

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

December 16, 2013

PLEDGE OF ALLEGIANCE

CALL TO ORDER

5:00 P.M., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL

Directors Matheis, LaMar, Swan, Withers and President Reinhart

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 five 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: Mrs. Joan Irvine Smith relative to the Dyer Road Wellfield.

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

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

PRESENTATION

Resolution No. 2013-55

3. **RESOLUTION OF COMMENDATION FOR GREGORY HEIERTZ**

Recommendation: That the Board adopt a Resolution commending Greg Heiertz for his dedicated service to the District.

Reso No. 2013-

CONSENT CALENDAR

Items 4-18

4. **MINUTES OF REGULAR BOARD MEETING**

Recommendation: That the minutes of the November 25, 2013 Regular Board meeting be approved as presented.

CONSENT CALENDAR - Continued Resolution No. 2013-55 Items 4-18

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

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

6. ANNUAL BOARD OF DIRECTORS' FEES

Recommendation: That the Committee recommend the Board decline the five (5%) percent scheduled compensation increase for calendar year 2014.

7. NOVEMBER 2013 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for November 2013, and Disclosure Report of reimbursements to board members and staff; approve the November 2013 summary of payroll ACH payments in the total amount of \$2,321,805 and approve the November 2013 accounts payable disbursement summary of warrants 343731 through 344413, workers' compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$11,111,974.

8. PROPOSED 2014 INVESTMENT POLICY

Recommendation: That the Board approve of the proposed 2014 Investment Policy and adopt the a Resolution approving investment policy and authorizing the Treasurer and Assistant Treasurers to invest and reinvest funds of the District and of each of its Improvement Districts and to sell and exchange securities.

9. PROPOSED WATER, SEWER AND RECYCLED WATER REGIONAL CAPITAL COST ALLOCATIONS

Recommendation: That the Board approve of the updated regional capital cost allocation tables.

10. SOUTH ORANGE COUNTY AGENCIES' METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA REPRESENTATIVE SELECTION PROCESS

Recommendation: That the Board approve and agree to the Metropolitan Water District of Southern California Representative Selection Process for South County Agencies.

CONSENT CALENDAR - Continued Resolution No. 2013-55 Items 4-18

11. PORTOLA HILLS SEWER LIFT STATION ABANDONMENT AND GRAVITY SEWER FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Portola Hills Sewer Lift Station Abandonment and Gravity Sewer, project 20224 (1600); 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.

12. SAND CANYON AVENUE GRADE SEPARATION VARIANCE

Recommendation: That the Board authorize the General Manager to execute Variance no. 4 in the amount of \$60,000 with Tetra Tech, Inc. for additional construction management and support services for the IRWD Utility Relocations project for the sand canyon grade separation, projects 11455 (1459) and 21455 (1152).

13. APPROVAL OF IRWD'S SHARE OF SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S (SOCWA) FISCAL YEAR 2013-14 OPERATING BUDGET

Recommendation: That the Board recommend approval of IRWD's share of SOCWA's Operations and Maintenance Fiscal Year 2013-14 Budget in the amount of \$263,414.

14. AGREEMENT FOR BIOSOLIDS MANAGEMENT SERVICES WITH THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY, SOCWA ENTITIES, AND NURSERY PRODUCTS, INC.

Recommendation: That the Board authorize the General Manager to execute an agreement with Nursery Products Incorporated for biosolids management services.

15. FISCAL YEAR 2012-13 COMPREHENSIVE ANNUAL FINANCIAL REPORT

Recommendation: That the Board receive and file the Fiscal Year 2012-13 Comprehensive Annual Financial Report.

16. LONG-TERM DISABILITY COVERAGE FOR CALENDAR YEAR 2014

Recommendation: That the Board authorize the General Manager to continue to contract for LTD coverage, including the enhanced Employee Assistant Program, for the calendar year 2014 with Principal Financial.

CONSENT CALENDAR - Continued Resolution No. 2013-55 Items 4-18

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| <p>17. <u>VISION INSURANCE COVERAGE FOR CALENDAR YEAR 2014</u></p> <p>Recommendation: That the Board authorize the General Manager to extend IRWD's current contract with Eye Med Vision Care for the 2014.</p> | |
| <p>18. <u>CALLING FOR SPECIAL ELECTIONS AND REQUEST REGISTRAR OF VOTERS TO HOLD SPECIAL BOND ELECTIONS IN IMPROVEMENT DISTRICTS NOS. 185/285</u></p> <p>Recommendation: That the Board adopt the following three resolutions: 1) Calling a Special Election in Improvement District No. 185 for the purpose of submitting to the voters of the improvement district a proposition to issue general obligation bonds in the amount of \$13,500,000.00; 2) Calling a Special Election in Improvement District No. 285 for the purpose of submitting to the voters of the Improvement District a proposition to issue general obligation bonds in the amount of \$21,300,000.00; and 3) Requesting the Board of Supervisors to authorize the Registrar of Voters to render services to the District relating to the conduct of Special Bond Elections for Improvement District Nos. 185 and 285 to be held on March 4, 2014.</p> | <p>Reso No. 2013-</p> <p>Reso No. 2013-</p> <p>Reso No. 2013-</p> |

ACTION CALENDAR

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| <p>19. <u>2014 LEGISLATIVE PLANNING – POTENTIAL LEGISLATIVE ISSUES AND IRWD LEGISLATIVE PRIORITIES</u></p> <p>Recommendation: That the Board provide input on the 2014 state legislative priorities and possible concepts for sponsored legislation.</p> | |
| <p>20. <u>ORANGE PARK ACRES WELL NO. 1 WELLHEAD FACILITIES CONSTRUCTION AWARD AND CONSULTANT SELECTION</u></p> <p>Recommendation: That the Board authorize a budget increase in the amount of \$1,738,900, from \$7,407,800 to \$9,146,700, for project 11405 (1250); approve an Expenditure Authorization in the amount of \$6,031,900 for project 11405 (1250); authorize the General Manager to execute a construction contract with Pacific Hydrotech in the amount of \$5,341,200 for project 11405 (1250); and authorize the General Manager to execute a Professional Services Agreement with URS Corporation in the amount of \$156,490 for construction phase services for the Orange Park Acres Well No. 1 Wellhead facilities, project 11405 (1250).</p> | |

ACTION CALENDAR - Continued

21. ESTABLISHING/SETTING CONNECTION FEES FOR FISCAL YEAR 2013-14

Recommendation: That the Board approve the proposed changes to the rates and charges for connection fees and adopt a Resolution 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.

22. VERIFICATION OF SUFFICIENT WATER SUPPLIES FOR CITY OF IRVINE PLANNING AREA 6 (TENTATIVE TRACT MAP 17607)

Recommendation: That the Board approve the Addendum to Assessment of Water Supply for Northern Sphere Area and Verification of Sufficient Water Supplies for Planning Area 6 (Tentative Tract Map 17607).

23. BAKER WATER TREATMENT PLANT AND RAW WATER CONVEYANCE FACILITIES CONSTRUCTION AWARD AND CONSTRUCTION PHASE AUTHORIZATIONS

Recommendation: That the Board waive bid irregularities and authorize the General Manager to execute a construction contract with PCL Construction Incorporated in the amount of \$77,520,613 to construct the Baker Water Treatment Plant; waive bid irregularities and authorize the General Manager to execute a construction contract with Pacific Hydrotech Corporation in the amount of \$4,995,744 to construct the Baker Raw Water Conveyance Facilities; approve the amended and restated agreement for construction, operation, and maintenance of the Baker Water Treatment Plant; approve the agreement relating to Baker pipeline capacity transfers among Baker Water Treatment Plant participants; approve the agreement between El Toro Water District and IRWD providing for domestic water interconnection; authorize the General Manager to execute a Professional Services Agreement with Carollo Engineers in the amount of \$3,418,900 for engineering services during construction; authorize the General Manager to execute a Professional Services Agreement with Jacobs Engineering in the amount of \$810,600 for construction management services; authorize the General Manager to execute a Professional Services Agreement with HDR Engineering in the amount of \$1,253,936 for construction management services; authorize the General Manager to execute a Professional Services Agreement with Arcadis-US in the amount of \$145,662 for construction support services; authorize the General Manager to execute a Professional Services Agreement with Ninyo & Moore in the amount of \$363,860 for construction phase geotechnical and concrete testing services; authorize the General Manager to execute a Professional Services Agreement with CNC Engineering in the amount of \$139,875 for construction phase surveying services; authorize the General Manager to execute a Professional Services Agreement with VCS Environmental in

ACTION CALENDAR - Continued

the amount of \$33,541 for construction phase biological and cultural monitoring services; authorize a budget decrease in the FY 2013-14 Capital Budget for the Baker Water Treatment Plant project 11218 (1417) for the design and bidding phase in the amount of \$72,901,500, from \$80,010,000 to \$7,108,500; authorize the addition to the FY 2013-14 Capital Budget of the Baker Water Treatment Plant project 11747 (5027) for the construction phase in the amount of \$96,852,000; approve an Expenditure Authorization in the amount of <\$6,751,500> for the Baker Water Treatment Plant, project 11218 (1417); and approve an Expenditure Authorization in the amount of \$96,852,000 for the Baker Water Treatment Plant, project 11747 (5027).

24. ELECTION OF OFFICERS FOR 2014

Recommendation: That an election be conducted of the President and Vice President of the Board of Directors of the Irvine Ranch Water District.

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.

25. A. General Manager's Report

B. Directors' Comments

C. CLOSED SESSION:

- 1) Conference with Labor Negotiators – Government Code Section 54957.6
Agency Designated Representatives: Paul Cook and Jenny Roney
Employee Organization: Irvine Ranch Water District Employees Association
- 2) Conference with Legal Counsel relative to anticipated litigation– Government Code Section 54956.9(d)(2) – significant exposure to litigation (one potential case).

OTHER BUSINESS


25. D. Open Session

E. Adjourn.

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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.

December 16, 2013
Prepared and
Submitted by: Various Staff
Approved by: Paul Cook 

PRESENTATION

RESOLUTION COMMENDING GREG HEIERTZ
FOR HIS SERVICE TO THE DISTRICT

SUMMARY:

As Executive Director of Water Resources Heiertz will retire from the District following 34 years of dedicated and outstanding service, staff has prepared a resolution (provided as Exhibit “A”) to honor him at the Board meeting.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2013 –

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT COMMENDING
GREG HEIERTZ FOR HIS DEDICATED AND
OUTSTANDING SERVICE TO THE DISTRICT.

LIST OF EXHIBITS:

Exhibit “A” – Resolution

EXHIBIT "A"

RESOLUTION NO. 2013-55

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT COMMENDING GREG HEIERTZ FOR HIS DEDICATED AND OUTSTANDING SERVICE TO THE DISTRICT

WHEREAS, Greg began his career at the Irvine Ranch Water District on March 19, 1979 as an Assistant Engineer; and

WHEREAS, Greg was promoted to Associate Engineer and Assistant Superintendent in 1981; to Assistant Director of Engineering and Planning in 1989, and to Director of Engineering and Planning in 1994; and Director of Planning and Water Resources in 2009; and

WHEREAS, in 2012, Greg was promoted to serve as the Executive Director of Water Policy, where he and his staff developed and implemented the policies for master planning of water and sewer facilities and business strategies for planning, water conservation, groundwater, recycled water, natural treatment systems, environmental compliance and water banking activities and also managed the water use efficiency program; and

WHEREAS, Greg has been responsible for countless successful projects over the years including the Dyer Road Wellfield, the Irvine Desalter Project, the Deep Aquifer Treatment System, the Michelson Water Recycling Plant Expansion, improvements to the Los Alisos Water Recycling Plant, Natural Treatment System Project, and the Orange County Water District Annexation; and

WHEREAS, Greg leveraged his valuable relationships with the Orange County Sanitation District, the City of Irvine, the City of Tustin, Orange County Water District, Serrano Water District, the Irvine Company, and other entities to assist the District in achieving its goals and objectives; and

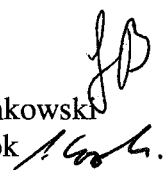
WHEREAS, Greg dedicated himself to negotiating favorable outcomes for the District in agreements with other influential agencies and organizations; and

WHEREAS, Greg was instrumental in the development of the District's potable and non-potable water systems and in ensuring water supply reliability for its customers; and

WHEREAS, Greg's professional affiliations include the American Society of Civil Engineers and the Orange County Water Association with special honors presented in 2011 when he was recognized by the Orange County branch of the American Society of Civil Engineers as Government Engineer of the Year; and

WHEREAS, Greg was responsible for directing the creation, implementation, and expansion of District's Geographic Information System (GIS) and its productive use by all employees; and

WHEREAS, Greg has been a committed mentor to many District employees and student interns over the years, providing guidance and direction, resulting in the development and succession of many careers; and

December 16, 2013
Prepared and
Submitted by: L. Bonkowski
Approved by: P. Cook 

CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the November 25, 2013 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE NOVEMBER 25, 2013 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Minutes

EXHIBIT "A"

MINUTES OF REGULAR MEETING – NOVEMBER 25, 2013

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 November 25, 2013 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance Clary, Executive Director of Water Policy Heiertz, Executive Director of Engineering Burton, Executive Director of Operations Shields, Director of Water Resources Weghorst, Legal Counsel Hoskinson, Secretary Bonkowski, Director of Risk Management and Treasury Jacobson, Director of Public Affairs Beeman, Ms. Christine Compton, Mr. Ian Swift, Mr. Ray Bennett, Mr. Jim Reed, Mr. Bruce Newell and other members of the public and staff.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION

Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road Wellfield. She said it was her understanding that currently wells 1, 5, 6, 7, C-8, C-9, and 17 will operate in accordance with the District's annual pumping plan. Wells 2, 3, 4, 11, 12, 13, 14 and 16 will be off. This was confirmed by Mr. Cook, General Manager of the District.

On October 14, 2013, the IRWD Board adopted the Program/Project Environmental Impact Report OCWD request by the City of Anaheim, IRWD, and Yorba Linda Water District" as a responsible agency under CEQA and directed staff to file a Notice of Determination, and authorized execution of the "Annexation Agreement between OCWD and IRWD regarding annexation to OCWD". This was confirmed by Mr. Cook.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. On October 14 2013, the IRWD Board approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also approved the operating agreement. This was confirmed by Mr. Cook.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - None.

EXHIBIT "A"

PRESENTATION

WATER RESOURCES REFORM AND DEVELOPMENT ACT UPDATE

The District's consultant, Mr. Sean Taylor, provided an update on the Water Resources Reform and Development Act.

CONSENT CALENDAR

On MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 4 THROUGH 10 WERE APPROVED AS FOLLOWS:

4. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the November 11, 2013 Regular Board meeting be approved as presented.

5. OCTOBER 2013 TREASURY REPORTS

Recommendation: That the Board receive and file the treasurer's investment summary report, the monthly interest rate swap summary for October 2013, and disclosure report of reimbursements to Board members and staff; approve the October 2013 summary of payroll ach payments in the total amount of \$1,450,561 and approve the October 2013 accounts payable disbursement summary of warrants 342865 through 343730, workers' compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$25,636,545.

6. QUITCLAIM OF REAL PROPERTY –THE IRVINE COMPANY LLC –
SEWER PIPELINE EASEMENT PER INST. NO. 89-572280, O.R.
IRVINE SPECTRUM

Recommendation: That the Board adopt the following resolution by title approving execution of the quitclaim deed to the Irvine Company LLC.

RESOLUTION NO. 2013 - 53

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM
DEED TO THE IRVINE COMPANY LLC

EXHIBIT "A"

CONSENT CALENDAR (CONTINUED)

7. QUITCLAIM OF REAL PROPERTY – IRVINE COMMUNITY DEVELOPMENT COMPANY LLC – WATER AND SEWER PIPELINE AND ACCESS EASEMENT PER TRACT NO. 17004 LYING WITHIN PROPOSED TRACT NO. 17619 – ORCHARD HILLS

Recommendation: That the Board adopt the following resolution by title approving execution of the quitclaim deed to the Irvine Community Development Company LLC.

RESOLUTION NO. 2013 - 54

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM
DEED TO THE IRVINE COMMUNITY DEVELOPMENT
COMPANY LLC

8. UPCOMING PROJECTS STATUS REPORT

Recommendation: Receive and file.

9. PORTOLA SPRINGS RECYCLED WATER PIPELINE BUDGET ADDITION

Recommendation: That the Board authorize the addition of project 30433 (4951) to the FY 2013-14 Capital Budget in the amount of \$284,500 for the Portola Springs Recycled Water Pipeline, Project 30433 (4951).

10. TUSTIN LEGACY WARNER AVENUE CAPITAL IMPROVEMENTS

Recommendation: That the Board authorize the addition of projects 11716 (4510) and 31716 (4511) for \$196,900 and \$207,900, respectively, to the FY 2013-14 Capital Budget; and approve Expenditure Authorizations for projects 11716 (4510) and 31716 (4511) for \$196,900 and \$207,900, respectively, for the Tustin Legacy Warner Avenue Improvements from Legacy Road to Tustin Ranch Road, Projects 11716 (4510) and 31716 (4511).

ACTION CALENDAR

CONSIDERATION OF ISDOC'S PROPOSED AMENDED BYLAWS

General Manager Cook reported that the Independent Special Districts of Orange County (ISDOC) Executive Committee has submitted a third version of proposed amendments to the ISDOC bylaws for consideration and approval by the organization's membership. Mr. Cook said that member ballots on the amended bylaws are due no later than 5:00 p.m. on Monday, December 9, 2013. Ms. Christine Compton provided an overview of the bylaws review process this year along with the reasoning for the proposed bylaw amendments. Specifically, the updated bylaws will bring ISDOC

EXHIBIT "A"

into compliance with recent changes in state law, advancements in communication technology, and other governance-related matters as well as address recurring questions regarding election and voting procedures. On MOTION by Matheis, seconded and unanimously carried, THE BOARD CAST IRWD'S VOTE IN FAVOR OF APPROVING THE AMENDED ISDOC BYLAWS, AND AUTHORIZED STAFF TO SUBMIT IRWD'S BALLOT BY THE DECEMBER 9, 2013 DEADLINE.

SILVERADO CANYON ROAD DOMESTIC WATER PIPELINE IMPROVEMENTS BUDGET ADDITION, EXPENDITURE AUTHORIZATION AND CONSULTANT SELECTION

The Silverado Canyon Road Domestic Water (DW) Pipeline Improvements Project will construct a new 8,200-foot long 12-inch DW pipeline from the Fleming Booster Pump Station (BPS) into Silverado Canyon to provide required fire flow to the proposed Saint Michael's Abbey and to enhance fire flow to the remainder of Silverado Canyon. Staff issued a Request for Proposal to Arcadis-US, Inc., CivilSource, Inc. (CivilSource), Kleinfelder, and Psomas for the project design and construction phase services. Staff evaluated the proposals and recommends the selection of CivilSource based on their project understanding, team, and budget. On MOTION by Swan, seconded and unanimously carried, THE BOARD AUTHORIZED THE ADDITION OF PROJECT 11743 (4919) TO THE FY 2013-14 CAPITAL BUDGET IN THE AMOUNT OF \$1,057,500; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$149,200; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$105,335 WITH CIVILSOURCE, INC. FOR THE SILVERADO CANYON ROAD DOMESTIC WATER PIPELINE IMPROVEMENTS, PROJECT 11743 (4919).

PETERS CANYON CHANNEL WATER CAPTURE AND REUSE PIPELINE

Using a PowerPoint presentation, Assistant Director of Water Resources Weghorst provided an overview of the Peters Canyon Channel Water Capture and Reuse Pipeline (Peters Canyon Pipeline) project.

Mr. Weghorst said that the City of Irvine, Tustin, OCFCD, County, Caltrans and IRWD are seeking a cost-effective solution to dispose of nuisance surface and perched groundwater flows that contain high selenium and nitrate concentrations in the San Diego Creek/Newport Bay Watershed. Nuisance flows from Irvine, Tustin and OCFCD are currently discharged to the Peters Canyon Channel (a tributary to San Diego Creek), while Caltrans currently discharges its flows to an IRWD sewer under a temporary special discharge permit. The Regional Water Quality Control Board's (RWQCB) Order No. R8-2007-0041 limits discharges of selenium within the San Diego Creek/Newport Bay Watershed.

Mr. Weghorst said that the purpose of the Peters Canyon Pipeline is to divert the nuisance surface and perched groundwater flows with high concentrations of selenium and nitrates from selected tributaries to Peters Canyon Channel and deliver them in a pressure pipeline to OCSD for treatment and then reuse by the Orange County Water District (OCWD).

Mr. Weghorst said that for many years the Project Participants and other members of the Nitrogen and Selenium Management Program (NSMP) have been evaluating alternatives to reduce the amount of selenium and nitrogen that flow into the Upper Newport Bay. Beginning in 2005 with IRWD's

EXHIBIT "A"

Natural Treatment System Master Plan, bench test studies were performed and a subsurface biological rock filter design was recommended for pilot testing. In 2006, a demonstration project was constructed with the City of Irvine at the intersection of Peters Canyon Channel and Barranca Boulevard (near Harvard Avenue). In July, 2009 the Cienega Selenium Treatment Facility was selected to receive American Resource Recovery Act (ARRA) funding from the Bureau of Reclamation (Reclamation) Title XVI program. In 2010 an evaluation of three treatment systems was performed that included the General Electric's ABMet system, the subsurface biological rock filter, and a fixed film fluidized bed reactor. Based on economic and non-economic criteria, the ABMet system was selected to implement a full-scale Selenium and Nitrogen Removal Project. In July, 2010 a preliminary design report for the ABMet treatment system was completed and in November, 2010 IRWD's Board approved final design services for an ABMet treatment system. In January 2011 the RWQCB's legal counsel indicated a regional offset program would not be consistent with current EPA requirements. With no assurance of RWQCB compliance for the stakeholder agencies, the ABMet project was discontinued and the remaining ARRA funds were returned to Reclamation.

Mr. Weghorst said that in late 2012, a meeting between legal counsel from OCFCD, Irvine, the State Water Resources Control Board, and the RWQCB resulted in a new legal interpretation that offsets could be used for a total maximum daily load (TMDL) permit compliance. He said that by December 6, 2013, the RWQCB is expected to approve the use of offset credits generated by the Pipeline Project and to extend the date for regulatory compliance to 2019.

Mr. Weghorst said that staff and IRWD's legal counsel have cooperated with the Funding Parties to develop an agreement confirming the mutual understandings of all Project Participants to design, construct, operate and maintain the Peters Canyon Pipeline. Key features of the agreement are summarized as follows: 1) IRWD will design, construct, own, operate, and maintain the Peters Canyon Pipeline for 20 years; 2) the Project will divert both point source and non-point source discharges of nitrogen and selenium. Only Irvine and Caltrans have point-source diversions to the Pipeline. The non-point source diversions will generate Nitrogen and Selenium Credits to be used by the Project Participants, traded among the Project Participants or collectively traded or sold to a third party; 3) IRWD will receive 31.6% of the Project's Nitrogen and Selenium Credits that are estimated to equal approximately 40 pounds of selenium per year if the project operates 325 days per year. IRWD's allocated credits may be used to offset selenium discharges to the Upper Newport Bay watershed including the San Joaquin Marsh; 4) IRWD will provide an annual contribution for operations and maintenance (O&M) up to \$60,000 per year (in 2013 dollars) for the project. IRWD's annual O&M contribution may change annually based on the local Consumer Price Index; 5) Irvine, Tustin, OCFCD, County and Caltrans are responsible for all capital costs not paid by grants and all O&M costs greater than IRWD's annual O&M contribution. Capital costs include all design, environmental review, and construction costs, including without limitation costs for defense of CEQA/NEPA lawsuits or construction claims, project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering, a reasonable and appropriate share of IRWD staff time, consultant costs, costs of permitting, bonds, rights-of-way acquisition, design, environmental compliance, mitigation and documentation, costs related to hazardous materials, management activities, construction management, startup and testing activities, project management and legal support for design, permitting and construction of the Project; 6) IRWD will be the lead agency for CEQA and be responsible for securing the necessary permits and rights-of-way for the Project; 7) in the event that Caltrans obtains Federal funding, IRWD will be responsible for preparation of a NEPA-compliant environmental document while

EXHIBIT "A"

Caltrans will be the lead NEPA agency and provide oversight and approval for the NEPA compliant document; 8) IRWD will not be responsible for any consequences, including the loss of grant funding, that may occur as a result of delays associated with environmental review, permitting, securing rights-of-way, design, construction, inspection, startup and testing, or failure of the Funding Parties to timely approve change orders; 9) the not-to-exceed project capital budget will include a 20 percent contingency throughout design and construction; 10) IRWD can approve a design change variance without Funding Party approval if it does not increase the cumulative total of the design and environmental contracts by 10 percent or more; or would increase total capital costs for the Funding Parties, combined, by \$60,000 or more; or would cause the total capital costs to exceed the estimated project cost. If a design change variance causes the estimated project cost to be exceeded, IRWD must obtain approval of the Funding Parties; 11) IRWD can approve a construction contract change order if it does not increase the capital costs by 10 percent or more of the contractor's bid amount, or does not cause the total capital costs to exceed the estimated project cost. Upon the issuance of a contract change order in an amount that, together with the amount of previously issued change orders, exceeds 10 percent of the Contractor's bid amount in the aggregate, IRWD must obtain approval by the Funding Parties for each individual contract change order that exceeds \$100,000; 12) all contractor delay and standby charges incurred as a result of a delay in the approval of a construction contract change order or an amendment to the Agreement will be included in Project Capital Costs and will be a responsibility of the Funding Parties.

Mr. Weghorst said that staff requested a proposal from six firms to provide engineering design services for the Peters Canyon Pipeline. He said that following a careful review of the methods, experience and values associated with the proposals, staff recommends awarding the Professional Services Agreement to Tetra Tech contingent upon the approval and execution of the Agreement. Key strengths of its proposal include a clear understanding and detailed scope of work for the project; superior design team; experienced management team; and the costs are consistent with staff expectation and less than other consultants.

Mr. Weghorst said that staff requested proposals from ESA, Dudek and LSA Associates to provide environmental consulting services. Following a careful review of the methods, experience and values associated with the proposals, staff recommends awarding the Professional Services Agreement to ESA contingent upon the approval and execution of the Agreement. Key strengths of its proposal are an excellent understanding and detailed scope of work; outstanding environmental team; experienced management team, and that the costs are consistent with staff expectation and lower than the other consultants.

Director Withers reported that this item was reviewed and approved by the Engineering and Operations Committee on November 19, 2013. Following discussion, on MOTION by Withers, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE THE PETERS CANYON CHANNEL WATER CAPTURE AND REUSE PIPELINE AGREEMENT WITH THE CITIES OF IRVINE AND TUSTIN, THE OCFCD, THE COUNTY AND CALTRANS, SUBJECT TO NON-SUBSTANTIAL CHANGES, THAT PROVIDES FOR THE FUNDING, DESIGN, ENVIRONMENTAL REVIEW, CONSTRUCTION, OPERATION AND MAINTENANCE OF THE PETERS CANYON PIPELINE; AUTHORIZED THE ADDITION OF PROJECT 21163(4985) FOR THE PETERS CANYON PIPELINE TO THE FY 2013-14 CAPITAL BUDGET IN THE AMOUNT OF \$993,500 WHICH WILL BE REIMBURSED TO IRWD BY THE FUNDING PARTIES; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$993,500 FOR THE PETERS CANYON PIPELINE**

EXHIBIT "A"

CONTINGENT UPON THE EXECUTION OF THE AGREEMENT; AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH TETRA TECH IN THE AMOUNT OF \$630,000 TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE PETERS CANYON PIPELINE CONTINGENT UPON THE EXECUTION OF THE AGREEMENT BY ALL PROJECT PARTICIPANTS; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH ESA IN THE AMOUNT OF \$143,200 TO PREPARE A CEQA AND NEPA DOCUMENT FOR THE PETERS CANYON PIPELINE CONTINGENT UPON THE EXECUTION OF THE AGREEMENT BY ALL PROJECT PARTICIPANTS.

OTHER BUSINESS

GENERAL MANAGER'S REPORT

General Manager Cook reported that staff sent an invitation for Governor Brown to visit the District, and that Ms. Debby Davis of the Governor's office of Planning and Research has accepted the invitation along with others.

DIRECTORS' COMMENTS

Director Matheis reported on her attendance at an ACC-OC Legislative session and the annual NWRI Clarke Prize awards ceremony and conference. In response to Director Matheis' inquiry if the allocation of water from the State Water project would affect Kern County, Director Weghorst said that water would be diverted from the Dudley Ridge area and it will impact our project partners in that area.

Director Withers reported on the appointment of Mr. Ira Glasky to the Irvine Unified School District's Board of Directors. He said that last week he and General Manager Cook met with the City of Santa Ana representatives relative to its water billing issues at Heritage Museum, a meeting with the City of Dana Point's council member Bill Brough last week, the City of Irvine's Exchange Club's Thanksgiving breakfast, and that this Wednesday he will be representing IRWD at the Irvine Rotary Club. He further updated the Board relative to the settlement of a dispute with SAWPA and the OCSD and the Regional Board.

Director Swan reported on his attendance at the Newport Beach Watershed Executive Committee meeting where they had a discussion on vector control issues with Big Canyon as well as the UCI marsh, the Clarke Prize Awards ceremony, a meeting where he addressed the Society of Marketing Professionals representing IRWD, and an ACWA Board meeting in Sacramento. He further said that he attended a meeting where SAWPA discussed OCSD becoming a SAWPA Board member as OCSD is a major player in the disposal of brine for SAWPA.

Director LaMar reported on his attendance at an ACC-OC Legislative session, and the NWRI Clarke Prize awards ceremony. He said that Mr. Ian Swift attended a day-long panel with NROC discussing how to adjust strategic planning among other issues.

Director Reinhart reported on his attendance at a MWDOC Board meeting where the Board approved the Baker treatment plant item, and a South County agency meeting with Director LaMar.

EXHIBIT "A"

CLOSED SESSION

President Reinhart said that the following Closed Session will be held:

- 1) CLOSED SESSION RELATIVE TO CONFERENCE WITH LABOR NEGOTIATORS – Government Code Section 54957.6: Agency Designated Representatives: Paul Cook and Jenny Roney; Employee Organization: Irvine Ranch Water District Employees Association
- 2) CLOSED SESSION WITH LEGAL COUNSEL RELATIVE TO: Existing litigation - Government Code Section 54956.9(a) - Travelers Insurance vs. IRWD, Patrick Madden Morgan, and The Paper Company.

OPEN SESSION

The meeting was adjourned with all Directors present. President Reinhart said that there was no action to report from the Closed Session items.

ADJOURNMENT

President Reinhart adjourned the meeting at 7:30 p.m.

APPROVED and SIGNED this 16th day of December, 2013.

President, IRVINE RANCH WATER DISTRICT

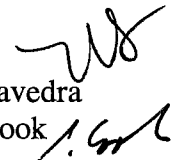
Secretary IRVINE RANCH WATER DISTRICT

EXHIBIT "A"

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone

December 16, 2013
Prepared and
Submitted by: N. Savedra
Approved by: P. 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

11/20/13 Nature Reserve of Orange County Executive Committee Meeting
11/25/13 Meeting with Government Affairs Advisor Sean Taylor of the Furman Group
12/3-5/13 ACWA Fall Conference, Los Angeles, CA
12/10-12/13 CRWUA Annual Conference

Mary Aileen Matheis

11/19/13 Urban Water Institute Planning Session
11/21/13 The Exchange Club of Irvine Annual Thanksgiving Event
12/2-6/13 ACWA Fall Conference, Los Angeles, CA
12/11-13/13 CRWUA Annual Conference

Douglas Reinhart

11/14/13 EOCWD/IRWD Meeting regarding coordination issues
12/3-5/13 ACWA Fall Conference, Los Angeles, CA
12/11-13/13 CRWUA Annual Conference

Peer Swan

11/20/13 Newport Bay Watershed Meeting
11/21-22/13 ACWA Board of Directors Meeting, Sacramento, CA
12/2-6/13 ACWA Fall Conference, Los Angeles, CA

John Withers

11/13/13 Meeting w/City of Santa Ana Mayor Pulido re: Heritage Museum water issues
11/21/13 Irvine Exchange Club Breakfast Meeting
12/4-5/13 ACWA Fall Conference, Los Angeles, CA

RECOMMENDATION:

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

LIST OF EXHIBITS:

None

December 16, 2013

Prepared and

Submitted by: N. Savedra

Approved by: Paul Cook  

CONSENT CALENDAR

ANNUAL BOARD OF DIRECTORS' FEES

SUMMARY:

The Finance and Personnel Committee annual reviews the Board of Directors' compensation and recommends to the Board to either accept or deny a fee increase for the new calendar year. Pursuant to the District's Ordinance No. 1989-1 and enacted under Section 20202 et seq. of the California Water Code, the Board's meeting compensation increases on January 1 of each year, however, said increase may not exceed an amount equal to five (5%) percent, and no compensation for more than a total of ten (10) days in any calendar month.

BACKGROUND:

The current compensation for the Board of Directors is \$237 per meeting, not to exceed ten (10) meetings per month. In accordance with Section 20202 et seq. of the California Water Code, the Board's meeting compensation increases on January 1 of each year by five (5%) percent. The last Board of Directors' compensation increase was effective in January 2009.

Provided as Exhibit "A" is a survey of the Director Fees for other local water districts.

FISCAL IMPACTS:

A 5% increase has a nominal impact on the operating budget if accepted by the Board.

ENVIRONMENTAL COMPLIANCE:

Not applicable

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee meeting on December 9, 2013.

RECOMMENDATION:

That the Committee recommend the Board decline the five (5%) percent scheduled compensation increase for calendar year 2014.

LIST OF EXHIBITS:

Exhibit "A" – Survey of Director Fees

EXHIBIT "A"**BOARD OF DIRECTORS PER DIEM SURVEY
(as of October 10, 2013)**

AGENCY	PER DIEM MEETING	EFFECTIVE DATE	MAXIMUM MEETINGS PER MONTH
El Toro Water District	\$198.00	December 2007	10
Irvine Ranch Water District	\$237.00	January 2009	10
Municipal Water of Orange County	\$232.70	January 2013	10
Orange County Water District	\$221.12	January 2008	10
Santa Margarita Water District	\$210.00	February 2009	10
South Coast Water District	\$190.00	January 2006	10
Moulton Niguel Water District	\$199.50	October 2007	10
Mesa Water District	\$207.00	February 2013	10
Yorba Linda Water District	\$150.00	January 2003	10

December 16, 2013

Prepared by: T. Fournier/J. Davis

Submitted by: R. Jacobson/Cheryl Clary

Approved by: Paul Cook

CONSENT CALENDAR

NOVEMBER 2013 TREASURY REPORTS

SUMMARY:

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

- A. The Investment Summary Report for November 2013. This Investment Summary Report is in conformity with the 2013 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of November 30, 2013, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$2,321,805, as outlined in Exhibit "C".
- D. The November 30, 2013 Disbursement Summary of warrants 343731 through 344413, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$11,111,974, as outlined in Exhibit "D".
- E. The Disclosure Report of Reimbursements to Board Members and Staff for November 2013, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "E".

FISCAL IMPACTS:

As of November 30, 2013, the book value of the investment portfolio was \$304,078,397, with a 0.37% rate of return and a market value of \$304,152,248. Based on the District's September 30, 2013 quarterly real estate investment rate of return of 9.95%, the District's weighted average return for the fixed income and real estate investments was 2.20%.

As of November 30, 2013, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in November from all swaps was negative \$583,785.

Payroll ACH payments totaled \$2,321,805 and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for November totaled \$11,111,974.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

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

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR NOVEMBER 2013, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE NOVEMBER 2013 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,321,805 AND APPROVE THE NOVEMBER 2013 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 343731 THROUGH 344413, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$11,111,974.

LIST OF EXHIBITS:

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

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

11/30/13

DATE	TOTAL	%	LAIF	AGENCIES	COLLATERAL DEPOSIT	CAL REV NOTES
11/13	\$134,055,075	44.09%	\$125,102,870		\$8,952,205	
12/13	\$15,000,000	4.93%		15,000,000		
1/14						
2/14	\$5,000,000	1.64%		5,000,000		
3/14						
4/14						
5/14	\$10,000,000	3.29%		10,000,000		
6/14						
07/14						
08/14						
09/14						
10/14						
SUB-TOTAL	\$164,055,075	53.96%	\$125,102,870	\$30,000,000	\$8,952,205	
13 Months - 3 YEARS						
11/1/2014 - 12/31/2014	-					
1/1/2015 - 3/31/2015	15,000,000	4.93%		15,000,000		
4/1/2015 - 6/30/2015	25,000,000	8.22%		25,000,000		
07/1/2015 - 9/30/2015	25,000,000	8.22%		25,000,000		
10/1/2015 - 12/30/15	\$20,000,000	6.58%		20,000,000		
01/01/16 - 03/31/2016	\$25,000,000	8.22%		25,000,000		
04/01/16 - 06/30/2016	\$24,975,000	8.21%		24,975,000		
07/01/16 - 9/30/2016	\$5,000,000	1.64%		5,000,000		
TOTALS	\$304,030,075	100.00%	\$125,102,870	\$169,975,000	\$8,952,205	

% OF PORTFOLIO

A-2

41.15%

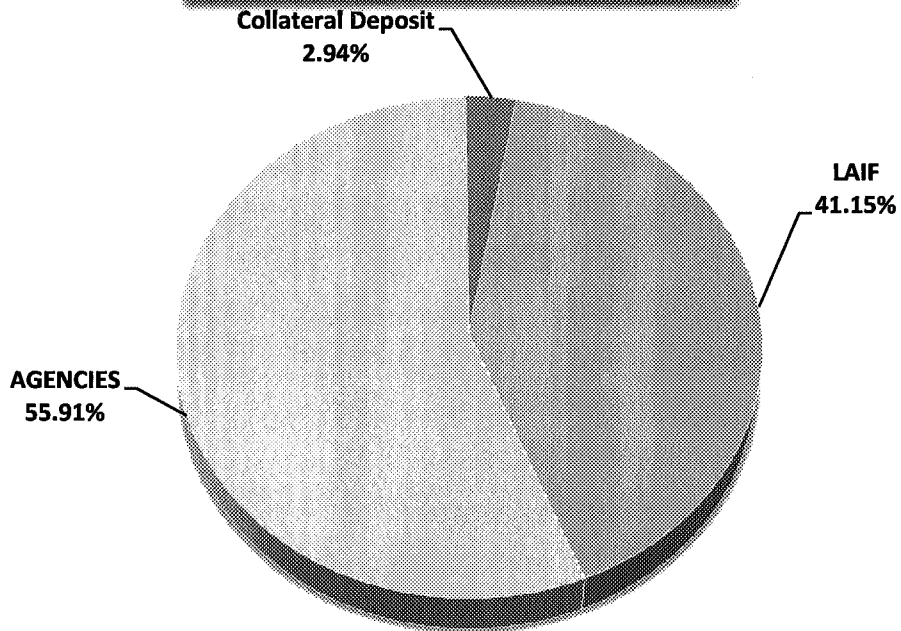
55.91%

2.94%

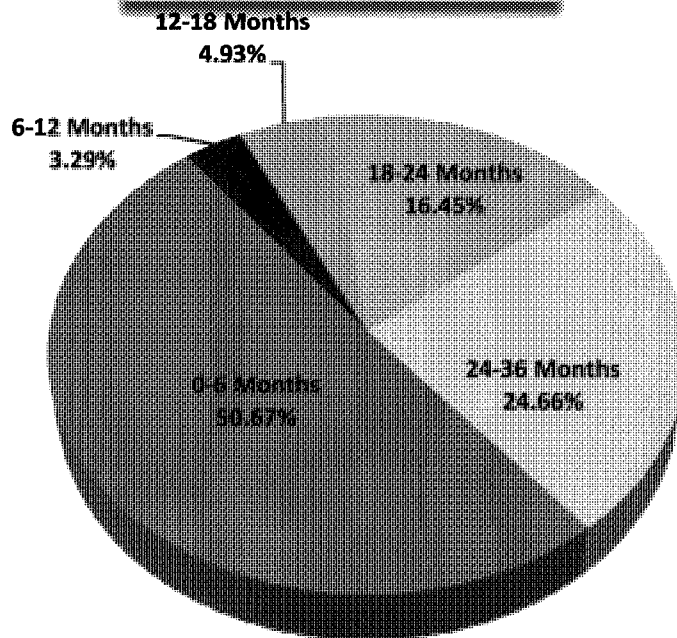
November 2013 INVESTMENT PORTFOLIO

November 30, 2013

Portfolio by Investment Type



Portfolio by Maturities



Irvine Ranch Water District
 Summary of Real Estate
 9/30/2013

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>RATE OF RETURN QUARTER ENDED Sep-13</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	12.24%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	8.56%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	7.31%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	4.75%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	6.36%
				<u>\$ 72,569,826</u>	<u>9.95%</u>

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

Joint Powers Agency - Investment Contracts

11/30/2013

Settlement Date	JPA Issue	Investment Contract	Original Cost	Current Par	Market Value 09/30/13
10/25/1994	JPA - Issue #1	AIG Matched Funding Corp. 7.705% Due 2-15-14	\$ 407,878,616	\$ 238,500,000	\$ 238,500,000
10/25/1994	JPA - Issue #2	Federal National Mortgage Assoc. 8.18% Due 2-15-14	\$ 518,644,189	\$ 349,472,521	\$ 359,477,919
			<u>\$ 926,522,805</u>	<u>\$ 587,972,521</u>	<u>\$ 597,977,919</u>

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
 November

MATURITIES/SALES/CALLS

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
11/14/2013	FFCB	\$5,000,000	0.48%					
11/26/2013	FFCB	\$10,000,000	0.48%					
11/29/2013	FNMA	\$5,000,000	0.26%					

**IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
November 30, 2013**

LIBOR Avg	Prior Mo	Current Mo	12-Mo Avg
	0.17%	0.17%	0.19%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Fixed Payer Swaps - By Effective Date													
6/4/2006	6/4/2019	5.5	ML	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (103,740)	\$ (93,725)	\$ (504,511)	\$ (6,740,529)	\$ 15,066,330	\$ (4,933,670)
6/4/2006	6/4/2019	5.5	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (103,740)	\$ (93,725)	(504,511)	(6,740,529)	15,059,413	(4,940,587)
6/17/2006	6/17/2019	5.5	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (154,041)	\$ (139,135)	(749,206)	(9,988,414)	22,663,023	(7,336,977)
3/10/2007	3/10/2029	15.3	ML	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (142,360)	\$ (128,600)	(692,250)	(8,881,953)	20,983,341	(9,016,659)
3/10/2007	3/10/2029	15.3	CG	\$ 30,000,000	FXP	LIBOR	5.687%	(142,360)	(128,600)	(692,250)	(8,881,953)	20,994,379	(9,005,621)
Totals/Weighted Avgs				10.0	\$ 130,000,000	5.949%	\$ (646,241)	\$ (583,785)	\$ (3,142,728)	\$ (41,233,379)	\$ 94,766,486	\$ (35,233,514)	
Total Current Year Active Swaps				\$ 130,000,000	\$ (646,241)	\$ (583,785)	\$ (3,142,728)	\$ (41,233,379)	\$ 94,766,486	\$ (35,233,514)			

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

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference								
\$ (646,241)	\$ (583,785)	\$ (3,142,728)	\$ (41,233,379)	\$ 94,766,486	\$ (35,233,514)								

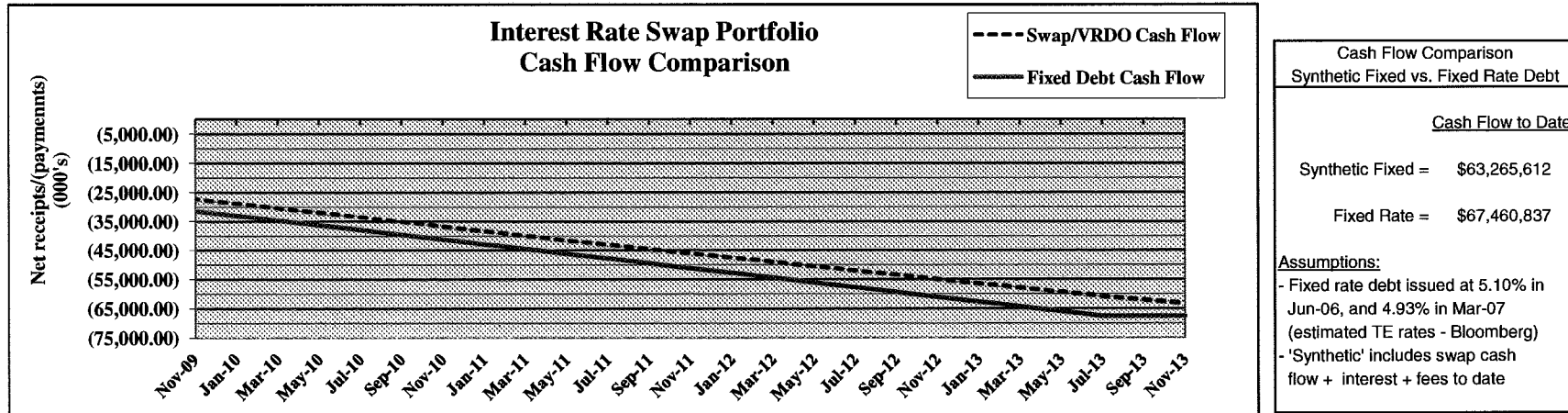


Exhibit "C"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

November
2013

DATE	AMOUNT	VENDOR	PURPOSE
11/1/2013	747,505.01	BANK OF AMERICA	ACH Payments for Payroll
11/15/2013	852,507.84	BANK OF AMERICA	ACH Payments for Payroll
11/29/2013	721,792.58	BANK OF AMERICA	ACH Payments for Payroll
	<u>\$2,321,805.43</u>		

