 0.8 PF
- ALTERNATOR TEST REPORT
- 4 HOUR TEST REPORT @ 0.8PF
- PGS TEST REPORT @ 0.8 PF

Newport Coast LS Genset

- Description**
- EPA STATIONARY EMERGENCY
- 60HZ 3PH 480/277V VOP601
- STANDBY POWER
- 60 Hz, 175 kW
- D175 60HZ 480V
- ENGLISH PANEL LANGUAGE
- UL 2200 LISTED PACKAGE GEN SET
- IBC SEISMIC CERT OF COMPLIANCE
- ENGLISH INSTRUCTION LANGUAGE
- GENERAL EPG
- PUBLIC OR CIVIL SERVICES
- STANDBY POWER
- ALT SPACE HEATER
- 105C TEMP RISE OVER 40C AMB
- LC5014F 60Hz SE ALT AC
- PERMANENT MAGNET EXCITATION
- SKID WITH FUEL TANK
- SUB BASE TANK 408 GAL



QUOTATION

NO. 220045

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- OVERFILL PREV & DROP TUBE 24HR
- NO TANKS RISER
- STANDARD VENT PIPE 12ft EXTENS
- Fuel Level Alarms / SD
- EMERGENCY FUEL VENT PIPE UL-4"
- NO ENCLOSURE REQUIRED
- NO ENCLOSURE REQUIRED
- WIRING FOR CANOPY SPACE HEATER
- CONTROL PANEL
- NFPA BUNDLE
- DISCRETE I/O MODULE
- GROUND FAULT RELAY INDICATION
- WET BATTERY (B1W)
- NFPA BATT CHARGER UL10A 120VAC
- JACKET WATER HEATER
- NO EXTERNAL EMERGENCY STOP
- VOLT FREE CONTACTS GENSET RUN
- LOW COOLANT LEVEL SHUTDOWN 1
- OVERLOAD ALARM SWITCH PPo1_I
- SEISMIC VIBRATION ISOLATOR (C)
- CONTROL PANEL OPTIONS BOX
- PANEL MOUNTED AUDIBLE ALARM
- ENGINE OPTION HARNESS
- NO POWER TERMINAL STRIP
- SINGLE CIRCUIT BREAKER
- 400A 100% RATED BREAKER
- NO 2ND CIRCUIT BREAKER
- SUSE DECALS AND FILMS
- AUXILIARY CONTACTS
- STD AIR CLEANER
- STANDARD RADIATOR
- SHIP LOOSE DPF
- RADIATOR TRANSITION FLANGE
- RADIATOR STONE GUARD
- QTY REMOTE ANNUNC
- REMOTE E-STOP BUTTON
- PRODUCT LINK 4G LTE TELEMATICS
- AMERICAS BAND
- ACCEPT - REVIEW LINK IN DESC
- CAN2 SERVICE CONNECTOR HARNESS
- STD TEST - PKG GEN SET 0.8 PF
- ALTERNATOR TEST REPORT
- 4 HOUR TEST REPORT @ 0.8PF
- SHRINK WRAP PROTECTION 21
- PGS TEST REPORT @ 0.8 PF

Accessories and/or modifications

Initial fill of coolant and lube oil
(1 set) Operation & Maintenance manuals (electronic copy) *
Factory warranty - 5 years from startup service
Fuel Tank Normal Vent Extension (12'ft above grade) *

QPS field work

Delivery to jobsite (**offload/crane service by others**)



QUOTATION

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NFPA 110 Startup Service [*incl. generator inspection, 4hr load bank & 2hr building load test*] ~ per specification
On-site Training Session [*single, 8 hour day per generator per specification*]
Ship Loose Rypos Active DPF to Newport Coast LS site, all other exhaust system components by others
Ship pre-fit DPF Structural steel stand and Rypos Active DPF pre-fit to Canada LS site. Installation supervision provided.
SCAQMD Permits – ultimate authority lies with SCAQMD. Permit fees included based on SCAQMD Permit consultant and IRWD participation during bid stage. Subject to change.
1 year/1 site visit for maintenance per specification
** See adder price below for a separate/additional training session**

Not included

- Sales tax
- Anchors
- Building or construct permits
- Offloading/crane service of equipment off delivery truck
- Installation, wiring, piping, plumbing or anchoring of equipment
- Diesel fuel, initial fill or for testing

Optional adders

- Anchor Calculations – Add: **\$500.00** (per piece of equipment)
- Pre-Startup Readiness Inspection (single day visit with contractor) – Add: **\$1,600.00**
- Additional On-site Training Session [*single, 4 hour day*] – Add: **\$1,100.00**

- * = Shipped loose to jobsite, installed on site by others.
- ^ = Installed, assembled or prepared by QPS or 3rd party.
- + = Pre-assembled, removed for shipping, re-installed on site by others.
- ~ = Service truck must be able to park within 25ft horizontally & vertically of unit, over 25ft at additional cost, based on T&M and billed direct from QPS Service department.

Availability:

- Submittals:** Estimated (8+ Weeks) on receipt and approval of purchase order. (1 electronic copy)
 - Equipment:** Estimated (44-46 Weeks) for factory build time after submittal approval.
 - Modifications:** Estimated (Additional time for Canada LS is TBD) additional time will vary depending on 3rd party or Quinn shop schedule and scope of work.
 - Not included:** Unforeseen factory delays, transit time from factory or vendor and/or delays due to project site readiness.
- ** Equipment prices and lead times are subject to change without notice.****

