

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

August 14, 2017

PLEDGE OF ALLEGIANCE

CALL TO ORDER

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

ROLL CALL

Directors LaMar, Matheis, Swan, Withers and President Reinhart

Douglas Reinhart will participate via conference call.
Agenda posted at: 377 Arnold Lake Road, Milford, New York 13806

NOTICE

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

COMMUNICATIONS TO THE BOARD

1. A. Written:

B. Oral:

2. **ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

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

CONSENT CALENDAR

Resolution No. 2017-23

Items 3-8

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

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

4. **MINUTES OF REGULAR BOARD MEETING**

Recommendation: That the minutes of the July 24, 2017 Regular Board Meeting be approved as presented.

CONSENT CALENDAR – Continued

Resolution No. 2017-23

Items 3-8

5. BAKER WATER TREATMENT PLANT RETENTION REDUCTION

Recommendation: That the Board authorize the reduction of retention from 10% to 1% of the contract amount for the Baker Water Treatment Plant, Project 05027.

6. 2018 MEDICAL INSURANCE COVERAGE RENEWAL

Recommendation: That the Board authorize the continuance of the District's health insurance coverage with CalPERS for the calendar year 2018 with the changes in District and Employee Contribution Rates as outlined in the Exhibit.

7. DENTAL AND VISION INSURANCE COVERAGE FOR CALENDAR YEAR 2018

That the Board authorize the General Manager to extend the contract with ACWA/JPIA for Delta Dental DPO Plan A with child and adult orthodontic coverage; and to accept the EyeMed proposal for vision insurance coverage with no premium rate increase, and a four-year rate guarantee through December 31, 2021.

8. 2017 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: Receive and file.

ACTION CALENDAR

9. IMPLEMENTATION OF WATER USE EFFICIENCY OUTREACH CAMPAIGN

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Suple Advertising & Design in the amount of \$1,136,100 to implement a new water use efficiency outreach campaign.

10. AMENDED WATER SUPPLY ASSESSMENT FOR PLANNING AREAS 40 AND 12 GENERAL PLAN AMENDMENT AND ZONE CHANGE PROJECT

Recommendation: That the Board approve the amended water supply assessment for Planning Areas 40 and 12 General Plan Amendment and Zone Change Project.

ACTION CALENDAR - Continued

11. MICHELSON WATER RECYCLING PLANT FILTER PUMP STATION 2
HEADER REPLACEMENT CONSTRUCTION AWARD

Recommendation: That the Board authorize a budget increase in the amount of \$370,400, from \$1,144,800 to \$1,515,200, for Project 07009; and authorize the General Manager to execute a construction contract with Norman A. Olsson Construction in the amount of \$1,175,978 for the Michelson Water Recycling Plant Filter Pump Station 2 header replacement, Project 07009.

12. OFFSITE PIPELINES FOR THE IRVINE LAKE PIPELINE NORTH
CONVERSION CONSULTANT SELECTIONS

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement, in the amount of \$152,743, with NMG Geotechnical for geotechnical services during construction; authorize the General Manager to execute a Professional Services Agreement, in the amount of \$136,050, with Michael Baker International for engineering support services during construction; acknowledge the material clerical error made in the computation of Artukovich & Son, Inc.'s bid, accept Artukovich & Son, Inc.'s formal written request to withdraw its bid, and return the bid bond to Artukovich & Son, Inc; and authorize the General Manager to execute a construction contract with CCL Contracting, Inc., in the amount of \$8,337,193.50, for the offsite pipelines for the Irvine Lake Pipeline North Conversion, Project 05823.

13. UTILITY BILL PRINTING, MAILING, AND ELECTRONIC BILL
PRESENTMENT SERVICES CONTRACT AWARD

Recommendation: That the Board authorize the General Manager to execute a three-year contract for utility bill printing, mailing, and electronic bill presentment services with Infosend, Inc. effective August 15, 2017, totaling approximately \$477,000.

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, 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.

14. A. General Manager's Report

OTHER BUSINESS - Continued

B. Directors' Comments

C. CLOSED SESSION

Conference with Real Property Negotiator (Government Code Section 54956.8)

Property: Biscayne Bay Drive, Lake Forest, CA

Negotiating Parties: Multiple

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Price and Terms of Purchase

D. OPEN SESSION

E. Adjourn

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

August 14, 2017

Prepared and

Submitted by: L. Bonkowski

Approved by: Paul A. Cook

CONSENT CALENDAR

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

SUMMARY:

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

Events/Meetings

Steven LaMar

July 26 – 28	ACWA Board of Directors' Meeting, Sacramento
August 15	Water Reliability Summit Presented by SMWD, Mission Viejo
August 17-18	California Environmental Dialogue Plenary Meeting, San Diego
August 24	ACWA Region 8 Program 2017, Los Angeles
August 30	Conference Call with Transportation Corridor Agency
Nov. 28 – Dec. 1	ACWA 2017 Fall Conference, Anaheim

John Withers

August 5	OC Great Park Opening Ceremony & Reception Dinner, Irvine
August 15	Water Reliability Summit Presented by SMWD, Mission Viejo
August 24	Congresswoman Mimi Walters' Elected Officials Breakfast, Irvine
August 24	OC Forum 2018 Housing Outlook, Irvine
Nov. 28 – Dec. 1	ACWA 2017 Fall Conference, Anaheim

Douglas Reinhart

September 19	Monthly Discussion of District Activities with the General Manager
October 26	Monthly Discussion of District Activities with the General Manager
Nov. 28 – Dec. 1	ACWA 2017 Fall Conference, Anaheim

Mary Aileen Matheis

August 5	OC Great Park Opening Ceremony & Reception Dinner, Irvine
August 24	Water Education Foundation Retreat, Sacramento
Nov. 28 – Dec. 1	ACWA 2017 Fall Conference, Anaheim

Peer Swan

June 2	North and Central Orange County – Integrated Regional Water Management Planning Meeting, Orange
June 7	Meeting at West Basin relative to MWD future programs
June 27	North and Central Orange County – Integrated Regional Water Management Planning Meeting, Orange
August 5	OC Great Park Opening Ceremony & Reception Dinner, Irvine

August 15	Water Reliability Summit Presented by SMWD, Mission Viejo
September 19	Monthly Discussion of District Activities with the General Manager
Nov. 28 – Dec. 1	ACWA 2017 Fall Conference, Anaheim

RECOMMENDATION:

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

LIST OF EXHIBITS:

None.

August 14, 2017
Prepared and
Submitted by: L. Bonkowski
Approved by: P. Cook



CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the July 24, 2017 Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JULY 24, 2017 BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – July 24, 2017 Minutes of Board Meeting

EXHIBIT "A"

MINUTES OF REGULAR MEETING – JULY 24, 2017

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 Reinhart on July 24, 2017 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Swan, Matheis, LaMar, and Reinhart.

Directors Absent: Withers.

Also Present: General Manager Cook, Executive Director of Water Policy Weghorst, Executive Director of Operations Shields, Executive Director of Engineering and Water Quality Burton, Executive Director of Finance and Administration Clary, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Recycling Operations Zepeda, Director of Public Affairs Beeman, Government Relations Officer Compton, Director of Water Operations Roberts, Director of Human Resources Roney, Legal Counsel Smith, Secretary Bonkowski, Principle Engineer Cortez, Principle Engineer Akiyoshi, Risk Manager Shinbashi, Asset System Manager Meserlian, Mr. Christopher Smithson, Mr. John Jaeger and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: Mr. John Jaegar, an Irvine resident, addressed the Board relative to the District's annual rate increase, longevity of each Director on the Board, and last year's comments he received from the Board President following his oral communications to the Board.

ITEMS TOO LATE TO BE AGENDIZED:

General Manager Cook reported that an item came to staff's attention after the agenda was posted in regard to a confidential matter of anticipated litigation. Legal Counsel Smith said that this item will need to be discussed in Closed Session as a conference with legal counsel relative to anticipated litigation, Government Code Section 54956.9(d)(4), initiation of litigation (one potential case). On MOTION by Swan, seconded and unanimously carried, IT WAS DETERMINED THAT THERE WAS A NEED TO TAKE IMMEDIATE ACTION TO DISCUSS ONE MATTER OF ANTICIPATED LITIGATION AS A CLOSED SESSION ITEM, AND THIS MATTER WAS ADDED TO THE AGENDA UNDER ITEM 14 (see page 7).

PUBLIC HEARING

SEWER TAXES IN THE NEWPORT NORTH SERVICE AREA

General Manager Cook reported that on June 26, 2017, the Board adopted Rates and Charges for Fiscal Year 2017-18 which included monthly sewer charges of \$25.75 for a residential single family home and \$19.30 per unit for multiple family dwelling units. The Newport North customers will have the same rate, but the method of collection differs in that they pay their sewer fees on an annual basis by means of the County tax rolls. Mr. Cook said that by adoption

of Resolution No. 1987-45, the Board of Directors elected to have sewer charges for certain parcels of land located in the Newport North area collected on the tax roll together with the District's general taxes. That resolution directs the filing of a report containing a description of such parcels and the corresponding charges for each fiscal year. Pursuant to the requirements of the Health and Safety Code of the State of California, a public hearing on the report is required.

President Reinhart said this was the time and place for a hearing on the sewer taxes in the Newport North area, and declared the hearing open. He asked the Secretary how the hearing was noticed.

Secretary Bonkowski reported that the report was filed with her on July 3, 2017 and the notice of the filing of the report and the time and place of this hearing was published in the Newport Beach-Costa Mesa Daily Pilot on July 6, 2017 and July 15, 2017. She said that a notice was also posted in the District office on July 3, 2017.

On MOTION by Swan, seconded and unanimously carried, THE AFFIDAVIT OF POSTING AND THE PROOF OF PUBLICATION PRESENTED BY THE SECRETARY WAS RECEIVED AND FILED.

President Reinhart requested Legal Counsel Smith to describe the nature of the proceedings.

Legal Counsel Smith described the nature of the proceedings, saying that the purpose of the hearing was to provide an opportunity for all persons interested or the owner of any parcel within the area to present objections or protests to the report.

President Reinhart asked Secretary Bonkowski whether she had received any written communications concerning this matter, and she stated that she had not. President Reinhart asked if there was anyone present who wished to address the Board concerning the report and the proposed collection of sewer charges on the tax roll. There was no one present who wished to be heard. President Reinhart further inquired if there were any comments or questions from members of the Board of Directors. There were no comments from the Board.

On MOTION by Swan, seconded and unanimously carried, THE HEARING WAS CLOSED, AND RESOLUTION NO. 2017-18 WAS ADOPTED BY TITLE AS FOLLOWS:

RESOLUTION NO. 2017-18

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE
RANCH WATER DISTRICT ADOPTING REPORT OF SEWER
CHARGES TO BE COLLECTED ON THE TAX ROLL
(NEWPORT NORTH SERVICE AREA)

CONSENT CALENDAR

Director Swan requested that item No. 4, RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS, be moved to the Action Calendar as he would like to add meetings to be approved by the Board. There being no objections, this item was moved accordingly. On MOTION by Swan, seconded and unanimously carried, THE BOARD APPROVED ITEMS NOS. 3 AND 5 THROUGH 9 AS FOLLOWS:

CONSENT CALENDAR (CONTINUED)

5. MINUTES OF BOARD MEETINGS

Recommendation: That the minutes of the July 7, 2017 Adjourned Regular Board Meeting and the July 10, 2017 Regular Board Meeting be approved as presented.

6. JUNE 2017 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the monthly Interest Rate Swap summary for June 2017, and Disclosure Report of reimbursements to Board members and staff; approve the June 2017 summary of Payroll ACH payments in the total amount of \$1,725,165 and approve the June 2017 Accounts Payable Disbursement Summary of Warrants 377651 through 378595, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$51,972,588.

7. IRVINE RANCH WATER DISTRICT STRATEGIC MEASURES

Recommendation: That the Board receive and file the report.

8. REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR INSTALLATION AND ADJUSTMENT OF IRWD FACILITIES TO GRADE

Recommendation: That the Board authorize the General Manager to execute a reimbursement agreement with the City of Irvine for its annual slurry seal and pavement rehabilitation project, bid no. 18-1292.

9. DYER ROAD WELLFIELD WELL 3 REHABILITATION FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Dyer Road Wellfield Well 3 Rehabilitation, project 04327; authorize the General Manager to file a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the notice of completion.

ACTION CALENDAR

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

Following Director Swan's additions to meetings and events he attended, on MOTION by Swan, seconded and unanimously carried, THE BOARD RATIFIED/APPROVED THE MEETINGS AND EVENTS FOR STEVEN LAMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN AND JOHN WITHERS AS DESCRIBED.

IRVINE LAKE PIPELINE NORTH CONVERSION RESERVOIR CONTRACT CHANGE ORDER

Executive Director of Engineering and Water Quality Burton reported that the Irvine Lake Pipeline (ILP) North Conversion Reservoir project includes construction of a 2.4 million gallon buried concrete reservoir, modifications at the Rattlesnake complex, and modifications at the Orchard Hills Strainer Facility. Mr. Burton said that the contract documents require the contractor to over-excavate four feet of soil below the reservoir slab and to reuse the over-excavated soil as compacted structural backfill for the reservoir foundation. He said that the original over-excavation depth was based on borings obtained under the reservoir as part of the geotechnical investigation report which suggested the potential for suitable soil conditions. He said that when the contractor reached the reservoir subgrade elevation, the geotechnical engineer determined that the soil beneath the reservoir contained significant portions of expansive clay which are unsuitable soils for the reservoir foundation which needed to be removed. He said that the additional over-excavation required for the reservoir foundation resulted in the need for additional disposal of unsuitable onsite soils, specialized excavation techniques adjacent to the contractor's temporary shoring system, and import and placement of an additional 6,500 cubic yards of structural backfill. The additional costs associated with the first two items were accounted for in previously executed change orders. The cost associated with the import and placement of additional structural backfill is the subject of this change order.

Mr. Burton said that the contractor, Pascal and Ludwig (P & L) Constructors, initially submitted a lump sum cost of \$365,699 for the work, but due to the uncertainty of the actual production levels that could be achieved, staff directed P & L to proceed with the work on a time and materials basis. He said that the work is now complete, and a change request is the amount of \$314,692 along with a contract time extension of 52 calendar days.

Director LaMar reported that this item was reviewed and approved by the Engineering and Operations Committee on July 18, 2017. On MOTION by LaMar, seconded and unanimously carried, THE BOARD APPROVED CONTRACT CHANGE ORDER NO. 8 WITH PASCAL & LUDWIG CONSTRUCTORS IN THE AMOUNT OF \$314,692 FOR IMPORT AND PLACEMENT OF ADDITIONAL STRUCTURAL BACKFILL BENEATH THE RESERVOIR FOR THE IRVINE LAKE PIPELINE NORTH CONVERSION RESERVOIR, PROJECT 05407.

MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONTRACT CHANGE ORDER NO. 56

Executive Director of Engineering and Water Quality Burton reported that Contract Change Order No. 56 includes the addition of stairs and a platform for the Regenerative Thermal Oxidizer and programming modifications for the microturbine's Capstone Logic Controller. Mr. Burton said that staff negotiated with Filanc/Balfour Beatty and it concurs with the labor and material costs for stairs and platform for the sludge dryer's Regenerative Thermal Oxidizer in the amount of \$101,744.33 and programming modifications for the microturbine's Capstone Logic Controller in the amount of \$100,000.

Director LaMar said that this item was reviewed and approved by the Engineering and Operations Committee on July 18, 2017. Following discussion, on MOTION by LaMar, seconded and unanimously carried, THE BOARD APPROVED CONTRACT CHANGE ORDER NO. 56 IN THE

AMOUNT OF \$201,744.33 WITH FILANC/BALFOUR BEATTY FOR THE ADDITION OF STAIRS AND A PLATFORM FOR THE REGENERATIVE THERMAL OXIDIZER, AND PROGRAMMING MODIFICATIONS FOR THE MICROTURBINE'S CAPSTONE LOGIC CONTROLLER FOR THE MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY, PROJECT NO. 04286.

SETTING CONNECTION FEES AND PROPERTY TAXES FOR FISCAL YEAR 2017-18

Executive Director of Finance and Administration Clary reported that connection fees for the City of Irvine/Great Park Recycled Water (Improvement District (ID) 112/212) and ID 256 for Orange Park Acres were approved at the June 12, 2017 Board meeting and that all other connection fees were last updated in July 2016. The proposed changes are consistent with the Engineering News Record (ENR) construction cost index and are based on periodic updates to the capital budget and other changing assumptions.

Ms. Clary said that the proposed connection fees assume an increase within each of the IDs based on the ENR estimated capital cost increase of 2.7% and are included in the Proposed Connection Fees and Property Tax Rates Summary as provided in the exhibit. On MOTION by Swan, seconded and unanimously carried, the FOLLOWING RESOLUTIONS WERE ADOPTED BY TITLE:

RESOLUTION NO. 2017- 19

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA ADOPTING CHANGES TO CONNECTION FEES AS SET FORTH IN THE SCHEDULE OF RATES AND CHARGES IN EXHIBIT "B" TO THE RULES AND REGULATIONS OF IRVINE RANCH WATER DISTRICT FOR WATER, SEWER, RECYCLED WATER, AND NATURAL TREATMENT SYSTEM SERVICE (EFFECTIVE SEPTEMBER 1, 2017)

RESOLUTION NO. 2017-20

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA ESTABLISHING AD VALOREM TAX REVENUES FOR FISCAL YEAR 2017-18

RESOLUTION NO. 2017 -21

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

WATER STORAGE INVESTMENT PROGRAM GRANT APPLICATION

Using a PowerPoint presentation, Director of Water Resources Sanchez reported that the California Water Commission (CWC) is accepting applications for Proposition 1 grant funding through the Water Storage Investment Program (WSIP), also known as the Water Quality, Supply and Infrastructure Improvement Act of 2014, which provides \$2.7 billion for public benefits associated with water storage projects with a maximum funding request of 50% of project capital costs.

Ms. Sanchez said that that staff has been working with Rosedale Rio Bravo Storage District and several consultants to develop a grant application for a Kern Fan Project which would be a regional water bank that would capture, transport and store water during conditions when surface water is abundant. She said that the project would be implemented in a two-phased approach with the first phase including the development of the proposed third project site as contemplated in the Stockdale Integrated Banking Project Environmental Impact Report (EIR). IRWD and Rosedale would jointly acquire up to 640 acres in the Kern Fan area and construct recharge and recovery facilities as necessary to develop a fully functioning water banking project. In addition, IRWD and Rosedale would construct a new dedicated conveyance canal from the California Aqueduct to ensure the ability to convey flows from the State Water Project to the new recharge facilities. She said that the second phase of the Kern Fan project would involve IRWD and Rosedale acquiring an additional 640 acres of land for the expansion of the water banking facilities. The overall project would consist of approximately 500 cfs of canal capacity from the California Aqueduct, 100,000 acre feet of storage capacity, up to 100,000 acre-feet per year (AFY) in recharge capacity and up to 70 cubic feet per second (cfs) or 50,000 AFY of recovery capacity.

The grant requires a 50% cost-share match which would be shared equally by IRWD and Rosedale so that each would provide 25% of the total funding. Currently, engineers at Dee Jaspar and Associates estimate the overall cost of the Kern Fan Project will be between \$150 million and \$172 million. Approximately half of the costs would be attributable to the construction of dedicated conveyance facilities. Based on these estimates, the project could receive between \$75 and \$86 million through a Proposition 1 grant. IRWD and Rosedale would then each provide between \$37.5 and \$43 million for the project.

Director Swan said that this item was reviewed and approved by the Supply Reliability Programs Committee on July 20, 2017. On MOTION by Swan, seconded and unanimously carried, THE BOARD ADOPTED THE FOLLOWING RESOLUTION BY TITLE THAT AUTHORIZES THE GENERAL MANAGER TO SUBMIT A GRANT APPLICATION FOR WATER STORAGE INVESTMENT PROGRAM FUNDING, CONFIRMED THAT IRWD HAS THE CAPABILITY TO PROVIDE ITS COST SHARE FUNDING AS SPECIFIED IN THE APPLICATION'S PROJECT FUNDING PLAN, AND AUTHORIZED THE GENERAL MANAGER TO WORK WITH THE CALIFORNIA WATER COMMISSION TO MEET ESTABLISHED DEADLINES AND TO EXECUTE AN ACCEPTABLE FUNDING AGREEMENT:

RESOLUTION NO. 2017 -22

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT AUTHORIZING
SUBMISSION OF A GRANT APPLICATION FOR THE
PROPOSITION 1 WATER STORAGE INVESTMENT PROGRAM

TO THE CALIFORNIA WATER COMMISSION
GENERAL MANAGER'S REPORT

General Manager Cook reported that the District is participating fully in the in-lieu program for the applicable wells. He said that as noted in his Weekly Report, staff is continuing to monitor the water quality in the basin.

Mr. Cook provided an update on the Sand Canyon Reservoir that is being drained as one of the valves failed. He said that the reservoir is anticipated to be back on-line in October during which time additional repairs are being made. He further said that staff is communicating with Strawberry Farms Golf Course and is also posting updates on the District's website.

DIRECTORS' COMMENTS

Director Matheis reported on her attendance at an ISDOC Executive Committee meeting and an ACC-OC summer reception.

Director LaMar reported that he attended an ACC-OC summer reception and MWDOC's Public Affairs and Legislative Committee meeting. He further said he will be attending an NCC Executive Committee meeting this coming Wednesday.

Director Swan reported that he attended an ACC-OC summer reception, a Newport Beach Watershed Committee meeting, OCWD Committee meetings, a WACO Planning Committee meeting, and a Newport Chambers' Government Affairs Committee meeting.

Director Reinhart reported that he attended a tour of the MWRP for the City of Newport Beach with General Manager Cook and a MWDOC Board meeting.

CLOSED SESSION

President Reinhart said that the following Closed Sessions will be held this evening:

CONFERENCE WITH REAL PROPERTY NEGOTIATOR (Government Code Section 54956.8)

Property: Biscayne Bay Drive, Lake Forest, CA

Negotiating Parties: Multiple

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Price and Terms of Purchase

CONFERENCE WITH LEGAL COUNSEL relative to anticipated litigation – Government Code Section 54956.9(d)(4) – initiation of litigation (one potential case).

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors Swan, LaMar, Reinhart and Matheis present. President Reinhart said there was no action to report.

ADJOURNMENT

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

APPROVED and SIGNED this 14th day of August, 2017.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Alfred Smith, Legal Counsel – Nossaman LLP

August 14, 2017

Prepared by: S. Toland/R. Mori

Submitted by: K. Burton *KLB*

Approved by: Paul Cook *[Signature]*

CONSENT CALENDAR

BAKER WATER TREATMENT PLANT RETENTION REDUCTION

SUMMARY:

The Baker Water Treatment Plant (WTP) project is nearly 100 percent complete. Staff recommends that the Board authorize the reduction of retention from 10% to 1% of the contract amount for the Baker WTP.

BACKGROUND:

The Baker WTP is a regional project that can produce up to 28 million gallons per day (43.5 cubic feet per second) of drinking water. The source water for this facility is untreated imported water from Metropolitan Water District of Southern California (MWD) and local water from Irvine Lake. Project participants include El Toro Water District, Moulton Niguel Water District, Santa Margarita Water District, Trabuco Canyon Water District, and IRWD. The Baker WTP utilizes microfiltration and ultraviolet disinfection as the primary treatment processes. The project also includes construction of Raw Water Conveyance Facilities (RWCF) that are used to pump water from Irvine Lake to the Baker WTP. These facilities provide an operational source of supply and, in the event of short-term water shortage emergencies, enhance water reliability for the project participants. Construction of both projects commenced in January 2014.

Construction Contract Retention Reduction:

PCL Construction has completed construction of all base contract work including punch list items, final cleanup, record drawings, and operations and maintenance manuals. The only remaining activity to be completed is the membrane system monitored test period (MTP), which is scheduled to last for 26 weeks. The purpose of the MTP is to confirm that the performance of the membrane system meets the as-bid performance criteria by the membrane system supplier. Since the MTP is included in PCL's contract, overall project Final Acceptance can only occur after completion of the MTP, which is anticipated for November 2017.

With all of the base contract work complete except for the MTP, PCL requested that the retention be reduced from 10% of the contract amount to 1% of the contract amount. Staff recommends approval of the retention reduction as the 1% retention provides adequate funding to cover the remaining payments to the membrane supplier for completion of the MTP.

FISCAL IMPACTS:

Project 05027 is included in the FY 2017-18 Capital Budget. The existing budget is sufficient to fund the recommendations presented herein.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and an Environmental Impact Report (EIR) was prepared in conformance with California Code of Regulations Title 14, Chapter 3, Article 7. The Final EIR was certified and adopted by the Board in April 2011. Addenda No. 1 and No. 2 to the EIR were prepared in accordance with Section 15164 of the CEQA Guidelines and were approved by the Board in February 2012, and March 2013, respectively.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on July 18, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE REDUCTION OF RETENTION FROM 10% TO 1% OF THE CONTRACT AMOUNT FOR THE BAKER WATER TREATMENT PLANT, PROJECT 05027.

LIST OF EXHIBITS:

None.

August 14, 2017

Prepared by: M. Ramos

Submitted by: J. Roney

Approved by: Paul A. Cook 

CONSENT CALENDAR

2018 MEDICAL INSURANCE COVERAGE RENEWAL

SUMMARY:

CalPERS Health Benefits Services has notified participating agencies of premiums for the 2018 calendar year. Staff recommends that the Board authorize the continuance of the District's health insurance coverage with CalPERS for calendar year 2018 with changes in District and employee contribution rates as outlined in the exhibit.

BACKGROUND:

CalPERS Medical Insurance Renewal Information:

The District currently utilizes the CalPERS medical insurance program to provide medical insurance coverage for District employees. Each year, in advance of the annual insurance benefit open enrollment period, the District receives the premium rates for each health insurance plan for the upcoming calendar year. For the 2018 calendar year, CalPERS has notified the District of premium rate changes for each of the specific plans from which IRWD employees may choose. The premiums rates for CalPERS health insurance plans for the 2018 calendar year are shown in Exhibit "A".

Open Enrollment Process for 2018:

The CalPERS 2018 health insurance open enrollment period will run from September 11, 2017 through October 6, 2017. Information about CalPERS health plans will be mailed to employees' homes by CalPERS in August 2017. Human Resources staff will conduct employee open enrollment information meetings in early September 2017. Health insurance plan representatives have been invited to attend the District's 2017 Employee Health and Wellness Fair, which will be held on September 13 at the Operations Center and September 14 at the Sand Canyon office.

Employee and Employer Contributions Rates:

The District has a long-standing practice of calculating the employer and employee contribution rates for health insurance premiums based on the rates of the Preferred Provider Organization (PPO) plan offered which had the highest enrollment in the prior renewal year. The rates for that plan are then used to calculate the maximum District contribution rates for all plans offered. This practice also aligns with the negotiated terms of the IRWD Employee Association Memorandum of Understanding (MOU).

In 2017, the year prior to this 2018 renewal, the PPO plan offered with the highest enrollment was the PERS Choice-PPO Other Southern California Region (OSC) plan. The premium for this plan will decrease by 2.17% for the 2018 renewal, therefore the District's maximum contribution rates will also decrease to align with the lower 2018 PERS Choice-PPO OSC plan premiums.

The proposed 2018 District and employee contribution rates toward health insurance premiums for each health plan offered under the CalPERS Health Insurance Program are outlined in Exhibit "A".

CalPERS Administrative Fees and Reserves:

On July 1, 2017, the CalPERS administrative fee was set at 0.33%, an increase from the prior year fee of 0.31%. The administrative fee is calculated on total monthly health premiums for active employees and retired annuitants. CalPERS can also charge up to 4% for a contingency reserve fund but has not charged one since 1985. There was no contingency reserve fee charged for the 2017 calendar year, and to date IRWD has not been notified of any contingency reserve fees for 2018.

FISCAL IMPACTS:

Renewal of the District's current health insurance coverage with CalPERS, as represented in Exhibit "A", will result in total projected expenses for FY 2017-18 of \$5,118,561. Projected health insurance premium expenses for FY 2017-18 are calculated using the six-months premium costs at the 2017 rate (\$2,491,777) plus the six-month premium cost at the 2018 rate (\$2,558,852) along with estimated premiums (\$67,932) for positions approved in the FY 17-18 budget.

Actual District health insurance expenses for FY 2016-17 were \$4,780,345 resulting in an expected year-over-year increase of \$338,216 (7%) over the FY 2017-18 projected costs noted above. Projected annual medical insurance premiums for FY 17-18 will be approximately \$101,439 (2%) below the budgeted amount of \$5,220,000.

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 reviewed by the Finance and Personnel Committee on August 1, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE CONTINUANCE OF THE DISTRICT'S HEALTH INSURANCE COVERAGE WITH CALPERS FOR CALENDAR YEAR 2018 WITH CHANGES IN DISTRICT AND EMPLOYEE CONTRIBUTION RATES AS OUTLINED IN THE EXHIBIT.

LIST OF EXHIBITS:

Exhibit "A" – CalPERS Medical Premium Comparison 2017 to 2018 and Recommended 2018 District and Employee Medical Premium Contribution Rates

EXHIBIT "A"


	Current Enrollment	2017			2018			CalPERS Renewal (+/-) %		
		Premium Rates	Max \$ Benefit Contribution	Employee Contributions	Premium Rates	Max \$ Benefit Contribution	Employee Contributions			
Acorn Select HMO - OSC										
Employee Only	1	\$659.03	\$643.03	\$16.00	2.4%	\$659.69	\$629.06	\$30.63	4.6%	0.10%
Employee + 1 Dependent	1	\$1,318.06	\$1,287.06	\$31.00	2.4%	\$1,319.38	\$1,258.13	\$61.25	4.6%	0.10%
Employee + Family	5	<u>\$1,713.48</u>	<u>\$1,671.48</u>	<u>\$42.00</u>	2.5%	<u>\$1,715.19</u>	<u>\$1,635.57</u>	<u>\$79.62</u>	4.6%	0.10%
	7	\$10,544	\$10,287	\$257		\$10,555	\$10,065	\$490		
Blue Shield of California Access - OSC										
Employee Only	8	\$778.45	\$643.45	\$135.00	17.3%	\$695.87	\$629.06	\$66.91	9.6%	-10.60%
Employee + 1 Dependent	9	\$1,556.90	\$1,286.90	\$270.00	17.3%	\$1,391.94	\$1,258.13	\$133.81	9.6%	-10.60%
Employee + Family	24	<u>\$2,023.97</u>	<u>\$1,671.97</u>	<u>\$352.00</u>	17.4%	<u>\$1,809.52</u>	<u>\$1,635.57</u>	<u>\$173.95</u>	9.6%	-10.60%
	41	\$88,815	\$66,857	\$11,958		\$61,524	\$55,609	\$5,914		
Health Net Select Max - OSC										
Employee Only	2	\$473.46	\$473.46	\$0.00	0.0%	\$461.56	\$461.56	\$0.00	0.0%	-2.51%
Employee + 1 Dependent	0	\$946.92	\$946.92	\$0.00	0.0%	\$923.12	\$923.12	\$0.00	0.0%	-2.51%
Employee + Family	0	<u>\$1,231.00</u>	<u>\$1,231.00</u>	<u>\$0.00</u>	0.0%	<u>\$1,200.06</u>	<u>\$1,200.00</u>	<u>\$0.00</u>	0.0%	-2.51%
	2	\$947	\$947	\$0		\$923	\$923	\$0		
Health Net Select Care - OSC										
Employee Only	0	\$537.20	\$537.20	\$0.00	0.0%	\$607.68	\$607.68	\$0.00	0.0%	13.12%
Employee + 1 Dependent	0	\$1,074.40	\$1,074.40	\$0.00	0.0%	\$1,215.36	\$1,215.36	\$0.00	0.0%	13.12%
Employee + Family	1	<u>\$1,396.72</u>	<u>\$1,396.72</u>	<u>\$0.00</u>	0.0%	<u>\$1,579.97</u>	<u>\$1,579.97</u>	<u>\$0.00</u>	0.0%	13.12%
	1	\$1,397	\$1,397	\$0		\$1,580	\$1,580	\$0		
Kaiser Health Plan of California - OSC										
Employee Only	37	\$599.54	\$599.54	\$0.00	0.0%	\$666.80	\$629.06	\$37.74	5.7%	11.22%
Employee + 1 Dependent	25	\$1,199.08	\$1,199.08	\$0.00	0.0%	\$1,333.60	\$1,258.13	\$75.47	5.7%	11.22%
Employee + Family	71	<u>\$1,558.80</u>	<u>\$1,558.80</u>	<u>\$0.00</u>	0.0%	<u>\$1,733.68</u>	<u>\$1,635.57</u>	<u>\$98.11</u>	5.7%	11.22%
	133	\$182,835	\$162,835	\$0		\$181,103	\$170,854	\$10,249		
PERS Core - OSC										
Employee Only	5	\$602.24	\$643.24	\$159.00	19.8%	\$733.50	\$629.06	\$104.44	14.2%	-8.57%
Employee + 1 Dependent	2	\$1,604.48	\$1,286.48	\$318.00	19.8%	\$1,467.00	\$1,258.13	\$208.87	14.2%	-8.57%
Employee + Family	3	<u>\$2,085.82</u>	<u>\$1,671.82</u>	<u>\$414.00</u>	19.8%	<u>\$1,907.10</u>	<u>\$1,635.57</u>	<u>\$271.53</u>	14.2%	-8.57%
	10	\$13,478	\$10,805	\$2,873		\$12,323	\$10,588	\$1,755		
PERS Choice - OSC										
Employee Only	11	\$714.43	\$643.43	\$71.00	9.9%	\$698.96	\$629.06	\$69.90	10.0%	-2.17%
Employee + 1 Dependent	20	\$1,428.86	\$1,286.86	\$142.00	9.9%	\$1,397.92	\$1,258.13	\$139.79	10.0%	-2.17%
Employee + Family	32	<u>\$1,857.52</u>	<u>\$1,671.52</u>	<u>\$186.00</u>	10.0%	<u>\$1,817.30</u>	<u>\$1,635.57</u>	<u>\$181.73</u>	10.0%	-2.17%
	63	\$95,877	\$86,304	\$9,573		\$93,801	\$84,421	\$9,380		
PERS Select - OSC										
Employee Only	8	\$633.46	\$633.46	\$0.00	0.0%	\$654.74	\$629.06	\$25.68	3.9%	3.36%
Employee + 1 Dependent	4	\$1,266.92	\$1,266.92	\$0.00	0.0%	\$1,309.48	\$1,258.13	\$51.35	3.9%	3.36%
Employee + Family	7	<u>\$1,647.00</u>	<u>\$1,647.00</u>	<u>\$0.00</u>	0.0%	<u>\$1,702.32</u>	<u>\$1,635.57</u>	<u>\$66.75</u>	3.9%	3.36%
	19	\$21,664	\$21,664	\$0		\$22,392	\$21,514	\$878		
Sharp Health Plan - OSC										
Employee Only	0	\$614.46	\$614.46	\$0.00	0.0%	\$618.14	\$618.14	\$0.00	0.0%	0.60%
Employee + 1 Dependent	0	\$1,228.92	\$1,228.92	\$0.00	0.0%	\$1,236.28	\$1,236.28	\$0.00	0.0%	0.60%
Employee + Family	1	<u>\$1,597.60</u>	<u>\$1,597.60</u>	<u>\$0.00</u>	0.0%	<u>\$1,607.16</u>	<u>\$1,607.16</u>	<u>\$0.00</u>	0.0%	0.60%
	1	\$1,598	\$1,598	\$0		\$1,607	\$1,607	\$0		
United Healthcare - OSC										
Employee Only	7	\$549.76	\$549.76	\$0.00	0.0%	\$616.66	\$616.66	\$0.00	0.0%	12.17%
Employee + 1 Dependent	4	\$1,099.52	\$1,099.52	\$0.00	0.0%	\$1,233.32	\$1,233.32	\$0.00	0.0%	12.17%
Employee + Family	10	<u>\$1,429.38</u>	<u>\$1,429.38</u>	<u>\$0.00</u>	0.0%	<u>\$1,603.32</u>	<u>\$1,603.32</u>	<u>\$0.00</u>	0.0%	12.17%
	21	\$22,940	\$22,940	\$0		\$25,283	\$25,283	\$0		
OSC Medical Monthly Total	298	\$399,694	\$375,233	\$24,461		\$411,090	\$382,424	\$28,666		
OSC Medical Annual Total		\$4,796,331	\$4,502,799	\$293,532	6.1%	\$4,933,085	\$4,589,093	\$343,992	7.0%	2.85%
% Change						2.85%	1.9%	17.2%		
\$ Change						\$136,754	\$66,294	\$50,460		

	Current Enrollment	2017			2018			CalPERS Renewal (+/-) %		
		Premium Rate	Max \$ Deduct Contribution	Employee Contribution	Employee Contribution %	Premium Rate	Max \$ Deduct Contribution		Employee Contribution	Employee Contribution %
Antism Select HMO - LA										
Employee Only	0	\$592.78	\$576.78	\$16.00	2.7%	\$660.17	\$629.06	\$31.11	4.7%	11.37%
Employee + 1 Dependent	0	\$1,185.56	\$1,154.56	\$31.00	2.6%	\$1,320.34	\$1,258.13	\$62.21	4.7%	11.37%
Employee + Family	2	<u>\$1,541.23</u>	<u>\$1,499.23</u>	<u>\$42.00</u>	2.7%	<u>\$1,716.44</u>	<u>\$1,635.57</u>	<u>\$80.87</u>	4.7%	11.37%
	2	\$3,082	\$2,998	\$84		\$3,433	\$3,271	\$162		
Blue Shield of California Account - LA										
Employee Only	1	\$675.98	\$540.98	\$135.00	20.0%	\$613.29	\$613.29	\$0.00	0.0%	-9.27%
Employee + 1 Dependent	1	\$1,351.96	\$1,081.96	\$270.00	20.0%	\$1,226.58	\$1,226.58	\$0.00	0.0%	-9.27%
Employee + Family	2	<u>\$1,757.55</u>	<u>\$1,405.55</u>	<u>\$352.00</u>	20.0%	<u>\$1,594.55</u>	<u>\$1,594.55</u>	<u>\$0.00</u>	0.0%	-9.27%
	4	\$5,543	\$4,434	\$1,109		\$5,029	\$5,029	\$0		
Health Net Silver X Max - LA										
Employee Only	0	\$414.79	\$414.79	\$0.00	0.0%	\$404.32	\$404.32	\$0.00	0.0%	-2.52%
Employee + 1 Dependent	0	\$829.58	\$829.58	\$0.00	0.0%	\$808.64	\$808.64	\$0.00	0.0%	-2.52%
Employee + Family	0	<u>\$1,078.45</u>	<u>\$1,078.45</u>	<u>\$0.00</u>	0.0%	<u>\$1,051.23</u>	<u>\$1,051.23</u>	<u>\$0.00</u>	0.0%	-2.52%
	0	\$830	\$830	\$0		\$809	\$809	\$0		
Health Net SmartCare - LA										
Employee Only	0	\$526.73	\$526.73	\$0.00	0.0%	\$577.15	\$577.15	\$0.00	0.0%	9.57%
Employee + 1 Dependent	0	\$1,053.46	\$1,053.46	\$0.00	0.0%	\$1,154.30	\$1,154.30	\$0.00	0.0%	9.57%
Employee + Family	2	<u>\$1,369.50</u>	<u>\$1,369.50</u>	<u>\$0.00</u>	0.0%	<u>\$1,500.59</u>	<u>\$1,500.59</u>	<u>\$0.00</u>	0.0%	9.57%
	2	\$2,739	\$2,739	\$0		\$3,001	\$3,001	\$0		
Kaiser Health Plan of California - LA										
Employee Only	4	\$573.89	\$573.89	\$0.00	0.0%	\$642.70	\$629.06	\$13.64	2.1%	11.99%
Employee + 1 Dependent	4	\$1,147.78	\$1,147.78	\$0.00	0.0%	\$1,285.40	\$1,258.13	\$27.27	2.1%	11.99%
Employee + Family	6	<u>\$1,492.11</u>	<u>\$1,492.11</u>	<u>\$0.00</u>	0.0%	<u>\$1,671.02</u>	<u>\$1,635.57</u>	<u>\$35.45</u>	2.1%	11.99%
	14	\$15,839	\$15,839	\$0		\$17,739	\$17,362	\$376		
PERS Care - LA										
Employee Only	1	\$715.88	\$556.88	\$159.00	22.2%	\$673.73	\$629.06	\$44.67	6.6%	-5.89%
Employee + 1 Dependent	0	\$1,431.76	\$1,113.76	\$318.00	22.2%	\$1,347.46	\$1,258.13	\$89.33	6.6%	-5.89%
Employee + Family	1	<u>\$1,061.29</u>	<u>\$1,447.29</u>	<u>\$414.00</u>	22.2%	<u>\$1,751.70</u>	<u>\$1,635.57</u>	<u>\$116.13</u>	6.6%	-5.89%
	2	\$2,577	\$2,004	\$573		\$2,425	\$2,265	\$161		
PERS Choice - LA										
Employee Only	1	\$637.53	\$566.53	\$71.00	11.1%	\$620.39	\$620.39	\$0.00	0.0%	-2.69%
Employee + 1 Dependent	2	\$1,275.06	\$1,133.06	\$142.00	11.1%	\$1,240.78	\$1,240.78	\$0.00	0.0%	-2.69%
Employee + Family	2	<u>\$1,657.58</u>	<u>\$1,471.58</u>	<u>\$186.00</u>	11.2%	<u>\$1,613.01</u>	<u>\$1,613.01</u>	<u>\$0.00</u>	0.0%	-2.69%
	5	\$6,503	\$5,776	\$727		\$6,328	\$6,328	\$0		
PERS Select - LA										
Employee Only	0	\$565.33	\$565.33	\$0.00	0.0%	\$573.21	\$573.21	\$0.00	0.0%	1.39%
Employee + 1 Dependent	0	\$1,130.66	\$1,130.66	\$0.00	0.0%	\$1,146.42	\$1,146.42	\$0.00	0.0%	1.39%
Employee + Family	1	<u>\$1,469.86</u>	<u>\$1,469.86</u>	<u>\$0.00</u>	0.0%	<u>\$1,490.35</u>	<u>\$1,490.35</u>	<u>\$0.00</u>	0.0%	1.39%
	1	\$1,470	\$1,470	\$0		\$1,490	\$1,490	\$0		
UnitedHealthcare - LA										
Employee Only	1	\$545.71	\$545.71	\$0.00	0.0%	\$602.78	\$602.78	\$0.00	0.0%	10.46%
Employee + 1 Dependent	0	\$1,091.42	\$1,091.42	\$0.00	0.0%	\$1,205.56	\$1,205.56	\$0.00	0.0%	10.46%
Employee + Family	3	<u>\$1,418.85</u>	<u>\$1,418.85</u>	<u>\$0.00</u>	0.0%	<u>\$1,567.23</u>	<u>\$1,567.23</u>	<u>\$0.00</u>	0.0%	10.46%
	4	\$4,802	\$4,802	\$0		\$5,304	\$5,304	\$0		
LA Region Medical Monthly Total	34	\$42,556	\$40,063	\$2,493		\$44,750	\$44,051	\$699		
LA Region Medical Annual Total		\$510,671	\$480,755	\$29,916	5.9%	\$536,997	\$528,611	\$8,387	1.6%	5.16%
% Change						5.2%	10.0%	-72.0%		
\$ Change						\$26,326	\$47,855	-\$21,529		
Medical Monthly Grand Total	332	\$442,250	\$419,290	\$26,954		\$455,840	\$426,475	\$29,365		
Medical Annual Grand Total		\$5,307,002	\$4,983,554	\$323,448		\$5,470,082	\$5,117,704	\$352,378		3.07%
% Change						3.07%	2.89%	8.94%		
\$ Change						\$183,080	\$134,150	\$26,930		

August 14, 2017

Prepared by: V. Martinez

Submitted by: J. Roney

Approved by: Paul Cook 

CONSENT CALENDAR

DENTAL AND VISION INSURANCE COVERAGE FOR CALENDAR YEAR 2018

SUMMARY:

ACWA/JPIA has negotiated rates for dental insurance coverage with Delta Dental for the plan year beginning January 1, 2018 which resulted in no change in the premiums for IRWD's current dental plan, DPO Plan A. Vision coverage for the District's plan participants went out to bid, and staff received a new proposal with a four-year rate guarantee for vision insurance coverage provided through EyeMed. Staff recommends that the Board extend IRWD's existing contract with ACWA/JPIA for Delta Dental DPO Plan A coverage for calendar year 2018; and accept the proposal from Eye Med for vision coverage through December 31, 2021.