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343731		01-NOV-13	JCI JONES	CINCINNATI	2,752.75	08-NOV-13	2,752.75	Reconciled
343732		01-NOV-13	CHEMICALS INC					
343733		01-NOV-13	GEICO	SANTA ANA	3,444.81			Negotiable
343734		01-NOV-13	WALKER, JOHN	FOOTHILL RANCH	6,500.00	05-NOV-13	6,500.00	Reconciled
343735		01-NOV-13	COUNTY OF ORANGE	IRVINE-OC PARKS	9,855.00	13-NOV-13	9,855.00	Reconciled
343736		01-NOV-13	AFNI	SANTA ANA	1,158.80			Negotiable
343737		04-NOV-13	Jane Larson	HOME	2,056.66	05-NOV-13	2,056.66	Reconciled
343738		04-NOV-13	Matthew Wiese	HOME	461.01	07-NOV-13	461.01	Reconciled
343739		07-NOV-13	ANTHEM BLUE CROSS	LOS ANGELES	562.26	12-NOV-13	562.26	Reconciled
343740		07-NOV-13	Mossbarger, Anthony J (Tony)		9.99	12-NOV-13	9.99	Reconciled
343741		07-NOV-13	Kelly, Cheryl D (Cheryl)		109.95	12-NOV-13	109.95	Reconciled
343742		07-NOV-13	Compton, Christine A		31.02			Negotiable
343743		07-NOV-13	Scarberry, Edward A		209.67	08-NOV-13	209.67	Reconciled
343744		07-NOV-13	Danielson, Gregg B (Gregg)		59.55	12-NOV-13	59.55	Reconciled
343745		07-NOV-13	Moeder, Jacob J (Jacob)		22.00	08-NOV-13	22.00	Reconciled
343746		07-NOV-13	Erwin, Kenneth D (Ken)		1,034.00			Voided
343747		07-NOV-13	Oldewage, Lars D (Lars)		285.45	08-NOV-13	285.45	Reconciled
343748		07-NOV-13	Cortez, Malcolm A (Malcolm)		88.88			Negotiable
343749		07-NOV-13	Sitzler, Roberta K (Roberta)		29.38	18-NOV-13	29.38	Reconciled
343750		07-NOV-13	Nomura, Scott C (Scott)		108.00	08-NOV-13	108.00	Reconciled
343751		07-NOV-13	A&A WIPING CLOTH CO		648.00	12-NOV-13	648.00	Reconciled
343752		07-NOV-13	ADS LLC		1,991.00	12-NOV-13	1,991.00	Reconciled
343753		07-NOV-13	AKM CONSULTING ENGINEERS, INC.		19,410.00	13-NOV-13	19,410.00	Reconciled
343754		07-NOV-13	ALEXANDER CONTRACT SERVICES INC		103,347.48	14-NOV-13	103,347.48	Reconciled
343755		07-NOV-13	ALLIED ELECTRONICS INC		137.96	14-NOV-13	137.96	Reconciled
343755		07-NOV-13	ALPHA TRAFFIC SERVICES, INC.		470.00	12-NOV-13	470.00	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343756		07-NOV-13	AMERICAN MESSAGING SERVICES LLC		292.51	18-NOV-13	292.51	Reconciled
343757		07-NOV-13	APPLIED INDUSTRIAL TECHNOLOGIES - CA LLC		115.40	12-NOV-13	115.40	Reconciled
343758		07-NOV-13	APPLIED TECHNOLOGY GROUP INC		24,500.22	18-NOV-13	24,500.22	Reconciled
343759		07-NOV-13	AQUA-METRIC SALES COMPANY		8,495.02	18-NOV-13	8,495.02	Reconciled
343760		07-NOV-13	ARCADIS U.S., INC.		1,781.00	12-NOV-13	1,781.00	Reconciled
343761		07-NOV-13	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		35,784.36	15-NOV-13	35,784.36	Reconciled
343762		07-NOV-13	AT&T		3,019.01	12-NOV-13	3,019.01	Reconciled
343763		07-NOV-13	BANK OF AMERICA		18,741.97	15-NOV-13	18,741.97	Reconciled
343764		07-NOV-13	BEACON BAY ENTERPRISES INC		25.90	14-NOV-13	25.90	Reconciled
343765		07-NOV-13	BILL'S SWEEPING SERVICE INC		575.00	12-NOV-13	575.00	Reconciled
343766		07-NOV-13	BOTTOM LINE UTILITY SOLUTIONS, INC.		59,243.93	13-NOV-13	59,243.93	Reconciled
343767		07-NOV-13	BRITHINEE ELECTRIC		1,905.31	12-NOV-13	1,905.31	Reconciled
343768		07-NOV-13	BUCCOLA LANDSCAPE SERVICES		38.46	12-NOV-13	38.46	Reconciled
343769		07-NOV-13	C WELLS PIPELINE MATERIALS INC		210.60	14-NOV-13	210.60	Reconciled
343770		07-NOV-13	CALIFORNIA		4,157.56	13-NOV-13	4,157.56	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
343771	07-NOV-13		BARRICADE INC CALIFORNIA SPECIAL DISTRICTS ASSOCIATION		5,294.00	22-NOV-13	5,294.00	Reconciled
343772	07-NOV-13		CANON SOLUTIONS AMERICA, INC.		407.01	12-NOV-13	407.01	Reconciled
343773	07-NOV-13		CAPTIVE AUDIENCE MARKETING INC.		85.32	13-NOV-13	85.32	Reconciled
343774	07-NOV-13		CDW GOVERNMENT LLC		170.92	12-NOV-13	170.92	Reconciled
343775	07-NOV-13		CHARLES P CROWLEY COMPANY INC		7,505.40	14-NOV-13	7,505.40	Reconciled
343776	07-NOV-13		CITY CIRCUIT BREAKERS		1,215.00	08-NOV-13	1,215.00	Reconciled
343777	07-NOV-13		CLA-VAL COMPANY		10,920.30	13-NOV-13	10,920.30	Reconciled
343778	07-NOV-13		COLDWELL BANKER		18.86	12-NOV-13	18.86	Reconciled
343779	07-NOV-13		COMMERCE ENERGY INC		699.82	12-NOV-13	699.82	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 3
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343780	07-NOV-13		COMMERCIAL CLEANING SYSTEMS		11,128.99	14-NOV-13	11,128.99	Reconciled
343781	07-NOV-13		COMPUCOM SYSTEMS, INC.		5,407.72	14-NOV-13	5,407.72	Reconciled
343782	07-NOV-13		ONEYBEARE INC		4,489.14	14-NOV-13	4,489.14	Reconciled
343783	07-NOV-13		CREATIVE ALLIANCE GROUP LLC		1,000.00	13-NOV-13	1,000.00	Reconciled
343784	07-NOV-13		CRESTLINE SPECIALTIES CO INC		1,685.50	12-NOV-13	1,685.50	Reconciled
343785	07-NOV-13		CRUMP & CO, INC.		4,318.72	12-NOV-13	4,318.72	Reconciled
343786	07-NOV-13		CSMFO		70.00	18-NOV-13	70.00	Reconciled
343787	07-NOV-13		DALEY & HEFT LLP		10,114.01	19-NOV-13	10,114.01	Reconciled
343788	07-NOV-13		DATASITE INC		12,735.00	18-NOV-13	12,735.00	Reconciled
343789	07-NOV-13		DE VAUL PAINT COMPANY		357.32	12-NOV-13	357.32	Reconciled
343790	07-NOV-13		EAGLE PRINT DYNAMICS		7,254.43	13-NOV-13	7,254.43	Reconciled
343791	07-NOV-13		EI&C ENGINEERING INC		15,645.00	18-NOV-13	15,645.00	Reconciled
343792	07-NOV-13		ENVIRONMENTAL SCIENCE ASSOCIATES		11,085.73	18-NOV-13	11,085.73	Reconciled
343793	07-NOV-13		EXCHANGE CLUB OF IRVINE		250.00			Negotiable
343794	07-NOV-13		EXPRESSAIR		79.00	25-NOV-13	79.00	Reconciled
343795	07-NOV-13		FARRELL & ASSOCIATES		178.38	18-NOV-13	178.38	Reconciled
343796	07-NOV-13		FERGUSON ENTERPRISES, INC.		10,954.63	14-NOV-13	10,954.63	Reconciled
343797	07-NOV-13		FIDELITY SECURITY LIFE INSURANCE COMPANY		6,220.08	18-NOV-13	6,220.08	Reconciled
343798	07-NOV-13		FIRST CHOICE SERVICES		497.26	13-NOV-13	497.26	Reconciled
343799	07-NOV-13		FISHER SCIENTIFIC COMPANY LLC		800.35	12-NOV-13	800.35	Reconciled
343800	07-NOV-13		FLO SYSTEMS INC		2,970.00	13-NOV-13	2,970.00	Reconciled
343801	07-NOV-13		GRAINGER		5,548.09	15-NOV-13	5,548.09	Reconciled
343802	07-NOV-13		GRAYBAR ELECTRIC COMPANY		1,775.03	12-NOV-13	1,775.03	Reconciled
343803	07-NOV-13		H2O INNOVATION USA INC		5,279.04	18-NOV-13	5,279.04	Reconciled
343804	07-NOV-13		HACH COMPANY		2,412.46	12-NOV-13	2,412.46	Reconciled
343805	07-NOV-13		HANSON BRIDGETT LLP		8,043.00	18-NOV-13	8,043.00	Reconciled
343806	07-NOV-13		HERITAGE PROPERTY MANAGEMENT		62.06	13-NOV-13	62.06	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 4
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343807	07-NOV-13		HILL BROTHERS CHEMICAL COMPANY		11,421.80	14-NOV-13	11,421.80	Reconciled
343808	07-NOV-13		HILTI INC.		581.09	14-NOV-13	581.09	Reconciled
343809	07-NOV-13		HOA-JAI ENTERPRISE INC		53.91	25-NOV-13	53.91	Reconciled
343810	07-NOV-13		HOME DEPOT USA INC		2,016.56	12-NOV-13	2,016.56	Reconciled
343811	07-NOV-13		INDUSTRIAL METAL SUPPLY CO		148.22	13-NOV-13	148.22	Reconciled
343812	07-NOV-13		INTERNATIONAL FARI		58.33	19-NOV-13	58.33	Reconciled
343813	07-NOV-13		IRVINE NEWPORT		25.74	13-NOV-13	25.74	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
343814		07-NOV-13	PROPERTIES					
343815		07-NOV-13	IRVINE PACIFIC, LP		484.13	12-NOV-13	484.13	Reconciled
343816		07-NOV-13	IRVINE PIPE & SUPPLY INC		1,560.83	08-NOV-13	1,560.83	Reconciled
343817		07-NOV-13	IRVINE UNIFIED SCHOOL DISTRICT		933.92	21-NOV-13	933.92	Reconciled
343818		07-NOV-13	IRWD-PETTY CASH CUSTODIAN		543.19	13-NOV-13	543.19	Reconciled
343819		07-NOV-13	JOHN G. ALEVIZOS D.O. INC.		285.00	13-NOV-13	285.00	Reconciled
343820		07-NOV-13	JOHN MICHAEL COVAS		134.00	19-NOV-13	134.00	Reconciled
343821		07-NOV-13	KINGS COUNTY TAX COLLECTOR		29,312.34	18-NOV-13	29,312.34	Reconciled
343822		07-NOV-13	KS DIRECT LLC		2,365.20	08-NOV-13	2,365.20	Reconciled
343823		07-NOV-13	LEWIS BRISBOIS BISGAARD AND SMITH LLP		3,330.49	12-NOV-13	3,330.49	Reconciled
343824		07-NOV-13	LEWIS OPERATING CORP		3,300.00	13-NOV-13	3,300.00	Reconciled
343825		07-NOV-13	LGC GEOTECHNICAL, INC.		1,985.00	08-NOV-13	1,985.00	Reconciled
343826		07-NOV-13	LSA ASSOCIATES INC		690.00	08-NOV-13	690.00	Reconciled
343827		07-NOV-13	MAIN ELECTRIC SUPPLY COMPANY LLC		10.55	13-NOV-13	10.55	Reconciled
343828		07-NOV-13	MBC APPLIED ENVIRONMENTAL SCIENCES		1,250.00	08-NOV-13	1,250.00	Reconciled
343829		07-NOV-13	MC FADDEN-DALE INDUSTRIAL		7.67	12-NOV-13	7.67	Reconciled
343830		07-NOV-13	MC MASTER CARR SUPPLY CO		149.63	12-NOV-13	149.63	Reconciled
343831		07-NOV-13	MORGAN COMPANY		1,163.66	12-NOV-13	1,163.66	Reconciled
343832		07-NOV-13	MR CRANE INC		993.75	08-NOV-13	993.75	Reconciled
		07-NOV-13	MSC INDUSTRIAL SUPPLY CO		199.10	14-NOV-13	199.10	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343833		07-NOV-13	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		184,314.04	13-NOV-13	184,314.04	Reconciled
343834		07-NOV-13	MUTUAL PROPANE		119.21	12-NOV-13	119.21	Reconciled
343835		07-NOV-13	NATIONAL READY MIXED CONCRETE CO		1,173.96	18-NOV-13	1,173.96	Reconciled
343836		07-NOV-13	NATURES IMAGE INC		1,879.56	12-NOV-13	1,879.56	Reconciled
343837		07-NOV-13	NEWAGE INDUSTRIES INC		129.12	12-NOV-13	129.12	Reconciled
343838		07-NOV-13	NMG GEOTECHNICAL INC		2,601.50	25-NOV-13	2,601.50	Reconciled
343839		07-NOV-13	NOREX INC		3,500.00	12-NOV-13	3,500.00	Reconciled
343840		07-NOV-13	NOVELL INC		9,721.32	14-NOV-13	9,721.32	Reconciled
343841		07-NOV-13	O'HAREN GOVERNMENT RELATIONS		6,500.00	15-NOV-13	6,500.00	Reconciled
343842		07-NOV-13	OLIN CORPORATION		11,216.57	15-NOV-13	11,216.57	Reconciled
343843		07-NOV-13	ONESOURCE DISTRIBUTORS LLC		7,460.27	14-NOV-13	7,460.27	Reconciled
343844		07-NOV-13	OPEN TEXT INC		2,728.20	12-NOV-13	2,728.20	Reconciled
343845		07-NOV-13	ORANGE COUNTY AUTO PARTS CO		927.11	08-NOV-13	927.11	Reconciled
343846		07-NOV-13	ORANGE COUNTY HOSE		1,763.53	08-NOV-13	1,763.53	Reconciled
343847		07-NOV-13	ORRICK, HERRINGTON & SUTCLIFFE LLP		95,925.02	14-NOV-13	95,925.02	Reconciled
343848		07-NOV-13	OSTS, INC		1,492.50	12-NOV-13	1,492.50	Reconciled
343849		07-NOV-13	OUTSOURCE TECHNICAL LLC		18,400.00	19-NOV-13	18,400.00	Reconciled
343850		07-NOV-13	PARADA PAINTING INC		29,093.51	18-NOV-13	29,093.51	Reconciled
343851		07-NOV-13	PARKHOUSE TIRE INC		1,159.66	13-NOV-13	1,159.66	Reconciled
343852		07-NOV-13	POLYDYNE INC		2,300.00	12-NOV-13	2,300.00	Reconciled
343853		07-NOV-13	PONTON INDUSTRIES INC		2,008.57	15-NOV-13	2,008.57	Reconciled
343854		07-NOV-13	PRAXAIR DISTRIBUTION INC		1,266.32	13-NOV-13	1,266.32	Reconciled
343855		07-NOV-13	PRINCIPAL LIFE INSURANCE		24,493.69	18-NOV-13	24,493.69	Reconciled
343856		07-NOV-13	PRUDENTIAL OVERALL SUPPLY		3,640.25	12-NOV-13	3,640.25	Reconciled
343857		07-NOV-13	PSB INTEGRATED MARKETING		225.00	08-NOV-13	225.00	Reconciled
343858		07-NOV-13	PUMP CHECK		2,285.00	13-NOV-13	2,285.00	Reconciled
343859		07-NOV-13	QANDC CAL LP		10.36			Negotiable
343860		07-NOV-13	RAINBOW DISPOSAL CO INC		506.33	12-NOV-13	506.33	Reconciled
343861		07-NOV-13	RBF CONSULTING		22,990.80	18-NOV-13	22,990.80	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)

Payment Type: All

Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343862		07-NOV-13	REED, JAMES D		1,922.57	15-NOV-13	1,922.57	Reconciled
343863		07-NOV-13	RICHARD C SLADE & ASSOCIATES		930.50	20-NOV-13	930.50	Reconciled
343864		07-NOV-13	ROCHESTER MIDLAND CORPORATION		1,416.96	12-NOV-13	1,416.96	Reconciled
343865		07-NOV-13	SANTA MARGARITA FORD		293.37	12-NOV-13	293.37	Reconciled
343866		07-NOV-13	SANTIAGO AQUEDUCT COMMISSION		26,086.28	13-NOV-13	26,086.28	Reconciled
343867		07-NOV-13	SCHINDLER ELEVATOR CORPORATION		169.16	12-NOV-13	169.16	Reconciled
343868		07-NOV-13	SCHULER ENGINEERING CORPORATION		125,123.53	13-NOV-13	125,123.53	Reconciled
343869		07-NOV-13	SCHULER ENGINEERING CORPORATION		6,585.45	14-NOV-13	6,585.45	Reconciled
343870		07-NOV-13	SECURTEC DISTRICT PATROL INC		11,160.00	15-NOV-13	11,160.00	Reconciled
343871		07-NOV-13	SHAMROCK SUPPLY CO INC		317.78	08-NOV-13	317.78	Reconciled
343872		07-NOV-13	SIMI VALLEY LANDFILL AND RECYCLING CENTER		466.24	12-NOV-13	466.24	Reconciled
343873		07-NOV-13	SIQUEIROS, CARLOS		302.19			Negotiable
343874		07-NOV-13	SOUTH COAST ANSWERING SERVICE		493.96	20-NOV-13	493.96	Reconciled
343875		07-NOV-13	SOUTHERN CALIFORNIA EDISON COMPANY		64,610.74	08-NOV-13	64,610.74	Reconciled
343876		07-NOV-13	SOUTHERN COUNTIES LUBRICANTS LLC		1,678.81	08-NOV-13	1,678.81	Reconciled
343877		07-NOV-13	SS MECHANICAL CORPORATION		25,768.08	18-NOV-13	25,768.08	Reconciled
343878		07-NOV-13	STEMAR EQUIPMENT & SUPPLY CO., INC		992.28	15-NOV-13	992.28	Reconciled
343879		07-NOV-13	SUPERMEDIA LLC		72.75	14-NOV-13	72.75	Reconciled
343880		07-NOV-13	TAYLOR MORRISON		30.00			Negotiable
343881		07-NOV-13	TESTAMERICA LABORATORIES, INC		200.00	12-NOV-13	200.00	Reconciled
343882		07-NOV-13	THE FURMAN GROUP		10,060.00	15-NOV-13	10,060.00	Reconciled
343883		07-NOV-13	THE NEW HOME COMPANY		33.71			Negotiable
343884		07-NOV-13	TODAY REAL ESTATE		11.50			Negotiable
343885		07-NOV-13	TROPICAL PLAZA NURSERY INC		1,333.50	08-NOV-13	1,333.50	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 7
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343886		07-NOV-13	TRUCPARCO		106.48	14-NOV-13	106.48	Reconciled
343887		07-NOV-13	TRUGREEN LANDCARE LLC		23,230.00	15-NOV-13	23,230.00	Reconciled
343888		07-NOV-13	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		919.50	12-NOV-13	919.50	Reconciled
343889		07-NOV-13	UNITED PARCEL SERVICE INC		70.44	12-NOV-13	70.44	Reconciled
343890		07-NOV-13	UNITED STATES POSTAL SERVICE		50.42	15-NOV-13	50.42	Reconciled
343891		07-NOV-13	US PEROXIDE LLC		6,096.06	15-NOV-13	6,096.06	Reconciled
343892		07-NOV-13	USA MOBILITY, INC		70.87	12-NOV-13	70.87	Reconciled
343893		07-NOV-13	VERIZON CALIFORNIA INC		241.66	13-NOV-13	241.66	Reconciled
343894		07-NOV-13	VERIZON WIRELESS SERVICES LLC		723.96	12-NOV-13	723.96	Reconciled
343895		07-NOV-13	VPSI INC		10,074.00	15-NOV-13	10,074.00	Reconciled
343896		07-NOV-13	WALTERS WHOLESALE ELECTRIC		1,045.29	13-NOV-13	1,045.29	Reconciled
343897		07-NOV-13	WALTON MOTORS & CONTROLS INC		6,430.10	14-NOV-13	6,430.10	Reconciled
343898		07-NOV-13	WASTE MANAGEMENT OF ORANGE COUNTY		1,753.11	12-NOV-13	1,753.11	Reconciled
343899		07-NOV-13	WATER EDUCATION FOUNDATION		13,739.00	18-NOV-13	13,739.00	Reconciled
343900		07-NOV-13	WATERLINE TECHNOLOGIES INC		5,680.00	14-NOV-13	5,680.00	Reconciled
343901		07-NOV-13	WAXIE'S ENTERPRISES, INC		318.75	12-NOV-13	318.75	Reconciled

343902	07-NOV-13	WECK LABORATORIES INC		2,635.00	08-NOV-13	2,635.00	Reconciled
343903	07-NOV-13	WEST COAST REALTY SERVICES INC		78.54	14-NOV-13	78.54	Reconciled
343904	07-NOV-13	WESTERN SAFETY PRODUCTS INC		720.53	13-NOV-13	720.53	Reconciled
343905	07-NOV-13	WILLIAMS, RICHARD H		99.30			Negotiable
343906	07-NOV-13	SOUTHERN CALIFORNIA EDISON COMPANY	ROSEMEAD	7,107.70	08-NOV-13	7,107.70	Reconciled
343907	07-NOV-13	THE GAS COMPANY	MONTEREY PARK 1	710.83	13-NOV-13	710.83	Reconciled
343908	07-NOV-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	1,950.00	13-NOV-13	1,950.00	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343909		12-NOV-13	JCI JONES CHEMICALS INC	CINCINNATI	9,870.72	18-NOV-13	9,870.72	Reconciled
343910		14-NOV-13	Coria, Alejandro (Alex)		230.00	18-NOV-13	230.00	Reconciled
343911		14-NOV-13	German, Carolyn L (Carolyn)		71.16			Negotiable
343912		14-NOV-13	Kinner, Chris A (Chris)		66.03			Negotiable
343913		14-NOV-13	Hayden, David M (Dave)		250.00	19-NOV-13	250.00	Reconciled
343914		14-NOV-13	Leal, Eliberto (Eliberto)		222.00	22-NOV-13	222.00	Reconciled
343915		14-NOV-13	Larson, Jane E (Jane)		567.32	19-NOV-13	567.32	Reconciled
343916		14-NOV-13	Johnny Vu		142.56	14-NOV-13	142.56	Reconciled
343917		14-NOV-13	Oldewage, Lars D (Lars)		812.61	15-NOV-13	812.61	Reconciled
343918		14-NOV-13	Cano, Marco T (Marco)		130.00	20-NOV-13	130.00	Reconciled
343919		14-NOV-13	Acosta, Monica (Monica)		25.82	18-NOV-13	25.82	Reconciled
343920		14-NOV-13	Fehser, Noah (Noah)		129.04	18-NOV-13	129.04	Reconciled
343921		14-NOV-13	Wang, Peter (Peter)		66.15	15-NOV-13	66.15	Reconciled
343922		14-NOV-13	Do, Thu-Tam T (Thu-Tam)		56.22	18-NOV-13	56.22	Reconciled
343923		14-NOV-13	PACIFIC GAS AND ELECTRIC COMPANY	SACRAMENTO	2,500.00	18-NOV-13	2,500.00	Reconciled
343924		14-NOV-13	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	1,570.00	18-NOV-13	1,570.00	Reconciled
343925		14-NOV-13	URS CORPORATION	PAY	4,265.75	18-NOV-13	4,265.75	Reconciled
343926		14-NOV-13	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	3,140.00	18-NOV-13	3,140.00	Reconciled
343927		14-NOV-13	AHMADI, MARYAM		24.70	25-NOV-13	24.70	Reconciled
343928		14-NOV-13	AIRGAS-WEST, INC.		1,176.87	18-NOV-13	1,176.87	Reconciled
343929		14-NOV-13	ALHAMBRA FOUNDRY CO LTD		4,977.29	15-NOV-13	4,977.29	Reconciled
343930		14-NOV-13	ALPHA TRAFFIC SERVICES, INC.		520.00	18-NOV-13	520.00	Reconciled
343931		14-NOV-13	ANDERSON, DEVON		34.49			Negotiable
343932		14-NOV-13	APPLIED MEMBRANES INC		5,996.81	20-NOV-13	5,996.81	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343933		14-NOV-13	APPLIED TECHNOLOGY GROUP INC		716.95	19-NOV-13	716.95	Reconciled
343934		14-NOV-13	ARB INCORPORATED		321.65	18-NOV-13	321.65	Reconciled
343935		14-NOV-13	ASHFORD, WALT		613.45	18-NOV-13	613.45	Reconciled
343936		14-NOV-13	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		30,981.50			Negotiable
343937		14-NOV-13	AST CORPORATION		7,375.11	21-NOV-13	7,375.11	Reconciled
343938		14-NOV-13	AT&T		121.50	19-NOV-13	121.50	Reconciled
343939		14-NOV-13	AT&T		3,529.54	19-NOV-13	3,529.54	Reconciled
343940		14-NOV-13	AT&T		1,943.84	19-NOV-13	1,943.84	Reconciled
343941		14-NOV-13	AUTOZONE PARTS,		109.75	18-NOV-13	109.75	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
343942	14-NOV-13	14-NOV-13	INC. BATTAGLIA, RYAN		33.50	20-NOV-13	33.50	Reconciled
343943	14-NOV-13	14-NOV-13	BATTERIES PLUS AND BATTERIES PLUS BULBS		153.90	22-NOV-13	153.90	Reconciled
343944	14-NOV-13	14-NOV-13	BDC SPECIAL WASTE		204.20	19-NOV-13	204.20	Reconciled
343945	14-NOV-13	14-NOV-13	BEACON BAY ENTERPRISES INC		1,077.23	15-NOV-13	1,077.23	Reconciled
343946	14-NOV-13	14-NOV-13	BELL TOWER FLORIST & GIFTS		180.34	26-NOV-13	180.34	Reconciled
343947	14-NOV-13	14-NOV-13	BK FOUNTAIN WORKS		697.28	15-NOV-13	697.28	Reconciled
343948	14-NOV-13	14-NOV-13	BLACKSTONE, MARTIN		162.06			Negotiable
343949	14-NOV-13	14-NOV-13	C WELLS PIPELINE MATERIALS INC		3,652.56	18-NOV-13	3,652.56	Reconciled
343950	14-NOV-13	14-NOV-13	CANON FINANCIAL SERVICES, INC		8,422.12	21-NOV-13	8,422.12	Reconciled
343951	14-NOV-13	14-NOV-13	CANON SOLUTIONS AMERICA, INC.		151.08	18-NOV-13	151.08	Reconciled
343952	14-NOV-13	14-NOV-13	CARL WARREN & CO		3,761.90	18-NOV-13	3,761.90	Reconciled
343953	14-NOV-13	14-NOV-13	CASA		18,720.00			Negotiable
343954	14-NOV-13	14-NOV-13	CDW GOVERNMENT LLC		459.26	20-NOV-13	459.26	Reconciled
343955	14-NOV-13	14-NOV-13	CHAN, WILLARD		30.10	25-NOV-13	30.10	Reconciled
343956	14-NOV-13	14-NOV-13	CHO DESIGN ASSOCIATES, INC		525.00	19-NOV-13	525.00	Reconciled
343957	14-NOV-13	14-NOV-13	Smithson, Christopher F (Christopher)		1,666.21	25-NOV-13	1,666.21	Reconciled
343958	14-NOV-13	14-NOV-13	CITY OF LAKE FOREST		98.21			Negotiable
343959	14-NOV-13	14-NOV-13	CLEAN ENERGY		1,314.13	20-NOV-13	1,314.13	Reconciled
343960	14-NOV-13	14-NOV-13	COMMON-A USERS GROUP		495.00	21-NOV-13	495.00	Reconciled
343961	14-NOV-13	14-NOV-13	CONEYBEARE INC		11,921.07	21-NOV-13	11,921.07	Reconciled
343962	14-NOV-13	14-NOV-13	CORELOGIC INC		30.00	18-NOV-13	30.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
343963	14-NOV-13	14-NOV-13	COUNTY OF ORANGE CR & R INCORPORATED		2,016.00	19-NOV-13	2,016.00	Reconciled
343964	14-NOV-13	14-NOV-13	D & H WATER SYSTEMS INC.		12.30	19-NOV-13	12.30	Reconciled
343965	14-NOV-13	14-NOV-13	DAN'S MACHINE TOOL, INC		2,182.96	21-NOV-13	2,182.96	Reconciled
343966	14-NOV-13	14-NOV-13	DCSE INC		1,370.40	19-NOV-13	1,370.40	Reconciled
343967	14-NOV-13	14-NOV-13	DE-VIGNY, DIANA		5,500.00	19-NOV-13	5,500.00	Reconciled
343968	14-NOV-13	14-NOV-13	DEE JASPAR & ASSOCIATES, INC.		31.84	21-NOV-13	31.84	Reconciled
343969	14-NOV-13	14-NOV-13	DOUG MARTIN CONTRACTING CO		2,205.49	19-NOV-13	2,205.49	Reconciled
343970	14-NOV-13	14-NOV-13	DWYER INSTRUMENTS INC		943.15			Negotiable
343971	14-NOV-13	14-NOV-13	EDALATKHAH, MOSTAFA		2,484.95	18-NOV-13	2,484.95	Reconciled
343972	14-NOV-13	14-NOV-13	EMERALD COURT I APTS		12.11			Negotiable
343973	14-NOV-13	14-NOV-13	EMPLOYEE BENEFIT SPECIALIST, INC		151.68			Negotiable
343974	14-NOV-13	14-NOV-13	ERICKSON, DEBORAH		655.00	18-NOV-13	655.00	Reconciled
343975	14-NOV-13	14-NOV-13	ESSCO PUMPS AND CONTROLS		152.82	25-NOV-13	152.82	Reconciled
343976	14-NOV-13	14-NOV-13	EXECUTIVE LIGHTING & ELECTRIC		4,708.44	18-NOV-13	4,708.44	Reconciled
343977	14-NOV-13	14-NOV-13	EXTERRAN ENERGY SOLUTIONS LP		5,201.63	19-NOV-13	5,201.63	Reconciled
343978	14-NOV-13	14-NOV-13	FEDEX		7,482.10	22-NOV-13	7,482.10	Reconciled
343979	14-NOV-13	14-NOV-13	FERGUSON ENTERPRISES, INC.		173.27	19-NOV-13	173.27	Reconciled
343980	14-NOV-13	14-NOV-13	FIRST CHOICE SERVICES		636.16	18-NOV-13	636.16	Reconciled
343981	14-NOV-13	14-NOV-13	FLW SERVICE CORPORATION		905.19	19-NOV-13	905.19	Reconciled
343982	14-NOV-13	14-NOV-13	GANAHL LUMBER CO.		615.00	19-NOV-13	615.00	Reconciled
343983	14-NOV-13	14-NOV-13	GARDEMAL, ROBERT		2,361.89	18-NOV-13	2,361.89	Reconciled
343984	14-NOV-13	14-NOV-13	GARLAND, TY		48.21	26-NOV-13	48.21	Reconciled
343985	14-NOV-13	14-NOV-13	GEORGE YARDLEY CO INC		24.64			Negotiable
343986	14-NOV-13	14-NOV-13	GIBSON, FRANK - ACCT 10062161053		2,779.01	18-NOV-13	2,779.01	Reconciled
343987	14-NOV-13	14-NOV-13	GILONGOS, GODFREY		39.13	19-NOV-13	39.13	Reconciled
343988	14-NOV-13	14-NOV-13	GOLDMAN, SACHS & CO		30.80			Negotiable
343989	14-NOV-13	14-NOV-13	GRAINGER		22,002.79	25-NOV-13	22,002.79	Reconciled
343990	14-NOV-13	14-NOV-13			366.40	18-NOV-13	366.40	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344041		14-NOV-13	TREASURER ORANGE COUNTY VECTOR CONTROL DISTRICT		3,492.60	22-NOV-13	3,492.60	Reconciled
344042		14-NOV-13	ORANGE COUNTY WATER DISTRICT		10,645.23	19-NOV-13	10,645.23	Reconciled
344043		14-NOV-13	PACIFIC COAST BOLT CORP		1,470.68	18-NOV-13	1,470.68	Reconciled
344044		14-NOV-13	PACIFIC GAS AND ELECTRIC COMPANY		23.43	20-NOV-13	23.43	Reconciled
344045		14-NOV-13	PAPER DEPOT DOCUMENT DESTRUCTION LLC		940.00	22-NOV-13	940.00	Reconciled
344046		14-NOV-13	PARKHOUSE TIRE INC		667.96	19-NOV-13	667.96	Reconciled

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344047		14-NOV-13	PAULUS ENGINEERING INC		26,483.83	19-NOV-13	26,483.83	Reconciled
344048		14-NOV-13	POST COMPANY		505.88			Negotiable
344049		14-NOV-13	PRAXAIR DISTRIBUTION INC		756.28	19-NOV-13	756.28	Reconciled
344050		14-NOV-13	PROBST, KARI		25.22	25-NOV-13	25.22	Reconciled
344051		14-NOV-13	PSIP WR MYFORD		14,401.18	20-NOV-13	14,401.18	Reconciled
344052		14-NOV-13	PTI SAND & GRAVEL INC		522.35	20-NOV-13	522.35	Reconciled
344053		14-NOV-13	PYRO-COMM SYSTEMS INC		485.00	15-NOV-13	485.00	Reconciled
344054		14-NOV-13	RACUNAS, JOHN		4,038.10	25-NOV-13	4,038.10	Reconciled
344055		14-NOV-13	RANE, AJAY		1,039.69			Negotiable
344056		14-NOV-13	RASSOULIAN, PARVIN		66.77	18-NOV-13	66.77	Reconciled
344057		14-NOV-13	RBF CONSULTING		34,550.00	22-NOV-13	34,550.00	Reconciled
344058		14-NOV-13	REACH EMPLOYEE ASSISTANCE INC		896.00	19-NOV-13	896.00	Reconciled
344059		14-NOV-13	RED HAWK FIRE & SECURITY (CA) LLC		375.00	18-NOV-13	375.00	Reconciled
344060		14-NOV-13	RESPONSE ENVELOPE, INC		3,481.92	19-NOV-13	3,481.92	Reconciled
344061		14-NOV-13	RINGCLEAR LLC		42.72			Negotiable
344062		14-NOV-13	ROZGONYI, IRENE		51.36			Negotiable
344063		14-NOV-13	SANTA ANA BLUE PRINT		179.80	18-NOV-13	179.80	Reconciled
344064		14-NOV-13	SANTA MARGARITA FORD		904.88	19-NOV-13	904.88	Reconciled
344065		14-NOV-13	SAVANT CONSTRUCTION INC		199.51	18-NOV-13	199.51	Reconciled
344066		14-NOV-13	SEPULVEDA COMMERCIAL DEVELOPMENT		372.46	21-NOV-13	372.46	Reconciled
344067		14-NOV-13	SHEWARD & SON & SONS		5,900.00	20-NOV-13	5,900.00	Reconciled
344068		14-NOV-13	SHI, KANG		59.29			Negotiable
344069		14-NOV-13	SIGMA-ALDRICH INC		422.77	18-NOV-13	422.77	Reconciled
344070		14-NOV-13	SONORA HIGH SCHOOL		5.00	20-NOV-13	5.00	Reconciled
344071		14-NOV-13	SOUTH COAST WATER CO.		40.00	19-NOV-13	40.00	Reconciled
344072		14-NOV-13	SOUTH COAST WATER CO.		151.68	19-NOV-13	151.68	Reconciled
344073		14-NOV-13	SOUTHERN CALIFORNIA EDISON COMPANY		25,223.10	15-NOV-13	25,223.10	Reconciled
344074		14-NOV-13	SPARLING INSTRUMENTS LLC		4,124.31	18-NOV-13	4,124.31	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344075		14-NOV-13	SS MECHANICAL CORPORATION		4,526.78	21-NOV-13	4,526.78	Reconciled
344076		14-NOV-13	STATE WATER RESOURCES CONTROL BOARD		36,811.00	20-NOV-13	36,811.00	Reconciled
344077		14-NOV-13	STROUD, TOM		165.03	18-NOV-13	165.03	Reconciled
344078		14-NOV-13	SUN, JONNIE		11.30	18-NOV-13	11.30	Reconciled
344079		14-NOV-13	SUNNYHILLS RESTORATION		566.38	26-NOV-13	566.38	Reconciled
344080		14-NOV-13	SUPPORT PRODUCTS SERVICES		1,839.69			Negotiable
344081		14-NOV-13	TABARES ENTERTAINMENT INC		1,734.50	19-NOV-13	1,734.50	Reconciled

344082	14-NOV-13	TAGGE, KEVIN	140.00	26-NOV-13	140.00	Reconciled
344083	14-NOV-13	TANG, GOLDIE	22.01			Negotiable
344084	14-NOV-13	TELEDYNE LEEMAN LABS	1,236.35	20-NOV-13	1,236.35	Reconciled
344085	14-NOV-13	THE GAS COMPANY	1,911.97	18-NOV-13	1,911.97	Reconciled
344086	14-NOV-13	THE GITTELMAN GROUP	9,970.01	21-NOV-13	9,970.01	Reconciled
344087	14-NOV-13	THOMAS HARDER & CO	14,607.45	25-NOV-13	14,607.45	Reconciled
344088	14-NOV-13	TOSHIAKI, OGASAWARA	101.28	18-NOV-13	101.28	Reconciled
344089	14-NOV-13	TOXGUARD FLUID TECHNOLOGIES	327.80	21-NOV-13	327.80	Reconciled
344090	14-NOV-13	TRAN, NIKKI	134.95	25-NOV-13	134.95	Reconciled
344091	14-NOV-13	TROPICAL PLAZA NURSERY INC	347.85	18-NOV-13	347.85	Reconciled
344092	14-NOV-13	TRUCPARCO	1,754.13	21-NOV-13	1,754.13	Reconciled
344093	14-NOV-13	TRUGREEN LANDCARE LLC	355.74	19-NOV-13	355.74	Reconciled
344094	14-NOV-13	UNITED PARCEL SERVICE INC	33.20	20-NOV-13	33.20	Reconciled
344095	14-NOV-13	UNITED PARCEL SERVICE INC	114.26	18-NOV-13	114.26	Reconciled
344096	14-NOV-13	UNITED SITE SERVICES OF CALIFORNIA INC	597.93	18-NOV-13	597.93	Reconciled
344097	14-NOV-13	US PEROXIDE LLC	6,275.88	21-NOV-13	6,275.88	Reconciled
344098	14-NOV-13	VALENCIA, GILBERTO	48.50			Negotiable
344099	14-NOV-13	VALLEY CREST LANDSCAPE	660.46	18-NOV-13	660.46	Reconciled
344100	14-NOV-13	VERIZON CALIFORNIA INC	43.38	21-NOV-13	43.38	Reconciled
344101	14-NOV-13	VOSS, NEGIN	24.50			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344102		14-NOV-13	VULCAN MATERIALS COMPANY		1,335.93	18-NOV-13	1,335.93	Reconciled
344103		14-NOV-13	WAGONER, FRANK		730.00	20-NOV-13	730.00	Reconciled
344104		14-NOV-13	WANG, AUSTIN		31.05			Negotiable
344105		14-NOV-13	WARDLOW, MELANIE		31.80			Negotiable
344106		14-NOV-13	WASTE MANAGEMENT OF ORANGE COUNTY		3,997.84	19-NOV-13	3,997.84	Reconciled
344107		14-NOV-13	WATERLINE TECHNOLOGIES INC		4,560.00	18-NOV-13	4,560.00	Reconciled
344108		14-NOV-13	WAXIE'S ENTERPRISES, INC		324.16	18-NOV-13	324.16	Reconciled
344109		14-NOV-13	WECK LABORATORIES INC		448.50	15-NOV-13	448.50	Reconciled
344110		14-NOV-13	WIDDICOMBE, PATTI		71.15	26-NOV-13	71.15	Reconciled
344111		14-NOV-13	WIRELESS WATCHDOGS, LLC		908.00			Negotiable
344112		14-NOV-13	WRIGHT, DAVID		53.87	21-NOV-13	53.87	Reconciled
344113		14-NOV-13	YSI INCORPORATED		1,195.73	18-NOV-13	1,195.73	Reconciled
344114		14-NOV-13	ZEE MEDICAL SERVICE CO		821.87	15-NOV-13	821.87	Reconciled
344115		14-NOV-13	CLEARINGHOUSE	PHOENIX	528.45	18-NOV-13	528.45	Reconciled
344116		14-NOV-13	INTERNAL REVENUE SERVICE	FRESNO	25.00	22-NOV-13	25.00	Reconciled
344117		14-NOV-13	FRANCHISE TAX BOARD	SACRAMENTO	797.88	22-NOV-13	797.88	Reconciled
344118		14-NOV-13	PERS LONG TERM CARE	PASADENA	852.57	20-NOV-13	852.57	Reconciled
344119		14-NOV-13	IRWD EMPLOYEE ASSOCIATION	IRVINE	530.00	26-NOV-13	530.00	Reconciled
344120		15-NOV-13	Richard Torres	HOME	311.27	25-NOV-13	311.27	Reconciled
344121		15-NOV-13	Todd Sinclair	HOME	133.18	18-NOV-13	133.18	Reconciled
344122		18-NOV-13	CITY OF SANTA ANA	SANTA ANA 3	8,784.63	19-NOV-13	8,784.63	Reconciled
344123		18-NOV-13	STATE BOARD OF EQUALIZATION	SACRAMENTO	12,600.00			Negotiable
344124		19-NOV-13	CITY OF BREA	BREA	30.00			Negotiable
344125		21-NOV-13	Mossbarger, Anthony J (Tony)		17.03	22-NOV-13	17.03	Reconciled
344126		21-NOV-13	Fike, Christopher A (Chris)		214.59	26-NOV-13	214.59	Reconciled
344127		21-NOV-13	Martin, Didene J (De)		196.20			Negotiable
344128		21-NOV-13	Reinhart, Douglas J		461.98			Negotiable
344129		21-NOV-13	Akiyoshi, Eric S (Eric)		60.96			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344130		21-NOV-13	Fike, Ethan O (Ethan)		77.00	22-NOV-13	77.00	Reconciled
344131		21-NOV-13	Maswadeh, Gretchen C (Gretchen)		47.46	25-NOV-13	47.46	Reconciled
344132		21-NOV-13	Smyth, Jeffrey S (Jeff)		115.00	22-NOV-13	115.00	Reconciled
344133		21-NOV-13	Withers, John B		99.44	26-NOV-13	99.44	Reconciled
344134		21-NOV-13	Hoffman, Michael S (Mike)		99.00			Negotiable
344135		21-NOV-13	Nguyen, Quynh		191.48	22-NOV-13	191.48	Reconciled
344136		21-NOV-13	LaMar, Steven E		435.72	25-NOV-13	435.72	Reconciled
344137		21-NOV-13	ALSTON & BIRD LLP		320.77	25-NOV-13	320.77	Reconciled
344138		21-NOV-13	APCO GRAPHICS INC		154.56	25-NOV-13	154.56	Reconciled
344139		21-NOV-13	AQUA-METRIC SALES COMPANY		5,843.63			Negotiable
344140		21-NOV-13	ARBITRATION MEDIATION CONCILIATION CENTER, INC.		1,300.00	25-NOV-13	1,300.00	Reconciled
344141		21-NOV-13	ARCADIS U.S., INC.		26,932.41			Negotiable
344142		21-NOV-13	AT&T		47.70	26-NOV-13	47.70	Reconciled
344143		21-NOV-13	AT&T		57.59	26-NOV-13	57.59	Reconciled
344144		21-NOV-13	AT&T		3,499.94			Negotiable
344145		21-NOV-13	AT&T		15.75	26-NOV-13	15.75	Reconciled
344146		21-NOV-13	ATHENS SERVICES		14,724.58			Negotiable
344147		21-NOV-13	AUTOZONE PARTS, INC.		457.58	25-NOV-13	457.58	Reconciled
344148		21-NOV-13	AVISTA TECHNOLOGIES, INC		17,977.23			Negotiable
344149		21-NOV-13	B & K ELECTRIC WHOLESALE		100.83	26-NOV-13	100.83	Reconciled
344150		21-NOV-13	BELL PIPE & SUPPLY CO		1,074.78			Negotiable
344151		21-NOV-13	BILL'S SWEEPING SERVICE INC		460.00			Negotiable
344152		21-NOV-13	BIOMAGIC INC		5,268.73			Negotiable
344153		21-NOV-13	BIOMERIEUX INC		279.72	25-NOV-13	279.72	Reconciled
344154		21-NOV-13	BLACK & VEATCH CORPORATION		125,896.33			Negotiable
344155		21-NOV-13	BORCHARD SURVEYING & MAPPING, INC.		9,787.50			Negotiable
344156		21-NOV-13	BOWIE, ARNESON, WILES & GIANNONE		29,428.50			Negotiable
344157		21-NOV-13	BRITHINEE ELECTRIC		1,252.35	25-NOV-13	1,252.35	Reconciled
344158		21-NOV-13	BUSH & ASSOCIATES INC		3,960.00			Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 17
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344159		21-NOV-13	C WELLS PIPELINE MATERIALS INC		9,462.96			Negotiable
344160		21-NOV-13	CALIFORNIA BARRICADE INC		650.00	26-NOV-13	650.00	Reconciled
344161		21-NOV-13	CALIFORNIA WATER ENVIRONMENT ASSOCIATION		230.00			Negotiable
344162		21-NOV-13	CAMERON-COLE, LLC		2,063.80	25-NOV-13	2,063.80	Reconciled
344163		21-NOV-13	CANON FINANCIAL SERVICES, INC		1,389.97	25-NOV-13	1,389.97	Reconciled
344164		21-NOV-13	CITY OF IRVINE		416,398.97			Negotiable
344165		21-NOV-13	CITY OF NEWPORT BEACH		1,183.81			Negotiable
344166		21-NOV-13	COMMERCE ENERGY INC		406.98	25-NOV-13	406.98	Reconciled
344167		21-NOV-13	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		7,847.00			Negotiable
344168		21-NOV-13	CONYBEARE INC		16,514.37			Negotiable
344169		21-NOV-13	COUNTY OF ORANGE		98,547.72			Negotiable
344170		21-NOV-13	COUNTY OF ORANGE		2,145.00			Negotiable
344171		21-NOV-13	CREDENTIAL CHECK CORPORATION		153.90	25-NOV-13	153.90	Reconciled
344172		21-NOV-13	DATA CLEAN CORPORATION		513.25	26-NOV-13	513.25	Reconciled
344173		21-NOV-13	DIRECTV INC		94.99	25-NOV-13	94.99	Reconciled
344174		21-NOV-13	DISCOVERY SCIENCE CENTER		1,116.90	26-NOV-13	1,116.90	Reconciled
344175		21-NOV-13	EAGLE PRINT DYNAMICS		4,619.17	25-NOV-13	4,619.17	Reconciled
344176		21-NOV-13	EMPLOYMENT DEVELOPMENT DEPARTMENT		1,874.00	25-NOV-13	1,874.00	Reconciled