NOTES, EXCEPTIONS, CLARIFICATION

- Quinn Power Systems is not a general, electrical or installing contractor. Providing equipment and services as described above only.
- The equipment offered in this proposal is CAT standard product (with modifications) as listed above based specification “Standby Diesel Engine Generator Sets Pre-purchase Specification section 16620 (19 pages, dated 09/29/2022)) provided for review. No other written details, plans, specification sections, contract documents, general or supplementary conditions apply to this quotation. Equipment is as stated above, call for any revisions to equipment quoted. Exception taken to anything not included in this proposal and as listed below.
- Quotation does not include any Sales Tax, Building Permits, Off-loading or Crane Services, Installation or Anchoring, Initial Fuel fill or Test fuel, Major Testing unless otherwise specified in the Bill of Materials.
- Depending on final height of installed generator set, a working platform may be required to access the control panel and maintenance doors. Platforms are not included in this proposal, unless stated above. Call for revised quotation if required.
- Startup/Commissioning Services are provided for CAT factory/QPS supplied equipment only. Scope of work for Startup Services available upon request. Out of Scope services are billed on a Time & Material basis in the field at purchaser's expense. QPS standard labor rates apply. Technician services are provided during normal business hours Monday through Friday.
- Exception taken to any NETA 3rd party or independent testing requirements. Any and all testing as listed above to be provided by QPS technicians.
- **Part 1 A1 – Canada LS will require a DPF. A RYPOS Active DPF with support stand has been quoted**
- **Part 1 C1 – Please reference generator spec sheets for applicable standards and codes. Not all may apply**
- **Part 1 C2&4 – Canada LS and Newport Coast LS will be tested without the DPF as this is aftermarket. Factory load bank tests will be 4 hour standard CAT factory test**
- **Part 1 D3 – Exception to “Any changes to equipment and/or emission requirements that occur after the initial submittal to SCAQMD shall be made at the Generator Vendor’s sole expense”. Quinn Power Systems does not have any control over the final say of each sites requirements for after-treatment. Any final changes required by SCAQMD will be passed on in the form of a change order. Quinn Power Systems partnered with a licensed SCAQMD permit consultant for this quotation and it was reviewed to the most current site addresses, maps, and SCAQMD requirements.**



QUOTATION

NO. 220045

3500 Shepherd Street, City of Industry, California 90601
Box 226789, Los Angeles, California 90022-0744
(562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

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- Part 1 E1 – warranty begins at start up not delivery.
- Part 1 E2 – One year/one site visit per unit included in quote
- Part 2 B3 – sizing in this specification has been used to produce quotation. If sizing is required by generator manufacturer, it will be provided in the submittal. If kW sizes are found to differ from what has been specified, all costs will be passed on to IRWD
- Part 2 B3c7 – 105 degree is not available from CAT on the Canada LS site. 130 degree is being provided
- Part 2 F1&2 – Canada LS will require a DPF. A RYPOS Active DPF with support stand has been quoted
- Part 2 G2 – providing CAT factory standard battery charger that meets the intent of the specification
- Part 2 H – providing CAT factory fuel tanks that meet the intent of the specification and meet all local and CA codes
- Part 2 I2b – exception. Nema 4X panel not provided. Control panel is not Nema rated
- Part 2 J5a – a load center is available from the factory. Exception. No load center provided.
- Part 2 J6 – providing CAT factory sound enclosures that meet the intent of the spec and meet sound ratings at 75 dBA @ 23 ft. with the exception of University LS which is rated 76 dBA @ 23 ft. Providing CAT factory standard steel enclosures, exception to aluminum. Color is CAT White only. Anchor bolts by others. Anchor calculations by QPS (see adder cost if required)
- Part 2L – Providing CAT factory standard 4 hour test
- Part 3 A1 – a storage agreement must be completed prior to delivery to QPS yard. No cost will be added after 6 months.

EMISSIONS NOTE

- **"California Air Resources Board (CARB) has approved alignment with the federal New Source Performance Standards (NSPS). Such alignment allows for emergency standby engines to be exempt from Tier 4 emissions standards; however, local air districts can require more stringent emissions control. The prospective buyer of the equipment quoted above is hereby notified the NSPS exemption does not apply to non-emergency standby engines (e.g. prime power applications such as peak shaving, parallel operation with the grid, or storm avoidance), or portable engines, even if used for emergency standby. Consult the local air district for permitting requirements and required emissions controls. Presently, South Coast Air Quality Management District (SCAQMD) Rule 1470 requires the use of a particulate filter if an engine is located within 100 meters of a school, and may require either a diesel particulate filter or an oxidation catalyst, depending upon engine size, if the installation is within 50 meters of a sensitive receptor. Particulate filters may also be required for Title V and major polluting facilities. For emissions requirements specific to the project for which this engine is being quoted, please contact SCAQMD at 909-396-2000. Unless otherwise listed above a DPF is not included in this proposal, please call for quotation if a DPF is required for this project."**
- **Caterpillar engines require a minimum of 30% load to prevent engine damage due to wet-stacking. Depending upon the permit and site specific conditions, SCAQMD emergency engine permits will only allow between 20 and 50 hours of runtime per year for non-emergency applications such as testing and exercising. Passive Diesel Particulate Filter systems depend on generator loading of a minimum of 50-60% to achieve minimum exhaust temperature threshold to keep soot regeneration and the filter backpressure within acceptable levels. If the engine will be operated consistently at low loads/low exhaust temperatures, the customer should make provisions to add load via facility operations or a load bank. Active Diesel Particulate Filter systems require no external load in order to regenerate. If listed above, Passive DPF option pricing, does not include a load bank or a load bank circuit breaker. If a load bank is needed for this project, please call for quotation.**

TERMS AND CONDITIONS

1. Acceptance of Order.

This Quotation is for Buyer's information only and is not a valid offer to sell unless signed by an authorized representative of Seller in the place provided on the face of this Quotation. Prices, terms and conditions in an order from Buyer, which are inconsistent with the prices, terms and conditions of this Quotation, will be rejected by Seller, and are of no force and effect unless accepted in writing by Seller. Prices, delivery schedules and the scope of work on this Quotation are subject to change at Seller's discretion.