BACKGROUND:

Dental Coverage:

IRWD's current employee dental insurance coverage is provided by Delta Dental Plan of California through ACWA/JPIA. IRWD currently contracts through ACWA/JPIA for the DPO Plan A with child and adult orthodontic coverage as an add-on. ACWA/JPIA has negotiated rates with Delta Dental for calendar year 2018, and premiums for the DPO Plan A with child and adult orthodontic coverage will remain unchanged from the 2017 rates.

The District's current monthly rates are \$35.36 for employee only coverage, \$69.99 for "employee plus+1" coverage and \$128.10 for "family" coverage. ACWA/JPIA's administration fee of \$2.24 per enrollee per month is included in the premiums. and is . Staff recommends that the Board extend IRWD's existing contract with ACWA/JPIA for Delta Dental DPO Plan A coverage for calendar year 2018.

Vision Coverage:

IRWD currently contracts with EyeMed for vision insurance coverage. Staff worked with our broker, Mercer, to conduct a market study for District vision benefits. Proposals were requested from Cigna, MetLife, and Vision Service Plan (VSP). Cigna was not able to provide a quote because the District does not contract with them for medical and dental insurance coverage. While MetLife declined to quote and VSP quoted two plan options; VSP's rates were not cost-competitive compared to EyeMed's proposed renewal rates. EyeMed has offered a renewal that includes no increase over the 2017 premium rates and a four-year rate guarantee through December 31, 2021.

The District's current monthly rates for vision insurance with EyeMed are \$8.69 for employee only coverage, \$16.52 for "employee+1" coverage and \$24.23 for "family" coverage. Staff recommends that the Board accept the proposal from Eye Med for vision coverage through December 31, 2021.

FISCAL IMPACTS:

Staff budgeted \$420,900 for FY 2017-18 dental insurance premiums. Renewal of the District's current dental insurance coverage with no change in premiums based on current and projected enrollment would result in total projected expenses for FY 2017-18 of \$395,573 or \$25,327(6%) under budget.

Staff budgeted \$85,000 for FY 2017-18 vision insurance premiums. Renewal of the District's current vision insurance coverage with no change in premiums based on current and projected enrollment would result in total projected expenses for FY 17-18 to be on budget.

ENVIRONMENTAL IMPACTS:

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 reviewed by the Finance and Personnel Committee on August 1, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXTEND THE CONTRACT WITH ACWA/JPIA FOR DELTA DENTAL DPO PLAN A WITH CHILD AND ADULT ORTHODONTIC COVERAGE; AND TO ACCEPT THE EYEMED PROPOSAL FOR VISION INSURANCE COVERAGE WITH NO PREMIUM RATE INCREASE, AND A FOUR-YEAR RATE GUARANTEE THROUGH DECEMBER 31, 2021.

LIST OF EXHIBITS:

None.

August 14, 2017

Prepared and

submitted by: C. Compton

Approved by: Paul A. Cook



CONSENT CALENDAR

2017 LEGISLATIVE AND REGULATORY UPDATE

SUMMARY:

This report provides an update on the 2017-2018 legislative session 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 that the Board receive and file this update.

BACKGROUND:

The California State Assembly and Senate will return from summer recess on August 21, 2017. With less than one month left in the first year of the 2017-2018 Regular Legislative Session after the Legislature returns, fiscal committees have until September 1 to meet and report bills to the floor. The last day for each house to pass bills in this year is September 15, which is the day the interim legislative recess begins. The Governor has until October 15 to sign or veto legislation passed by the Legislature this session. The 2017-2018 Regular Legislative Session will resume on January 3, 2017.

A copy of the 2017 Legislative Matrix is attached as Exhibit "A". Exhibit "B" is the 2017 Legislative Update Report Links to Bill and Regulatory Texts, which contains links to the bills and regulations discussed below, unless a separate exhibit is noted.

State Budget Update:

June Revenue Numbers:

On June 10, 2017, State Controller Betty Yee released her monthly report on the State's finances. She announced that the State took in \$16.63 billion during the month of June. This was 2.5 percent lower than the revenue assumptions contained in the Governor's May Revise. Despite June's receipts, revenue receipts for the 2016-2017 fiscal year came in at \$121.91 billion, which was \$295.7 million lower than the assumptions in the May Revise. The fiscal year revenues were \$2.68 billion lower than anticipated in the Fiscal Year 2016-17 budget with personal income, corporate, and sales taxes all coming in lower than anticipated.

The State's General Fund outstanding loan balance was \$4.84 billion or \$1.64 billion less than estimated in the May Revise.

2017 State Legislative Update:

Long-Term Water-Use Efficiency Framework:

Since the beginning of the year staff has continued to work with various stakeholders and the Association of California Water Agencies (ACWA) on long-term water use efficiency and drought planning legislation. As reported to the Board, the Senate Natural Resources and Water Committee heard the bills related to “Making Water Conservation a California Way of Life” on July 11, 2017.

The Committee considered AB 1323 (Weber, D-San Diego), AB 1654 (Rubio, D-West Covina), AB 1667 (Friedman, D-Glendale) and AB 1668 (Friedman). As expected, the Committee passed AB 1323 without amendment, held AB 1667 in the Committee, and passed AB 1654 and AB 1668 with amendments that stripped the existing language from the bills and replaced it with a general statement of intent. As amended, AB 1654 and AB 1668 now read, “It is the intent of the Legislature to enact legislation necessary to help make water conservation a California way of life.” As part of its action, the Senate Natural Resources and Water Committee committed to continuing to work on a final agreement related to the “Making Water Use Efficiency a California Way of Life” legislation and requested that stakeholders submit written comments to the Committee on policies that should be included in the legislation.

On July 21, the comment deadline, the water community submitted an extensive comment letter to the Senate Natural Resources and Water Committee. The letter, which was signed by 112 water agencies, associations and other local governments, advocated that any legislation on “Making Water Conservation a California Way Life” include the following principles:

1. Preserve the Legislature’s authority over long-term water use efficiency target-setting. State agencies should **not** be granted the authority to set and revise water use efficiency targets. Commercial, industrial, and institutional (CII) performance measures must be determined by a broad stakeholder task force and not state agencies;
2. Ensure that any water use efficiency target-setting approach is flexible to account for the diversity among California’s communities and the urban retail water suppliers that serve them. Legislation must include alternative pathways or functional equivalents to compliance, variances, and criteria for the data to be collected;
3. Protect water rights and preserve a water supplier’s ability to use water it has a right to access;
4. Protect and create incentives for the further development of potable reuse and recycled water;
5. Provide for appropriate, progressive enforcement authority that accounts for urban retail water suppliers’ authorities and responsibilities relative to their customers. The focus should be on corrective action instead of cease-and-desist orders;

6. Preserve local decision-making to determine actions to avoid or mitigate shortages. The state should not dictate what actions are to be taken at any stage or specific actions that must be included in a water shortage contingency analysis;
7. Preserve and encourage investments in resilient water supplies. Potable reuse, recycled water, and desalination should all be considered fully reliable;
8. Ensure that annual water supply and demand assessments are based on and accurately reflect local conditions;
9. Maintain the existing legislative intent and challenge period for urban water management plans; and
10. Recognize that energy use is only one aspect of water supply planning.

IRWD signed onto the water community's comment letter. A copy of the letter is attached as Exhibit "C".

Since the Senate Natural Resources and Water Committee hearing on July 11, Senator Bob Hertzberg (D-Van Nuys), the Chairman of the committee, and Senator Nancy Skinner (D-Oakland) gutted and amended SB 606. SB 606 had previously dealt with property taxation of the Los Angeles Memorial Coliseum. It now relates to "Making Water Conservation a California Way of Life" and contains the same intent language that was placed into AB 1654 and AB 1668.

Staff continues to be engaged in the discussions taking place in Sacramento related to "Making Water Conservation a California Way of Life." Over the Legislature's Summer Recess, Senate Natural Resources and Water Committee staff and Assembly Water, Parks and Wildlife Committee staff will be working to develop legislation on long-term water use efficiency and drought planning with the hope that an agreement on the legislation can be reached between the Assembly and Senate Committees before the Legislature returns in August.

Staff will provide an update on the ongoing discussions taking place within the State Capitol regard the framework when new information becomes available.

2017 State Regulatory Update:

California Water Fix:

Late last month, the California Department of Water Resources (DWR) announced that the Notice of Determination (NOD) for the California WaterFix environmental analysis was certified. The certification of the NOD was the last step needed for DWR to approve the California WaterFix and its associated California Environmental Quality Act documents.

According to DWR, the "certification comes after more than a decade of analysis, review, and public comment. State and federal water and wildlife agencies have been working since 2006 to find the best way to improve how the State Water Project and Central Valley Project obtain

water from the channels of the Sacramento-San Joaquin Delta. Together, the projects supply 25 million Californians with some or all of their drinking water supply and help irrigate three million acres of farmland.” To read DWR’s full announcement, visit <http://cms.capitoltechsolutions.com/ClientData/CaliforniaWaterFix/uploads/WaterFixJuly21presrelease2.pdf>.

IRWD has supported improvements in the Sacramento-San Joaquin Delta that support the co-equal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. As part of its support, the District has endorsed the California WaterFix, the proposal to build three new intakes and two tunnels to convey water under the Delta to the State Water Project and Central Valley Project pumping facilities in the South Delta as the best option for improving water supplies and the Delta ecosystem.

State Water Resources Control Board Surface Water Augmentation Regulations:

On July 21, 2017, the State Water Resources Control Board (State Board) released draft regulation on “Surface Water Augmentation Using Recycled Water”. The regulations, which have been expected for nearly a year, propose to standardize the rules governing indirect potable reuse via reservoir augmentation. As stated in its initial statement of reasons, these regulations are intended to establish “uniform water recycling criteria for the planned placement of recycled water into a surface water reservoir used as a source of water supply for a public water system, such that the adherence to the criteria would result in public health being adequately protected.”

The State Board is accepting comment on the draft regulations until September 12, 2017. Staff will be coordinating with WateReuse Association of California on comments and will submit individual comments, if appropriate.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on August 3, 2017.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit “A” – IRWD Legislative Matrix

Consent Calendar: 2017 Legislative and Regulatory Update

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Exhibit “B” – 2017 Legislative Update Report Links to Bill Texts

Exhibit “C” – Water Community Comment Letter on “Making Water Conservation a California Way of Life”

EXHIBIT "A"
IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 18 Garcia E (D)	Clean Water, Climate, and Coastal Protection Act		Enacts the California Clean Water, Climate, Coastal Protection and Outdoor Access For All Act, which would authorize the issuance of bonds to finance a clean water, climate, and coastal protection and outdoor access for all program. Provides for the submission of these provisions to the voters at the statewide direct primary election.	06/28/2017 - To SENATE Committees on NATURAL RESOURCES AND WATER and GOVERNANCE AND FINANCE.
AB 22 Bonta (D)	Secretary Of State: Storing and Recording Media		Provides that a cloud computing storage service that provides administrative users with tools or controls to prevent stored records from being overwritten, deleted, or altered until the required retention period for the record has expired is considered a trusted system for the purposes of storing government documents. Requires a cloud computing storage service to comply with standards published by the International Organization for Standardization, or other applicable industry recognized standard.	07/17/2017 - In SENATE. Read second time and amended. To third reading.
AB 52 Cooper (D)	Public Employee: Orientation And Informational Programs		Requires the public employers regulated by specified acts to provide all employees an orientation and to permit an exclusive representative to participate.	04/19/2017 - In ASSEMBLY Committee on PUBLIC EMPLOYEES, RETIREMENT AND SOCIAL SECURITY: Not heard.
AB 151 Burke (D)	California Global Warming Solutions Act		Amends the Global Warming Solutions Act. Requires the Air Resources Board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan. Requires the state board to report to the Legislature on the need for increased education, career technical education, job training, and workforce development in ensuring that statewide greenhouse gas emissions are reduced by a specified level.	05/30/2017 - In ASSEMBLY. Read second time. To third reading.
AB 161 Levine (D)	Department of Finance: Infrastructure Investment		Authorizes the Department of Finance to identify infrastructure projects in the state for which the department will guarantee a rate of return on investment for an investment made in that infrastructure project by the Public Employees' Retirement System.	06/27/2017 - From SENATE Committee on GOVERNMENTAL ORGANIZATION: Do pass to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 166</u> Salas (D)	Safe Drinking Water: Household Filtration Systems		Requires the State Water Resources Control Board to conduct a study on the feasibility and financial stability of a rebate program that would provide a household that is served by a water system that does not meet primary drinking water standards with a rebate for the purchase of a household water filtration system.	06/08/2017 - To SENATE Committee on RULES.
<u>AB 176</u> Salas (D)	Water Project: Friant-Kern Canal		Appropriates a specified sum from the General Fund for the Reverse Flow Pump-back Facilities on the Friant-Kern Canal Restoration Project. Makes legislative findings and declarations as to the necessity of a special statute for the Friant-Kern Canal.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
<u>AB 196</u> Bigelow (R)	Greenhouse Gas Reduction Fund: Water Supply		Amends the Global Warming Solutions Act, which creates the Greenhouse Gas Reduction Fund and authorizes specified investments, including water use and supply. Authorizes the use of the moneys in the fund for electric pump efficiency, water and wastewater systems, pump and pump motor efficiency improvements, and drinking water transmission and distribution systems' water loss if the investment furthers the regulatory purposes of the act and is consistent with law.	07/17/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
<u>AB 241</u> Dababneh (D)	Personal Information: Privacy: State and Local Breach		Relates to state and local breaches of privacy. Requires a state or local agency, if it was the source of a computer breach of information, to provide appropriate identity theft prevention and mitigation services at no cost to a person whose personal information, including social security number, driver license or identification card number.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
<u>AB 277</u> Mathis (R)	Water and Wastewater Loan and Grant Program		Authorize the State Water Resources Control Board to establish the Water and Wastewater Loan and Grant Program to provide funding to eligible applicants for specified purposes relating to drinking water and wastewater treatment. Authorizes a county or qualified nonprofit organization to apply to the board for a grant to award loans or grants, or both, to an eligible applicant. Authorizes the board to use a specified funding source.	07/10/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.

IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 305</u> Arambula (D)	School Accountability Report Card: Drinking Water		Amends the Classroom Instructional Improvement and Accountability Act to require a specified school accountability report card to include an assessment of the drinking water access points at each school site. Requires the State Department of Education to compile the assessments and transmit them to the State Water Resources Control Board.	02/13/2017 - To ASSEMBLY Committees on EDUCATION and ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<u>AB 313</u> Gray (D)	Water		Establishes a Water Rights Division within the Office of Administrative Hearings. Provides for hearing requirements. Authorizes the State Water Resources Control Board to issue a complaint seeking an order requiring a person to cease and desist from diverting or using water.	07/18/2017 - From SENATE Committee on APPROPRIATIONS with author's amendments.;07/18/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 321</u> Mathis (R)	Groundwater Sustainability Agencies		Includes farmers, ranchers, and dairy professionals in the agricultural users whose interests a groundwater sustainability agency is required to consider for sustainability plans.	07/17/2017 - Signed by GOVERNOR.;07/17/2017 - Chaptered by Secretary of State. Chapter No. 2017-67
<u>AB 408</u> Chen (R)	Eminent Domain: Final Offer of Compensation		Provides that if a court finds, that the offer of the plaintiff was a certain percentage of the compensation awarded in the eminent domain proceeding, then the court would be required to include the defendant's litigation costs in the costs allowed.	03/20/2017 - From ASSEMBLY Committee on JUDICIARY without further action pursuant to JR 62(a).
<u>AB 429</u> Grayson (D)	State Water Policy: Water Rights: Use/Transferability		Makes nonsubstantive changes to existing law concerning water policy, water use, rights and transferability of those rights.	02/13/2017 - INTRODUCED.
<u>AB 472</u> Frazier (D)	Water Transfers: Idled Agricultural Land: Wildlife		Requires the Department of Water Resources to allow nonirrigated cover crops or natural vegetation to remain on idled agricultural lands without penalty to the landowner, unless it is determined that it causes injury to another legal user of water. Requires the Wildlife Conservation Board to establish an incentive program for landowners who cultivate or retain cover crops or natural vegetation on idled agricultural lands to provide waterfowl, upland game bird, and other wildlife habitat.	07/11/2017 - In SENATE Committee on NATURAL RESOURCES AND WATER: Failed passage.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 474 Garcia E (D)	Hazardous Waste: Spent Brine Solutions		Exempts spent brine solutions that are byproducts of the treatment of groundwater to meet California drinking water standards from Hazardous Waste Control Law requirements if certain conditions are met. Requests surface impoundments used for the treatment of spent brine solutions to maintain financial assurances consistent with requirements of the Hazardous Waste Control Law.	07/10/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
AB 494 Bloom (D)	Land Use: Accessory Dwelling Units		Amends the Planning and Zoning Law to provide that an accessory dwelling unit may be rented separately from the primary residence. Requires that parking requirements for accessory dwelling units not exceed a certain number. Removes the prohibition on specified offstreet parking where that parking is not allowed anywhere else in the jurisdiction.	07/12/2017 - From SENATE Committee on GOVERNANCE AND FINANCE: Do pass to Committee on APPROPRIATIONS.
AB 524 Bigelow (R)	Public Utilities: Fines and Settlements		Appropriates moneys resulting from specified citations, issued by the Public Utilities Commission to the Pacific Gas and Electric Company for violations relating to the 2015 Butte Fire, to the Department of Forestry and Fire Protection to be expended for the department's program known as the State Responsibility Area Fire Prevention Fund and Tree Mortality Grant Program.	07/17/2017 - In SENATE Committee on NATURAL RESOURCES AND WATER: Not heard.
AB 530 Cooper (D)	Public Employment: Collective Bargaining: Officers		Expands the jurisdiction of the Public Employment Relations Board to include resolving disputes and statutory duties and rights of persons who are employed by public agencies and who are peace officers. Authorizes a peace officer to bring an action to seek injunctive relief. Excepts the employee relations commissions of the County of Los Angeles and the City of Los Angeles from the application of these provisions.	07/17/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
AB 551 Levine (D)	Political Reform Act of 1974: Postemployment		Amends the Political Reform Act, which prohibits certain elected officials from acting as agents or attorneys for certain persons, and which excludes from that prohibition certain appearances and communications. Specifies that the one-year prohibition applies to independent contractors of a local government agency or a public	07/11/2017 - In SENATE. Read second time. To third reading.

IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			agency who are appearing or communicating on behalf of that agency.	
<u>AB 554</u> Cunningham (R)	Desalination: Statewide Goal		Relates to desalination projects and opportunities for state assistance and funding. Establishes a goal to desalinate a specified acre-feet of drinking water per year.	06/20/2017 - In ASSEMBLY. Coauthors revised.
<u>AB 567</u> Quirk-Silva (D)	School Facilities: Drinking Water Fountains		Requires a school district to ensure that every drinking water fountain at each school under its jurisdiction is equipped with both a water fountain and a spigot, or a combination water fountain and spigot, for filling water bottles.	03/14/2017 - From ASSEMBLY Committee on EDUCATION with author's amendments.;03/14/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on EDUCATION.
<u>AB 574</u> Quirk (D)	Potable Reuse	SUPPORT	Specifies that direct potable reuse includes raw water augmentation and treated drinking water augmentation. Changes surface water augmentation to reservoir water augmentation and redefines the term. Requires the State Water Resources Control Board to adopt uniform water recycling criteria for direct potable reuse through raw water augmentation.	07/19/2017 - Withdrawn from SENATE Committee on NATURAL RESOURCES AND WATER.;07/19/2017 - Re-referred to SENATE Committee on APPROPRIATIONS.
<u>AB 577</u> Caballero (D)	Disadvantaged Communities		Amends existing law which defines a disadvantaged community as a community with an annual median household income that is less than a certain percentage of the statewide annual median household income for various purposes, that include, but are not limited to, the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Expands the definition of disadvantaged community.	03/09/2017 - From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS with author's amendments.;03/09/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<u>AB 589</u> Bigelow (R)	Water Diversion: Monitoring: University of California		Relates any water diverter who has completed an instructional course regarding the devices or measurement method administered by the University of California Cooperative Extension to be considered a qualified individual when installing and maintaining devices or methods of measurement for the diverter's diversion. Requires a diverter to recomplete the course every 6 years.	07/12/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			Requires the University of California Cooperative Extension to consult with the board when developing the curriculum of the course.	
AB 594 Irwin (D)	Water Supply Planning: Photovoltaic Energy Facility		Amends existing law which requires a city or county that determines that a project is subject to the California Environmental Quality Act to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment.	02/27/2017 - To ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and LOCAL GOVERNMENT.
AB 664 Steinorth (R)	Political Reform Act: Campaign Expenditure		Prohibits the payment of financial or material compensation from campaign funds held by a controlled committee of an elected officer or candidate for elective office, in exchange for services rendered, to any vendor that is majority-owned or controlled by any spouse or domestic partner, parent, grandparent, sibling, child, or grandchild of that officer or candidate.	04/26/2017 - In ASSEMBLY Committee on ELECTIONS AND REDISTRICTING: Failed passage.;04/26/2017 - In ASSEMBLY Committee on ELECTIONS AND REDISTRICTING: Reconsideration granted.
AB 672 Jones-Sawyer (D)	Utility Services		Relates to civil actions brought by an electrical, gas, or water utility against a person who commits the diversion of utility services. Authorizes a defendant that prevails upon judgment to recover reasonable attorney's fees and costs of the suit from the utility.	05/01/2017 - From ASSEMBLY Committee on JUDICIARY with author's amendments.;05/01/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on JUDICIARY.
AB 732 Frazier (D)	Levee Maintenance		Extends indefinitely the operation of the authorization to advance funds to reimburse local agencies under a program for the maintenance or improvement of project or nonproject levees. Postpones the operation of certain related provisions.	07/10/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
AB 791 Frazier (D)	Sacramento-San Joaquin Delta: Conveyance Facility	OPPOSE	Relates to the State Water Project and federal Central Valley Project. Require, before a water contractor enters into a contract to pay for these costs, that the lead agency provide the breakdown of costs for each water contractor entering into a contract and what benefits each contractor will receive based on the proportion it has financed of the proposed conveyance project.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 792 Frazier (D)	Sacramento-San Joaquin Delta Plan: Certification	OPPOSE	Prohibits the Delta Stewardship Council from granting a certification of consistency with the Sacramento-San Joaquin Delta Plan until the State Water Resources Control Board has completed its update of a specified water quality control plan.	03/28/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE with author's amendments.;03/28/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
AB 793 Frazier (D)	Sacramento-San Joaquin Delta: Financing	OPPOSE	States that the maintenance and repair of the Sacramento-San Joaquin Delta are eligible for the same forms of financing as other water collection and treatment infrastructure and would specify the maintenance and repair activities that are eligible are limited to certain cleanup and abatement-related restoration and conservation activities.	03/27/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE with author's amendments.;03/27/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
AB 869 Rubio (D)	Sustainable Water Use; Recycled Water		Requires the State Water Resources Control Board to adopt long-term standards for urban water conservation and water use Requires the department to conduct necessary studies and investigations and recommend standards for indoor residential use and outdoor irrigation use for adoption by the board. States the intent of the Legislature in enacting this measure to encourage continued investment in water reuse as a means to increase water supply reliability and diversification.	07/03/2017 - From SENATE Committee on NATURAL RESOURCES AND WATER with author's amendments.;07/03/2017 - In SENATE. Read second time and amended. Re-referred to Committee on NATURAL RESOURCES AND WATER.
AB 851 Caballero (D)	Local Agency Contracts		Authorizes the Santa Clara Valley Water District to use the design-build procurement process when contracting for the construction of a building or buildings and improvements directly related to the construction of a building or buildings. Authorizes the utilization of the design-build procurement process by the Santa Clara Valley Water District for the purposes of, among other things, flood protection improvements, habitat restorations or enhancements, and enhancement of surface water facilities.	07/18/2017 - In SENATE. Read second time. To third reading.

IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 884</u> Levine (D)	Dams and Reservoirs: Inspections		Requires the Department of Water Resources to make annual physical inspections of dams and reservoirs at state expense for the purpose of determining their safety.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
<u>AB 891</u> Garcia E (D)	California Communities Environmental Health Screening		Require the State Air Resources Board to include data from certain local air monitoring studies, including certain data on ozone and diesel particulate matter, in a certain report. Requires funds to be allocated to the board and the office to support the continued collection of this data. Requires the board to add air monitoring stations at additional locations in the California-Mexico border region and to submit a report concerning cross-border pollution.	06/08/2017 - To SENATE Committee on ENVIRONMENTAL QUALITY.
<u>AB 898</u> Frazier (D)	Property Taxation: Revenue Allocations: Fire District		Requires the auditor of the County of Contra Costa to allocate certain ad valorem property tax revenues to the East Contra Costa Fire Protection District that would otherwise be allocated to the county's Education Revenue Augmentation Fund.	04/04/2017 - From ASSEMBLY Committee on LOCAL GOVERNMENT with author's amendments.;04/04/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on LOCAL GOVERNMENT.
<u>AB 947</u> Gallagher (R)	Fish and Wildlife: Streambed Alteration Agreements		Relates to streambed alteration agreements of the Department of Fish and Wildlife. Defines river and stream for purposes of provisions requiring certain notification.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Not heard.
<u>AB 967</u> Gloria (D)	Human Remains Disposal: Alkaline Hydrolysis		Requires the Cemetery and Funeral Bureau to license and regulate hydrolysis facilities. Enacts requirements applicable to hydrolysis facilities substantially similar to those applicable to crematoria. Requires a local registrar of births or deaths to issue permits for the disposition of hydrolyzed remains. Requires an applicant for hydrolysis facility to present to the bureau any state or locally required permits for business operation and employ a certified hydrolysis chamber.	07/13/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 968 Rubio (D)	Retail Water Use: Water Efficiency	CO-SPONSOR & SUPPORT	Requires the Urban Stakeholder Committee to submit a report to the Legislature recommending for potential adjustments to water efficiency targets and commercial, industrial, and institutional performance measures. Requires the Department of Water Resources to recommend appropriate water efficiency measures for various segments of the commercial, industrial, and institutional water use sector. requires each urban retail water supplier to develop a water efficiency target. Revises definitions.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
AB 975 Friedman (D)	Natural Resources: Wild and Scenic Rivers		Specifies that certain rivers that possess scenic, recreational, fishery, wildlife, historical, cultural, geological, or other similar values shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state.	06/05/2017 - In ASSEMBLY. To Inactive File.
AB 1000 Friedman (D)	Water Conveyance: Unused Facility Capacity	WATCH	Prohibits a transferor of water from using a water conveyance facility that has unused capacity to transfer water from a groundwater basin underlying desert lands that is in the vicinity of specified federal lands or state lands to outside of the groundwater basin unless the State Lands Commission, in consultation with the Department of Fish and Wildlife, finds that the transfer of the water will not adversely affect the natural or cultural resources of those federal and state lands.	07/11/2017 - From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
AB 1008 McCarty (D)	Employment Discrimination: Prior Criminal History		Repeals the prohibition on a state or local agency from asking an applicant for employment to disclosure information regarding criminal conviction, provides that it is an unlawful employment practice under California Fair Employment and Housing for an employer to include on any application for employment any question that seeks the disclosure of an applicant's criminal history, to inquire into or consider the conviction history of an applicant until that applicant has received a conditional offer.	07/18/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX
Updated 07/25/2017

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 1030 Ting (D)	Energy Storage Systems		Establishes energy policy goals of the state with respect to energy storage. Requires the Public Utility Commission to undertake specified actions with respect to customer- and load-sited energy storage systems in order to achieve those energy policy goals, including a rebate program dedicated to energy storage that carves out a portion of funding for low-income customers and disadvantaged communities.	05/24/2017 - From ASSEMBLY Committee on UTILITIES AND ENERGY without further action pursuant to JR 62(a).
AB 1041 Levine (D)	Transportation Funding: Transportation Improvement Fee		Amends the Road Repair and Accountability Act of 2017 which imposes a transportation improvement fee on each vehicle. Requires that the revenues from fee be available for expenditure only on specified transportation purposes. Provides for provisions to be added by SB 1 to correct an erroneous cross-reference in these provisions.	04/24/2017 - Re-referred to ASSEMBLY Committee on TRANSPORTATION.
AB 1050 Allen T (R)	Endangered Species Act: Delta Smelt		Requires the Fish and Game Commission to remove the Delta smelt from the endangered species list.	03/28/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE with author's amendments.;03/28/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
AB 1066 Aguiar-Curry (D)	Public Works: Definition		Expands the meaning of the term public works to include specific types of tree removal work. Expands the scope of a crime.	07/12/2017 - From SENATE Committee on LABOR AND INDUSTRIAL RELATIONS: Do pass to Committee on APPROPRIATIONS.
AB 1089 Mullin (D)	Local Elective Offices: Contribution Limitations		Prohibits a person from making to a candidate for local elective office any a contribution totaling more than a certain amount. Authorizes a county, city, special district, or school district to impose a different limitation.	06/20/2017 - In ASSEMBLY. Coauthors revised.
AB 1132 Garcia (D)	Nonvehicular Air Pollution: Order for Abatement		Authorizes an air pollution control officer, if they find that any person is causing an imminent and substantial endangerment to the public health or welfare, or the environment, by violating	07/21/2017 - Enrolled.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			requirements related to the emission of air pollutants by stationary sources, to issue an interim order for abatement pending a hearing before the hearing board of the air district. Requires the air pollution control officer to notify the alleged violator and establishes procedure for a hearing.	
<u>AB 1133</u> Dahle (R)	California Endangered Species Act		Provides that the California Endangered Species Act (CESA) prohibits the taking of an endangered or threatened species. Authorizes the take of listed species if the take is incidental to an otherwise lawful activity. Provides that a person who obtains a federal enhancement of survival permit requires no further authorization under CESA for that person to take that species as identified in the enhancement of survival permit.	07/13/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 1180</u> Holden (D)	Los Angeles County Flood Control District		Authorizes the Los Angeles County Flood Control District to levy a tax or impose a fee or charge to pay the costs and expenses of carrying out projects and programs to increase stormwater capture and reduce stormwater and urban runoff pollution in the district. Specifies that projects funded by the revenues may include projects that increase water supply and improve water quality.	07/19/2017 - From SENATE Committee on GOVERNANCE AND FINANCE: Do pass as amended.
<u>AB 1235</u> Daly (D)	Santa Ana River Conservancy Program		appropriates a specified sum from the General Fund to the conservancy to be expended for the purposes of the the Santa Ana River Conservancy Program.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
<u>AB 1271</u> Gallagher (R)	Dams and Reservoirs		Amends the existing law which requires the Department of Water Resources supervise the maintenance and operation of dams and reservoirs as necessary to safeguard life and property. Requires the department to order the owner to take action to remove the resultant danger to life and property. Provides for continuously appropriate the moneys in the fund to the department for the administration of the dam safety program.	03/21/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE with author's amendments.;03/21/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.

IRWD 2016 LEGISLATIVE MATRIX
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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
AB 1323 Weber (D)	Sustainable Water Use and Demand Reduction		Requires the Department of Water Resources to convene a stakeholder workgroup. Requires the workgroup to develop, evaluate, and recommend proposals for establishing new water use targets for urban water suppliers and report to the Governor and the Legislature. Requires all expenses to be the responsibility of the nonstate agency stakeholders.	07/11/2017 - From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
AB 1333 Dababneh (D)	Political Reform Act: Local Government Agency Notices		Requires every local government agency to prominently post on its Internet Web site a notice of any upcoming election in which voters will vote on a tax measure or proposed bond issuance of the agency. Requires every local government agency that publishes an electronic newsletter to include the notice in the electronic newsletter.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
AB 1342 Flora (R)	Greenhouse Gas Reduction Fund: Appropriations		Appropriates from the fund to the Department of Forestry and Fire Protection for healthy forest programs that reduce greenhouse gas emissions caused by uncontrolled wildfires. Appropriates from the fund to the Department Resources Recycling and Recovery for in-state organic waste recycling projects that reduce greenhouse gas emissions.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
AB 1369 Gray (D)	Water Quality and Storage		Requires the Department of Water Resources to increase statewide water storage capacity by a certain percent by a specified year. Provides for the appropriation of moneys from the Greenhouse Gas Reduction Fund. Requires all groundwater basins designated as high- or medium-priority basins by the department that are designated as basins subject to critical conditions of overdraft to be managed under a groundwater sustainability plan.	03/27/2017 - To ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and NATURAL RESOURCES.
AB 1420 Aguilar-Curry (D)	Water Rights: Small Irrigation Use		Requires State Water Resources Control Board to give priority to adopting general conditions that permit a registrant to store water for small irrigation use during times of high streamflow in exchange for the registrant reducing diversions during periods of low streamflow. Exempts an entity from the requirement to enter	07/10/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.

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			into a lake or streambed alteration agreement with the department under specified circumstances.	
AB 1427 Eggman (D)	Water: Underground Storage		Revises the declaration to additionally provide that certain uses of storage water while underground constitute beneficial use. Provides that the forfeiture periods of a water right do not apply to water being beneficially used or being held in storage for later beneficial use.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
AB 1438 Env Safety & Toxic Material Cmt	State Water Resource Control Board		Amends the Environmental Laboratory Accreditation Act. Updates obsolete references. Authorizes the state board to require an owner of a laboratory under these provisions to provide certain information or records to the state board. Amends the California Safe Drinking Water Act. Authorizes the state board to suspend or revoke a permit if the state board determines that the permittee is in violation of the act.	07/10/2017 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
AB 1479 Bonta (D)	Public Records: Supervisor of Records: Civil Penalties		Amends the Public Records Act. Requires public agencies to designate a person or office to act as the agency's custodian of records who is responsible for responding to any request made under the Act and any inquiry from the public about a decision by the agency to deny a request for records. Authorizes a court that finds by preponderance of the evidence that an agency failed to respond to a request for records or improperly withheld public records from a member of the public to assess a civil penalty.	07/18/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
AB 1490 Gray (D)	State Water Resources Control Board: School Water		Requires the State Water Resources Control Board to prepare and submit to the Legislature a report evaluating potential adverse impacts resulting from the implementation of the Bay-Delta Water Quality Control Plan on the quality and supply of drinking water provided to schools in disadvantaged communities, in the state, including a summary describing any measures that may be implemented to address any adverse impacts identified in the report. Relates to school financial assistance.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.