344177	21-NOV-13	ENVIRONMENTAL SCIENCE ASSOCIATES		21,968.83			Negotiable
344178	21-NOV-13	EQUIPMENT DIRECT INC		346.45	26-NOV-13	346.45	Reconciled
344179	21-NOV-13	EXECUTIVE LIGHTING & ELECTRIC		7,189.19			Negotiable
344180	21-NOV-13	FARRELL & ASSOCIATES		233.00	22-NOV-13	233.00	Reconciled
344181	21-NOV-13	FERGUSON ENTERPRISES, INC.		1,056.89	25-NOV-13	1,056.89	Reconciled
344182	21-NOV-13	FISERV		12,632.36			Negotiable
344183	21-NOV-13	FISHER SCIENTIFIC COMPANY LLC		2,702.75	25-NOV-13	2,702.75	Reconciled

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 02-DEC-2013 15:15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 18
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344184		21-NOV-13	FORTIS RESOURCE PARTNERS INC		2,754.40	25-NOV-13	2,754.40	Reconciled
344185		21-NOV-13	GANAHL LUMBER CO.		2,676.24			Negotiable
344186		21-NOV-13	GARZA INDUSTRIES, INC		1,381.97	25-NOV-13	1,381.97	Reconciled
344187		21-NOV-13	GRAINGER		1,244.73	25-NOV-13	1,244.73	Reconciled
344188		21-NOV-13	GRAYBAR ELECTRIC COMPANY		4,855.11	25-NOV-13	4,855.11	Reconciled
344189		21-NOV-13	HAGEMEYER NORTH AMERICA INC		527.20	25-NOV-13	527.20	Reconciled
344190		21-NOV-13	HARMSWORTH ASSOCIATES		2,785.00	26-NOV-13	2,785.00	Reconciled
344191		21-NOV-13	HDR ENGINEERING INC		55,741.77			Negotiable
344192		21-NOV-13	HILL BROTHERS CHEMICAL COMPANY		17,933.85			Negotiable
344193		21-NOV-13	IBM CORPORATION		70,626.00			Negotiable
344194		21-NOV-13	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,823.52	25-NOV-13	1,823.52	Reconciled
344195		21-NOV-13	IRVINE PIPE & SUPPLY INC		1,611.89	22-NOV-13	1,611.89	Reconciled
344196		21-NOV-13	IRVINE UNIFIED SCHOOL DISTRICT		39,404.30			Negotiable
344197		21-NOV-13	IRWD-PETTY CASH CUSTODIAN		1,262.86	25-NOV-13	1,262.86	Reconciled
344198		21-NOV-13	JOHN G. ALEVIZOS D.O. INC.		810.41	25-NOV-13	810.41	Reconciled
344199		21-NOV-13	KOELLER NEBEKER CARLSON & HALUCK, LLP		2,990.67			Negotiable
344200		21-NOV-13	KOENIG, NICOLE		157.95			Negotiable
344201		21-NOV-13	KONECRANES INC		1,900.00	25-NOV-13	1,900.00	Reconciled
344202		21-NOV-13	LCS TECHNOLOGIES, INC.		10,750.00			Negotiable
344203		21-NOV-13	LEWIS OPERATING CORP		200.00	22-NOV-13	200.00	Reconciled
344204		21-NOV-13	LUBRICATION ENGINEERS, INC.		2,631.51	25-NOV-13	2,631.51	Reconciled
344205		21-NOV-13	LUNG & ASSOCIATES INC, ROBERT J		243.00			Negotiable
344206		21-NOV-13	MAILFINANCE INC		2,648.28	26-NOV-13	2,648.28	Reconciled
344207		21-NOV-13	MC MASTER CARR SUPPLY CO		710.06	25-NOV-13	710.06	Reconciled
344208		21-NOV-13	MGH PAINTING INC		9,785.30			Negotiable

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 02-DEC-2013 15:15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 19
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344209		21-NOV-13	MOODY'S INVESTORS SERVICE INC		5,000.00			Negotiable
344210		21-NOV-13	MSC INDUSTRIAL SUPPLY CO		762.86			Negotiable
344211		21-NOV-13	NATIONAL READY MIXED CONCRETE CO		991.60	25-NOV-13	991.60	Reconciled
344212		21-NOV-13	NEOGOV		13,950.00			Negotiable
344213		21-NOV-13	NEW PIG CORPORATION		435.90	25-NOV-13	435.90	Reconciled
344214		21-NOV-13	NINYO & MOORE		2,104.50	25-NOV-13	2,104.50	Reconciled
344215		21-NOV-13	NORTHWOOD PLACE APTS		366.04			Negotiable
344216		21-NOV-13	NURSERY PRODUCTS LLC		20,970.66			Negotiable
344217		21-NOV-13	OLIN CORPORATION		11,518.84			Negotiable

344218	21-NOV-13	ONESOURCE DISTRIBUTORS LLC	1,762.46	25-NOV-13	1,762.46	Reconciled
344219	21-NOV-13	ORANGE COUNTY AUTO PARTS CO	72.97	22-NOV-13	72.97	Reconciled
344220	21-NOV-13	OUTSOURCE TECHNICAL LLC	36,800.00			Negotiable
344221	21-NOV-13	PACIFIC COAST BOLT CORP	1,986.04	25-NOV-13	1,986.04	Reconciled
344222	21-NOV-13	PACIFIC PARTY RENTAL	1,608.25			Negotiable
344223	21-NOV-13	PACIFIC RESOURCE RECOVERY	964.20	25-NOV-13	964.20	Reconciled
344224	21-NOV-13	PARKHOUSE TIRE INC	667.96	26-NOV-13	667.96	Reconciled
344225	21-NOV-13	PENCO ENGINEERING, INC.	4,620.80	22-NOV-13	4,620.80	Reconciled
344226	21-NOV-13	PINNACLE LANDSCAPE COMPANY	6,560.00			Negotiable
344227	21-NOV-13	PINNACLE TOWERS LLC	592.11	25-NOV-13	592.11	Reconciled
344228	21-NOV-13	PRAXAIR DISTRIBUTION INC	359.65	25-NOV-13	359.65	Reconciled
344229	21-NOV-13	PTI SAND & GRAVEL INC	1,021.04	26-NOV-13	1,021.04	Reconciled
344230	21-NOV-13	RAMIREZ, MARISOL	2,211.29			Negotiable
344231	21-NOV-13	RED WING SHOES	177.12			Negotiable
344232	21-NOV-13	RINCON TRUCK CENTER INC.	1,085.89	22-NOV-13	1,085.89	Reconciled
344233	21-NOV-13	ROBERT F. THORPE	3,132.00			Negotiable
344234	21-NOV-13	SANTA MARGARITA FORD	328.90	25-NOV-13	328.90	Reconciled

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 20
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344235		21-NOV-13	SECURTEC DISTRICT PATROL INC		2,200.00			Negotiable
344236		21-NOV-13	SEPARATION PROCESSES INC		10,097.80			Negotiable
344237		21-NOV-13	SHAMROCK SUPPLY CO INC		1,833.83	25-NOV-13	1,833.83	Reconciled
344238		21-NOV-13	SOUTHERN CALIFORNIA EDISON COMPANY		191,844.74	22-NOV-13	191,844.74	Reconciled
344239		21-NOV-13	SOUTHERN CALIFORNIA EDISON COMPANY		97,178.57	26-NOV-13	97,178.57	Reconciled
344240		21-NOV-13	SOUTHERN CALIFORNIA SECURITY CENTER, INC.		144.26			Negotiable
344241		21-NOV-13	STATE WATER RESOURCES CONTROL BOARD		31,215.00			Negotiable
344242		21-NOV-13	STATE WATER RESOURCES CONTROL BOARD		691.80	26-NOV-13	691.80	Reconciled
344243		21-NOV-13	SUN ENGINEERING SERVICES, INC		9,771.61			Negotiable
344244		21-NOV-13	SUNNYHILLS RESTORATION		3,502.89			Negotiable
344245		21-NOV-13	THE GAS COMPANY		3,652.36	26-NOV-13	3,652.36	Reconciled
344246		21-NOV-13	TRENCH SHORING COMPANY		296.02	25-NOV-13	296.02	Reconciled
344247		21-NOV-13	TRIPAC MARKETING INC		202.51			Negotiable
344248		21-NOV-13	TRUCPARCO		701.91			Negotiable
344249		21-NOV-13	UNITED PARCEL SERVICE INC		28.88	25-NOV-13	28.88	Reconciled
344250		21-NOV-13	UNIVAR USA INC		2,562.59	25-NOV-13	2,562.59	Reconciled
344251		21-NOV-13	URS CORPORATION		94,487.93			Negotiable
344252		21-NOV-13	VERIZON CALIFORNIA INC		429.53			Negotiable
344253		21-NOV-13	VULCAN MATERIALS COMPANY		1,379.36	25-NOV-13	1,379.36	Reconciled
344254		21-NOV-13	WALTERS WHOLESALE ELECTRIC		70.72			Negotiable
344255		21-NOV-13	WATERLINE TECHNOLOGIES INC		3,095.60	22-NOV-13	3,095.60	Reconciled
344256		21-NOV-13	WATERSMART SOFTWARE INC		7,500.00			Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 21
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344257		21-NOV-13	WAXIE'S ENTERPRISES, INC		2,367.81	26-NOV-13	2,367.81	Reconciled
344258		21-NOV-13	YORKE ENGINEERING LLC		8,009.00			Negotiable
344259		21-NOV-13	ZEE MEDICAL SERVICE CO		368.97	22-NOV-13	368.97	Reconciled
344260		25-NOV-13	MARVIN GARDENS LLC	HUNGTINGTON BEA	492.57	25-NOV-13	492.57	Reconciled
344261		26-NOV-13	UNITED STATES POSTIRVINE OFFICE		24,580.00			Negotiable
344262		27-NOV-13	ABC LIOVIN DRILLING		845.47			Negotiable
344263		27-NOV-13	ALLIED ELECTRONICS INC		375.94			Negotiable
344264		27-NOV-13	ALPHA TRAFFIC SERVICES, INC.		520.00			Negotiable
344265		27-NOV-13	AQUA BEN CORPORATION		3,757.05			Negotiable
344266		27-NOV-13	AQUFLOW		2,030.40			Negotiable
344267		27-NOV-13	ARCADIS U.S., INC.		1,213.80			Negotiable
344268		27-NOV-13	AT&T		4,766.89			Negotiable
344269		27-NOV-13	AUTOZONE PARTS, INC.		32.40			Negotiable
344270		27-NOV-13	BATTERIES PLUS AND BATTERIES PLUS BULBS		844.04			Negotiable
344271		27-NOV-13	BATTERIES PLUS AND BATTERIES PLUS BULBS		86.94			Negotiable
344272		27-NOV-13	BATTERY SPECIALTIES		366.47			Negotiable
344273		27-NOV-13	BILL'S SWEEPING SERVICE INC		488.75			Negotiable
344274		27-NOV-13	BIRCH HEIGHTS HOA		93.73			Negotiable
344275		27-NOV-13	BRENNTAG PACIFIC INC		2,060.00			Negotiable
344276		27-NOV-13	BRUCE NEWELL		1,316.00			Negotiable
344277		27-NOV-13	BUSH & ASSOCIATES INC		4,302.00			Negotiable
344278		27-NOV-13	C WELLS PIPELINE MATERIALS INC		939.60			Negotiable
344279		27-NOV-13	CAL MAX PROPERTIES		82.55			Negotiable
344280		27-NOV-13	CALIFORNIA BARRICADE INC		3,472.50			Negotiable
344281		27-NOV-13	CALIFORNIA PACIFIC HOMES		57.92			Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 22
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344282		27-NOV-13	CALIFORNIA URBAN WATER CONSERVATION COUNCIL		40.00			Negotiable
344283		27-NOV-13	CDW GOVERNMENT LLC		3,611.12			Negotiable
344284		27-NOV-13	CEDAR CREEK APARTMENTS		16.01			Negotiable
344285		27-NOV-13	CITY OF LAKE FOREST		8,712.48			Negotiable
344286		27-NOV-13	CITY OF SANTA ANA		55.52			Negotiable
344287		27-NOV-13	CLA-VAL COMPANY		2,570.75			Negotiable
344288		27-NOV-13	CLEARINGHOUSE		528.45			Negotiable
344289		27-NOV-13	COX COMMUNICATIONS		3,338.23			Negotiable
344290		27-NOV-13	CREATIVE ALLIANCE GROUP LLC		4,564.41			Negotiable
344291		27-NOV-13	D & G SIGNS		11,064.60			Negotiable
344292		27-NOV-13	D & H WATER SYSTEMS INC.		7,242.80			Negotiable
344293		27-NOV-13	DAY SCHOOL HARBOR		66.51			Negotiable
344294		27-NOV-13	DCSE INC		6,100.00			Negotiable
344295		27-NOV-13	DIETZ HYDROSEEDING CO		957.70			Negotiable
344296		27-NOV-13	EAST ORANGE COUNTY WATER DISTRICT		4,236.29			Negotiable
344297		27-NOV-13	ELECTRABOND		3,928.00			Negotiable
344298		27-NOV-13	ESSEX PORTFOLIO, LP		13.19			Negotiable
344299		27-NOV-13	EXECUTIVE LIGHTING & ELECTRIC		505.19			Negotiable
344300		27-NOV-13	FARRELL & ASSOCIATES		48.60			Negotiable
344301		27-NOV-13	FEDEX		654.07			Negotiable
344302		27-NOV-13	FERGUSON, DAVID		6,317.24			Negotiable
344303		27-NOV-13	FIRST CHOICE SERVICES		380.12			Negotiable
344304		27-NOV-13	FISERV		286.00			Negotiable

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344305	27-NOV-13	FISHER SCIENTIFIC COMPANY LLC		1,694.42	Voided
344306	27-NOV-13	FLEET SOLUTIONS LLC		1,937.39	Negotiable
344307	27-NOV-13	FLUID CONSERVATION SYSTEMS INC		204.96	Negotiable
344308	27-NOV-13	FRANCHISE TAX BOARD		797.88	Negotiable
344309	27-NOV-13	G.M. SAGER CONSTRUCTION CO, INC		25,850.00	Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 23
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344310		27-NOV-13	GJ AUTOMOTIVE EQUIPMENT CO INC		1,186.42			Negotiable
344311		27-NOV-13	GOTHIC LANDSCAPE		4,148.55			Negotiable
344312		27-NOV-13	GRAINGER		1,753.16			Negotiable
344313		27-NOV-13	HAAKER EQUIPMENT COMPANY		1,156.80			Negotiable
344314		27-NOV-13	HACH COMPANY		725.12			Negotiable
344315		27-NOV-13	HANU REDDY REALTY		129.87			Negotiable
344316		27-NOV-13	HARRINGTON INDUSTRIAL PLASTICS LLC		4,387.03			Negotiable
344317		27-NOV-13	HDR ENGINEERING INC		13,140.00			Negotiable
344318		27-NOV-13	HILL BROTHERS CHEMICAL COMPANY		3,882.60			Negotiable
344319		27-NOV-13	HOME DEPOT USA INC		46.67			Negotiable
344320		27-NOV-13	HOSE SOLUTIONS INC.		378.00			Negotiable
344321		27-NOV-13	IBM CORPORATION		11,580.00			Negotiable
344322		27-NOV-13	INDUSTRIAL NETWORKING SOLUTIONS		363.87			Negotiable
344323		27-NOV-13	INTERNAL REVENUE SERVICE		25.00			Negotiable
344324		27-NOV-13	INTERNATIONAL COUNCIL FOR MACHINERY LUBRICATION		400.00			Negotiable
344325		27-NOV-13	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		39.11			Negotiable
344326		27-NOV-13	IRVINE PACIFIC, LP		117.63			Negotiable
344327		27-NOV-13	IRVINE PIPE & SUPPLY INC		420.23			Negotiable
344328		27-NOV-13	IRWD EMPLOYEE ASSOCIATION		600.00			Negotiable
344329		27-NOV-13	JCI JONES CHEMICALS INC		2,167.36			Negotiable
344330		27-NOV-13	JOHN G. ALEVIZOS D.O. INC.		597.45			Negotiable
344331		27-NOV-13	KAYDAD LLC		153.34			Negotiable
344332		27-NOV-13	KERN COUNTY TREASURER TAX COLLECTOR		20.00			Negotiable
344333		27-NOV-13	KINGMAN COAST PROPERTY LLC		15.00			Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344334		27-NOV-13	KONECRANES INC		1,807.00			Negotiable
344335		27-NOV-13	KS DIRECT LLC		2,004.48			Negotiable
344336		27-NOV-13	LILLESTRAND LEADERSHIP CONSULTING, INC.		2,807.46			Negotiable
344337		27-NOV-13	LUBRICATION ENGINEERS, INC.		1,420.85			Negotiable
344338		27-NOV-13	MARVIN GARDENS LLC		2,593.70			Negotiable
344339		27-NOV-13	MC FADDEN-DALE INDUSTRIAL		100.86			Negotiable
344340		27-NOV-13	MC MASTER CARR SUPPLY CO		1,486.83			Negotiable
344341		27-NOV-13	MCCROMETER, INC.		344.73			Negotiable
344342		27-NOV-13	MCR TECHNOLOGIES INC		673.53			Negotiable
344343		27-NOV-13	MESA PRODUCTS, INC		232.77			Negotiable

Payment Document : IRWD CHECK

Payment Number	Date	Supplier Name	Payment Amount	Status
344384	27-NOV-13	SPECTRUM REAL ESTATE SERVICES	15.00	Negotiable
344385	27-NOV-13	SS MECHANICAL CORPORATION	51,816.80	Negotiable
344386	27-NOV-13	SS MECHANICAL CORPORATION	984,519.20	Negotiable
344387	27-NOV-13	STANTEC CONSULTING SERVICES INC.	1,128.00	Negotiable
344388	27-NOV-13	STATE WATER RESOURCES CONTROL BOARD	77,685.00	Negotiable
344389	27-NOV-13	TABRIZI, MARJANEH	34.15	Negotiable
344390	27-NOV-13	TALLEY INC	85.91	Negotiable
344391	27-NOV-13	TAYLOR MORRISON	15.94	Negotiable
344392	27-NOV-13	TESTAMERICA LABORATORIES, INC	210.00	Negotiable
344393	27-NOV-13	THE NEW HOME COMPANY	150.09	Negotiable
344394	27-NOV-13	TIC-IPG-COMMON	1,630.70	Negotiable
344395	27-NOV-13	TROPICAL PLAZA NURSERY INC	36,801.74	Negotiable
344396	27-NOV-13	TRUCPARCO	596.08	Negotiable
344397	27-NOV-13	TRUGREEN LANDCARE LLC	18,800.00	Negotiable
344398	27-NOV-13	ULTRA SCIENTIFIC	152.85	Negotiable
344399	27-NOV-13	UNIVAR USA INC	2,562.61	Negotiable
344400	27-NOV-13	VERIZON CALIFORNIA INC	91.03	Negotiable
344401	27-NOV-13	VICTORY FURNITURE	39.12	Negotiable
344402	27-NOV-13	WALTERS WHOLESALE ELECTRIC	486.07	Negotiable
344403	27-NOV-13	WAXIE'S ENTERPRISES, INC	51.03	Negotiable
344404	27-NOV-13	WESTIN ENGINEERING, INC	23,412.50	Negotiable
344405	27-NOV-13	WILDERMUTH ENVIRONMENTAL INC	2,202.50	Negotiable
344406	27-NOV-13	ZEBRON CONTRACTING INC	4,410.00	Negotiable
344407	27-NOV-13	AST CORPORATION NAPERVILLE	75,000.00	Negotiable
344408	27-NOV-13	Jacob Broderick	107.85	Negotiable
344409	27-NOV-13	Erwin, Kenneth D (Ken)	20.00	Negotiable
344410	27-NOV-13	Ramos, Martha A (Marta)	197.81	Negotiable

IRWD Ledger Payment Register For 01-NOV-13 To 30-NOV-13 Report Date: 02-DEC-2013 15:15
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 27
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344411		27-NOV-13	Hoffman, Michael S (Mike)		99.00			Negotiable
344412		27-NOV-13	Reed, Shannon (Shannon)		70.31			Negotiable
344413		27-NOV-13	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	1,570.00			Negotiable
Payment Document Subtotal:					5,623,158.08		2,306,211.18	

Payment Document : IRWD Wire

Payment Number	Date	Supplier Name	Site	Payment Amount	Status
10159	07-NOV-13	CALPERS	SACRAMENTO 1	377,181.40	Negotiable
10160	05-NOV-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	1,407.63	Negotiable
10161	05-NOV-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	8,233.05	Negotiable
10162	12-NOV-13	ABOULELA, KAL	IRVINE	15.00	Negotiable
10163	12-NOV-13	BOETTCHER, TIM	FULLERTON	34.41	Negotiable
10164	12-NOV-13	SIEGEL, JORDAN	OCEANSIDE	24.38	Negotiable
10165	12-NOV-13	EVANS, CORY	TUSTIN	12.58	Negotiable
10166	12-NOV-13	EHSAN, MAHSHID	IRVINE	25.89	Negotiable
10167	12-NOV-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	6,030.89	Negotiable
10168	15-NOV-13	INTERNAL REVENUE SERVICE	FRESNO	159,331.84	Negotiable
10169	15-NOV-13	FRANCHISE TAX BOARD	SACRAMENTO	43,402.03	Negotiable
10170	15-NOV-13	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	8,785.22	Negotiable
10171	15-NOV-13	ORDONEZ, CYNTHIA	DESERT HOT	500.17	Negotiable

10172		15-NOV-13	MARIE CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SPR SACRAMENTO	1,991.98		Negotiable
10173		15-NOV-13	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	9,728.35		Negotiable
10174		15-NOV-13	GREAT WEST	DENVER	85,290.67		Negotiable

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 02-DEC-2013 15:15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 28
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
10175		15-NOV-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	6,294.90			Negotiable
10176		15-NOV-13	SUMITOMO MITSUI BANKING CORPORAION	NEW YORK	1,066.16			Negotiable
10177		15-NOV-13	U.S. BANK NATIONALST. ASSOCIATION	ST. LOUIS	3,567.11			Negotiable
10178		15-NOV-13	BANK OF AMERICA	SAN FRANCISCO	3,605.47			Negotiable
10179		15-NOV-13	CALPERS	SACRAMENTO	84,545.29			Negotiable
10180		15-NOV-13	SUMITOMO MITSUI BANKING CORPORAION	NEW YORK	2,949.04			Negotiable
10181		15-NOV-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	1,689.10			Negotiable
10182		15-NOV-13	INTERNAL REVENUE SERVICE	FRESNO	183,340.05			Negotiable
10183		15-NOV-13	FRANCHISE TAX BOARD	SACRAMENTO	48,705.14			Negotiable
10184		15-NOV-13	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	9,142.46			Negotiable
10185		15-NOV-13	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17			Negotiable
10186		15-NOV-13	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,425.36			Negotiable
10187		15-NOV-13	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	10,186.05			Negotiable
10188		15-NOV-13	GREAT WEST	DENVER	97,159.34			Negotiable
10189		19-NOV-13	CALPERS	SACRAMENTO	83,487.41			Negotiable
10190		19-NOV-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	8,338.54			Negotiable
10191		19-NOV-13	CALPERS	SACRAMENTO	83,652.43			Negotiable
10192		19-NOV-13	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	796,568.90			Negotiable
10193		20-NOV-13	CALPERS	SACRAMENTO	84,214.14			Negotiable
10194		25-NOV-13	J.R. FILANC CONSTRUCTION COMPANY INC.	ESCONDIDO	179,237.25			Negotiable
10195		25-NOV-13	FILANC-BALFOUR BEATY JV	WEST COVINA	1,599,891.23			Negotiable

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 02-DEC-2013 15:15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 29
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
10196		26-NOV-13	J.R. FILANC CONSTRUCTION COMPANY INC.	ESCONDIDO	274,156.49			Negotiable
10197		26-NOV-13	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	913,718.89			Negotiable
10198		27-NOV-13	U.S. BANK NATIONALST. ASSOCIATION	ST. LOUIS	9,931.56			Negotiable
10199		27-NOV-13	INTERNAL REVENUE SERVICE	FRESNO	151,635.81			Negotiable
10200		27-NOV-13	FRANCHISE TAX BOARD	SACRAMENTO	41,046.26			Negotiable
10201		27-NOV-13	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	7,576.05			Negotiable
10202		27-NOV-13	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17			Negotiable
10203		27-NOV-13	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,425.36			Negotiable

10204	27-NOV-13	EMPLOYEE BENEFIT	PAY	9,321.31	Negotiable
		SPECIALIST, INC			
10205	27-NOV-13	GREAT WEST	DENVER	85,943.38	Negotiable
Payment Document Subtotal:				----- 5,488,816.31	-----
Bank Account Subtotal :				=====	=====
				11,111,974.39	2,306,211.18
				=====	=====
Report Count : 730	Report Total:	11,111,974.39	2,306,211.18	=====	=====

*** End of Report ***

Exhibit "E"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.
November 2013

NAME	CHECK NUMBER	CHECK DATE	TRANSACTION	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Scarberry, Edward A	343742	7-Nov-13	\$ 181.02	Lunch <20	RTC Training and Vendor Onsite
Oldewage, Lars D (Lars)	343746	7-Nov-13	\$ 177.00	Membership/Certification	ACS membership renewal
Nomura, Scott C (Scott)	343749	7-Nov-13	\$ 108.00	Other(Misc)	safety shoes
Coria, Alejandro (Alex)	343910	14-Nov-13	\$ 230.00	Membership/Certification	SWRCB WW Grade II Certificate Reimbursement
Hayden, David M (Dave)	343913	14-Nov-13	\$ 250.00	Other(Misc)	\$250 Retirement Gift for Mark Gingras
Leal, Eliberto (Eliberto)	343914	14-Nov-13	\$ 140.00	Membership/Certification	CWEA Membership and Grade 2 Collections System Certificate Renewal Fee
Larson, Jane E (Jane)	343915	14-Nov-13	\$ 106.28	Mileage - 10/19/2013	COSS Saftey Professional Training, San Diego, CA
Larson, Jane E (Jane)	343915	14-Nov-13	\$ 115.26	Mileage - 10/16/2013	COSS Saftey Professional Training, San Diego, CA
Larson, Jane E (Jane)	343915	14-Nov-13	\$ 115.26	Mileage - 10/23/2013	COSS Saftey Professional Training, San Diego, CA
Larson, Jane E (Jane)	343915	14-Nov-13	\$ 115.26	Mileage - 10/30/2013	COSS Saftey Professional Training, San Diego, CA
Larson, Jane E (Jane)	343915	14-Nov-13	\$ 115.26	Mileage - 11/6/2013	COSS Saftey Professional Training, San Diego, CA
Vu, Johnny	343916	14-Nov-13	\$ 142.56	Other(Misc)	safety shoes
Oldewage, Lars D (Lars)	343917	14-Nov-13	\$ 645.00	Registration Fees	AWWA Water Quality Technology Conference
Torres, Richard	344120	15-Nov-13	\$ 228.66	Other(Misc)	CWEA Tristate 28th Tristate Seminar
Fike, Christopher A	344126	21-Nov-13	\$ 184.00	Membership/Certification	CWEA Renewal
Martin, Didene J (De)	344127	21-Nov-13	\$ 196.20	Other(Misc)	safety shoes
Reinhart, Douglas J	344128	21-Nov-13	\$ 246.56	Lodging	Rm & Tax at Hyatt Regency, San Diego, CalDesal Annual Conference
Smyth, Jeffrey S (Jeff)	344132	21-Nov-13	\$ 115.00	Membership/Certification	Professional Engineering License Renewal M34737
Nguyen, Quynh	344135	21-Nov-13	\$ 191.48	Other(Misc)	Meeting Lunch ID Consolidation 14NOV2013
LaMar, Steven E	344136	21-Nov-13	\$ 246.56	Lodging	Rm & Tax at Hyatt Regency, San Diego, CalDesal Annual Conference
Broderick, Jacob	344408	27-Nov-13	\$ 107.85	Other(Misc)	safety shoes
Ramos, Martha A (Marta)	344410	27-Nov-13	\$ 113.82	Other(Misc)	Service Awards & Mileage
Total			\$ 4,071.03		

December 16, 2013

Prepared by: T. Fournier/J. Davis

Submitted by: R. Jacobson/Cheryl Clary

Approved by: Paul Cook

CONSENT CALENDAR

PROPOSED 2014 INVESTMENT POLICY

SUMMARY:

Each year, the District is required to adopt an Investment Policy. Changes to the policy from year-to-year are required to conform to any amendments to the California Government Code governing investment of public funds. During 2013, there were no significant changes to the California Government Code: and the proposed policy for 2014 has no change from the policy adopted for 2013. Staff is requesting that the Board approve the proposed policy attached as Exhibit "A".

BACKGROUND:

Staff annually submits a Statement of Investment Policy to the Board of Directors for approval. The annual submittal generally incorporates amendments to investment-related Government Code sections, policy objectives, delegation of authority and a detailed schedule of authorized investments. The proposed 2014 Investment Policy and related Resolution are attached as Exhibits "A" and Exhibit "B", respectively. During 2013, there were no significant amendments to the Government Code section relating to authorized investments for local agencies, and therefore the 2014 proposed policy is the same as the 2013 Investment Policy.

As specified in the Government Code, the Board's delegation of authority to the Treasurer and Assistant Treasurer(s) to manage the District's investment program is limited to a one year period, renewable annually. The recommended 2014 Investment Policy includes continuation of this annual delegation of authority to the Treasurer and Assistant Treasurer(s).

Given the conservative nature of the State codes and the Board's additional restrictions, staff believes the authorized investments in the recommended 2014 Investment Policy are sufficiently limited to ensure appropriate investments while retaining some degree of flexibility to take advantage of changing market opportunities. Additionally, the recommended policy provides authority for the Finance and Personnel Committee to further restrict, but not liberalize, authorized investments. Any liberalization of authorized investments would first require the approval of the Board of Directors.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This activity is categorically exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Sections 15301 and 15302.

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on December 9, 2013.

RECOMMENDATION:

THAT THE BOARD APPROVE OF THE PROPOSED 2014 INVESTMENT POLICY AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2013-___

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT APPROVING INVESTMENT
POLICY AND AUTHORIZING THE TREASURER AND ASSISTANT
TREASURERS TO INVEST AND REINVEST FUNDS OF THE
DISTRICT AND OF EACH OF ITS IMPROVEMENT DISTRICTS
AND TO SELL AND EXCHANGE SECURITIES

LIST OF EXHIBITS:

Exhibit “A” – Proposed 2014 Investment Policy

Exhibit “B” – Resolution Adopting 2014 Investment Policy

Exhibit “A”

IRVINE RANCH WATER DISTRICT PROPOSED 2014 INVESTMENT POLICY

Introduction:

This investment policy is intended to establish a clear understanding of the District’s authorized investment activities for members of the public, the Board of Directors of the Irvine Ranch Water District (the “District”), District management and outside investment professionals.

Policy:

It is the policy of the District to invest its funds in a prudent and professional manner which will provide maximum security of principal while meeting required cash flow demands and conforming to all State statutes governing the investment of public funds, the District’s investment policies, and prudent cash management principles.

Scope:

This investment policy applies to all District funds that are under the direct oversight of the Board of Directors. The investment of any bond proceeds or related funds will also be made in accordance with this investment policy.

Standard of Care:

The Board of Directors and those persons authorized to make investment decisions on behalf of the District are trustees of public funds. The standard of care to be used in all investment transactions shall be the “prudent person” standard and shall be applied in the context of managing the overall portfolio (Government Code Section 53600.3). The “prudent person” standard is:

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived.

Officers and employees of the District involved in the investment process shall refrain from personal business activities that could conflict with proper execution of the investment program or could impair their ability to make impartial investment decisions.

“Designated employees” of the District involved in the investment of District funds, which includes the Treasurer and Assistant Treasurer(s), shall disclose all information at the times and in the manner required by the District’s Conflict of Interest Code.

Objectives:

The primary objectives of the District's investment activities, in priority order, are as follows:

1. **Safety:** Safety of principal is the foremost objective of the investment program. Investments of the District shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. Accordingly, diversification by issuer, type, and maturity of securities will be made to avoid or minimize potential losses on individual securities.
2. **Liquidity:** The District's investment portfolio will remain sufficiently liquid to enable the District to meet all operating and capital cash requirements. To the extent required, this liquidity will be maintained through the purchase of securities with active secondary or resale markets and with short-term maturities so as to minimize market risk on the market price of the securities.
3. **Yield:** The District's investment portfolio shall be designed with the objective of attaining the highest rate of return commensurate with the above requirements for the preservation of capital and the maintenance of adequate liquidity.

Delegation of Authority:

In accordance with Government Code Sections 53607 and 53608, the Board of Directors has delegated to the District's Treasurer and Assistant Treasurer(s), acting singly, the authority to manage the District's investment program and to provide for the safekeeping of securities. This delegated authority is effective for the 2014 calendar year (Resolution 2013-___).

Authorized Investments:

The District is authorized to invest its funds pursuant to the following State codes:

Government Code:

- Section 53600 et seq. - General investments
- Section 16429.1 - Local Agency Investment Fund (LAIF)
- Section 53684 - Orange County Treasury Pool (not currently authorized by the Board of Directors)
- Section 5920 - Public finance contracts

Water Code:

- Section 35912 - Real estate

The Treasurer and Assistant Treasurer(s) are authorized to invest District funds in accordance with these Code sections, subject to certain restrictions imposed by the District's Board of Directors. These authorized investments and restrictions are shown in Exhibit "A".

Whenever practical, a competitive process shall be used for the purchase and sale of securities.

The Board of Directors has approved investing in securities with terms or remaining maturities in excess of five years as part of the District's investment program, but that no such investments are to be made without the concurrence of the Finance and Personnel Committee.

Authorized Financial Institutions:

Only financial institutions designated as "primary dealers" by the Federal Reserve Bank of New York, or other dealers that qualify under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule), are authorized to provide investment services to the District. The Treasurer may limit the number of dealers authorized to provide such services.

A copy of the District's annual investment policy shall be provided to each institution authorized by the Treasurer to provide services to the District. Prior to providing investment services, such financial institution shall acknowledge in writing that it has received the District's investment policy and that all persons handling the District's account have reviewed the policy.

All authorized financial institutions are required to send the District unaudited quarterly and audited annual financial statements or provide electronic access to the financial statements.

Safekeeping and Custody:

All security transactions entered into by the District shall be conducted on a delivery-versus-payment (DVP) basis. All securities owned by the District shall be delivered to the District by book entry, physical delivery, or a third party custodial agreement. Any third party custodian shall be designated by the Treasurer, and all securities held by such custodian, including book entry and physical securities, shall be held in a manner that clearly establishes the District's right of ownership. The District's custodial agent shall meet the requirements of Government Code Section 53608. The District's deposits with LAIF or any other authorized investment pool shall be evidenced by the standard reporting requirements of LAIF or the investment pool.

Reporting:

The Treasurer shall file a monthly report with the Board of Directors at a public meeting that shows the status of the District's cash and securities, and all related investment transactions that occurred during the month. The status report shall also be filed with the District's General Manager and will include at least the following information:

- Type of investment
- Issuing institution
- Par amount
- Coupon and/or yield
- Original cost
- Market value, including source
- Maturity date

In addition, the status report shall include the portfolio's rate of return for the month, the average weighted life of the portfolio, a statement regarding the portfolio's compliance with the District's investment policy, and a statement regarding the District's ability to meet expenditure requirements over the following six months. (Government Code Sections 53607 and 53646)

The Treasurer shall also file a quarterly report with the Board of Directors at a public meeting with respect to the District's real estate investments and any related transactions which occurred during such quarter. The real estate report will be structured to comply as closely as possible with the information requirements of G.C. Section 53646.

Investment Policy Adoption and Amendments:

The Treasurer shall submit an investment policy at least annually to the Board of Directors at a public meeting. (Government Code Section 53646) The policy shall be effective for the calendar year specified. If the Board of Directors does not approve an investment policy for any calendar year, then the investment policy for the previous calendar year shall remain in effect until a new policy is approved.

The District's Finance and Personnel Committee is authorized to make changes in the investment policy from time to time as may be necessary, provided that such changes may only be more restrictive in nature. Any changes that would liberalize the investment policy shall be approved by the Board of Directors before becoming effective. Any changes in the investment policy by the Finance and Personnel Committee shall be reported to the Board of Directors at its next regular meeting.

**IRVINE RANCH WATER DISTRICT
2014 AUTHORIZED INVESTMENTS**

TYPE OF INVESTMENT	MAJOR PROVISIONS (G.C. 53601 or 53635 except as noted)	ADDITIONAL RESTRICTIONS IMPOSED BY THE BOARD OF DIRECTORS
California State and Local Agency Bonds, Notes and Warrants	Registered State warrants, treasury notes or bonds. Any bonds, notes, warrants or other evidences of indebtedness of any local agency.	Limited to securities approved by the Finance and Personnel Committee.
U.S. Treasury and Agency Obligations	U.S. Treasury notes, bonds, bills or certificates of indebtedness or those for which the full faith and credit of the United States are pledged for the payment of principal and interest. Also federal agency or U.S. government sponsored obligations.	No additional restrictions.
Registered treasury notes or bonds of California or other 49 United States	Registered treasury notes or bonds of any of the other 49 United States in addition to California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by a state or by a department, board, agency, or authority of any of the other 49 United States, in addition to California.	Limited to states and/or agencies approved by the Finance and Personnel Committee.
Banker's Acceptances	Must be eligible for discount at the Federal Reserve Bank. May not exceed 180 days maturity or 40% of local agency funds. No more than 30% of local agency funds may be invested in banker's acceptances of any one commercial bank.	Limited to domestic and foreign banks approved by the Finance and Personnel Committee.
Commercial Paper	Must be of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by a nationally recognized rating service. Issuers must be organized and operating in U.S., have assets exceeding \$500 million and be rated "A" or better. May not exceed 270 days maturity. May not exceed 25% of a local agency's funds.	Limited to corporations approved by the Finance and Personnel Committee.
Negotiable Certificates of Deposit	Issued by national or state-chartered banks, savings associations, federal associations, or state or federal credit unions or state-licensed branches of a foreign bank. Specified restrictions on credit unions. Limited to 30% of local agency funds.	Limited to domestic and foreign banks and thrift institutions approved by the Finance and Personnel Committee.

**IRVINE RANCH WATER DISTRICT
2014 AUTHORIZED INVESTMENTS**

TYPE OF INVESTMENT	MAJOR PROVISIONS (G.C. 53601 or 53635 except as noted)	ADDITIONAL RESTRICTIONS IMPOSED BY THE BOARD OF DIRECTORS
Repurchase and Reverse Repurchase Agreements	Repurchase agreements are limited to one year or less and collateral shall be valued at least 102%. Reverse repurchase agreements, including securities lending agreements, are limited to 20% of the base portfolio value and to terms of 92 days or less unless a spread is guaranteed in writing. Securities being sold on reverse must be owned by the agency for at least 30 days. Reverse repurchase agreements may be made with primary dealers of the Federal Reserve Bank of New York, or nationally and state chartered banks with a significant banking relationship with the local agency.	All reverse repurchase agreements must have the prior approval of the Finance and Personnel Committee. All repurchase agreements must be made only with primary dealers of the Federal Reserve Bank of New York, or nationally and state chartered banks with a significant banking relationship with the local agency.
Medium Term Corporate Notes	All debt securities issued by U.S. corporations or depository institutions licensed by the U.S. or any state and operating within the U.S. Institutions rated "A" or better. May not exceed five years maturity, or 30% of funds.	For depository institutions, same as shown under Negotiable Certificates of Deposit. For corporations, limited to those approved by the Finance and Personnel Committee.
Shares of Beneficial Interest	Issued by diversified management companies investing in securities as specified. Companies shall have highest rating assigned by not less than two nationally recognized statistical rating organizations or shall have a registered and experienced investment advisor. Purchase price shall not include any commissions. Limited to 20% of funds of which no more than 10% may be with any one fund.	No additional restrictions.
Shares of Beneficial Interest - (JPA)	Issued by a joint powers authority (JPA) organized pursuant to Section 6509.7 investing in authorized securities as specified. The issuing JPA shall retain an investment advisor that is registered or exempt from registration with the SEC, has not less than five years of investment experience and meets the minimum requirement for assets under management.	No investment in shares of beneficial interest issued by a joint powers authority shall be made without the prior approval of the Finance and Personnel Committee.

**IRVINE RANCH WATER DISTRICT
2014 AUTHORIZED INVESTMENTS**

TYPE OF INVESTMENT	MAJOR PROVISIONS (G.C. 53601 or 53635 except as noted)	ADDITIONAL RESTRICTIONS IMPOSED BY THE BOARD OF DIRECTORS
Collateralized Negotiable Securities	Notes, bonds or obligations secured by a valid first priority security interest in specified securities. Collateral to be placed by delivery or book-entry into the custody of a trust company/department not affiliated with the issuer. Security interest perfected in accordance with Uniform Commercial Code or applicable federal regulations. Collateral requirements are the same as required to secure bank deposits made by local agencies.	No investment in collateralized negotiable securities shall be made without the prior approval of the Finance and Personnel Committee.
Collateralized Mortgage Obligations and Asset-Backed Securities	Mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond of a maximum of 5 years maturity. Securities must be issued by an issuer having an "A" or higher rating by a nationally recognized rating service. Securities themselves must have an "AA" rating and may not exceed 20% of surplus funds.	No investment in collateralized mortgage obligations or mortgage-backed securities shall be made without the prior approval of the Finance and Personnel Committee.
Financial Futures and Options	Authorizes the investment in financial futures and financial option contracts in any of the investment categories contained in G.C. Section 53601. (Government Code Section 53601.1)	No investments in financial futures and financial option contracts are to be made without the prior approval of the Finance and Personnel Committee.
Prohibited Investments	A local agency shall not invest any funds in inverse floaters, range notes, and mortgage derived interest-only strips, or any security that could result in zero interest accrual if held to maturity. (Government Code Sections 53601.6 and 53631.5)	No additional restrictions.