2. Liability.

Seller's liability on any claim of any kind, including claims for negligence, or for any loss or damage arising out of or connected with the manufacture, sale, delivery, installation, resale or use of any products covered by or furnished under any order connected with this Quotation shall be limited to those claims arising solely from the acts of Seller and Seller shall in no way be liable for any special, indirect, incidental or consequential damages. The term "consequential damages" shall include, but not be limited to, loss of anticipated profits, business interruption, loss of use, revenue, reputation and data, costs incurred, including without limitation, for capital, fuel, power and loss or damage to property or equipment. Buyer expressly acknowledges and agrees that Seller has set its prices in reliance upon the limitations of liability and other terms and conditions specified herein, which allocate the risk between Seller and Buyer and form a basis of this bargain between the parties. Any claims against Seller for shortages in shipments shall be made in writing to Seller within fifteen (15) days of receipt of shipment by Buyer. Unless otherwise provided for in writing, Seller's responsibility for shipment ceases upon delivery to carrier, and any claims for shortage, delays or damage occurring thereafter shall be made direct to carrier by Buyer. Seller shall not be liable for any delays in delivery attributable to strikes, labor disputes, lockouts, accidents, fires, delays in manufacture or in transportation, delays in delivery of component materials, floods, severe weather, or Acts of God, embargoes, governmental actions, or any other cause beyond the reasonable control of Seller. Seller shall not indemnify nor be liable to Buyer, Buyer's assigns, successors, purchasers, lessees or licensees, or to any person or entity for any claims, losses, expenses or judgments arising out of or resulting in any way from the product or integration of compatibility of the product with any other components, processes, facilities or equipment that does not comply with the equipment manufacturer(s)'s recommendations.

3. Shipments.

Unless otherwise specified, all risk of loss from the goods shall shift to Buyer at such time as the goods are delivered to a carrier for shipment to Buyer. Unless otherwise specified, shipment dates are approximate and all quoted prices exclude shipping costs. Shipment of goods under any order accepted by Seller shall be subject to the approval by Seller of Buyer's financial condition at the time of shipment. Whether or not terms of payment are specified elsewhere, Seller may, at its option, condition shipments under any order accepted by Seller upon receipt of satisfactory security or of cash prior to shipment. If, at Buyer's request, shipment of goods under any order accepted by Seller is delayed more than thirty (30) days after the shipment date specified in the order, or the date the goods are ready for shipment, whichever is later, Seller will require immediate payment in full and/or assess additional charges for the expenses incident to such delay.

4. Termination.

In the absence of a written agreement between Buyer and Seller expressing different terms and conditions as to termination, any order accepted by Seller may be terminated prior to completion by Buyer only upon written notice to Seller and payment of Seller's termination charges. If notice of termination is received by Seller after Seller has committed to buy the principal components for any order, termination charges shall include all direct and indirect costs incurred by Seller and the total profit anticipated by Seller. Additionally, Buyer's instruction to Seller to stop work for thirty (30) days during the time specified for performance in any order may be construed by Seller as the equivalent of written notice of termination from Buyer and previous stipulations will be in effect.

5. Taxes.

Unless expressly stated, Seller's prices do not include sales, use, excise or similar taxes, which Seller may be required to pay in filling Buyer's order. The amount of any applicable tax shall be paid by Buyer as an additional charge unless specifically included in any order accepted by Seller, or in lieu thereof, Buyer shall provide Seller with a tax exemption certificate acceptable to the taxing authorities.

6. Patents.

Seller shall, at its own expense, defend and save Buyer harmless from the expenses and consequences of any suit or procedure brought against Buyer, based on a claim that the use or sale of goods specified in any order accepted by Seller constitutes an infringement of any United States letters of patent in existence on the date of any such order; provided Buyer promptly notifies Seller in writing of such claim and gives the necessary authorization, information and assistance for the defense of such a claim.

7. Changes.

Seller, and Seller's suppliers, may, at any time, without notice to Buyer, make changes (whether in design, materials, the addition of improvements, or otherwise) in any goods specified in any order accepted by Seller without incurring any obligation of any kind as a result thereof, but only to the extent that such change does not cause the goods specified to fail to meet Buyer's requirements. Buyer may, in its order, provide for changes in its requirements with provision for a corresponding equitable change in the price, if any; but in no instance shall Buyer make changes, which are substantially different from the scope of the original order accepted by Seller.

8. Export Sales.

In the event the goods and services specified in any order accepted by Seller are for export, the Buyer shall be responsible for securing export, import and other licenses or authorizations as may be required. The conditions specified in this Section apply to all export transactions. This transaction is only for the sale of the equipment requested and detailed in this Quotation. Not included is any startup assistance, field-testing, training or any other services that might be required on site. Also not included is any installation, installation audits, sea trials (if applicable), or installation materials. To ensure proper application, installation, and warranty integrity, Buyer is encouraged to contact the applicable Caterpillar Dealer for these services. The costs of these services are not included in the sale price nor will Seller be responsible for any such related costs.

9. Permits for Equipment Design, Installation and Operation.

As a supplier of equipment, disclaims responsibility for any and all permits or licenses necessary to design, install and operate the equipment due to zoning, air quality, environmental, safety, building or construction codes or use permits pertaining to Buyer's particular application of such equipment or any similar type of permit. Special attention should be given to the requirements of local air district rules and California Air Resources Board (CARB) regulations pertaining to permit requirements. Seller is quoting on equipment based on the specifications set forth in this Quotation. If additional equipment or engine modifications are required beyond the specifications, such as additional equipment required for compliance by a local air district or CARB, those items are not included and are the responsibility of Buyer. For example, South Coast AQMD (SCAQMD) Rule 1470 may require controls and limits on particulate matter, especially when the engine installation is within 100-meters from a school, or within 50 meters of a sensitive receptor (defined in Rule 1470). Ultra low sulfur fuel is required for particulate filters. CARB Diesel Fuel, or other CARB-approved alternative fuel, is also required for compression ignition (CI) engines operated in California. When indicated in the bill of materials, the proposed equipment may be SCAQMD pre-approved as Certified Equipment. This certification does not eliminate the permit process or responsibility of others to obtain a permit. Procurement of certified equipment assures permitability, reduces the permit processing fees and reduces the time necessary to obtain the permit through SCAQMD.

10. Start-up, Commissioning and Operating Requirements.

Equipment provided in this Quotation may require start-up and commissioning, including inspection(s), to ensure the equipment is installed in accordance with manufacturer(s)'s recommendations and specifications. If Seller has commissioned the equipment, Buyer agrees not to modify the design or components of the installation such that the modifications would violate any legal requirements of the installation, or would cause the installation to deviate from manufacturer(s)'s recommendations and specifications. Buyer acknowledges and agrees that, with respect to products sold to Buyer in connection with this Quotation, Buyer shall have the sole responsibility to ensure the products are properly installed, operated and maintained in accordance with the manufacturer(s)'s recommendations and specifications, and to determine and



QUOTATION

NO. 220045

3500 Shepherd Street, City of Industry, California 90601
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(562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

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comply with all applicable Federal, state, local and regulated use restrictions and requirements, including, without limitation, the continuing responsibility to ensure that the use of product is in full compliance with all applicable environmental laws and regulations. Failure to install, operate and maintain the products in accordance with the manufacturer(s)'s recommendations and specifications will invalidate any applicable manufacturer's warranty.