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<u>AB 1524</u> Brough (R)	Political Reform Act: Mass Mailing Prohibitions		Amends the Political Reform Act of 1974 which prohibits the sending of a mass mailing by either a candidate or an agency. States violation of the act's provisions is punishable as a misdemeanor.	03/16/2017 - To ASSEMBLY Committee on ELECTIONS AND REDISTRICTING.
<u>AB 1529</u> Thurmond (D)	Cross-Connection or Backflow Prevention Inspectors		Requires valid and current certifications for cross-connection inspection or backflow prevention device inspection, testing, and maintenance that meet specified requirements for competency to e accepted certification test until the state Water Resources Control Board promulgates specified regulations. Prohibits a water supplier from refusing to recognize certifications tests that meet standards set by regulations of the Board.	07/18/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 1548</u> Fong (R)	Occupational Safety and Health: Penalties		Expands the application of an existing law which authorizes certain entities to apply for a refund of civil penalties assessed against them if specified conditions are met and which requires moneys in a certain fund to be expended to assist schools in establishing effective occupational injury and illness prevention programs.	03/16/2017 - To ASSEMBLY Committee on LABOR AND EMPLOYMENT.
<u>AB 1605</u> Caballero (D)	Maximum Contaminant Levels: Replacement Water		Deems a person that causes or permits, or threatens to cause or permit, any waste to be discharged that contributes to the exceedance of the maximum contaminant level for nitrate in drinking water to not have caused pollution or a nuisance or to not be liable for negligence or trespass, if the person or entity takes certain actions relating to replacement water until the maximum contaminant level for nitrate is no longer exceeded.	04/27/2017 - From ASSEMBLY Committee on JUDICIARY with author's amendments.;04/27/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on JUDICIARY.
<u>AB 1654</u> Rubio (D)	Water Conservation	CO-SPONSOR & SUPPORT	States the intent of the Legislature to enact legislation necessary to help make water conservation a California way of life.	07/19/2017 - Re-referred to SENATE Committee on RULES.
<u>AB 1667</u> Friedman (D)	Water Management Planning	OPPOSE	Requires the State Water Resources Control Board to adopt long-term standards for urban water conservation and water use on or before the specified date. Requires the board to adopt performance	07/11/2017 - In SENATE Committee on NATURAL RESOURCES AND

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			measures for commercial, industrial, and institutional water use on or before that date. Require an urban water supplier to calculate a water use target beginning the calendar year after the board adopts long-term standards for urban water conservation and water use. Relates to submission of specified information.	WATER: Heard, remains in Committee.
AB 1668 Friedman (D)	Water Conservation		States the intent of the Legislature to enact legislation necessary to help make water conservation a California way of life.	07/19/2017 - Re-referred to SENATE Committee on RULES.
AB 1669 Friedman (D)	Urban Water Conservation Standards and Use Reporting		Requires the State Water Resources Control Board, in consultation with the Department of Water Resources, to adopt long-term standards for urban water conservation and water use by a specified date. Provides for the adoption of interim standards. Requires the board, before adopting an emergency regulation, to provide a certain number of days for the public to review and comment on the regulation and requires the board to hold a public hearing.	05/26/2017 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
AB 1671 Caballero (D)	Backflow Prevention Assemblies		Requires a public water system to implement a cross-connection control program that complies with applicable regulations and standards. Requires the State Water Resources Control Board to adopt standards for backflow protection and cross-connection control. Authorizes the Board to do so through the adoption of a policy handbook.	07/11/2017 - From SENATE Committee on APPROPRIATIONS with author's amendments.;07/11/2017 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
AB 1673 Aguiar-Curry (D)	The California Water Plan		Makes technical, nonsubstantive changes to existing law which requires the Department of Water Resources to update every five years, the plan for the orderly and coordinated control, protection, conservation, development and use of the water resources of the state.	02/17/2017 - INTRODUCED.
SB 5 de Leon (D)	California Drought, Water, Parks, Climate		Enacts the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, authorizes the issuance of bonds in an amount of a specified sum pursuant to the State General Obligation Bond Law to finance a drought, water,	07/18/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE with author's amendments.;07/18/2017 - In

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			parks, climate, coastal protection, and outdoor access for all program. Provides for appropriate sum for the purpose of paying costs associated with operating and maintaining certain parks projects funded by the program.	ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
SB 24 Portantino (D)	Political Reform Act of 1974: Economic Interest		Amends the Political Reform Act which requires certain disclosures to include a statement indicating the fair market value of investments or interests in real property and the aggregate value of income received from each reportable source. Revises the dollar amounts associated with these ranges.	07/12/2017 - From ASSEMBLY Committee on ELECTIONS AND REDISTRICTING: Do pass to Committee on APPROPRIATIONS.
SB 49 de Leon (D)	Environmental and Workers Defense Act of 2017		Relates to the California Environmental, Public Health, and Workers Defense Act of 2017. Relates to clean air, drinking water, discharge of pollutants into the atmosphere and waters and endangered species. Prohibits state or local agencies from amending or revising their rules and regulations implementing these state laws to be less stringent than the baseline federal standards. Prohibits a state agency from amending rules to be less stringent in protection of worker rights and worker safety.	07/18/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 62 Jackson (D)	Affordable Senior Housing Act		Establishes the Affordable Senior Housing Program for the purpose of guiding and serving as a catalyst for the development of affordable senior housing and supportive care campuses. Requires the director of GO-Biz to undertake various actions in implementing the program, including establishing and implementing a process for identifying and convening public and private stakeholders and assisting participants in identifying locations and funding sources, obtaining permits, and other matters.	07/19/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 72 Mitchell (D)	Budget Act of 2017		Makes appropriations for the support of state government for the 2017-18 fiscal year.	05/26/2017 - From SENATE Committee on BUDGET AND FISCAL REVIEW with author's amendments.;05/26/2017 - In SENATE. Read second time and amended. Re-

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
				referred to Committee on BUDGET AND FISCAL REVIEW.
SB 80 Wieckowski (D)	California Environmental Quality Act: Notices		Amends the California Environmental Quality Act. Requires a lead agency to post certain notices on the agency's Internet Web site and to offer to provide those notices by e-mail. Requires a county clerk to post notices regarding an environmental impact report or a negative declaration on the county's Internet Web site. Requires the filing of a notice in certain cases.	07/20/2017 - In ASSEMBLY. Read second time. To third reading.
SB 146 Wilk (R)	Water Resources: Permit To Appropriate		Amends an existing law which prohibits the taking or possession of a fully protected fish, except as provided, and designates the unarmored threespine stickleback as a fully protected fish. Prohibits the issuance of a new permit to appropriate water from any river source or stream that has, or is reasonably suspected to have, a population of unarmored threespine stickleback.	04/25/2017 - In SENATE Committee on NATURAL RESOURCES AND WATER: Not heard.
SB 205 Governance and Finance Cmt	Local Government Omnibus Act of 2017		Requires an officer to take an oath following any election or appointment and before entering the duties of his or her office. Authorizes the County of Merced to enter into a lease, concession, or managerial contract involving a specified area of county property, by a four-fifths vote of the board of supervisors. Makes changes relating to the Committee on County Auditing Procedures, sexual harassment prevention training, certain appointments lists, and certain flood control facilities.	07/20/2017 - In ASSEMBLY. Read second time. To Consent Calendar.
SB 206 Governance and Finance Cmt	Validations		Enacts the First Validating Act of 2017, which validates the organization, boundaries, acts, proceedings, and bonds of the state and counties, cities, and specified districts, agencies, and entities.	07/10/2017 - Signed by GOVERNOR.;07/10/2017 - Chaptered by Secretary of State. Chapter No. 2017-57
SB 207 Governance and Finance Cmt	Validations		Enacts the Second Validating Act of 2017, which validates the organization, boundaries, acts, proceedings, and bonds of the state and counties, cities, and specified districts, agencies, and entities.	07/10/2017 - Signed by GOVERNOR.;07/10/2017 - Chaptered by Secretary of State. Chapter No. 2017-58

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
SB 208 Governance and Finance Cmt	Validations		Enacts the Third Validating Act of 2017, which validates the organization, boundaries, acts, proceedings, and bonds of the state and counties, cities, and specified districts, agencies, and entities.	07/10/2017 - Signed by GOVERNOR.;07/10/2017 - Chaptered by Secretary of State. Chapter No. 2017-59
SB 210 Leyva (D)	Pupil Health: Drinking Water		Requires priority for grants from the State Water Resources Control Board to be given to projects for schools that have tested their drinking water fixtures, and the results show that the drinking water either does not meet the United States Environmental Protection Agency drinking water standards for lead or is above the California maximum contaminant level for any other contaminant.	06/12/2017 - To ASSEMBLY Committees on EDUCATION and ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
SB 224 Jackson (D)	Environmental Quality Act: Baseline Conditions		Requires the Office of Planning and Research to prepare, develop, and transmit to the secretary proposed changes or amendments to guidelines for the Environmental Quality Act to determine the baseline physical conditions by which a lead agency determines whether a project has a significant effect on the environment. require the office, in developing the recommendations to limit the consideration of modifications to the environment at the project site cause by certain action.	05/25/2017 - In SENATE Committee on APPROPRIATIONS: Held in committee.
SB 229 Wieckowski (D)	Accessory Dwelling Units		Authorizes an ordinance creating accessory dwelling units in single-family and multi-family residential zones to prohibit the sale or other conveyance of the unit separate from the primary residence. Extends the use of the maximum standards to a proposed accessory dwelling unit on a lot zoned for residential use, provision concerning the location of certain required replacement parking spaces, and the applicability of certain provisions concerning utility charges to special districts and water corporations.	07/12/2017 - From ASSEMBLY Committee on LOCAL GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
SB 231 Hertzberg (D)	Local Government: Fees and Charges		Relates to a provision of the California Constitution that requires that assessments, fees, and charges be submitted to property owners for approval or rejection after the provision of written notice and the holding of a public hearing. Defines the term sewer for these	06/15/2017 - In ASSEMBLY. Read second time. To third reading.

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			purposes. Makes findings and declarations relating to the definition of the term sewer for these purposes.	
SB 252 Dodd (D)	Water Wells	WATCH	Requires a city or county overlying a critically overdrafted basin to request estimates of certain information from an applicant for a new well located within a critically overdrafted basin as part of an application for a well permit. Requires this information to be made available to both the public and to groundwater sustainability agencies and easily accessible.	07/17/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 372 Cannella (R)	San Joaquin River Exchange Contractors Groundwater		Creates the San Joaquin River Exchange Contractors Groundwater Sustainability Agency as the exclusive groundwater sustainability agency and successor agency. Establishes the initial boundaries of the agency and authorizes the agency's boundaries to be changed.	07/11/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
SB 423 Cannella (R)	Indemnity: Design Professionals		Amends an existing law which provides, with respect to certain contracts and amendments to contracts with a public agency for design professional services, that all provisions, clauses, covenants, and agreements contained in, collateral to, or affecting these contracts or amendments that purport to require the professional to defend the agency under an indemnity agreement are unenforceable, except for certain cases. Makes such provisions applicable to all design professional services.	03/29/2017 - Re-referred to SENATE Committee on JUDICIARY.
SB 427 Leyva (D)	Community Water Systems: Lead User Service Lines		Requires a community water system to provide the timeline for replacement of known lead user service lines in use in its distribution system to the State Water Resources Board. Requires certain public water systems to provide related findings. Authorizes the application and enforcement of these provisions under the Safe Drinking Water Act.	07/20/2017 - In ASSEMBLY. Read second time. To Consent Calendar.
SB 450 Hertzberg (D)	Public Bodies: Bonds: Public Notice		Requires the governing body of a public body to obtain and disclose specified information regarding the issuance of bonds in a meeting open to the public. Requires the information to be obtained	07/12/2017 - From ASSEMBLY Committee on LOCAL

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			as a good faith estimate from an underwriter, financial advisor, or private lender or from a third party borrower, as specified, if the public body issuing bonds is a conduit financing provider, as defined.	GOVERNMENT: Do pass to Committee on APPROPRIATIONS.
SB 454 Moorlach (R)	Public Employees' Health Benefits		Relates to the Public Employees' Medical and Hospital Care Act. Provides that, for state employees who are first employed and become members of the retirement system on or after a specified date, the employer contribution for annuitants shall be limited to a certain percent of the weighted average of the health benefit plan premiums for an active employee enrolled for self-alone. Makes other changes concerning employer contributions and prefunding of retiree health care.	04/24/2017 - In SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT: Failed passage.;04/24/2017 - In SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT: Reconsideration granted.
SB 473 Hertzberg (D)	California Endangered Species Act		Amends the California Endangered Species Act which requires the Department of Fish and Wildlife to adopt regulations for reporting on all take authorized by incidental take permits and for providing public notice of permit applications and issued permits. Includes a requirement that the person pay a permit application fee. Makes changes concerning surface mining operations, agricultural activities, conservation easements, addition or removal of species from the endangered species list, and other matters.	07/11/2017 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
SB 506 Nielsen (R)	Department of Fish and Wildlife: Lake or Streambed		Requires the Department of Fish and Wildlife to periodically upgrade the information on its Internet Web site regarding lake or streambed alteration agreements, to update its "Frequently Asked Questions" document and other appropriate sources of information regarding the lake and streambed alteration program, and to provide guidance on its Internet Web site to facilitate members of the public in obtaining individualized guidance regarding the lake and streambed alteration program.	07/21/2017 - Vetoed by GOVERNOR.
SB 564 McGuire (D)	Water Bill Savings Act		Enacts the Water Bill Savings Act. Authorizes a joint powers authority to provide funding for a customer of a local agency in	07/18/2017 - In ASSEMBLY. Read second time. To third reading.

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			specified counties or its publicly owned utility to acquire, install, or repair a water efficiency improvement on the customer's property served by the local agency or its publicly owned utility. Requires the customer to repay the authority through an efficiency charge on the customer's water bill.	
SB 580 Pan (D)	Water development projects: Sacramento-San Joaquin		Revises authorization for flood control projects along the American and Sacramento Rivers.	07/19/2017 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
SB 606 Skinner (D)	Water Conservation	WATCH	States the intent of the Legislature to enact legislation necessary to help make water conservation a California way of life.	07/19/2017 - In ASSEMBLY. Read second time. To third reading.
SB 623 Monning (D)	Water Quality: Safe and Affordable Drinking Water Fund		Establishes the Safe and Affordable Drinking Water Fund in the State Treasury. Provides that moneys in the fund are available to the State Water Resources Control Board. Requires the Board to expend moneys in the fund for grants, loans, contracts, or services to assist those without access to safe and affordable drinking water.	07/11/2017 - From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: Do pass to Committee on APPROPRIATIONS.
SB 634 Wilk (R)	Santa Clarita Valley Water District		Repeals the Castaic Lake Water Agency Law. Recognizes the Newhall County Water District and the Castaic Lake Water Agency into the Santa Clarita Valley Water District which prohibits the Castaic Lake Water Agency and the Newhall County Water District from operating as separate entities or exercising independent functions.	07/12/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 638 Leyva (D)	Heavy Duty Motor Vehicles		Requires the State Air Resource Board to adopt regulations that require owners or operators of heavy duty motor vehicles used for commercial purposes to perform regular inspections of their vehicles for compliance with emission standards of the State board. Requires a fleet of these vehicles to comply with the State boards emission standards in order for any vehicle of the fleet to be registered.	03/02/2017 - To SENATE Committees on TRANSPORTATION AND HOUSING and ENVIRONMENTAL QUALITY.

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
SB 667 Atkins (D)	Riverine and Riparian Stewardship		Requires the Department of Water Resources to establish a program to implement watershed-based riverine and riparian stewardship improvements by providing technical and financial assistance in support of projects with certain benefits. Requires the program to support the purposes of and be coordinated with the Urban Stream Restoration Program, fish passage improvements, and other similar programs.	07/19/2017 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
SB 686 Wilk (R)	Public Contracts: Claims Resolution		Requires a public entity to conduct a meet and confer conference within a specific period for the settlement of disputes.	03/09/2017 - To SENATE Committee on JUDICIARY.
SB 700 Wiener (D)	Energy Storage Initiative		Requires the Public Utilities Commission and the governing boards of local publicly owned electric utilities to establish an Energy Storage Initiative to provide rebates to customers of electrical corporations for the installation of energy storage systems consistent with certain requirements. Requires the PUC to ensure an orderly transition of the funding for energy storage systems from the self-generation incentive program to the Energy Storage Initiative to minimize disruption.	07/05/2017 - From ASSEMBLY Committee on UTILITIES AND ENERGY with author's amendments.;07/05/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on UTILITIES AND ENERGY.
SB 740 Wiener (D)	Onsite Treated Water		Requires the State Water Resources Control Board to adopt regulations for a comprehensive risk-based standards for local jurisdictions permitting programs for onsite recycling of water in multifamily residential, commercial, and mixed-use buildings for nonpotable use. Requires the regulations to address specified issues and practices relating to the management, monitoring, and treatment of recycled water for nonpotable use.	05/25/2017 - In SENATE Committee on APPROPRIATIONS: Held in committee.
SB 748 Glazer (D)	Public Contracts		Amends an existing law which requires a state agency or department to follow specified rules regarding the negotiation of fees and execution of contracts for professional consulting services of a private architectural, engineering, land surveying, environmental, or construction project management firm. Requires certain negotiations to begin within a specified time period.	03/09/2017 - To SENATE Committee on GOVERNMENTAL ORGANIZATION.

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
SB 771 de Leon (D)	California Environmental Quality Act		Relates to The California Environmental Quality Act. Establishes a continuing education requirement for employees of public agencies who have primary responsibility to administer the act.	07/18/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 778 Hertzberg (D)	Safe Drinking Water Fund		Requires the State Water Resources Control Board to track and publish on its Internet Web site an analysis of all voluntary and ordered consolidations of water systems that have occurred on or after a certain date. Requires the published information to include the resulting outcomes of the consolidations and whether the consolidations have succeeded or failed in providing an adequate supply of safe drinking water to the communities served by the consolidated water systems.	07/13/2017 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 780 Wiener (D)	Water Conservation in Landscaping Act		Requires the Department of Water Resources to establish guidelines for designing landscapes consistent with the watershed approach to landscaping. Requires funding to provide preference for projects that comply with the guidelines. Requires the Department to promote this approach by providing education, and training for persons who plan, develop, or implement landscaping projects. Authorizes the promotion of application of compost to assist with projects that follow these guidelines.	05/25/2017 - In SENATE Committee on APPROPRIATIONS: Held in committee.
SCA 4 Hertzberg (D)	Water Conservation		Declares the intent of the Legislature to amend the California Constitution to provide a program that would ensure that affordable water is available to all Californians and to ensure that water conservation is given a permanent role in California's future.	02/16/2017 - To SENATE Committee on RULES.
HR 23 Valadao (R)	Gaining Responsibility on Water Act		Amends the Gaining Responsibility on Water Act of 2017, provides drought relief in the State of California.	07/18/2017 - In SENATE. Read second time.;07/18/2017 - To SENATE Committee on ENERGY AND NATURAL RESOURCES.
HR 434 Denham (R)	Water Project Financing Program Pilot Project		Authorizes a pilot project for an innovative water project financing program.	02/07/2017 - In HOUSE Committee on NATURAL RESOURCES: Referred to

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Bill No. Author	Title	IRWD Position	Summary/Effects	Status
				Subcommittee on WATER, POWER AND OCEANS.
HR 448 Huffman (D)	Conservation Subsidies Water Conservation Exclusion		Amends the Internal Revenue Code of 1986, expands the exclusion for certain conservation subsidies to include subsidies for water conservation or efficiency measures and storm water management measures.	01/11/2017 - INTRODUCED.;01/11/2017 - To HOUSE Committee on WAYS AND MEANS.

Exhibit “B”

2017 Legislative Update Report: Links to Bill & Regulatory Texts (as of July 25, 2017)

Bill Number/Version Date	Link to Bill Text
AB 1323 (Weber), as amended	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB1323
AB 1654 (Rubio), as amended	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB1654
AB 1667 (Friedman) as amended	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB1667
AB 1668 (Friedman) as amended	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB1668
SB 606 (Hertzberg/Skinner), as amended	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB606
State Water Resources Control Board Draft Regulations for “Surface Water Augmentation Using Recycled Water”	https://www.waterboards.ca.gov/drinking_water/certlic/drinki ngwater/documents/swa/draft_swa_reg_text.pdf

EXHIBIT "C"

July 21, 2017

The Honorable Robert M. Hertzberg
Chairman, Senate Committee on Natural Resources and Water
State Capitol, Room 5046
Sacramento, CA 95814

Re: Comments of Water Suppliers and the Business Community on Legislation Necessary to Help with "Making Water Conservation a California Way of Life"

Dear Chairman Hertzberg:

On behalf of the 112 undersigned organizations, we are responding to your request at the July 11, 2017, hearing of the Senate Committee on Natural Resources and Water that stakeholders submit their written comments and perspectives on the Committee's stated intent to "enact legislation necessary to help make water conservation a California way of life."

Since January 2017, many of the undersigned organizations have been engaged in the development of legislation to implement the vision of the Governor's framework for "Making Water Conservation a California Way of Life." To that end, the water community undertook a nearly four-month process to develop a comprehensive, consensus-based approach to ensure continued improvement in long-term urban water use efficiency while strengthening drought preparedness and water shortage response. That approach was put forth in AB 968 and AB 1654, authored by Assembly Member Blanca Rubio (D-West Covina).

AB 968 and AB 1654 were developed with input from dozens of water agencies committed to developing and implementing balanced approaches to water management that include demand reduction through improvements in water efficiency, continued development of resilient water supplies, and preparation for inevitable future droughts. This balanced approach is consistent with Governor Brown's comprehensive California Water Action Plan.

AB 968 and AB 1654 were also consistent with the framework's policy objectives of establishing new water use targets for urban retail water suppliers and enhancing drought planning, preparation, and reporting requirements. In addition to promoting these sound water policy goals, these two bills preserved local authority — where experience, expertise and customer relationships are maintained — and balanced the need to improve water use efficiency and further develop drought-resilient water supplies. ***We believe maintaining legislative oversight and local authority must be paramount as the state develops and implements new policies intended to enhance water use efficiency and water shortage planning requirements.***

AB 968 and AB 1654 were supported by more than 100 entities, including water suppliers, cities and counties, business groups and associations. The two-bill package garnered broad-based support because it was guided by the following principles, which should be the foundation for any legislation enacted for "Making Water Conservation a California Way of Life."

Policy Principles Related to Long-Term Water Use Efficiency and Drought Planning

Long-Term Water Use Efficiency:

1. Preserve the Legislature's authority over long-term water use efficiency target setting. State agencies should **not** be granted the authority to set and revise water use efficiency targets. Commercial, industrial, and institutional (CII) performance measures must be determined by a broad stakeholder task force and not state agencies.
2. Ensure that any water use efficiency target setting approach is flexible to account for the diversity among California's communities and the urban retail water suppliers that serve them. Legislation must include alternative pathways or functional equivalents to compliance, variances, and criteria for the data to be collected.
3. Protect water rights and preserve a water supplier's ability to use water it has a right to access.
4. Protect and create incentives for the further development of potable reuse and recycled water.
5. Provide for appropriate, progressive enforcement authority that accounts for urban retail water suppliers' authorities and responsibilities relative to their customers. The focus should be on corrective action instead of cease-and-desist orders.

Shortage Response Planning:

6. Preserve local decision-making to determine actions to avoid or mitigate shortages. The state should not dictate what actions are to be taken at any stage or specific actions that must be included in a water shortage contingency analysis.
7. Preserve and encourage investments in resilient water supplies. Potable reuse, recycled water, and desalination should all be considered fully reliable.
8. Ensure that annual water supply and demand assessments are based on and accurately reflect local conditions.
9. Maintain the existing legislative intent and challenge period for urban water management plans.
10. Recognize that energy use is only one aspect of water supply planning.

Proposed Goals for the Legislation

The water, city and county, and business communities support the goal of making water conservation a California way of life, but the Administration and the Legislature have yet to

define the means to accomplish this goal. We recommend that legislation be designed to accomplish two objectives: 1) improve urban water use efficiency, and 2) identify demand management and supply augmentation measures that urban retail water suppliers will utilize to address water supply shortages. Improvements in urban water use efficiency should be measured at the urban retail water supplier level based on water use that is considered reasonable and efficient. The legislation should have a goal of reducing the wasteful use of water rather than seeking to reduce the total volume of water served for uses that are reasonable and efficient.

The legislation should also ensure that urban water suppliers engage in drought planning that better prepares them to respond to drought and other water shortages. Any legislation modifying urban water management plans and water shortage contingency analysis requirements should result in usable documents for the supplier and not simply a compilation of hypothetical modeling or academic analyses. The legislation should also consider the benefits and burdens of mandatory reporting requirements placed on urban water suppliers.

Detailed Discussion on Long-Term Water Use Efficiency and Drought Planning

- 1. Preserve the Legislature's authority over long-term water use efficiency target setting. State agencies should not be granted the authority to set and revise water use efficiency targets. Commercial, industrial, and institutional (CII) performance measures must be determined by a broad stakeholder task force and not state agencies.**

California can and should enact legislation establishing new long-term aggregated targets and standards for water use efficiency at the retail agency level that assign appropriate roles for the Legislature, state agencies and urban retail water suppliers. Toward this end, and substantially mirroring the process enacted within the Sustainable Groundwater Management Act and within the Renewable Portfolio Standards policy area:

- The Legislature should establish, in statute, the standards for reasonable and efficient urban water use, and the target formula(s) by which retail agency-level water use efficiency will be measured;
- State agencies should develop guidance and adopt regulations necessary to implement the target formula(s), and provide technical and financial assistance to local urban retail water suppliers; and
- Urban retail water suppliers should have responsibility for using state-provided data and/or local data, if it is of comparable or better quality, to calculate a water use efficiency target that is consistent with state law and that accounts for unique local conditions. An urban retail water supplier also should have responsibility for taking actions within its control to meet its water use efficiency target.

Future revisions to the long-term aggregated targets and standards for water use efficiency at the retail agency level should have a technical or scientific basis that justifies a change in the efficiency standard. State agencies should have responsibility for making recommendations to the Legislature on appropriate updates to the efficiency standards every five years after engaging urban stakeholders and soliciting public input. State agencies also should be required to engage urban stakeholders and solicit public input regarding implementation of the long-term water use efficiency targets given that there likely will be technical issues related to the calculation of and compliance with the targets that will need to be resolved with stakeholders input.

Additionally, the long-term water use efficiency target should not include volumetric targets for the commercial, industrial and institutional (CII) water use sectors. Instead, the water use efficiency approach taken with CII should be the implementation of performance measures designed to promote the efficient use of water. These performance measures, reflecting best management practices, should be developed in conjunction with stakeholders to ensure that the measures are cost-effective, and support California's economic productivity. Stakeholders must play a meaningful role in the development of the performance measures as well as the thresholds for implementation.

Arguments in Support:

The Administration and others have proposed that the State Water Resources Control Board should be granted unlimited authority to set standards for urban water use, including setting standards for indoor residential water use, outdoor irrigation, and CII water uses. However, giving full control of future water efficiency target setting to any state agency risks negative impacts to California's economy, business climate, and quality of life. Furthermore, as written in the introduction to the California Water Action Plan, "To be sustainable, solutions [to management of California's water resources] must strike a balance between the need to provide for public health and safety (e.g., safe drinking water, clean rivers and beaches, flood protection), protect the environment, and support a stable California economy." Additionally, as California moves toward greater water use efficiency, it should be noted that improving water use efficiency may increase costs and reduce water system revenues. The upward pressure on water rates and impact on affordability of water must be considered.

Only the Legislature can balance California's many competing policy goals and priorities, and represent all Californians in determining how water should be used within our urban communities. State agencies should not be granted the unfettered authority to set and revise water use targets.

- 2. Ensure that any water use efficiency target setting approach is flexible to account for the diversity among California's communities and the urban retail water suppliers that serve them. Legislation must include alternative pathways or functional equivalents to compliance, variances, and criteria for the data to be collected.**

Legislation on urban water use efficiency can build on the success of California's "20% by 2020" law by recognizing the diversity that exists among California's many unique urban communities

and more than 400 urban retail water suppliers. Before the Legislature establishes water use efficiency targets based on any single method, including water budgets, that method must be proven to be reliable, broadly applicable, and adaptable to different community characteristics and conditions throughout the state. AB 968 would have accomplished this by providing three clearly defined, codified options for calculating the water use efficiency target. Each option would have allowed water suppliers to calculate a water use efficiency target using existing processes and programs while acknowledging the state's hydrologic, geographic, climatic, and economic diversity.

The Legislature should consider the following, depending on the method(s) chosen for calculating water use efficiency targets:

- If one method is chosen for setting water use efficiency targets, alternative pathways or functional equivalents to compliance should be permitted where the calculation of the water use efficiency target under the chosen method is technically, economically or administratively infeasible.
- If a data-intensive method, such as a retail-level water budget, is chosen as the sole method for calculating an urban retail water supplier's water use efficiency target, the Department of Water Resources should be responsible for providing urban retail water suppliers with accurate data necessary to calculate each urban retail water supplier's water efficiency target.¹
- The legislation must provide for variances that account for unique community attributes and situations.

Arguments in Support:

Calculating retail-level water use efficiency targets using a "one-size fits all" methodology will likely be challenging for a number of technical, economic or administrative reasons. Providing flexibility can aid in the statewide implementation of water use efficiency targets, and can appropriately balance the benefits and resource requirements of the chosen method(s).

If a water budget approach is selected, the Department of Water Resources should provide to urban retail water suppliers, in electronic form, a database of validated aerial imagery and measured irrigable area needed to calculate a water use efficiency target for compliance. The state should provide this data because most urban retail water suppliers do not have it, nor the resources and expertise required to collect the large amount of data necessary to calculate a water use efficiency target using a water budget approach. Those water suppliers that develop

¹ It is important to note that for a water budget approach, as proposed by the Administration, valid data is needed to establish equitable budgets. Time is needed to acquire accurate data, verify data and implement the budget. At a minimum, basic retail-level water budgets will require accurate information on irrigable area, population data, and adjustments or variances to account for unique local circumstances. While aerial imagery and technological advances have improved the ability to calculate landscape measurements, they are not perfect and a number of challenges remain. In many situations, fieldwork will be necessary to confirm the data. More complex water budgets require additional data related to parcel characteristics or development date, type of water served and customer type.

the necessary data locally should be afforded the opportunity to use their own data if its accuracy can be demonstrated.

Independent of the selected approach, flexibility in the form of variances is imperative so that unique community factors and the water associated with those uses are given consideration in the water use efficiency target setting process. Water use due to unique factors can be valid, appropriate, and often efficient uses of water within California's urban communities. For example, urban water use for livestock, agriculture, evaporative coolers, significant seasonal and transient population increases, construction, vegetation irrigated for fire protection purposes, and environmental protection are legitimate uses that would not be captured under the water budget methodology that has been proposed by the Administration. A variance process would allow these unique local uses to be accommodated. Standardized variances also are an integral component of establishing equitable, accurate water use efficiency targets, and are needed to ensure urban retail water suppliers account for similar uses in a consistent manner.

3. Protect water rights and preserve a water supplier's ability to use water it has a right to access.

By securing and defending water rights an urban water supplier can plan for and manage water supplies to meet current and projected demands. Because legislation related to urban water use efficiency has the potential to impact an urban supplier's access to water, legislation in this policy area must expressly provide that **it does not**:

- Alter or affect existing water rights or the full exercise of those rights;
- Modify the authority of any state agency to adjudicate, alter or make a decision related to water rights;
- Permit a state agency to condition any changes to a water right or water-right permits or licenses based on the legislation;
- Permit a state agency or a court to reduce an urban water supplier's discretion to determine the timing and use of its available water supplies; or
- Affect or limit an urban water supplier's right to water conserved or waived through reuse.

Furthermore, the establishment and enforcement of urban water use efficiency targets should not result in stranded water system assets or undermine the financial condition of water suppliers that have invested ratepayer revenue, and in certain cases, state grants and loans, to develop a reliable water supply.

Arguments in Support:

Under California law, water rights are a property right. Without the protection of that right and the preservation of Water Code Section 1011, which provides that water saved and not used as

a result of water conservation efforts may be transferred, legislation related to urban water use efficiency targets may have the unintended consequence of impacting water rights and result in a regulatory taking under the Constitution. By expressly protecting water rights and access to water, and by preserving the full applicability of Section 1011 to water saved under any new target setting approach, the legislation would avoid this consequence and enhance the availability of saved water to be put to beneficial use. The Legislature and state agencies also should consider how current barriers to the voluntary transfer of conserved water could be removed.

4. Protect and create incentives for the further development of potable reuse and recycled water.

Drought-resilient supplies, such as recycled water, potable reuse, desalination, and stormwater, are key components of the state's water supply portfolio. As has been widely acknowledged, California needs to continue investing in these types of supplies as a means to increase water supply reliability and diversification within the state, to reduce reliance on the Delta for future water supplies, to reduce greenhouse gas emissions where applicable, and to recharge groundwater basins. The state must continue on a path toward greater investment in drought resiliency. At minimum, local investments in water recycling should be recognized as part of any water use efficiency legislation, and long-term targets and standards for water use efficiency should protect existing local investments made by urban water suppliers in resilient supplies.

Targets and standards should include a credit and consideration for all types of drought-resilient supplies, and should include the following provisions related to recycled water:

- If an outdoor irrigation standard is set, landscapes irrigated with recycled water should be given a special landscape allowance as set forth in the Model Water Efficient Landscape Ordinance and an evapotranspiration factor of 1.0;
- A variance to the 1.0 evapotranspiration factor should be included where additional recycled water use is necessary to protect and sustain landscaping due to recycled water quality, ambient soil conditions or adverse drainage. A higher level of use should also be allowed when needed to avoid the stranding of recycled water assets, for the application of water to agriculture, or due to other relevant factors;
- An urban retail water supplier should receive a credit for the volume of its recycled water supply that is served for potable uses up to the volume needed, on an acre-foot basis, to meet its water efficiency target;
- Prior to recommending an indoor residential water use efficiency standard of less than 55 gallons per capita daily, state agencies should be required to evaluate and report to the Legislature on the anticipated impacts that the combined reductions in indoor residential and CII water use would have on existing wastewater and recycling/reuse supply, infrastructure and operations.

Arguments in Support:

By its very nature, water recycling reuses wastewater, which would otherwise be disposed of, for beneficial uses and offsets dependence on other sources of supply. Under an urban water use efficiency framework, the quantity of wastewater that is available for recycling already has been subjected to conservation and efficient water use because it is derived from the potable water used within an urban community. Further restricting its use will serve as a disincentive for continued local investment in these types of supplies and could result in recycled water not being put to beneficial potable and non-potable reuse. In fact, if storage is not available, water suppliers could be forced to release recycled water to the ocean or to forego advanced treatment and simply discharge treated wastewater.

Moreover, the approach outlined above recognizes that the application of recycled water in landscape irrigation is already extensively regulated, ensuring its efficient use. The provisions outlined above promote water use efficiency through greater water reuse in California and protect local investments in water recycling.

5. Provide for appropriate, progressive enforcement authority that accounts for an urban retail water supplier's authorities and responsibilities relative to their customers. The focus should be on corrective action instead of cease-and-desist orders.

Water suppliers are responsible for ensuring that the communities they serve have access to safe and reliable water. As stewards of their communities' water resources, water suppliers have taken and will continue to take the appropriate actions to encourage greater water use efficiency within their service areas. Water suppliers, however, do not have the ability to directly control their customers' behaviors relative to water use; instead, water suppliers must cultivate relationships with their customers through a wide variety of locally appropriate incentives and disincentives and communication activities to achieve greater water use efficiency.

The creation of new, punitive enforcement authorities targeting local water suppliers is not appropriate to achieve greater water use efficiency. For example, granting state agencies cease-and-desist authority to compel compliance with water use standards is very problematic. When taken to the extreme, such authority could be used to compel a water supplier to cease delivery of water to its customers, which an urban retail water supplier cannot do legally except for nonpayment. Cease-and-desist powers in this context are inappropriate.

Instead, the legislation should authorize the provision of state agency resources that focus on the goal of eliminating the waste of water within communities. This approach would include notices of noncompliance that provide a time to cure. The legislation should enact enforcement provisions that:

- Grant progressive enforcement authority to the State Water Board, beginning with informational orders, then written notices of noncompliance and ultimately potential civil liability;

- Require that within 90 days of receiving a notice of noncompliance for failing to meet its water efficiency target, an urban retail water supplier must identify additional actions to be taken to encourage users to increase water use efficiency. The supplier also should be required to submit a comprehensive remedial plan detailing the additional steps it will take to the State Water Board for approval;
- Provide for an urban retail water supplier to face potential civil liability for failure to implement the steps identified in an approved remedial plan; and
- Recognize that an urban retail water supplier may take all reasonable and appropriate steps, yet still fail to meet its target.

Arguments in Support:

State agencies should work to cultivate relationships with water suppliers in the same way water suppliers must cultivate relationships with their customers. The state's approach to the enforcement of any new water use efficiency targets should emphasize a technical assistance and information-sharing role for state agencies. Providing state agencies with the ability to issue informational orders as local water suppliers work to achieve water use targets is appropriate. Additionally, providing state agencies with the ability to ensure that reporting and other requirements are satisfied is appropriate. In all cases, however, local water suppliers must retain control over the actions required to meet water use efficiency targets to ensure that they are locally appropriate.

Detailed Discussion on Shortage Response Planning

- 6. Preserve local decision-making to determine actions to avoid or mitigate shortages. The state should not dictate what actions are to be taken at any stage or specific actions that must be included in a water shortage contingency analysis.**

Water agencies agree that smart, thoughtful enhancements to the state's shortage response planning laws can make California more drought resilient. However, urban water suppliers must retain the authority and responsibility to establish and implement the appropriate drought response actions for their community.

This is consistent with one of the primary objectives for strengthening water shortage contingency planning contained in the Administration's "Making Water Conservation a California Way of Life" framework. The objective of strengthened drought planning should be to provide the state with information necessary to evaluate specific urban supplier responses to drought conditions in order to allow focused attention where necessary and forestall overarching mandates that may conflict with existing adequate local plans and policies.

Rather than specify the specific shortage level(s) and actions each urban water supplier should plan and implement, urban water suppliers should:

- Describe and analyze the reliability of their water supplies in greater detail within their Urban Water Management Plans, and be required to assess the vulnerability of those supplies to seasonal or climatic shortage based on the five consecutive driest years that the supplier has experienced, unless a shorter multiple-year period would more severely impact supplies;
- Include more specific elements within their water shortage contingency analysis to ensure that the plans are usable documents that will aid the supplier in responding to a water shortage;
- Retain authority to determine when to declare a shortage emergency declaration;
- Have flexibility to take reasonable alternative actions not included in their water shortage contingency plan to act in real time based on real conditions they are experiencing; and
- Report annually on water supply availability to meet demands, allowing the state agencies to consider the results of the annual assessments (e.g., drought response actions and level) prior to adopting any statewide emergency conservation regulations.

In addition, urban water suppliers should be able to decide actions that are necessary before a shortage is declared to avoid or mitigate shortage impacts to their customers. Urban water suppliers must be able to factor in all water supplies, including supply augmentation, in calculating the suppliers' shortage level.

Arguments in Support:

Effective drought response will occur only when urban water suppliers retain local control to establish and implement the shortage response actions and levels best suited for their communities and local supply conditions. We have a diverse state with no two communities being the same; a "one-size-fits-all" approach does not work while still trying to ensure that Urban Water Management Plans and water shortage contingency plans/analysis are usable documents for the supplier and not simply a compilation of hypothetical or academic analyses.

The Public Policy Institute of California, in evaluating the response to California's multi-year drought, concluded that most water suppliers were prepared and that the mandatory conservation requirements imposed under emergency regulations were a "blunt instrument." Legislation should ensure that all water suppliers are prepared in the future, that this preparedness is well documented, that the state has necessary information on an annual basis to take appropriate and targeted actions, and that any future emergency conservation regulations shall consider this information.