**IRVINE RANCH WATER DISTRICT
2014 AUTHORIZED INVESTMENTS**

TYPE OF INVESTMENT	MAJOR PROVISIONS (G.C. 53601 or 53635 except as noted)	ADDITIONAL RESTRICTIONS IMPOSED BY THE BOARD OF DIRECTORS
Local Agency Investment Fund	Permits a local agency to deposit funds with the State Treasurer for the purpose of investment in securities prescribed in Government Code Section 16430. (Government Code Section 16429.1 et seq.)	No additional restrictions.
Orange County Treasury Pool	Permits a local agency to deposit funds with the County Treasurer for investment in securities prescribed in Government Code Section 53601 or 53635. (Government Code Section 53684)	No investments are to be made with the Orange County Treasury Pool without the prior approval of the Board of Directors.
Inactive Public Deposits	Deposits or contracts with Federal Reserve System banks insured by FDIC, savings associations or federal associations which are home loan bank members or insured by FSLIC, and state or federal credit unions. Specified restrictions on credit unions.	No inactive public deposits are to be made without the prior approval of the Finance and Personnel Committee.
Public Finance Contracts	Includes interest rate swap agreements, currency swap agreements, forward payment conversion agreements, futures, or index-based agreements to hedge payment, currency, rate, spread or similar exposure. Requires certain determinations by governing body. (Government Code Section 5920 et seq.)	No public finance contracts may be entered into without the prior approval of the Board of Directors. The Board is authorized to approve the general parameters for swap transactions including transaction type (i.e. fixed receiver, fixed payer or basis trade), maximum notional amount(s) and maximum duration(s). The Finance and Personnel Committee shall structure specific parameters for individual transactions including notional amount, transaction timing, counterparty selection, index to be used and ISDA agreement approval. (Resolution 2003-36)
Real Estate Investments	Authorized to invest no more than 30% of the District's Replacement Fund in real estate located in Orange County. (Water Code Section 35912)	Real estate investments shall be made in accordance with existing Board policies (Resolution 1990-30). All real estate investments must be individually approved by the Board of Directors.

Exhibit "B"

RESOLUTION NO. 2013-___

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT APPROVING INVESTMENT
POLICY AND AUTHORIZING THE TREASURER AND ASSISTANT
TREASURERS TO INVEST AND REINVEST FUNDS OF THE
DISTRICT AND OF EACH OF ITS IMPROVEMENT DISTRICTS
AND TO SELL AND EXCHANGE SECURITIES**

WHEREAS, the Treasurer of the Irvine Ranch Water District is permitted by Section 53646 of the California Government Code to annually render to the Board of Directors a statement of investment policy, which the Board shall consider at a public meeting; and

WHEREAS, in accordance with such requirement, the Treasurer has presented an investment policy to the Board at this meeting; and

WHEREAS, Section 53607 of the California Government Code permits the Board of Directors to delegate to the Treasurer of the District the Board's authority to invest or reinvest funds of the District or sell or exchange securities so purchased, limits the delegation to a one-year period, allows renewal by the Board on an annual basis and establishes a requirement for monthly reporting of the transactions by the Treasurer to the Board; and

WHEREAS, Section 53608 of the California Government Code permits the Board of Directors to delegate to the Treasurer of the District the Board's authority to deposit for safekeeping the bonds, notes, bills, debentures, obligations, certificates of indebtedness, warrants or other evidences of indebtedness in which money of the District is invested; and

WHEREAS, under Section 53635.2 of the California Government Code, funds of the District may be deposited with certain financial institutions; and

WHEREAS, pursuant to Section V, Paragraph 8 of the District's Bylaws, the Board has appointed one or more Assistant Treasurers;

WHEREAS, Resolution No. 2012-56 contains the previous delegation by this Board of the authority to invest or reinvest funds, sell or exchange securities, deposit investments for safekeeping, and deposit funds;

NOW THEREFORE, the Board of Directors of Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. The 2014 Investment Policy of the District is approved in the form presented by the Treasurer to this meeting, to be effective January 1, 2014, and remain in effect until it is revoked or is superseded.

Section 2. The authority of the Board of Directors to invest or reinvest funds of the District and its improvement districts or sell or exchange securities so purchased, subject to the requirements of the Investment Policy approved hereby, is hereby delegated to each of the Treasurer and the Assistant Treasurer(s), acting singly. Pursuant to Government Code Section 53607, the Treasurer shall assume full responsibility for those transactions until this delegation is revoked or expires. This delegation shall become effective January 1, 2014, and shall remain in effect until it is revoked or is superseded by a subsequent delegation.

Section 3. The authority of the Board of Directors to deposit for safekeeping the bonds, notes, bills, debentures, obligations, certificates of indebtedness, warrants or other evidences of instruments in which money of the District and its improvement districts is invested, subject to the requirements of the investment policy approved hereby, is hereby delegated to each of the Treasurer and the Assistant Treasurer(s), acting singly. This delegation shall become effective January 1, 2014, and shall remain in effect until it is revoked or is superseded by a subsequent delegation.

ADOPTED, SIGNED AND APPROVED this ____ day of _____, 2013.

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

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

APPROVED AS TO FORM:

BOWIE, ARNESON,
WILES & GIANNONE
Legal Counsel - IRWD

By _____
jah172991

December 16, 2013

Prepared by: Christopher Smithson

Submitted by: Cheryl Clary

Approved by: Paul Cook

CONSENT CALENDAR

PROPOSED WATER, SEWER AND RECYCLED WATER REGIONAL CAPITAL COST ALLOCATIONS

SUMMARY:

The Board approved the consolidation and formation of several new improvement districts (IDs) as part of the Long Term Financial Plan (LTFP) at the Board Public Hearing on November 11, 2013. With the formation of the new IDs, the following additional steps are required:

- Approve new regional capital cost allocations;
- Establish /adjust connection fees.

Staff recommends approval of the regional capital cost allocations to the Board.

- Regional capital cost allocations for potable water shown in Exhibit "A";
- Regional capital cost allocations for sewer shown in Exhibit "B"; and
- Regional capital cost allocations for recycled water shown in Exhibit "C"

The recommendation for the updated reconnection fees is included in a separate write-up.

BACKGROUND:

The master consolidation resulting from the LTFP included significant changes for both the remaining and newly formed IDs. Updating regional capital cost allocations is an essential next step in the consolidation process. The attached exhibits identify the current splits, last approved in 2008, and the proposed allocations based upon updated demand projections and new ID formations. The modifications resulting from the master consolidation include:

- An allocation for the newly formed IDs 125/225 identified as the developed ID which consists of the developed areas from IDs 120/121/130/135/140/150/160/161 /182/184/186 for water and 220/221/230/235/250/260/261/282/284/286 for sewer;
- An allocation for IDs 110/210 which includes all developed areas that have no available general obligation authority including those areas that consolidated with IRWD (OPA, SAH, etc.);
- The allocation for ID 153/253 which includes future development in the former areas identified as 130/150/230/250 as well as the development from 153/253; and
- The formation of new IDs 185/285, identified as the future development from the opportunity study area (OSA) excluding the existing Portola development (IDs 188/288).

The Portola development (IDs 188/288) and the former Marine bases (IDs 112/212 El Toro and 113/213 Tustin) are included in the regional allocations with no change to existing borders.

Staff suggests that the Committee recommend approval of the revised regional capital cost allocations to the Board.

FISCAL IMPACTS:

The net fiscal impacts will be minimal to the District as a whole and vary based on the improvement district.

ENVIRONMENTAL COMPLIANCE:

Not Applicable

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on December 9, 2013.

RECOMMENDATION:

THAT THE BOARD APPROVE OF THE UPDATED REGIONAL CAPITAL COST ALLOCATION TABLES.

LIST OF EXHIBITS:

- Exhibit "A" – Potable Water- Regional Capital Cost Allocations
- Exhibit "B" – Sewer- Regional Capital Cost Allocations
- Exhibit "C" – Recycled Water- Regional Capital Cost Allocations

Exhibit "A"

Potable Water

Regional Capital Cost Allocations

	New (2013)		Old (2008)	
	Demand (cfs)	Splits	Demand (cfs)	Splits
Improvement District 110	38.29	33.3%		
Improvement District 112 ET	3.76	3.3%	3.27	4.3%
Improvement District 113 TU	3.40	3.0%	4.01	5.2%
Improvement District 120/1			11.74	15.3%
Improvement District 125 (New)	53.69	46.6%		
Improvement District 130			8.46	11.0%
Improvement District 140			3.23	4.2%
Improvement District 150			23.93	31.2%
Improvement District 153	12.82	11.2%	2.60	3.4%
Improvement District 154	0.47	0.4%	1.12	1.5%
Improvement District 160/1			6.16	8.0%
Improvement District 182			2.31	3.0%
Improvement District 184			2.13	2.8%
Improvement District 185 (New)	1.90	1.7%		
Improvement District 186			0.76	1.0%
Improvement District 188	0.53	0.5%	0.76	1.0%
Improvement District 190			0.63	0.8%
Planning Area IBC			5.65	7.3%
Grand Total	114.86	100%	76.76	100%

Improvement District 110		29.81
Improvement District 135		14.84
Improvement District 700		3.86
Improvement District 189		0.37
Santiago Area		0.7
TCWD in Portola Hills	0.32	0.32
Total Potable Demands	115.18	126.66

Exhibit "B"

Sewer

Regional Capital Cost Allocations

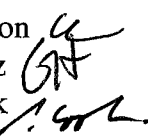
		New (2013)		Old (2008)	
		Flow (mgd)	Splits	Flow (mgd)	Splits
Improvement District	210	3.77	8.1%		
Improvement District	211 UCI			3.15	8.9%
Improvement District	212 ET	1.50	3.2%	1.35	3.8%
Improvement District	213 TU	1.52	3.3%	1.78	5.0%
Improvement District	220/1			6.32	17.8%
Improvement District	225 (New)	33.06	71.3%		
Improvement District	230			4.02	11.3%
Improvement District	240	1.21	2.6%	1.18	3.3%
Improvement District	250			9.81	27.7%
Improvement District	253	4.46	9.6%	0.35	1.0%
Improvement District	256 (New)	0.15	0.3%		
Improvement District	260/1			2.56	7.2%
Improvement District	282			0.70	2.0%
Improvement District	284			0.75	2.1%
Improvement District	285 (New)	0.59	1.3%		
Improvement District	286			0.22	0.6%
Improvement District	288	0.14	0.3%	0.22	0.6%
Improvement District	290			0.13	0.4%
Planning Area	IBC			2.93	8.3%
Grand Total		46.42	100%	35.47	100%
Improvement District	210			3.71	
Improvement District	235			5.42	
Improvement District	289			0.10	
Total Sewer		46.42		44.70	

December 16, 2013

Prepared by: C. Compton

Submitted by: G. Heiertz

Approved by: Paul Cook



CONSENT CALENDAR

SOUTH ORANGE COUNTY AGENCIES' METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA REPRESENTATIVE SELECTION PROCESS

SUMMARY:

The Municipal Water District of Orange County (MWDOC) is a member agency of the Metropolitan Water District of Southern California (MET). As the member agency serving Orange County, MWDOC has four appointments to the MET Board of Directors. In 2011, MWDOC and 10 of its South County member agencies (South County Agencies) entered into an agreement to facilitate a continued working relationship. As part of that agreement the South County Agencies were given the ability to nominate a candidate for appointment as one of MWDOC's four representatives on the MET Board of Directors. The agreement calls on the South County Agencies to develop a nomination process for selecting the South County candidate, and that this process be agreed to by all 10 South County Agencies.

A subgroup of the South County Agencies has developed and recommended a process by which the South Orange County member agencies would nominate a candidate to serve as MWDOC's representative on the MET Board of Directors. A copy of the proposed nomination process is attached as Exhibit "A". Staff recommends that the Board approve and agree to the proposed nomination process.

BACKGROUND:

In 2007, six South Orange County water agencies comprised of the El Toro Water District, Trabuco Canyon Water District, Santa Margarita Water District, Irvine Ranch Water District, Moulton Niguel Water District and South Coast Water District issued a white paper regarding the formation of a South Orange County Water Authority. The white paper addressed issues associated with the formation of such an agency if certain changes were not made in MWDOC's operations. As a result MWDOC and the six South Orange County water agencies funded a study to review the governance options for MWDOC.

The ultimate result of the governance study was that MWDOC and its member agencies entered into a comprehensive agreement that addressed the concerns raised by the six South Orange County agencies, and kept MWDOC as the wholesale regional planning agency for Orange County. The comprehensive agreement was signed in 2011 and titled an "Agreement between MWDOC and its Member Agencies on Budget, Activities, Charges, and Other Issues" (Agreement). A copy of this agreement is attached as Exhibit "B".

MWDOC/Member Agency Agreement Provisions on the Selection of MET Directors

Section 7 of the Agreement dealt with MWDOC's four appointments to the MET Board of Directors, and granted MWDOC's member agencies the ability to nominate appointees for two of MWDOC's four MET Board of Directors appointments. Section 7.1.3 further provided that:

“When the first MET Director vacancy occurs following the Effective Date, the South County Agencies that are Member Agency Parties (“South County Parities”) may nominate a candidate of their choosing (“MET Candidate”) through a process to which they all agree, directly to the MWDOC President and Board. In the absence of agreement among the South County Parities, the nomination(s) shall be determined by a “one agency, one vote” process among the South County Parties. Nominations shall be stated in a letter to the MWDOC Board President signed by authorized elected representatives of the South County Parties. Once filled, that seat will be designated, pursuant to this Agreement, as the “South County Seat”.”

The Agreement defined the South County Agencies as the six agencies who had funded the governance study along with the City of San Clemente, the City of San Juan Capistrano, the Laguna Beach County Water District and the Emerald Bay Services District.

The Agreement also provided that “[t]he MWDOC Board shall consider the nominated MET Candidate seriously, in good faith and in the spirit of this Agreement and can only reject said MET Candidate for cause.”

A similar provision was included for the selection of the second MET Director vacancy giving nomination authority to MWDOC's North County Agencies and designating that seat as the North County Seat.

Recommended South County Agencies' Selection Process

In order to develop a nomination process, the South County Agencies agreed to form the South County Agencies Subgroup (Subgroup) to recommend a nomination process for consideration by all 10 South County Agencies. The Subgroup has proposed a process by which the South County Agencies will select the nominee to fill the South County Seat.

The process proposed requires that the South Orange County Agencies form a nomination committee comprised of one member from each agency. Candidates will then submit letters of interest to the South Orange County Agencies. Each agency will vet the candidates and submit nominees to the nomination committee within four weeks. The nomination committee will then consider five criteria and select the nominee. The five criteria include the candidate's ability to effectively represent the interest of MET, represent the interest of MWDOC's interest, represent the interest of South Orange County, forge relationships and partnerships, and make the time commitment required by the position. Following the nomination committee's selection, based on a simple majority vote, each member of the nomination committee will sign the nominating letter to MWDOC.

At this time, the South County Agencies are being asked to approve and agree to the selection process recommended by the Subgroup. A copy of the recommendation from the Subgroup is attached as Exhibit "A".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on December 9, 2013.

RECOMMENDATION:

That the Board approve and agree to the Metropolitan Water District of Southern California Representative Selection Process for South County Agencies.

LIST OF EXHIBITS:

Exhibit "A" – MET Representative Selection Process for South County Agencies
Recommendation from the South County Agencies Subgroup

Exhibit "B" – Agreement between MWDOC and its Member Agencies on Budget, Activities, Charges, and Other Issues

EXHIBIT "A"

MET Representative Selection Process for South County Agencies Recommendation from the South County Agencies Subgroup

Subgroup members

Paul Cook
Joyce Crosthwaite
Laura Freese
Scott Goldman
Larry McKenney

Facilitation

Joone Lopez

Coordination

Kelly Winsor

Background

In 2010, Municipal Water District of Orange County (MWDOC) and ten of its South County member agencies entered into an agreement to facilitate a continued working relationship and "accommodate interests of all." Section 7 of the agreement outlines the selection of the next Metropolitan Water District of Southern California (MET) director, who will be nominated by the South County Agencies.

The agreement requires that the nomination process be agreed to by all of the South County agencies. The South County Agencies agreed to form a subgroup to develop a process and make its recommendation to the full membership. The subgroup has met three times since November 2012.

The subgroup reviewed the 2010 agreement, researched other agencies' processes in selecting their MET directors, and reached out to MWDOC in developing the following recommendations.

Goal

Develop a clear, comprehensive, collaborative process that is agreed upon by agencies involved in advance of any vacancy of a MET director position.

RECOMMENDATION:

Overview

When a nomination is needed, the South County Agencies will form a nomination committee of one member from each agency. Candidates will submit letters of interest to South County Agencies, who will vet their candidates and submit nominees to the nominating committee within four weeks. The agencies and the nominating committee will consider five

criteria as described below. The nominating committee will select the nominee, and each committee member will sign the nominating letter to MWDOC.

Process

- When a South County nomination is needed, the coordinator will send an email to the South County Agencies' city managers and general managers.
- Each of the ten (10) signatory South County Agencies must name a representative to the nomination committee within four (4) weeks of the vacancy notification.
 - Nomination committee representative must be a current member of the agency's governing body.
 - An agency can choose not to participate in the process of reviewing nominees, but its nominating committee representative must sign the letter to MWDOC.
 - Six members of the nomination committee will constitute a quorum.
 - The nomination committee will select its own chair.
 - Voting will be based on a simple majority.
 - The nomination committee will develop a method for any ties.
- South County Agencies will have four (4) weeks to submit qualified candidate(s) to the nomination committee. No limit on number of candidates.
- Candidates must submit a letter of interest to the governing body of at least one of the ten South County Agencies. Each agency will vet its own candidates as determined by its board.
- Each agency will conduct a background check on its candidate(s) – agencies should coordinate their HR departments to perform the checks efficiently and affordably
- Each agency's board will submit its candidate(s) to the nomination committee accompanied by a brief written statement and/or material that addresses the five criteria, and how the candidates meet those criteria.
- Depending on the number of candidates, the nomination committee will interview the candidates or form a subgroup to further narrow the

candidate pool for the interviews. The selection process will be guided by the five criteria described below.

- Simple majority vote to determine the nomination to MWDOC, which will be signed by all members of the nomination committee.

Questions for the five criteria

The questions set forth below are intended to explain the criteria and serve as suggestions for the nominating committee.

1. Ability to effectively represent the interest of MET

- 1) What do you know about MET and their current major issues? And, what is your understanding of their mission and do you agree with it? Why or why not?
- 2) What do you see as MET's highest priorities now and in the future?
- 3) How have you been involved with MET?
- 4) What is your understanding of current issues facing MET?
- 5) What do you feel is the most important asset that you possess to be able to work with the exceptionally strong and diverse group, which is the composition of the MET Board of Directors at this time?
- 6) Who do you consider to be MET's allies and opponents?

2. Ability to effectively represent MWDOC interest

- 1) What do you see as MWDOC's unique role at MET, if any?
- 2) How do you see Orange County being more effective at MET?
- 3) Do you see an opportunity to improve MWDOC's way of conducting business by being a MET representative from Orange County? If so, how?
- 4) How would you strike a balance when interests of agencies in Orange County conflict?

3. Ability to effectively represent the interest of South County

- 1) What skills do you possess which allows you to represent all South County agencies, from the small to the very large?
- 2) What do you see as Orange County's highest priorities at MET, and what key issues do you see emerging in the near future that will significantly impact us?
- 3) How would you keep the South County Agencies informed and involved in what's happening at MET?

- 4) How would you go about fostering partnerships when alignments on issues are necessary among Orange County agencies as well as between Orange County and MET?

4. Ability to forge relationship and partnerships

Discussed some measure of ability as:

- Be actively involved
- Understand State/Federal water issues
- Experience and knowledge
- Proven political involvement in MET affairs

- 1) Please give an example of your past history of forming relationships and/or partnerships?
- 2) What relationships do you have now with other MET agencies and directors?
- 3) There are seven representatives from Orange County, how would you try to meet with and involve them?
- 4) What do you see as Los Angeles and San Diego's main goals with MET?

5. Time commitment

- 1) What is your understanding of the time commitment to effectively carry out the responsibilities of a MET representative?
- 2) How would you educate yourself to be an effective MET Representative?
- 3) What are your other commitments and priorities?

PASS/FAIL: Time commitment

Criminal record (pass/fail for felony)

Conflict of interest (pass/fail)

Ranking

100 point weighted system

Criteria #1– 30 points

Criteria #2 – 20 Points

Criteria #3 – 10 Points

Criteria #4 – 40 Points

Criteria #5 – Pass/Fail

Conflict of interest – Pass/Fail

Criminal record (felony conviction) – Pass/Fail

TOTAL POINTS: 100

Hypothetical timeline

(60 days)
Email announcement: Day 1
Submit candidates to nomination committee: Day 30
<i>Based on the number of candidates, the nomination committee will determine if a subgroup to narrow the pool is needed</i>
Nomination committee reviews written material for candidates: Day 30-40
Invite candidates to an interview: Day 45- 50
Deliberate and vote on the group's final selection for nomination to MWDOC: Day 50-60
Sign the nomination form to MWDOC and submit to MWDOC: Day 60

EXHIBIT "B"

Amended 12-14-10

AGREEMENT BETWEEN MWDOC AND ITS MEMBER AGENCIES ON BUDGET, ACTIVITIES, CHARGES, AND OTHER ISSUES

This Agreement is made by and between the Municipal Water District of Orange County ("MWDOC") and those of its 28 Member Agencies that have signed below (referred to collectively as "Member Agency Parties" and individually as "Member Agency Party"). Signatories to this Agreement are also referred to herein collectively as "Parties" and individually as "Party." This Agreement is effective as of the Effective Date established pursuant to Section 12.1 below.

RECITALS

WHEREAS, MWDOC is a wholesale water provider to 28 Member Agencies in Orange County, California; and

WHEREAS, MWDOC is a member agency of the Metropolitan Water District of Southern California ("MET") and appoints four (4) directors to MET's Board of Directors, and

Whereas, MWDOC was formed in 1951 by Orange County voters to provide imported water from MET into Orange County; and

Whereas, MWDOC has been performing this function and many other functions since its formation in support of Member Agencies within its service area; and

Whereas, MWDOC was formed and operates pursuant to the Municipal Water District Law of 1911 (Water Code Section 71000 et seq.) and is governed by a seven-member publicly elected Board of Directors; and,

Whereas, an essential area of MWDOC's authority includes the setting of rates for water commodities and services, and while rates may be different for different classes or conditions of service, they shall be uniform for like classes and conditions of service (Water Code § 71614); and,

Whereas, an essential area of MWDOC's authority includes representing the Member Agencies at MET to ensure that the approximately \$140 million paid to MET each year by MWDOC is used effectively and efficiently; and,

Whereas, in addition to its role at MET, MWDOC's regional services to its Member Agencies currently include water use efficiency programs, water supply planning activities to improve reliability and emergency preparedness, the Water Emergency Response Organization of Orange County ("WEROC"), the school education program, and numerous other programs; and

Whereas, in support of these services to its Member Agencies, MWDOC seeks grant funding for its programs, engages lobbyists on the Federal, State and local levels, and operates a public affairs department that serves its Member Agencies and their customers; and

Whereas, MWDOC's budget and rates have been the subject of discussion between MWDOC and some of its Member Agencies over the past several years, and these Member Agencies have raised concerns over whether the rate structure is equitable and whether a Member Agency should be able to opt out of certain services if it provides those services; and

Whereas, in conjunction with the preparation by the Orange County Local Agency Formation Commission ("OCLAFCO") of its 2007 Municipal Services Review and Sphere of Influence for MWDOC, MWDOC and several of its Member Agencies from southern Orange County participated in a series of "stakeholder" discussions facilitated by OCLAFCO in an attempt to resolve these and other concerns; and

Whereas, following approval by Orange County LAFCO of the 2007 Municipal Services Review and Sphere of Influence for MWDOC, OCLAFCO retained a consultant to conduct a study of "governance options" for MWDOC ("Governance Study"), which Study was funded 50% by MWDOC and 50% by six of its Member Agencies from southern Orange County; and

Whereas, the same six Member Agencies, namely El Toro Water District, Trabuco Canyon Water District, Santa Margarita Water District, Irvine Ranch Water District, Moulton Niguel Water District and South Coast Water District, have issued a "White Paper" regarding the formation of a "South Orange County Water Authority" that discusses issues associated with formation of such an agency if certain changes in MWDOC's operations are not made; and

Whereas, the Governance Study recommended the addition of three Member Agencies into the Study effort -- the City of San Clemente, the City of San Juan Capistrano and Laguna Beach County Water District, thereby bringing the total number of "South County Agencies" to nine; and

Whereas, the other Member Agencies of MWDOC are the City of Brea, City of Buena Park, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, City of La Palma, City of Newport Beach, City of Orange, City of Seal Beach, City of Tustin, City of Westminster, East Orange County Water District, Emerald Bay Services District, Golden State Water Company ("GSWC"), Mesa Consolidated Water District, Orange County Water District, Serrano Water District, and Yorba Linda Water District.

Whereas, Emerald Bay Services District boundaries are located in the southern Orange County area and has requested to be included as a South County Agency, as hereinafter defined for purposes of this agreement; and

Whereas, the Parties signing below have reached a comprehensive agreement, memorialized herein ("Agreement"), that accommodates the interests of all

Parties, maintains MWDOC as the wholesale regional planning agency and promotes a cooperative and collaborative partnership between MWDOC and its Member Agencies;

NOW, THEREFORE, THE PARTIES ACKNOWLEDGE AND AGREE AS FOLLOWS:

1. DEFINITIONS

- 1.1 "South County Agencies," as referenced in the recitals above, refers collectively to City of San Clemente, City of San Juan Capistrano, El Toro Water District, Irvine Ranch Water District, Laguna Beach County Water District, Moulton Niguel Water District, Santa Margarita Water District, South Coast Water District, Trabuco Canyon Water District and Emerald Bay Services District.
- 1.2 "Member Agencies" refers to any and all entities, public or private, that purchase water from MWDOC. "Member Agency Parties" refers to Member Agencies who have signed this Agreement.
- 1.3 "North County Agencies" as referenced in the Recitals above refer collectively to Member Agencies (other than the South County Agencies), including the City of Brea, City of Buena Park, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, City of La Palma, City of Newport Beach, City of Orange, City of Seal Beach, City of Tustin, City of Westminster, East Orange County Water District, District, Golden State Water Company, Mesa Consolidated Water District, Orange County Water District, Serrano Water District, and Yorba Linda Water District.

2. MWDOC BUDGET

- 2.1 **Core and Choice Services.** Commencing in Fiscal Year 2011-2012, MWDOC will organize its budget according to "Core" services and "Choice" services. (See Section 4 below regarding designation of specific services as Core and Choice.)
 - 2.1.1 The Core services budget shall include services identified by MWDOC as services that are both essential to its mission and carried out on behalf of the entire MWDOC service area for all 28 Member Agencies. The Core services also include services that MWDOC determines cannot practicably or efficiently be budgeted and charged to individual Member Agencies on an agency-by-agency basis.

2.1.2 Choice services shall be budgeted, described, and priced in a manner that is intended to allow individual Member Agencies to decide whether to receive such services from MWDOC. MWDOC's costs for Choice services provided, including related Overhead costs, will be recovered only from the MWDOC Member Agencies electing to receive the service.

2.1.3 Once Core and Choice services are established for the purpose of the Fiscal Year 2011-2012 budget, those designations and their associated cost allocations shall thereafter be presumed reasonable and appropriate; and such designations and cost allocations will be used by MWDOC in its budgeting in subsequent years, subject to Paragraph 5.3 below. The designation of any new or different services to be offered by MWDOC as Core or Choice will be made at the time the services are considered for approval by the MWDOC Board and will be subject to input from the Member Agencies during the review process described below.

2.2 Review of Budget. MWDOC will continue its practice of soliciting and considering review and input on its budget from all MWDOC Member Agencies commencing in December and developing a conceptual draft budget for Member Agency review the following January. On or before March 1st of each calendar year, MWDOC shall publish its draft budget and shall solicit comments from Member Agencies. Each Member Agency shall indicate to MWDOC in writing by March 15th of each year if any changes in the Choice Services they will be participating in are being considered or are to be deleted as a Choice Service (some services, such as the South Orange Coastal Ocean Desalination Project, have existing contractual commitments that differ from fiscal year commitments). In the absence of such timely notification of changes by the Member Agencies, the Member Agencies will be deemed to be participating without change in those Choice services in the following budget year to the same extent that the Member Agencies are participating in such Choice Services as of March 15. Member Agencies desiring to submit formal comments on the budget shall deliver such formal comments to MWDOC before April 15th. (See Section 6.1 below, "Elected Officials 'Meeting.>") These comments will be considered in preparation of the final Budget and will be presented to the MWDOC Board in May. The Parties acknowledge that the MWDOC Board is solely responsible for final approval and establishment of the MWDOC Budget and all rates and charges.

3. MWDOC'S RESERVES

3.1 Purpose. MWDOC's Reserves allow it to meet operating and emergency financial requirements for operation of the District, including cash flow for managing grants and such expenses as future building improvements, Other Post Employment Benefits (OPEB), unforeseen emergencies, potential litigation, and MWDOC elections.

3.2 Reserve Line Items. MWDOC adopted a Reserve Policy on June 16, 2010, as outlined in the chart below. MWDOC will segregate its reserves into these categories and will report on the levels each year during the budget preparation process:

MWDOC Proposed Reserves as of June 30, 2010	
Reserve Category	Proposed Amount
General Reserves (Unrestricted Reserve)	\$1,850,000
Grant/WJE Cash flow (Designated Reserve)	\$1,000,000
Election Expense (Designated Reserve)	\$ 500,000
Building Repair/Replacement (Designated Reserve)	\$ 350,000
Total Designated or Unrestricted	\$3,700,000
OPEB Reserve (Irrevocable Trust -- Restricted)	\$500,000

4. MWDOC CHOICE SERVICES

MWDOC shall institute a budgeting process in accordance with Section 2 above based on a designation of certain MWDOC services as Core services and other MWDOC services as Choice services. For the purposes of this Agreement and the MWDOC 2011-2012 Budget, the designation of Core and Choice services and Overhead costs are identified in Table A, attached. (See 5.3 below.) Input to any proposed changes in the designations shall be solicited from the Member Agencies in the annual budget preparation process in accordance with Section 2.2 above.

4.1 Designation of Choice Services.

The Choice categories identified at this time are described below. During the first half of fiscal year 2010-11, MWDOC Staff and the Member Agencies will work together to develop the concept, structure, budget and participation terms for the following services and any others identified for implementation beginning July 1, 2011. These will be developed in such a way as to be offered to the Member Agencies for participation and will be incorporated into the proposed budget for 2011-12.

4.1.1 Project Participation Committees

4.1.1.1 South Orange Coastal Ocean Desalination Project will continue to be organized in a Project Participation format with five agencies participating on an equal cost-sharing basis. The participating agencies will ultimately determine all institutional, financing and delivery issues for the project.

4.1.1.2 Poseidon Huntington Beach Ocean Desalination Project is currently organized in a Project Participation format with 23 agencies participating on an equal cost-sharing basis. The costs to date for outside consulting have been paid for by Poseidon, so no local costs have been paid by the agencies.

4.1.2 MWDOC - Member Agency Agreements

4.1.2.1 School Program will be organized with each Member Agency participating and paying its share of costs on a per student basis, and this Program also includes as participants the non-Member Agency cities of Anaheim, Fullerton, and Santa Ana.

4.1.2.2 Water Use Efficiency Program will be developed as a pay-as-you-go or a pay-for-participation basis instead of a "choice" basis. Functionally, however, there will be "choice" programs offered to all Member Agencies by agreement or through direct participation by retail consumers or others in the water service area. The Parties anticipate that the terms for the agreements between MWDOC and the Member Agencies will range between 3 and 5 years. The eight programs currently in operation include:

- Residential clothes washers
- Sprinkler nozzles
- SmarTimers
- CII Plumbing Fixtures
- Synthetic Turf
- Hotel Program
- Industrial Program
- Landscape Certification Program

4.2 Right to Submit Proposal. If a Member Agency Party does not participate in a MWDOC Choice Service pursuant to the provisions of this Agreement, including Section 2 above, and desires to participate in a substantially similar Service from another Member Agency Party, as set forth in a written proposal, such Member Agency Party shall deliver to MWDOC, no later than March 15th of each year, a copy of the written proposal to receive such Service. MWDOC shall have thirty (30) days from receipt of such proposal to submit a scope and cost to provide the Service, for the Member Agency Party's consideration.

4.3 Core Programs shall be those listed in Table A. Any funding brought in via MWDOC efforts from its State or Federal advocacy efforts, except for those specifically being funded through a Project Participation Agreement, shall be available to all MWDOC Member Agencies via Core or Choice Programs, e.g., such as the Water Use Efficiency Program.

4.4 Overhead Costs shall be those listed in Table A. The Overhead costs are allocated over all Core and Choice services. Subject to Paragraph 5.3, if activities are ever added to or removed from the

list of Core or Choice services, the commensurate proportion of Overhead costs will also be allocated accordingly. The determination of the Overhead cost percentage applicable to each Core and Choice service for any particular year shall be made during the budget preparation process and fixed for the entire budget year.

5. REVENUE COLLECTION

The Parties agree that MWDOC should transition its current rate structure, which includes both a per retail connection charge and a per acre-foot charge, to a structure that includes only a per retail connection charge. Currently, MWDOC's revenue from water rate charges is approximately 65% on the per retail connection charge and 35% on the per acre-foot charge. As described below, MWDOC shall increase the percentage on the per retail connection charge gradually, reaching 100% in fiscal year 2015-16.

- 5.1 Fixed Charges.** Commencing in fiscal year 2011 -2012, MWDOC will begin transitioning to a 100% fixed charge. In the first year of this process, 80% of MWDOC's water rate charges for its operating budget will be fixed, and 20% will be water charges. Each year for the next four years, MWDOC will increase the amount on fixed charges by 5%.
- 5.2 Method of Fixed Charges.** MWDOC will continue to use the methodology in effect as of the Effective Date to define retail service connections independent of size as the method of passing charges to the Member Agencies on a fixed charge basis.
- 5.3 Designation of Core, Choice, and Overhead Services.** The designations of services and activities set forth in (i) Section 2.1 and Table A for Core and Choice Service, in (ii) Paragraph 4.4 and Table A for Overhead Costs, and in (iii) Paragraph 5.2 for Method of Fixed Charges, shall carry a presumption of reasonableness and, therefore, shall remain unchanged for the term of this Agreement, unless changed by amendment in accordance with the provisions of Section 15.

6. INTERACTION OF ELECTED OFFICIALS

6.1 Elected Officials' Meeting. MWDOC will hold a semi-annual meeting for elected representatives of the Member Agencies and a GSWC officer or the officer's designee in October and April ("Elected Officials' Meeting") in addition to any other meetings, workshops, or assemblies open to those officials. The meetings shall be chaired by the President of the MWDOC Board and it is the intent of the Parties that the primary attendees shall be members of their respective governing bodies. The forum will be used to discuss:

- MWDOC activities, policies, and budget (including reserves)
- MET activities and policies
- Statewide water resource issues
- Strategies to increase Orange County's water supply reliability and to minimize Orange County water costs
- Other topics of significant interest to the Orange County water community

Beginning in March 2011 and each year thereafter, upon completion of the first DRAFT of the MWDOC Budget for the upcoming year, MWDOC will formally request comments on the budget from all 28 Member Agencies, as described in Section 2.2 above. MWDOC will report on the budget comments received from the Member Agencies at the Elected Officials' Meeting described herein.

6.2 Public Meetings. The Elected Officials' Meetings shall be noticed public meetings of MWDOC's Board. Each Member Agency participating in these meetings shall be responsible for compliance with the Brown Act by its own legislative body. (Government Code § 54950 etseq.)

7. SELECTION OF MET DIRECTORS

7.1 Recommended Appointments by MWDOC Member Agency Parties.
Commencing with the first vacant MWDOC MET Director position following the Effective Date, the MWDOC Board will institute and follow the procedure set forth in this Section 7 for appointing MET Directors.

- 7.1.1 The MWDOC Administrative Code provides that the Board President shall nominate and the Board shall approve MET Directors.
- 7.1.2 Under the conditions and procedures established in this Agreement, the MWDOC Board will delegate limited nominating power to the MWDOC Member Agencies for two of MWDOC's MET Director positions.
- 7.1.3 When the first MET Director vacancy occurs following the Effective Date, the South County Agencies that are Member Agency Parties ("South County Parties") may nominate a candidate of their choosing ("MET Candidate") through a process to which they all agree, directly to the MWDOC President and Board. In the absence of agreement among the South County Parties, the nomination(s) shall be determined by a "one agency, one vote" process among the South County Parties. Nominations shall be stated in a letter to the MWDOC Board President signed by authorized elected representatives of the South County Parties. Once filled, that seat will be designated, pursuant to this Agreement, as the "South County Seat".
- 7.1.4 When the second MET Director vacancy occurs following the Effective Date, the North County Agencies that are Member Agency Parties ("North County Parties") may nominate a MET Candidate of their choosing, through a process to which they all agree, directly to the MWDOC President and Board. In the absence of agreement among the North County Parties, the nomination(s) shall be determined by a "one agency, one vote" process among the North County Parties. Nominations shall be stated in a letter to the MWDOC Board President signed by authorized elected representatives of the North County Parties. Once filled, that seat will be designated, pursuant to this Agreement, as the "North County Seat".
- 7.2 The MWDOC Board shall consider each nominated MET Candidate seriously, in good faith and in the spirit of this Agreement and can only reject said MET Candidate for cause. The remaining MET Director seats shall continue to be filled pursuant to MWDOC's Administrative Code. MWDOC shall continue its practice of advising the Member Agencies when a vacancy occurs and soliciting potential candidates and input from all Member Agencies for filling these seats.
- 7.3 All MWDOC MET Directors shall serve for an indefinite term pursuant to the MWDOC Administrative Code; provided, however, a MWDOC MET Director holding the North County Seat or the South County Seat may be removed by MWDOC only after MWDOC has convened an ad hoc committee to review that MWDOC MET Director's performance and the ad hoc committee has solicited and considered the input of the respective nominating area as provided below. If a vacancy occurs in the North County Seat or the South County Seat, the North or South County Parties, as established herein, may make subsequent nominations to fill the vacancy in accordance with Sections 7.1.3 and 7.1.4, as applicable. The MWDOC Board President shall

consider appointment of an ad hoc committee to review the performance of MWDOC's MET Directors upon request of any MWDOC Board Member or Member Agency, or upon the MWDOC President's own determination. Such review, if any, may be conducted no more than once annually. If appointed, the ad hoc committee shall solicit input from the respective nominating areas on the performance of the North County and South County nominated MET Directors. Should the North County Parties or South County Parties deem it appropriate to remove their selected MET Director, they can make their request for removal to the MWDOC Board. The MWDOC Board will not unreasonably withhold action on such request(s).

8. COMPLIANCE WITH MWDOC ADMINISTRATIVE CODE

Any MET Candidate nominated and appointed as provided herein must be familiar with MWDOC's Administrative Code and express a willingness to comply with it. This includes, without limitation, meeting the criteria for a MWDOC MET Director established in Section 1500 of the MWDOC Administrative Code.

9. COMPLIANCE WITH LAW

The nomination and appointment of any MET Candidate, as provided herein, must comply with applicable statutory and case law.

10. MET DIRECTOR ORANGE COUNTY CAUCUS

MWDOC will schedule and conduct at its offices regular meetings of the MET Directors representing MET Member Agencies in Orange County. Meetings will be scheduled at least three (3) times per year to be determined by the Orange County MET Directors at the first meeting each year. The purpose of the meetings is to provide special access by all Member Agencies to the MET Directors representing Orange County.

11. REMEDIES AND ENFORCEMENT

11.1 Remedies in General. Except as set forth below, each Party shall have all remedies otherwise available to enforce the terms of the Agreement and to seek remedies for any breach hereof, including but not limited to the remedies set forth in Sections 11.2.3, 11.5 and 11.6 of this Agreement.

11.2 Breach of the Agreement.

- 11.2.1** Any material breach or material violation of the Agreement shall be deemed a default under this Agreement.
- 11.2.2** In the event of an alleged material breach or material violation of the Agreement, the Parties agree to work together in good faith to resolve any disagreement using the following dispute resolution process:
- 11.2.2.1** The Party alleging a breach shall notify the other Parties of the basis for the allegation and the requested cure for the breach.
- 11.2.2.2** The alleged breaching Party receiving notice of breach shall have 15 calendar days to respond. If the response acknowledges that a breach has occurred, the breaching Party shall have 30 days to cure such breach, provided that if such breach cannot be reasonably capable of being cured within said 30-day period, then the breaching Party shall not be in default of this Agreement provided that the breaching Party is diligently continuing to cure such default.
- 11.2.2.3** If the Party alleging a breach and the alleged breaching Party disagree with respect to whether a breach has occurred, they shall meet and confer in good faith toward a mutually satisfactory solution. The meet and confer shall be open to all Parties.
- 11.2.2.4** If the dispute cannot be resolved through the meet and confer process within 60 calendar days after the first meeting, the Party alleging a breach and the alleged breaching Party, along with any other Party that wishes to participate, shall engage in third party mediation, with the participating Parties to equally share mediation costs. Said mediation shall end no later than 90 calendar days after the completion of the original meet and confer process. No Party may file a lawsuit concerning the alleged breach until the mediation has ended.
- 11.2.2.5** In the event a lawsuit is filed after completion of the mediation concerning the alleged breach, the Parties' rights and obligations under this Agreement shall continue until one of three actions occurs: (1) the agreement continues as drafted; (2) the agreement is terminated; or (3) an amendment to the agreement is entered into pursuant to Section 15.
- 11.2.3** Any Party to this Agreement may, in addition to any other remedy, seek an order from a court specifically enforcing the

obligations of the Parties to the Agreement to comply with this Section 11.2.

11.3 Material Breach in the Event of Certain Activities. The Parties to this Agreement have mutual interests in avoiding the time, expense, and uncertainty of either (a) legislative measures that would affect MWDOC's organizational form or (b) filing an application with the OCLAFCO for secession of a Party or detachment of a Party's territory from MWDOC. Consequently, the Parties to this Agreement agree that "material breach," within the meaning of Section II.(a) shall include (but not be limited to) the following activities that any Party hereto may undertake during the term of this Agreement:

11.3.1 The submission of an application with OCLAFCO to reorganize or undertake an action that would result in a Party's secession or the detachment of all or a portion of a Party's territory, from MWDOC, or would result in any other material change in governance or structure affecting MWDOC.

11.3.2 The filing of any written letters or testimony with, or providing verbal testimony to, any committee or other body of the State Legislature in support of legislative measures that would (A) materially affect MWDOC's organizational form or change the governance of MWDOC, and (B) would result in secession or detachment of territory from MWDOC by any Member Agency.

11.4 An action constituting a material breach under Sections 2.2, 4, 5, 6, 7, 10, or 11.3 shall be subject to the dispute resolution provisions of Section 11.2.2.

11.5 Enforcement. Any Party may enforce compliance by a defaulting Party with the terms of this Agreement by, among other available remedies:

11.5.1 Filing a complaint for specific performance;

11.5.2 Filing an action to recover actual damages to which the notifying Party may be entitled for violation by the defaulting Party of the terms of this Agreement;

11.5.3 Filing an action to enjoin the violation, on an ex parte basis if necessary, by temporary or permanent injunction, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies, or for other equitable relief;

11.5.4 Petitioning for a writ of ordinary or administrative mandate ordering the defaulting Party to cure; and/or

11.5.5 Petitioning for a writ of ordinary or administrative mandate ordering OCLAFCO not to process an application filed in contravention of this Agreement.

11.6 **Injunctive and Temporary Relief Appropriate.** The Parties acknowledge that breach of this Agreement may not be adequately remedied by monetary damages and could result in irreparable harm to the aggrieved Parties. Therefore, injunctive and temporary relief may be appropriate to ensure compliance with the terms of this Agreement.

12. TERM OF AGREEMENT

12.1 **Effective Date.** This Agreement shall be effective upon the date of execution by MWDOC, which shall execute the Agreement upon express approval of its Board ("Effective Date"). MWDOC shall inform all Parties by e-mail when that event occurs.