11. Additional material.

Only those items listed in this Quotation are included with any order. For example, unless specifically identified in this Quotation, the following items are not included with any purchased equipment: any exhaust or fuel piping, main fuel tank, fuel, duct work, special tools, insulation, wiring, cable, bus duct, concrete, anchor bolts, rigging or any material or labor incidental to the installation itself. Buyer specifically assumes responsibility for the provision of any such items if not specifically identified in the Quotation.

12. Hours of services.

When included, delivery, startup assistance, field testing, training or any other services required on site will be provided during the normal weekday working hours of 7:00 am to 4:30 pm. Delivery or services occurring at any other time, weekends or holidays is subject to premium charges.

13. Warranty.

The equipment manufacturer's warranty is the only warranty provided in connection with the equipment described in this Quotation. Buyer is responsible for operating and maintaining the equipment as specified by the manufacturer. The manufacturer's warranties are exclusive and in lieu of all other warranties either oral or written, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Seller is not a manufacturer and makes no warranty and shall not, under any circumstances, be liable for any indirect or special, incidental or consequential damages including but not limited to loss of production, loss of profit, loss of use or business interruption, or any other economic loss, whether arising from contract, tort, strict liability or any other theory of law. Buyer, Buyer's assigns, successors, purchasers or any other person designated to operate the equipment as the end user, is responsible for operating the equipment in accordance with manufacturer(s)'s recommendations and specifications. Failure to perform all scheduled maintenance may result in damage to the equipment, and may be grounds to deny warranty coverage.

14. Terms.

Terms of payment are due upon receipt of invoice with no deductions of any kind for retentions, setoffs, discounts or other similar items. A finance charge of 1.5% per month (not to exceed the maximum allowed by law) will be charged on all past due invoices. When necessary Seller will file a California "Preliminary 20-day notice" pursuant to Section 3097 of the California Civil Code.

15. Cost additives.

A: Unit Cost.

Quotation prices are valid for 30 days only and are based on current market prices as of date of quotation. The Seller reserves the right to adjust the final invoice with a price escalation up to 6% due to 1) purchase orders being received after expiration of quotation, 2) fluctuations in raw materials market prices at time of order, 3) labor rate increases at time of scheduled field services, 4) delays in submittal approvals and/or release of equipment or 5) additional items or services provided that were not included as part of the original quotation. Since final invoicing can and may take place up to a year or more from original quotation date.

B: Delays.

If delivery is delayed by customer Buyer beyond original shipment date, purchase price is due 30 days after original shipment date and a storage and handling charge will be applied and is due each month until delivery. Finance charge of 1.5% per month (not to exceed the maximum allowed by law) is applicable on any amounts arising hereunder or in connection herewith that are not paid when due.

C: Start up.

If construction of the facility or other delays are experienced or expected, which prohibit the initial startup of the equipment beyond one year from delivery additional costs may be imposed including, but not be limited to, long term storage preparation, inspection charges, parts, service, etc.

16. Lead Times.

Lead times are based on manufactures estimated timetables. Project completion time may vary due to delays in receipt of purchase orders, submittal approval, release of equipment, manufactures unforeseen delays in production or holiday schedules. Project completion time frame cannot be guaranteed. Back orders will be processed as soon as available. Part number changes may be made to provide latest improved interchangeable items of equipment.

17. Governing Law and Venue.

The rights and obligations of the parties with respect to the transactions contemplated by this Quotation shall be governed in all respects by the laws of the State of California. The parties hereto irrevocably agree that the exclusive venue for any litigation arising in connection with the transactions specified in this Quotation shall be in the courts located in the County of Los Angeles, California.

18. Attorneys' Fees and Costs.

In the event of any legal action, controversy, claim, or dispute between the parties involving the transactions contemplated by this Quotation, the prevailing party shall be entitled to recover from the other party reasonable expenses, attorneys' fees, and costs.

19. Additional Conditions.

Buyer shall furnish to Seller, at no cost, suitable working space, storage space, adequate heat, telephone, light, ventilation, regulated electric power and outlets for testing purposes (if applicable). The facilities shall be within a reasonable distance from where any applicable services are to be provided. Seller and its representatives shall have full and free access to the equipment in order to provide any applicable services. Buyer shall provide the means to shut-off and secure electric power to the equipment and provide safe working conditions. Buyer shall not require Seller or its employees, as a condition to site access or otherwise, to further agree or enter into any agreement, which waives, releases, indemnifies or otherwise limits or expands any rights or obligation whatsoever. Any such agreements shall be null and void. Seller is under no obligation to remove or dispose of parts or equipment unless specifically agreed upon in Seller's scope of work. Seller-removed parts become the property of Seller. Seller must not perform any electrical power switching unless specifically requested by Buyer, under the supervision of Buyer, and subject to procedures jointly agreed to in advance. Notwithstanding Buyer's request, Seller may refuse to perform power switching, if in the opinion of Seller, such action would be unsafe. IN THE EVENT THAT SELLER PERFORMS POWER SWITCHING, TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER SHALL INDEMNIFY, DEFEND, AND HOLD SELLER HARMLESS FROM ANY AND ALL LIABILITY, ACTIONS, SUITS, CLAIMS, DEMANDS, DAMAGES, COSTS, AND EXPENSES ("LOSSES") ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR RESULTING FROM SELLER'S PERFORMANCE OF POWER SWITCHING, REGARDLESS OF WHETHER THE LOSSES RESULT FROM SELLER'S NEGLIGENCE (WHETHER ACTION OR PASSIVE, AND WHETHER SOLE, JOINT, OR CONCURRENT), AND EVEN THOUGH CAUSED IN WHOLE OR IN PART BY A PRE-EXISTING DEFECT, STRICT LIABILITY, OR OTHER LEGAL FAULT OF SELLER. THIS INDEMNITY SHALL APPLY TO ANY ACTS OR OMISSIONS OR NEGLIGENT CONDUCT, WHETHER ACTIVE OR PASSIVE, ON THE PART OF EITHER SELLER OR BUYER. If OSHA or any other federal, state or local government, trade association, or contractual regulations or standards require a "safety person" to be on site during the performance of services, or in the event of a trade union jurisdictional dispute where trade union represented personnel are required to assist or stand by during the performance of services by Seller, Buyer shall be responsible for providing for and paying for any charge or wages for such person(s), as applicable. Buyer shall immediately inform Seller, in writing, at the time of order placement and thereafter, of any unsafe or hazardous substance or condition at the site, including, but not limited to, the presence of asbestos or asbestos-containing materials, and shall provide Seller with any applicable Material Data Safety Sheets regarding the same. Any losses, costs, damages, claims and expenses incurred by Seller as a result of Buyer's failure to advise Seller shall be borne by Buyer. Seller, in its sole discretion and without cost or penalty, reserves the right to cancel its performance under this Agreement or any order immediately upon written notice to Buyer following Seller's discovery of unsafe or hazardous site substance or condition or any other circumstance altering Seller performance of Services. Buyer shall appoint a representative familiar with the site and the nature of the Services to be performed by Seller to be accessible at all times that Seller personnel are at the site. Seller shall not be liable for any expenses incurred by Buyer in removing, replacing or refurbishing any Buyer equipment or any part of Buyer's building structure that restricts Seller's access. Buyer's personnel shall cooperate with and provide all necessary assistance to Seller. Seller shall not be liable or responsible for any work performed by Buyer.