7. Preserve and encourage investments in resilient water supplies. Potable reuse, recycled water, and desalination should all be considered fully reliable.

Many water suppliers have invested in resilient water supplies to ensure that they are able to meet customer demands during times of shortage. Water suppliers make financial and

operational planning decisions based on the availability of those resilient supplies during drought conditions.

Consistent with the approach suggested by the State Water Board and the Department of Water Resources, the legislation should enact better drought planning and preparation and allow local agencies to carry out those plans, if they are complying with the enhanced requirements, and should encourage investments in resilient supplies to ensure California is better prepared to weather the next drought. Additionally, potable reuse, recycled water, and desalination should all be considered fully reliable.

Enhanced planning requirements should be complemented by policies that encourage greater local investment in resilient supplies and protect a water supplier's ability to depend on those supplies during a shortage. Toward this end, the legislation should expressly provide that:

- During a statewide drought, local drought, or water shortage, an urban water supplier shall not be required to reduce its use or reliance on any water supply available for its use and identified in its urban water management plan, or be required to take additional actions beyond those specified in its water shortage contingency plan for the level of shortage that is anticipated in the annual assessment report or the level of shortage that it is currently experiencing, whichever is greater.

Arguments in Support:

There must be a balanced approach of long-term water use efficiency combined with development of drought-resilient supplies if California is to effectively manage future droughts. The governing bodies of urban water suppliers will be reluctant to invest in alternative local supplies without some certainty that they can use the supplies created through the investments of their ratepayers. In its recommendations on fostering water system flexibility and integration, the June 2017 Public Policy Institute of California report titled, "Building Drought Resilience in California's Cities and Suburbs," summarized the impact of not taking a balanced approach best:

"Perhaps more importantly, the state's response to this drought created new uncertainties for local suppliers regarding their investments in drought-resilient supplies, because of concerns that these investments will not be utilized if the state again mandates conservation beyond what is locally needed... This type of uncertainty is very detrimental to planning for the next drought, and it highlights the importance of the state and local suppliers getting on the same page."

8. Ensure that annual water supply and demand assessments are based on and accurately reflect local conditions.

The recent drought highlighted the value of readily available information regarding the steps that individual water suppliers can and will take to respond to drought conditions. While many water suppliers demonstrated high levels of resiliency during the recent drought — as a result of adequate planning, preparation, and investment — state law does not currently require annual reporting of local water supply conditions to the state. Reporting of this information each year will allow the relevant state agencies to better identify water suppliers that are experiencing

actual water shortages, as well as understand which suppliers are well prepared to deal with drought conditions.

Annual supply and demand assessments can provide state agencies and the Legislature with valuable information on local supply conditions throughout California. The assessments can also provide the public essential information on the status of their local supply conditions. Critical to the success of these reports, however, is that they be based on the actual hydrologic conditions occurring in the year the report is being submitted and made public. The annual report should not require projections for future years and should not be based on hypothetical dry year scenarios.

The legislation should provide that:

- By June 15 of each year, an urban retail water supplier shall report to the Department of Water Resources the status of its water supplies for that year, considering hydrologic conditions in the current year, and whether the supplies will be adequate to meet projected customer demands over the next 12 months;
- If a supply shortage is projected or exists in its service area, the supplier would be required to implement the appropriate responses described in its water shortage contingency analysis and provide monthly reports to the Department of Water Resources on how the supplier is implementing its plan; and
- The monthly reporting would be required to continue until the supplier finds that it is able to meet customer demand over the next 12 months without continued implementation of its water shortage plans.

Arguments in Support:

By enacting this approach, the state will be able to ensure local suppliers are taking appropriate actions during times of shortage. A targeted state response is more effective than statewide emergency mandates because it focuses state resources where they are needed.

Urban water suppliers must have the support and trust of their customers to be successful in making the necessary investments in supplies and infrastructure and for them to take the necessary demand reduction measures during droughts. A critical aspect to maintaining that trust is that the annual assessments prepared by the urban water suppliers be based on the actual local supply situation and current hydrologic conditions. The reports cannot create unnecessary uncertainties regarding the availability of supplies. The reports need only capture the current year, because they will be submitted annually to provide an accurate “snapshot” of supply conditions. The Urban Water Management Plan, updated every five years, requires the agencies to conduct a dry year assessment that covers a multiple dry-year scenario, and should not be repeated annually.

9. Maintain the existing legislative intent and challenge period for Urban Water Management Plans.

Under the Urban Water Management Planning Act, the legislative intent governing that act states that:

“This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.” (California Water Code §10610.2(c).)

The intent of the act is for the planning process to be an effective tool for urban water suppliers to evaluate supply reliability based on their unique local conditions. This approach is important because it helps ensure that the planning process is useful and not merely an academic exercise. As a result, this approach must be maintained.

Because urban water management plans are designed to be useful, practical documents to aid in long-term water resource planning and to help suppliers ensure that they have adequate water supplies to meet existing and future water demands, land use planning decisions rely on the plans. As a result, the California Water Code requires that challenges to the plans must be brought within 90 days after the plan has been submitted to the state. (California Water Code §10650.) Like other 90-day challenge periods in code, this gives local agencies certainty as to whether the plan can be relied upon.

Several proposals related to the shortage response planning provisions contained in the “Making Water Conservation a California Way of Life” framework have suggested extending this challenge period, which would create uncertainty surrounding the validity of urban water management plans. Instead, the legislation should:

- Preserve the intent of existing law that the Urban Water Management Planning Act is a planning tool for urban water suppliers. The act should not be interpreted or used by state agencies as a regulatory framework; and
- Maintain the existing language in California Water Code Section 10650 regarding the 90-day challenge period.

Arguments in Support:

Urban water suppliers must be able to plan based on their local conditions and not be required to develop their plans based on a “one-size-fits-all” regulated process. In addition, the 90-day challenge should be maintained, because extending the challenge period could present undue legal uncertainty for urban water suppliers. A longer challenge period also creates difficulties for entities making land-use decisions — particularly relating to the construction of new housing — using urban water management plans. These plans support the preparation of required water supply assessments and verifications of sufficient water supply, as called for in the “Show-Me-the-Water” statutes.

10. Recognize that energy use is only one aspect of water supply planning.

The Urban Water Management Planning Act currently states that an urban water management plan may, but is not required to, include information on the amount of energy used to obtain, treat and distribute water supplies to a supplier's customers. (California Water Code § 10631.2.) Providing this data should continue to be a voluntary requirement for urban water suppliers, as negotiated with the water community when § 10631.2 was enacted, and not a mandated requirement as part of compliance with the act.

Any legislation modifying the Urban Water Management Planning Act should:

- Maintain the existing language in California Water Code § 10631.2(a) that allows urban water suppliers to voluntarily provide information on energy usage.

Arguments in Support:

Urban water suppliers consider multiple variables when making water supply investments and when determining the appropriate mix of water resources they will need to meet future demands. These factors include, but are not limited to, cost-effectiveness, growth, potential climate change impacts, availability of resources, energy use, technical feasibility and regulatory issues. With that said, the number one variable considered by urban water suppliers in supply planning is maintaining water supply reliability for the community they serve. Energy use is only one factor in water supply planning, and cannot be considered independent of other factors. Requiring the reporting of this sole factor gives it undue weight in the supply planning process and in urban water management plans. This issue was appropriately not included in the framework for "Making Water Conservation a California Way of Life," and should not be included as a part of development of this legislation.

Conclusion

We appreciate the Senate Committee on Natural Resources and Water's solicitation of stakeholder input into legislation that is consistent with the vision of the Administration's "Making Conservation a California Way of Life" framework. We support the Senate's and Assembly's commitment to engage directly with water suppliers from around the state and other stakeholders as they continue development of this important legislation.

We look forward to working with the Legislature to secure a sustainable and resilient water future that protects local authority and includes sensible approaches to improving water use efficiency and enhancing drought planning and preparation. If you have any questions regarding the comments in this letter, please do not hesitate to contact me at (916) 441-4545 or whitniew@acwa.com.

Sincerely,



Whitnie Wiley
Senior Legislative Advocate
Association of California Water Agencies

WW:jv

Alameda County Water District
Amador Water Agency
Association of California Cities - Orange
County
Bay Area Water Supply and Conservation
Agency
Bella Vista Water District
Calaveras County Water District
California Building Industry Association
California Chamber of Commerce
California League of Food Producers
California Municipal Utilities Association
California Special Districts Association
California Water Association
Calleguas Municipal Water District
Camrosa Water District
Carlsbad Municipal Water District
Carmichael Water District
Casitas Municipal Water District
Central Basin Municipal Water District
Citrus Heights Water District
City of Clovis
City of Fairfield
City of Newport Beach
City of Oceanside
City of Poway
City of Redding – Public Works Department
City of Roseville
City of Sacramento
City of Tustin
City of Yuba City
Coachella Valley Water District
Contra Costa Water District
County of Sacramento
Cucamonga Valley Water District
Desert Water Agency

Dublin San Ramon Services District
East Orange County Water District
Eastern Municipal Water District
El Dorado County Water Agency
El Dorado Irrigation District
El Toro Water District
Elk Grove Water District
Elsinore Valley Municipal Water District
Fallbrook Public Utility District
Foothill Municipal Water District
Georgetown Divide, Public Utilities District
Groveland Community Services District
Helix Water District
Hidden Valley Lake Community Services
District
Humboldt Bay Municipal Water District
Humboldt Community Services District
Irvine Ranch Water District
Jurupa Community Services District
Kinneloa Irrigation District
Long Beach Water Department
Malaga County Water District
McKinleyville Community Services District
Mesa Water District
Modesto Irrigation District
Mojave Water Agency
Monte Vista Water District
Monterey Peninsula Water Management
District
Mountain Counties Water Resources
Association
Murphys Sanitary District
Nevada Irrigation District
Newhall County Water District
Olivenhain Municipal Water District
Orange County Water District

Orchard dale Water District	Scotts Valley Water District
Otay Water district	Solano Irrigation District
Padre Dam Municipal Water District	South Orange County Economic Coalition
Pasadena Water and Power	South Tahoe Public Utilities District
Placer County Water Agency	Stockton East Water District
Rainbow Municipal Water District	Suisun Solano Water Authority
Rancho California Water District	Sweetwater Authority
Rancho Murieta Community Services District	Three Valleys Municipal Water District
Reclamation District 1004	Trabuco Canyon Water District
Regional Water Authority	Tuolumne County Water Agency
Rincon del Diablo Municipal Water District	Tuolumne Utilities District
Riverside Public Utilities	Twain Harte Community Service District
Rowland Water District	Upper San Gabriel Valley Municipal Water District
Rural County Representatives of California	Utica Water and Power Authority
Sacramento Metropolitan Chamber of Commerce	Vallecitos Water District
Sacramento Suburban Water District	Valley Center Municipal Water District
San Diego County Water Authority	Vista Irrigation District
San Francisco Public Utilities Commission	Walnut Valley Water District
San Juan Water District	Western Municipal Water District
Santa Fe Irrigation District	Yorba Linda Water District
Santa Margarita Water District	Yuima Municipal Water District
	Zone 7 Water Agency

cc: The Honorable Eduardo Garcia, Chairman, Assembly Committee on Water, Parks and Wildlife
The Honorable Nancy Skinner, Member, California State Senate
The Honorable Laura Friedman, Member, California State Assembly
The Honorable Blanca Rubio, Member, California State Assembly
The Honorable Shirley Weber, Member, California State Assembly
The Honorable Members, Senate Committee on Natural Resources and Water
The Honorable Members, Assembly Committee on Water, Parks, and Wildlife
The Honorable Members, Assembly Water Conservation Working Group
Mr. Gordon Burns, Undersecretary, CalEPA
Ms. Kim Craig, Deputy Cabinet Secretary, Office of the Governor
Mr. Kip Lipper, Chief Policy Advisor, Office of the Senate President Pro Tem
Mr. Alf Brandt, Senior Counsel, Office of the Assembly Speaker
Mr. Dennis O'Connor, Principal Consultant, Senate Natural Resources and Water Committee
Ms. Rachel Machi Wagoner, Chief Consultant, Senate Environmental Quality Committee
Ms. Catherine Freeman, Chief Consultant, Assembly Committee on Water, Parks, and Wildlife
Mr. Ryan Ojakian, Senior Consultant, Assembly Committee on Water, Parks, and Wildlife
Mr. Michael Bedard, Chief of Staff, Office of Senator Robert Hertzberg
Mr. Todd Moffitt, Consultant, Senate Republican Caucus
Mr. Robert Spiegel, Consultant, Assembly Republican Caucus

August 14, 2017

Prepared by: B. Beeman

Submitted by: P. Weghorst 

Approved by: Paul A. Cook 

ACTION CALENDAR

IMPLEMENTATION OF WATER USE EFFICIENCY OUTREACH CAMPAIGN

SUMMARY:

Recent customer focus group results indicate that IRWD's outreach efforts would benefit from an updated water use efficiency messaging strategy that would be sustainable during both drought and non-drought periods. In July 2016, the Board approved a Professional Services Agreement with Suple Advertising & Design (Suple) to develop a new creative outreach plan that communicates the value of water, sustains current levels of water savings and seeks additional permanent water savings among customer groups that have been traditionally difficult to reach. The resultant plan, along with creative outreach recommendations, will be presented at the Board meeting. To implement the plan, staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with Suple for \$1,136,100.

BACKGROUND:

With the abatement of drought conditions, IRWD has moved from urgency-based water efficiency outreach efforts to the development of a new water efficiency outreach program that communicates the value of water, sustains current levels of water savings, and seeks additional permanent water savings among customer groups that have been traditionally difficult to reach. In July 2016, the Board approved a Professional Services Agreement with Suple to develop an updated water use efficiency outreach program. Upon execution of the agreement, Suple completed the following four phases of outreach program development:

- A *Discovery Phase* that brought the knowledge and thinking of Suple and IRWD staff together;
- A *Customer Research Phase* that coordinated efforts between Suple and the District's current opinion, research and strategy firm, Fairbank, Maslin, Maullin, Metz & Associates (FM3). FM3 conducted four new customer focus group sessions with customers who regularly stay within their monthly water budgets as well as customers who regularly use more water than their monthly water budgets. The results of these focus groups, along with accumulated knowledge obtained from previous research efforts, were used to complete the last two phases of the outreach campaign;
- A *Message Strategy Development Phase* that utilized the information learned from the first two phases to formulate a simple and articulate message strategy; and
- A *Creative Development Phase* during which Suple developed a creative brief and a proposal that includes a plan for the execution of an updated water use efficiency outreach program.

Execution of Plan:

To execute the proposed plan, Suple will lead the implementation of the updated water use efficiency outreach campaign as described in the scope of work provided as Exhibit "A". The campaign will include the following elements:

- The *Campaign Execution* will take concepts for the 2017-18 launch campaign and apply them to actions to be taken within the media plan. The Campaign Execution will include writing, designing and launching each element of production.
- The *Campaign Media Buy* will launch in October 2017 with the goal of combatting outdoor water usage during the fall shoulder season. The Campaign Media Buy will include a primary media flight along with a sustained effort that will occur in late 2017 and the spring of 2018.
- The *Campaign Evaluation* that will track media and engagement metrics and coordinate efforts with FM3. The results of this research will help formulate the ongoing efforts after the proposed campaign concludes.

All not-to-exceed costs associated with implementing the outreach plan are listed in the following table. Suple will bill on a monthly basis for its efforts on a time and material basis up to the amounts shown.

Costs of Implementing 2017-18 Water Use Efficiency Outreach Campaign		
Campaign Execution	September 2017 – October 2017	\$450,000
Campaign Media Buy	October 2017 – April 2018	\$655,000
Evaluation	September 2017 – December 2017	\$15,000
Account Leadership	September 2017 – December 2017	\$15,300
Miscellaneous Hard Costs	September 2017 – December 2017	\$800
Total		\$1,136,100

At the Board meeting, Suple will present the proposed outreach plan along with the creative and media strategy recommendations. To execute the proposed plan, staff recommends that the Board authorize the General Manager to execute a new Professional Services Agreement with Suple for \$1,136,100.

FISCAL IMPACTS:

The cost of the proposed water use efficiency outreach campaign is \$1,136,100. Funding for this effort is included in the FY 2017-18 operating budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on August 3, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH SUKLE ADVERTISING & DESIGN IN THE AMOUNT OF \$1,136,100 TO IMPLEMENT A NEW WATER USE EFFICIENCY OUTREACH CAMPAIGN.

LIST OF EXHIBITS:

Exhibit "A"- Sukle Advertising & Design Scope of Work

EXHIBIT "A"



SUKLE
2430 WEST 32ND AVENUE
DENVER, COLORADO 80211

P (303) 964-9100
F (303) 964-9663
SUKLE.COM

IRVINE RANCH WATER DISTRICT

2017/18 SCOPE OF WORK

July 21, 2017

Revision 8

SITUATION

Irvine Ranch Water District has asked for our assistance in moving their water conservation outreach forward to a new frontier. Building on the success of the drought outreach efforts, the goal is to launch a long-term outreach effort that communicates the value of water and promotes lasting water efficient behavior. To help achieve this goal, Sukle has been brought onboard to develop a water conservation messaging platform and to create social marketing campaigns that result in meaningful attitude and behavior change.

This proposal is designed to outline the scope of work required to keep the campaign in market during high watering seasons. To accomplish this, the first year scope of work is outlined below, beginning in September 2017, with media buys through April 2018. Work on the second year would begin in January 2018 and will be included in a future scope of work.

The overall year one plan includes two main campaign efforts: the first being the fall shoulder month campaign launching later this year targeting outdoor water usage, as well as a sustaining flight through April 2018 to help keep water-use efficiency top-of-mind during the winter months.

This scope includes the initial campaign execution in September 2017.

INITIATIVE

2017 Campaign Execution
2017 Media Buy
2017 Evaluation

PROJECTED TIMING

Sept 2017 – Oct 2017
Oct 2017 – Apr 2018
Sept 2017 – Dec 2017

Account Leadership
Miscellaneous Hard Costs

Sept 2017 – Apr 2018
Sept 2017 – Apr 2018

YEAR 1: 2017/18 APPROACH

This proposal outlines recommended communication activities and corresponding budgets for the 2017 Launch and 2018 Sustaining campaigns. Our approach is focused on maximizing change on the attitude and behaviors of IRWD customers within the district, while also balancing the need to be good stewards of available budget resources.

For 2017, the Launch activity will be in-market during the fall shoulder months of October – December 2017 and will target outdoor water usage with various media vehicles such as cable TV, cinema, digital video and banner advertising, out-of-home transit, bus shelters, and buses as well as community and ethnic papers. Sustaining activity will take place January through April of 2018 and will continue to communicate a water conversation message through a digital campaign, and potentially cable TV.

This scope intends to build upon projects that have already been completed:

Discovery Session	COMPLETE
2017 Message Strategy Development	COMPLETE
2017 Message Strategy Research & Evaluation	COMPLETE
2017 Campaign Concepting	COMPLETE
2017 Media Strategic Recommendation	COMPLETE

2017/18 BUDGET ALLOCATIONS

The budgets utilized were developed by analyzing outreach/marketing spend by similar sized water departments in California, Texas and Colorado, as well as the most recent IRWD campaign effort. Specific challenges associated with paid media planning and buying in the district were also considered and factored in.

2017 Campaign Execution

The agency will take the concept for the 2017 launch campaign "Your Lawn's Perspective" (pending final board approval) and apply it to each and every tactic included within the media plan. This will include writing, designing and bidding each element for production.

This budget range was based off of producing up to three separate TV/video spots at :30-:60 seconds each, as well as creating up to three :15 second spots, edited from the three original :30 or :60 executions. These spots will air on cable TV, in digital videos and in cinema advertising. This estimate also includes three print executions to be used in out-of-home transit and bus shelters, as well as modified versions for community and ethnic papers. One to two creative executions for the development of digital banners in the standard sizes for mobile, desktop and tablet are included in this estimate. The digital banner executions will be similar to the print executions used in out-of-home, but may be animated in HTML5.

Language translation for two languages is included in this estimate for print. Translation costs for cable TV, digital video and digital banners will be determined in the bidding process. The language translation will be confirmed with the client prior to bidding.

Fees for production management and project oversight are included in this estimate range, as well as time and hard costs for a photo and / or video shoot, editing and trafficking the various media elements to meet the in-market dates. Costs for talent usage, rights, music and sound design are also included in this estimate range.

The tactics to be confirmed in the media plan execution are as follows: Cable TV, digital video and display banners, cinema, out-of-home transit, bus shelters, buses, non-traditional and print. This estimate range includes fees and production for the 2018 sustaining flight, as well, as a different set of creative will be produced for the digital campaign and potentially a cable TV buy, which will be confirmed in the media execution.

Deliverables: An integrated campaign, produced and trafficked for in-market dates

Timing: 12-16 weeks (includes design and production for sustaining flight)

Cost: \$365,000 - \$450,000*

**Note: The full estimate will be executed upon approval of the contract. 75% of the production budget will be billed upon estimate signature for production.*

2017/18 Campaign Media Buy

The media plan will target IRWD homeowners in the district for the first year. As both over-users and under-users dramatically underestimate their outdoor use, the 2017 campaign will launch in October 2017 to combat outdoor water usage during the fall shoulder season. This will include a primary media flight along with a sustaining effort later in the year. The tactics for this have been discussed, but not yet planned and purchased, and include the following:

- Cable TV (up to three :30/:15 second spots)
- Cinema (up to three :15 second spots)
- Digital video (up to three :15 second spots)
- Digital display banners in the standard sizes for mobile, tablet and desktop
- Up to three print executions for out-of-home transit, bus shelters, community and ethnic papers.

The winter / spring 2018 sustaining flight has been discussed as a digital campaign buy with digital videos and display banners, as well as a cable TV buy, to be determined.

Once the media plan is approved, the agency will execute the media buy for the 2017 launch campaign, as well as the 2018 sustaining flight to continue to communicate a long-term water-use efficiency message throughout the winter and spring months.

Once the campaign tactics are created and produced, the agency will ensure all elements are provided to the appropriate media outlet. This estimate includes fees to develop and execute the media plan, as well as to monitor the tactics in market. The agency will manage all elements of the campaign while it is in-market and track key media metrics and deliver monthly reporting.

Please see the media chart located in the Appendix for more detail on timing, estimated delivery (impressions, reach and frequency), as well as budget.

Deliverables: Paid media for cable TV, cinema, digital, print and out-of-home

Timing:

Launch Flight: Oct 2017 – Dec 2017

- Cable TV & Cinema
- Digital videos & display banners
- Print – Community and ethnic papers
- Out-of-home - bus shelters and bus wraps

Sustaining Flight: Jan 2018 – Apr 2018

- Cable TV (TBD)
- Digital videos & display banners

Cost: \$595,000 - \$655,000

**Note: The full estimate will be executed upon approval of the contract. Invoices will be sent 60 days in advance of the media flight date(s).*

2017 Campaign Evaluation

The agency will track media and engagement metrics. We will work with your organization and research partner to develop a strategy to measure real changes in attitude and behavior. At the conclusion of the launch campaign, in the winter of 2017, a report will be created summarizing the campaign, key metric reporting, media analytics and key takeaways.

Deliverable: A campaign report and ongoing tracking

Timing: On-going over the course of the campaign with the report to be provided within 60 days of evaluation being finalized

Cost: \$15,000

2017/18 YEARLY BUDGET ALLOCATIONS

Account Leadership

Account leadership entails all ongoing leadership that ensures your account is run as seamlessly and efficiently as possible. This often involves work that spans across multiple projects and initiatives and is critical to the overall success.

This include general account and campaign oversight and management functions that are not specific to any one component of the campaign(s), including regular status calls, budget/fiscal management and reconciliation, account onboarding discussions and learnings that impact multiple topics and projects.

Deliverables:

- Weekly project status meetings
- Monthly budget management and reconciliation, including the creation of a master budget document and monthly billing summary reports
- Review of any documentation, presentations, research reports

Timing: Ongoing, September 2017-April 2018

Cost: \$15,300 (\$1,912.50/monthly)

Miscellaneous Hard Costs

Estimated cost to cover travel, such as mileage, as well as postage, long-distance charges and conference calls will be invoiced at cost, as incurred.

Timing: Ongoing, September 2017-April 2018

Cost: \$800 (Billed as hard costs are incurred)

2017 PROPOSED BUDGET

2017 Campaign Execution (Sept 2017-Oct 2017)	\$365,000 - \$450,000
2017 Campaign Media Buy (Oct 2017-Apr 2018)	\$595,000 - \$655,000
2017 Evaluation (Sept 2017-Dec 2017)	\$15,000
2017 Account Leadership (Sept 2017-Apr 2018)	\$15,300
2017 Miscellaneous Hard Costs (Sept 2017-Apr 2018)	\$800
Total:	\$991,048- \$1,136,100

PAYMENT TERMS: Sukle will submit monthly invoices on a time and materials basis.

August 14, 2017

Prepared by: K. Welch/E. Akiyoshi

Submitted by: F. Sanchez/P. Weghorst 

Approved by: Paul A. Cook 

ACTION CALENDAR

AMENDED WATER SUPPLY ASSESSMENT FOR PLANNING AREAS 40 AND 12 GENERAL PLAN AMENDMENT AND ZONE CHANGE PROJECT

SUMMARY:

In April 2017, staff received a request from the City of Irvine (City) to complete a Water Supply Assessment (WSA) as required under SB 610 for the Planning Area (PA) 40 and PA 12 General Plan Amendment (GPA) and Zone Change Project that will reflect proposed changes to portions of PA 40 and PA 12. Staff has completed an Amended WSA for the proposed project and recommends Board approval of the document.

BACKGROUND:

On December 17, 2007, the Board approved a WSA for PA 40 and PA 12 as requested by the City in accordance with SB 610. The demands for the PA 40 and PA 12 were incorporated into the District's demand forecasting and were included in the District's most recent 2015 Urban Water Management Plan. The overall project included 4,487 dwelling units and 8.1 million square feet (msf) of mixed use, industrial and commercial use.

In April 2017, the City requested that IRWD prepare a WSA for the Planning Area (PA) 40 and PA 12 General Plan Amendment (GPA) and Zone Change Project (Project) to reflect proposed land use changes within portions of PA 40 and PA 12. The Project includes three areas within PA 40 and PA 12 that are in the central portion of the City. A location map of the project sites is attached as Exhibit "A".

Revisions to Project:

The City is proposing a project that involves a GPA and Zone Change for portions of PA 40 and PA 12. The proposed Project revises PA 40 and PA 12 to include a net increase of 1,343 dwelling units and net decrease of 1.5 msf of mixed use, industrial and commercial use. An Amended WSA has been completed in response to the City's request related to the revised Project and is provided as Exhibit "B". The Amended WSA is based on information from the most recent IRWD Water Resources Master Plan. Estimates show a net decrease of 178 acre-feet per year (AFY) in potable water demands and a net decrease of 4 AFY of non-potable demand associated with the revised land use changes.

The Amended WSA concludes that 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 demands of the Project, in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

The development of the Amended WSA is exempt from the California Environmental Quality Act (CEQA) 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 by the Water Resources Policy and Communications Committee on August 3, 2017.

RECOMMENDATION:

THAT THE BOARD APPROVE THE AMENDED WATER SUPPLY ASSESSMENT FOR PLANNING AREAS 40 AND 12 GENERAL PLAN AMENDMENT AND ZONE CHANGE PROJECT.

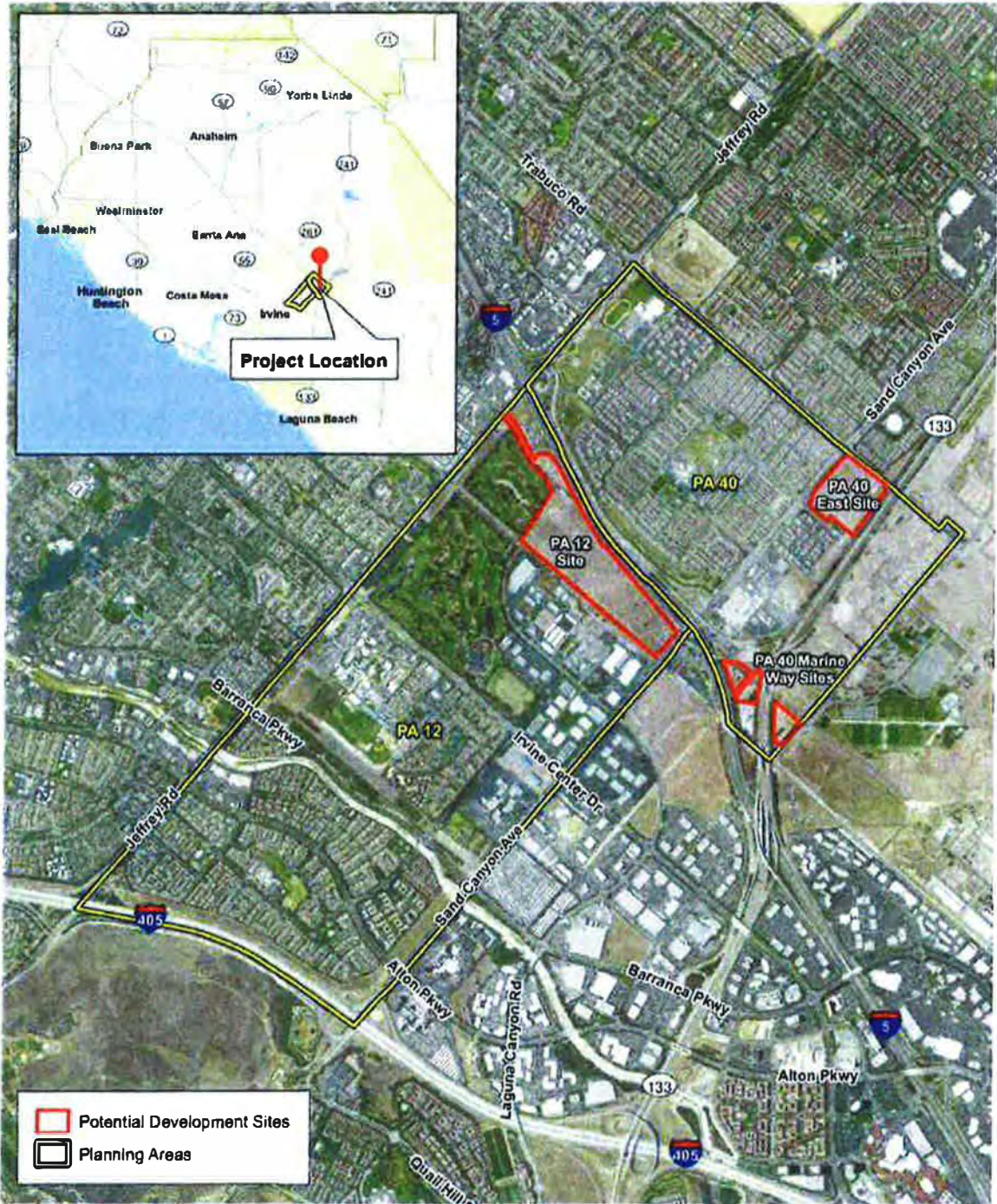
LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Amended Water Supply Assessment for Planning Areas 40 and 12 General Plan Amendment and Zone Change Project

EXHIBIT "A"

REGIONAL LOCATION AND LOCAL VICINITY



Planning Areas 12 and 40
General Plan Amendment and Zone Change Project
Irvine, CA



EXHIBIT "B"

AMENDED IRVINE RANCH WATER DISTRICT ASSESSMENT OF WATER SUPPLY Water Code §10910 *et seq.*

To: (Lead Agency)

City of Irvine
One Civic Center Plaza
Irvine, CA 92606

(Applicant)
The Irvine Company
550 Newport Center Drive
Newport Beach, CA 92658-6370

Project Information

Project Title: Planning Area (PA) 12 and PA 40 General Plan Amendment and Zone Change (Exhibit A)

- Residential: No. of dwelling units: 1,343
- 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 or processing: No. of employees _____ No. of acres _____
Sq. ft. of floor space _____
- Mixed use (check and complete all above that apply) (see Exhibit B)
- Other: _____

Assessment of Availability of Water Supply

On _____, 2017, the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within assessment and made the following determination regarding the above-described Project:

- The projected water demand for the Project was was not included in IRWD's most recently adopted urban water management plan.
- 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. [Plan for acquiring and developing sufficient supply attached. Water Code § 10911(a)]

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

Signature

Date

Title

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. 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. This Amended Assessment supersedes the Assessment dated December 17, 2007, to adjust water demand figures as shown in Figures 1 through 8 in order to reflect the effect on the Project of the proposed land use change designated “Planning Area (PA) 12 and PA 40 General Plan Amendment and Zone Change Project,” as requested by the letter from the City of Irvine dated April 28, 2017 (see Exhibit B).

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 was adopted June 27, 2016.

In addition to the WRMP and the 2015 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 conservation 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 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 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with IRWD's 2015 UWMP and 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 also consistent with MWDOC's 2015 UWMP which assumes increased demands in single dry and multiple dry years of 6% based on MWDOC's Orange County Reliability Study (MWDOC 2015 UWMP, pg. 3-42).

Planning horizon. For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2037, which is considered to represent build-out or "ultimate development".

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2037):

- 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 Municipal Water District of Orange County ("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 increases 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 2015 Urban Water Management Plan (MWD UWMP) concludes that MWD has sufficient supply capabilities to meet expected demands from 2020 through 2040 under a repeat of the 1990-1992 multiple dry-year hydrology and the 1977 single-dry-year hydrology. (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 projected annual demands for both the *baseline* and *with-project* demand projections under the normal year conditions through the year 2037. (Figures 1, 2 and 3.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of *under-development* supplies. (Figures 2 and 3.)
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2037. (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 2037. (Figures 5, 6, 7 and 8.) IRWD has proceeded with the implementation of future 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 recent events. See “**Recent 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 information concerning recent events. See “**Recent 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 provides additional reliability during dry years or emergencies.

Recent 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, most recently, 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 BDCP/California WaterFix, which is aimed at making physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, south of Delta SWP water supplies and water quality (MWD 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 2007 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. To comprehensively address the impacts of the SWP cut back on MWD’s water supply development targets, in December 2007, MWD brought to its Board a strategy and work plan to update the long-term Integrated Resources Plan (“IRP”). 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. MWD's reliability goal that full-service demands at the retail level will be satisfied for all foreseeable hydrologic conditions remained unchanged in the 2010 IRP Update. 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. MWD's Adaptive Resource Management Strategy includes 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. MWD indicates it will collaborate with its member agencies to implement this buffer through complying with Senate Bill 7 which calls for the state to reduce per capita water use 20 percent by the year 2020.

In January 2016, MWD adopted its 2015 IRP Update. 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. The 2015 IRP finds additional action is 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.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: In the MWD UWMP, MWD states it has supply capability that would be sufficient to meet expected demands from 2020 to 2040 under single dry year and multiple dry year conditions. ¹

Based on the prior MWD 2007 IRP Implementation Report, as a result of the 2007 federal court order, 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 2015 through 2037. 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 2015 through 2037, 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 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") (February 2009, updated December 2014) which provides

¹ MWD's UWMP utilized DWR's 2015 SWP Delivery Capability Report to estimate its SWP supplies for 2015 through 2040. 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 UWMP reflect a reduction of approximately 12% 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.

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.

As an alternative means of analyzing the effect of reduced MWD supplies on IRWD, Figures 1a, 2a, and 3a show IRWD's estimated supplies in all of the 5-year increments (average and single and multiple dry years) under a short-term MWD 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 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. Section 15 of the Rules and Regulations serves as IRWD's "conservation ordinance". As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels. 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 would include 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

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 "2015-2016 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.

conserve potable water. In addition, if needed, resultant net shortage levels can be addressed by demand reduction programs as described in IRWD's Water Shortage Contingency Plan.

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

It can be noted that IRWD's above approach is conservative, in that IRWD evaluates the effect of the 16% reduction through 2037 and shows the effect of current allocation scenarios in all of the five-year increments, but 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. DWR emphasizes that "the report represents an example of an impacts assessment based on four scenarios defining an expected range of potential climate change impacts." DWR's major goal is to extend the analysis for long-term water resource planning from "assessing impacts" to "assessing risk." The report presents directions for further work in incorporating climate change into the management of California's water resources. Emphasis is placed on associating probability estimates with potential climate change scenarios in order to provide policymakers with both ranges of impacts and the likelihoods associated with those impacts. DWR's report acknowledges "that all results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

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 MWD's 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 2015 UWMP that it intends to revisit the RDM approach with the new resource reliability targets identified in its 2015 IRP Update.

Per MWD's UWMP, MWD continues to incorporate current climate change science into its planning efforts. MWD's 2015 IRP Update incorporates evaluating a wider range of water management strategies and seeking robust and adaptive action plans that respond to uncertain conditions as they evolve over time, and that ultimately will perform adequately under a wide range of future conditions. Per MWD's UWMP, MWD's planning activities support the MWD Board-adopted principles on climate change by: 1) Supporting reasonable, economically viable, and technologically feasible management strategies for reducing impacts on water supply; 2) Supporting flexible "no regret" solutions that provide water supply and quality benefits while increasing the ability to manage future climate change impacts; and 3) Evaluating staff recommendations regarding climate change and water resources against the California

Environmental Quality Act to avoid adverse effects on the environment. 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 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 its UWMP (pages 3-19 to 3-23). IRWD has also addressed supply interruption planning in its WRMP and 2015 UWMP.

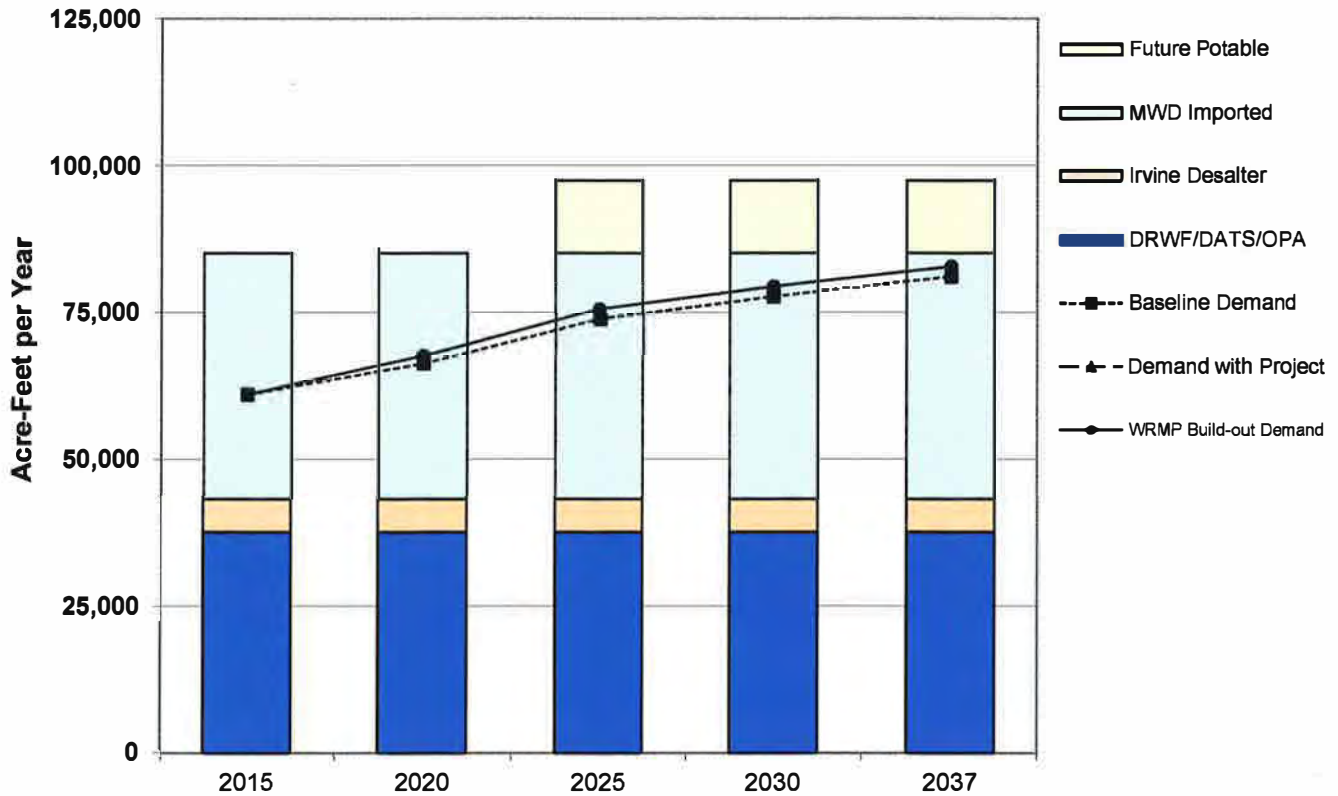
Recent Actions Related to Drought Conditions. In response to the historically dry conditions throughout the state of California, on April 1, 2015, Governor Brown issued an Executive Order directing the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25 percent reduction in potable water use through February 2016. The Governor's Order also includes 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 the 2013 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 the 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 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 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 "Recent Actions on Delta Pumping" above.