12.2 **Subsequent Execution.** Any Member Agency that executes this Agreement after the Effective Date shall, upon execution, become a full Party to the Agreement, with all the rights and obligations set forth herein.

12.3 **Termination Date.** This Agreement shall run for a term of five (5) years from the Effective Date, unless terminated as provided herein. This agreement may be extended by mutual agreement of all of the Parties hereto for subsequent term(s) five (5) years, or other period as mutually agreed to at the time of the extension.

13. OBLIGATIONS OF MEMBER AGENCIES

13.1 **No OCLAFCO Application.** During the term of this Agreement, none of the Member Agency Parties shall prepare, hire a consultant to prepare, or submit an application to OCLAFCO requesting reorganization or any action that would result in detachment of any territory from MWDOC or any other change affecting the governance, structure, or finances of MWDOC, unless agreed to in writing by MWDOC. In the event that the OCLAFCO undertakes proceedings, whether in response to an application or pursuant to its own discretionary powers, that reduces the territory within the boundaries or affects or changes the governance, structure or finances of MWDOC, these proceedings shall be considered a material breach of this Agreement by the Party or

Parties filing, supporting or in any way furthering the application except to the extent their actions are required by law.

- 13.2 No Legislative Activities.** During the term of this Agreement, none of the Member Agency Parties shall pursue, support, or further any legislative measures that would affect MWDOC's organizational form, board or staff members, finances, exercise of powers, or governance or result in detachment of any territory from MWDOC, unless agreed to in writing by MWDOC.
- 13.3 Participation In Agreement.** During the term of this Agreement, the Member Agency Parties, and each of them, shall contribute staff time and resources as required to participate and contribute in good faith to the activities and changes discussed in this Agreement.

14. OBLIGATIONS OF MWDOC

14.1 No OCLAFCO Application. During the term of this Agreement, MWDOC shall not prepare, hire a consultant to prepare, or submit an application to OCLAFCO as described in Paragraph 13.1 relating to the governance, structure, or finances of MWDOC or any equivalent OCLAFCO application relating to the governance, structure, or finances of any of its Member Agencies, unless agreed to in writing by the affected Member Agency.

- 14.2 No Legislative Activities.** During the term of this Agreement, MWDOC shall not pursue, support, or further any legislative measures that would affect any Member Agency's organizational form, board or staff members, finances, exercise of powers, or governance or result in detachment of any territory from the Member Agency, unless agreed to in writing by the Member Agency.
- 14.3 Participation In Agreement.** During the term of this Agreement, MWDOC shall contribute staff time and resources as required to participate and contribute in good faith to the activities and changes discussed in this Agreement.

15. AMENDMENT OF AGREEMENT

- 15.1** Any amendment, alteration, or variation of any provision of this Agreement ("Amendment") will not be valid unless made in writing and approved as provided in this Section.
- 15.2** The Parties acknowledge that the process of obtaining initial approvals and execution of this Agreement has required a substantial investment of public resources and time and that the same process should not be required for subsequent Amendments to the Agreement that are proposed without objection. For this reason, Amendments to the Agreement may be made as provided in this section.
- 15.2.1** An Amendment to the Agreement proposed by MWDOC shall be distributed by MWDOC to all Parties signing this

Agreement for a 60-day review period.

15.2.2 Any and all comments and objections to the Amendment shall be provided by the Parties to MWDOC and the remaining Member Agency Parties before the conclusion of the 60-day review period.

15.2.3 If no objections are received by the conclusion of the 60-day review period, the Amendment shall be valid and binding on the Parties. Upon this occurrence, MWDOC will provide a copy of the Amendment to all Parties.

15.2.4 If any objections are received within the review period, MWDOC may submit the proposed Amendment to the Parties for signatures, and if the proposed Amendment is executed by MWDOC and all of the Member Agency Parties, the Amendment shall be valid and binding on the Parties. Upon this occurrence, MWDOC will provide a copy of the Amendment to all Parties.

15.3 An Amendment to the Agreement proposed by a Party other than MWDOC shall be submitted in writing to MWDOC. Upon receipt of the proposed Amendment, MWDOC shall then follow the procedures set forth in section 15.2 above.

16. NO ADMISSION BY ANY PARTY

The Parties acknowledge that statements made by the Parties during negotiation of this Agreement, statements made in this Agreement, and all rights and obligations that arise from this Agreement were and are in furtherance of the goal of resolving issues between the Parties without the need for administrative or judicial proceedings, including possible OCLAFCO proceedings and litigation. Neither any statement made during negotiation of this Agreement nor any provision of the Agreement itself shall constitute an admission by a Party or be offered as evidence or included in any record of proceedings in any future administrative or judicial proceeding.

17. GENERAL PROVISIONS

17.1 All Parties are deemed to have participated in the drafting of this Agreement, and any rule of law (including, but not limited to, Civil Code Section 1654) or legal principle that would require interpretation of this Agreement against the drafter hereto shall not apply and is waived by the Parties. This Agreement may be signed in multiple counterparts for convenience of the Parties.

17.2 This Agreement will inure to the benefit of and be binding upon all Parties and their respective successors and assigns.

17.3 This Agreement will be deemed a contract made under the laws of

the State of California and for all purposes will be interpreted in accordance with such laws. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California.

- 17.4** This Agreement constitutes the entire agreement among the Parties. This Agreement supersedes any and all other understandings or agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters; and each Party acknowledges that no representation, inducement, promise of agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other Party that is not embodied herein.
- 17.5** If any action at law or equity, including any action for writ of mandate or injunctive relief, is brought to enforce or interpret the provisions of this Agreement, the prevailing Party(ies) shall be entitled to its or their reasonable attorney's fees and costs as against the Party(ies) that did not prevail in that action or proceeding.
- 17.6** All activities undertaken pursuant to this Agreement must be in compliance with all applicable state and federal laws and regulations.
- 17.7** In the event one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed severed from this Agreement and the remaining parts of this Agreement shall remain in full force and effect as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.
- 17.8** All communications set forth in this Agreement shall be in writing and transmitted to and among the Parties in a manner that is consistent with the custom and practice of MWDOC and its Member Agencies then in effect. Any computations of time shall start from 5:00 PM on the day of receipt.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the respective dates shown below.

Gai Sanchez

Mayor, City of San Clemente

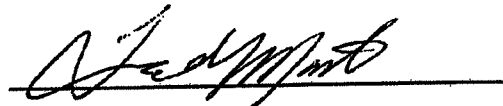
February 15, 2011

Date

Amended 12-14-10

Mayor, City of San Juan Capistrano

Date

A handwritten signature in black ink, appearing to read "Ted F. Martin", is written over a horizontal line.

Ted F. Martin, President

Date

El Toro Water District

APPROVED
AS TO FORM:
[Signature]

[Signature]
President, Irvine Ranch Water District

Amended 12-14-10

6/30/11

Date

President, Laguna Beach County Water District

Date

President, Municipal Water District of
Orange County

Date

President, Moulton Niguel Water District

Date

President, Santa Margarita Water District

Date

President, South Coast Water District

Date

Amended 12-14-10

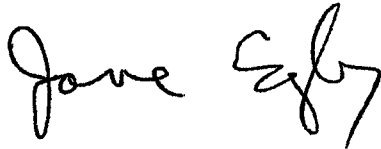
President, Irvine Ranch Water District

Date

President, Laguna Beach County Water District

Date

3-25-11



President, Municipal Water District of
Orange County

Date

President, Moulton Niguel Water District

Date

President, Santa Margarita Water District

Date

President, South Coast Water District

Date

Amended 12-14-10

President, Irvine Ranch Water District

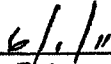
Date

President, Laguna Beach County Water District

Date



President, Municipal Water District of
Orange County



Date

President, Moulton Niguel Water District

Date

President, Santa Margarita Water District

Date

President, South Coast Water District

Date

Amended 12-14-10

President, Irvine Ranch Water District

Date

President, Laguna Beach County Water District

Date

President, Municipal Water District of
Orange County

Date

President, Modilon Miguel Water District

Date

1/20/201

President, Santa Margarita Water District

Date

President, South Coast Water District

Date

Amended 12-14-10

President, Irvine Ranch Water District

Date

President, Laguna Beach County Water District

Date

President, Municipal Water District of
Orange County

Date

President, Moulton Niguel Water District

Date


President, Santa Margarita Water District

Date

1/14/11

President, South Coast Water District

Date

Amended 12-14-10

President, Irvine Ranch Water District

Date

President, Laguna Beach County Water District

Date

President, Municipal Water District of
Orange County

Date

President, Moulton Niguel Water District

Date

President, Santa Margarita Water District

Date

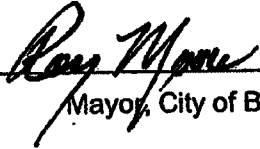

President, South Coast Water District

Date

6/29/11

President, Trabuco Canyon Water District

Date



Mayor, City of Brea

4-20-11

Date

Mayor, City of Buena Park

Date

Mayor, City of Fountain Valley

Date

Mayor, City of Garden Grove

Date

Mayor, City of Huntington Beach

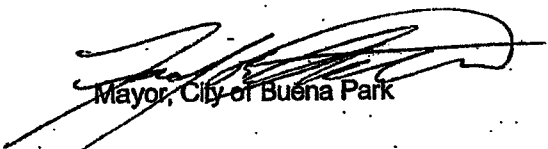
Date

President, Trabuco Canyon Water District

Date

Mayor, City of Brea

Date


Mayor, City of Buena Park

5/11/11
Date

Mayor, City of Fountain Valley

Date

Mayor, City of Garden Grove

Date

Mayor, City of Huntington Beach

Date

17.7 In the event one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed severed from this Agreement and the remaining parts of this Agreement shall remain in full force and effect as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.

17.8 All communications set forth in this Agreement shall be in writing and transmitted to and among the Parties in a manner that is consistent with the custom and practice of MWDOC and its Member Agencies then in effect. Any computations of time shall start from 5:00 PM on the day of receipt.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the respective dates shown below.

ATTEST:

CITY OF FOUNTAIN VALLEY

Kathleen Weard
Deputy City Clerk

Steve A. Nagal
Mayor

APPROVED AS TO FORM:

MUNICIPAL WATER DISTRICT OF
ORANGE COUNTY

Al L. Barnes
City Attorney

Joan C. Finnegan
MWDOC General Manager
Joan C. Finnegan, President

Amended 12-14-10

President, Trabuco Canyon Water District

Date

Mayor, City of Brea

Date

Mayor, City of Buena Park

Date

Mayor, City of Fountain Valley

Date

Mayor, City of Garden Grove

Date

William Dalton
Kathy Bailor 4/11/11
Attest: Kathy Bailor, City Clerk

2/25/11
APPROVED AS TO FORM
by *[Signature]*
City Atty:
Date: 4/11/11

Mayor, City of Huntington Beach

Date

Amended 12-14-10

President, Trabuco Canyon Water District

Date

Mayor, City of Brea

Date

Mayor, City of Buena Park

Date

Mayor, City of Fountain Valley

Date

Mayor, City of Garden Grove

Date

Joe Carchio,
Mayor, City of Huntington Beach

Date
March 8, 2011


APPROVED AS TO FORM
JENNIFER McGRATH, City Attorney

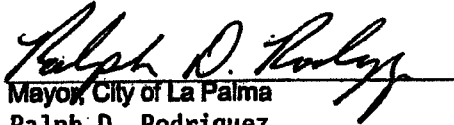

By Paul D'Alessandro
Assistant City Attorney

2/5/2011

Amended 12-14-10

Mayor, City of La Habra

Date


Mayor, City of La Palma
Ralph D. Rodriguez

04/05/11
Date

Mayor, City of Newport Beach

Date

Mayor, City of Orange

Date

Mayor, City of Seal Beach

Date

Mayor, City of Tustin

Date

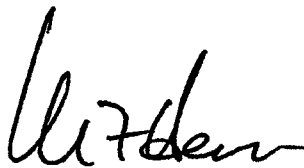
Amended 12-14-10

Mayor, City of La Habra

Date

Mayor, City of La Palma

Date



Mayor, City of Newport Beach

6-16-11

Date

Mayor, City of Orange

Date

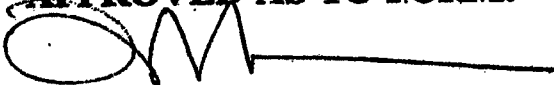
Mayor, City of Seal Beach

Date

Mayor, City of Tustin

Date

APPROVED AS TO FORM:



City Attorney

mt
6/2/11
6/7/11

21

ATTEST:



BY: Leilani Brown
City Clerk

Amended 12-14-10

Mayor, City of La Habra

Date

Mayor, City of La Palma

Date

Mayor, City of Newport Beach

Date


Mayor, City of Orange

5/31/2011
Date

Mayor, City of Seal Beach

Date

Mayor, City of Tustin

Date

APPROVED AS TO FORM:

DATE: 

BY: 

 CITY ATTORNEY

Amended 12-14-10

Mayor, City of La Habra

Date

Mayor, City of La Palma

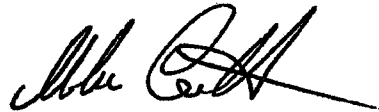
Date

Mayor, City of Newport Beach

Date

Mayor, City of Orange

Date



Michael P. Levitt
Mayor, City of Seal Beach

March 14, 2011
Date

Mayor, City of Tustin

Date

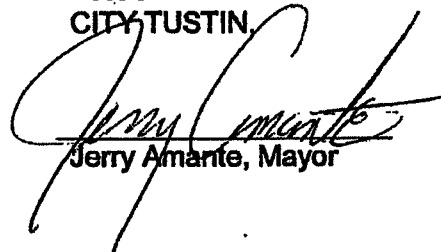
Amended 12-14-10

as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.

17.8 All communications set forth in this Agreement shall be in writing and transmitted to and among the Parties in a manner that is consistent with the custom and practice of MWDOC and its Member Agencies then in effect. Any computations of time shall start from 5:00 PM on the day of receipt.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the respective dates shown below.

"CITY"
CITY OF TUSTIN,



Jerry Amante, Mayor

ATTEST:



Pamela Stoker, City Clerk (SEAL)

APPROVED AS TO FORM:



Douglas C. Holland, City Attorney

Amended 12-14-10

Margie L. Rice
Mayor, City of Westminster

Date 4-21-11

President, East Orange County Water District

Date

President, Emerald Bay Service District

Date

Officer, Golden State Water Company

Date

President, Mesa Consolidated Water District

Date

President, Orange County Water District

Date

Amended 12-14-10

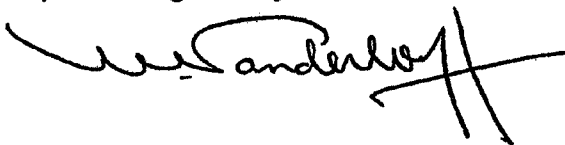
Mayor, City of Westminster

Date

*Approved as
to form:*



President, East Orange County Water District



Date

7/12/11

President, Emerald Bay Service District

Date

Officer, Golden State Water Company

Date

President, Mesa Consolidated Water District

Date

President, Orange County Water District

Date

Amended 12-14-10

Mayor, City of Westminster

Date

President, East Orange County Water District

Date


President, Emerald Bay Service District

1/19/11
Date

Officer, Golden State Water Company

Date

President, Mesa Consolidated Water District

Date

President, Orange County Water District

Date

Amended 12-14-10

Mayor, City of Westminster

Date

President, East Orange County Water District

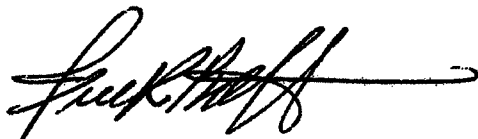
Date

President, Emerald Bay Service District

Date

Officer, Golden State Water Company

Date



President, Mesa Consolidated Water District

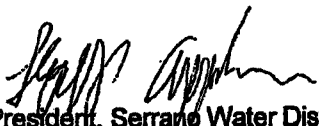
03/25/2011

Date

President, Orange County Water District

Date

Amended 12-14-10


President, Serrano Water District

Date 8/5/11

President, Yorba Linda Water District

Date

Table A - MWDOC Breakdown of Services/Activities/Costs

Core Services	Choice Services	Overhead Costs
<p>Board Compensation & Benefit</p> <p>Retiree Costs</p> <p>Legal Costs</p> <p>Board Elections</p> <p>Accounting and General Admin</p> <p><u>MET Representation</u></p> <ul style="list-style-type: none"> • MET Director Support • MET policy analysis, programs and special projects • MET operations, water rates and accounting <p>Staff time for MWDOC's Water Use Efficiency Programs Manager</p> <p><u>Governmental Affairs</u></p> <ul style="list-style-type: none"> • In-house staff for legislative info • WACO, ISDOC and other support • Federal lobbyist for countywide funding • State lobbyist for countywide legislative, grant funding and policy access • Local lobbyist for Board of Supervisors <p><u>Public Affairs</u></p> <ul style="list-style-type: none"> • Coordination with MET, other regional and local retailers • Basic communications functions-media outreach and inquiries, water information and messaging, MWDOC website • MWDOC newsletter (e-currents) • Countywide surveys as appropriate • Countywide water awareness in coordination with retail agencies <p><u>Research</u> -- support for Center for Demographic Research</p> <p><u>Water Supply Planning</u></p> <ul style="list-style-type: none"> • Coordination among agencies • Water use tracking and projections • Water supply analysis • Regulatory compliance issues • Water trends analysis • Countywide studies <p>Water Emergency Response Organization of Orange County (WEROC) - MWDOC contribution</p>	<p><u>Water Use Efficiency</u></p> <ul style="list-style-type: none"> • Residential clothes washers • Sprinkler nozzles • SmartTimers • CII Plumbing Fixtures • Synthetic Turf • Hotel Program • Industrial Program • Landscape Certification Program <p>Includes marketing materials for WUE activities, staff time, overhead and grant funds (MET and other)</p> <p><u>Governmental Relations</u></p> <ul style="list-style-type: none"> • Any project or program legislative or grant support on choice activities -- Townsend Public Affairs <p><u>Specific Programs</u></p> <ul style="list-style-type: none"> • School program • South Orange Coastal Ocean Desal Project <ul style="list-style-type: none"> o Federal lobbying for SOCODP - Barker o Federal lobbying for SOCODP - Townsend • Support for Poseidon Desal Project • Other Project specific studies • Non-countywide issue studies 	<p>Salary charged to overhead function (vacation, sick leave and holidays)</p> <p>Personnel development</p> <p>Legal costs charged to overhead function</p> <p>Employee benefits</p> <p>Personnel/staff development</p> <p>Information technology</p> <p>Conference employee</p> <p>Travel & Accommodations employee</p> <p>Automotive/Mileage/Toll</p> <p>Office maintenance</p> <p>Rents & Leases</p> <p>Office supplies</p> <p>Insurance expenses</p> <p>Utilities - telephone</p> <p>Miscellaneous expenses</p> <p>Professional fees for overhead activities</p> <p>Software support</p> <p>Computers/software</p>

AS
December 16, 2013
Prepared by: J. Smyth/M. Cortez
Submitted by: K. Burton *(KB)*
Approved by: Paul Cook *(PC)*

CONSENT CALENDAR

PORTOLA HILLS SEWER LIFT STATION ABANDONMENT AND GRAVITY SEWER
FINAL ACCEPTANCE

SUMMARY:

Construction of the Portola Hills Sewer Lift Station Abandonment and Gravity Sewer Project is complete. The Contractor, Paulus Engineering, Inc., has completed all required work and punch list items. The project has received a final inspection and acceptance of construction is recommended.

BACKGROUND:

Paulus Engineering, Inc. was awarded the construction contract for the Portola Hills Sewer Lift Station Abandonment and Gravity Sewer Project to abandon the Portola Hills Sewer Lift Station, abandon an eight-inch gravity sewer, rehabilitate the adjacent pressure reducing valve vault, and install a new 12-inch gravity sewer. Construction is complete and the project is ready for final acceptance by the Board.

Project Title:	Portola Hills Sewer Lift Station Abandonment and Gravity Sewer Project
Project No.:	20224 (1600)
Design Engineer:	CivilSource, Inc.
Construction Management by:	IRWD Staff and AndersonPenna Partners, Inc.
Contractor:	Paulus Engineering, Inc.
Original Contract Cost:	\$1,149,197
Final Contract Cost:	\$1,280,859
Original Contract Days:	180
Substantial Completion Days:	179
Final Contract Days:	199
Total Budget:	\$1,874,400
Total Project Cost (Est.):	\$1,560,000
Final Change Order Approved On:	November 25, 2013

FISCAL IMPACTS:

Project 20224 (1600) is included in the FY 2013-14 Capital Budget. The existing budget and Expenditure Authorization are sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) and is in conformance with California Code of Regulation, Title 14, Chapter 3, Section 15301 and Section 15282(k). A Notice of Exemption was filed with the County of Orange on July 27, 2012. Section 15301 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. Section 15282(k) includes the installation of new pipeline or maintenance, repair, restoration, removal or demolition of an existing pipeline, as set forth in Section 21080.21 of the Public Resources Code, as long as the project does not exceed one mile in length.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ACCEPT CONSTRUCTION OF THE PORTOLA HILLS SEWER LIFT STATION ABANDONMENT AND GRAVITY SEWER, PROJECT 20224 (1600); 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.

LIST OF EXHIBITS:

None.

DS
December 16, 2013 JM RKM
Prepared by: J. McGehee/R. Mori
Submitted by: K. Burton (KB)
Approved by: Paul Cook / [Signature]

CONSENT CALENDAR

SAND CANYON AVENUE GRADE SEPARATION VARIANCE

SUMMARY:

The Sand Canyon Grade Separation Project will realign and lower Sand Canyon Avenue below the railroad tracks between Burt Road and Laguna Canyon Road and will also widen Sand Canyon Avenue from four to six lanes. The project includes the relocation and installation of domestic water and sewer pipelines and the construction of a storm water pump station and drain. The cost for this work will be shared with the City of Irvine (City) in accordance with the June 2010 Reimbursement Agreement between IRWD and the City. The Orange County Transportation Authority (OCTA), representing the City, has contracted with C.C. Meyers to construct the road improvements, railroad work, and pipeline relocations. Staff recommends that the Board authorize the General Manager to execute Variance No. 4 in the amount of \$60,000 with Tetra Tech, Inc. for additional construction management and support services for this project.

BACKGROUND:

The City is constructing an underpass to replace the existing at-grade railroad crossing on Sand Canyon Avenue between Burt Road and Laguna Canyon Road to alleviate traffic congestion and improve safety. Sand Canyon Avenue will be realigned and lowered approximately 20 feet below the railroad tracks and includes a temporary railroad shoofly system to divert railroad traffic during construction. Sand Canyon Avenue will also be widened from four to six lanes to match the road segments north and south of the project area. The project also includes construction of a storm water pump station and a storm drain from Marine Way to Laguna Canyon Road.

Several existing IRWD facilities will be affected by this project, including a 16-inch domestic water pipeline in Sand Canyon Avenue, a 24-inch domestic water pipeline parallel to the railroad tracks (within the Irvine Company's property which serves East Irvine), and sanitary sewers (serving Old Town Irvine as well as the OCTA and Irvine Unified School District yards north of the I-5 freeway).

Staff determined that several of these facilities were constructed before the expansion of Sand Canyon Avenue in the 1960s and, as a result, IRWD retained prior rights to the project. On June 10, 2010, the District executed a reimbursement agreement with the City that describes the impacted IRWD facilities and the cost sharing arrangement between the City and IRWD for the relocation work.

IRWD facilities installed to date as part of the project include approximately 1,000 feet of 24-inch steel pipeline, installation and removal of 1,100 feet of temporary 24-inch steel pipeline, casing extensions for the sewer and 48-inch transmission mains beneath the existing railroad, three valve replacements on the 48-inch domestic water transmission main, a domestic water

Zone 3-2 pressure reducing facility, 1,800 feet of 10- to 16-inch steel and PVC pipelines, steel highline for Displayworks, and miscellaneous appurtenances.

Variance No. 4 for Construction Management and Support Services:

Staff requested Tetra Tech, Inc., the design engineer for the IRWD Utility Relocation Project, to submit a variance request to provide additional construction management and support services through the duration of the project. Since construction began in March 2011, substantial effort has been required to coordinate with OCTA and the general contractor, C.C. Meyers, Inc. Neither the general contractor nor SRD Engineering (the subcontractor for the underground pipeline work) have performed previous work for the District. This lack of direct experience with the District has resulted in the need for significant effort on the part of Tetra Tech and District staff to meet with the contractors and OCTA to review standard District construction practices, requirements, and expectations. Additional time beyond the initial scope of work has been spent reviewing several material re-submittals, coordinating shut-downs for pipeline tie-ins, discussing inspection requirements, negotiating change orders, and providing construction plan clarifications. As a result, the scope of work for construction management and support services has increased beyond that which was originally anticipated. In addition, the project completion date has been extended from July 2014 to September 2014.

Additionally, during installation of the Zone 2 pipeline (in front of the Union 76 gas station), several abandoned gas tanks owned by the Chevron Corporation were discovered in the proposed alignment where OCTA and the City requested IRWD to investigate an alternative alignment. Tetra Tech's cost to perform this work is also included in the variance request, and will be reimbursed by the City.

Staff reviewed Variance No. 4 from Tetra Tech in the amount of \$60,000 for additional construction management and support services and finds it to be acceptable given the remaining effort needed to complete the project, and is presented as Exhibit "A".

FISCAL IMPACTS:

Projects 11455 (1459) and 21455 (1152) are included in the FY 2013-14 Capital Budget. The existing budgets and Expenditure Authorizations are sufficient to fund Variance No. 4.

ENVIRONMENTAL COMPLIANCE:

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) Procedures and Article 18 of the State of California CEQA Guidelines, the proposed project has been found to be exempt from the requirements of CEQA, Section 15282(g) which states that any railroad grade separation which eliminates an existing crossing is a Statutory Exemption as set forth in Section 21080.13 of the Public Resources Code.

Caltrans and the Federal Highway Administration have evaluated and approved the proposed project and environmental documents required for National Environmental Protection Act (NEPA) compliance. Both agencies have determined the project meets the Categorical Exclusion determination in compliance with NEPA guidelines.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on December 10, 2013.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 4 IN THE AMOUNT OF \$60,000 WITH TETRA TECH, INC. FOR ADDITIONAL CONSTRUCTION MANAGEMENT AND SUPPORT SERVICES FOR THE IRWD UTILITY RELOCATIONS PROJECT FOR THE SAND CANYON GRADE SEPARATION, PROJECTS 11455 (1459) AND 21455 (1152).

LIST OF EXHIBITS:

Exhibit "A" – Tetra Tech Variance No. 4

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: IRWD Pipeline Relocations for Sand Canyon Grade Separation

PO# 121005 and 503411

Project No.: 11455, 21455 and 30366 Project Manager: Joseph McGehee

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Additional Work: Prepare Traffic Control Plans (12 sheets)	03/22/10	3/29/10	\$ 29,500
2	Add Recycled Water Main and Additional Construction Support Services (Act as District Agent)	2/02/11	3/30/11	\$ 285,000
3	Additional Construction Support Services including 2 month construction extension	12/17/12	1/28/13	\$ 84,000
4	Additional Construction Support Services including 2 month construction extension	11/12/13		\$ 60,000



TETRA TECH

November 21, 2013

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

**Reference: IRWD Pipeline Relocations for Sand Canyon Grade Separation
PO# 121005 and PO# 503411, Project No. 11455, 21455, and 30366
Variance No. 4**

Dear Mr. McGehee:

Tetra Tech has been working with the District on the Sand Canyon Grade Separation Project since July 2009 under Purchase Order (PO) No. 121005 and PO No. 503411. Our original approved budget for this project was \$250,000, which included construction support services. By Variance No. 1, our approved budget was increased to \$279,500 in order to allow Tetra Tech to prepare traffic control plans as part of our design. By Variance No. 2, our approved budget was increased to \$564,500 to include the design of the recycled water pipeline and additional engineering construction support. By Variance No. 3, our approved budget was increased to \$648,500 to include additional engineering construction support. We have been providing construction support services since March 2011.

As the District is well aware, Tetra Tech has been required to expend substantial more effort than planned in providing the construction support services. This additional effort is primarily due to the contract logistics with OCTA, City of Irvine, CC Myers, SRD and IRWD, and SRD's lack of experience with working with IRWD and pressurized pipeline systems. Specifically, this has resulted in Tetra Tech having to expend substantial more effort in the following tasks: processing change orders with OCTA; attending meetings with OCTA; shop drawing review; responding to RFIs; and resolving field issues.

Tetra Tech has had to perform the following construction support services on the project to date:

- Respond to seventeen (17) RFIs: including recently the sewer abandonment; hydrant relocation; OCTA sewer alignment; Traveland pipe; sewer lateral conflict; handholes for the 16" water pipe; gas tank in front of the gas station; and blow-off and hydrant location;
- Respond to multi e-mails, meetings and questions regarding the sewer bypass and SRD wanting to use a temporary pump;
- Respond to field issues regarding the recent leak of the pipeline at Sand Canyon and Oak Canyon;
- Review of over 60 shop drawings;
- Provide support services on nine (9) change order requests;
- Redesign of the Zone 2 Pipeline in front of the gas station due to the existing tank; and
- Acting as the District's Agent with Contractor, City of Irvine and OCTA.

Tetra Tech, Inc.
17885 Von Karman, Suite 500, Irvine, CA 92614-6213
Tel 949.809-5000 Fax 949.809.50107 www.tetrattech.com

Mr. Joseph McGehee
 November 21, 2013
 Page 2

The following is a summary of the construction activities completed to date: valve replacement; casings under the railroad; PRV construction; Zone 3 Pipeline; Zone 3 Intertie – temporary and permanent; and the Zone 2 Pipeline from Oak Canyon to Sand Canyon/Burt intersection.

Tetra Tech has been performing the construction support services on a Time and Material Basis and providing the effort and labor needed to assure CC Meyers and SRD are adequately prepared to perform work on IRWD Facilities to IRWD Standards. We have used the majority of our approved budget performing the support services to date. As of the date of this Variance, Tetra Tech has about \$15,400 remaining in our approved budget.

The following is a summary of the construction of IRWD facilities that are still remaining: Displayworks connection (shall be completed in the next two weeks); Zone 3 steel plates at Sand Canyon and Burt Road; Zone 2 Pipeline from Old Towne Irvine and Burt Road to I-5; Zone 2 laterals; Old Towne Irvine Sewer; and OCTA Sewer.

The Contractor is estimating construction to be completed by September 2014. We estimate that the IRWD portion of the work will be completed in about four (4) months spread over the next eight (8) months. The following is a summary of the construction support services that we envision will be required to complete the construction support services for the duration of the proposed Grade Separation Project.

<i>Scope of Work</i>	<i>Recommended Budgeted Hours</i>						<i>Budget</i>
	<i>TLE</i>	<i>MBF</i>	<i>MT</i>	<i>DE</i>	<i>CAD</i>	<i>WP</i>	
District Agent (Mike Fakhar)	0	128	0	0	0	0	\$ 21,120
TT Office Support	18	0	48	0	0	6	\$ 13,290
RFIs (12)	6	24	40	0	0	0	\$ 12,040
Plan changes (20 hours)	0	0	0	0	20	0	\$ 2,560
Shop Drawings (8)	0	0	32	0	0	0	\$ 5,120
Change Orders (10)	20	10	60	0	0	0	\$ 16,850
Record Drawings	0	0	0	0	30	4	\$ 4,420
Total	44	162	180	0	50	10	\$ 75,400

The above hours are based on the following assumptions:

- Mike Fakhar will need 5 hours per week while construction is occurring, 1.5 hours per week during the other times, and 24 hours for project closeout;
- Mike Tsoi will need about 2 hours per week while construction is occurring and about 16 hours for project closeout;
- Twelve (12) additional RFIs;
- Eight (8) additional shop drawings; and
- Ten (10) additional change orders.

Mr. Joseph McGehee
November 21, 2013
Page 3

By this correspondence, we are requesting a variance to increase our budget by **\$60,000** to ensure we have sufficient budget to complete the construction support services for the duration of the proposed Grade Separation Project construction, which has been extended a additional two months (from July 2014 to September 2014).

ADDITIONAL CONSTRUCTION SUPPORT SERVICES

The following is a summary of the specific additional items of work that were not budgeted for in our construction support services included in our original budget and as increased by Variance No. 2 and Variance No. 3:

Item No. 1: Redesign of Pipeline in front of Gas Station

Tetra Tech redesigned the 16-inch Zone Pipeline in front of the Union 76 gas station due to the three existing storage tanks encountered during the pipeline construction. Tetra Tech created one plan and profile sheet and coordinated this revision with OCTA and the Contractor. All future coordination activities anticipated OCTA are included in our proposed amount for this work. As summarized in our September 26, 2013 proposal for this work, the budget is **\$6,000**. It is our understanding that this work will be reimbursed from OCTA.

Item No. 2: Acting as District's Agent

Mr. Fakhar has been acting as the District's main point of contact with OCTA, the City of Irvine and the Grade Separation Contractor. In addition, Mr. Fakhar has been attending the OCTA/Contractor's construction project meetings as necessary and/or requested by the District. To date, Mr. Fakhar has expended 960 hours. By Variance No. 3, we had budgeted 860 hours for Mr. Fakhar. Adding the 162 hours recommended above to the 960 hours spent to date, the total hours will be 1,120 hours. This is an additional 260 hours from the 860 hours included in Variance No. 3. This will increase the budget for this item by **\$42,900**.

Item No. 3: Coordination and General Assistance

Tetra Tech will continue to coordinate the remaining IRWD pipeline relocation work with representatives from OCTA, City of Irvine, RBF and OCTA's Construction Manager. This will include attendance at meetings, as requested by the District, phone correspondence to resolve issues, review changes to the street, storm drain and utility plans to determine the impact, if any, to the IRWD facilities, and any other issues/conflicts that arise during the construction of the Grade Separation Project. This includes the work performed to date on the sewer bypass including the contractor's desire to use a temporary pump and the recent water leak at Sand Canyon and Oak Canyon. We will also provide general assistance to the District's field representative, and the District's Project Manager to answer questions, resolve conflicts, assist with project coordination, and provide direction and/or advise with field changes throughout the project. We are requesting an increase in the budget for this item by **\$11,100**.

Mr. Joseph McGehee
November 21, 2013
Page 4

SUMMARY

Tetra Tech is requesting the District to authorize the above additional scope of work items.

Item No.	Description of the Work	Requested Budget
Additional Services		
1	Redesign of Pipeline in front of Gas Station	\$ 6,000
2	Acting as District's Agent & Construction Meetings	\$ 42,900
3	Coordination and General Assistance	\$ 11,100
Total Requested Amount		\$ 60,000

Acceptance by the District of Requested Variance No. 4 will increase our approved budget from \$648,500 to \$708,500.

Attached herewith are the Professional Services Variance and Register.

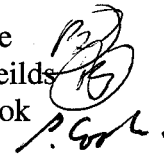
Sincerely,



Tom Epperson, P.E.
Project Manager

TLE/cg
P:\09368-09003\Wordpro\Letters\VarianceNo.4
Attachments

December 16, 2013
Prepared by: R. Lee
Submitted by: P. Sheilds
Approved by: P. Cook



CONSENT CALENDAR

**APPROVAL OF IRWD'S SHARE OF SOCWA'S
FISCAL YEAR 2013-14 OPERATING BUDGET**

SUMMARY:

Staff has been provided Irvine Ranch Water District's (IRWD's) share of the South Orange County Wastewater Authority (SOCWA) Fiscal Year (FY) 2013-2014 Operating Budget which reflects an increase of \$12,414 from the FY 2012-13 Operating Budget. Staff recommends that the Board approve IRWD's share of the SOCWA Operations and Maintenance budget in the amount of \$263,414.

BACKGROUND:

IRWD is a member agency of SOCWA for the Los Alisos Water Recycling Plant (LAWRP) effluent disposal capacity within SOCWA's Aliso Creek Ocean Outfall. IRWD is responsible to fund a portion of SOCWA's General Fund; Project Committee 2 Water Reclamation Permitting; Pretreatment Program; and Project Committee 21 and 24 Capital Replacement, Operation, and Maintenance expenses. These expenses are allocated based on capacity ownership and a percentage of agencies' effluent flows.

The SOCWA Operations and Maintenance (O & M) budget is subject to the approval of each member agencies' governing body. IRWD's portion of SOCWA's O & M budget for FY 2013-14 is \$263,414 as shown in Exhibit "A". This reflects an increase of \$12,414 from FY 2012-13 O & M budget.

FISCAL IMPACTS:

Sufficient funds are included in IRWD's approved FY 2013-14 Operating Budget for these costs. The IRWD portion of the SOCWA capital budget in the amount of \$342,628 is managed through IRWD's capital program budget.

ENVIRONMENTAL COMPLIANCE:

Not Applicable.

COMMITTEE STATUS:

This item has been submitted to the Engineering and Operations Committee on December 10, 2013.

RECOMMENDATION:

THAT THE BOARD RECOMMENDS APPROVAL OF IRWD'S SHARE OF SOCWA'S OPERATIONS AND MAINTENANCE FISCAL YEAR 2013-14 BUDGET IN THE AMOUNT OF \$263,414.

LIST OF EXHIBITS:

Exhibit "A" – SOCWA's Summary of Member Agency Allocations for FY 2013-14
ri SOCWA 2013-14 Budget Approval

EXHIBIT "A"

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SUMMARY OF MEMBER AGENCY ALLOCATIONS FISCAL YEAR 2013-14



FY2013-14 Annual Operating & Capital Improvement Budgets

PROJECT COMMITTEES	City of Laguna Beach	City of San Clemente	City of San Juan Capistrano	Emerald Bay Services District	El Toro Water District	Irvine Ranch Water District	Moulton Niguel Water District	Santa Margarita Water District	South Coast Water District	Trabuco Canyon Water District	Totals
Operations & Maintenance											
General Fund	\$ 28,035	\$ 26,505	\$ 30,865	\$ 26,675	\$ 30,136	\$ 29,656	\$ 35,466	\$ 30,786	\$ 31,616	\$ 3,010	\$ 272,750
PC 2 JB Latham (Dana Point) Treatment Plant Operations	-	-	1,638,087	-	-	-	971,976	1,382,477	1,231,510	-	5,224,050
PC 3(A) MNWD/SMWD Treatment Plant Operations	-	-	-	-	-	-	1,890,743	171,007	-	-	2,061,750
PC 5 Ocean Outfall - (San Juan Creek)	-	126,670	143,070	-	-	24,362	113,910	285,230	109,240	-	778,120
PC 2 SO - Water Reclamation Permitting	-	-	18,420	-	14,657	-	70,610	48,922	21,589	21,391	219,950
PC 15 - Coastal Treatment Plant Operations	1,173,388	-	-	52,258	-	-	144,906	-	1,070,788	-	2,441,340
PC 17 - Regional Treatment Plant Operations	484,678	-	-	19,002	622,860	-	5,159,579	-	325,831	-	6,611,950
PC 21 - Effluent Transmission Main	-	-	-	-	23,916	23,916	19,818	-	-	-	67,550
PC 23 - North Coast Interceptor	413,700	-	-	17,000	-	-	-	-	-	-	430,700
PC 24 - Ocean Outfall (Aliso Creek)	95,915	-	-	4,690	166,072	170,880	243,587	-	56,056	-	737,200
Pretreatment Program	14,700	14,600	25,800	1,300	12,400	14,600	51,600	54,800	39,200	-	229,000
Sub-Total FY2013-14 P.C.'s	\$ 2,210,416	\$ 167,775	\$ 1,856,242	\$ 120,925	\$ 870,041	\$ 263,414	\$ 8,702,195	\$ 1,973,222	\$ 2,885,830	\$ 24,401	\$ 19,074,460
Capital Project Committees - FY2013-14 ADDITIONS											
PC 2R JB Latham (Dana Point) Plant Capital Projects	-	-	217,620	-	-	-	160,882	182,279	153,219	-	714,000
PC 3(A)R MNWD/SMWD Plant Capital Projects	-	-	-	-	-	-	260,331	101,869	-	-	362,200
PC 5 Ocean Outfall - Capital Projects	-	16,310	18,430	-	-	-	14,610	36,620	14,030	-	100,000
PC 15R - Coastal Treatment Plant Capital Projects	1,077,478	-	-	84,982	-	-	831,344	-	848,397	-	2,842,200
PC 17R - Regional Treatment Plant Capital Projects	66,600	-	-	3,600	117,900	-	2,892,400	-	53,200	-	3,133,700
PC 21 - Effluent Transmission Main	-	-	-	-	325,243	325,243	269,513	-	-	-	920,000
PC 24 - Ocean Outfall	9,758	-	-	477	16,896	17,385	24,782	-	5,703	-	75,000
Sub-Total Capital Project Committees - FY2013-14	\$ 1,153,836	\$ 16,310	\$ 236,050	\$ 89,059	\$ 460,039	\$ 342,628	\$ 4,453,862	\$ 320,768	\$ 1,074,548	\$ -	\$ 8,147,100
Total Fiscal Year 2013-14	\$ 3,364,252	\$ 184,085	\$ 2,092,292	\$ 209,984	\$ 1,330,080	\$ 606,042	\$ 13,156,057	\$ 2,293,990	\$ 3,960,378	\$ 24,401	\$ 27,221,560

FISCAL YEAR 2012-13

PROJECT COMMITTEES	City of Laguna Beach	City of San Clemente	City of San Juan Capistrano	Emerald Bay Services District	El Toro Water District	Irvine Ranch Water District	Moulton Niguel Water District	Santa Margarita Water District	South Coast Water District	Trabuco Canyon Water District	Totals
General Fund	\$ 25,990	\$ 24,400	\$ 28,800	\$ 24,600	\$ 28,000	\$ 27,600	\$ 33,400	\$ 28,700	\$ 29,500	\$ 3,010	\$ 254,000
PC 2 JB Latham (Dana Point) Treatment Plant Operations	-	-	1,623,400	-	-	-	969,400	1,357,800	1,349,400	-	5,300,000
PC 3(A) MNWD/SMWD Treatment Plant Operations	-	-	-	-	-	-	2,089,200	156,800	-	-	2,246,000
PC 5 Ocean Outfall - (San Juan Creek)	-	120,400	126,400	-	-	-	99,800	271,800	101,600	-	720,000
PC 2 SO - Water Reclamation Permitting	-	-	20,200	-	18,100	29,000	83,100	65,700	25,600	26,300	268,000
PC 15 - Coastal Treatment Plant Operations	1,142,200	-	-	52,400	-	-	175,400	-	1,086,000	-	2,456,000
PC 17 - Regional Treatment Plant Operations	469,000	-	-	18,400	578,800	-	5,182,600	-	327,200	-	6,576,000
PC 21 - Effluent Transmission Main	-	-	-	-	24,200	24,200	19,600	-	-	-	68,000
PC 23 - North Coast Interceptor	413,400	-	-	17,000	-	-	-	-	-	-	430,400
PC 24 - Ocean Outfall (Aliso Creek)	77,700	-	-	3,800	137,500	154,200	216,100	-	50,700	-	640,000
Pretreatment Program	15,000	15,000	25,000	1,200	12,000	16,000	48,000	58,800	39,000	-	230,000
Sub-Total FY2012-13 P.C.'s	\$ 2,143,290	\$ 159,800	\$ 1,823,800	\$ 117,400	\$ 798,600	\$ 251,000	\$ 8,916,600	\$ 1,939,600	\$ 3,009,000	\$ 29,310	\$ 19,188,400
Capital Project Committees											
PC 2R JB Latham (Dana Point) Plant Capital Projects	-	-	2,320,900	-	-	-	1,723,500	1,531,100	2,016,500	-	7,592,000
PC 3(A)R MNWD/SMWD Plant Capital Projects	-	-	-	-	-	-	553,600	216,600	-	-	770,200
PC 5 Ocean Outfall - Capital Projects	-	-	-	-	-	-	-	-	-	-	-
PC 15R - Coastal Treatment Plant Capital Projects	1,467,500	-	-	115,700	-	-	1,132,300	-	1,230,500	-	3,946,000
PC 17R - Regional Treatment Plant Capital Projects	74,700	-	-	3,900	131,000	-	1,936,500	-	59,700	-	2,205,800
PC 21 - Effluent Transmission Main	-	-	-	-	100,000	100,000	-	-	-	-	200,000
PC 24 - Ocean Outfall	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Capital Project Committees	\$ 1,542,200	\$ -	\$ 2,320,900	\$ 119,600	\$ 231,000	\$ 100,000	\$ 5,345,900	\$ 1,747,700	\$ 3,306,700	\$ -	\$ 14,714,000
Total Fiscal Year 2012-13	\$ 3,685,490	\$ 159,800	\$ 4,144,700	\$ 237,000	\$ 1,029,600	\$ 351,000	\$ 14,262,500	\$ 3,687,300	\$ 6,315,700	\$ 29,310	\$ 33,902,400

June 6, 2013 Board Meeting
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December 16, 2013

Prepared by: R. Lee

Submitted by: P. Sheilds

Approved by: P. Cook



CONSENT CALENDAR

AGREEMENT FOR BIOSOLIDS MANAGEMENT SERVICES WITH THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY, SOCWA ENTITIES, AND NURSERY PRODUCTS, INC.