ACCEPTED BY:

By: _____

Company: _____

Date: _____

P.O. #: _____

SUBMITTED BY:

By: Pete Vainoris

Quinn Power Systems

Phone: 562-201-3428



QUOTATION

211034R3

3500 Shepherd Street, City of Industry, California 90601
 (562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

Page: 1 of 5

To: Contact: Harry Cho
 Company: Irvine Ranch Water District
 Address: 15600 Sand Canyon Ave.
 City, Zip: Irvine, CA 92618
 Phone: 949-453-5675 Email: CHO@irwd.com

Terms: Net 30
 F.O.B. QPS City of Industry, CA
 Sales Rep.: Matt Stephens
 Contact #: Office: (562) 463-6062 Cell: (818) 739-9764
 Email: Matthew.Stephens@quinnpower.com

Project Name: Irvine Ranch Water District Pre Purchase Foothill Zone 4-6 PS 1000kW

Qty:	Description	Unit Price	Extension
1	Foothill Zone 4-6 PS 1000kW New Caterpillar Model C32, EPA Tier 2 Stationary Emergency certification, UL2200 listed, Diesel Standby Generator Set, 1000 kW / 1250 kVA, 480 volt, 3 Phase 4W. SCAQMD Pre-certified. Weather enclosure mounted on a 5000 Gallon UL-142 Listed sub base fuel tank. - Caterpillar factory Sound Attenuated Enclosure 75dBA @ 23 feet at full load - Diesel Particulate filter NOT required	\$486,000.00 7.75% Sales Tax	\$486,000.00 \$37,665.00
1	5 Year Extended Service Coverage 60 Month 2000 hours Warranty	Included	Included
1	1 year Customer Service Agreement	Included	Included
NOTE: Stamped seismic anchor calcs provided with custom fuel tank package. Fuel Tank does NOT include epoxy interior coating as is NOT recommended by the supplier Block Heater input voltage cannot be changed to 480 volt. Factory Load Center and AC devices are fed by off of 120/220/240 Single phase normal power. Quinn Power Systems will store these units for 6 months at no cost as long as IRWD pays for the equipment when it arrives at Quinn Power System's yard. IRWD will be required to sign the Quinn storage agreement. -Freight and offloading is included to Quinn Power Systems, City of Industry, CA Only. Clarification: For equipment held for customer in City of Industry, freight to jobsite is not included and is by others. For equipment shipped directly from manufacturer to the job site, freight is included.			
Total sales price including sales tax			\$523,665.00
PRICING IS VALID FOR ORDERS PLACED BY 1/31/23			

UNLESS OTHERWISE INDICATED ON PROPOSAL SALES TAX NOT INCLUDED. Buyer responsible for all taxes. Any offer to sell or any offer accepted shall be subject to the Terms and Conditions page. Unless expressly stated on the face of this quotation, all prices, delivery schedules and product specifications are subject to change without notice.
Quotation is good for orders placed by January 31, 2023.



BILL OF MATERIALS

- Outdoor Installation sound attenuated enclosure
- UL2200 Listed Packaged Genset
- Caterpillar automatic start control panel, digital Integrated; generator mounted, digital readouts
 - Panel illumination lights and auxiliary relays with NFPA 110 Alarms including:
 - Engine Run
 - Not in Auto
 - Common Alarm
 - Coolant level sensor
 - Hi/Low fuel level
- Local NFPA Annunciator (NFPA 99-110) w/ RS-485 Data link, installed
- Generator mounted circuit breaker: 1600AF/1600AT 100% rated LSIP & ERMS protection
- Electronic governor, Advanced Diesel Engine Management (ADEM)
- Caterpillar Integrated Voltage Regulator (IVR)
- 105 Deg C Rise Alternator with PMG Excitation
- Primary fuel filter and water separator
- Lube oil drain valve and initial fill of lube oil
- Initial fill of coolant, 50% solution
- Standard starter motor 24 volt
- Batteries, lead acid type with battery rack and cables mounted
- 100/150 Amp load center
- Battery charger, 10 amp with alarms mounted within the generator enclosure
- Jacket water heater, 208-240 volt with isolation valves and pump
- 75dBA Sound attenuated weather protective outdoor enclosure
 1. Internal vibration isolators
 2. Critical grade silencer internal installation with ss flex
- 5000 Gallon DW UL-142 Listed sub base fuel tank 24 hour run time at full load
 1. Hi/Low fuel level programmable
 2. Rupture/derangement alarm
 3. 95% OPV
 4. 12 foot main vent extension
 5. 5 gallon spill bucket
- Submittals and Shop drawings (electronic)
- Operation and Maintenance Manuals (electronic)
- Factory load test reports 4 hours
- Seismic calculations by State Structural Engineer to meet Zone 4 requirements
- Delivery to jobsite, off-loading by others
- Startup assistance, engineering, phase rotation check by Caterpillar Certified Technician
- Field load test 25% for 30 minutes, 50% for 60 minutes, 75% for 60 minutes, 2-hours at 100% rated load with QPS supplied 1.0 pf load bank and cables (up to 50' run)
- NFPA 110 testing. All start up and testing will be performed by Quinn Power Systems Factory Certified Technicians
- Field certified test reports (electronic)
- Demonstrate safety shut downs
- On-site training for one (1) working day (minimum 4 hours of instructions)