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



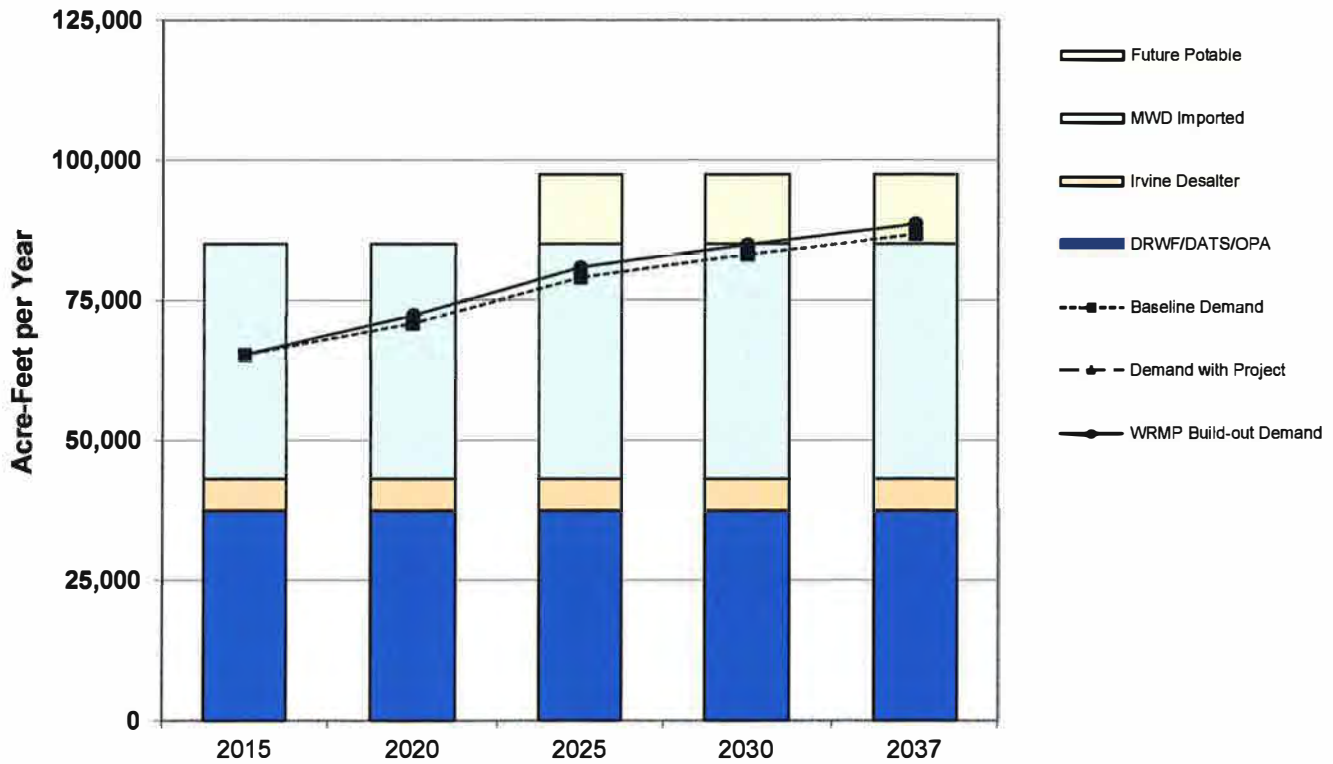
(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	-	4,000	4,000	4,000	4,000
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	91,409	95,409	107,761	107,761	107,761
Baseline Demand	61,061	66,304	73,842	77,679	81,095
Demand with Project	61,061	67,656	75,532	79,369	82,811
WRMP Build-out Demand	61,061	67,656	75,532	79,369	82,811
Reserve Supply with Project	30,348	27,753	32,229	28,392	24,950

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 will be supplied untreated imported water and native water from Irvine Lake.

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



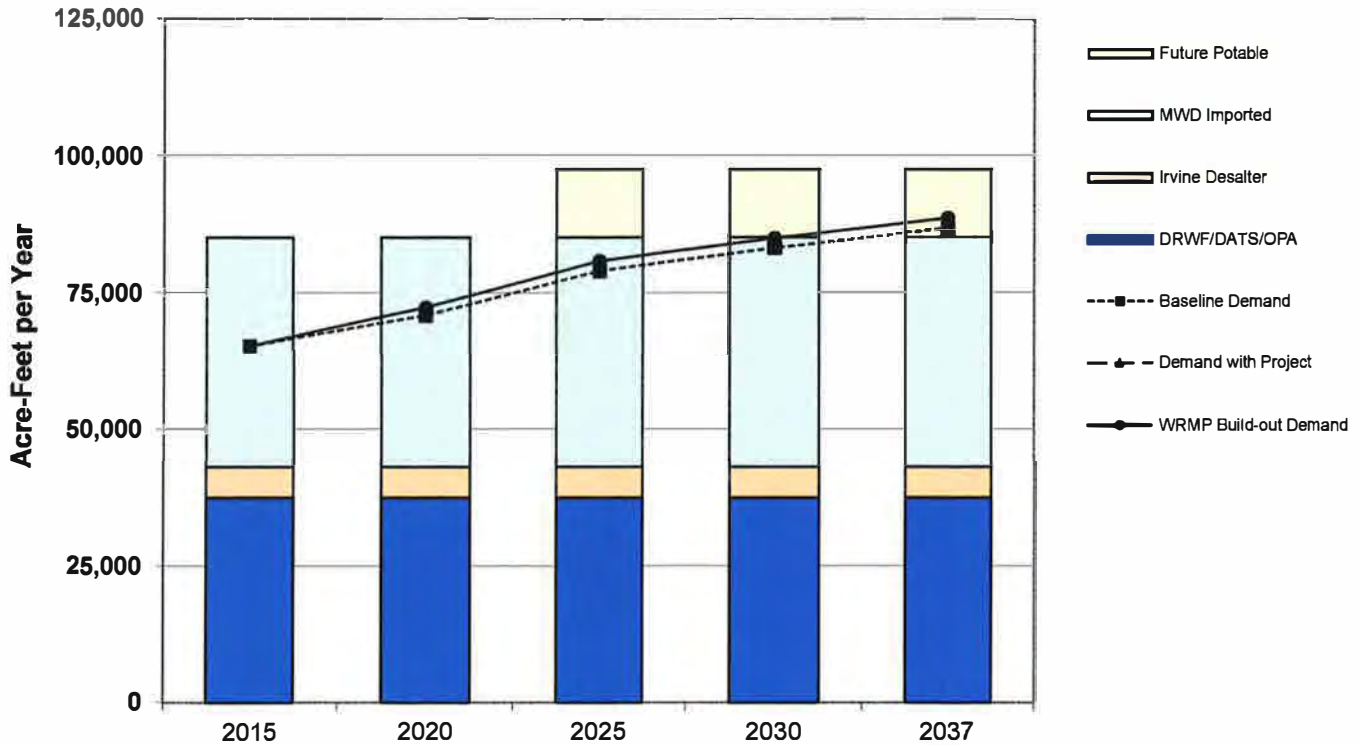
(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portion)	-	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	91,409	92,409	104,761	104,761	104,761
Baseline Demand	65,335	70,946	79,011	83,117	86,772
Demand with Project	65,335	72,392	80,819	84,925	88,608
WRMP Build-out Demand	65,335	72,392	80,819	84,925	88,608
Reserve Supply with Project	26,073	20,017	23,942	19,837	16,153

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 will be supplied untreated imported water and native water from Irvine Lake.

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



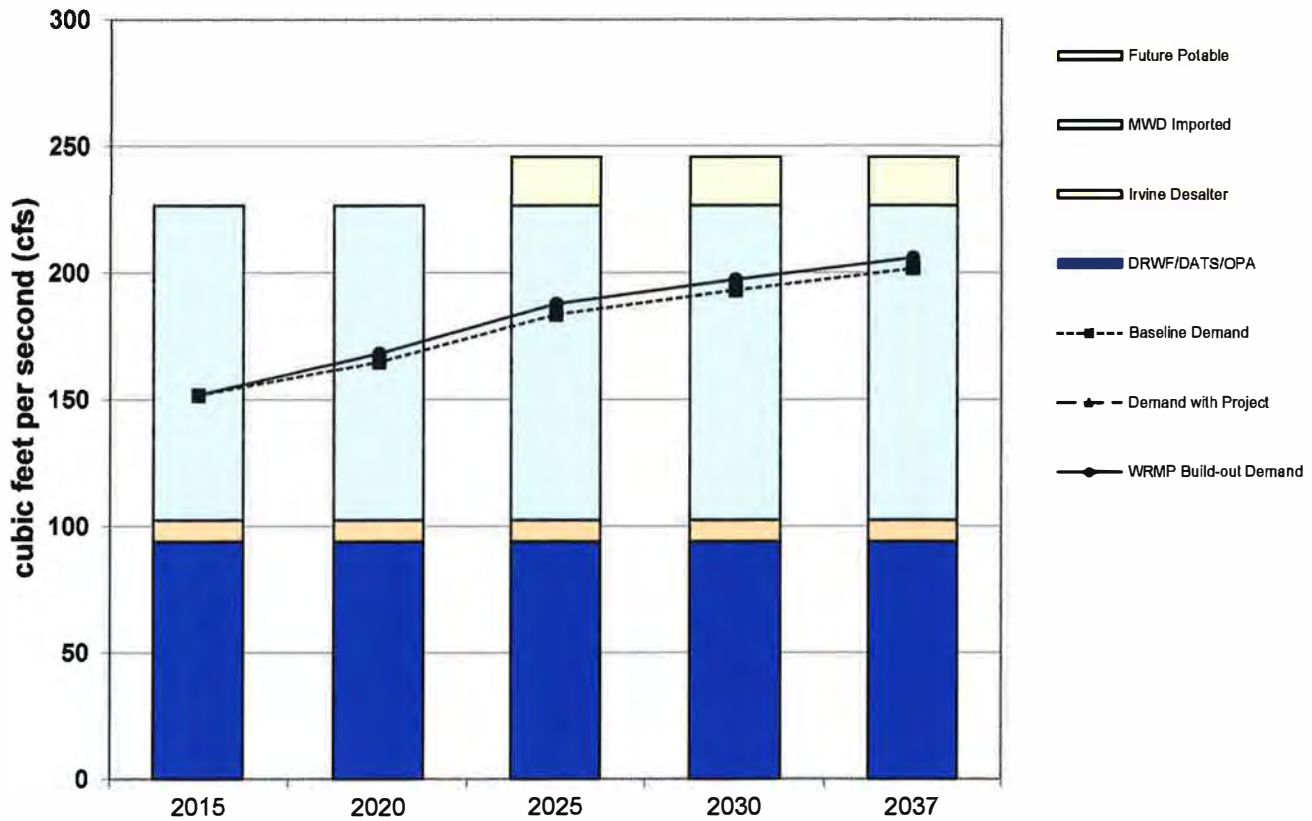
(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, B:	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Baker Water Treatment Plant (native portic	-	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	91,409	92,409	104,761	104,761	104,761
Baseline Demand	65,335	70,946	79,011	83,117	86,772
Demand with Project	65,335	72,392	80,819	84,925	88,608
WRMP Build-out Demand	65,335	72,392	80,819	84,925	88,608
Reserve Supply with Project	26,073	20,017	23,942	19,837	16,153

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.

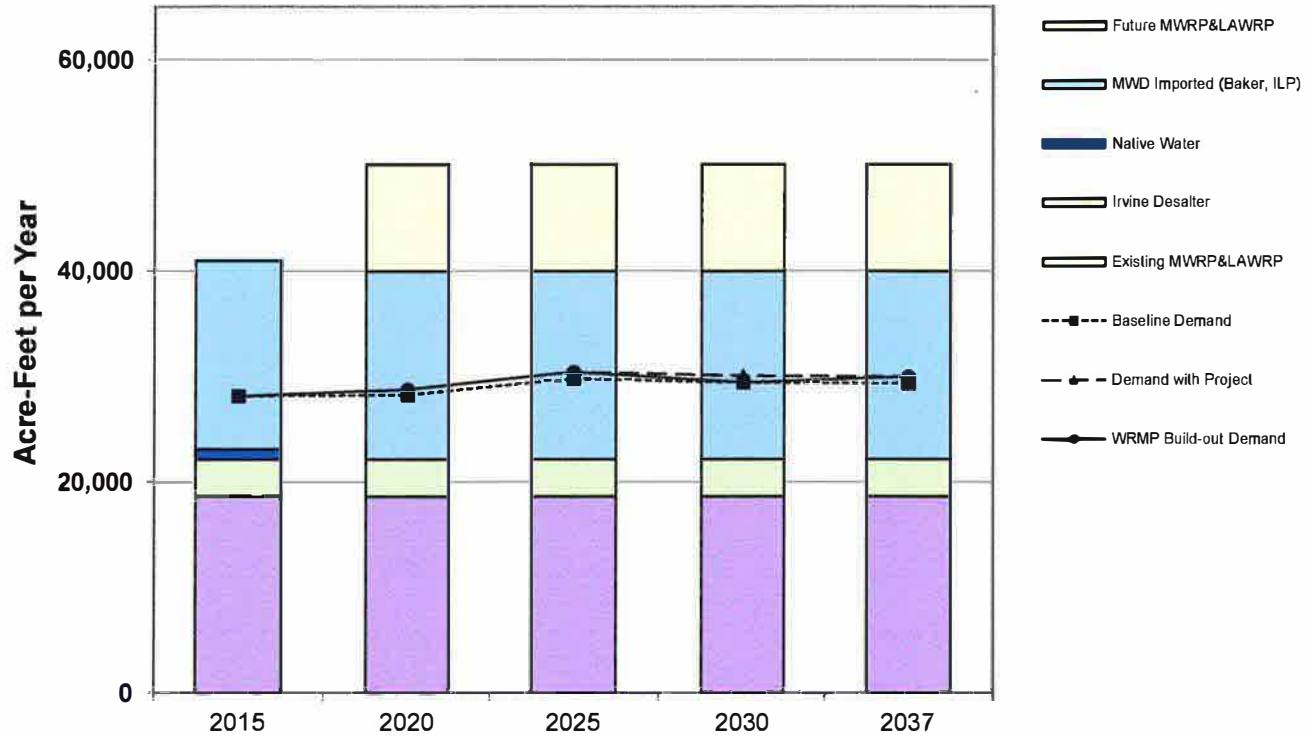
Baker Water Treatment Plant will be supplied untreated imported water and native water from Irvine Lake.

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



(in cfs)	2015	2020	2025	2030	2037
<u>Current Potable Supplies</u>					
MWD Imported (EOCF#2, AMP, OCF, Baker)	124.1	124.1	124.1	124.1	124.1
DRWF/DATS/OPA	93.9	93.9	93.9	93.9	93.9
Irvine Desalter	8.6	8.6	8.6	8.6	8.6
Wells 21 & 22	10.9	10.9	10.9	10.9	10.9
Baker Water Treatment Plant	-	10.5	10.5	10.5	10.5
<u>Supplies Under Development</u>					
Future Potable	-	-	19.2	19.2	19.2
Maximum Supply Capability	237.5	248.0	267.2	267.2	267.2
Baseline Demand	151.8	164.8	183.6	193.1	201.6
Demand with Project	151.8	168.2	187.8	197.3	205.9
WRMP Build-out Demand	151.8	168.2	187.8	197.3	205.9
Reserve Supply with Project	85.7	79.8	79.4	69.9	61.3

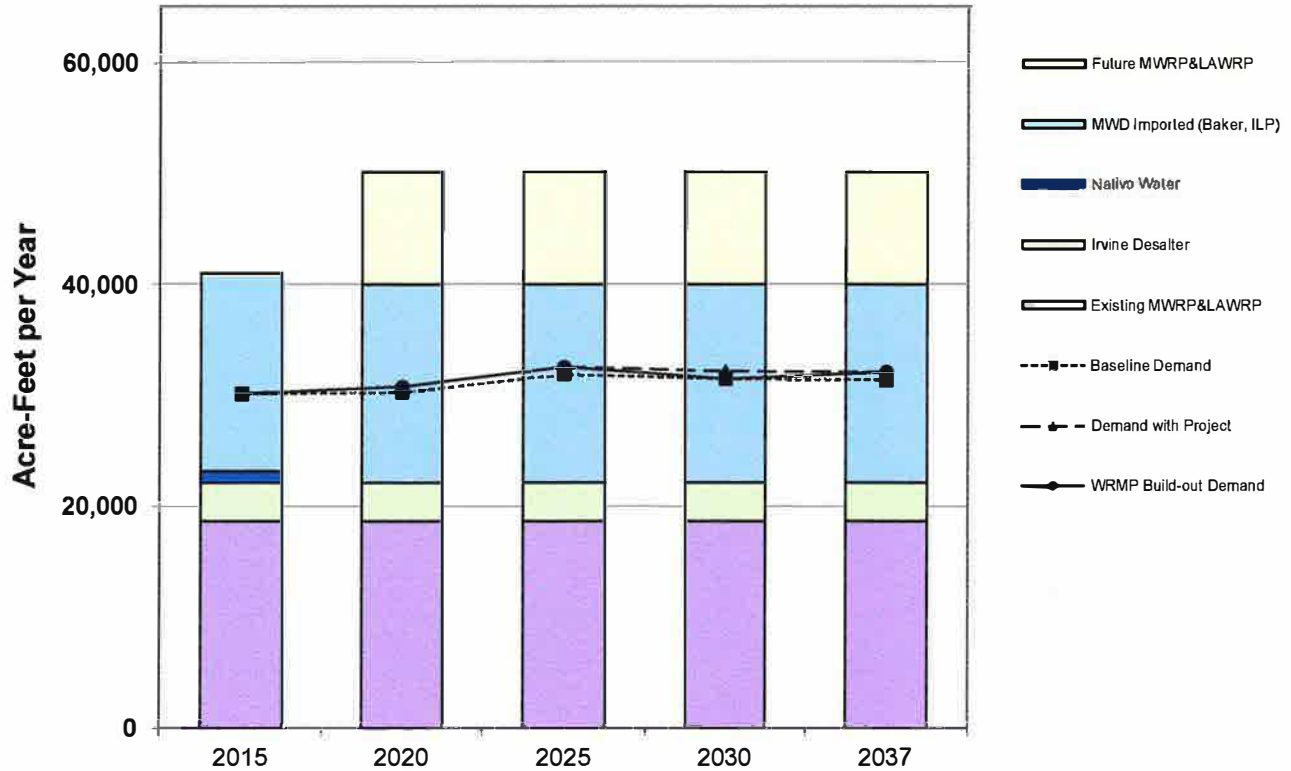
**Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	-	-	-	-
Maximum Supply Capability	40,997	50,097	50,097	50,097	50,097
Baseline Demand	28,173	28,281	29,795	29,428	29,351
Demand with Project	28,173	28,788	30,430	30,062	29,992
WRMP Build-out Demand	28,173	28,788	30,430	29,428	29,992
Reserve Supply with Project	12,824	21,308	19,667	20,669	20,105

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

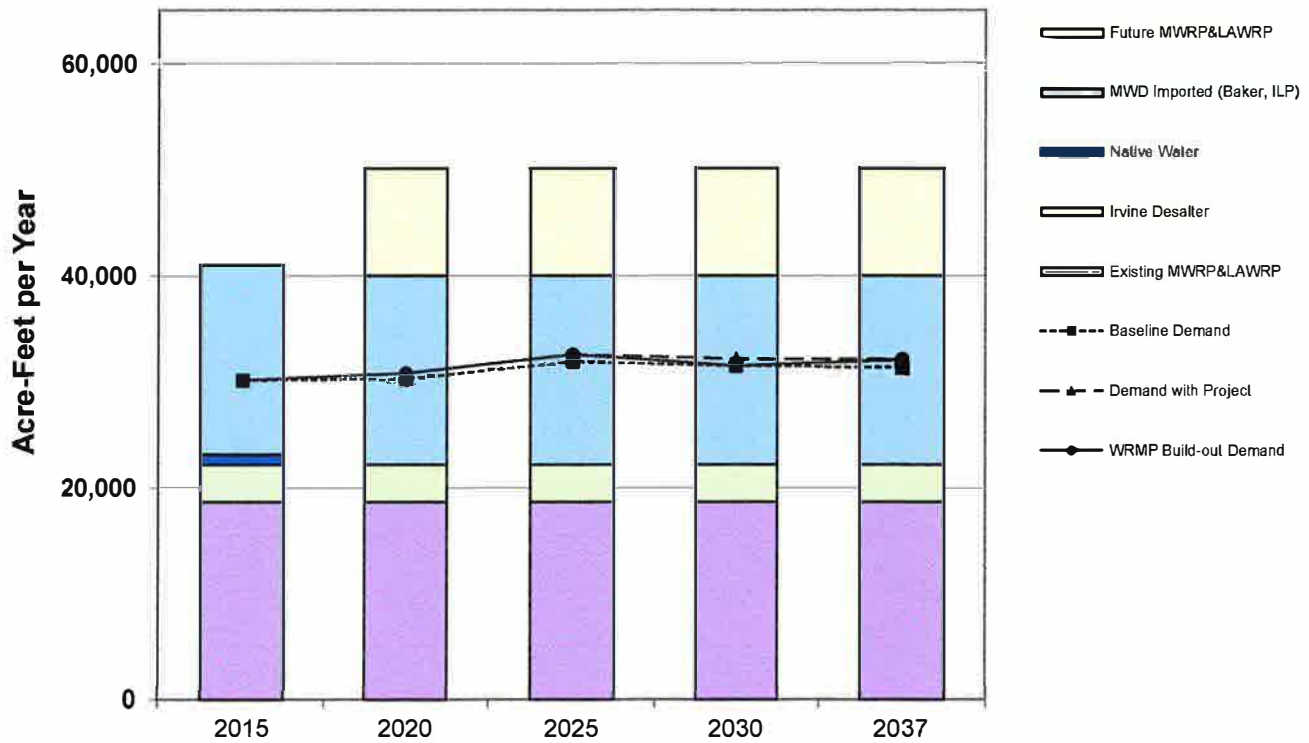
**Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	-	-	-	-
Maximum Supply Capability	40,997	50,097	50,097	50,097	50,097
Baseline Demand	30,145	30,261	31,881	31,488	31,406
Demand with Project	30,145	30,804	32,560	32,166	32,091
WRMP Build-out Demand	30,145	30,804	32,560	31,488	32,091
Reserve Supply with Project	10,852	19,293	17,537	17,931	18,005

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

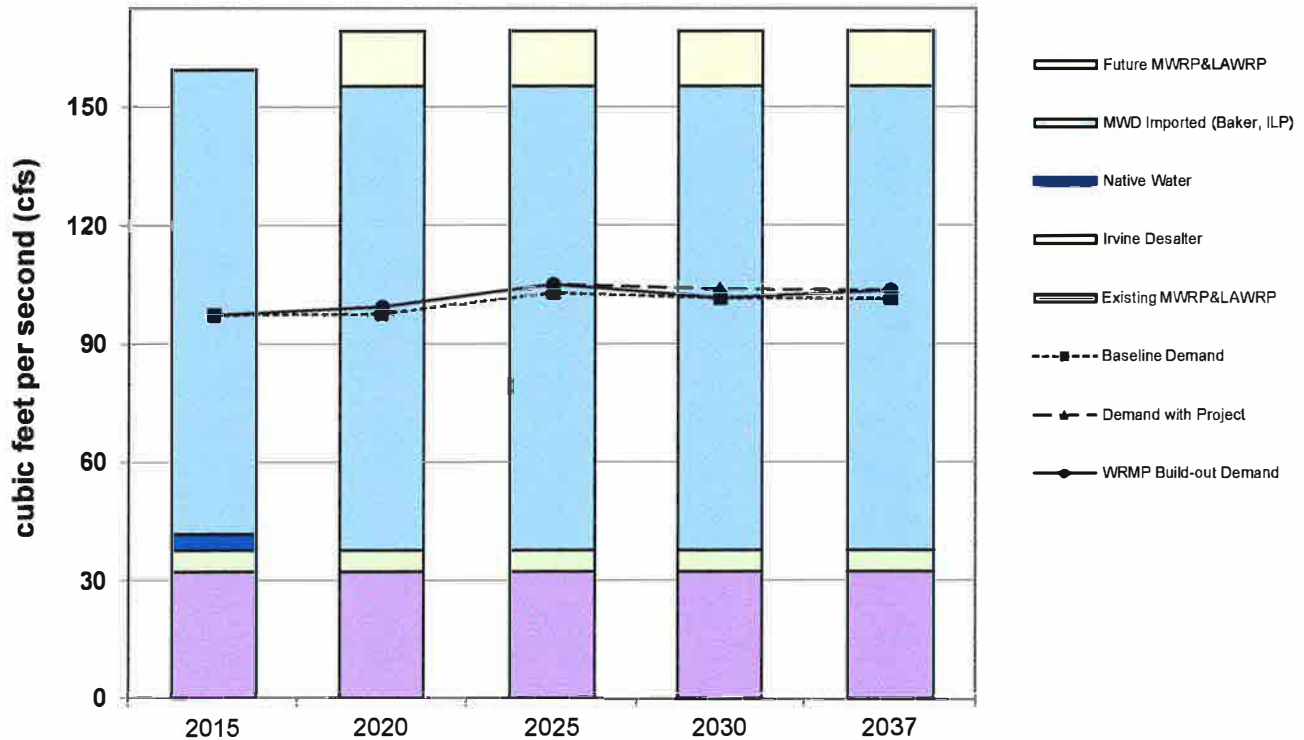
**Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	-	-	-	-
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	30,215	31,870	32,838	32,415	31,988
Demand with Project	30,215	31,997	33,014	32,602	32,187
WRMP Build-out Demand	30,215	31,997	33,014	32,415	32,187
Reserve Supply with Project	10,781	19,100	17,083	17,495	17,910

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

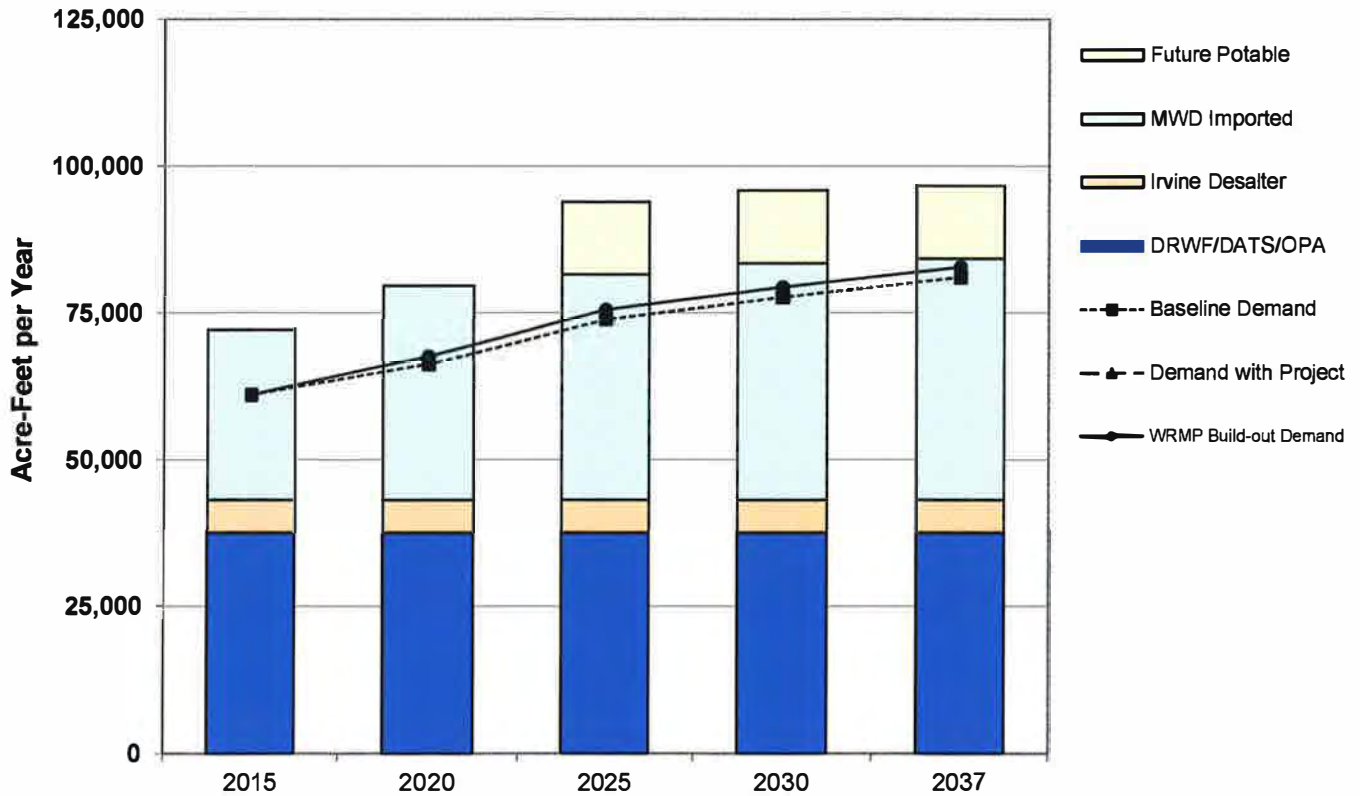
**Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water**



(in cfs)	2015	2020	2025	2030	2037
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
MWD Imported (Baker, ILP)	117.7	117.7	117.7	117.7	117.7
Irvine Desalter	5.4	5.4	5.4	5.4	5.4
Native Water	4.2	-	-	-	-
Maximum Supply Capability	159.5	169.2	169.2	169.2	169.2
Baseline Demand	97.3	97.7	102.9	101.6	101.4
Demand with Project	97.3	99.4	105.1	103.8	103.6
WRMP Build-out Demand	97.3	99.4	105.1	101.6	103.6
Reserve Supply with Project	62.2	69.8	64.2	67.6	65.7

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.

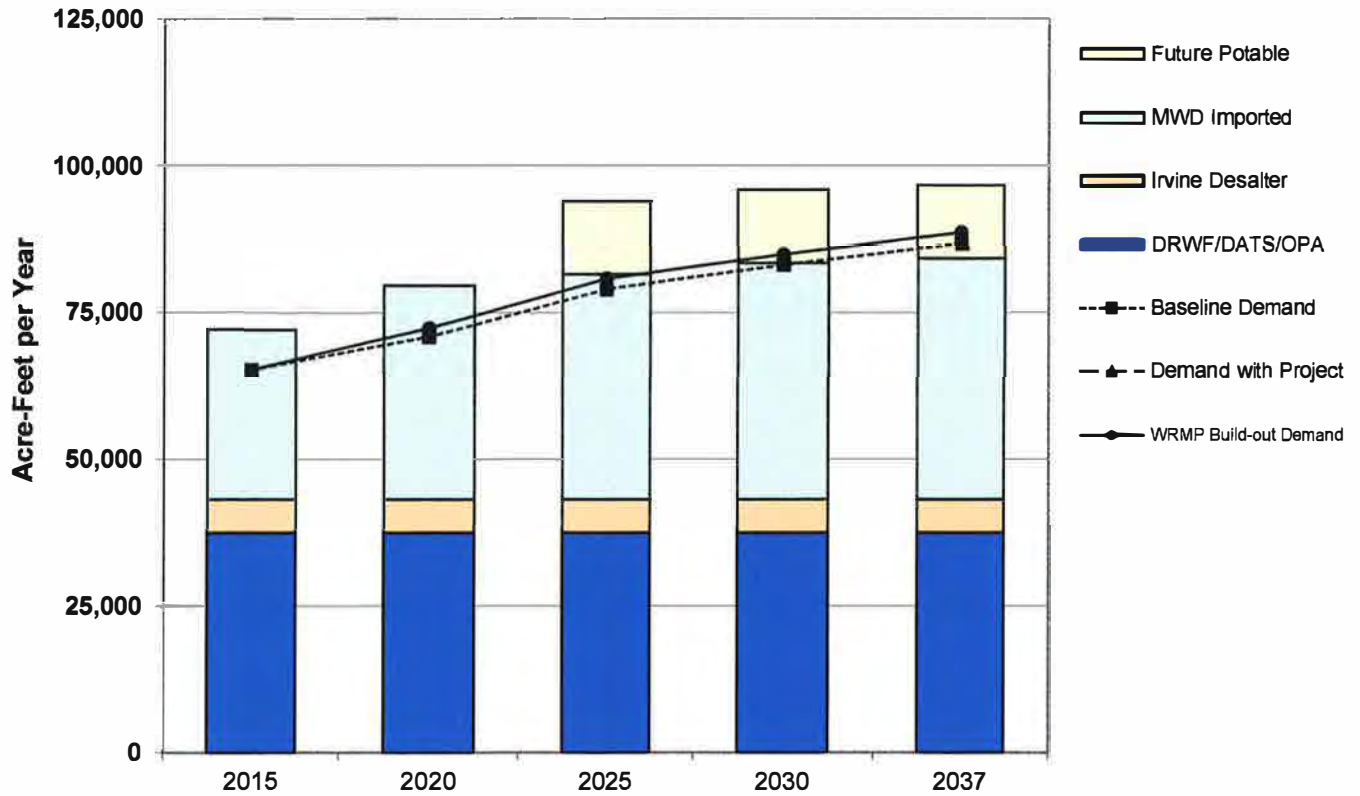
**Figure 1a
IRWD Normal-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation***



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	29,000	36,500	38,362	40,319	41,129
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
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
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	78,480	86,980	101,194	103,151	103,961
Baseline Demand	61,061	66,304	73,842	77,679	81,095
Demand with Project	61,061	67,656	75,532	79,369	82,811
WRMP Build-out Demand	61,061	67,656	75,532	79,369	82,812
Reserve Supply with Project	17,418	19,324	25,662	23,782	21,150

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation, Shortage Stage 3 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. 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 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water only.

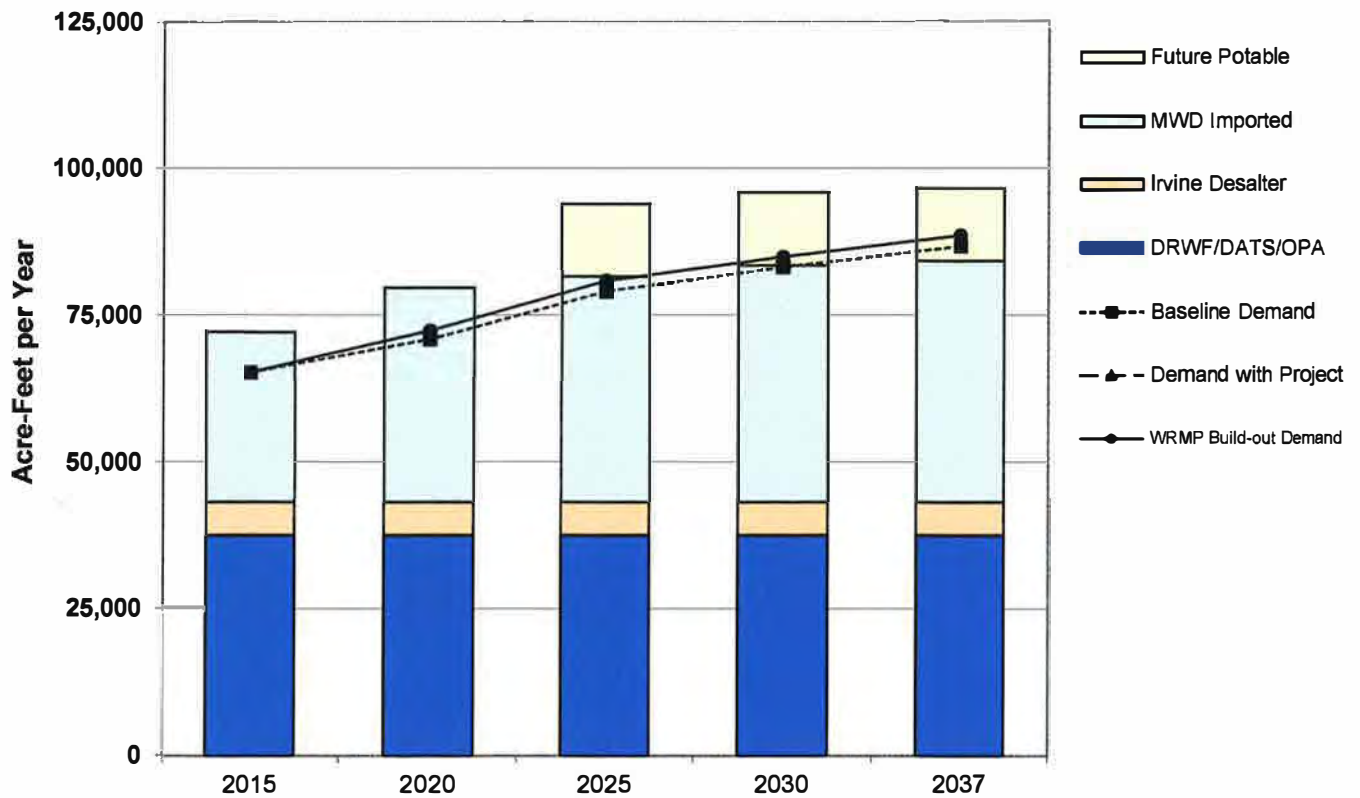
**Figure 2a
IRWD Single Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation***



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	29,000	36,500	38,362	40,319	41,129
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
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
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	78,480	86,980	101,194	103,151	103,961
Baseline Demand	65,335	70,946	79,011	83,117	86,772
Demand with Project	65,335	72,392	80,819	84,925	88,608
WRMP Build-out Demand	65,335	72,392	80,819	84,925	88,609
Reserve Supply with Project	13,144	14,588	20,375	18,226	15,353

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation, Shortage Stage 3 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. 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 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water only.

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



(in acre-feet per year)	2015	2020	2025	2030	2037
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	29,000	36,500	38,362	40,319	41,129
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
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
Supplies Under Development					
Future Potable	-	-	12,352	12,352	12,352
Maximum Supply Capability	78,480	86,980	101,194	103,151	103,961
Baseline Demand	65,335	70,946	79,011	83,117	86,772
Demand with Project	65,335	72,392	80,819	84,925	88,608
WRMP Build-out Demand	65,335	72,392	80,819	84,925	88,608
Reserve Supply with Project	13,144	14,588	20,375	18,226	15,353

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation, Shortage Stage 3 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. 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 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water only.