SUMMARY:

An agreement for biosolids management services has been finalized with the South Orange County Wastewater Authority, and SOCWA entities (Santa Margarita Water District, the City of San Clemente, Trabuco Canyon Water District and IRWD) for biosolids hauling and processing with Nursery Products Incorporated. Staff recommends that the Board authorize the General Manager to execute this agreement for a total cost of \$276,000.

BACKGROUND:

The biosolids management contract between Synagro Technology Incorporated and South Orange County Wastewater Authority (SOCWA) expired on June 30, 2013. To provide uninterrupted biosolids hauling and processing services to its member agencies until a long-term agreement could be reached, SOCWA entered into a five month interim agreement with Nursery Products (on behalf of SOCWA and SOCWA entities) beginning on July 1, 2013 and terminating on November 30, 2013.

During this interim period, SOCWA issued a Request for Proposals to provide Biosolids Management Services and received bids from Western Express Transporters and Nursery Products. These bids were evaluated by SOCWA's Technical Advisory Committee and the findings and recommendations were presented to the SOCWA Board on November 7, 2013. The successful contractor, Nursery Products, was awarded the contract (as provided for in Exhibit A).

As of November 30, 2013, IRWD has expended \$94,923 on biosolids hauling and processing services through the interim agreement. Based on the terms of the new contract, the IRWD biosolids budget for FY 2013-14 will need to be increased by \$48,000.

The contract, effective December 1, 2013, is for a two-year term with up to three optional annual renewals as provided in Exhibit B. With SOCWA as the contract administrator, IRWD will utilize the services and applicable provisions stipulated within the agreement. In order to meet the hauling and processing costs stipulated under SOCWA's new agreement with Nursery Products and maintain biosolids dewatering production at the District's Los Alisos Water Recycling Plant, staff recommends that the Board authorize the General Manager to execute an agreement with Nursery Products.

FISCAL IMPACTS:

The increase in biosolids hauling and processing costs was not anticipated in the FY 2013-2014 Operating Budget which will be an additional \$48,000 for a new biosolids FY 13-14 total of \$276,000.

ENVIRONMENTAL COMPLIANCE:

As stipulated in Section 9 of the attached agreement the Nursery Products Inc. is responsible for ensuring that all processes utilized at its composting facility site comply with all applicable Local, State and Federal laws, rules and regulations.

COMMITTEE STATUS:

This item has been submitted to the Engineering and Operations Committee on December 10, 2013.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT WITH NURSERY PRODUCTS INCORPORATED FOR BIOSOLIDS MANAGEMENT SERVICES.

LIST OF EXHIBITS:

Exhibit "A" – SOCWA Board of Directors Meeting Agenda Item (November 7, 2013)

Exhibit "B" – Agreement for Biosolids Management Services with Nursery Products

EXHIBIT "A"

Agenda Item

Budgeted: Yes
Budget amount: \$1,889,000
Line Item: PC2, 3A, 15 &17 Lines 21B
Legal Counsel Review: Yes
Meeting Date: November 7, 2013

TO: SOCWA Board of Directors

FROM: Dave Seymour, Interim General Manager

STAFF CONTACT: Jim Burror, Director of Operations

SUBJECT: Contract Award to Nursery Products for Biosolids Management

Summary

This year one of SOCWA’s primary Biosolids management contracts expired. SOCWA staff has been soliciting a replacement vendor through a Request for Proposal (RFP) process utilizing an online, transparent procurement tool called Planetbids.com. Furthermore, staff contacted more than 7 providers directly and also sought input from our member agencies.

The RFP process has concluded and SOCWA’s Technical Advisory Committee recommends award of a contract to Nursery Products with a two (2) year term with up to three (3) optional annual renewals. The fees for Biosolids management include a \$38 per ton management fee, \$522 trip fee, and an optional \$88 per day trailer rental fee.

Discussion/Analysis

SOCWA manages approximately 24,000 tons per year of Biosolids with a diverse mix of management options. The prices range from \$51 to \$81 per ton.

The following is the schedule for the solicitation of a new Biosolids management vendor.

<u>Date</u>	<u>Task/Work Item</u>
22-Jul-13	RFP Released
6-Aug-13	Pre-proposal Meeting
21-Aug-13	Received Proposals
8/21-9/4	Review Proposals
4-Sep-13	Proposal team review meeting
9/9-9/13	Interview Week
10/13-10/23	Counsel prepares agreement documents
19-Sep-13	SOCWA TAC Committee Meeting
7-Nov-13	Board Meeting to approve the Contract
11/7-11/31	Member agencies Counsel/Boards review and approve agreements
1-Dec-13	New contract start date

Contract Award to Nursery Products for Biosolids Management

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November 7, 2013

In March 2006, the South Orange County Wastewater Authority (SOCWA) completed its Biosolids Management Strategic Plan Update (Plan), which provided a number of recommendations for management of Biosolids over the next five to ten years.

A key recommendation of this plan is to maintain multiple economic options. As part of the ongoing implementation of the Plan, SOCWA undertook a major procurement effort. This involved preparing and issuing a Request for Proposals (RFP) for viable management options, evaluating the resultant proposals and recommending one or more proposals to the Board of Directors.

Request for Proposals

SOCWA prepared Request for Proposals (RFP) 14-004 Open Options Biosolids Management Services. The RFP solicits proposals for managing a portion of SOCWA's Biosolids through any viable technology. The purpose was to find one or more vendors to propose solutions which will comply with our policies and provide the needed processing capacities in a timely and cost-effective manner.

Proposal Review Team

A proposal review team was formed to prepare the RFP's and perform the proposal evaluations. The team was comprised of a SOCWA employee and one employee from each of the ten SOCWA agencies with Jason Simpson, Director of Administration, managing the overall procurement effort.

This was a potentially complex proposal process involving simultaneously reviewing of proposals for various Biosolids management technologies. In addition, known potential vendors have proven to be litigious and the project team believed that one or more of the vendors was likely to challenge the RFP results. For these reasons, Jason Simpson oversaw the RFP process to help ensure that the process was fair and open and all vendors were treated in a fair and equal manner. This fair and open process monitoring is based on Michael Asner's The Request for Proposals Handbook, Second Edition.

SOCWA staff was also prepared to retain outside external consulting support if necessary to provide the team with technical data and input related to Biosolids management options involving technologies unfamiliar to the team. Bowie, Arneson, Wiles & Giannone reviewed the RFP and provided legal services to the team.

The team members of the review and selection Committee included:

Jim Burror, SOCWA
Tracy Wallace, SMWD
Ziad Mazboudi, CSJC
Dennis Cafferty, ETWD
Michael Perea, TCWD
Marissa Potter, SCWD

Contract Award to Nursery Products for Biosolids Management

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David Shissler, CLB
Matt Collings, MNWD
Dana Wehr, IRWD
David Rebensdorf, SCS
Mike Dunbar, EBSD

The RFP process resulted in two (2) proposals for SOCWA to review.

The Evaluation Process

The evaluation process was done in three phases. The first phase of the review included assessment of the minimum screening criteria and minimum mandatory requirements. The second phase was an initial evaluation of the ten selection criteria that included:

- Overall Qualification and Experience of Firm
- Staffing Organization
- Financial Capabilities
- Sustainability/Reuse
- Project Sitting
- Diversification of Biosolids Management Options
- Contractor Diversification
- Technology Viability
- Product Marketing
- Cost and Price

The selection team determined that a group consensus process would be used to determine the scores for each vendor in each category. The resulting group consensus scoring was used as a basis for a recommendation to SOCWA's Technical Advisory Committee.

The last phase of the proposal process was a Best and Final Offer (BAFO) phase. The selection team provided Proposers with an opportunity to provide a BAFO. The BAFO was useful because the selection team needed to request some additional information and SOCWA needed to see if there was an option for a lower guaranteed minimum because several agencies are installing centrifuges and the amount of material to be managed under this contract will ultimately be lower than thresholds noted in the responses to below 50 wet tons per day.

RFP Process Results and Outcomes

The RFP process used the online bidding service tool PlanetBids.com. This bidding service provides notification to registered vendors throughout California and the United States. The system also helps manage and store documents, Q&A's, notifications, etc. that are associated with the RFP process. It also helps ensure a fair and open process. Also, prior to issuance of the RFP potential vendors were notified to visit SOCWA's website to get registered as a vendor. This helped ensure that potential vendors knew that SOCWA was soliciting Biosolids Management options.

Contract Award to Nursery Products for Biosolids Management

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At the close of the proposal period, two (2) proposals were received in response to the RFP. Synagro, a vendor currently conducting business with SOCWA notified SOCWA staff that they would not be proposing.

Non-Compliant Proposals (Phase 1) Review Results

Neither of the two proposals received were determined to be noncompliant. Each contained the minimum requirements requested in the proposal.

Initial Proposal (Phase 2) Review Results

The companies providing the two (2) proposals were reviewed in detail by SOCWA staff and the proposal review team. Tentative scores for the proposals were developed. There was a clear consensus of the selection committee that Nursery Products was the preferred vendor. However, a list of outstanding questions and issues that could be better discussed or presented in the proposals was generated.

The following is a summary of the review results:

Nursery Products

The Nursery Products proposal was to convert SOCWA's Biosolids to a Class A compost at their Processing Facility near Hinckley, CA. This proposal received a score of 101 out of a potential 120 points or 84% of the available points.

Pros:

- 1) SOCWA and its agencies have been using Nursery Products successfully and they are familiar with the operations of each of the sites.
- 2) Composting works as seen with Nursery Products and Synagro.
- 3) The facility is remote and within California
- 4) The vendor would not have more than 1/3 of SOCWA's Biosolids.
- 5) Composted has a dedicated market

Cons:

- 1) San Bernardino is a county with known Biosolids controversies.
- 2) Composting is outdoors and susceptible to future odor complaints if neighbors were to move close by.
- 3) Limited staff to only 2 team members with Biosolids and composting experience.
- 4) Limited to specific farms or a limited market.

Western Express Transporters

The Western Express Transporters proposal was to send the Biosolids to a landfill in Arizona. This proposal received a score of 74 out of a potential 120, or 62% of the available points.

Contract Award to Nursery Products for Biosolids Management

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Pros:

- 1) The team has extensive experience with handling, processing, and marketing Biosolids products.
- 2) The team members have worked together on similar projects in the recent past.
- 3) The company is a long standing business.
- 4) The vendor would not have more than 1/3 of SOCWA's Biosolids.
- 5) The landfill can take all of SOCWA's materials if needed for an extended period of time.

Cons:

- 1) The Biosolids will not be reused.
- 2) The pricing is higher than both Nursery Products and local landfilling operations.
- 3) Arizona is outside the State and SOCWA will have little political control to ensure continued operations.
- 4) Landfilling would make up a vast majority of SOCWA's management options and is not consistent with SOCWA's long range Biosolids planning.
- 5) A single landfill site was identified.

Best and Final Offers (Phase 3) Process and Review Results

The preferred vendor, Nursery Products, was informed in writing of the questions which the proposal review team required clarification or improvement based upon the initial reviews. This included an opportunity to make a formal presentation to SOCWA followed by a discussion with the proposal review team on the proposal or any outstanding issues identified by the proposal review team.

At the conclusion of the interview, Nursery Products was informed that they had an opportunity to resubmit a Best and Final Offer (BAFO) package for consideration by SOCWA. The BAFO was reviewed by the proposal review team. The initial proposal ratings did not change as part of the BAFO process. Thus, the rating remained as follows:

Nursery Products	101 out of 120
Western Express Transporters	74 out of 120

Nursery Products did include an option to guarantee 30 to 40 wtpd (Wet Tons per Day) to receive a \$2 per wet ton discount.

The proposal review team recommended that Nursery Products be awarded a two (2) year with up to 3 annual renewals with the following conditions:

- Management Fee \$36 per wet ton (minimum tonnage guarantee of 30 to 40 wtpd)
- Haul fee \$552 per trip
- Trailer rental \$88 per day (if used)

Contract Award to Nursery Products for Biosolids Management

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Technical Advisory Committee Review and Recommendation

SOCWA's Technical Advisory Committee (TAC) was convened to review and discuss the Biosolids proposal review committee's recommendation. The TAC discussed the SMWD proposals with Gate 5 and their schedule. The TAC ultimately decided that to guarantee tonnage to Nursery Products would interfere with potential contracting with Gate 5 and that the \$38 per wet tone fee would suit SOCWA and the member agencies better. Also, the potential savings could also be recovered by the SOCWA agencies by sending additional material to the Prima Deshecha landfill in the interim. Thus, the TAC recommended the following:

A contract with Nursery Products be awarded for two (2) years with up to 3 annual renewals with the following conditions:

Management Fee \$38 per wet ton (no minimum tonnage guarantee)

Haul fee \$552 per trip

Trailer rental \$88 per day (if used)

Post RFP Process Public Comments

No bid protests were received during the seven (7) period prior to the proposal period ending.

However, one vendor made written public comments for the TAC to consider. The Vendor was Western Express Transporters. The public comments were reviewed, received and filed by the Technical Advisory Committee.

Current Management Contracts and Fees

The Table below has some additional information related to SOCWA's current Biosolids management contracts.

Site	Otay Mesa - Landfill - Terra Renewal(2)	Prima D - Landfill - SOCWA	Nursery Products (3)	South Kern - Composting - Synagro	Totals
2012 Biosolids (tons per year)	1,589	3,932	9,323	9,367	24,211
Cost per wet ton	\$67.04/Ton	\$51.37/Ton	\$58.14/Ton	\$81.11/Ton	\$66.51 (avg)
Annual Cost(1)	\$106,527	\$201,987	\$542,039	\$759,757	\$1,610,310
Reuse	No	No	Yes	Yes	
Percent of material	6.6%	16.2%	38.5%	38.7%	
Percent of annual cost	6.9%	13.1%	35.0%	49.1%	
Contract Expiration	Oct-2013	NA	Nov-2013	Jan-2017	

(1) Based on 2012 Biosolids production at current pricing

Contract Award to Nursery Products for Biosolids Management

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- (2) The member agency TCWD manages an additional approximately 2 to 5 tons per day with this contract.
- (3) The member agencies SMWD, IRWD, and San Clemente manage an additional 20 tons per day with this contract.

In June 2013, the Board approved a contract with Nursery Products for 3 months because an existing contract was set to expire with Synagro for their Arizona Soils site. In September, the Nursery Products contract was extended to the end of November to allow for additional time to complete the procurement process.

Advisory Committee Review

Technical Advisory Committee recommended award of a contract to Nursery Products for two years with up to 3 annual renewals with a Biosolids management of a \$38 per ton, \$522 trip fee, and an optional \$88 per day trailer rental fee.

Prior Related Project Committee or Board Action(s)

None

Fiscal impact

Currently, \$1,889,000 is appropriated to cover Biosolids management costs for the Authority. The anticipated expenses are within these appropriated limits approved for the impacted Project Committees.

Recommendation

Award a contract to Nursery Products for two (2) years with up to 3 annual optional renewals with the following conditions:

- Management Fee \$38 per wet ton (no minimum tonnage guarantee)
- Haul fee \$552 per trip
- Trailer rental \$88 per day (if used)

Attachment(s): Agreement

EXHIBIT "B"

AGREEMENT FOR BIOSOLIDS MANAGEMENT SERVICES SOUTH ORANGE COUNTY WASTEWATER AUTHORITY AND NURSERY PRODUCTS, INC.

THIS AGREEMENT is made and entered into, and effective this 1st of December, 2013, by and between the South Orange County Wastewater Authority (SOCWA), and SOCWA entities Santa Margarita Water District (SMWD) Irvine Ranch Water District (IRWD), City of San Clemente (CSC), and Trabuco Canyon Water District (TCWD) (hereinafter referred to collectively as "SOCWA", or in some cases separately from SOCWA as "SOCWA entity(ies)").

AND

Nursery Products, Inc., a California corporation (herein referred to as "Contractor")

SOCWA and Contractor are sometimes individually referred to herein as each "Party," and jointly referred to herein as the "Parties."

RECITALS

WHEREAS, Contractor represents that it has the expertise and qualifications necessary to perform the Biosolids Management services described in this Agreement in a highly competent manner. Contractor further represents that it has demonstrated competence in providing the type of services contemplated by this Agreement. Contractor acknowledges that SOCWA is relying on these representations in entering into this Agreement; and

WHEREAS, subject to the specific terms and conditions set forth herein, Contractor desires to enter into this Agreement with SOCWA for removal and processing of SOCWA's dewatered Biosolids (as defined in this Agreement); and

WHEREAS, subject to the specific terms and conditions set forth herein, Contractor and SOCWA desire to enter into this Agreement providing for:

- (i) the management of SOCWA's Biosolids at the SOCWA Plants listed on Exhibit A, which include plants owned by SMWD, IRWD, CSC, TCWD in their separate capacities from SOCWA;
- (ii) the management of Biosolids including both the loading, transportation and beneficial reuse of de-watered wastewater Biosolids in accordance with this Agreement;
- (iii) the permitting and operations of the Biosolids Management site specified in this Agreement and Contractor's management of SOCWA's Biosolids thereon for reuse through Class A composting of SOCWA Biosolids to permitted farming applications at the Hawes Composting Facility;

- (iv) the management of Biosolids at other site other than the Hawes Composting Facility requires written approval from SOCWA; and

WHEREAS, Contractor represents that it has valid permits from the Lahontan Regional Water Quality Control Board, County of San Bernardino, and California State Health Services Departments, and any other federal, State of California ("State"), regional or local regulatory agency as necessary, to operate a program for beneficial use or the processing of Biosolids through facilities and operations at the Hawes Composting Facility, 14479 Cougar Road, Helendale, CA 92342 ("Hawes Facility") to Class A composted Biosolids as defined under 40 CFR 503 for permissible farming applications. Copies of these facilities permits are to be provided to SOCWA upon execution of this Contract.

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

Section 1. Definitions

1.1. Biosolids. Means the primarily organic material removed during the digested treatment of municipal waste water or domestic sewage that meet the nonhazardous material standard according to the California Administration Code's procedures and the U.S. Environmental Protection Agency's (EPA) Toxic Characteristic Leaching Procedures test. In addition, Biosolids shall meet the EPA's Pollutant Limits, as established in 40 Code of Federal Regulations Part 503-Sewage Sludge Regulations (Table 1), **but will not meet** the EPA's Class B Pathogen Reduction and Vector Attraction Reduction Requirements as stated in 40 Code of Federal Regulations Part 503 Sewage Sludge, and therefore are referred to as "sub-Class B Biosolids." Grit and screenings removed during the wastewater treatment process shall not constitute Biosolids.

1.2. Biosolids Management. Biosolids Management means management of Biosolids in compliance with all applicable legal requirements under federal, state, and local law, including but not limited to those requirements defined in the California Public Resources Code section 40192 and the Federal Code of Regulations 40 CFR, Part 503.

1.3. SOCWA's Biosolids. Biosolids (as defined in Section 1.1) removed by or generated by SOCWA during the treatment of municipal wastewater or domestic sewage at the SOCWA Plants, and stated to be the amount for each SOCWA Plant set forth in Exhibit A; provided, Contractor and SOCWA understand and agree that SOCWA has no obligation to provide any set quantity of SOCWA Biosolids in connection with the Biosolids Management services provided by Contractor under this Agreement. This Agreement is a non-exclusive contract, and SOCWA reserves the right to enter into contracts with one or more companies in order to provide Biosolids management services for any transport, disposal, composting or other beneficial reuse for the SOCWA Biosolids.

Section 2. Services.

2.1 This Agreement, when fully executed by the Parties, shall constitute a contract whereby Contractor agrees to remove and transport the SOCWA Biosolids from the SOCWA Plants. Contractor further agrees to manage SOCWA's Biosolids by Class A composting of SOCWA Biosolids at the Hawes Facility for permitted farming applications and Contractor certifies and agrees that it shall provide sufficient capacity to handle all the SOCWA Biosolids at such site for such applications.

2.2 Contractor agrees it will provide services for the loading support, transporting, hauling and composting the SOCWA Biosolids to Class A Biosolids for the beneficial reuse thereof at the Hawes Facility as well as any hauling required for distribution of the finished product to beneficial use sites for farming applications, or approved fail-safe sites, as determined by the Contractor, in accordance with the terms of this Agreement. The SOCWA Entities are entering into this Agreement with Contractor and providing the consideration set forth herein with the understanding that the terms of this Agreement permit Contractor to transport and reuse the SOCWA Biosolids through Class A composting for permitted farming applications in accordance with all federal, state and local laws and regulations.

2.3 Contractor agrees to furnish all permits, licenses, facilities, equipment, labor and materials to load, transport and reuse all the SOCWA Biosolids provided by SOCWA to Contractor through Class A composting and permitted farming applications and agrees to maintain sufficient site capacity in accordance with the terms of this Agreement to transport and reuse such SOCWA Biosolids in accordance with the terms of this Agreement.

2.4 The frequency of SOCWA Biosolids loading and transport varies for each SOCWA Plant. Storage of dewatered Biosolids for longer than one-to-two days is not feasible for any SOCWA Facility. An exception to this fact is the Los Alisos Plant, which conducts batch dewatering operations and may allow for storage of dewatered Biosolids for longer periods of time. The scheduling of load pick-ups will be subject to the individual SOCWA Plant's operating schedules; night pick-ups may be a possibility. The operating schedules shall be determined by each SOCWA Plant, in consultation with Contractor. Generally, loadings may be conducted on any day of the week, including weekends and holidays, with some exceptions.

2.5 Contractor shall furnish and maintain water-tight, tarped equipment specifically designed for the collection and transport of the SOCWA Biosolids. Contractor shall furnish and maintain all truck tractors required to transport the trailers, properly licensed operators, fuel, insurance, and all associated labor, equipment, and appurtenances. Such equipment may include, but not be limited to, the following: "end-dump" trailers with a tarp-type cover with a capacity of fifteen-to twenty wet tons or more. Such trailers shall be capable of accommodating the existing SOCWA Plants' loading bays. The tarp cover must be capable of sliding open to expose approximately 80% of the trailer in order to accommodate loading from more than one loading point. Tarp covers must be maintained in good working order to help control odors, keep the trailer and its contents water-tight and prevent any loss of SOCWA Biosolids during transportation.

2.6 Contractor represents and warrants that the reuse of SOCWA Biosolids shall be done in accordance with all laws and regulations, and any regulatory administrative orders or

other directives or mandates in effect during the term of this Agreement. Concurrently with the execution of this Agreement, and thereafter periodically as requested by the SOCWA entities, Contractor shall submit evidence that the designated reuse site, the Hawes Facility, is an approved, permitted site, and meets all associated federal, state, and local regulatory permit requirements for the transportation, Class A composting, and reuse activities identified in this Agreement.

2.7 All equipment utilized in connection with Contractor's operation intended to operate on the highways shall be fully licensed as required by all applicable agencies. Contractor shall be responsible for ensuring that all licenses are current. Contractor shall be fully responsible for the proper licensing and training of its personnel. Upon SOCWA's reasonable request, Contractor will furnish evidence of Contractor's compliance with the Omnibus Transportation Employee Testing Act of 1991 and any other related regulations. All subcontractors of Contractor as allowed by this Agreement shall also be in compliance with the terms of this Agreement as such terms apply to the Biosolids Management services provided by such subcontractors.

2.8 Contractor shall be required to complete a manifest prior to the transportation of every load from the SOCWA Plants. The manifest shall clearly indicate from which plant the SOCWA Biosolids originated.

2.9 Contractor shall indicate in writing provided to SOCWA Plant personnel the proper haul weight of each trailer and such personnel shall use all reasonable efforts to load each trailer to the maximum allowable weight, including supplemental loading if requested by Contractor. It shall be Contractor's responsibility to ensure that the desired transportation weights provided to SOCWA meet all applicable regulatory restrictions and Contractor assumes liability for all penalties, assessments or charges in the event such laws or regulations are violated. SOCWA may periodically request that Contractor check the transport weight of each trailer at a State certified scale at no additional cost to SOCWA. Contractor must maintain truckload weight tickets. Annual, monthly, and quarterly compliance reporting and monthly billing invoices must match tonnages.

The Contractor is required to provide separate weight tickets per bin for each of the SOCWA agencies and SOCWA will receive a copy of all the other agencies tickets as the lead contracting agency.

2.10 Contractor shall be responsible for cleaning up and removing all trash, grease, oil and debris at the SOCWA Plants, resulting from the services provided by Contractor, including its subcontractors, under this Agreement. All of Contractor's equipment shall be kept clean and maintain a neat appearance. Cleaning or servicing of equipment by Contractor shall not be undertaken at the SOCWA Plants, except for emergency repairs. Any spills or discharge at the SOCWA Plants resulting from Contractor's operation will be promptly cleaned up by Contractor. Contractor's equipment shall be as clean as possible before entering any SOCWA Plant, and shall not contain any Biosolids residue. Prior to leaving any SOCWA Plant, Contractor shall ensure that the transport equipment does not have any Biosolids on the wheels, tarp cover or any other appurtenance that may track onto public roads. Contractor is responsible for the

load(s) once it departs any SOCWA Plant. This responsibility includes, but is not limited to, traffic tickets, load stability, intentional or unintentional spills, traffic accidents/injuries, equipment breakdowns, and any other situation that may arise in the process of transferring the SOCWA Biosolids to Contractor's reuse sites. Any spills that occur during the transportation of the SOCWA Biosolids shall be immediately cleaned up, at Contractor's expense. SOCWA shall be immediately contacted with written verification thereafter in the event of any SOCWA Biosolids spill.

2.11 Contractor shall furnish phone numbers to the SOCWA Plants for scheduling pickups, emergencies and for contacting Contractor's Project Manager, who shall be identified by Contractor in writing prior to the commencement of this Agreement. All phone numbers will be kept up-to-date throughout the duration of this Agreement. Emergency numbers shall allow the SOCWA Plant personnel to reach the Project Manager twenty-four (24) hours a day.

2.12 In addition to any other costs or other responsibilities Contractor has under this Agreement, Contractor agrees it shall reimburse all transportation and related costs incurred by any SOCWA Plant that is required to make arrangements for SOCWA Biosolids transport and disposal as a result of Contractor's (or Contractor's subcontractor(s)) failure to pick up, transport and manage of any SOCWA Biosolids within twenty-four (24) hours from (i) the time the SOCWA Biosolids are available for loading by Contractor, as evidenced by written or verbal communication by the SOCWA Plant personnel to Contractor; or (ii) the times indicated on the operating schedules determined by such entities. The amount to be reimbursed by Contractor shall be an amount equal to the difference between the per ton rate charged by Contractor hereunder, and the per ton rate paid by SOCWA to an alternative transport and disposal service, and/or any other costs incurred with respect thereto. Notwithstanding any other term set forth in this Agreement, at SOCWA 's option, SOCWA may deduct such amounts from the next payment due. If SOCWA has not otherwise elected to deduct such amounts from current payments, Contractor shall reimburse all such costs, to be adequately documented by the SOCWA, within ten (10) calendar days from receipt of SOCWA's written request therefore. Contractor's failure to remit such costs shall, as set forth herein, be considered a breach of this Agreement.

2.13 Proposer shall provide and maintain a contingency and emergency response plans along with simple procedures written in the appropriate language format (English and Spanish) to their truck drivers. Emergency preparedness kits are also required onboard trucks.

2.14 Contractor is responsible to provide facilities necessary to clean trucks as necessary. Retuned haul equipment will be empty for Biosolids will be empty.

2.15 Contractor's drivers are expected to conduct themselves in a professional and courteous manner. Dispatchers are expected to relay important communications from SOCWA to drivers promptly and document communications and trainings through sign-in sheets.

Section 3. Ownership of SOCWA Biosolids.

All Biosolids removed from SOCWA Plant premises by Contractor shall become the property of and the responsibility of Contractor at the time Contractor takes possession at the SOCWA Plants, and Contractor assumes all right, title to and interest in such loads, including all responsibility associated with the proper handling, transportation, disposal, treatment, recycling, Class A composting, reuse and ultimate use of the SOCWA Biosolids.

Section 4. Permitting of Biosolids Management for Class A composting of SOCWA Biosolids to applicable farming applications at the Hawes Composting Facility

On execution of this Agreement, Contractor agrees to comply with the following:

4.1 Contractor shall maintain in effect all necessary licenses, permits and other approvals legally required in order to perform this Agreement.

4.2 Contractor shall promptly notify SOCWA of any action or proceeding to cancel, withdraw or modify any license, permit or insurance policy held by Contractor that is related to SOCWA's Biosolids or the Biosolids Management services, or the Hawes Facility, and of the cancellation, withdrawal, loss or modification of any such license, permit, or policy.

4.3 Contractor shall forward to SOCWA copies of all new or revised permits obtained for the Hawes Facility. Contractor shall demonstrate to SOCWA that it has obtained and kept current all required permit and other business authorizations for the Biosolids Management services in accordance with all laws and regulations, including but not limited to Contractor's license and corporate status.

Section 5. Inclement Weather.

Contractor shall provide adequate facilities at the Hawes Facility to insure its ability to manage and transport the SOCWA Biosolids during inclement weather. However, the Parties acknowledge that these wet weather facilities may not be adequate for severe wet weather conditions, which may result in a reduction or cessation in the acceptance of SOCWA's Biosolids during severe weather periods. Following a reasonable determination by Contractor that such a reduction or cessation is necessary, Contractor shall provide the SOCWA Plants with notice thereof at least twenty-four (24) hours prior to putting such reduction or cessation of Biosolids acceptance into effect.

Section 6. Quality Assurance Project Plan.

Contractor shall provide SOCWA with a copy of its Quality Assurance Project Plan (QAPP) prior to performing any services under this Agreement. The QAPP shall include, but not be limited to, a complete description of an environmental monitoring program performed by Contractor with respect to the Hawes Facility and a response plan to be implemented by Contractor in the event of a spill of Biosolids during transport, or otherwise.

Section 7. Safety.

Contractor's management shall attend periodic safety meetings and Contractor shall be responsible for insuring that all SOCWA safe working practices are followed by Contractor's

personnel at the SOCWA Plants. Contractor must comply with all SOCWA and each entities' safety requirements for providing the Biosolids Management services while on the plant properties. This includes logging in and out of the SOCWA Plants with the operations staff each visit. Current safety requirements are described in the Exhibit B to this Agreement.

Section 8. Records and Reporting.

Contractor shall keep complete and correct daily records of all Biosolids Management services and activities, including, but not limited to, records reflecting the date, quantity, origin and destination of SOCWA Biosolids removed, transported, Class A composted, and, applied. Upon request by SOCWA, Contractor shall provide SOCWA timely access to all such records concerning the management of SOCWA's Biosolids, and SOCWA may conduct additional laboratory testing to verify regulatory compliance.

Contractor shall provide SOCWA with a written monthly report of activities on the tenth (10th) day of each month during the term of this Agreement, commencing one (1) month from the effective date of this Agreement. The report of activities shall include, but not be limited to, environmental monitoring data, crops harvested and planted if applicable, quantities of residuals applied, and problems encountered. If applicable, the Contractor will supply on a monthly basis, as part of the monthly report of activities, product quality information that demonstrates the achievement of Class A Pathogen Reduction status as well as marketing information that demonstrates product shipping. Contractor shall provide SOCWA with an annual report of compliance with 40 CFR Sections 501 and 503 no later than January 31 of the year following the calendar year of the report.

Section 9. Compliance with Laws.

9.1 Contractor shall assure that all processes utilized at its Hawes Facility site, or the farming application sites as required, shall comply with all applicable local, state and federal laws, rules, regulations and pronouncements including but not limited to the following:

A. All activities shall be conducted in accordance with the rules, regulations, orders and other requirements, as applicable, set forth by the California Integrated Waste Management Board; County of San Bernardino Board of Supervisors; State of California Resource Management Agency and Local Enforcement Agency; State of California Water Resource Control Board; Lahonton Regional Water Quality Control Board; Air Pollution/Air Quality Control; Parts 503 of Title 40 of the Code of Federal Regulations ("Standards for the Use and Disposal of Sewage Sludge," respectively), and such other regulations as may be applicable now or in the future;

B. Contractor recognizes that Part 503 of Title 40 of the Code of Federal Regulations is a self-implementing rule and that activities conducted at its existing Hawes Facility site must comply with all applicable general requirements, pollutant limits, management practices, operational standards, monitoring requirements, recordkeeping requirements and reporting requirements of the rule. Contractor shall provide all information relevant to operations

at the Hawes Facility site, or farming application sites as required, which SOCWA may need to complete NPDES or other permit applications or permit required reports.

9.2. Contractor shall perform the Biosolids Management services under this Agreement in a safe and competent manner.

9.3. Contractor shall comply with all applicable federal, state and local laws, statutes, regulations, ordinances, rules, orders, directives, and pronouncements in performing its obligations under this Agreement.

9.4. Without limiting the foregoing, Contractor shall abide by, and shall cause its employees and subcontractors to abide by, all applicable health, safety and EPA rules.

9.5. Contractor shall promptly and fully notify the SOCWA of any governmental action or proceeding to enforce any statute, regulation, ordinance, rule, or governmental order in connection with the SOCWA's Biosolids or the Biosolids Management services provided under this Agreement.

9.6. Contractor shall keep fully informed of federal, state and local laws, ordinances and regulations which in any manner affect those employed by Contractor, or in any way affect SOCWA's Biosolids or the Biosolids Management services provided pursuant to this Agreement.

Section 10. Inspections.

SOCWA shall have access to Contractor's Existing Sites and other sites specific to this Agreement during normal business hours to conduct inspections of Biosolids Management services and related operations. SOCWA shall not be required to give advance notice of such inspections to Contractor.

Section 11. Subcontractors

SOCWA has entered into this Agreement in order to receive the services of Contractor. Other than in the case of subcontractor transportation services and subcontractors that are wholly owned subsidiaries of Contractor, SOCWA will have the right to approve all subcontractors and subcontractor agreements in writing. The provisions of the Agreement will apply to any subcontractor of Contractor.

Section 12. Contractor's Employees Compensation

12.1 Davis-Bacon Act - Contractor will pay and will require all subcontractors to pay all employees on said project a salary or wage at least equal to the prevailing rate of per diem wages as determined by the Secretary of Labor in accordance with the Davis-Bacon Act for each craft or type of worker needed to perform this Agreement. The provisions of the Davis-Bacon Act shall apply only if this Agreement is in excess of two thousand dollars (\$2,000.00) and when twenty-five percent (25%) or more of this Agreement is funded by federal assistance. If the aforesaid conditions are met, a copy of the provisions of the Davis-Bacon Act to be complied with are incorporated herein as a part of this Agreement and referred to by reference.

12.2 General Prevailing Rate – SOCWA and the SOCWA entities have been advised by the State of California Director of Industrial Relations of its determination of the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and overtime work in the locality in which the services and work is to be performed for each craft or type of work needed to execute this Agreement, and copies of the same are on file in the office of the Director of Administration of SOCWA, and the SOCWA entities. Contractor agrees that not less than said prevailing rates shall be paid to workers employed on this public works Agreement as required by Labor Code Section 1774 of the State. Per Labor Code 1773.2, SOCWA and the SOCWA entities will have on file copies of the prevailing rate of per diem wages at its principal office and at each SOCWA Plant, which shall be made available to any interested party upon request.

12.3 Forfeiture For Violation - Contractor shall, as a penalty to SOCWA forfeit fifty dollars (\$50.00) for each calendar day or portion thereof for each worker paid (either by Contractor or any subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the Labor Code for the work provided for in this Agreement, all in accordance with Section 1775 of the Labor Code of the State of California.

12.4 Apprentices – Sections 1777.5, 1777.6, 1777.7 of the Labor Code of the State, regarding the employment of apprentices are applicable to this Agreement and Contractor shall comply therewith if the prime contract involves thirty thousand dollars (\$30,000.00) or more or twenty (20) working days or more; or if contracts of specialty contractors not proposing for work through Contractor are two thousand dollars (\$2,000.00) or more or five (5) working days or more.

12.5 Workday – In the performance of this Agreement, not more than eight (8) hours shall constitute a day's work, and Contractor shall not require more than eight (8) hours of labor in a day from any person employed by it hereunder except as provided in paragraph 35.2 above. Contractor shall conform to Article 3, Chapter 1, Part 7 (Section 1810 et seq.) of the Labor Code of the State and shall forfeit to SOCWA as a penalty, the sum of twenty five dollars (\$25.00) for each worker employed in the execution of this contract by Contractor or any subcontractor for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. Contractor shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by Contractor in connection with the project.

12.5.1 Under the "motor carrier exemption," property-carrying drivers are exempted from the applicability of the requirements established under the Federal Labor Standards Act (49 U.S.C. section 31502) and the corresponding California Industrial Welfare Commission Wage Order for the Transportation Industry (Cal. Code Regulations Title 8, Division 1, Chapter 5, Article 9 (Section 11090 et seq.)). Under federally established rules regarding hours of service, an interstate property-carrying driver may drive a maximum of eleven (11) hours after ten (10) consecutive hours off duty. Under California Vehicle Code section 34501.2, the maximum

driving time within a work period is twelve (12) hours for a driver of a truck or truck tractor who is engaged in intrastate commerce.

12.6 Record of Wages; Inspection - Contractor agrees to maintain accurate payroll records showing the name, address, social security number, work classification, straight-time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by it in connection with the project and agrees to require that each of its subcontractors do the same. All payroll records shall be certified as accurate by the applicable Contractor or subcontractor or its agent having authority over such matters. Contractor further agrees that its payroll records and those of its subcontractors shall be available to the employee or employee's representative, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards and shall comply with all of the provisions of Labor Code Section 1776, in general. Penalties for noncompliance with the requirements of Section 1776 may be deducted from project payments per the requirements of Section 1776.

Section 13. SCAQMD Requirements

It is Contractor's responsibility that all equipment furnished and used for performance of the Biosolids Management services be in accordance with the latest rules and regulations of the SCAQMD.

Section 14. Composition of Biosolids.

All SOCWA Biosolids to be removed by Contractor shall be digested wastewater Biosolids that are processed and dewatered by SOCWA to an average of eighteen (18) or greater percent solids. The SOCWA Plants produce sub-Class B Biosolids by anaerobically digesting primary and secondary solids at a temperature of approximately 98°F but for less than 15 days or by aerobic digestion of secondary solids. The SOCWA's Biosolids shall meet the non-hazardous material standard according to the California Administration Code's procedures and the U.S. Environmental Protection Agency's (EPA) Toxic Characteristic Leaching Procedures test. In addition, the SOCWA Plants' Biosolids shall meet the EPA's alternative Pollutant Limits, as established in 40 Code of Federal Regulations Part 503-Sewage Sludge Regulations Table 3. No representation or agreement is made by any public agency Party with respect to the quality of the SOCWA Biosolids, or the compliance thereof, with respect to, or under any state law, including any rules or regulations, other than the State of California.

Section 15. Term of Agreement.

This Agreement shall be effective as of the date first set forth above and shall continue in full force and effect for a period of two (2) years, beginning December 1, 2013, and ending November 30, 2015 (the "scheduled expiration date"), unless the Agreement is: (1) terminated prior to the scheduled expiration date pursuant to the terms of this Agreement; or (2) renewed pursuant to the Contract Renewals Section, except as subject to early termination as provided in Early Termination Section of this Agreement.

Section 16 Contract Renewals

SOCWA, and its member agencies, may exercise the option to renew the contract for up to three (3) one-year periods based if mutually acceptable contract terms can be negotiated. SOCWA and the SOCWA entities have no obligation, collectively or individually, to renew or justify any non-renewal if it elects not to renew.

Section 17. Early Termination.

17.1. Grounds for Early Termination. This Agreement may only be terminated at a time prior to the scheduled termination date set forth in Term of Agreement Section of this Agreement, and any renewal thereof, by written notice of termination as follows:

A. By either Party in the event the defaulting Party fails to cure an Event of Default under the Default and Remedies Section of this Agreement within sixty (60) days of receipt of a written notice from the non-defaulting Party of such material breach.

B. Notwithstanding any other term of this Agreement, by SOCWA, or by any individual SOCWA entity, upon sixty (60) days written notice to Contractor, where SOCWA or the SOCWA entity(ies) has determined, in its sole discretion, that the services of Contractor no longer meet, or are necessary to meet, SOCWA's Biosolids Management service needs with respect to the applicable SOCWA Plant(s). The Agreement shall terminate on the date specified in the notice of termination.

C. By either Party, in the event of a Force Majeure as defined the Force Majeure Section of this Agreement, if such condition exists for fifteen (15) days or more. Either party may terminate this Agreement on account of Force Majeure by giving notice in writing in accordance with the Notice Section in the Agreement. Said notice shall be effective twenty-four (24) hours after receipt.

D. SOCWA may, after giving Contractor sixty (60) days' written notice terminate the services of Contractor for cause, upon the occurrence of any one or more of the following events:

(i) if Contractor fails to perform the work in accordance with this Agreement including, but not limited to, failure to provide Biosolids Management services established under the terms of this Agreement, failure to supply sufficient skilled workers, failure to provide suitable materials or equipment;

(ii) if Contractor otherwise violates in any substantial way any provisions of the Agreement; and/or

(iii) if Contractor is adjudicated bankrupt, voluntarily files for bankruptcy, or makes any assignment for the benefit of creditors.

SOCWA may terminate this Agreement by giving Contractor written notice of termination. The Agreement shall terminate on the date specified in the notice of termination.

17.2. Effect of Early Termination. Where Contractor's services have been so terminated by SOCWA, as set forth in this Section, the termination will not affect any rights or remedies of SOCWA against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by SOCWA will not release Contractor from liability.

17.3. Rights Upon Termination. On termination of this Agreement by SOCWA, SOCWA and Contractor agree as follows:

(i) All of the records in Contractor's possession pertaining to the SOCWA Biosolids Management services, together with all supplies, equipment, or other items of property owned by SOCWA and in Contractor's possession, if any, shall be immediately delivered to SOCWA.

(ii) Contractor's right to compensation shall immediately cease, except that Contractor is entitled to compensation for services rendered before the termination date.

Section 18. Force Majeure.

Notwithstanding any other provisions in this Agreement, neither Contractor nor SOCWA shall be held responsible or liable for failure to meet their respective obligations under this Agreement, if such failure shall be due to causes beyond the control of the Party that failed to meet its obligations ("Force Majeure"). Such causes shall be limited, however, to the following: civil disorder, insurrection or acts of the public enemy, road closures, acts of God, power failure, or acts of a federal or state governmental authority which renders it unlawful to implement this Agreement. A Party shall immediately notify the other Party in writing of such a condition. No Party, however, shall be relieved of any obligation or liability if such failure arises out of such Party's own acts or negligence.

Section 19. Default and Remedies.

19.1. Allegation of Default. In the event either Party violates any of the terms or conditions of this Agreement or fails, in the opinion of the other Party, to satisfactorily perform its duties under this Agreement, the aggrieved Party shall deliver an Allegation of Default to the violating Party. The Allegation of Default shall be delivered in the manner described in Section 35 - Notices of this Agreement. After delivery of the Allegation of Default, the violating Party shall have fifteen (15) days within which to cure the alleged default or to otherwise respond to the Allegation of Default.

19.2. Event of Default. In the event that either Party to this Agreement shall fail to comply, in any material respect, with any of its obligations, covenants or responsibilities under this Agreement within fifteen (15) days after an Allegation of Default has been issued, this shall constitute an Event of Default, and the non-defaulting Party shall be entitled to the remedies set forth below.

19.3. Remedies for Default. In the event of an uncured Event of Default of any material provision of this Agreement, a Party shall be permitted to pursue any remedy available to it at law or equity; provided, however, that a Party shall have the right to terminate this Agreement

Attn: Accounts Payable
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688

To: CSC
City of San Clemente
Attn: Accounts Payable
100 Avenida Presidio
San Clemente, CA 92672

To: TCWD
Trabuco Water District
Attn: General Manager
32003 Dove Canyon Drive
Trabuco Canyon, CA 92679

Section 21. Insurance to be Maintained by Contractor.

21.1 Contractor and all subcontractors shall purchase and maintain, throughout the term of this Agreement and any periods of warranty or extensions, insurance in amounts equal to the requirements set forth below. Contractor shall not commence work under this Agreement until all required insurance is obtained in a form acceptable to the SOCWA as evidenced by certificates and endorsements, nor shall Contractor allow any subcontractor to commence service pursuant to a subcontract until all insurance required of the subcontractor has been obtained and submitted to SOCWA. Failure to maintain required insurance coverage shall result in immediate termination of this Agreement.