Not included

- Sales tax
- Air or building permits
- Offloading of equipment
- Installation or anchoring
- Diesel fuel, initial or for testing

Lead Times:

- Submittals:* Estimated (10 Weeks) on receipt and approval of purchase order. (1 electronic copy)
 - Equipment Delivery: Generator* Estimated (58-62 Weeks);
 - Modifications:* Estimated (Additional time TBD) additional time will vary depending on 3rd party or Quinn shop schedule and scope of work.
 - Not included:* Unforeseen factory delays, transit time from factory or vendor and/or delays due to project site readiness.
- ** Equipment prices and lead times are subject to change without notice.****



QUOTATION

211034R3

3500 Shepherd Street, City of Industry, California 90601
(562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

Page: **3 of 5**

NOTES, EXCEPTIONS, CLARIFICATION

The equipment offered in this proposal is CAT standard product (with modifications) as listed above based specification "Standby Diesel Engine Generator Sets Pre-purchase Specification section 16620 (19 pages, dated 09/29/2022)) provided for review. No other written details, plans, specification sections, contract documents, general or supplementary conditions apply to this quotation. Equipment is as stated above, call for any revisions to

- **equipment quoted. Exception taken to anything not included in this proposal and as listed below.**
- Quotation does not include Sales Tax, any Air District or Building Permits, Off-loading or Crane Services, Installation or Anchoring, Initial Fuel fill or Test fuel, Major Testing unless otherwise specified in the Bill of Materials.
- Depending on final height of installed generator set, a personal platform may be required to access the control panel and maintenance doors. Platform not included in this proposal, if required please call for quotation.
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- **Two (2) hour load Bank Testing with a resistive Load Bank is included**

EMISSIONS NOTE

- "California Air Resources Board (CARB) has approved alignment with the federal New Source Performance Standards (NSPS). Such alignment allows for emergency standby engines to be exempt from Tier 4 emissions standards; however, local air districts can require more stringent emissions control. The prospective buyer of the equipment quoted above is hereby notified the NSPS exemption does not apply to non-emergency standby engines (e.g. prime power applications such as peak shaving, parallel operation with the grid, or storm avoidance), or portable engines, even if used for emergency standby. Consult the local air district for permitting requirements and required emissions controls. Presently, South Coast Air Quality Management District (SCAQMD) Rule 1470 requires the use of a particulate filter if an engine is located within 100 meters of a school, and may require either a diesel particulate filter or an oxidation catalyst, depending upon engine size, if the installation is within 50 meters of a sensitive receptor. Particulate filters may also be required for Title V and major polluting facilities. For emissions requirements specific to the project for which this engine is being quoted, please contact SCAQMD at 909-396-2000. Unless otherwise listed above a DPF is not included in this proposal, please call for quotation if a DPF is required for this project."
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This Quotation is for Buyer's information only and is not a valid offer to sell unless signed by an authorized representative of Seller in the place provided on the face of this Quotation. Prices, terms and conditions in an order from Buyer, which are inconsistent with the prices, terms and conditions of this Quotation, will be rejected by Seller, and are of no force and effect unless accepted in writing by Seller. Prices, delivery schedules and the scope of work on this Quotation are subject to change at Seller's discretion.

2. Liability.

Seller's liability on any claim of any kind, including claims for negligence, or for any loss or damage arising out of or connected with the manufacture, sale, delivery, installation, resale or use of any products covered by or furnished under any order connected with this Quotation shall be limited to those claims arising solely from the acts of Seller and Seller shall in no way be liable for any special, indirect, incidental or consequential damages. The term "consequential damages" shall include, but not be limited to, loss of anticipated profits, business interruption, loss of use, revenue, reputation and data, costs incurred, including without limitation, for capital, fuel, power and loss or damage to property or equipment. Buyer expressly acknowledges and agrees that Seller has set its prices in reliance upon the limitations of liability and other terms and conditions specified herein, which allocate the risk between Seller and Buyer and form a basis of this bargain between the parties. Any claims against Seller for shortages in shipments shall be made in writing to Seller within fifteen (15) days of receipt of shipment by Buyer. Unless otherwise provided for in writing, Seller's responsibility for shipment ceases upon delivery to carrier, and any claims for shortage, delays or damage occurring thereafter shall be made direct to carrier by Buyer. Seller shall not be liable for any delays in delivery attributable to strikes, labor disputes, lockouts, accidents, fires, delays in manufacture or in transportation, delays in delivery of component materials, floods, severe weather, or Acts of God, embargoes, governmental actions, or any other cause beyond the reasonable control of Seller. Seller shall not indemnify nor be liable to Buyer, Buyer's assigns, successors, purchasers, lessees or licensees, or to any person or entity for any claims, losses, expenses or judgments arising out of or resulting in any way from the product or integration of compatibility of the product with any other components, processes, facilities or equipment that does not comply with the equipment manufacturer(s)'s recommendations.

3. Shipments.

Unless otherwise specified, all risk of loss from the goods shall shift to Buyer at such time as the goods are delivered to a carrier for shipment to Buyer. Unless otherwise specified, shipment dates are approximate and all quoted prices exclude shipping costs. Shipment of goods under any order accepted by Seller shall be subject to the approval by Seller of Buyer's financial condition at the time of shipment. Whether or not terms of payment are specified elsewhere, Seller may, at its option, condition shipments under any order accepted by Seller upon receipt of satisfactory security or of cash prior to shipment. If, at Buyer's request, shipment of goods under any order accepted by Seller is delayed more than thirty (30) days after the shipment date specified in the order, or the date the goods are ready for shipment, whichever is later, Seller will require immediate payment in full and/or assess additional charges for the expenses incident to such delay.