2. Information concerning supplies

(a)(1) 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			
East Orange County Feeder No. 2	41.4	16,652	¹
Allen-McColloch Pipeline*	64.7	26,024	¹
Orange County Feeder	18.0	7,240	¹
	124.1	49,916	49,916
Potable - Treated Surface			
Baker Treatment Plant (includes imported and native)	10.5	7,602	⁶ 7,602
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000	²
OPA Well	1.4	914	
Deep Aquifer Treatment System-DATS	12.5	8,618	²
Wells 21 & 22	10.9	6,329	²
Irvine Desalter	8.6	5,618	³ 49,480
Total Potable Current Supplies	248.0		106,997
Nonpotable - Recycled Water			
MWRP (28 mgd)	37.3	26,970	⁴
LAWRP (5.5 mgd)	8.3	5,975	⁴
Future MWRP & LAWRP	6.7	4,820	⁵ 37,765
Nonpotable - Imported			
Baker Aqueduct	52.7	12,221	⁶
Irvine Lake Pipeline	65.0	9,000	⁷
	117.7	21,221	21,221
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	5.4	3,514	⁸ 3,514
Nonpotable Native			
Irvine Lake (see Baker Treatment Plant above)	4.2	3,048	^{6,9} 3,048
Total Nonpotable Current Supplies	179.4		65,548
Total Combined Current Supplies	427.4		172,546
Supplies Under Development			
Potable Supplies			
Future Groundwater Production Facilities	19.2	12,352	12,352
Total Under Development	19.2	12,352	12,352
Total Supplies			
Potable Supplies	267.2		119,350
Nonpotable Supplies	179.4		65,548
Total Supplies (Current and Under Development)	446.6		184,898

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 5, page 24).

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

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

4 MWRP 28.0 mgd treatment capacity (26,970 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)

5 Future estimated MWRP & LAWRP recycled water production.

6 After 2016, Baker Water Treatment Plant (WTP) will treat imported and native water. Baker Aqueduct capacity has been allocated to Baker WTP participants and IRWD will own 46.50 cfs in Baker Aqueduct after completion of Baker WTP, of which 10.5 cfs will be for potable treatment. IRWD will have 35 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 Footnote 9, 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 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. By 2020, native water will be treated through Baker WTP..

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 24 (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

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.

Santa Ana, concerns the development of IRWD's Dyer Road Wellfield (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 in the year 2037. 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; 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 MWD's UWMP, MWD has extended its planning timeframe out through 2040 to ensure that MWD's UWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the MWD 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 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 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 2040. 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 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 - Recent 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. 01402 and 07140), IRWD adopted its fiscal year 2017-18 capital budget on June 12, 2017 (Resolution No. 2017-14), 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 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 MWD's 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 MWD's 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 MWD's 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 2015 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 277,000 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.

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 utilization of the storage capacity of the Basin.

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.

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)

(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:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD¹²
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

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.

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)
2020	43,861	0	5,618	3,461
2025	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

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.

(e) If not included in the 2015 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 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") which is to be "functionally equivalent"

¹⁵ OCWD has adopted a basin production percentage of 75% for 2017-18. 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.

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).

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
- Section 15 of the Rules and Regulations – Water Conservation and Water Supply Shortage Program*, Irvine Ranch Water District, February 2009
- Water Shortage Contingency Plan*, Irvine Ranch Water District, February 2009
- 2015 Urban Water Management Plan*, Irvine Ranch Water District, June, 2016
- 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
- 2015 Urban Water Management Plan*, Metropolitan Water District of Southern California, June 2016

2015 Urban Water Management Plan, Municipal Water District of Orange County, May 2016

Progress on Incorporating Climate Change into Management of California's Water Resources, California Department of Water Resources, July 2006

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

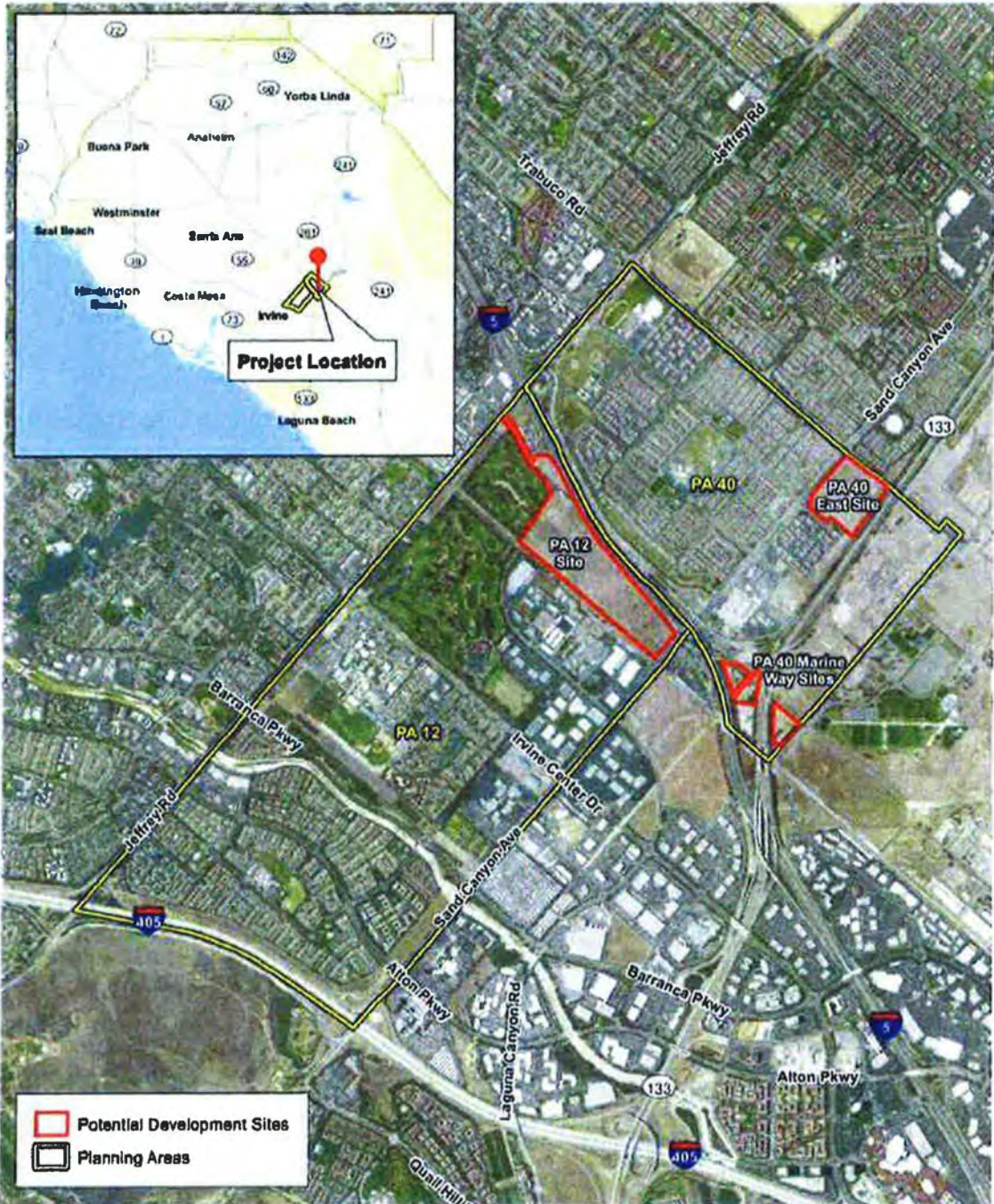
Long-Term Facilities Plan 2014 Update, Orange County Water District, November 2014

2015-2016 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2017

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

Exhibit A
Depiction of Project Area

REGIONAL LOCATION AND LOCAL VICINITY



**Planning Areas 12 and 40
General Plan Amendment and Zone Change Project
Irvine, CA**



Exhibit B

Uses Included in Project



April 28, 2017

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, County of Orange hereby requests an assessment of water supply availability for the below-described project. The City of Irvine 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: Planning Area (PA) 12 and PA 40 General Plan Amendment (GPA) and Zone Change Project – Inclusive of the three project areas known as the PA 12 Site, PA 40 East Site, and PA 40 Marine Way Sites

Project Location: The PA 12 Site is bound by the Oak Creek Golf Club to the northwest, the Orange County Transportation Authority (OCTA) / Metrolink railroad to the southwest, Sand Canyon Avenue to the southeast, and Interstate (I) 5 to the northeast. The PA 40 East Site is bound by Roosevelt (a street) to the southwest, State Route (SR) 133 to the southeast, Trabuco Road to the northeast, and Sand Canyon Avenue to the northwest. The Marine Way Sites are composed of two individual sites. The northwest site is generally bound by I-5 to the west, the planned future Marine Way alignment to the north, the SR-133 overpass to the east, and an OCTA property to the south. The southeast site is bound by the SR-133 overpass to the west, the planned future alignment of Marine Way to the northeast, and Ridge Valley to the southeast. Refer to the attached Exhibit A.

- (For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on: December 2007. 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: +1,343 (net increase see attached Table 1)
- Shopping center or business*: No. of employees _____ Sq. ft. of floor space -180,000 sq. ft. (net reduction see attached Table 1)
- 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 -665,181 sq. ft. (net reduction see attached Table 1)
- Mixed use* (check and complete all above that apply)
- Other*: Mixed Use: -675,237 sq. ft. (net reduction see attached Table 1), and a 10,000 sq. ft. childcare center (1.3 acres) on the PA 40 East Site

Total acreage of project: Total acreage of PA 12 is 1,053 acres, of which the PA 12 Project Site is 70.2 acres. The total acreage of PA 40 is 634 acres, of which the PA 40 East Site is 25.7 acres, and the PA 40 Marine Way Sites are 12.7 acres.

Acreage devoted to landscape:

Greenbelt n/a Golf course n/a Parks Approx. 7 acres (project sites only)

Agriculture n/a Other landscaped areas Approx. 27 acres (project sites only)

Number of schools n/a Number of public facilities n/a

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: n/a

What is the current land use of the area subject to a land use change under the project? Project sites are currently vacant; however, agricultural activities currently occur at the PA 12 Site, the PA 40 East site is used for temporary construction staging, and a landscape company is utilizing the southeast PA 40 Marine Way Site.

Is the project included in the existing General Plan? No

If no, describe the existing General Plan Designation: General Plan land uses for the three project sites are Research and Industrial (PA 12 Site and PA 40 Marine Way Sites), Medium High Density Residential (PA 40 East Site), and a small area of Recreation (along Jeffrey Road at the location of the Walnut Road extension from the PA 12 Site). Refer to the attached Initial Study project description for more information about the proposed GPA.

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 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 IRVINE /COUNTY OF ORANGE

By: 
Stephanie Frady, Senior Planner
PO Box 19575, Irvine, CA 92623
sfrady@cityofirvine.org

REQUEST RECEIVED:

Date: May 4, 2017

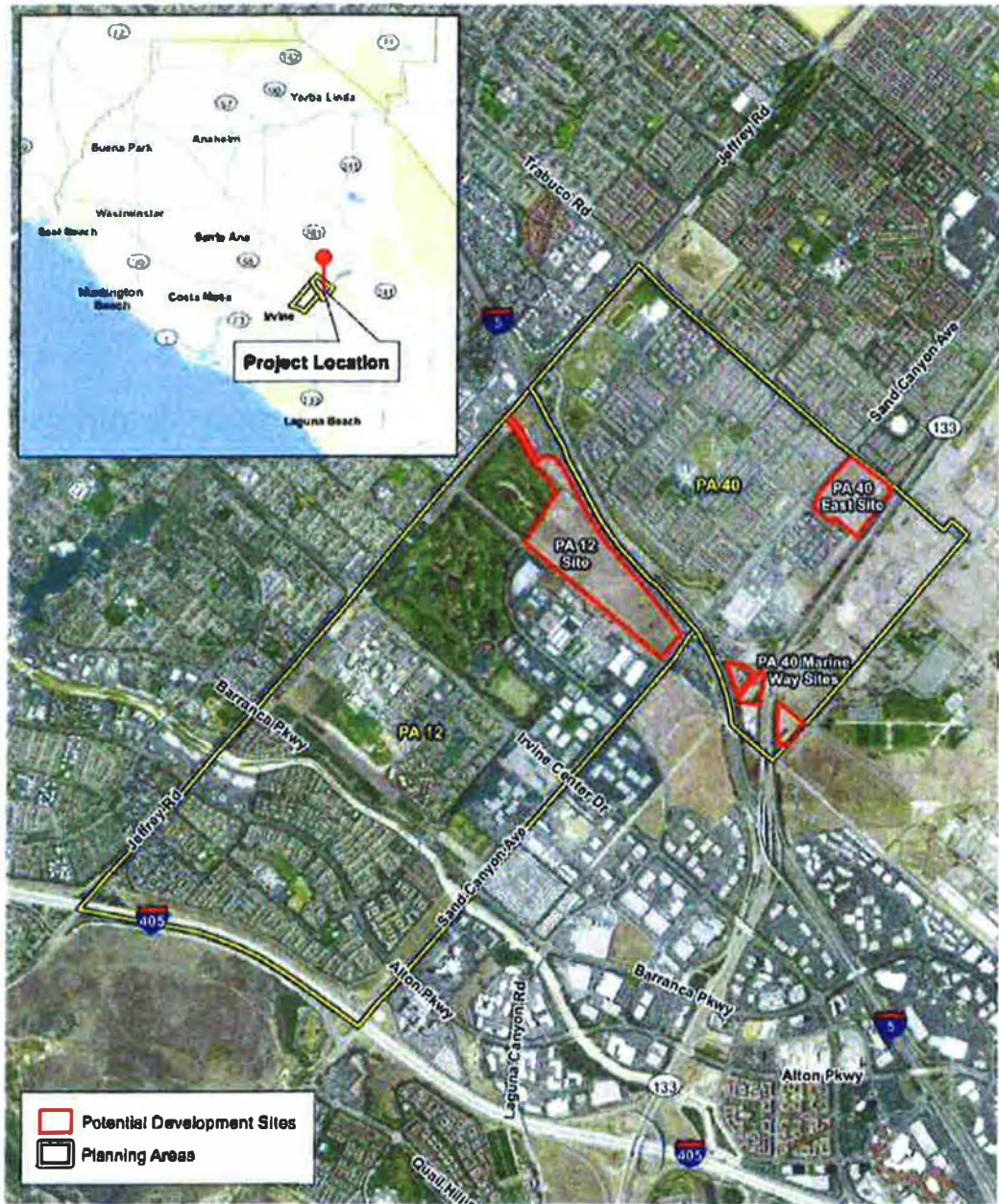
By: 
Irvine Ranch Water District

REQUEST COMPLETE:

Date: June 19, 2017

By: 
Irvine Ranch Water District

Exhibit 1
REGIONAL LOCATION AND LOCAL VICINITY



**Planning Areas 12 and 40
General Plan Amendment and Zone Change Project
Irvine, CA**



**TABLE 1
EXISTING AND PROPOSED
MAXIMUM INTENSITY STANDARDS BY PLANNING AREA
(Table A-1 of the General Plan)**

Planning Area	Residential			Unaffiliated Residential Units	Multi-Use		Institutional			Industrial	Commercial		Maximum Dwelling Units	Maximum sq
	Medium (0-10 DUs/Acre)	Med-High (0-25 DUs/Acre)	High (0-60 DUs/Acre)		0-40 DUs/Acre	Square Feet	0-40 DUs/Acre	Public Facility (sq)	Educational Facility (sq)	Research/Industrial (sq)	Community Commercial (sq)	Neighborhood Commercial (sq)		
<i>Existing</i>														
Approved PA 12	190	2,164	1,172	40	694	470,000	0	194,440	150,000	3,603,281	955,000	150,000	4,280	5,522,721
Approved PA 40	1,595	2,323	0	0	1,303	875,237	0	0	100,000	1,662,352	205,000	0	5,221	2,642,589
Approved Total	1,785	4,487	1,172	40	1,997	1,145,237	0	194,440	250,000	5,265,633	1,160,000	150,000	9,481	8,165,310
<i>Proposed</i>														
Proposed PA 12	190	3,874	1,172	40	694	470,080	0	194,440	150,000	2,635,532	955,000	175,000	5,970	4,579,972
Proposed PA 40	1,595	1,956	0	0	1,303	0	0	0	100,000	1,964,820	0	0	4,854	2,064,820
Proposed Total	1,785	5,830	1,172	40	1,997	478,080	0	194,440	250,000	4,600,432	955,000	175,000	10,824	6,644,892
Difference Between Approved and Proposed Totals for PAs 12 and 40	NC	+1,343	NC	NC	NC	-675,237	NC	NC	NC	-865,181	-285,000	+25,000	+1,343	-1,520,418

Notes – DUs: Dwelling Units; NC: No Change
sq – square feet

Figures listed as "existing" will be finalized as part of the General Plan technical update to be processed in summer 2017. While these figures do not appear in the current version of the City of Irvine General Plan, the units and square footage totals are approved.

August 14, 2017

Prepared by: A. Murphy/M. Cortez

Submitted by: K. Burton

Approved by: Paul Cook 

ACTION CALENDAR

MICHELSON WATER RECYCLING PLANT FILTER PUMP STATION 2 HEADER REPLACEMENT CONSTRUCTION AWARD

SUMMARY:

Due to age and corrosive soil conditions, the Michelson Water Recycling Plant (MWRP) Filter Pump Station 2 (FPS2) discharge header pipe has deteriorated and requires replacement. Staff recommends that the Board:

- Authorize a budget increase for Project 07009 in the amount of \$370,400, from \$1,144,800 to \$1,515,200; and
- Authorize the General Manager to execute a construction contract with Norman A. Olsson Construction in the amount of \$1,175,978 for the MWRP FPS2 Header Replacement.

BACKGROUND:

The MWRP FPS2 was constructed in 1978 as part of the upgrade of the Michelson Plant filtration facilities. FPS2 currently pumps 11 to 22 MGD of secondary effluent from the conventional treatment train to either the tertiary filters or the long term storage ponds based on operational needs. The pump station discharge piping includes 24-inch diameter cement mortar lined and coated steel pipes from each of the four pumps joining a 36-inch diameter discharge header pipeline that is encased in concrete. During the construction of the MWRP Phase 2 Expansion's high rate clarifier in 2009, the discharge pipes from FPS2 were partially exposed revealing that the mortar coating on the four discharge pipes was severely degraded and the steel pipes were heavily corroded with significant metal loss. The work to replace the 24-inch diameter pump discharge pipes or the 36-inch diameter header pipe as part of Phase 2 was not performed due to the complexity of installing the improvements while maintaining plant operations. Due to its severe condition and to avert a possible future emergency repair of the discharge header, replacement is required at this time.

The scope of this project includes: replacement of the four 24-inch diameter pump discharge pipes and the associated butterfly valves; replacement of the 36-inch diameter discharge header between the high rate clarifier (HRC) vault and the ES-3 Vault; installation of a cathodic protection system on the entire header pipe segment between the HRC vault and the tertiary filters; installation of two new 36-inch butterfly valves on the header; and replacement of a 36-inch flow meter on the header pipeline downstream of the ES-3 Vault. The work also includes the installation of a temporary bypass pumping system to facilitate the replacement of the piping while maintaining operation of MWRP. The District has prepurchased six butterfly valves and the 36-inch magnetic flow meter to expedite the construction of this project. The project site shown in Exhibit "A".

Construction Bid

The project was advertised to a select list of 15 mechanical contractors on June 28, 2017. The bid opening was held on July 27, 2017, with bids received from four contractors: Olsson Construction, Pacific Hydrotech, PCL Construction, and Schuler Constructors. The apparent low bidder is Norman A. Olsson Construction with a bid of \$1,175,978; the engineers' estimate was \$1,472,000. Norman A. Olsson Construction recently completed construction of the Chloramine Boosters at two Domestic Water Reservoirs projects on schedule with no contract change orders and is nearing completion of the San Joaquin Marsh Modifications project with minor schedule delays and contract change orders. They have performed well on these projects. The Bid Summary is attached as Exhibit "B".

FISCAL IMPACTS:

Project 07009 is included in the FY 2017-18 Capital Budget. A budget increase is required to fund the construction and engineering support services for the project as shown in the table below.

Project No.	Current Budget	Addition <Reduction>	Total Budget
07009	\$1,144,800	\$370,400	\$1,515,200

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which 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; and Section 15302 which provides an exemption for replacement or reconstruction 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 and capacity as the structure replaced. A Notice of Exemption for the project was prepared and filed with the County of Orange on July 12, 2017.

COMMITTEE STATUS:

Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$370,400, FROM \$1,144,800 TO \$1,515,200, FOR PROJECT 07009; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH NORMAN A. OLSSON CONSTRUCTION IN THE AMOUNT OF \$1,175,978 FOR THE MICHELSON WATER RECYCLING PLANT FILTER PUMP STATION 2 HEADER REPLACEMENT, PROJECT 07009.

Action Calendar: Michelson Water Recycling Plant Filter Pump Station 2 Header Replacement
Construction Award
August 14, 2017
Page 3

LIST OF EXHIBITS:

Exhibit "A" – Project Site Map
Exhibit "B" – Bid Summary

EXHIBIT "A"

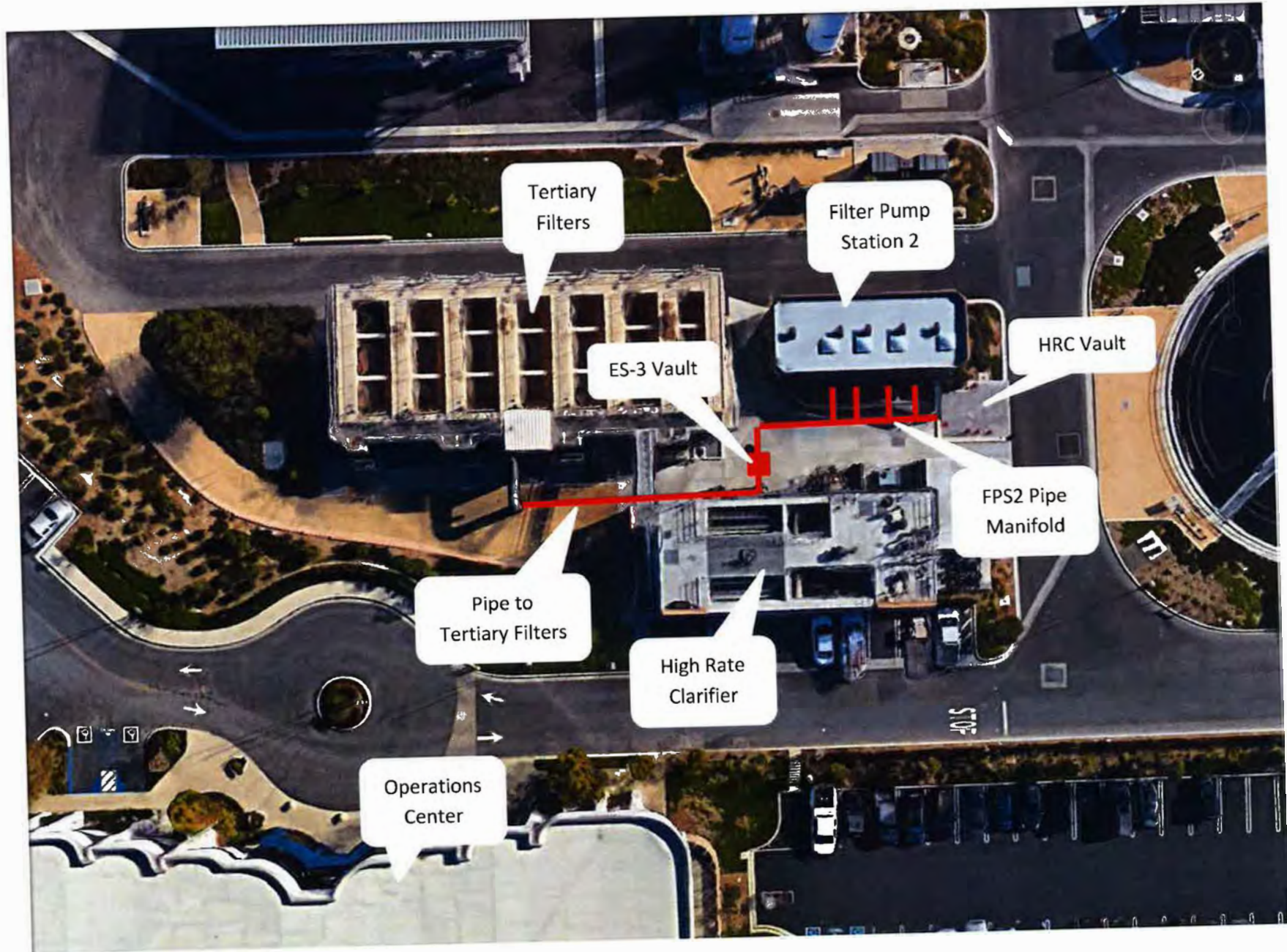


EXHIBIT "B"

Item No	Description	Qty	Unit	Engineer's Estimate		1 Norman A. Olsson Construction, Inc. Orange, CA		2 Pacific Hydrotech Corp. Perris, CA	
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	Mobilization, Demobilization, and Cleanup	1	LS	\$143,000.00	\$143,000.00	\$10,000.00	\$10,000.00	\$184,800.00	\$184,800.00
2	Bonds and Insurance	1	LS	\$29,000.00	\$29,000.00	\$50,000.00	\$50,000.00	\$26,000.00	\$26,000.00
3	Trench Safety Measures	1	LS	\$42,000.00	\$42,000.00				
4	Site Demolition	1	LS	\$107,000.00	\$107,000.00	\$10,000.00	\$10,000.00	\$3,000.00	\$3,000.00
5	Provide, install, test and maintain temporary bypass pumping system for duration of construction.	1	LS	\$422,000.00	\$422,000.00	\$20,000.00	\$20,000.00	\$15,800.00	\$15,800.00
6	Operate bypass pumping system during primary mode.	1	\$/per week	\$65,000.00	\$65,000.00	\$379,978.00	\$379,978.00	\$432,200.00	\$432,200.00
7	Provide and install electrical improvements for power and communication connection to temporary bypass pumping and power equipment.	1	LS	\$15,000.00	\$15,000.00	\$87,500.00	\$87,500.00	\$96,800.00	\$96,800.00
8	Provide and install PLC panel and enclosure for bypass pumping system control. PLC to be provided to District following project completion.	1	LS	\$76,000.00	\$76,000.00	\$20,000.00	\$20,000.00	\$22,900.00	\$22,900.00
9	Install District provided flow meter and FIT. Install new wiring and flex conduit. Provide and install Victaulic coupling and spindle pieces to connect flow meter to existing piping.	1	LS	\$10,000.00	\$10,000.00	\$70,000.00	\$70,000.00	\$40,300.00	\$40,300.00
10	Excavate, demolish existing piping, and install and provide CML&C discharge header section, piping, and appurtenances. Install District provided valves.	1	LS	\$413,000.00	\$413,000.00	\$30,000.00	\$30,000.00	\$36,200.00	\$36,200.00
11	Provide and Install Cathodic Protection along discharge header section and valves	1	LS	\$31,000.00	\$31,000.00	\$300,000.00	\$300,000.00	\$319,300.00	\$319,300.00
12	Site backfill and paving	1	LS	\$76,000.00	\$76,000.00	\$40,000.00	\$40,000.00	\$42,300.00	\$42,300.00
13	Final Record Drawings	1	LS	\$1,000.00	\$1,000.00	\$70,000.00	\$70,000.00	\$46,500.00	\$46,500.00
	SUBTOTAL. Base Bid Items				\$1,430,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
A-1	Operate bypass pumping system during stand-by mode.	7	\$/per day	\$6,000	\$42,000.00	\$300,000.00	\$300,000.00	\$319,300.00	\$319,300.00
	SUBTOTAL Additive and Deductive Bid Items				\$42,000.00	\$40,000.00	\$40,000.00	\$42,300.00	\$42,300.00
	SUBTOTAL. Base & Additive/Deductive Bid Items				\$1,472,000.00	\$1,472,000.00	\$1,472,000.00	\$1,472,000.00	\$1,472,000.00
	Adjustment (+ or -)								
	TOTAL AMOUNT OF BID				\$1,472,000.00	\$1,175,978.00	\$1,175,978.00	\$1,412,700.00	\$1,412,700.00
				Item		Manufacturers:		Manufacturers:	
				None					
						Subcontractors:		Subcontractors:	
						Electrical: Hydrotech Electric		Electrical: Big Bear Electric	
								Bypass: Xylem Dewatering Solutions	

Item No	Description	Qty	Unit	Engineer's Estimate		3 PCL Construction, Inc. Corona, CA		4 Schuler Constructors, Inc. Corona, CA	
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	Mobilization, Demobilization, and Cleanup	1	LS	\$143,000.00	\$143,000.00	\$70,000.00	\$70,000.00	\$62,000.00	\$62,000.00
2	Bonds and Insurance	1	LS	\$29,000.00	\$29,000.00	\$18,000.00	\$18,000.00	\$15,000.00	\$15,000.00
	Trench Safety Measures	1	LS	\$42,000.00	\$42,000.00				
3						\$25,000.00	\$25,000.00	\$6,000.00	\$6,000.00
	Site Demolition	1	LS	\$107,000.00	\$107,000.00				
4						\$60,000.00	\$60,000.00	\$14,000.00	\$14,000.00
5	Provide, install, test and maintain temporary bypass pumping system for duration of construction.	1	LS	\$422,000.00	\$422,000.00	\$335,000.00	\$335,000.00	\$670,000.00	\$670,000.00
6	Operate bypass pumping system during primary mode.	1	\$/per week	\$65,000.00	\$65,000.00	\$50,000.00	\$50,000.00	\$56,000.00	\$56,000.00
7	Provide and install electrical improvements for power and communication connection to temporary bypass pumping and power equipment.	1	LS	\$15,000.00	\$15,000.00	\$20,000.00	\$20,000.00	\$14,000.00	\$14,000.00
8	Provide and install PLC panel and enclosure for bypass pumping system control. PLC to be provided to District following project completion.	1	LS	\$76,000.00	\$76,000.00	\$105,000.00	\$105,000.00	\$74,000.00	\$74,000.00
9	Install District provided flow meter and FIT. Install new wiring and flex conduit. Provide and install Victaulic coupling and spindle pieces to connect flow meter to existing piping.	1	LS	\$10,000.00	\$10,000.00	\$30,000.00	\$30,000.00	\$10,000.00	\$10,000.00
10	Excavate, demolish existing piping, and install and provide CML&C discharge header section, piping, and appurtenances. Install District provided valves.	1	LS	\$413,000.00	\$413,000.00	\$623,247.00	\$623,247.00	\$480,000.00	\$480,000.00
11	Provide and Install Cathodic Protection along discharge header section and valves	1	LS	\$31,000.00	\$31,000.00	\$16,000.00	\$16,000.00	\$60,000.00	\$60,000.00
12	Site backfill and paving	1	LS	\$76,000.00	\$76,000.00	\$20,000.00	\$20,000.00	\$45,000.00	\$45,000.00
13	Final Record Drawings	1	LS	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
	SUBTOTAL, Base Bid Items				\$1,430,000.00		\$1,373,247.00		\$1,507,000.00
A-1	Operate bypass pumping system during stand-by mode.	7	\$/per day	\$6,000	\$42,000.00	\$9,500.00	\$66,500.00	\$6,500.00	\$45,500.00
	SUBTOTAL Additive and Deductive Bid Items						\$66,500.00		\$45,500.00
	SUBTOTAL, Base & Additive/Deductive Bid Items				\$1,472,000.00		\$1,439,747.00		\$1,552,500.00
	Adjustment (+ or -)								-\$60,000.00
	TOTAL AMOUNT OF BID				\$1,472,000.00		\$1,439,747.00		\$1,492,500.00
					Item		Manufacturers:		Manufacturers:
					None				
							Subcontractors:		Subcontractors:
							Electrical: PCL Industrial Services, Inc.		Electrical: Hydrotech Electric
							Bypass Pumping: Rain-4-Rent		Dewatering: Xylem Dewatering Solutions
							Shoring: McBratney Company		Concrete: Regan Paving
							Cathodic Protection: Corpro		

August 14, 2017

Prepared by: J. McGehee/R. Mori

Submitted by: K. Burton *(KLB)*

Approved by: Paul Cook *(Signature)*

ACTION CALENDAR

OFFSITE PIPELINES FOR THE IRVINE LAKE PIPELINE NORTH CONVERSION CONSULTANT SELECTIONS AND CONSTRUCTION AWARD

SUMMARY:

The Offsite Pipelines for the Irvine Lake Pipeline (ILP) North Conversion project includes the pipelines necessary to connect the recycled water system to the Zone C+ Reservoir, which is currently under construction. Staff recommends that the Board:

- Authorize the General Manager to execute a Professional Services Agreement with NMG Geotechnical, in the amount of \$152,743, for geotechnical services during construction;
- Authorize the General Manager to execute a Professional Services Agreement with Michael Baker International (MBI), in the amount of \$136,050, for engineering support services during construction;
- Acknowledge the material clerical error made in the computation of Artukovich & Son, Inc.'s bid, accept Artukovich & Son, Inc.'s formal written request to withdraw its bid, and return the bid bond to Artukovich & Son, Inc; and
- Authorize the General Manager to execute a construction contract with CCL Contracting, Inc., in the amount of \$8,337,193.50, for the Offsite Pipelines for the ILP North Conversion project.

BACKGROUND:

The ILP North Conversion project is part of the District's strategic plan to increase recycled water usage and reduce reliance on imported water supplies by converting a significant portion of the ILP from untreated water to recycled water. The conversion project will convert the Rattlesnake Reach of the ILP, which is located between Rattlesnake Reservoir and the Zone C+ reservoir, from untreated to recycled water. The conversion project includes constructing a new 2.4 million gallon buried concrete Zone C+ reservoir, various modifications at the Rattlesnake Reservoir Complex, and the offsite pipelines necessary to connect the reservoir to the ILP.

The ILP currently extends from Irvine Lake to Rattlesnake Reservoir and serves untreated water to customers in North Tustin, Orchard Hills, and the Irvine Company agricultural users. The ILP supplements the recycled water system by delivering flow to Rattlesnake Reservoir. The ILP also serves untreated water to the Baker Raw Water Pump Station (RWPS) and feeds the Baker Water Treatment Plant via a connection to the Baker Pipeline at the site of the Baker RWPS. A location map is included as Exhibit "A".

To streamline the design and construction of the ILP North Conversion Project, staff divided the project into two components: 1) the Santiago Hills Zone C+ Reservoir and Rattlesnake Reservoir Complex Improvements Project, and 2) the Offsite Pipelines for the ILP North Conversion Project. The construction of the two projects will progress simultaneously to meet the estimated project completion milestone of fall 2018.

Consultant Selections:

Geotechnical and Materials Testing Services: Staff received proposals from Converse Consultants, LGC Geotechnical, Inc., Ninyo & Moore, and NMG Geotechnical, Inc. to provide construction phase soils and materials testing. The scope of services includes field observation, soil and compaction testing, testing of proposed structural subgrade foundations, pipe bedding, and miscellaneous excavations, and materials testing services including concrete cylinders, hot mix asphalt and concrete mixes. Staff reviewed the proposals with an emphasis on identifying the firm that best demonstrated a clear understanding of the project requirements and an appropriate blend of field and office engineering staff to provide the anticipated level of services. Based on these criteria, staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement, in the amount of \$152,743, with NMG Geotechnical for construction phase geotechnical services. The geotechnical services consultant selection matrix is provided as Exhibit “B”, and NMG Geotechnical’s proposal is provided as Exhibit “C”.

Engineering Support Services during Construction: Staff requested MBI to submit a proposal for engineering support services during construction. The proposal, which is attached as Exhibit “D”, includes budget for submittals, RFIs, site visits, record drawings, and construction coordination that accurately reflects the requirements associated with the final configuration of the project. MBI is the engineer of record for the design of this project. Staff reviewed MBI’s scope of work and fee and recommends that the Board authorize the General Manager to execute a Professional Services Agreement with MBI, in the amount of \$136,050, for engineering support services during construction.

Construction Award:

The project was advertised for construction on June 7, 2017 to a select list of fifteen contractors including ARB, Inc., CCL Contracting, Inc., E.J. Meyer Company, J.F. Shea Construction, Inc., L.H. Woods & Sons, Inc., Leatherwood Construction, Inc., Mladen Buntich Construction Company, Paulus Engineering, Inc., Steve Bubalo Construction Company, Steve P. Rados, Inc., Sukut Construction, Inc., Sully-Miller Contracting Company, T.E. Roberts, Inc., Vido Artukovich & Son, Inc. and W.A. Rasic Construction.

The bid opening was held July 27, 2017 with eight bids received from CCL Contracting, Inc., E.J. Meyer Company, Leatherwood Construction, Inc., Mladen Buntich Construction Company, Paulus Engineering, Inc., Steve P. Rados, Inc., Sully-Miller Contracting Company and Artukovich & Son, Inc. Artukovich & Son, Inc. (Artukovich) was the apparent low bidder with a bid amount of \$6,300,000. The remaining bids ranged from \$8,337,193.50 to \$13,540,562. The engineer’s estimate, prepared by MBI Consulting, was \$9,180,000.

On August 1, 2017, Artukovich submitted a formal written request to withdraw its bid, which is attached as Exhibit “E”, citing a material clerical error made in the computation of its bid. Staff conferred with legal counsel, and legal counsel confirmed that under Public Contract Code § 5100, et seq., if a bidder discovers a mistake in its bid submitted to a state or local public entity, it may obtain relief and withdraw the bid either with the consent of the awarding entity or

by an action to recover the bid bond in court. The mistake must be material and resulting from a typographical, arithmetical, or other clerical errors, as opposed to an error in judgment or carelessness in inspecting the site of the work or in reading the plans and specifications. Additionally, the bidder must provide written notice of the mistake within five work days after the opening of the bid, explaining the mistake in detail.

Artukovich's formal written request, which cites an approximate \$1.5 million dollar miscalculation in its bid price, complies with the Public Contract Code requirements for requesting withdrawal of its bid. Pursuant to the Public Contract Code, the District can either acknowledge the mistake, return the bid bond, and prepare a report documenting the bases for that decision, or contest the bidder's statement and call on the bid bond. By claiming the mistake, Artukovich is prohibited from further participating in the bidding process for this project, and the District may award the contract to the next lowest responsible bidder.

Staff and legal counsel have reviewed Artukovich's written request to withdraw its bid and concur that a material clerical error was made in the preparation of its bid. As afforded by the Public Contract Code, staff recommends that the Board acknowledge the material clerical error made in the computation of its bid, accept Artukovich's formal written request to withdraw its bid, and return the bid bond to Artukovich. Staff will prepare a report documenting the bases for the withdrawal and the District's acceptance, pursuant to the Public Contract Code.

The next lowest bidder is CCL Contracting, Inc. (CCL), who submitted a bid in the amount of \$8,337,193.50. Staff reviewed CCL's bid and has determined that it is responsive. Staff recommends that the Board authorize the General Manager to award a construction contract to CCL Contracting, Inc., in the amount of \$8,337,193.50. The bid summary is attached as Exhibit "F".

FISCAL IMPACTS:

Project 05823 is included in the FY 2017-18 Capital Budget. The existing budget is sufficient to fund the recommendations presented herein.

The ILP North Conversion Project, which includes the reservoir and associated off-site pipelines, is receiving grant funding from the United States Department of Bureau of Reclamation (USBR) and the State Water Resources Control Board (State Board). The USBR funding, in the amount of \$300,000, is being provided through the Drought Resiliency Grant program with 75 percent IRWD matching requirements. The State Board is providing Proposition 1 Recycled Water Program grant funds, which will contribute up to a 35 percent match on eligible construction costs up to a maximum of \$29,510,300 in project costs.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and in conformance with California Code of Regulations Title 14, Chapter 3, Article 6, a Notice of Intent to adopt a Mitigated Negative Declaration was filed with the County of Orange on November 3, 2015.