21.2 Contractor will furnish satisfactory proof by certificate, which may be on SOCWA's own form(s) at SOCWA's discretion, or otherwise as may be required by SOCWA's that it has taken out public liability and property damage insurance naming SOCWA and its member agencies, and the SOCWA entities, SMWD, IRWD, CSC, and TCWD and each of their "directors, officers, agents and employees" as additional insureds under such policies, in accordance with the terms of this Agreement. Contractor shall furnish SOCWA with certificates of insurance and appropriate endorsements naming the additional insureds with respect to all of the services provided by this Agreement in accordance with the terms of this Agreement.

21.3 The general liability and automobile liability insurance will be comprehensive or commercial in form (at Contractor's option) and cover contractual obligations set forth in this Agreement, and will insure against (a) claims, loss or damages on account of bodily injury and personal injury, including death resulting therefrom, caused or alleged to have been caused directly or indirectly from the performance or execution of this Agreement or the performance of services hereunder by Contractor, its employees, officers, agents and any subcontractor thereof, and (b) claims, loss or damages to any property caused or alleged to have been caused directly or indirectly by the performance or execution of the Agreement or the performance of services hereunder by Contractor, its employees, officers, and agents and any subcontractor thereof. Such insurance will also adequately insure against all injury, death, claims, loss or damage or accidents caused by or alleged to have been caused directly or indirectly by the use

and operation of automobiles, trucks and/or other mobile or stationary equipment. Contractor will maintain worker's compensation insurance, including occupational disease provisions, under the laws of the State, or other state (as applicable) and employer's liability insurance for the benefit of its employees. Contractor shall additionally maintain and provide pollution legal liability insurance as further set forth in this Agreement. All said commercial, automobile and pollution legal liability insurance will be for the period of performance under this Agreement and shall be on a 'per occurrence' basis and any and all aggregate amounts, if applicable, must be stated in the certificates provided hereunder.

The coverage amounts of said insurance will not be less than the following:

Commercial General Liability - Bodily, Personal Injury; Property Damage and Umbrella coverage: \$5,000,000

Pollution Legal Liability: \$2,500,000

Auto Liability - Bodily, Personal Injury; Property Damage and Umbrella coverage: \$5,000,000

Employers Liability - Bodily Injury by Accident: \$1,000,000

Employers Liability - Bodily Injury by Disease: \$1,000,000

21.4 Subcontractor Insurance

Contractor shall require in any subcontract, as permitted, that the subcontractor also obtain and maintain insurance coverage consistent with the insurance policies and coverage required pursuant to this Section 21.3. SOCWA, upon request and in its reasonable discretion, may approve lesser per-occurrence and/or aggregate limit(s) for a subcontractor's coverage than as specified if consistent with a limited scope of work and limited potential for loss attributable to the subcontractor's work, as justified by information provided to SOCWA. Contractor shall be responsible for ensuring that any and all subcontractors are insured in accordance with this Section, or as otherwise approved by SOCWA, and for providing all documentation of the subcontractors' insurance coverage (i.e., insurance policies, certificates of insurance, endorsements, et cetera) to SOCWA within the time(s) required pursuant to this Section. The contractor shall indemnify and defend SOCWA, its member agencies, the SOCWA entities- SMWD, IRWD, CSC, and TCWD, and each of their directors, officers, employees, and representatives against any and all claims arising from the failure of any subcontractor to obtain and maintain the insurance required pursuant to this Section. All subcontractor insurance coverage shall be subject to review and approval as described in Section.

21.5 Said policies will have a clause providing that thirty (30) calendar days written notice by registered mail will be given to SOCWA prior to any cancellation or amendment to such policies, except in the case of non-payment of premium, where such prior notice shall be ten (10) calendar days.

Contractor's insurance will be issued and underwritten by insurance companies acceptable to SOCWA, and having a rating not less than Class A:VII in accordance with the most current Best's Rating Guide Property/Casualty, and which are authorized or admitted to do business in the State and have an agent for service of process in the State.

Contractor may satisfy the insurance limit requirements in a single policy or multiple policies, provided, however, that any such additional policies written as excess insurance will not provide any less coverage than that provided by Contractor's first or primary policy. All policies of insurance, endorsements and certificates of insurance showing compliance with the terms of this Agreement will be furnished to SOCWA concurrently with Contractor's execution of this Agreement.

21.6 All of the above policies of insurance shall be primary insurance and shall name "SOCWA, each SOCWA member agency, SMWD, IRWD, CSC, TCWD and each of their officers, employees, directors and agents" as additional insureds pursuant to separate endorsement(s) (the "Additional Insureds"). The insurer shall waive all rights of subrogation and contribution it may have against the Additional Insureds and their respective insurers and the certificates of insurance and endorsements shall set forth the waiver of subrogation and any other required term. In the event any of said policies of insurance are canceled, Contractor shall, prior to the cancellation date, submit new evidence of insurance in conformance with this Section of the Agreement to SOCWA. No work or services under this Agreement shall commence until Contractor has provided SOCWA including each SOCWA entity hereunder with certificates of insurance and required endorsements, and said certificates of insurance and endorsements are approved by SOCWA and each SOCWA entity.

21.7 In the event Contractor subcontracts any portion of the services under this Agreement (as permitted by SOCWA), the contract between Contractor and such subcontractor shall require the subcontractor to maintain the same policies of insurance that Contractor is required to maintain pursuant to this entire Section, and to name the Additional Insureds under the policies identified above, in accordance with all of the requirements of this entire Section of the Agreement.

21.8 SOCWA and the SOCWA entities agree among themselves each is responsible for reviewing the adequacy of, and thereafter accepting on its own behalf, the Contractor's insurance certificates and endorsements. Each SOCWA entity acknowledges and agrees that by virtue of SOCWA representatives coordinating matters with respect to this Agreement, including obtaining evidence of Contractor's insurance; SOCWA does not assume any responsibility for ensuring the adequacy thereof with respect to the SOCWA Plants owned by the respective SOCWA entities. SOCWA individually and SMWD, IRWD, CSC, and TCWD, respectively, each releases the other agencies from any responsibility for such matters in connection with the releasing party's own plant.

Section 22. Faithful Performance Bond.

The Section is not used because there is no Guarantee for tonnage to Contractor.

Section 23. Indemnification by Contractor.

Contractor agrees to save, indemnify, defend and hold harmless SOCWA, including its member agencies, and SMWD, IRWD, TCWD and CSC, individually, and each of their officers, employees, directors, agents and representatives (collectively defined as the "Indemnitees" for purposes of this Section 23 - Indemnification by Contractor and Sections 24 - Duty To Defend 25 - Indemnification Among SOCWA Entities of this Agreement), against any and all liability, claims, judgments, cost and demands arising directly or indirectly, or resulting from or in connection with, the Biosolids Management services hereunder, and the services or work of Contractor's employees, agents, representatives, or subcontractors in relation to the rendition of services pursuant to this Agreement ("Claims") including but not limited to the following:

(a) bodily injury to or death of persons, and personal injury to, including but not limited, third parties, the Indemnitees, and Contractor, its employees, agents, representatives, or subcontractors;

(b) injury to property of the Indemnitees, Contractor its employees, agents, representatives, or subcontractors, and third parties, and to natural resources;

(c) violation of any federal, state, and local law or regulations, including but not limited to, strict liability imposed thereby; and

(d) any other claims, demands, losses, damages, costs, expenses, attorneys' fees and liability to the extent arising from, or as a result of Contractor 's services or work under this Agreement; excepting only such Claims caused by the active negligence or willful misconduct of the Indemnitees.

Contractor acknowledges that any Claims connected with the release or spill of any hazardous (as designated under law or regulations) material, by-product or residue as a result of the services or work performed under this Agreement by Contractor, its employees, agents, representatives or subcontractors are expressly within the scope of this indemnity, and that the costs, expenses, and liability for (a) environmental investigations, monitoring, containment, abatement, removal, repair, cleanup, restoration and remedial work; (b) penalties and fines arising from the violation of the law or regulations; and (c) attorneys' fees, disbursements, and other response costs, are all expressly within the scope of this indemnity.

Contractor shall defend any Claim as set forth under Section 24 – Duty to Defend below. Contractor shall pay all reasonable costs that may be incurred by an Indemnitee in enforcing this indemnity, including reasonable attorney's fees. This indemnity obligation shall survive the termination of this Agreement by any Party hereto.

Section 24. Duty To Defend.

Contractor's duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of Contractor. Contractor's obligation to defend shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially

result in an obligation to indemnify one or more of the Indemnitees, and upon written notice of such Claim being provided to Contractor. Payment to Contractor by any Indemnitee or the payment or advance of defense costs by any Indemnitee shall not be a condition precedent to enforcing such Indemnitee's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution expressly determines that the Claim did not arise out of, pertain to, or relate to the Biosolids Management services or work of Contractor, or its employees, agents, representatives or subcontractors, provided under this Agreement, to any extent, then the Indemnitees will reimburse Contractor for the reasonable costs of defending the Indemnitees against such Claims.

Section 25. Indemnification Among SOCWA Entities

SOCWA shall indemnify SMWD, IRWD, CSC, and TCWD each in its individual entity capacity and not as a member agency of SOCWA, and their respective officers, directors, employees and agents against, and shall hold and save them and each of them harmless from, any and all actions, claims, damages to persons or property, penalties, obligations or liabilities of any kind that may be asserted or claimed by any person, firm, entity, corporation, political subdivision, governmental entity or agency or other organization arising out of or in connection with the negligence or willful misconduct of SOCWA in the performance of this Agreement related to the SOCWA Plants.

IRWD shall indemnify SOCWA, SMWD, CSC, and TCWD and each of their respective officers, directors, employees and agents against, and shall hold and save them and each of them harmless from, any and all actions, claims, damages to persons or property, penalties, obligations or liabilities of any kind that may be asserted or claimed by any person, firm, entity, corporation, political subdivision, governmental entity or agency or other organization arising out of or in connection with the negligence or willful misconduct of IRWD in the performance of this Agreement related to the IRWD Plant.

SMWD shall indemnify SOCWA, IRWD, CSC, and TCWD and each of their respective officers, directors, employees and agents against, and shall hold and save them and each of them harmless from, any and all actions, claims, damages to persons or property, penalties, obligations or liabilities of any kind that may be asserted or claimed by any person, firm, entity, corporation, political subdivision, governmental entity or agency or other organization arising out of or in connection with the negligence or willful misconduct of SMWD in the performance of this Agreement related to the SMWD Plant.

CSC shall indemnify SOCWA, IRWD, SMWD, and TCWD and each of their respective officers, directors, employees and agents against, and shall hold and save them and each of them harmless from, any and all actions, claims, damages to persons or property, penalties, obligations or liabilities of any kind that may be asserted or claimed by any person, firm, entity, corporation, political subdivision, governmental entity or agency or other organization arising out of or in connection with the negligence or willful misconduct of CSC in the performance of this Agreement related to the CSC Plant.

TCWD shall indemnify SOCWA, IRWD, SMWD, and CSC and each of their respective officers, directors, employees and agents against, and shall hold and save them and each of them harmless from, any and all actions, claims, damages to persons or property, penalties, obligations or liabilities of any kind that may be asserted or claimed by any person, firm, entity, corporation, political subdivision, governmental entity or agency or other organization arising out of or in connection with the negligence or willful misconduct of TCWD in the performance of this Agreement related to the TCWD Plant.

Section 26. Attorneys' Fees.

In the event that legal action is commenced by either of the Parties hereto in connection with this Agreement, the Party prevailing in any such action shall be entitled to recover from the other Party or Parties, in addition to such other relief as a court may grant, all reasonable attorneys' fees and costs incurred by the prevailing Party.

Section 27. Contractor's Status.

It is understood and agreed that the Contractor is, and shall be, acting at all times as an independent contractor herein, and not as an employee of SOCWA. Contractor shall secure, at its own expense, and be responsible for, any and all payment of applicable taxes including Social Security (FICA), State Disability Insurance Compensation, Unemployment Compensation, employee payroll taxes, and any other payroll deduction for Contractor and its officers, agents, and employees in connection with the services to be performed under this Agreement. The relationship between the Parties shall be limited to performance of this Agreement in accordance with its terms. Unless otherwise specifically stated herein, neither Party shall have any responsibility with respect to the services to be provided or contractual benefits assumed by the other Party. Nothing in this Agreement shall be deemed to constitute either Party a partner, agent or legal representative of the other Party. No liability or benefits, such as workers compensation, pension rights or liabilities, or other provisions or liabilities arising out of or related to a contract for hire or employer/employee relationship, shall arise or accrue to any Party's agent or employee as a result of this Agreement or the performance thereto.

No permitted or required approval by SOCWA under this Agreement or in connection with Contractor's Biosolids Management services will be construed as making SOCWA responsible for the manner in which Contractor performs such services. Such approvals are intended only to give SOCWA the right to satisfy themselves with the quality of services and work performed by Contractor.

Section 28. Successors and Assigns.

The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective heirs, representatives, successors, and assigns. No assignment of this Agreement shall be effective without the prior written consent of the non-assigning Party.

Section 29. Further Assurances.

Whenever requested by the other Party, each Party shall execute, acknowledge, and deliver all further conveyances, agreements, confirmations, satisfactions, releases, powers of attorney, instruments of further assurance, approvals, consents, and all further instruments and documents as may be necessary, expedient, or proper to complete any conveyances, transfers, sales, and agreements covered by this Agreement, and to do all other acts and to execute, acknowledge, and deliver all requested documents to carry out the intent and purpose of this Agreement.

Section 30. Third-Party Rights.

Nothing in this Agreement, express or implied, is intended to confer on any person, other than the Parties to this Agreement and their respective successors and assigns, any rights or remedies under or by reason of this Agreement.

Section 31. Entire Agreement: Modifications in Writing.

All previous negotiations had between the Parties hereto and/or their agents with respect to this Agreement are merged herein and this Agreement alone fully and completely expresses the Parties' rights and obligations. This Agreement shall not be modified in any manner except by an instrument in writing executed by the Parties or their respective successors in interest.

Section 32. Severability.

Should it be found that any part of this Agreement is unlawful or unenforceable, such part or parts of this Agreement shall be of no force or effect, and this Agreement shall be treated as if such part or parts had not been inserted

Section 33. Interpretation.

Each of the Parties hereby waives any provisions of law to the effect that an ambiguity in a contract or agreement should be interpreted against the Party that drafted the contract, agreement, or instrument. SMWD, IRWD, CSC and TCWD each agree that the existing joint powers agreement establishing SOCWA, and the joint powers arrangements established pursuant to that agreement, have no bearing or effect on the application of this Agreement to the SOCWA Plants owned by each such entity listed on Exhibit A.

Section 34. Governing Law; Venue.

This Agreement shall be governed by and construed according to the laws of the State of California. If any legal action is necessary to enforce any of the terms or conditions of this Agreement, the venue of such action shall be in Orange County, California.

Section 35. Notice.

Any notice, payment, or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or upon deposit in the United States mail, registered or certified, postage prepaid and addressed to the Party for whom intended as follows:

This Agreement may be executed in counterparts, each of which shall be an original and which together shall constitute one instrument.

Section 39. Recitals; Exhibits

The Recitals are true and correct and are incorporated in this Agreement by this reference. Exhibits A, B and C referred to in this Agreement are incorporated herein.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first above written.

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

By _____

Dave Seymour, Interim General Manager

APPROVED AS TO FORM:

General Counsel, South Orange County Wastewater Authority

Bowie Arneson, Wiles & Giannone

By _____

Patricia B. Giannone

SANTA MARGARITA WATER DISTRICT

By _____

Authorized Representative

IRVINE RANCH WATER DISTRICT

By _____

Authorized Representative

City of San Clemente

By _____

Authorized Representative

Trabuco Canyon Water District

By _____

Authorized Representative

"CONTRACTOR"

By _____

Print Name and Title of Officer

IRS Employer's I.D. Number

Exhibit A

SOCWA PLANTS

Agency/Plant/Address

- 1) SOCWA/ JB Latham Facility/ 34156 Del Obispo, Dana Point, CA, 92629
- 2) SMWD/ Chiquita WRF/ 28792 Ortega Hywy, San Juan Capistrano, CA, 92675
- 3) IRWD/ Los Alisos WRP/ 22312 Muirlands Blvd. City, Lake Forest, CA 92630
- 4) CSC/ WRF 380 Avenida Pico, San Clemente, CA 92672
- 5) TCWD RRWRP 21397 Heritage Drive, Trabuco Canyon, CA 92679

Exhibit B

**Attachment F of the SOCWA Request for Proposal for Open
Options Biosolids Management Services**

SOCWA SAFETY AND ACCIDENT PREVENTION REQUIREMENTS

1. General: In addition to the requirements set forth in proposal and contract documents, Vendor, Consultant or Contractor ("Contractor") shall adhere to the following requirements.

2. Safety Meeting: Contractor shall meet with personnel from SOCWA's Director of Operations before the start of the Agreement. All subcontractors should be present at this meeting. Contractor is responsible to inform all subcontractors of the items discussed at this meeting. This meeting shall occur within 5 working days of the Agreement being fully executed.

3. Personal Protective Equipment: SOCWA requires, safety glasses, long pants, shirts and safety toed footwear will be worn on the plant premises and SOCWA jobsites. In addition, hard hats, safety glasses, Class 2 safety vest, and safety toed footwear are required on all construction sites and where posted. A class 3 vest shall be worn on SOCWA jobsites that take place in public roadways. Other personal protective equipment is required where posted or required by regulation. Face shields and safety goggles shall also be required to be worn when working around pressured chemical systems at connections, disconnections, adjustments and observations. It is the responsibility of Contractor to inform the delivery truck drivers of this obligation and train them in these requirements. Lack of safety equipment or failure to use safety equipment will be cause for termination of the Agreement.

4. Regulations: Contractor agrees to conform to all applicable Federal and State Occupational Safety and Health Act (OSHA), California Labor Code, South Coast Air Quality Management District (SCAQMD) California Hazardous Waste and Federal Department of Transportation regulations. Lack of compliance with applicable regulations may be cause for termination of the Agreement.

5. SOCWA Policy: Contractor agrees to conform to all applicable SOCWA policies, procedures and programs. SOCWA policy is more stringent than Cal-OSHA in many instances. Contractor shall be responsible for obtaining applicable SOCWA policies, procedures and programs from SOCWA. Lack of compliance with applicable SOCWA policies, procedures or programs may be cause for termination of the Agreement.

6. Plant Speed Limits: The posted speed limit is 15 miles per hour. Violators of the posted speed limit may have their vehicle banned from the site.

7. Quarterly Safety Meetings: Contractor agrees to send representatives including subcontractor representatives to quarterly Contractor Safety meetings if Contractor is on site, or if this Agreement is in effect.

8. Biosolids Materials Spill Response Plan: Contractor shall have and maintain an effective Biosolids materials spill response plan to minimize environmental impacts. Said plan must be forwarded in writing to SOCWA approximately 30 calendar days after the execution of the Agreement, and in any case prior to hauling SOCWA Biosolids.

9. Smoking: Smoking is only allowed in designated areas. Smoking is not allowed in any building, electrically classified area or process area where methane gas may be present. Lack of compliance with SOCWA Smoking policy will be cause for removal of offending personnel from the site, termination of the Agreement, or both.

10. Training Certification: When required by regulation, certificates of training shall be maintained on-site for the duration of the activity that requires an employee to be certified. Certificates shall be current. Lack of certificates when required will be cause for removal of offending personnel from the site, termination of the Agreement, or both.

11. Drug-Free Workplace - Contractor and all subcontractors shall adhere to the California Drug-Free Workplace Act, Sections 8350 through 8357.

EXHIBIT C
Biosolids Fee Schedule



ATTACHMENT B COMPENSATION FOR SERVICES OPEN OPTIONS BIOSOLIDS MANAGEMENT

Facility	SOCWA Avg. Volume Guarantee Level (wtpd)(a)	Truck Charge per delivery trip	Trailer Rental charge per day	Biosolids Management Fee per wet ton delivered (b)	Weekend or Holiday Surcharges (include basis for charge)	Standby time charge when documented per hour	Cancellation Charge (include basis for charge)
SOCWA/ Regional Treatment Plant	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
SOCWA/ JB Latham Facility	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
SOCWA/ 3A Plant	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
SMWD/ Chiquita WRF	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
IRWD/ Los Alisos WRP/	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
CSC/ WRP	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110
TCWD / WRP	None	552	88	38	0	110	110
	SOCWA 30-40	552	88	36	0	110	110
	SOCWA 75	552	88	35	0	110	110

(a) SOCWA Average Guarantee Level is defined as the total volume to be managed by all the agencies combined on a monthly average based.

(b) If using SOCWA's existing landfill contracts, SOCWA will pay the landfill directly and the total price will be used to evaluate the cost of the proposal.


THE PROPOSAL INCLUDES THE FOLLOWING REQUIRED SUBMITTALS.


- 1) Attachment C – Reference Sheet
- 2) Attachment D – Acknowledgement of Insurance Requirements and Certification of Ability to Provide Coverages Specified
- 3) Attachment E – Non-Collusion Affidavit form

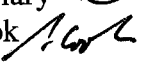
Name of Firm	Nursery Products LLC
Authorized Agent (Printed or Typed)	Jeff Meberg
Signature	
Address, City, State, Zip Code	647 Camino de los mares, #108 San Clemente
Telephone No.	949-366-2155
Email	jmeberg@cox.net

No Guarantee Pricing is used for SOCWA contracting

December 16, 2013

Prepared by: Eileen Lin 

Submitted by: Cheryl Clary 

Approved by: Paul Cook 

CONSENT CALENDAR

FY 2012-13 COMPREHENSIVE ANNUAL FINANCIAL REPORT

SUMMARY:

At the November 5, 2013 Finance and Personnel Committee meeting, an initial draft of the Comprehensive Annual Financial Report (CAFR), including audited financial statements, accompanying auditor's report, and management's discussion and analysis of significant changes in transaction amounts and account balances was presented for the Committee's review and comment. Based on that discussion and input from the Committee, staff is providing the proposed FY 2012-13 CAFR incorporating the modifications discussed for final approval, attached as Exhibit "A".

BACKGROUND:

At the Committee meeting, the District's auditor, Mayer Hoffman McCann, P.C. presented its required Auditor Communication pursuant to Statement on Auditing Standards 114 *The Auditor's Communication with Those Charged with Governance*. This letter, attached as Exhibit "B", reflects the auditor's understanding of key management assumptions and practices and notes that there were no disagreements with management during the scope of the audit. The auditors have also provided a recommendation, attached as Exhibit "C", that the District continue to improve interdepartmental communications regarding capital asset timing of depreciation.

The IRWD Comprehensive Annual Financial Report:

The FY 2012-13 CAFR is being prepared for the tenth consecutive year by the District. The Government Finance Officers Association (GFOA) encourages state and local governments to prepare and publish expanded financial reports (CAFR) in conformity with generally accepted accounting principles. GFOA has awarded a Certificate of Achievement for Excellence in Financial Reporting in each of the previous nine years the District has submitted the CAFR.

Staff will continue to exclusively produce an enhanced electronic version with key references hyperlinked throughout the document. The CAFR will be available on the District's website.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on November 5, 2013.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit “A” – Proposed FY 2012-13 Comprehensive Annual Financial Report

Exhibit “B” – SAS 114 Auditor’s Communication with Those Charged with Governance from
Mayer Hoffman McCann

Exhibit “C” – Management Comment Letter from Mayer Hoffman McCann

NOTE:

**COPY OF
EXHIBIT "A"
MAY BE OBTAINED
FROM THE DISTRICT
SECRETARY**



Mayer Hoffman McCann P.C.

An Independent CPA Firm

2301 Dupont Drive, Suite 200

Irvine, California 92612

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Finance and Personnel Committee
Irvine Ranch Water District
Irvine, California

Summary of Audit Results

We have audited the financial statements of the Irvine Ranch Water District ("District") for the year ended June 30, 2013, and have issued our report thereon dated December 9, 2013. Professional standards require that we provide you with the following information related to our audit.

Our Responsibilities under U.S. Generally Accepted Auditing Standards And OMB Circular A-133

Our responsibility, as described by professional standards, is to express opinions about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities.

Our responsibility is to plan and perform the audit to obtain reasonable, but no absolute, assurance that the financial statements are free of material misstatement. In planning and performing our audit, we considered the District's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. We also considered internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with the U.S. Office of Management and Budget (OMB) Circular A-133.

As part of obtaining reasonable assurance about whether the District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit. Also, in accordance with OMB Circular A-133, we examined, on a test basis, evidence about the District's compliance with the types of compliance requirements described in the OMB Circular A-133 Compliance Supplement applicable to its major federal program for the purpose of expressing an opinion on the District's compliance with those requirements. While our audit provides a reasonable basis for our opinion, it does not provide a legal determination on the District's compliance with those requirements.

As part of our audit, we considered the internal control of the District. Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control. We are responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Scope and Timing of the Audit

Audit field work was substantially completed in October 2013. Audit risks addressed by the audit included the following:

- Risk of material misstatement associated with investments and bank balances
- Risk of material misstatement associated with cash receipts and cash disbursements
- Risk of material misstatement associated with significant assets and liabilities
- Risk of improper recognition of revenues and expenses

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. We will advise management about the appropriateness of accounting policies and their application. The significant accounting policies used by the District are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the year. We noted no transactions entered into by the District during the year for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the financial statements in a different period than when the transaction occurred.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Examples of significant judgments and estimates reflected in the District's financial statements include:

- Judgments involving the useful lives and depreciation methodology to use for capital assets.
- Judgments concerning which capital project expenditures should be capitalized and depreciated versus expensed in the financial statements and judgments concerning which projects should be placed in service.
- Judgments regarding the fair market valuation of derivative instruments.

Significant Difficulties Encountered in Performing the Audit

We encountered no difficulties in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. Audit adjustments reflected in the accompanying financial statements were primarily associated with adjustments to commence depreciation for capital assets upon their placement in service. With the concurrence of management, adjustments not reflected in the financial statements because they were immaterial to the financial statements included immaterial adjustments to construction in progress, capital assets, depreciation expense, interest expense and beginning net position.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated December 9, 2013.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the governmental unit's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

This information is intended solely for the use of the Finance and Personnel Committee and management of the District and is not intended to be and should not be used by anyone other than these specified parties.

Irvine, California
December 9, 2013

Mayer Hoffman Melman P.C.



Mayer Hoffman McCann P.C.

An Independent CPA Firm

2301 Dupont Drive, Suite 200

Irvine, California 92612

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Finance and Personnel Committee
Irvine Ranch Water District
Irvine, California

Communications Regarding Internal Control

In planning and performing our audit of the financial statements of the Irvine Ranch Water District ("District") as of and for the year ended June 30, 2013, in accordance with auditing standards generally accepted in the United States of America, we considered the District's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses and therefore there can be no assurance that all such deficiencies have been identified.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We did not identify any deficiencies in internal control that we consider to be material weaknesses.

The status of our prior year communications regarding internal control are as follows:

(1) Communications Regarding Capital Assets

During the prior year audit, we had noted certain projects that were accounted for as construction in progress that did not meet the criteria necessary to be classified as a capital asset. Accordingly, we had recommended revision to the written communications between the Engineering Department and the Finance Department so that the Finance Department obtained all of the information needed to properly evaluate projects for consideration of capitalization. In the current year audit, we saw a significant improvement in the communication between the departments with respect to managing the risk that construction in progress included projects that did not meet the criteria established by accounting standards for the recording of a capital asset and we had no audit adjustments with respect to this issue. This year, our adjustments pertaining to capital assets were limited to adjustments to ensure that depreciation commenced in the month that assets were placed in service, as provided by generally accepted accounting principles. We will continue to monitor controls in this important area and advise the Finance and Personnel Committee should we observe a deterioration in these controls.

(2) Depreciation Methodology

During the prior year audit, we noted certain anomalies with respect to depreciation expense. As a result, we recommended that the District investigate these anomalies during the 2012/13 fiscal year. The District has investigated this issue and found the depreciation methodology of the District to be functioning as intended. We will continue to monitor controls in this important area and advise the Finance and Personnel Committee should we observe a deterioration in these controls.

This communication is intended solely for the information and use of management, the Finance and Personnel Committee, and others within the organization, and is not intended to be and should not be used by anyone other than these specified parties.

Mayer Hoffman Melman P.C.

Irvine, California
December 9, 2013

December 16, 2013

Prepared by: Gretchen Maswadeh *gm*

Submitted by: Jenny Roney *JR*

Approved by: Paul Cook *PC*

CONSENT CALENDAR

LONG-TERM DISABILITY COVERAGE FOR CALENDAR YEAR 2014

SUMMARY:

Staff has received renewal rates for long-term disability insurance (LTD). The District is in the last year of a three-year rate guarantee for life insurance and dependent life insurance coverage, so no renewal rates for the life insurance programs are presented at this time. Staff recommends that the Board authorize the General Manager to extend IRWD's current contract with Principal Financial for LTD coverage and add the optional enhanced 3 Session EAP program provided by Magellan Health Services.

BACKGROUND:

LTD Coverage:

Long-term disability insurance coverage provides wage replacement to individuals who experience wage loss due to a disability lasting longer than 90 days. LTD insurance provides cash income in the event that an employee becomes disabled through illness or injury. Through the Principal Financial LTD insurance program, employees may receive up to 66.67% of their monthly gross income, up to a maximum monthly benefit of \$10,000, while they are disabled. A summary of the District's current coverage is provided in Exhibit "A".

Employee Assistance Program (EAP):

Bundled with the Principal Financial LTD program, at no additional cost to the District, is an Employee Assistance Program (EAP) provided by Magellan Health Services. This EAP includes telephonic counseling only and referrals to licensed health providers. The program is designed to assist employees in reducing stress, strengthening relationships, increasing productivity, and improving their overall quality of life. Although available since the inception of the District's LTD program with Principal Financial, the Magellan Health Services EAP was never activated because the District has another EAP provider, REACH Employee Assistance, Inc. (REACH), which has been in place for many years.

The District's broker requested that Principal Financial provide a quote for an enhanced EAP program that more closely matched the current benefits available to District employees through REACH, including up to three face-to-face counseling sessions. Principal Financial was able to provide an enhanced program through their contract with Magellan Health Services. An EAP Benefits Overview is provided as Exhibit "B".

Renewal Rates:

After negotiations beginning at a more than 14% premium increase, Principal Financial has proposed a 9.5% premium increase for the District's LTD premiums. This will result in the current rate of 0.42% of insured payroll increasing to 0.46% for calendar year 2014.

Principal Financial is also able to provide an enhanced EAP program through its bundled arrangement with Magellan Health Services at an additional cost of 0.01% of covered payroll. This enhanced EAP program will closely mirror the services provided by REACH. As a comparison, the Principal/Magellan Health Services enhanced EAP program cost is \$0.69 per employee per month. Currently the REACH program cost is approximately \$2.80 per employee per month. While the Principal/Magellan Health Services EAP program provides considerable savings to the District, it is an untried program with District employees and the usage and satisfaction levels are as yet unknown.

FISCAL IMPACTS:

LTD Coverage:

The District's budget includes \$117,500 for LTD premiums for FY 2013-14. Continuing to contract with Principal Financial for LTD coverage with the proposed 9.5% premium increase will result in estimated annual premiums for FY 2013-14 of \$116,750, an estimated \$1,000 or 0.8% under budgeted projections.

Employee Assistance Program (EAP):

Adding the enhanced EAP program to the Principal Financial LTD premium rate will result in an additional \$1,300 in LTD premium for the FY 2013-2014, bringing the total LTD estimated cost to \$118,050, \$550 or 0.4% over budget. The current budget for FY 2013-14 EAP services provided by REACH is \$11,300.

In light of the minimal budget increase to include the enhanced Principal/Magellan Health Services EAP program and the fact that the District has not explored changes to the EAP benefits offered to employees in many years, staff recommends adding this enhanced EAP program at this time. Staff plans to evaluate both programs during the remainder of FY 2013-14 to determine employee preference and satisfaction levels. The data gathered from this analysis will be a significant factor in recommendations for EAP services in FY 2014-15.

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 & Personnel Committee on December 9, 2013.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO CONTINUE TO CONTRACT FOR LTD COVERAGE, INCLUDING THE ENHANCED EMPLOYEE ASSISTANCE PROGRAM, FOR THE CALENDAR YEAR 2014 WITH PRINCIPAL FINANCIAL.

LIST OF EXHIBITS:

Exhibit “A” – Summary of Long Term Disability coverage

Exhibit “B” – EAP Benefits Overview

EXHIBIT "A"

LONG TERM DISABILITY INSURANCE SUMMARY

Minimum Hours Requirement	Employees must be working at least 30 hours a week	
Who Pays for Coverage	You are not required to pay a part of the premium for insurance under the Group Policy.	
Elimination Period	three months	
Own Occupation Period	two year(s)	
Primary Monthly Benefit	66 2/3% of your Predisability Earnings.	
Maximum Monthly Benefit	\$10,000	
Minimum Monthly Benefit	\$100	
Maximum Benefit Payment Period	Member's Age on The Date Disability Begins Before age 65	Months of the Benefit Payment Period greater of 36 Months or to Social Security Normal Retirement Age
	65-67	24 months
	68-69	18 months
	70-71	15 months
	72 and over	12 months
Rehabilitation Services and Benefits		
Rehabilitation Services	Included	
Predisability Intervention Services	Included	
Other Coverage Features		
Work Incentive Benefit	12 months	
Survivor Benefit	three times Primary Monthly Benefit	
NOTE:		
No premiums are required during a Long Term Disability Benefit Payment Period.		
Benefits may be reduced by other sources of income and disability earnings.		
Some disabilities may not be covered or may be limited under this insurance.		

This summary provides only highlights of the Group Policy. The entire Group Policy determines all rights, benefits, exclusions and limitations of the insurance described above.

✓ **1-3 Session Model EAP**

Magellan's EAP is available 24 hours a day, 7 days a week. Participants access the EAP services through a 24-hour toll-free line staffed by Customer Service Associates who are responsible for obtaining basic demographic information and referring callers to an appropriate EAP provider for assessment and referral services.

Our staff refers the caller to a Magellan EAP provider in the participant's area. To match a caller's need with a specific provider's capabilities and demographics, our staff has online access to our provider database. They consider participant's preferences for gender, location (near work or home), specialty (adolescents, substance abuse, other), and special needs (language, ethnicity). If a member is in crisis or expresses the need to speak with someone immediately, Magellan has counselors available 24-hours a day who can speak with the caller.

All participants are able to make an appointment with a Magellan provider within the following timeframes:

- Life-threatening emergency care is immediately available
- Non-life threatening emergency care is available within 6 hours
- Urgent care is available within 24 hours
- Routine care appointments are available within three business days

When a member requires long-term or medical assistance, Magellan assists the individual in obtaining needed services. We consult with the plan to obtain names of providers who can deliver required services for the participant. Within all EAP models when members need non-clinical assistance, Magellan provides expert referral to a community resource capable of meeting the participant's needs. Magellan maintains an extensive database of free or low-cost programs including Alcoholics Anonymous and Narcotics Anonymous, 12-step programs, religious and social support groups, and a host of other resources.

✓ **Critical Incident Stress Debriefings**

- ◆ A critical incident is any unexpected event which produces intense emotional reactions that could interfere with work performance. Examples are shootings, robberies, accidents, natural disasters, or the sudden death of an employee. Magellan has a specialized CISM team, available 24 hours a day, which:
 - Consults with management
 - Arranges with local specialists from our EAP provider network to conduct debriefings (CISDs)
 - 3 hrs included in contract ees < 999, \$250.00 for each additional hour after

✓ **Unlimited Mandatory Referrals**

- ◆ Managers frequently deal with employee problems. In fact, it has been estimated that involvement with employee issues takes nearly 20 percent of a manager's time. A manager might need to address a personal problem an employee has confided, a performance deficiency jeopardizing employment, an employee conflict affecting an entire work team, or a substance abuse problem affecting work safety. When managers need help dealing with or confronting employees, they can contact Magellan through their regular toll-free line. Our Workplace Support Services unit offers consultation, tracks a case referred to treatment, and acts as a liaison for communication among the employer, the employee, and the treatment program. Managers have three levels of referral available to them: an informal referral, a formal (written) referral, or a mandatory referral to the EAP.

✓ **Training Hours**

- ◆ Magellan offers your organization the opportunity to receive up to one hour per year of topical training, (hours are based on employee count) These trainings vary in duration from 1-2 hours and cover a wide range of topics including stress management, change management, substance abuse and sexual harassment. \$230.00 per hour Fee for Service after no-cost training hour allotment has been exhausted.

✓ **MagellanHealth.com**

EAP Benefits Overview



Getting Better All the Time

- MagellanHealth.com is Magellan's premiere website devoted to providing information to our members and organizations. This site contains information about mental health issues, child/elder care issues, management tips/techniques and organizational information. The management section of the site is devoted to assisting managers in their daily activities; from government regulations to training and is password protected. Additional logon/access information is attached.

December 16, 2013

Prepared by: Gretchen Maswadeh *gm*

Submitted by: Jenny Roney *JR*

Approved by: Paul Cook *PC*

CONSENT CALENDAR

VISION INSURANCE COVERAGE FOR CALENDAR YEAR 2014

SUMMARY:

The District's broker, Mercer, has negotiated rates with Eye Med for the plan year beginning January 1, 2014 which include a 3.0% increase in the premiums for IRWD's current vision plan. IRWD has been with EyeMed since 2008 and rates have never changed during the six-year period. Eye Med will include a 4-year rate guarantee for the District's current coverage with this renewal.

Staff recommends that the Board:

- Authorize the General Manager to extend IRWD's current contract with Eye Med for vision coverage.

BACKGROUND:

Vision Insurance Coverage:

Commencing in 2008, the District contracted with Eye Med to provide vision insurance coverage with an initial 4-year rate guarantee. In 2012, the District renewed its coverage with no rate increase and a 2-year rate guarantee. From 2008 to 2013, monthly rates have been \$8.44 for employee only, \$16.04 for employee plus one, and \$23.52 for family coverage. Eye Med is requiring an increase to \$8.69 for employee only, \$16.52 for employee plus one, and \$24.23 for family coverage.

The Eye Med plan provides for a \$140 frame allowance every 12 months, with additional discounts for amounts exceeding the frame allowance, coverage for routine lenses, and discounts for specialized treatments for lenses. Eye Med alternatively provides coverage for contact lenses in lieu of frames and lenses. Staff recommends that the Board extend the existing contract and coverage with Eye Med for calendar year 2014.

FISCAL IMPACTS:

Staff budgeted \$78,000 for FY 2013-14 vision premiums. Renewal of the District's current vision insurance coverage with a 3% increase in premiums based on current enrollment would result in total projected expenses for FY 2013-14 of \$76,000 or \$2,000 (2.6%) under 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 & Personnel Committee on December 9, 2013.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXTEND IRWD'S CURRENT CONTRACT WITH EYE MED VISION CARE FOR THE 2014.

LIST OF EXHIBITS:

Exhibit "A" – Summary of Vision Plan benefits



IRVINE RANCH WATER DISTRICT

Irvine Ranch Water District has selected EyeMed as your vision wellness program. This plan allows you to improve your health through a routine eye exam, while saving you money on your eye care purchases. The plan is available through thousands of provider locations participating on the EyeMed SELECT network.

To see a list of participating providers near you, go to www.eyemedvisioncare.com and choose SELECT from the provider locator dropdown box. You can also call 1-866-299-1358.

Enroll today to take advantage of an affordable way to help ensure a lifetime of healthy vision.

Vision Care Services	Member Cost	Out-of-Network Reimbursement
Exam with Dilatation as Necessary	\$10 Copay	Up to \$35
Contact Lens Fit and Follow-up:		
Standard	Up to \$40	N/A
Premium	10% off retail price	N/A
Frames:	\$0 Copay, \$140 Allowance; 20% off balance over \$140	Up to \$70
Standard Plastic Lenses:		
Single Vision	\$10 Copay	Up to \$35
Bifocal	\$10 Copay	Up to \$49
Trifocal	\$10 Copay	Up to \$74
Standard Progressive	\$10 Copay	Up to \$95
Lens Options (paid by the member and added to the base price of the lens):		
Tint (Solid and Gradient)	20% off retail price	N/A
UV Coating	20% off retail price	N/A
Standard Scratch-Resistance	20% off retail price	N/A
Standard Polycarbonate	Covered in Full	Up to \$32
Standard Anti-Reflective	20% off retail price	N/A
Other Add-Ons and Services	20% off retail price	N/A
Contact Lenses (allowance covers materials only):		
Conventional	\$155 Allowance; 15% off balance over \$155	Up to \$124
Disposables	\$155 Allowance; plus balance over \$155	Up to \$124
Medically Necessary	\$0 Copay, Paid in Full	Up to \$200
LASIK and PRK Vision Correction Procedures:	15% off retail price OR 5% off promotional pricing	N/A
Frequency:		
Exam	Once every 12 months	
Frames	Once every 12 months	
Standard Plastic Lenses or Contact Lenses	Once every 12 months	

Additional Purchases and Out-of-Pocket Discount

Member will receive a 20% discount on remaining balance at Participating Providers beyond plan coverage; the discount does not apply to EyeMed's Providers' professional services or disposable contact lenses. Members also receive a 40% discount off complete pair eyeglass purchases and a 15% discount off conventional contact lenses once the funded benefit has been used.

Benefits are not provided for services or materials arising from: Orthoptic or vision training, subnormal vision-aids and any associated supplemental testing; Anesthetic lenses; Medical and/or surgical treatment of the eye, eyes or supporting structures; Any eye or Vision Examination, or any corrective eyewear required by a Policyholder as a condition of employment; safety eyewear; Services provided as a result of any Workers Compensation law, or similar legislation, or required by any governmental agency or program whether federal, state or subdivisions thereof; Plano (non-prescription) lenses and/or contact lenses; Non-prescription sunglasses; Two pair of glasses in lieu of bifocals; Services or materials provided by any other group benefit plan providing vision care; Certain brand name Vision Materials in which the manufacturer imposes a no-discount policy; or Services rendered after the date an Insured Person ceases to be covered under the Policy, except when Vision Materials ordered before coverage ended are delivered, and the services rendered to the Insured Person are within 31 days from the date of such order. Lost or broken lenses, frames, glasses, or contact lenses will not be replaced except in the next Benefit Frequency when Vision Materials would next become available.

Benefits may not be combined with any discount, promotional offering, or other group benefit plans. Standard/Premium Progressive lens not covered - fund as a Bifocal Lens. Standard Progressive Lens covered - fund Premium Progressive as a Standard.

Underwritten by Fidelity Security Life Insurance Company of Kansas City, Missouri, except in New York. Fidelity Security Life Policy number VC-73/VC-74, form number M-9059. This is a snapshot of your benefits. The Certificate of Insurance is on file with your employer.



Value Added Features:


In addition to the health benefits your EyeMed program offers, members also enjoy additional, value-added features including:

- **Eye Care Supplies** - Receive 20% off retail price for eye care supplies like cleaning cloths and solutions purchased at network providers (not valid on doctor's services or contact lenses).
- **Laser Vision Correction** - Save 15% off the retail price or 5% off the promotional price for LASIK or PRK procedures.
- **Replacement Contact Lens Purchases** - Visit www.eyemedcontacts.com to order replacement contact lenses for shipment to your home at less than retail price.

December 16, 2013

Prepared by: Tanja Fournier 

Submitted by: Robert Jacobson/Cheryl Clary 

Approved by: Paul Cook 

CONSENT CALENDAR

CALLING FOR SPECIAL ELECTIONS AND REQUEST REGISTRAR OF VOTERS TO HOLD SPECIAL BOND ELECTIONS IN IMPROVEMENT DISTRICTS NOS. 185/285

SUMMARY:

Staff is requesting that the Board adopt three Resolutions calling a special election for March 4, 2013 in Improvement Districts 185 and 285; and requesting the County of Orange Registrar of Voters to conduct the special bond elections to be held March 4, 2014 to provide for bond authorization in Improvement Districts 185 and 285.

BACKGROUND:

On November 11, 2013, the Board adopted the Plans of Works, and approved the formation of two Improvement Districts (IDs) - ID 185 for water facilities and ID 285 for sewer facilities in the Opportunity Study Area of Lake Forest.

It is anticipated that general obligation bonds will be issued in amounts necessary to finance the facilities within IDs 185 and 285. The amount of bond authorization required to fund the acquisition and construction of facilities described in the Plans of Works is estimated at \$13,500,000 for water facilities and \$21,300,000 for sewer facilities. In order to issue bonds, landowner elections and a two-thirds (2/3) vote in favor of the proposed bond authorization is required. To provide sufficient time to complete all of the legally required steps for the bond election, staff is proposing an election date of March 4, 2014. A preliminary list of landowners is attached as Exhibit "A", and Resolutions calling for the elections and requesting the County of Orange Registrar of Voters to conduct the special bond elections are attached as Exhibits "B", "C" and "D".

FISCAL IMPACTS:

It is anticipated that general obligation debt will be issued in increments required to fund implementation of the Plan of Works. District staff will recommend, on an annual basis beginning in Fiscal Year 2014-15, appropriate levels of connection fees and property taxes to meet annual debt service in IDs 185 and 285.