4. Termination.

In the absence of a written agreement between Buyer and Seller expressing different terms and conditions as to termination, any order accepted by Seller may be terminated prior to completion by Buyer only upon written notice to Seller and payment of Seller's termination charges. If notice of termination is received by Seller after Seller has committed to buy the principal components for any order, termination charges shall include all direct and indirect costs incurred by Seller and the total profit anticipated by Seller. Additionally, Buyer's instruction to Seller to stop work for thirty (30) days during the time specified for performance in any order may be construed by Seller as the equivalent of written notice of termination from Buyer and previous stipulations will be in effect.

5. Taxes.

Unless expressly stated, Seller's prices do not include sales, use, excise or similar taxes, which Seller may be required to pay in filling Buyer's order. The amount of any applicable tax shall be paid by Buyer as an additional charge unless specifically included in any order accepted by Seller, or in lieu thereof, Buyer shall provide Seller with a tax exemption certificate acceptable to the taxing authorities.

6. Patents.

Seller shall, at its own expense, defend and save Buyer harmless from the expenses and consequences of any suit or procedure brought against Buyer, based on a claim that the use or sale of goods specified in any order accepted by Seller constitutes an infringement of any United States letters of patent in existence on the date of any such order; provided Buyer promptly notifies Seller in writing of such claim and gives the necessary authorization, information and assistance for the defense of such a claim.

7. Changes.

Seller, and Seller's suppliers, may, at any time, without notice to Buyer, make changes (whether in design, materials, the addition of improvements, or otherwise) in any goods specified in any order accepted by Seller without incurring any obligation of any kind as a result thereof, but only to the extent that such change does not cause the goods specified to fail to meet Buyer's requirements. Buyer may, in its order, provide for changes in its requirements with provision for a corresponding equitable change in the price, if any; but in no instance shall Buyer make changes, which are substantially different from the scope of the original order accepted by Seller.

8. Export Sales.

In the event the goods and services specified in any order accepted by Seller are for export, the Buyer shall be responsible for securing export, import and other licenses or authorizations as may be required. The conditions specified in this Section apply to all export transactions. This transaction is only for the sale of the equipment requested and detailed in this Quotation. Not included is any startup assistance, field-testing, training or any other services that might be required on site. Also not included is any installation, installation audits, sea trials (if applicable), or installation materials. To ensure proper application, installation, and warranty integrity, Buyer is encouraged to contact the applicable Caterpillar Dealer for these services. The costs of these services are not included in the sale price nor will Seller be responsible for any such related costs.

9. Permits for Equipment Design, Installation and Operation.

As a supplier of equipment, disclaims responsibility for any and all permits or licenses necessary to design, install and operate the equipment due to zoning, air quality, environmental, safety, building or construction codes or use permits pertaining to Buyer's particular application of such equipment or any similar type of permit. Special attention should be given to the requirements of local air district rules and California Air Resources Board (CARB) regulations pertaining to permit requirements. Seller is quoting on equipment based on the specifications set forth in this Quotation. If additional equipment or engine modifications are required beyond the specifications, such as additional equipment required for compliance by a local air district or CARB, those items are not included and are the responsibility of Buyer. For example, South Coast AQMD (SCAQMD) Rule 1470 may require controls and limits on particulate matter, especially when the engine installation is within 100-meters from a school, or within 50 meters of a sensitive receptor (defined in Rule 1470). Ultra low sulfur fuel is required for particulate filters. CARB Diesel Fuel, or other CARB-approved alternative fuel, is also required for compression ignition (CI) engines operated in California. When indicated in the bill of materials, the proposed equipment may be SCAQMD pre-approved as Certified Equipment. This certification does not eliminate the permit process or responsibility of others to obtain a permit. Procurement of certified equipment assures permitability, reduces the permit processing fees and reduces the time necessary to obtain the permit through SCAQMD.

10. Start-up, Commissioning and Operating Requirements.

Equipment provided in this Quotation may require start-up and commissioning, including inspection(s), to ensure the equipment is installed in accordance with manufacturer(s)'s recommendations and specifications. If Seller has commissioned the equipment, Buyer agrees not to modify the design or components of the installation such that the modifications would violate any legal requirements of the installation, or would cause the installation to deviate from manufacturer(s)'s recommendations and specifications. Buyer acknowledges and agrees that, with respect to products sold to Buyer in connection with this Quotation, Buyer shall have the sole responsibility to ensure the products are properly installed, operated and maintained in accordance with the manufacturer(s)'s recommendations and specifications, and to determine and comply with all applicable Federal, state, local and regulated use restrictions and requirements, including, without limitation, the continuing responsibility to ensure that the use of product is in full compliance with all applicable environmental laws and regulations. Failure to install, operate and maintain the products in accordance with the manufacturer(s)'s recommendations and specifications will invalidate any applicable manufacturer's warranty.

11. Additional material.

Only those items listed in this Quotation are included with any order. For example, unless specifically identified in this Quotation, the following items are not included with any purchased equipment: any exhaust or fuel piping, main fuel tank, fuel, duct work, special tools, insulation, wiring, cable, bus duct, concrete, anchor bolts, rigging or any material or labor incidental to the installation itself. Buyer specifically assumes responsibility for the provision of any such items if not specifically identified in the Quotation.

12. Hours of services.

When included, delivery, startup assistance, field testing, training or any other services required on site will be provided during the normal weekday working hours of 7:00 am to 4:30 pm. Delivery or services occurring at any other time, weekends or holidays is subject to premium charges.

13. Warranty.

The equipment manufacturer's warranty is the only warranty provided in connection with the equipment described in this Quotation. Buyer is responsible for operating and maintaining the equipment as specified by the manufacturer. The manufacturer's warranties are exclusive and in lieu of all other warranties either oral or written, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Seller is not a manufacturer and makes no warranty and shall not, under any circumstances, be liable for any indirect or special, incidental or consequential damages including but not limited to loss of production, loss of profit, loss of use or business interruption, or any other economic loss, whether arising from contract, tort, strict liability or any other theory of law. Buyer, Buyer's assigns, successors, purchasers or any other person designated to operate the equipment as the end user, is responsible for operating the equipment in accordance with manufacturer(s)'s recommendations and specifications. Failure to perform all scheduled maintenance may result in damage to the equipment, and may be grounds to deny warranty coverage.