Pursuant to State Guideline § 15073, the Initial Study/Mitigated Negative Declaration (IS/MND) was made available for public review for a period of 30 days from November 4, 2015 through December 3, 2015. The IS/MND was adopted by IRWD Board of Directors at its January 11, 2016 meeting. A Notice of Determination was filed with the Orange County Clerk/Recorder and the CA State Clearinghouse on January 12, 2016.

COMMITTEE STATUS:

The consultant selection items were reviewed by the Engineering and Operations Committee on July 18, 2017. Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT, IN THE AMOUNT OF \$152,743, WITH NMG GEOTECHNICAL FOR GEOTECHNICAL SERVICES DURING CONSTRUCTION; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT, IN THE AMOUNT OF \$136,050, WITH MICHAEL BAKER INTERNATIONAL FOR ENGINEERING SUPPORT SERVICES DURING CONSTRUCTION; ACKNOWLEDGE THE MATERIAL CLERICAL ERROR MADE IN THE COMPUTATION OF ARTUKOVICH & SON, INC.'S BID, ACCEPT ARTUKOVICH & SON, INC.'S FORMAL WRITTEN REQUEST TO WITHDRAW ITS BID, AND RETURN THE BID BOND TO ARTUKOVICH & SON, INC; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH CCL CONTRACTING, INC., IN THE AMOUNT OF \$8,337,193.50, FOR THE OFFSITE PIPELINES FOR THE IRVINE LAKE PIPELINE NORTH CONVERSION, PROJECT 05823.

LIST OF EXHIBITS:

- Exhibit "A" – Location Map
- Exhibit "B" – Geotechnical Services Consultant Selection Matrix
- Exhibit "C" – NMG Geotechnical's Proposal for Geotechnical Services During Construction
- Exhibit "D" – MBI Proposal for Engineering Support Services During Construction
- Exhibit "E" – Vido Artukovich & Son, Inc. Written Request to Withdraw Bid
- Exhibit "F" – Bid Summary

EXHIBIT "B"

CONSULTANT SELECTION MATRIX

Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project
Geotechnical Services During Construction

Item	Description	NMG Geotechnical	Ninyo & Moore	LGC Geotechnical	Converse Consultants	American Geotechnical
A	TECHNICAL APPROACH					
	Weighted Score (Project Understanding)	1	2	3	4	N/A
B	SCOPE OF WORK					
TASK		Fee	Fee	Fee	Fee	
1	Project Management	\$3,100	\$6,520	\$13,440	\$4,500	
2	Daily Reports	\$3,150	\$0	\$4,560	\$0	
3	Observation and Field Testing	\$103,572	\$77,000	\$140,200	\$224,800	
4	Laboratory Testing	\$15,781	\$3,370	\$28,455	\$10,825	
5	Office Support/Administration	\$5,000	\$1,304	\$6,400	\$7,500	
6	Final Report	\$4,500	\$2,164	\$12,500	\$2,000	
7	Additional On-Call Services	\$17,640	\$17,560	\$17,600	\$16,400	
	TOTAL FEE	\$152,743	\$107,918	\$223,155	\$266,025	Did Not Submit

EXHIBIT "C"



July 6, 2017

Project No. 17062-01

To: Engineering Department
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

Attention: Mr. Richard Mori

Subject: Proposal for Geotechnical Services during Construction Phase, Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project, PR 5823, IRWD Code 6470, County of Orange, California

INTRODUCTION

At your request, NMG Geotechnical, Inc. (NMG) has prepared this proposal for geotechnical services during construction of the proposed pipelines for the conversion of a portion of the ILP from untreated water (UW) to recycled water (RW). We understand that the project will consist of construction of approximately 9,800 linear feet of 42-inch welded steel pipeline, 1,250 linear feet of 20-inch PVC pipeline and 73 linear feet of 10-inch PVC pipeline within Santiago Canyon Road and Jamboree Road in east Orange. Trench repair pavement section and adjacent pavement grind and overlay are also a part of this project. Our proposal and cost estimate are based on:

- Request for proposal (RFP) dated June 6, 2017;
- Review of the project plans and accompanying project manual;
- Review of geotechnical reports associated with the project by URS and Kleinfelder;
- Discussions with representatives of IRWD; and
- Our experience on other projects with IRWD.

The plans reviewed for the preparation of this proposal included Sheets 1 through 63 of 63 sheets, titled "Construction Plans for Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project," dated June 2017 and prepared by Michael Baker, International.

PROJECT UNDERSTANDING

The project includes a 42-inch inlet pipe connecting the existing Irvine Lake Pipeline (IPL) in Jamboree Road, traveling within Santiago Canyon Road to the Santiago Hills Reservoir; a 42-inch pipeline from Santiago Hills Reservoir within Santiago Canyon Road (except for a small portion along the road) to Jamboree Road and then south within Jamboree Road to tie into the IPL near the Baker Raw Water Pump Station and Peters Canyon Reservoir; and a 20-inch pipeline that connects to the second line above and travels northward within Jamboree Road to the East Santiago Canyon Road intersection. Several 10-inch laterals will be installed along the 42-inch lines described above. The pipelines will generally range from 8 to 10 feet in depth, with portions ranging up to 16 feet in depth as it approaches the street crossings or where passing below other pipelines or improvements.

Per the RFP, the geotechnical services will also include materials testing which is anticipated to include concrete placement inspection and compression testing. The concrete saddle that is required for 42-inch pipelines with less than 4 feet of cover, approximately 40 feet of pipeline within Santiago Canyon Road, will require concrete inspections and materials testing.

Trench repairs will include aggregate base section replacement (plus one inch) and asphalt replacement, per the City of Orange trench repair requirements and grind and overlay per the pavement plans. The grind and overlay will include, at minimum, full-lane width for the longitudinal trenches, multiple lanes in numerous areas and full road width for extended distances on either side of the lateral trenching.

On this project, we understand that the work on both lines within Santiago Canyon Road will be performed as night work. The night work is anticipated to have a duration of approximately six months. The work within the intersection of Santiago Canyon Road and Jamboree Road will be conducted on weekends.

The subsurface conditions are anticipated to include bedrock consisting generally of siltstone, decomposed siltstone and silty clays, artificial fills, generally sandy silt or clayey silt and alluvial soils that are generally clayey sand or silty sand. Groundwater was not encountered in borings up to 31.5 feet below existing grade. Historic groundwater levels have been 10 feet below existing ground. Perched groundwater is likely to be encountered when excavating near other buried pipelines and structures.

OUR APPROACH TO THIS PROJECT

NMG has considerable experience with IRWD inspectors on similar projects. Therefore, we have tried to take into account the typical level of geotechnical and materials testing/inspection services that may be requested by the district's assigned inspector.

We assume night work backfill operations will be carefully scheduled to avoid unnecessary technician presence during operations that only include traffic control, excavation or cleanup (i.e., no earthwork, paving, or concrete work).

Special services that may require engineering or geology input might include issues related to shoring, dewatering, potential trench instability due to adverse bedding and/or groundwater, and the potential impacts of these conditions on existing improvements.

Our cost estimate for field coverage for the anticipated inspections and testing for the subgrades, backfills and paving is based on our experience with scheduling coordination with the IRWD inspector and contractor with some adjustments to the anticipated days and hours per day provided in the RFP.

PROJECT STAFFING

The assigned field technician will tentatively be Mr. Jonathan Clark with assistance from other technicians which will likely be necessary due to the off-hours or multi-shift schedule. The engineer and project manager will be Mr. Karlos Markouizos. The project geologist will be Mr. Tom Devine, Associate Geologist. Combined, these professionals have considerable experience with IRWD inspectors and project managers on a variety of IRWD projects. They would be available for the duration of the project.

NMG provides a broad range of professional services in the disciplines of geotechnical engineering, engineering geology, soils, and materials testing. NMG was established in 1994 and currently employs over 60 people, including nine geotechnical engineers, seven engineering geologists, and more than 30 field/laboratory technicians and materials inspectors. We have provided our services for numerous IRWD projects including on-call services. With our staffing profile we have always been able to provide our services in a timely manner even on very short notice.

PROPOSAL ASSUMPTIONS

NMG is proposing to provide on-call geotechnical observation and testing services for the subject project. Based on our review of the project, our assumptions for geotechnical observation and testing services include the following:

- The 42-inch ILP line will include approximately 2,700 feet of pipeline. The majority of this pipeline will be located within Santiago Canyon Road and thus will require night work. The portion of the pipeline within the intersection of Santiago Canyon Road and Jamboree Road will be constructed on weekends. Construction will include 5 lateral lines. The depth of the trench will generally range from 8 to 10 feet with portions ranging up to 12 feet deep and the portion passing over the Baker Aqueduct shallower than the 5 feet minimum cover.
- The Zone C+ 42-inch RW line will include approximately 7,100 feet of pipeline. Approximately 2,600 feet of this pipeline will be located within Santiago Canyon Road and thus will require night work. The portion of the pipeline within the intersection of Santiago Canyon Road and Jamboree Road will be constructed on weekends. The remaining portion is within Jamboree Road and will be constructed during typical workday hours. Construction will include 5 lateral lines. The depth of the trench will generally range from 8 to 10 feet with portions ranging up to 19 feet deep to pass below existing utilities or storm drain.

- The Zone C+ 20-inch RW line will include approximately 1,350 feet of pipeline. This pipeline will be located within Jamboree Road, between Santiago Canyon Road and East Santiago Canyon Road, and will be constructed during typical workday hours. Construction will include four lateral lines. The depth of the trench will generally range from 7 to 9 feet with portions ranging up to 16 feet deep to pass below existing utilities or storm drain.
- Subgrade observation and testing is anticipated for the trench bottoms and for curb and gutter replacement.
- Materials testing services will be required for the concrete saddle over the portion of the 42-inch ILP that is less than the 5 feet of cover minimum. The concrete saddle will be necessary for approximately 40 feet of pipeline. The concrete will be required to meet a minimum compression strength of 4,000 psi. It is assumed that this will be constructed in a single pour.
- Materials testing services may be required for the butt-strap for the CCP to SML&C pipeline connections (2). Sampling of the cement grout overlaying the connection is anticipated.
- Trench repair will include replacement of aggregate base, existing section plus one inch, and 10 inches of asphalt. Based upon the anticipated days of asphalt paving presented in the RFP (25), we anticipate trench repair will be performed in 400- to 500-foot sections, for each day of paving. Requirements for our services include both temperature and density, thus, the 2 hours per day of paving presented in the RFP is likely to be at least 4 hours per day.
- Observation and testing services during de-watering and shoring, placement and removal, is anticipated for the ILP cut-in tee connections and the connection to the Zone C+ reservoir.
- Grind and overlay paving will be performed for one lane of traffic, minimum, for the entire length of the water lines, approximately 11,150 feet. According to the plans, additional grind and overlay will be required on either side of lateral lines and for additional lanes where the pipeline encroaches within adjacent lanes or close to the median or parkway curbs. Overlay will consist of AHRM (rubberized asphalt). Overlay paving will require approximately five full days of paving, two of these will be night work.
- Other additional observation and testing that is not listed in the RFP and hours adjusted by NMG include:
 - Asphalt overlay observation and testing appears to have been omitted, assuming the RFP's reference to 25 days of paving is referring to the trench repair.
 - Compaction testing services are being reduced by a total of 200 hours based on NMG's review and project understanding.
- Laboratory testing will be required for:
 - Maximum density of soil and aggregate base (15)
 - Sieve analysis of soil and aggregate base (15)

- Asphalt maximum density (16)
- Asphalt extraction and percent asphalt (16)
- Asphalt aggregate gradation (16)
- Sand equivalent for shading sand (8)
- Concrete compression sets (3)

Note: Batch plant density and bitumen content will be acceptable for smaller paving episodes.

- One final report of observation and testing will be required upon completion.
- Special services time allowances, if requested by IRWD. The special services time allowances include 15 working days, 8 hours per day for a field technician and 5 working days, 8 hours per day for a geologist/engineer.
- Observation and testing services will be conducted in conformance with IRWD standards for trench backfills, subgrades and asphalt repair. Testing for the project will be in accordance with ASTM test methods. We assume that both the City and County will defer inspection and testing roles to the District.

SCOPE OF SERVICES

The general scope of geotechnical services for this project is summarized below:

1. **Project Management and Review of Project Materials:** Project management, coordination for the project, as needed. This includes some budget for review of the plans, specifications, and any other pertinent readily available reports. We have budgeted a total of 20 hours for this task.
2. **Daily Field Reports:** Preparation of written field reports for field visits with an evaluation of work performed by your contractor.
3. **Observation and Field Testing:** Observation and testing during materials inspection, shading and bedding, trench backfill, subgrade preparation, aggregate base placement and asphalt paving operations.
4. **Laboratory Testing:** Laboratory testing will be performed to confirm the soil/aggregate material properties and support the compaction operations. This will include maximum density, gradations, sand equivalent, asphalt density, extraction and percent asphalt, and concrete/grout compression testing.
5. **Geologist/Engineering/Office Support Administration:** The field supervisor or engineer/geologist will review project status with the project soil technician. Other office tasks will include communications with project team (e.g., scheduling of field work), data compilation and review, and technical support. In the event of unforeseen conditions, a geotechnical engineer, engineering geologist will be available to further evaluate the

conditions and provide appropriate recommendations. Project technician and/or project geotechnical engineer will attend a total of 10 meetings over the duration of the project.

6. **Final Geotechnical Report:** A final geotechnical summary report at the completion of the project will be submitted, including density test results, map showing test locations, and descriptions of work performed.
7. **Special Services:** If requested and authorized by IRWD, the special services time allowances will be used for extra support by field technicians and geologist/engineer.

NMG QUALIFICATIONS AND SCHEDULE

NMG Geotechnical, Inc. provides a broad range of professional services in the disciplines of geotechnical engineering, engineering geology, soils, and materials testing. NMG was established in 1994 and currently employs over 60 people, including eight geotechnical engineers, seven engineering geologists, and more than 30 field/laboratory technicians and materials inspectors. NMG is based in Irvine where its soil and concrete testing laboratories are located, and primarily serves the southern California region, from San Diego to Santa Clarita, and into the Inland Empire. NMG project types vary widely from public works, institutional, to large acreage master planned communities. Public and semi-public clients include numerous water districts (Irvine Ranch, Orange County, Santa Margarita, Metropolitan, Mesa Consolidated), school districts (Capistrano Unified, Tustin Unified), transportation departments (OCTA, Caltrans), and numerous local municipalities. Private clients include large developers and the majority of major homebuilders in southern California. A significant portion of NMG's service to the private sector include the infrastructure associated with these developments, including reservoirs, bridges, streets, drainage facilities, and utilities.

Based on NMG's large and experienced staff of field technicians, the proximity of our office to the project site, and our ongoing work in the south Irvine/Tustin area, we will be able to cover and respond quickly to the project construction needs for geotechnical observation and testing. Our work will be performed in accordance with the overall project schedule and in coordination with the IRWD inspector.

COST ESTIMATE

We have analyzed the project plans and reviewed the specified hours for each area of work provided in the RFP. Please note that based on our analysis and experience on other IRWD pipeline projects, we have DEDUCTED 200 hours of field technician time for backfill compaction; we believe the remaining field time is sufficient.

We have also added 50 hours of asphalt overlay inspection time, which did not appear to be included in the RFP.

Our estimated costs are summarized in the IRWD table (attached). Our prevailing wage rates, hourly analyses of each task, and other fees are provided in more detail in the attached Table 1,

Scope of Services and Estimated Costs. Please note that NMG does not charge for overtime or extra for night or weekend work.

If you have any questions regarding this proposal, please contact our office. We appreciate this opportunity to offer our services.

Respectfully submitted,

NMG GEOTECHNICAL, INC.



Reza Saberi, GE 3071
Associate Engineer



Ted Miyake, RCE 44864
Principal Engineer

GF/TM/RS/grd

Attachments: IRWD Proposal Format Form and Company Information Form
Table 1 – Scope of Services and Estimated Costs
2013 Professional Fee Schedule

Distribution: (3) Addressee

Proposal Format and Requested Information

Construction Phase Geotechnical Services for the
Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project

PR 05823

Submitted by: NMG Geotechnical, Inc.

 **Mr. Ted Miyake, Principal**
July 6, 2017

WORK DELINEATION AND FEE PROPOSAL

On a separate sheet, provide additional breakdown as necessary of the efforts required under each Task listed in this fee proposal.

- 1. **Project Management**.....Hours 20 **Total \$** 3,100
- 2. **Daily Reports**.....**Total \$** 3,150
- 3. **Observation and Field Testing**.....**Total \$** 103,572

Compaction Testing.....Subtotal \$ 94,500

- Pipeline sub-grade and backfill.....180 days @ 4 hrs / day
- Appurtenances, above-grade equipment sub-grade.....20 days @ 2 hrs / day
- ILP cut-in tee connection sub-grade and backfill.....10 days @ 4 hrs / day
- Asphalt concrete paving.....25 days @ 2 hrs / day
- Asphalt aggregate base.....25 days @ 2 hrs / day

Observation.....Subtotal \$ 10,962

- ILP cut-in tee connections sub-grade preparation, backfill...5 days @ 6 hrs / day
- ILP cut-in tee connections dewatering activities.....10 days @ 2 hrs / day
- ILP cut-in tee connections shoring install/removal.....5 days @ 6 hrs / day
- Connections at Zone C+ Reservoir shoring install/removal...2 days @ 6 hrs / day

Materials Inspection/Testing.....Subtotal \$ 13,860

- Concrete.....3 days @ 4 hrs / day
- Imported sand.....3 days @ 2 hrs / day
- Native backfill.....2 days @ 4 hrs / day
- Crushed rock.....3 days @ 2 hrs / day
- Asphalt concrete paving.....25 days @ 2 hrs / day
- Asphalt aggregate base.....25 days @ 2 hrs / day

Request for Proposals for Construction Phase Geotechnical Services for the
 Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project
 June 6, 2017

Other Observation and/or Testing.....Subtotal \$ -15,750
 Add AC Overlay Paving - 5 days @ 10 hrs / day
Adjustment to Compaction Testing (Subtract).....-200 hours

4. Laboratory Testing.....**Total \$** 15,781

List specific tests and quantities as required by the specifications.

5. Geologist / Engineer / Office Support / Administration.....**Total \$** 5,000

A. **Meetings**.....Subtotal \$ 2,500

B. **Technical Support**.....Subtotal \$ 2,500

6. Final Report.....**Total \$** 4,500

One (1) hard copy and 1 color PDF file on CD

7. Additional On-call Services.....**Total \$** 12,600

(Work under this task shall only be performed as requested and as authorized by IRWD.
 Provide a budget for the following stipulated tasks and time allowances.)

A. **Field Technician – 15 days @ 8 hrs / day**.....Subtotal \$ 12,600

B. **Geologist/Engineer – 5 days @ 8 hrs / day**.....Subtotal \$ 5,040

TOTAL PROPOSED FEE \$ 152,743
 (Tasks 1 – 7)

**TABLE 1
SCOPE OF SERVICES AND ESTIMATED COSTS**

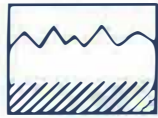
17062-01
July 6, 2017

IRWD - IRVINE LAKE PIPELINE NORTH CONVERSION PROJECT				
Category	Staff Level	Hours	Unit Rate	Cost
1. PROJECT MANAGEMENT	Principal/Associate Eng/Geo	20	\$155	\$3,100
	Subtotal Task 1:			\$3,100
2. DAILY REPORTS	Prevailing Wage Technician	30	\$105	\$3,150
	Subtotal Task 2:			\$3,150
3. OBSERVATION AND FIELD TESTING				
3a. Compaction Testing				
Pipeline Subgrade and Backfill				
42-Inch ILP Trench Backfill	Prevailing Wage Technician	180	\$105	\$18,900
42-Inch C+ RW Trench Backfill	Prevailing Wage Technician	420	\$105	\$44,100
20-inch C+ RW Trench Backfill	Prevailing Wage Technician	80	\$105	\$8,400
10-inch Lateral Line Trench Backfill	Prevailing Wage Technician	40	\$105	\$4,200
	Subtotal:	720		\$75,600
Appurtenances, Above-Grade Equipment Subgrade				
Access Road Repair Subgrade	Prevailing Wage Technician	8	\$105	\$840
Curb Replacement Pavement Subgrade	Prevailing Wage Technician	20	\$105	\$2,100
V-Ditch Replacement Subgrade	Prevailing Wage Technician	4	\$105	\$420
Sidewalk Replacement Subgrade	Prevailing Wage Technician	8	\$105	\$840
	Subtotal:	40		\$4,200
ILP Cut-In Tee Connection Subgrade and Backfill				
Trench Subgrade	Prevailing Wage Technician	8	\$105	\$840
Trench Backfill	Prevailing Wage Technician	32	\$105	\$3,360
	Subtotal:	40		\$4,200
Asphalt Concrete Paving				
Trench Repair Paving	Prevailing Wage Technician	50	\$105	\$5,250
	Subtotal:	50		\$5,250
Asphalt Aggregate Base				
Trench Repair Aggregate Base Replacement	Prevailing Wage Technician	50	\$105	\$5,250
	Subtotal:	50		\$5,250
	Subtotal Task 3a:			\$94,500
3b. Observation				
ILP Cut-In Tee Connections Subgrade Preparation and Backfill	Prevailing Wage Technician	30	\$105	\$3,150
ILP Cut-In Tee Connections Dewatering Activities	Project Geologist	20	\$126	\$2,520
ILP Cut-In Tee Connections Shoring Install and Removal	Project Geologist	30	\$126	\$3,780
Connection at Zone C+ Reservoir Shoring Install/Removal	Project Geologist	12	\$126	\$1,512
	Subtotal Task 3b:	92		\$10,962
3c. Materials Inspection/Testing				
Concrete	Prevailing Wage Technician	12	\$105	\$1,260
Imported Sand	Prevailing Wage Technician	6	\$105	\$630
Native Backfill	Prevailing Wage Technician	8	\$105	\$840
Crushed Rock	Prevailing Wage Technician	6	\$105	\$630
Asphalt Concrete Paving	Prevailing Wage Technician	50	\$105	\$5,250
Asphalt Concrete Paving Aggregate Base	Prevailing Wage Technician	50	\$105	\$5,250
	Subtotal Task 3c:	132		\$13,860
3d. Other Observation and/or Testing plus Adjusted Hours				
Overlay Paving	Prevailing Wage Technician	50	\$105	\$5,250
Adjusted Compaction Testing Services (deduct)	Prevailing Wage Technician	-200	\$105	-\$21,000
	Subtotal Task 3d:	-150		-\$15,750
	Subtotal Task 3:			\$103,572

**TABLE 1
SCOPE OF SERVICES AND ESTIMATED COSTS**

17082-01
July 6, 2017

IRWD - IRVINE LAKE PIPELINE NORTH CONVERSION PROJECT				
Category	Staff Level	Hours	Unit Rate	Cost
4. LABORATORY TESTING				
	Maximum Density	15	\$215	\$3,225
	Sieve Analysis	15	\$95	\$1,425
	Asphalt Density	16	\$235	\$3,760
	Extraction and % Asphalt	16	\$300	\$4,800
	Asphalt Gradation	16	\$100	\$1,600
	Sand Equivalent	8	\$82	\$656
	Concrete Cylinder (Set)	3	\$105	\$315
	Subtotal Task 4:			\$15,781
5. GEOLOGIST / ENGINEER / OFFICE SUPPORT / ADMINISTRATION				
5a. Meetings				\$2,500
5b. Technical Support				\$2,500
	Subtotal Task 5:			\$5,000
6. FINAL REPORT				\$4,500
7. SPECIAL SERVICES				
7a. Field Technician	Prevailing Wage Technician	120	\$105	\$12,600
7b. Geologist/Engineer	Associate or Principal Eng/Geo	40	\$126	\$5,040
	Subtotal Task 7:			\$17,640
	TOTAL COST ESTIMATE:			\$152,743



2013 PROFESSIONAL FEE SCHEDULE

HOURLY RATES BY STAFF CATEGORY

Principal and Associate Engineer/Geologist.....	\$155
Project Engineer/Geologist	\$126
Senior Staff Engineer/Geologist.....	\$105
Supervisory Technician	\$105
Staff Engineer/Geologist	\$ 97
Senior Project Technician	\$ 97
Project Technician.....	\$ 89
Staff Technician.....	\$ 81
CAD Drafter/Technical Illustrator	\$ 81
Word Processor.....	\$ 71
Technical Assistant	\$ 58

LABORATORY TESTING

Moisture Content.....	\$ 17	Consolidation	\$195
Moisture Content & Density.....	\$ 27	- For time-rate, add \$38/increment	
Atterberg Limits	\$150	- For remolded, add \$54/specimen	
Particle-Size Sieve Analysis.....	\$ 95	- For reload, add \$105/cycle	
Finer than No. 200 Sieve.....	\$ 62	Hydroconsolidation/Collapse	\$125
Hydrometer Analysis	\$ 98	Undisturbed Direct Shear	\$185
Maximum Dry Density	\$215	Undisturbed Direct Shear – Slow.....	\$280
Maximum Dry Density with Oversize Particle.....	\$245	Remolded Direct Shear	\$235
Caltrans 216 Maximum Density	\$195	Remolded Direct Shear – Slow.....	\$370
Sand Equivalent.....	\$ 82	Residual Direct Shear	\$560
Soluble Sulfate Content.....	\$ 62	R-Value	\$235
Expansion Index	\$160	Asphalt Maximum Density	\$235
Concrete, Mortar or Grout Compression (per cylinder/cube/prism).....	\$ 27	Gunite/Shotcrete Panel Coring & Testing.....	\$105
CMU Grouted Prisms			
- Compression Test ≤8" x 8" x 16"	\$ 190		
- Compression Test >8" x 8" x 16".....	\$ 260		

NOTES

1. Prevailing Wage is invoiced at Supervisory Technician rate.
2. No additional charges for field vehicle usage, nuclear gauge, or overtime work (except for prevailing wage).
3. Heavy equipment (i.e. drill rig, backhoe, CPT) charges will be invoiced at cost.
4. Delivery and outside reproduction charges will be invoiced at cost.
5. Outside laboratory test charges will be invoiced at cost.

EXHIBIT "D"

Michael Baker
INTERNATIONAL

June 19, 2017

Mr. Joe McGehee
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

Subject: Scope and Fee to provide Construction Support Services for the Offsite Pipelines for the Irvine Lake Pipeline North Conversion project

Dear Mr. McGehee:

Michael Baker International (MBI) is pleased to be submitting this proposal to provide construction support services during for the ILP North Conversion project. Construction of the Oak Park Acres Zone C+ 10" Recycled Waterline in Santiago Canyon Road (west of Jamboree) is not included. It is our understanding that the construction of that project will move forward in approximately twelve months.

Our proposed Scope of Services is summarized in Exhibit "A". A summary of our proposed fee for professional services is included as Exhibit "B", and a detailed breakdown of the proposed fee is included on Table 1.

If you would like to discuss our proposal or need any additional information, please do not hesitate to contact me at 949.330.4275, or jnagle@mbakerintl.com at any time.

Sincerely,



John Nagle, P.E.
Vice President
Michael Baker International, Inc.

Enclosures: Exhibit "A" – Proposed Scope of Services
Exhibit "B" – Proposed Fee

cc: Bryan Kallenbaugh, Michael Baker Intl.
Josh Stone, Michael Baker Intl.

P:\Irvine Ranch Water District (IRWD)\ILP-NorthConv_ESDC\2017-06-19_Proposal.docx

EXHIBIT "A"
IRVINE RANCH WATER DISTRICT
OFFSITE PIPELINES FOR THE ILP NORTH CONVERSION PROJECT
PROPOSED SCOPE OF SERVICES

Item No. 1: Project Meetings and Project Management:

The consultant shall attend up to ten (10) meetings during construction. A submittal log and RFI log shall be maintained and updated for each meeting. This task also provides budget for general project management including meeting preparation, following up on action items, and providing general day to day project correspondence.

Item No. 2: Response to Requests For Information (RFIs):

The consultant shall review RFI's and provide formal written responses within four (4) business days or sooner if possible. For this scope and fee, it is assumed that there will be twenty five (25) RFIs. A detailed matrix of the RFI's and the status of each shall be kept. Additional RFIs beyond the assumed amount may require additional budget.

Item No. 3: Review of Contractor Submittals:

The consultant shall review submittals and provide written responses within ten business (10) days or sooner if possible. For this scope and fee, it is assumed that there will be seventy five (75) submittals. Some submittals will require multiple reviews. A detailed matrix of the submittals and the status of each submittal shall be kept. Additional submittals beyond the assumed amount may require additional budget.

Item No. 4: Preparation of Plan Revisions:

This task will provide budget for plan revisions to the design plans and construction quantities. Up to eighty (80) hours will be assumed in this task. Plans revisions will be coordinated with the resident engineer and submitted to IRWD or the City of Orange for review as appropriate. A numbering system of delta revisions will be established for the revisions. Additionally, all design changes shall be coordinated with the future ICDC project and IRWD reservoir project as necessary. If additional budget for plan changes is required, the consultant shall notify the client prior to making additional revisions.

Item No. 5: Preparation of Record Drawings:

The consultant shall prepare record drawings upon completion of the project. It is assumed that the contractor will provide redlines that show the revisions made to the design during construction. The plans will be signed by the engineer or record and submitted in mylar format to IRWD.

Item No. 6: Additional Construction Coordination:

Work under this task generally includes support efforts outside of Tasks 2 and 3, and may include responding to general IRWD and contractor inquiries, additional coordination and correspondence with permitting agencies, IRWD, ICDC, the City of Orange, and contractor. For this proposal, we have allocated labor hours to correspond to a task budget amount of \$25,000.

EXHIBIT "B"
IRVINE RANCH WATER DISTRICT
OFFSITE PIPELINES FOR THE ILP NORTH CONVERSION PROJECT
PROPOSED COMPENSATION

PROJECT COMPENSATION

The work described in Exhibit "A" is proposed to be completed on a time and materials basis for the not-to-exceed fee of \$136,050, as summarized below. Invoicing will be monthly basis. A detailed breakdown of the proposed fee by Task and Labor Classification is included on Table 1 (attached).

Task No.	Task Description	Proposed Amount
1	Project Meetings and Project Management	\$ 6,840
2	Response to Requests for Information	\$ 15,990
3	Review of Contractor Submittals	\$ 68,820
4	Preparation of Plan Revisions	\$ 11,440
5	Preparation of Record Drawings	\$ 7,690
6	Additional Construction Coordination	\$ 25,000
TOTAL:		\$ 136,050

**TABLE 1
IRVINE RANCH WATER DISTRICT
OFFSITE PIPELINES FOR ILP NORTH CONVERSION PROJECT
CONSTRUCTION PHASE SERVICES**

PROPOSED FEE

Task No.	Task Description	Project Manager	Project Engineer	Designer	Assistant Engineer	Permit Processor	Total Hours	Labor	Direct Costs [1]	Total
	Billing Rate (\$/hr):	\$220	\$165	\$130	\$105	\$95				
1	Project Meetings and Project Management (10 Meetings)	8	20	0	16	0	44	\$6,740	\$100	\$6,840
2	Response to Contractor RFI's (25 RFI's)	12	30	0	80	0	122	\$15,990	\$0	\$15,990
3	Review of Contractor Submittals (75 Submittals)	48	124	0	360	0	532	\$68,820	\$0	\$68,820
4	Preparation of Plan Revisions (80 hours)	8	20	32	12	8	80	\$11,240	\$200	\$11,440
5	Preparation of Record Drawings (20 shts)	2	8	40	0	0	50	\$6,960	\$1,000	\$7,960
6	Additional Construction Coordination	16	48	64	48	0	176	\$24,800	\$200	\$25,000
TOTALS		94	250	136	516	8	1,004	\$134,550	\$1,500	\$136,050

D-4

MONTELEONE & McCRORY, LLP

LAWYERS

A LIMITED LIABILITY PARTNERSHIP
INCLUDING PROFESSIONAL CORPORATIONS

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STEPHEN MONTELEONE
(1886-1962)

DARRELL P. MCCRORY
(1922-2013)

J. MICHAEL GRIMM
ASSOCIATE

OUR FILE NUMBER

August 1, 2017

**Via Federal Express and
Email: boardmail@irwd.com**

Mr. Joe McGehee
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

**Re: Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project,
Project No. 5823**

Dear Mr. McGehee:

We represent Vido Artukovich & Son, Inc./Vidmar, Inc., a joint venture (hereinafter "Artukovich") which has asked us to write to you to inform the Irvine Ranch Water District that it made a material clerical error in its computations for its bid for the Offsite Pipelines for the Irvine Lake Pipeline North Conversion Project, Project No. 5823 ("hereinafter "Project").

On behalf of our client, we hereby notify the Irvine Ranch Water District that Artukovich rescinds its bid to the Project submitted on July 27, 2017 on the basis of the material clerical error made in its bid pursuant to Section 5103 of the Public Contract Code. The circumstances and details of the bid mistake follow.

In preparing the estimate for the Project, Artukovich prepared calculations for the bid items on separate pieces of paper and transferred them onto a recap sheet to obtain the total bid price. However, for the main bid items 14, 15 and 16, Artukovich mistakenly did not transpose the price of the CML&C steel pipe it would use for the Project onto the recap sheet. The price quoted for the pipe was \$1,400,000.00. By failing to transfer the \$1,400,000.00 onto the recap sheet, Artukovich ended up submitting a bid for \$6,300,000.00, when in fact the bid amount should have been \$7,861,267.00 (including all markups and deductions).

MONTELEONE & MCCRORY, LLP

Mr. Joe McGehee
 August 1, 2017
 Page 2

The way \$7,861,267.00 is derived, is from the estimate job cost (including the \$1,400,000.00) plus the 1.5% for bonds and 10% for overhead and profit, minus the last minute cut (\$44,038.00). Attached is a copy of the recap sheet missing the price of the pipe and a schedule of work items (which was submitted at time of bid). In the first line of the recap sheet, you will see that the amount for the pipe was accidentally left blank (the clerical error amounting to a material mistake). On the schedule of work sheets, you will notice a deduction of the aforementioned \$44,083.00 on sheet 5 of 13 which was taken from item 14 (which is indicated on sheet 6 of 13), which happens to be for a valve cut.

Below is the formula to arrive at the intended bid amount of \$7,861,267:

Est. job cost:	\$7,090,000.00
Bonds @ 1.5%:	\$106,350.00
Overhead and Profit @ 10%:	\$709,000.00
Total job estimate:	\$7,905,350.00
Deduction:	\$44,083.00.00
Intended Total:	\$7,861,267.00

Of course, the estimated \$7,861,267.00 did not include the cost of the pipe, which is the reason Artukovich now rescinds its bid. Due to the clerical error, the bid of \$6,300,000.00 submitted was materially different than the bid Artukovich intended to submit for the Project. The mistake was made in filling out the bid, and not due to error in judgment or to carelessness in inspecting the site of the work, or in reading the plans and specifications.

Due to the material, clerical error, please confirm that the Irvine Ranch Water District accepts this rescission and please return the original Bid Bonds to me or directly to my client.

Very truly yours,

MONTELEONE & McCRORY, LLP

By: 
 J. MICHAEL GRIMM

JMG/es
 Cc: Board of Directors

RECAP SHEET

IRWD
Job Estimate Summary

Job: Offsite Pipelines
Bid Date & Time: ~~7/13/17 @ 2pm~~
Eng. Estimate \$9,180,000

7-27-17 @ 3pm

Pipe size & Type	Quant.	Unit	Extension (Total)
Lin. Ft. :			
Contract Days			
Pipe (CML&C)			
Valves & Fittings (PVC Pipe)			450,000
Structures & manholes	10 EA	\$2,500	75,000
Concrete support & thrust blocks	70 EA	\$300	6,000
All American (G&C/Dike/V-Ditch)			450,000
Aggregates			1,000,000
CCTV			10,000
Pipe Cleaning			20,000
City Bid Items			20,000
Cathodic Protection			30,000
Welding			150,000
Pipe Joint matls. (Inside & Out)			20,000
Signalized Intersections	3 EA		160,000
Trench shoring & safety matls.			50,000
Traffic control			60,000
Constr. Water - test			20,000
Small tools			10,000
Disposal fees			100,000
Engineering & testing			65,000
Permits & licenses			30,000
Field office & yard			50,000
Saw Cut	21,000'	\$	
Concrete Cap	60'	\$100	6,000
Potholing	120		120,000
Striping			120,000
Loops	3 EA	300	1,000
Equip. transportation			40,000
Fuel & maintenance			200,000
Equipment repairs			60,000
Equipment rental			650,000
Truck Rental			650,000
Tool rental			20,000
Job Cost Subtotal			4,635,000
Direct Labor cost	1,055,000		
Add - Tax, Ins., Fringe @ ()%			5,690,000
Est. Job cost			
Add - Bonds @ (1.5 %)	85,250		
Overhead & profit 10%	569,000		
TOTAL JOB ESTIMATE			6,344,350
Est. per L.F. (M.L.)			

SCHEDULE OF WORK

SCHEDULE OF WORK ITEMS

**OFFSITE PIPELINES FOR THE IRVINE LAKE
PIPELINE NORTH CONVERSION PROJECT**

PROJECT NO. 5823

Base Bid Items

<u>Item No.</u>	<u>Approx. Quantity</u>	<u>Description</u>	<u>Unit Price Dirs./Cts.</u>	<u>Total Amount Dirs./Cts.</u>
1	1	LS MOBILIZATION, DEMOBILIZATION, AND CLEANUP (NOT TO EXCEED 4% OF CONTRACT PRICE)	Lump Sum	\$ <u>260,000</u>
2	1	LS PAYMENT AND PERFORMANCE BONDS, AND INSURANCE	Lump Sum	\$ <u>95,000</u>
3	1	LS DEVELOP CONSTRUCTION WATER	Lump Sum	\$ <u>10,000</u>
4	1	LS TRAFFIC CONTROL	Lump Sum	\$ <u>60,000</u>
5	3	EA VIDEO DETECTION AT INTERSECTION	\$ <u>60,000</u>	\$ <u>180,000</u>
6	1	LS PHOTOGRAPHIC AND VIDEO SITE DOCUMENTATION	Lump Sum	\$ <u>10,000</u>
7	1	LS SWPPP PREPARATION, REPORTING, AND COMPLIANCE	Lump Sum	\$ <u>20,000</u>
8	1	LS COMPLIANCE WITH ENVIRONMENTAL MITIGATION MONITORING AND REPORTING PLAN	Lump Sum	\$ <u>5,000</u>
9	1	LS COMPLIANCE WITH GRANT REPORTING REQUIREMENTS	Lump Sum	\$ <u>5,000</u>
10	1	LS SHEETING, SHORING, AND BRACING	Lump Sum	\$ <u>50,000</u>
11	73	LF 10" PVC C-900 DR-14	\$ <u>300</u>	\$ <u>21,900</u>
12	1,121	LF 20" PVC C-905 DR-18 - COVER LESS THAN OR EQUAL TO 8'	\$ <u>270</u>	\$ <u>302,670</u>
13	218	LF 20" PVC C-905 DR-18 - COVER GREATER THAN 8'	\$ <u>300</u>	\$ <u>65,400</u>

Bid Documents

Revised 3/15

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Bid Form ADDENDUM 2 – 3 of 13

<u>Item No.</u>	<u>Approx. Quantity</u>	<u>Description</u>	<u>Unit Price Dirs./Cts.</u>	<u>Total Amount Dirs./Cts.</u>
14	3,329	LF 42" CML&C STEEL (0.25" THICK) - COVER LESS THAN OR EQUAL TO 8'	\$ <u>325</u>	\$ <u>1,081,925</u>
15	879	LF 42" CML&C STEEL (0.25" THICK) - COVER GREATER THAN 8'	\$ <u>370</u>	\$ <u>325,230</u>
16	5,678	LF 42" CML&C STEEL (0.25" THICK) - NIGHT / WEEKEND WORK	\$ <u>330</u>	\$ <u>1,873,740</u>
17	1	EA 10" BUTTERFLY VALVE	\$ <u>6,000</u>	\$ <u>6,000</u>
18	2	EA 20" BUTTERFLY VALVE	\$ <u>10,000</u>	\$ <u>20,000</u>
19	4	EA 42" BUTTERFLY VALVE	\$ <u>25,000</u>	\$ <u>100,000</u>
20	1	EA 54" BUTTERFLY VALVE	\$ <u>60,000</u>	\$ <u>60,000</u>
21	1	EA 4" BLOWOFF ASSEMBLY	\$ <u>16,000</u>	\$ <u>16,000</u>
22	2	EA 6" BLOWOFF ASSEMBLY	\$ <u>19,000</u>	\$ <u>38,000</u>
23	5	EA 12" BLOWOFF ASSEMBLY	\$ <u>21,000</u>	\$ <u>105,000</u>
24	1	EA 2" TEMPORARY FLUSH-OUT	\$ <u>5,000</u>	\$ <u>5,000</u>
25	7	EA 2" AIR/VAC ASSEMBLY	\$ <u>14,000</u>	\$ <u>98,000</u>
26	1	EA 4" AIR/VAC ASSEMBLY	\$ <u>15,000</u>	\$ <u>15,000</u>
27	22	EA CATHODIC PROTECTION TEST STATION	\$ <u>8,000</u>	\$ <u>176,000</u>
28	1	LS CONNECT TO EXISTING 54" ILP PER DETAIL 1 ON SHEET D-2	Lump Sum	\$ <u>70,000</u>
29	1	LS CONNECT TO EXISTING 54" ILP PER DETAIL 2 ON SHEET D-2	Lump Sum	\$ <u>70,000</u>
30	1	LS CONNECT TO EXISTING 42" RESERVOIR INLET/OUTLET	Lump Sum	\$ <u>30,000</u>
31	80	LF CONCRETE CAP PER DETAIL 5 ON SHEET D-1	\$ <u>100</u>	\$ <u>8,000</u>
32	237,279	SF 2" GRIND AND OVERLAY (2" MIN.) PER PLAN	\$ <u>1</u>	\$ <u>237,279</u>
33	101,428	SF T-CUT TRENCH REPAIR (10" AC THICKNESS, 12" BASE)	\$ <u>8</u>	\$ <u>811,924</u>
34	617	LF CONSTRUCT TYPE D1-6 DIKE PER OCPW STD. PLAN 120-2-OC	\$ <u>15</u>	\$ <u>9,255</u>

Bid Documents

Revised 3/15

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Bid Form ADDENDUM 2 - 4 of 13

<u>Item No.</u>	<u>Approx. Quantity</u>	<u>Description</u>	<u>Unit Price Dirs./Cts.</u>	<u>Total Amount Dirs./Cts.</u>
35	12	LF CONSTRUCT TYPE A1-6 CURB PER OCPW STD. PLAN 120-2-OC	\$ <u>200</u>	\$ <u>2,400</u>
36	3	EA REPLACE DAMAGED TRAFFIC LOOPS IN KIND	\$ <u>300</u>	\$ <u>9,000</u>
37	25	EA ADJUST EXISTING MANHOLES & VALVE CANS TO GRADE	\$ <u>300</u>	\$ <u>7,500</u>
38	1	LS DEWATERING 54" ILP LINE	Lump Sum	\$ <u>15,000</u>
39	1	LS HYDROSTATIC TESTING AND FLUSHING	Lump Sum	\$ <u>20,000</u>
40	118	LF REMOVE AND REPLACE V-DITCH DRAIN PER OCPWD STD. PLAN 1321	\$ <u>20</u>	\$ <u>2,360</u>
41	1	LS REMOVE AND REPLACE SITE ACCESS GATE IN KIND	Lump Sum	\$ <u>5,000</u>
42	1	LS PROCURE AND CONFORM TO NPDES PERMIT	Lump Sum	\$ <u>12,000</u>
43	1	LS PREPARE RECORD DRAWINGS	Lump Sum	\$ <u>20,000</u>
44	1	LS OPERATIONS AND MAINTENANCE MANUALS	Lump Sum	\$ <u>10,000</u>
Subtotal, Base Bid Items (1 through 44)			\$	<u>6,344,083</u>
ADDITION (+) OR			\$	<u> </u>
DEDUCTION (-)*			\$	<u>44,083</u>
TOTAL AMOUNT OF BID			\$	<u>6,300,000</u>

* VALUE CUT OF \$44,083

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be proportionately applied to the progress payments for items 14, -, -, -, and -. (If no items are listed by the bidder, the addition or deduction shall be treated as a separate bid item, and payment or deduction for this item shall be proportionate to the percentage payment for completed work).

Signed this 24 day of July, 20 17

Vido Artukovich & Son Inc./ Vidmar Inc. A J.V.
Name of Bidder

Signature of Bidder
Anthony Artukovich

Estimator
Title of Signatory

EXHIBIT "F"

Irvine Ranch Water District Bid Summary For
OffSite Pipelines for the ILP North Conversion Project
Project No. 05823

Item No.	Description	Qty	Unit	Engineer's Estimate		Vido Artukovich & Son, Inc. South El Monte, CA		CCL Contracting, Inc. Escondido, CA		E.J. Meyer Company Highland, CA		Leatherwood Construction, Inc. Fountain Valley, CA	
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
Base Bid Items													
1	MOBILIZATION, DEMOBILIZATION, AND CLEANUP (NOT TO EXCEED 4% OF CONTRACT PRICE)	1	LS	\$350,000.00	\$350,000.00	\$260,000.00	\$260,000.00	\$295,000.00	\$295,000.00	\$300,183.50	\$300,183.50	\$355,000.00	\$355,000.00
2	PAYMENT AND PERFORMANCE BONDS, AND INSURANCE	1	LS	\$75,000.00	\$75,000.00	\$95,000.00	\$95,000.00	\$176,000.00	\$176,000.00	\$90,000.00	\$90,000.00	\$100,000.00	\$100,000.00
3	DEVELOP CONSTRUCTION WATER	1	LS	\$15,000.00	\$15,000.00	\$10,000.00	\$10,000.00	\$7,500.00	\$7,500.00	\$20,000.00	\$20,000.00	\$15,000.00	\$15,000.00
4	TRAFFIC CONTROL	1	EA	\$200,000.00	\$200,000.00	\$60,000.00	\$60,000.00	\$404,000.00	\$404,000.00	\$250,000.00	\$250,000.00	\$100,000.00	\$100,000.00
5	VIDEO DETECTION AT INTERSECTION	3	EA	\$50,000.00	\$150,000.00	\$60,000.00	\$180,000.00	\$70,000.00	\$210,000.00	\$70,000.00	\$210,000.00	\$60,000.00	\$180,000.00
6	PHOTOGRAPHIC AND VIDEO SITE DOCUMENTATION	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$4,500.00	\$4,500.00	\$5,000.00	\$5,000.00	\$2,500.00	\$2,500.00
7	SWPPP PREPARATION, REPORTING, AND COMPLIANCE	1	LS	\$50,000.00	\$50,000.00	\$20,000.00	\$20,000.00	\$18,000.00	\$18,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
8	COMPLIANCE WITH ENV. MITIGATION MONITORING / REPORTING PLAN	1	LS	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$8,000.00	\$8,000.00	\$5,000.00	\$5,000.00	\$12,000.00	\$12,000.00
9	COMPLIANCE WITH GRANT REPORTING REQUIREMENTS	1	LS	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$2,800.00	\$2,800.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00
10	SHEETING, SHORING, AND BRACING	1	LS	\$75,000.00	\$75,000.00	\$50,000.00	\$50,000.00	\$121,000.00	\$121,000.00	\$100,000.00	\$100,000.00	\$36,000.00	\$36,000.00
11	10" PVC C-900 DR-14	73	LF	\$150.00	\$10,950.00	\$300.00	\$21,900.00	\$329.00	\$24,017.00	\$200.00	\$14,600.00	\$200.00	\$14,600.00
12	20" PVC C-905 DR-18 - COVER LESS THAN OR EQUAL TO 8'	1,121	LF	\$250.00	\$280,250.00	\$270.00	\$302,670.00	\$321.00	\$359,841.00	\$350.00	\$392,350.00	\$290.00	\$325,090.00
13	20" PVC C-905 DR-18 - COVER GREATER THAN 8'	218	LF	\$275.00	\$59,950.00	\$300.00	\$65,400.00	\$702.00	\$153,036.00	\$375.00	\$81,750.00	\$505.00	\$110,090.00
14	42" CML&C STEEL (0.25" THICK) - COVER LESS THAN OR EQUAL TO 8'	3,329	LF	\$550.00	\$1,830,950.00	\$325.00	\$1,081,925.00	\$420.00	\$1,398,180.00	\$480.00	\$1,597,920.00	\$450.00	\$1,498,050.00
15	42" CML&C STEEL (0.25" THICK) - COVER GREATER THAN 8'	879	LF	\$580.00	\$509,820.00	\$370.00	\$325,230.00	\$511.00	\$449,169.00	\$520.00	\$457,080.00	\$670.00	\$588,930.00
16	42" CML&C STEEL (0.25" THICK) - NIGHT / WEEKEND WORK	5,678	LF	\$700.00	\$3,974,600.00	\$330.00	\$1,873,740.00	\$477.00	\$2,708,406.00	\$490.00	\$2,782,220.00	\$525.00	\$2,980,950.00
17	10" BUTTERFLY VALVE	1	EA	\$8,000.00	\$8,000.00	\$6,000.00	\$6,000.00	\$3,300.00	\$3,300.00	\$3,000.00	\$3,000.00	\$4,000.00	\$4,000.00
18	20" BUTTERFLY VALVE	2	EA	\$12,000.00	\$24,000.00	\$10,000.00	\$20,000.00	\$7,500.00	\$15,000.00	\$7,500.00	\$15,000.00	\$10,000.00	\$20,000.00
19	42" BUTTERFLY VALVE	4	EA	\$40,000.00	\$160,000.00	\$25,000.00	\$100,000.00	\$37,000.00	\$148,000.00	\$35,000.00	\$140,000.00	\$41,000.00	\$164,000.00
20	54" BUTTERFLY VALVE	1	EA	\$55,000.00	\$55,000.00	\$60,000.00	\$60,000.00	\$85,000.00	\$85,000.00	\$70,000.00	\$70,000.00	\$90,000.00	\$90,000.00
21	4" BLOWOFF ASSEMBLY	1	EA	\$12,000.00	\$12,000.00	\$16,000.00	\$16,000.00	\$28,000.00	\$28,000.00	\$30,000.00	\$30,000.00	\$41,500.00	\$41,500.00
22	6" BLOWOFF ASSEMBLY	2	EA	\$15,000.00	\$30,000.00	\$19,000.00	\$38,000.00	\$40,000.00	\$80,000.00	\$30,000.00	\$60,000.00	\$48,000.00	\$96,000.00
23	12" BLOWOFF ASSEMBLY	5	EA	\$18,000.00	\$90,000.00	\$21,000.00	\$105,000.00	\$33,800.00	\$169,000.00	\$33,000.00	\$165,000.00	\$34,000.00	\$170,000.00
24	2" TEMPORARY FLUSH-OUT	1	EA	\$3,000.00	\$3,000.00	\$5,000.00	\$5,000.00	\$4,500.00	\$4,500.00	\$10,000.00	\$10,000.00	\$5,600.00	\$5,600.00
25	2" AIR/VAC ASSEMBLY	7	EA	\$8,000.00	\$56,000.00	\$14,000.00	\$98,000.00	\$20,000.00	\$140,000.00	\$20,000.00	\$140,000.00	\$23,500.00	\$164,500.00
26	4" AIR/VAC ASSEMBLY	1	EA	\$10,000.00	\$10,000.00	\$15,000.00	\$15,000.00	\$17,500.00	\$17,500.00	\$22,000.00	\$22,000.00	\$21,000.00	\$21,000.00
27	CATHODIC PROTECTION TEST STATION	22	EA	\$2,000.00	\$44,000.00	\$8,000.00	\$176,000.00	\$2,900.00	\$63,800.00	\$3,500.00	\$77,000.00	\$6,500.00	\$143,000.00
28	CONNECT TO EXISTING 54" ILP PER DETAIL 1 ON SHEET D-2	1	LS	\$50,000.00	\$50,000.00	\$70,000.00	\$70,000.00	\$84,000.00	\$84,000.00	\$75,000.00	\$75,000.00	\$120,000.00	\$120,000.00
29	CONNECT TO EXISTING 54" ILP PER DETAIL 2 ON SHEET D-2	1	LS	\$50,000.00	\$50,000.00	\$70,000.00	\$70,000.00	\$79,000.00	\$79,000.00	\$80,000.00	\$80,000.00	\$165,000.00	\$165,000.00
30	CONNECT TO EXISTING 42" RESERVOIR INLET/OUTLET	1	LS	\$60,000.00	\$60,000.00	\$30,000.00	\$30,000.00	\$7,000.00	\$7,000.00	\$25,000.00	\$25,000.00	\$75,000.00	\$75,000.00
31	CONCRETE CAP PER DETAIL 5 ON SHEET D-1	80	LF	\$100.00	\$8,000.00	\$100.00	\$8,000.00	\$600.00	\$48,000.00	\$700.00	\$56,000.00	\$300.00	\$24,000.00
32	2" GRIND AND OVERLAY (2" MIN.) PER PLAN	237,279	SF	\$1.50	\$355,918.50	\$1.00	\$237,279.00	\$1.50	\$355,918.50	\$1.50	\$355,918.50	\$2.00	\$474,558.00
33	T-CUT TRENCH REPAIR (10" AC THICKNESS, 12" BASE)	101,428	SF	\$4.00	\$405,712.00	\$8.00	\$811,424.00	\$7.50	\$760,710.00	\$15.00	\$1,521,420.00	\$11.00	\$1,115,708.00
34	CONSTRUCT TYPE DI-6 DIKE PER OCPW STD. PLAN 120-2-OC	617	LF	\$10.00	\$6,170.00	\$15.00	\$9,255.00	\$18.00	\$11,106.00	\$21.00	\$12,957.00	\$20.00	\$12,340.00
35	CONSTRUCT TYPE A1-6 CURB PER OCPW STD. PLAN 120-2-OC	12	LF	\$50.00	\$600.00	\$200.00	\$2,400.00	\$77.00	\$924.00	\$200.00	\$2,400.00	\$250.00	\$3,000.00
36	REPLACE DAMAGED TRAFFIC LOOPS IN KIND	3	EA	\$650.00	\$1,950.00	\$1,000.00	\$3,000.00	\$1,600.00	\$4,800.00	\$1,000.00	\$3,000.00	\$1,200.00	\$3,600.00
37	ADJUST EXISTING MANHOLES & VALVE CANS TO GRADE	25	EA	\$650.00	\$16,250.00	\$300.00	\$7,500.00	\$740.00	\$18,500.00	\$300.00	\$7,500.00	\$750.00	\$18,750.00
38	DEWATERING 54" ILP LINE	1	LS	\$25,000.00	\$25,000.00	\$15,000.00	\$15,000.00	\$30,000.00	\$30,000.00	\$10,000.00	\$10,000.00	\$20,000.00	\$20,000.00
39	HYDROSTATIC TESTING AND FLUSHING	1	LS	\$50,000.00	\$50,000.00	\$20,000.00	\$20,000.00	\$51,000.00	\$51,000.00	\$35,000.00	\$35,000.00	\$160,000.00	\$160,000.00
40	REMOVE AND REPLACE V-DITCH DRAIN PER OCPWD STD. PLAN 1321	118	LF	\$200.00	\$23,600.00	\$20.00	\$2,360.00	\$127.00	\$14,986.00	\$150.00	\$17,700.00	\$200.00	\$23,600.00
41	REMOVE AND REPLACE SITE ACCESS GATE IN KIND	1	LS	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$1,700.00	\$1,700.00	\$5,000.00	\$5,000.00	\$12,000.00	\$12,000.00
42	PROCURE AND CONFORM TO NPDES PERMIT	1	LS	\$10,000.00	\$10,000.00	\$12,000.00	\$12,000.00	\$6,000.00	\$6,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00
43	PREPARE RECORD DRAWINGS	1	LS	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
44	OPERATIONS AND MAINTENANCE MANUALS	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
SUBTOTAL- Base Bid Items					\$9,206,720.50		\$6,338,083.00		\$8,597,193.50		\$9,299,999.00		\$9,530,366.00
Adjustment (+ or -)					\$0.00		-\$38,083.00		-\$260,000.00				
TOTAL AMOUNT OF BID					\$9,206,720.50		\$6,300,000.00		\$8,337,193.50		\$9,299,999.00		\$9,530,366.00


Irvine Ranch Water District Bid Summary For
 Onsite Pipelines for the ILP North Conversion Project
 Project No. 05823

				1		2		3		4		
		Engineer's Estimate		Vido Artukovich & Son, Inc. South El Monte, CA		CCL Contracting, Inc. Escondido, CA		E.J. Meyer Company Highland, CA		Leatherwood Construction, Inc. Fountain Valley, CA		
Item No.	Description	Qty	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
FOOTNOTES:												
1	CCL Contracting, Incorporated's Bid Total Submitted was \$8,337,190.00 - modified Bid Total due to mathematical error on Bid Item No. 32											
2	Mladen Buntich Construction Company Incorporated's Bid Total Submitted was \$9,593,246.60 - modified Bid Total due to mathematical error on Bid Item No. 22											
					Items	Manufacturers:	Manufacturers:	Manufacturers:	Manufacturers:		Manufacturers:	
					CML&C Steel Pipe	West Coast Pipe	West Coast Pipe	Ameron			West Coast Pipe	
					Butterfly Valves	Mueller/Pratt	Mueller/Pratt	Mueller/Pratt			Mueller/Pratt	
					PVC Pipe	Diamond Plastics Co	Diamond Plastics Co	North American Pipe Corporation			Vim,itech	
						Subcontractors:	Subcontractors:	Subcontractors:			Subcontractors:	
						Welding: Dean's Welding	Welding: Dean's Welding	Welding: Loren Brugger Welding			Paving: RJ Noble Company	
						Paving: All American Asphalt	Paving: All American Asphalt	Paving: All American Asphalt			Striping: Superior Pavement Markings	
						Striping: Superior Pavement Markings	Striping: Cal Strip	Striping: Superior Pavement Markings			Electrical: G&G Electric, Inc	
						Electrical: Surecon Electric	Electrical: MSL Electric, Inc.	Electrical: LA Signal Incorporated			Gate: Ace Fence Co	

Item No	Description	Qty	Unit	Engineer's Estimate		5 Mladen Buntich Construction Co. Inc. Upland, CA		6 Sully-Miller Contracting Company Brea, CA		7 Paulus Engineering, Inc. Anaheim, CA		8 Steve P. Rados, Inc. Santa Ana, CA	
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
Base Bid Items													
1	MOBILIZATION, DEMOBILIZATION, AND CLEANUP (NOT TO EXCEED 4% OF CONTRACT PRICE)	1	LS	\$350,000.00	\$350,000.00	\$350,000.00	\$350,000.00	\$384,000.00	\$384,000.00	\$353,999.40	\$353,999.40	\$550,000.00	\$550,000.00
2	PAYMENT AND PERFORMANCE BONDS, AND INSURANCE	1	LS	\$75,000.00	\$75,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$78,000.00	\$78,000.00	\$300,000.00	\$300,000.00
3	DEVELOP CONSTRUCTION WATER	1	LS	\$15,000.00	\$15,000.00	\$20,000.00	\$20,000.00	\$50,000.00	\$50,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
4	TRAFFIC CONTROL	1	LS	\$200,000.00	\$200,000.00	\$350,000.00	\$350,000.00	\$379,307.75	\$379,307.75	\$515,000.00	\$515,000.00	\$450,000.00	\$450,000.00
5	VIDEO DETECTION AT INTERSECTION	3	EA	\$50,000.00	\$150,000.00	\$75,000.00	\$225,000.00	\$50,000.00	\$150,000.00	\$68,000.00	\$204,000.00	\$50,000.00	\$150,000.00
6	PHOTOGRAPHIC AND VIDEO SITE DOCUMENTATION	1	LS	\$10,000.00	\$10,000.00	\$25,000.00	\$25,000.00	\$8,000.00	\$8,000.00	\$11,000.00	\$11,000.00	\$7,500.00	\$7,500.00
7	SWPPP PREPARATION, REPORTING, AND COMPLIANCE	1	LS	\$50,000.00	\$50,000.00	\$250,000.00	\$250,000.00	\$210,000.00	\$210,000.00	\$15,000.00	\$15,000.00	\$65,000.00	\$65,000.00
8	COMPLIANCE WITH ENV. MITIGATION MONITORING / REPORTING PLAN	1	LS	\$10,000.00	\$10,000.00	\$2,000.00	\$2,000.00	\$17,500.00	\$17,500.00	\$5,600.00	\$5,600.00	\$5,000.00	\$5,000.00
9	COMPLIANCE WITH GRANT REPORTING REQUIREMENTS	1	LS	\$10,000.00	\$10,000.00	\$1,000.00	\$1,000.00	\$14,000.00	\$14,000.00	\$4,700.00	\$4,700.00	\$4,000.00	\$4,000.00
10	SHEETING, SHORING, AND BRACING	1	LS	\$75,000.00	\$75,000.00	\$100,000.00	\$100,000.00	\$250,000.00	\$250,000.00	\$40,000.00	\$40,000.00	\$250,000.00	\$250,000.00
11	10" PVC C-900 DR-14	73	LF	\$150.00	\$10,950.00	\$500.00	\$36,500.00	\$260.00	\$18,980.00	\$650.00	\$47,450.00	\$370.00	\$27,010.00
12	20" PVC C-905 DR-18 - COVER LESS THAN OR EQUAL TO 8'	1,121	LF	\$250.00	\$280,250.00	\$350.00	\$392,350.00	\$320.00	\$358,720.00	\$416.00	\$464,336.00	\$350.00	\$392,350.00
13	20" PVC C-905 DR-18 - COVER GREATER THAN 8'	218	LF	\$275.00	\$59,950.00	\$350.00	\$76,300.00	\$413.00	\$90,034.00	\$499.00	\$108,782.00	\$400.00	\$87,200.00
14	42" CML&C STEEL (0.25" THICK) - COVER LESS THAN OR EQUAL TO 8'	3,329	LF	\$550.00	\$1,830,950.00	\$495.00	\$1,647,855.00	\$420.00	\$1,398,180.00	\$526.00	\$1,751,054.00	\$900.00	\$2,996,100.00
15	42" CML&C STEEL (0.25" THICK) - COVER GREATER THAN 8'	879	LF	\$580.00	\$509,820.00	\$515.00	\$452,685.00	\$595.00	\$523,005.00	\$448.00	\$393,792.00	\$1,000.00	\$879,000.00
16	42" CML&C STEEL (0.25" THICK) - NIGHT / WEEKEND WORK	5,678	LF	\$700.00	\$3,974,600.00	\$518.00	\$2,941,204.00	\$495.00	\$2,810,610.00	\$466.00	\$2,645,948.00	\$849.00	\$4,820,622.00
17	10" BUTTERFLY VALVE	1	EA	\$8,000.00	\$8,000.00	\$6,000.00	\$6,000.00	\$3,450.00	\$3,450.00	\$3,956.00	\$3,956.00	\$5,000.00	\$5,000.00
18	20" BUTTERFLY VALVE	2	EA	\$12,000.00	\$24,000.00	\$12,000.00	\$24,000.00	\$10,000.00	\$20,000.00	\$7,428.00	\$14,856.00	\$20,000.00	\$40,000.00
19	42" BUTTERFLY VALVE	4	EA	\$40,000.00	\$160,000.00	\$30,000.00	\$120,000.00	\$50,000.00	\$200,000.00	\$51,140.00	\$204,560.00	\$30,000.00	\$120,000.00
20	54" BUTTERFLY VALVE	1	EA	\$55,000.00	\$55,000.00	\$60,000.00	\$60,000.00	\$96,000.00	\$96,000.00	\$95,000.00	\$95,000.00	\$50,000.00	\$50,000.00
21	4" BLOWOFF ASSEMBLY	1	EA	\$12,000.00	\$12,000.00	\$35,000.00	\$35,000.00	\$16,500.00	\$16,500.00	\$64,800.00	\$64,800.00	\$40,000.00	\$40,000.00
22	6" BLOWOFF ASSEMBLY	2	EA	\$15,000.00	\$30,000.00	\$48,000.00	\$96,000.00	\$19,600.00	\$39,200.00	\$67,000.00	\$134,000.00	\$50,000.00	\$100,000.00
23	12" BLOWOFF ASSEMBLY	5	EA	\$18,000.00	\$90,000.00	\$52,000.00	\$260,000.00	\$36,000.00	\$180,000.00	\$64,000.00	\$320,000.00	\$50,000.00	\$250,000.00
24	2" TEMPORARY FLUSH-OUT	1	EA	\$3,000.00	\$3,000.00	\$24,000.00	\$24,000.00	\$8,150.00	\$8,150.00	\$11,000.00	\$11,000.00	\$20,000.00	\$20,000.00
25	2" AIR/VAC ASSEMBLY	7	EA	\$8,000.00	\$56,000.00	\$22,000.00	\$154,000.00	\$12,500.00	\$87,500.00	\$29,250.00	\$204,750.00	\$20,000.00	\$140,000.00
26	4" AIR/VAC ASSEMBLY	1	EA	\$10,000.00	\$10,000.00	\$24,000.00	\$24,000.00	\$22,700.00	\$22,700.00	\$30,000.00	\$30,000.00	\$15,000.00	\$15,000.00
27	CATHODIC PROTECTION TEST STATION	22	EA	\$2,000.00	\$44,000.00	\$5,000.00	\$110,000.00	\$3,950.00	\$86,900.00	\$8,300.00	\$182,600.00	\$7,500.00	\$165,000.00
28	CONNECT TO EXISTING 54" ILP PER DETAIL 1 ON SHEET D-2	1	LS	\$50,000.00	\$50,000.00	\$100,000.00	\$100,000.00	\$165,000.00	\$165,000.00	\$77,000.00	\$77,000.00	\$75,000.00	\$75,000.00
29	CONNECT TO EXISTING 54" ILP PER DETAIL 2 ON SHEET D-2	1	LS	\$50,000.00	\$50,000.00	\$110,000.00	\$110,000.00	\$165,000.00	\$165,000.00	\$85,000.00	\$85,000.00	\$100,000.00	\$100,000.00
30	CONNECT TO EXISTING 42" RESERVOIR INLET/OUTLET	1	LS	\$60,000.00	\$60,000.00	\$80,000.00	\$80,000.00	\$75,000.00	\$75,000.00	\$11,250.00	\$11,250.00	\$50,000.00	\$50,000.00
31	CONCRETE CAP PER DETAIL 5 ON SHEET D-1	80	LF	\$100.00	\$8,000.00	\$150.00	\$12,000.00	\$625.00	\$50,000.00	\$110.00	\$8,800.00	\$300.00	\$24,000.00
32	12" GRIND AND OVERLAY (2" MIN) PER PLAN	237,279	SF	\$1.50	\$355,918.50	\$1.40	\$332,190.60	\$1.75	\$415,238.25	\$1.40	\$332,190.60	\$2.00	\$474,558.00
33	T-CUT TRENCH REPAIR (10" AC THICKNESS, 12" BASE)	101,428	SF	\$4.00	\$405,712.00	\$9.00	\$912,852.00	\$12.50	\$1,267,850.00	\$9.75	\$988,923.00	\$6.50	\$659,282.00
34	CONSTRUCT TYPE D1-6 DIKE PER OCPW STD PLAN 120-2-OC	617	LF	\$100.00	\$61,700.00	\$30.00	\$18,510.00	\$25.00	\$15,425.00	\$16.00	\$9,872.00	\$20.00	\$12,340.00
35	CONSTRUCT TYPE A1-4 CURB PER OCPW STD PLAN 120-2-OC	12	LF	\$50.00	\$600.00	\$220.00	\$2,640.00	\$250.00	\$3,000.00	\$132.00	\$1,584.00	\$150.00	\$1,800.00
36	REPLACE DAMAGED TRAFFIC LOOPS IN KIND	3	EA	\$650.00	\$1,950.00	\$1,000.00	\$3,000.00	\$700.00	\$2,100.00	\$795.00	\$2,385.00	\$1,000.00	\$3,000.00
37	ADJUST EXISTING MANHOLES & VALVE CANS TO GRADE	25	EA	\$650.00	\$16,250.00	\$1,000.00	\$25,000.00	\$900.00	\$22,500.00	\$640.00	\$16,000.00	\$1,000.00	\$25,000.00
38	DEWATERING 54" ILP LINE	1	LS	\$25,000.00	\$25,000.00	\$10,000.00	\$10,000.00	\$70,000.00	\$70,000.00	\$39,000.00	\$39,000.00	\$55,000.00	\$55,000.00
39	HYDROSTATIC TESTING AND FLUSHING	1	LS	\$50,000.00	\$50,000.00	\$40,000.00	\$40,000.00	\$83,000.00	\$83,000.00	\$38,000.00	\$38,000.00	\$55,000.00	\$55,000.00
40	REMOVE AND REPLACE V-DITCH DRAIN PER OCPWD STD PLAN 1321	118	LF	\$200.00	\$23,600.00	\$1,200.00	\$141,600.00	\$175.00	\$20,650.00	\$150.00	\$17,700.00	\$100.00	\$11,800.00
41	REMOVE AND REPLACE SITE ACCESS GATE IN KIND	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$21,500.00	\$21,500.00	\$7,500.00	\$7,500.00	\$5,000.00	\$5,000.00
42	PROCURE AND CONFORM TO NPDES PERMIT	1	LS	\$10,000.00	\$10,000.00	\$2,000.00	\$2,000.00	\$18,000.00	\$18,000.00	\$10,077.00	\$10,077.00	\$20,000.00	\$20,000.00
43	PREPARE RECORD DRAWINGS	1	LS	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
44	OPERATIONS AND MAINTENANCE MANUALS	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
SUBTOTAL, Base Bid Items					\$9,206,720.50		\$9,585,246.60		\$9,947,000.00		\$9,591,465.00		\$13,540,562.00
Adjustment (+ or -)					\$0.00		-\$40,000.00		\$0.00		-\$456,763.00		\$0.00
TOTAL AMOUNT OF BID					\$9,206,720.50		\$9,545,246.60		\$9,947,000.00		\$10,048,228.00		\$13,540,562.00

Irvine Ranch Water District Bid Summary For
 Offsite Pipelines for the ILP North Conversion Project
 Project No. 05823

				5		6		7		8		
		Engineer's Estimate		Mladen Buntich Construction Co. Inc. Upland, CA		Sully-Miller Contracting Company Brea, CA		Paulus Engineering, Inc. Anaheim, CA		Steve P. Rados, Inc. Santa Ana, CA		
Item No	Description	Qty	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
FOOTNOTES:												
1	CCL Contracting, Incorporated's Bid Total Submitted was \$8,337,190.00 - modified Bid Total due to mathematical error on Bid Item No. 32.											
2	Mladen Buntich Construction Company Incorporated's Bid Total Submitted was \$9,593,246.60 - modified Bid Total due to mathematical error on Bid Item No. 22.											
			Items		Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:	
			CML&C Steel Pipe		Ameron		West Coast Pipe		West Coast Pipe		Ameron	
			Butterfly Valves		Mueller/Pratt		Mueller/Pratt		Mueller/Pratt		Cospin	
			PVC Pipe		North American Pipe Corporation		Vinyltech		Diamond Plastics Co		North American Pipe Corporation	
					Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:	
					Paving: RJ Noble Company		Striping: Superior Pavement Markings		Paving: All American Asphalt		Welding: Dean's Welding	
					Striping: PCI Striping		Electrical: Sturgeon Electric		Striping: Superior Pavement Markings		Paving: RJ Noble Company	
					Electrical: LA Signal Incorporated		Fence: FenceCorp, Inc.		Electrical: Sturgeon Electric		Striping: PCI Striping	
							V-Ditch, Southwest V Ditch, Inc.				Electrical: Sturgeon Electric	

August 14, 2017
Prepared by: D. Cotton
Submitted by: T. Mossbarger / C. Clary
Approved by: Paul A. Cook 

ACTION CALENDAR

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

SUMMARY:

Revisions to the customer bill template began in April 2016 with feedback solicited from customers through focus group sessions. The recommended revisions to the bill were reviewed by the Water Resources Policy and Communications Committee in October 2016. The bill redesign project provided an opportunity for staff to evaluate the District's current processes for printing, mailing, and presentment of the revised electronic bill to customers.

Staff issued a Request for Proposal (RFP) for utility bill printing, mailing, and electronic bill presentment (eBill) services to six firms, and received responses from five. Based on a thorough evaluation of the proposals, staff recommends that the Board authorize the General Manager to execute a three-year contract for the services with InfoSend, Inc. effective August 15, 2017 for approximately \$159,000 per year for approximately \$477,000 (based on the number of bills, correspondence printed and mailed).

BACKGROUND:

Revisions to the customer bill began in April 2016 with feedback solicited from customers through focus group sessions. The revisions to the customer bill were reviewed with the Water Resources Policy and Communications Committee in October 2016.

Bill Printing, Mailing, and eBill Services Evaluation:

As a result of revisions to the customer bill, staff evaluated the current processes used to print and mail bills, correspondence, and notifications as well as eBills. The current in-house process uses the following resources:

- 0.75 full time employee (FTE) to process customer bills, letters, and notices;
- High speed laser printers;
- Mail inserting equipment and postage meter;
- Postal processing software;
- Bill formatting software;
- Bill image archiving software;
- Pre-printed bill forms;
- Pre-printed mailing and return envelopes;
- Pre-printed newsletters; and
- Technology support resources for bill formatting, postal, and archiving software.

Current costs to print and mail bills, correspondence, and notifications are approximately \$207,000 annually.

Staff contacted other water utilities to understand alternative processes used for these services, and found that the majority have a service provider under contract to provide bill printing, mailing, and eBill services. After a thorough evaluation of current processes for bill printing, mailing, and eBill services, staff determined that IRWD will receive the following benefits from using a service provider:

- Provide customer with PDF image of bill instead of rendered image;
- Ability to send customer a secure link to display the bill from the e-mail message versus the customer currently having to log into web portal;
- Flexibility to print selective messaging on bill, envelope, and in newsletter;
- Flexibility and reduced cost when making future changes to bill formats;
- Reduced lead time and ability to make changes to the newsletter content mid-month;
- Cost savings from redeployment of 0.75 FTE;
- Cost savings from termination of equipment leases and maintenance;
- Cost savings by printing customer bills on standard paper (no pre-printed forms);
- Cost savings by using standard window envelopes;
- Cost savings by printing newsletter in-line with the customer bill on standard paper; and
- Cost savings by utilizing the National Change of Address (NCOA) for returned mail.

Selection Process:

Staff issued an RFP for utility bill printing, mailing, and eBill Services. Proposals were received from five firms: Alexander Enterprises Inc., Fiserv, InfoSend Inc., Pinnacle Data Systems, and Utilitec. Based on the initial responses, staff selected InfoSend, Inc., Pinnacle Data Systems, and Utilitec as the finalists and conducted in-house interviews. Through a rigorous evaluation process, staff determined that InfoSend, Inc. to be the most qualified proposer. The complete evaluation matrix is provided as "Exhibit A". The key strengths exhibited by InfoSend are listed below:

- Experienced bill printing and mailing service provider since 1997;
- Core competency in information technology, data processing, document formatting, and document production and delivery;
- No cost for customer bill revisions during initial implementation;
- Improved returned mail processing with NCOA;
- Ability to integrate with IRWD customer web portal and Fiserv;
- Ability to accept IRWD customer billing system information;
- Capability to host eBill presentment and customer payments portal;
- Local presence with production facility in Anaheim;

- Backup facilities with same equipment and processing capabilities located in Carrollton, Texas and Downers Grove, Illinois; and
- Provides web-based technology that allows staff transparent access to bill printing and distribution tracking information.

Staff recommends awarding a three-year contract to InfoSend, Inc. as the most qualified to perform Utility Bill Printing, Mailing, and Electronic Bill Presentment Services. The annual amount is approximately \$128,000 plus newsletter printing of \$31,000 for a total of \$159,000. The total amount for the three-year contract is approximately \$477,000.

FISCAL IMPACTS:

Funds for utility bill printing, mailing, and electronic bill presentment services for FY 2017-18 are included in the approved FY 2017-18 Operating Budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on August 1, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A THREE-YEAR CONTRACT FOR UTILITY BILL PRINTING, MAILING, AND ELECTRONIC BILL PRESENTMENT SERVICES WITH INFOSEND, INC. EFFECTIVE AUGUST 15, 2017 TOTALING APPROXIMATELY \$477,000.

LIST OF EXHIBITS:

Exhibit "A" – Proposal Evaluation Matrix

EXHIBIT "A"

PROPOSAL EVALUATION MATRIX

Bill Printing, Mailing, and Electronic Bill Presentment Services							
Item	Description		InfoSend	Utilitec	Alexander Enterprises	Fiserv	Pinnacle Data Systems
A	<u>TECHNICAL APPROACH</u>	40%					
1	Overall Project Understanding / Approach	40%	1.0	1.5	3.5	3.0	2.0
2	Scope of Proposal	60%	1.5	2.0	3.5	3.0	2.5
	Weighted Score (Technical Approach)		1.3	1.8	3.5	3.0	2.3
B	<u>QUALIFICATION AND EXPERIENCE</u>	60%					
1	Qualifications	30%	1.0	1.5	3.5	2.8	2.0
3	Electronic Record Exchange	30%	1.0	1.0	3.0	2.5	2.0
4	Experience	40%	1.0	1.0	4.0	2.0	2.0
	Weighted Score (Experience)		1.0	1.2	3.6	2.4	2.0
	<u>COMBINED WEIGHTED SCORE</u>		1.1	1.4	3.5	2.6	2.1
	Ranking of Vendors		1	2	5	4	3
C	<u>SCOPE OF WORK</u>						
TASK			FEE	FEE	FEE	FEE	FEE
1	Printing		\$94,556	\$105,216	\$124,800	\$131,060	\$30,720
2	Mailing		\$18,432	\$7,880	(In Task 1)	\$67,700	\$30,720
3	eBill		\$15,180	\$51,840	\$92,100	\$74,320	\$12,000
	Additional Annual Expenses		\$0	\$34,900	N/A	N/A	N/A
	Implementation Costs		\$0	\$7,500	N/A	N/A	N/A
	TOTAL ANNUAL FEE (Year one)		\$128,168	\$207,136	\$216,900	\$273,080	\$ 73,440
	TOTAL THREE YEAR FEE		\$384,504	\$551,096	\$650,700	\$819,240	\$220,320
D	<u>OTHER</u>						
	Joint Venture		None	None	None	None	None
	Sub Consultants						
	Exceptions taken to IRWD Std. Contract		None	None	None	None	None
	Insurance (Professional & General Liability)		Yes	Yes	Yes	Yes	Yes
	<u>RANKINGS:</u>						
	1 - Best						
	2 - 2nd Best						
	3 - 3rd Best						
	4 - 4th Best						