14. Terms.

Terms of payment are due upon receipt of invoice with no deductions of any kind for retentions, setoffs, discounts or other similar items. A finance charge of 1.5% per month (not to exceed the maximum allowed by law) will be charged on all past due invoices. When necessary Seller will file a California "Preliminary 20-day notice" pursuant to Section 3097 of the California Civil Code.



QUOTATION

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3500 Shepherd Street, City of Industry, California 90601
(562) 463-6000 Fax: (562) 463-7156

Date: December 14, 2022

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15. Cost additives.

A: Unit Cost. Quotation prices are valid for 30 days only and are based on current market prices as of date of quotation. The Seller reserves the right to adjust the final invoice with a price escalation up to 6% due to 1) purchase orders being received after expiration of quotation, 2) fluctuations in raw materials market prices at time of order, 3) labor rate increases at time of scheduled field services, 4) delays in submittal approvals and/or release of equipment or 5) additional items or services provided that were not included as part of the original quotation. Since final invoicing can and may take place up to a year or more from original quotation date.

B: Delays. If delivery is delayed by customer Buyer beyond original shipment date, purchase price is due 30 days after original shipment date and a storage and handling charge will be applied and is due each month until delivery. Finance charge of 1.5% per month (not to exceed the maximum allowed by law) is applicable on any amounts arising hereunder or in connection herewith that are not paid when due.

C: Start up. If construction of the facility or other delays are experienced or expected, which prohibit the initial startup of the equipment beyond one year from delivery additional costs may be imposed including, but not be limited to, long term storage preparation, inspection charges, parts, service, etc.

16. Lead Times.

Lead times are based on manufactures estimated timetables. Project completion time may vary due to delays in receipt of purchase orders, submittal approval, release of equipment, manufactures unforeseen delays in production or holiday schedules. Project completion time frame cannot be guaranteed. Back orders will be processed as soon as available. Part number changes may be made to provide latest improved interchangeable items of equipment.

17. Governing Law and Venue.

The rights and obligations of the parties with respect to the transactions contemplated by this Quotation shall be governed in all respects by the laws of the State of California. The parties hereto irrevocably agree that the exclusive venue for any litigation arising in connection with the transactions specified in this Quotation shall be in the courts located in the County of Los Angeles, California.

18. Attorneys' Fees and Costs.

In the event of any legal action, controversy, claim, or dispute between the parties involving the transactions contemplated by this Quotation, the prevailing party shall be entitled to recover from the other party reasonable expenses, attorneys' fees, and costs.

19. Additional Conditions.

Buyer shall furnish to Seller, at no cost, suitable working space, storage space, adequate heat, telephone, light, ventilation, regulated electric power and outlets for testing purposes (if applicable). The facilities shall be within a reasonable distance from where any applicable services are to be provided. Seller and its representatives shall have full and free access to the equipment in order to provide any applicable services. Buyer shall provide the means to shut-off and secure electric power to the equipment and provide safe working conditions. Buyer shall not require Seller or its employees, as a condition to site access or otherwise, to further agree or enter into any agreement, which waives, releases, indemnifies or otherwise limits or expands any rights or obligation whatsoever. Any such agreements shall be null and void. Seller is under no obligation to remove or dispose of parts or equipment unless specifically agreed upon in Seller's scope of work. Seller-removed parts become the property of Seller. Seller must not perform any electrical power switching unless specifically requested by Buyer, under the supervision of Buyer, and subject to procedures jointly agreed to in advance. Notwithstanding Buyer's request, Seller may refuse to perform power switching, if in the opinion of Seller, such action would be unsafe. IN THE EVENT THAT SELLER PERFORMS POWER SWITCHING, TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER SHALL INDEMNIFY, DEFEND, AND HOLD SELLER HARMLESS FROM ANY AND ALL LIABILITY, ACTIONS, SUITS, CLAIMS, DEMANDS, DAMAGES, COSTS, AND EXPENSES ("LOSSES") ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR RESULTING FROM SELLER'S PERFORMANCE OF POWER SWITCHING, REGARDLESS OF WHETHER THE LOSSES RESULT FROM SELLER'S NEGLIGENCE (WHETHER ACTION OR PASSIVE, AND WHETHER SOLE, JOINT, OR CONCURRENT), AND EVEN THOUGH CAUSED IN WHOLE OR IN PART BY A PRE-EXISTING DEFECT, STRICT LIABILITY, OR OTHER LEGAL FAULT OF SELLER. THIS INDEMNITY SHALL APPLY TO ANY ACTS OR OMISSIONS OR NEGLIGENT CONDUCT, WHETHER ACTIVE OR PASSIVE, ON THE PART OF EITHER SELLER OR BUYER. If OSHA or any other federal, state or local government, trade association, or contractual regulations or standards require a "safety person" to be on site during the performance of services, or in the event of a trade union jurisdictional dispute where trade union represented personnel are required to assist or stand by during the performance of services by Seller, Buyer shall be responsible for providing for and paying for any charge or wages for such person(s), as applicable. Buyer shall immediately inform Seller, in writing, at the time of order placement and thereafter, of any unsafe or hazardous substance or condition at the site, including, but not limited to, the presence of asbestos or asbestos-containing materials, and shall provide Seller with any applicable Material Data Safety Sheets regarding the same. Any losses, costs, damages, claims and expenses incurred by Seller as a result of Buyer's failure to advise Seller shall be borne by Buyer. Seller, in its sole discretion and without cost or penalty, reserves the right to cancel its performance under this Agreement or any order immediately upon written notice to Buyer following Seller's discovery of unsafe or hazardous site substance or condition or any other circumstance altering Seller performance of Services. Buyer shall appoint a representative familiar with the site and the nature of the Services to be performed by Seller to be accessible at all times that Seller personnel are at the site. Seller shall not be liable for any expenses incurred by Buyer in removing, replacing or refurbishing any Buyer equipment or any part of Buyer's building structure that restricts Seller's access. Buyer's personnel shall cooperate with and provide all necessary assistance to Seller. Seller shall not be liable or responsible for any work performed by Buyer.

ACCEPTED BY:

By: _____

Company: _____

Date: _____

P.O. #: _____