ENVIRONMENTAL COMPLIANCE:

Similar to the formation of Improvement Districts and adoption of Plan of Works, calling and holding of the special bond elections within the Improvement Districts are steps in the process of authorizing general obligation bonds, and as such, constitute the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment, and therefore are not a project for purposes of CEQA (Guidelines Section 15378(b)(4)).

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on December 9, 2013.

RECOMMENDATION:

That the Board adopt the following resolutions by title:

RESOLUTION NO. 2013-_____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT CALLING A SPECIAL ELECTION IN IMPROVEMENT DISTRICT NO. 185 FOR THE PURPOSE OF SUBMITTING TO THE VOTERS OF THE IMPROVEMENT DISTRICT A PROPOSITION TO ISSUE GENERAL OBLIGATION BONDS IN THE AMOUNT OF \$13,500,000.00

RESOLUTION NO. 2013-_____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT CALLING A SPECIAL ELECTION IN IMPROVEMENT DISTRICT NO. 285 FOR THE PURPOSE OF SUBMITTING TO THE VOTERS OF THE IMPROVEMENT DISTRICT A PROPOSITION TO ISSUE GENERAL OBLIGATION BONDS IN THE AMOUNT OF \$21,300,000.00

RESOLUTION NO. 2013-_____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT REQUESTING THE BOARD OF SUPERVISORS TO AUTHORIZE THE REGISTRAR OF VOTERS TO RENDER SERVICES TO THE DISTRICT RELATING TO THE CONDUCT OF SPECIAL BOND ELECTIONS FOR IMPROVEMENT DISTRICT NOS. 185 AND 285 TO BE HELD ON MARCH 4, 2014

LIST OF EXHIBITS:

- Exhibit "A" – Preliminary List of Land Owners
- Exhibit "B" – Resolution Calling a Special Election in ID No. 185
- Exhibit "C" – Resolution Calling a Special Election in ID No. 285
- Exhibit "D" – Resolution Requesting Registrar of Voters to Conduct Special Election

**PRELIMINARY LIST OF LANDOWNER VOTERS, MAILING ADDRESSES
AND NUMBER OF VOTES ENTITLED TO BE CAST
(Elections Code §10525; Water Code §35003)**

**SPECIAL BOND ELECTIONS FOR IMPROVEMENT
DISTRICT NOS. 185 AND 285 OF THE IRVINE
RANCH WATER DISTRICT ON MARCH 4, 2014**

OWNER	MAILING ADDRESS	NUMBER OF VOTES ENTITLED TO CAST ¹
Avalon Baker Ranch LP	4440 Von Karman Avenue #300 Newport Beach CA 92660-2081	16
Baker Ranch Properties	9140 Irvine Center Dr. Irvine CA 92618	146
Gary Emsiek	2 Dartmoor Trubuco Canyon, CA 92679	18
Irvine Ranch Water District (formally Los Alisos Water District) ²	P.O. Box 15600 Irvine, CA. 92619-7000	91
Saddleback Valley Community Church	1 Saddleback Parkway, Lake Forest, CA 92630-8700	45
Shea of Baker Ranch Associates LLC	8800 N. Gainey Center Dr. #350 Scottsdale, AZ 85258-2124	50
Shea of Baker Ranch Associates LLC	1250 Corona Pointe Ct. #600 Corona, CA 92679-1779	123
Shea/Baker Ranch Associates LLC	26840 Laguna Hills #100 E Aliso Viejo, CA 92656	31
Shea/Baker Ranch Associates LLC	655 Brea Canyon Rd. Walnut, CA 91789-3078	8
	Total	528

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

Date _____ (SEAL)

¹ Under Water Code Section 35003, each voter shall have one (1) vote for each acre within the Improvement District to which he or she owns title. Any fraction of an acre shall be rounded to the nearest full acre, but if the voter owns less than one acre, then the voter shall be entitled to one vote.

² A portion of this property was dedicated to the City of Lake Forest. Exact acreage and voting rights will be determined prior to the election.

Exhibit "B"

RESOLUTION NO. 2013-_____

RESOLUTION OF THE BOARD OF DIRECTORS OF
THE IRVINE RANCH WATER DISTRICT CALLING A
SPECIAL ELECTION IN IMPROVEMENT DISTRICT
NO. 185 FOR THE PURPOSE OF SUBMITTING TO
THE VOTERS OF THE IMPROVEMENT DISTRICT A
PROPOSITION TO ISSUE GENERAL OBLIGATION
BONDS IN THE AMOUNT OF \$13,500,000.00

WHEREAS, by adoption of Resolution No. 2013-45, the Board of Directors of the Irvine Ranch Water District ("IRWD") ordered the formation of Improvement District No. 185 (the "Improvement District") and adopted a Plan of Works therefor (the "Plan of Works"), following a duly noticed hearing; and

WHEREAS, the Board of Directors has determined that bonds of the Improvement District should be issued in the amount set forth below.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. A special bond election be and the same hereby is called and ordered to be held in the Improvement District on March 4, 2014, which election shall be an all-mailed ballot election pursuant to Section 4002 of the Elections Code of the State of California, for the purpose of submitting to the voters of the Improvement District the proposition of whether a general obligation bonded indebtedness of IRWD for the Improvement District shall be incurred and bonds issued therefor in the below-specified amount to accomplish the Plan of Works, which bonds shall be payable from assessments to be levied and collected exclusively upon lands within the Improvement District and, if such is determined by the Board to be necessary or desirable in connection with the sale of any of the proposed general obligation bonds, also secured by a pledge of all or part of the revenues of said works or any facilities extended or improved by said works, pursuant to the powers granted by Section 53500 *et seq.* of the Government Code of the State of California.

Section 2. The principal amount of bonds proposed to be issued to accomplish the Plan of Works is \$13,500,000.00. The bonds shall bear interest at a rate or rates not to exceed twelve percent (12%) per annum, payable at times determined upon the sale thereof.

Section 3. The Secretary of IRWD is hereby authorized and directed to give a notice of the election by publication thereof once a week for four (4) successive weeks prior to the election in a newspaper of general circulation published in the County of Orange.

The notice shall be in substantially the following form:

NOTICE OF ELECTION

NOTICE IS HEREBY GIVEN that a special election has been called and will be held on March 4, 2014, which election shall be an all-mailed ballot election pursuant to Section 4002 of the Elections Code of the State of California, within Improvement District No. 185 of the Irvine Ranch Water District (IRWD), for the purpose of submitting to the voters of the Improvement District the proposition of whether or not general obligation bonds of IRWD for the Improvement District in the amount of \$13,500,000.00 shall be authorized and issued, for the purpose stated in the proposition hereinafter set forth in this notice, which bonds shall be payable from assessments to be levied and collected exclusively upon lands within the Improvement District and, if such is determined by the Board of Directors of IRWD to be necessary or desirable in connection with the sale of any of the proposed general obligation bonds, also secured by a pledge of all or part of the revenues of said works or any facilities extended or improved by said works, pursuant to the powers granted by Section 53500 *et seq.* of the Government Code of the State of California.

The bonds shall bear interest at a rate or rates not to exceed twelve percent (12%) per annum, the actual times of payment to be determined upon the sale thereof.

The ballots used at the election shall be in the form prescribed by Section 35106 of the Water Code of the State of California.

On the ballots to be used at the election, in addition to any other matters required by law there shall be printed substantially the following:

OFFICIAL BALLOT

IMPROVEMENT DISTRICT NO. 185
OF
IRVINE RANCH WATER DISTRICT

SPECIAL BOND ELECTION
MARCH 4, 2014

To vote, mark a cross (+) in the voting square after the word "YES" or after the word "NO." All marks otherwise made are forbidden. All distinguishing marks are forbidden and make the ballot void.

If you wrongly mark, tear, or deface this ballot, return it to the Registrar of Voters and obtain another.

BOND PROPOSITION: Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 185 thereof in the amount of \$13,500,000.00 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage, distribution and treatment of water and water rights, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment, urban runoff diversion and treatment systems, and all necessary equipment and property therefor, reconstruction, replacements and additions to said facilities, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 185?

YES	
NO	

If a proxy or other authority of legal representative is being voted, the proxy or authority shall be attached to the ballot.

Ballots must be received by 5:00 p.m., March 4, 2014, either at the Office of the Registrar of Orange County, 1300 South Grand Avenue, Santa Ana, California, or at P.O. Box 11298, Santa Ana, California, 92711.

The Improvement District shall constitute a single election precinct for the

purpose of holding the election.

To be qualified as a voter and to be entitled to vote at the election, a person must be a holder of title, as defined in Section 34026 of the Water Code of the State of California, to land in the Improvement District. Each voter shall have one (1) vote for each acre within the Improvement District to which he or she owns title. Any fraction of an acre shall be rounded to the nearest full acre, but if the voter owns less than one acre, then the voter shall be entitled to one vote. The last equalized assessment roll of the County of Orange is conclusive evidence of ownership of land; provided, however, that pursuant to a determination by resolution of the Board of Directors of the District, the equalized assessment roll of the County of Orange shall be corrected to reflect, in the case of transfers of land, those persons who as of the 45th day prior to the election appear as owners on the records of the County. Every voter, or his legal representative, may vote either in person or by a person duly appointed as his proxy. "Legal representative" means either of the following: (a) a duly appointed and acting guardian, executor or administrator of the estate of a holder of title to land; or (b) a person duly authorized to act for, and on behalf of, a holder of title to land that is not a natural person. Before a legal representative may vote at the election, he must provide a certified copy of said authority, which shall be kept and filed within the returns of the election.

No appointment of a proxy shall be valid, accepted, or a vote allowed thereon unless it meets all of the following requirements: (a) it is in writing; (b) it is executed by the person or legal representative of the person, who, in accordance with the provisions of Section 35003 of the Water Code of the State of California, is entitled to the votes for which the proxy is given; (c) it is acknowledged or certified in accordance with Section 2015.5 of the Code of Civil Procedure of the State of California; (d) it specifies the election at which it is to be used and is used only at the election specified; and (e) it shall be on a form specified by the County elections official as meeting the above requirements.

Every appointment of a proxy is revocable at the pleasure of the person executing it at any time before the person appointed as proxy shall have cast a ballot representing the votes for which the appointment was given.

If two-third of the votes cast at the election favor the issuance of the herein described bonds, said bonds shall be issued and sold for the purpose set forth herein.

Except as otherwise provided in the California Water District Law, Division 13 of the Water Code of the State of California, the election shall be held and conducted in the manner provided in the Uniform District Election Law of the State of California.

This notice is given pursuant to a resolution of the Board of Directors of the Irvine Ranch Water District adopted on December 16, 2013.

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

Section 4. Impartial analysis and arguments for the bond proposition are hereby waived.

Section 5. Pursuant to Section 35003 of the California Water Code, the Board hereby determines that the last equalized assessment roll of the County of Orange shall be corrected to reflect, in the case of transfers of land, those persons who as of January 17, 2014, the 45th day prior to the election, appeared as owners on the records of the County.

ADOPTED, SIGNED AND APPROVED this ____ day of _____, 2013.

President/Vice President
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

APPROVED AS TO FORM:

BOWIE, ARNESON,
WILES & GIANNONE
Legal Counsel - IRWD

By _____

BAWGjca/ 00173024/ 111913

Exhibit "C"

RESOLUTION NO. 2013-_____

RESOLUTION OF THE BOARD OF DIRECTORS OF
THE IRVINE RANCH WATER DISTRICT CALLING A
SPECIAL ELECTION IN IMPROVEMENT DISTRICT
NO. 285 FOR THE PURPOSE OF SUBMITTING TO
THE VOTERS OF THE IMPROVEMENT DISTRICT A
PROPOSITION TO ISSUE GENERAL OBLIGATION
BONDS IN THE AMOUNT OF \$21,300,000.00

WHEREAS, by adoption of Resolution No. 2013-46, the Board of Directors of the Irvine Ranch Water District ("IRWD") ordered the formation of Improvement District No. 285 (the "Improvement District") and adopted a Plan of Works therefor (the "Plan of Works"), following a duly noticed hearing; and

WHEREAS, the Board of Directors has determined that bonds of the Improvement District should be issued in the amount set forth below.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. A special bond election be and the same hereby is called and ordered to be held in the Improvement District on March 4, 2014, which election shall be an all-mailed ballot election pursuant to Section 4002 of the Elections Code of the State of California, for the purpose of submitting to the voters of the Improvement District the proposition of whether a general obligation bonded indebtedness of IRWD for the Improvement District shall be incurred and bonds issued therefor in the below-specified amount to accomplish the Plan of Works, which bonds shall be payable from assessments to be levied and collected exclusively upon lands within the Improvement District and, if such is determined by the Board to be necessary or desirable in connection with the sale of any of the proposed general obligation bonds, also secured by a pledge of all or part of the revenues of said works or any facilities extended or improved by said works, pursuant to the powers granted by Section 53500 *et seq.* of the Government Code of the State of California.

Section 2. The principal amount of bonds proposed to be issued to accomplish the Plan of Works is \$21,300,000.00. The bonds shall bear interest at a rate or rates not to exceed twelve percent (12%) per annum, payable at times determined upon the sale thereof.

Section 3. The Secretary of IRWD is hereby authorized and directed to give a notice of the election by publication thereof once a week for four (4) successive weeks prior to the election in a newspaper of general circulation published in the County of Orange.

The notice shall be in substantially the following form:

NOTICE OF ELECTION

NOTICE IS HEREBY GIVEN that a special election has been called and will be held on March 4, 2014 which election shall be an all-mailed ballot election pursuant to Section 4002 of the Elections Code of the State of California, within Improvement District No. 285 of the Irvine Ranch Water District (IRWD), for the purpose of submitting to the voters of the Improvement District the proposition of whether or not general obligation bonds of IRWD for the Improvement District in the amount of \$21,300,000.00 shall be authorized and issued, for the purpose stated in the proposition hereinafter set forth in this notice, which bonds shall be payable from assessments to be levied and collected exclusively upon lands within the Improvement District and, if such is determined by the Board of Directors of IRWD to be necessary or desirable in connection with the sale of any of the proposed general obligation bonds, also secured by a pledge of all or part of the revenues of said works or any facilities extended or improved by said works, pursuant to the powers granted by Section 53500 *et seq.* of the Government Code of the State of California.

The bonds shall bear interest at a rate or rates not to exceed twelve percent (12%) per annum, the actual times of payment to be determined upon the sale thereof.

The ballots used at the election shall be in the form prescribed by Section 35106 of the Water Code of the State of California.

On the ballots to be used at the election, in addition to any other matters required by law there shall be printed substantially the following:

OFFICIAL BALLOT

IMPROVEMENT DISTRICT NO. 285
OF
IRVINE RANCH WATER DISTRICT

SPECIAL BOND ELECTION
MARCH 4, 2014

To vote, mark a cross (+) in the voting square after the word "YES" or after the word "NO." All marks otherwise made are forbidden. All distinguishing marks are forbidden and make the ballot void.

If you wrongly mark, tear, or deface this ballot, return it to the Registrar of Voters and obtain another.

BOND PROPOSITION: Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 285 thereof in the amount of \$21,300,000.00 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage and the storage and distribution of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, reconstruction, replacements and additions to said facilities, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 285?

YES	
NO	

If a proxy or other authority of legal representative is being voted, the proxy or authority shall be attached to the ballot.

Ballots must be received by 5:00 p.m., March 4, 2014, either at the Office of the Registrar of Orange County, 1300 South Grand Avenue, Santa Ana, California, or at P.O. Box 11298, Santa Ana, California, 92711.

The Improvement District shall constitute a single election precinct for the

purpose of holding the election.

To be qualified as a voter and to be entitled to vote at the election, a person must be a holder of title, as defined in Section 34026 of the Water Code of the State of California, to land in the Improvement District. Each voter shall have one (1) vote for each acre within the Improvement District to which he or she owns title. Any fraction of an acre shall be rounded to the nearest full acre, but if the voter owns less than one acre, then the voter shall be entitled to one vote. The last equalized assessment roll of the County of Orange is conclusive evidence of ownership of land; provided, however, that pursuant to a determination by resolution of the Board of Directors of the District, the equalized assessment roll of the County of Orange shall be corrected to reflect, in the case of transfers of land, those persons who as of the 45th day prior to the election appear as owners on the records of the County. Every voter, or his legal representative, may vote either in person or by a person duly appointed as his proxy. "Legal representative" means either of the following: (a) a duly appointed and acting guardian, executor or administrator of the estate of a holder of title to land; or (b) a person duly authorized to act for, and on behalf of, a holder of title to land that is not a natural person. Before a legal representative may vote at the election, he must provide a certified copy of said authority, which shall be kept and filed within the returns of the election.

No appointment of a proxy shall be valid, accepted, or a vote allowed thereon unless it meets all of the following requirements: (a) it is in writing; (b) it is executed by the person or legal representative of the person, who, in accordance with the provisions of Section 35003 of the Water Code of the State of California, is entitled to the votes for which the proxy is given; (c) it is acknowledged or certified in accordance with Section 2015.5 of the Code of Civil Procedure of the State of California; (d) it specifies the election at which it is to be used and is used only at the election specified; and (e) it shall be on a form specified by the County elections official as meeting the above requirements.

Every appointment of a proxy is revocable at the pleasure of the person executing it at any time before the person appointed as proxy shall have cast a ballot representing the votes for which the appointment was given.

If two-third of the votes cast at the election favor the issuance of the herein described bonds, said bonds shall be issued and sold for the purpose set forth herein.

Except as otherwise provided in the California Water District Law, Division 13 of the Water Code of the State of California, the election shall be held and conducted in the manner provided in the Uniform District Election Law of the State of California.

This notice is given pursuant to a resolution of the Board of Directors of the Irvine Ranch Water District adopted on December 16, 2013.

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

Section 4. Impartial analysis and arguments for the bond proposition are hereby waived.

Section 5. Pursuant to Section 35003 of the California Water Code, the Board hereby determines that the last equalized assessment roll of the County of Orange shall be corrected to reflect, in the case of transfers of land, those persons who as of January 17, 2014, the 45th day prior to the election, appeared as owners on the records of the County.

ADOPTED, SIGNED AND APPROVED this ____ day of _____, 2013.

President/Vice President
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors
thereof

APPROVED AS TO FORM:

BOWIE, ARNESON,
WILES & GIANNONE
Legal Counsel - IRWD

By _____

BAWGjca/ 00173025/ 111913

EXHIBIT "D"

RESOLUTION NO. 2013-_____

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE IRVINE RANCH WATER DISTRICT REQUESTING
THE BOARD OF SUPERVISORS TO AUTHORIZE THE
REGISTRAR OF VOTERS TO RENDER SERVICES TO THE
DISTRICT RELATING TO THE CONDUCT OF SPECIAL
BOND ELECTIONS FOR IMPROVEMENT DISTRICT
NOS. 185 AND 285 TO BE HELD ON MARCH 4, 2014**

WHEREAS, the Board of Directors of the Irvine Ranch Water District ("IRWD") has commenced proceedings for the calling of special bond elections in Improvement District Nos. 185 and 285 of IRWD to be held on March 4, 2014; and

WHEREAS, this Board of Directors desires that the Board of Supervisors of the County of Orange permit the Registrar of Voters to render specified services to IRWD relating to the conduct of the bond elections, as authorized by Sections 10002 and 10502 of the California Elections Code.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. The Board of Supervisors of the County of Orange is hereby requested to permit the Registrar of Voters to perform and render services to IRWD incidental to and connected with the special bond elections to be held as all-mailed ballot elections in Improvement District Nos. 185 and 285 of IRWD on March 4, 2014, including the following and services incidental thereto:


- a. Furnish a tabulation of the number of voters and votes;
- b. Provide official ballots and all other printed matter and envelopes for mailing, and caused the same to be mailed as required by law;
- c. Canvass the returns and furnish a tabulation of the number of votes given;
- d. Render such other services as the Secretary of IRWD may request.

Section 2. IRWD shall reimburse the County for services performed when the work is completed and upon presentation to IRWD of a bill and approval thereof.

December 16, 2013

Prepared by: C. Compton 

Submitted by: G. Heiertz 

Approved by: Paul Cook 

ACTION CALENDAR

2014 LEGISLATIVE PLANNING--POTENTIAL LEGISLATIVE ISSUES AND IRWD LEGISLATIVE PRIORITIES

SUMMARY:

This report provides an overview of expected 2014 legislative issues in Sacramento, including proposals the District's statewide associations are considering for introduction. It also provides a review of potential 2014 IRWD state legislative priorities for consideration by the Water Resources Policy and Communications Committee. Staff recommends that the Board provide input on 2014 state legislative priorities and possible concepts for sponsored legislation.

BACKGROUND:

Expected 2014 Statewide Legislative Issues:

State Budget: On November 8, 2013, State Controller John Chiang released his monthly report on the State's finances. He announced that the State took in \$5.3 billion in revenue during the month of October. This amount was substantially higher than budgeted, and moved the State's total revenues \$603.7 million past the total revenue anticipated in the 2013-14 Budget Act during the first four months of the fiscal year. The State ended October with a General Fund cash deficit of \$18.3 billion. This deficit was covered by borrowing.

October's revenues numbers represented a second straight month of strong revenue receipts. As a result, some in Sacramento believe that these revenues signal a trend of higher than anticipated revenues for the remainder of the year. If that trend continues, it will impact the 2014-2015 budget discussions. The Governor, Controller Chiang and others in leadership positions have urged the Legislature to remain disciplined in the State's spending. If the State's financial situation continues to improve, the Legislature is less likely to look to local revenues to solve the State's financial problems.

Given the potential impact of the State's finances and the Fiscal Year 2014-15 Budget on IRWD, staff will continue work with the District's associations and industry partners to monitor developments associated with the State budget and proposals related to local government revenues including property taxes and reserves, among others.

2014 Water Bond: Currently the Safe, Clean, and Reliable Drinking Water Supply Act of 2012, an \$11.14 billion general obligation bond, is scheduled for the November 2014 ballot. After significant consensus in 2012 and 2013 that the \$11.14 billion water bond would fail passage, AB 1331 (Rendon) and SB 42 (Wolk) were introduced in 2013 to reformulate the water bond.

AB 1331 would repeal the Safe, Clean and Reliable Drinking Water Supply Act of 2012 and enact the Climate Change Response for Clean and Safe Drinking Water Act of 2014. The Climate Change Response for Clean and Safe Drinking Water Act of 2014 would authorize the

issuance of a \$6.5 billion general obligation water bond upon approval by the voters in November 2014. SB 42 would repeal the Safe, Clean and Reliable Drinking Water Supply Act of 2012, and enact the Safe Drinking Water, Water Quality, and Flood Protection Act of 2014, a \$6.475 billion water bond. Despite some discussion on these two proposals, negotiations on the two proposals will continue into the first part of 2014 unless the Administration and Legislative Leadership decide to put the bond off until 2016.

The Association of California Water Agencies (ACWA), along with others in the water industry, has begun advocating that the amount of money designated for Delta Ecosystem Restoration and Watersheds, and storage should be increased. The current 2014 bond allocates \$3.05 billion for Delta Ecosystem Restoration and Watersheds of which \$2.250 billion is designated for work that would improve Delta sustainability. ACWA is advocating that this level of funding be included in any bond reformulation. AB 1331 designates \$2.5 billion for Delta Ecosystem Restoration and Watersheds of which \$1 billion is designated for Delta sustainability. SB 42 designates \$1.7 billion for Delta Ecosystem Restoration and Watersheds of which \$600 million is designated for Delta sustainability.

With regard to money designated for statewide storage, the current bond allocates \$3 billion for water storage and delivery projects, and includes a continuous appropriation. ACWA is advocating that this level of funding be maintained. AB 1331 designates \$1.5 billion less than the current bond, and allocates \$1.5 billion for storage along with a continuous appropriation. SB 42 designates \$2.4 billion less than the current bond and allocates \$1 billion for storage. It does not include a continuous appropriation for storage and delivery projects.

The WaterReuse Association of California (WaterReuse) has focused its efforts on other provisions contained in AB 1331 and SB 42. Both AB 1331 and SB 42 contain provisions which require bond fund recipients to provide matching funds for projects receiving either grants and loans from water bond funds. WaterReuse has begun advocating for several changes to these provisions, and is seeking elimination or a lowering of the matching requirement on loans resulting from the water bond. The Association will also be inquiring as to whether a specific allocation could be inserted into the bond splitting the bond proceeds between grants and loans. The current targeted split is 50-50. The Association will also be working to ensure that the criteria used to define a project's cost effectiveness are appropriate and favorable to recycled water projects.

ACWA, the California Municipal Utilities Association (CMUA), WaterReuse and the Metropolitan Water District of Southern California (MET) will continue to be at the forefront of the discussions on the water bond. Staff will continue to work with the District's associations as these proposals develop, and will provide updates and recommendations to the Committee as appropriate. At this time, staff recommends that IRWD support ACWA's efforts related to the amount of money included in any bond reformulation for Delta sustainability and storage, and work to ensure that the matching requirements and any grant/loan allocation considered in a reformulated water bond do not disadvantage the District's ability to compete for bond funds.

Bay Delta Conservation Plan: On December 13, 2013, the final draft of the Bay Delta Conservation Plan (BDGP) will be released for formal public review. The review period will run

120 days and will conclude on April 14, 2014. Public hearings will be held in the first part of 2014 to accept public comments on the documents. While the BDCP will not need to go before the voters or the Legislature for approval, it will undoubtedly be a topic of conversation in Sacramento and throughout the state in 2014. The Municipal Water District of Orange County (MWDOC) and others in the water community have asked local districts to send letters in support of the BDCP to Governor Brown. Staff recommends that IRWD send a letter in support of the BDCP pending review of the final draft released on December 13 and its consistency with IRWD's BDCP Policy Principles.

Relocation of Responsibility for the State's Drinking Water Program: Following the Legislature's failure to move AB 145 (Perea, D-Fresno / Rendon, D-Lakewood) forward this year. The Brown Administration announced that it would reorganize the Drinking Water Program from California Department Public Health (DPH) to the State Water Resources Control Board (SWRCB). In order to accomplish this, the Administration formed a Drinking Water Reorganization Task Force. The task force, which is jointly convened by the California Environmental Protection Agency and the California Health and Human Services Agency, will finish meeting this month. The Administration is expected to issue its plan to transfer the Drinking Water Program to the SWRCB next year and complete the transfer by July 1, 2014. It is expected that the language transferring the Drinking Water Program to the SWRCB will be negotiated as part of the Fiscal Year 2014-15 Budget, and will be included in a budget trailer bill. Staff will continue to monitor this effort and make recommendations as appropriate.

AB 32 Scoping Plan Update and Cap-and-Trade Auction Revenues: The California Air Resources Board is currently in the process of completing the 2013 AB 32 Scoping Plan Update. It is expected that the priorities and actions outlined in the scoping plan update will shape how the Cap-and-Trade Auction revenues will be allocated in 2014 and into the future. In 2013, staff monitored and engaged with IRWD's association and industry partners on these issues. Staff will continue to engage on these issues in 2014, and will make recommendations as appropriate.

Voter-Approval Thresholds for Bonds and Special Taxes: As promised by Senate President Pro Tem Darrell Steinberg, the measures introduced in 2013, which dealt with lowering voter-approval thresholds on bonds and special taxes, did not move forward during the first year of the legislative session. These measures are expected to be taken up in 2014. Two measures are currently pending before the Senate—ACA 8 and SCA 11. ACA 8 would place a constitutional amendment on the next statewide ballot allowing California voters to decide whether local communities may approve special district and local government bond funding with a fifty-five percent voter approval instead of the current two-thirds required. SCA 11 would place a proposition on the next statewide ballot amending the California Constitution to permit the imposition, extension, or increase of a local government special tax upon the approval of fifty-five percent of the voters instead of the current two-thirds required. Staff will continue to monitor these measures, and provide updates and recommendations to the Committee as appropriate.

California Environmental Quality Act Reform: While 2013 was hailed to be the year of CEQA reform and modernization, no broad sweeping reforms were enacted. Most agree that the momentum to reform CEQA has left Sacramento and that the Legislature will not want to

consider broad CEQA reform next year. Despite this, most agree that the Legislature may be open to enacting more narrow measures addressing specific aspects of CEQA. Staff will work through the District's associations to review and weigh in on CEQA reform proposals as they develop. IRWD is particularly interested in ensuring that in the process of reforming current CEQA law, water and wastewater districts do not lose some of the valuable exemptions that currently exist.

Several of the CEQA bills that were of interest to IRWD during the 2013 session became two-year bills and remain before the Legislature. Staff will continue to monitor and work on the following bills:

- *AB 52 (Gatto) – Native Americans: CEQA:* AB 52 (Gatto, D- Los Angeles) would mandate consultation with Native American Tribes at various stages of CEQA review, prescribe CEQA processes related to the treatment of Tribal Cultural Resources, and define mitigation measures which shall be considered by a lead agency if a Tribal Cultural Resources will be impacted by a project. At the end of session, AB 52 remained in the Senate Environmental Quality Committee and became a two-year bill. As discussed with the Water Resources and Policy Committee, staff worked during the 2013 session and will continue to work with IRWD's industry and association partners in 2014 to make the provisions of AB 52 workable for the District.
- *AB 543 (Campos) – CEQA: translation:* AB 543 (Campos, D-San Jose), which would require a lead agency to translate certain CEQA notices when a project is proposed that will impact a community comprised of a substantial number of non-English-speaking people, was referred to Senate Environmental Quality. The bill was set for hearing on July 3, 2013, but the hearing was canceled at the author's request. The author made AB 543 a two-year bill. IRWD currently has an 'OPPOSE' position on this bill, and staff will continue to monitor this bill in 2014.
- *AB 823 (Eggman) - California Farmland Protection Act:* AB 823 (Eggman, D-Stockton), which would enact the California Farmland Protection Act, become a two-year bill. The bill was double referred to the Assembly Natural Resources Committee and the Assembly Agriculture Committee. It was not heard in the Assembly Agriculture Committee before the policy committee deadline of May 3, 2013, and became a two-year bill. As a result, the bill did not move forward this year. IRWD currently has an 'OPPOSE' position on this bill, and staff will continue to monitor this bill in 2014.

Expected 2014 Association Proposals:

ACWA & CMUA: ACWA and CMUA have agreed to cosponsor legislation related to narrow CEQA reforms that would benefit the water community. The initial legislation would seek a CEQA exemption for recycled water pipelines placed in a public right of way and which are 8 miles or less in length. Both ACWA and CMUA have agreed that this legislation may include other CEQA reform measures of benefit to the water community. In order to determine which other measures will be included, ACWA, CMUA, and MET will engage the water community in

a discussion on other needed CEQA reforms. Staff has and will continue to participate in the discussions hosted by ACWA, CMUA, and MET. Staff will provide updates and recommendations as appropriate.

California Special Districts Association: The California Special Districts Association (CSDA) is exploring options for sponsoring legislation that would allow public employers to be eligible under SB 594 (Steinberg). SB 594 sought to create the Career Pathways Trust (CPT), a grant program incentivizing partnerships between private businesses and school districts to develop career-oriented education. SB 594 was folded into a budget trailer bill and subsequently signed by the Governor before CSDA could engage with the author's office. Staff will provide updates and recommendations as appropriate.

WateReuse: WateReuse has set its 2014 legislative and regulatory plan to include targeted actions with the Legislature and the SWRCB. As part of its plan, WateReuse will engage with the Legislature on the water bond, and the proposed CEQA categorical exemption for recycled water being sought by ACWA, CMUA, and MET. WateReuse plans on engaging with SWRCB on the following topics:

- Integration of the DPH Drinking Water Program into the existing SWRCB regulatory framework, and improved effectiveness of the SWRCB recycled water regulatory program. This effort is already in progress;
- Final SWRCB adoption of groundwater recharge and surface water regulations, and initiation of the direct potable reuse regulatory evaluation;
- Establishing a recycled water stakeholder working group with SWRCB to identify opportunities to improve recycled water regulations. Early topics include mandatory recycling requirements that conflict with mandatory discharge requirements, and less restrictive limits on stormwater overflows from recycled water storage facilities. This could lead to legislation (such as AB 1200 which was vetoed in 2013); and
- Anti-degradation policy.

The Association will also consider additional Title 22 improvements. WateReuse has maintained a detailed list of Title 22 changes to reflect changes in technology, plumbing code, and recycled water demand but has not achieved agreement among its members as to which changes are appropriate. Due to the transition of authority for Title 22 from DPH to SWRCB, 2014 is viewed as an opportunity to solidify WateReuse member agreement on and support for priority Title 22 changes for future action by SWRCB.

Bioenergy Association of California: IRWD joined the Bioenergy Association of California (BAC) in 2013. BAC's purpose is the promotion of sustainable bioenergy production with a focus on promoting community-scale bioenergy generation from a wide-range of sustainably available organic waste sources, including dairy and agricultural waste, food and food processing waste, water treatment waste, other organic urban waste, and forest biomass. BAC will be developing its legislative priorities and possible legislative proposals at its Board of Directors meeting on December 9.

Possible 2014 IRWD Legislative Priorities and Concepts for Potential Legislation

Staff discussed with the Water Resources Policy and Communications Committee possible 2014 IRWD legislative priorities, and potential sponsored legislation. Maureen O'Haren, IRWD's Sacramento Legislative Advocate, also participated in the discussion with the Committee. Possible priorities and concepts for potential legislation are attached as Exhibit "A".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on December 9, 2013.

RECOMMENDATION:

That the Board provide input on the 2014 state legislative priorities and possible concepts for sponsored legislation.

LIST OF EXHIBITS:

Exhibit "A"– Possible IRWD 2014 State Priorities and Concepts for Potential Legislation

EXHIBIT "A"

IRWD 2014 STATE PRIORITIES AND CONCEPTS FOR POTENTIAL LEGISLATION

This provides a review of potential 2014 IRWD state legislative priorities for consideration by the Water Resources Policy and Communications Committee. The following items are proposals on which IRWD could take the lead, including IRWD-sponsored legislation, or on which IRWD could collaborate with its agency and association partners.

Proposed 2014 Priorities:

In addition to the activities highlighted in the staff report, staff is proposing that IRWD adopt the following 2014 State priorities.

- 1) Engage productively in the discussions surrounding the water bond in order to protect IRWD's interests, and to promote policies consistent with the Water Resources Funding Policy Principles adopted by the Board in August 2013.
- 2) Promote the expanded use of recycled water and its acceptance as a resource and not a waste by advocating for the removal of hindrances to recycled water projects. Advocacy would include promotion of the following:
 - Removing recycled water from being classified as a waste.
 - Updating Title 17 & 22 of the California Code of Regulations.
 - Changes to permitting processes so that recycled water is views as a resource and not a problem by State agencies.
- 3) Promote policies which encourage energy reliability in Orange County and energy efficiency in the water and wastewater sectors without an increase in cost to or mandates on local entities. Advocacy would include promotion of the following:
 - Allocation of Cap-and-Trade revenues to projects that reduce the greenhouse gas emissions and energy demands in the water and wastewater sectors.
 - Policies and incentives which encourage water and wastewater agencies to implement renewable and solar energy projects in order to offset their energy needs.
- 4) Promote the implementation of a solution in the Bay Delta, consistent with IRWD's BDCP Policy Principles, that provides a long-term solution to California's water crisis; will provide a reliable high-quality water supply to residents, agriculture and businesses across the state; and will protect and improve the Delta ecosystem.

Concepts for Potential Legislation:

Storm-induce Overflows: The storage of water, including recycled water, is an important element of good water resources management. The State Water Resources Control Board, *Recycled*

Water Policy requires the “Management of any ponds containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and there is notification of the appropriate Regional Water Board Executive Officer of the discharge.” In order to avoid a discharge of recycled water during the wet weather season, the Regional Water Quality Control Boards require agencies to draw down their recycled water storage levels to protect against storm-induced overflows. The consequence is unused recycled water storage capacity and the underutilization of recycled water. In dry years, when recycled water should be used to the maximum extent possible to meet nonpotable demands, it means that there is less recycled water available. Legislation could be introduced in 2014 to address this problem.

South Coast Air Quality Management District (AQMD) Rule 1196: AQMD Rule 1196, Clean On-Road Heavy Duty Public Fleet Vehicles, originally adopted in 2000 and most recently amended in 2008, is designed to help reduce emissions from public fleets in AQMD’s jurisdiction. The Rule requires that all new additions to a heavy-duty vehicle fleet must either be an alternative fuel heavy duty vehicle or a dual-fuel heavy duty vehicle. An alternative fuel heavy duty vehicle is a vehicle which uses compressed or liquefied natural gas, propane, methanol, electricity, fuel cells or other California Air Resources Board certified alternative fuels. A dual-fuel heavy duty vehicle is a vehicle equipped with a diesel engine that uses an alternative fuel in combination with diesel and is fitted with a particulate filter.

These requirements severely limit IRWD’s operational ability to use these specialized vehicles in emergency situations such as wildfires, floods, and major sewer breaks. Alternative fuel filling stations are limited, particularly in remote area and, therefore, restrain how far vehicles can travel for emergency response and how long they can operate while in an emergency before having to leave the site to refuel. Additionally particulate filters must be cleaned after approximately four hours of use. This requires the vehicle to return to the IRWD Operations Center to have the filter cleaned before returning to the field.

Water and wastewater heavy duty fleet vehicles play a vital role in emergency response, particularly in fire, flood, water pipe breaks, and sewer system failure scenarios. Rule 1196 provides exemptions for emergency vehicles as defined in California Vehicle Code Section 165. IRWD may want to consider sponsoring or advocating for legislation to exempt water and wastewater agency vehicles, which would be used to responds to emergency situations, from AQMD Rule 1196.

December 16, 2013

Prepared by: J. Moeder/R. Mori

Submitted by: K. Burton

Approved by: Paul Cook



ACTION CALENDAR

ORANGE PARK ACRES WELL NO. 1 WELLHEAD FACILITIES CONSTRUCTION AWARD AND CONSULTANT SELECTION

SUMMARY:

Orange Park Acres Well No. 1 (OPA-1) was drilled in 2012 on the same site as the former Orange Park Acres Mutual Water Company Headquarters building and the former Orange Park Acres Well No. 3. The drilling work is complete and the wellhead facilities have been designed. Bids were received from five contractors for the construction of the wellhead facilities. Staff recommends that the Board:

- Authorize a budget increase in the amount of \$1,738,900, from \$7,407,800 to \$9,146,700, for Project 11405;
- Approve an Expenditure Authorization in the amount of \$6,031,900 for Project 11405;
- Authorize the General Manager to execute a construction contract with Pacific Hydrotech in the amount of \$5,341,200 for OPA-1 Wellhead Facilities; and
- Authorize the General Manager to execute a Professional Services Agreement with URS Corporation (URS) in the amount of \$156,490 for construction phase services.

BACKGROUND:

This project will provide a groundwater for IRWD customers located primarily in and around the Orange Park Acres portion of the District's service area. The OPA-1 Wellhead Facilities project, designed by URS, includes equipping the recently constructed Well OPA-1, a wet well and booster pump station, chemical feed storage and feed system, a surge tank, and associated controls, electrical equipment, and buildings.

Construction Award:

The project was advertised on October 10, 2013 to a select list of eleven contractors including Caliagua, Clarke Contracting, Doty Bros. Construction, Gateway Pacific Contractors, Olsson Construction, Pacific Hydrotech, RC Foster Corporation, Schuler Engineering, SS Mechanical, Stanek Constructors, and W.M. Lyles. The bid opening was held on November 19, 2013 with bids received from Olsson Construction, Pacific Hydrotech, Schuler Engineering, SS Mechanical, and Stanek Constructors. Pacific Hydrotech is the apparent low bidder with a bid amount of \$5,341,200.

Staff reviewed Pacific Hydrotech's bid and has determined that it is responsive. Pacific Hydrotech has performed well on other District projects, which were completed on time and on budget. Pacific Hydrotech is also the apparent low bidder for the recently bid Baker Water Treatment Plant Raw Water Conveyance Facilities project. The engineer's estimate, prepared by URS, was \$4,762,000. The low bid was 12% higher than the engineer's estimate, which is

similar to other recent bids. Staff recommends awarding the construction contract to Pacific Hydrotech in the amount of \$5,341,200. The Bid Summary is attached as Exhibit "A".

Consultant Selection:

In October 2012, the Board approved a Professional Services Agreement with URS for engineering services, which included \$77,070 for construction phase services. URS' original scope of work and fee for construction phase services were based on the preliminary design that Kennedy/Jenks prepared in 2012. Since the final design of the project significantly varied from the preliminary design developed by Kennedy/Jenks, staff requested URS to submit a revised scope of work and fee for construction phase services. URS submitted a proposal in the amount of \$156,490 for construction phase engineering services.

Staff recommends closing the existing design contract with URS and executing a new Professional Services Agreement with URS in the amount of \$156,490 for the construction phase engineering services. URS successfully completed the OPA-1 Wellhead Facilities design and continues to perform well on other IRWD projects including Syphon Reservoir Interim Improvements project. URS' scope of work and fee proposal are attached as Exhibit "B".

FISCAL IMPACTS:

Project 11405 (1250) is included in the FY 2013-14 Capital Budget. Staff requests a budget increase and an Expenditure Authorization to fund the construction and construction phase engineering services as shown in the table below and in Exhibit "C".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11405 (1250)	\$7,407,800	\$1,738,900	\$9,146,700	\$3,114,800	\$6,031,900	\$9,146,700

ENVIRONMENTAL COMPLIANCE:

This project is subject to the 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 April 23, 2012. Pursuant to State Guideline § 15073, the IS/MND was made available for public review for a period of 30 days beginning April 23, 2012 and concluded May 24, 2012. The Board adopted the Final IS/MND at the June 11, 2012 Board meeting.

COMMITTEE STATUS:

The consultant selection portion of this recommendation was reviewed at the December 10, 2013 Engineering and Operations Committee meeting. Construction awards are not routinely taken to Committee prior to submittal to the Board for approval.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$1,738,900, FROM \$7,407,800 TO \$9,146,700, FOR PROJECT 11405 (1250); APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$6,031,900 FOR PROJECT 11405 (1250); AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PACIFIC HYDROTECH IN THE AMOUNT OF \$5,341,200 FOR PROJECT 11405 (1250); AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH URS CORPORATION IN THE AMOUNT OF \$156,490 FOR CONSTRUCTION PHASE SERVICES FOR THE ORANGE PARK ACRES WELL NO. 1 WELLHEAD FACILITIES, PROJECT 11405 (1250).

LIST OF EXHIBITS:

Exhibit "A" – Bid Summary

Exhibit "B" – Scope of Work from URS for Construction Phase Services

Exhibit "C" – Expenditure Authorization

				1		2		3		4		5			
				Engineer's Estimate		Pacific Hydrotech Corp. Perris, CA		Stanek Construction, Inc. Escondido, CA		Schuler Engineering Corp. Corona, CA		S.S. Mechanical Corp. Huntington Beach, CA		Norman A. Olsson Construction, Inc. Orange, CA	
Item No.	Description	Qty	Unit	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	Mobilization, demobilization and clean-up.	1	LS	\$450,000.00	\$450,000.00	\$250,400.00	\$250,400.00	\$100,000.00	\$100,000.00	\$160,000.00	\$160,000.00	\$210,000.00	\$210,000.00	\$310,000.00	\$310,000.00
2	Site demolition including, but not limited to demolition of hardscape, clearing and grubbing.	1	LS	\$30,000.00	\$30,000.00	\$30,400.00	\$30,400.00	\$105,000.00	\$105,000.00	\$27,500.00	\$27,500.00	\$125,000.00	\$125,000.00	\$250,000.00	\$250,000.00
3	Construct site work including, but not limited to: precise grading, import/export, over-excavation and re-compaction, excavation, backfill, slurry backfill, constructing AC pavement, concrete driveway, concrete ramp, sidewalk, rolled and standard curbs, furnish and install crushed gravel, rolling gate with foundation, pedestrian gate, swing gate, fencing, and catch basins complete in place.	1	LS	\$380,000.00	\$380,000.00	\$178,100.00	\$178,100.00	\$430,000.00	\$430,000.00	\$316,000.00	\$316,000.00	\$777,000.00	\$777,000.00	\$594,200.00	\$594,200.00
4	Furnish and install yard piping, mechanical piping, valving, and appurtenances including, but not limited to: potable water piping, sanitary sewer piping, chemical injection piping, static mixers, magnetic flow meter, watertight hatch, manholes, catch basin piping, storm drain piping, storm drain junction structure, floor drains and piping, valves, fittings, pipe sleeves, electric actuators, cathodic protection system, equipment pads, flow meter, connections to existing piping, and appurtenances complete in place	1	LS	\$410,000.00	\$410,000.00	\$605,200.00	\$605,200.00	\$790,000.00	\$790,000.00	\$780,000.00	\$780,000.00	\$800,000.00	\$800,000.00	\$800,000.00	\$800,000.00
5	Furnish and install surge tank, air compressor system and appurtenances including but not limited to: surge tank, butterfly valves, air compressor and receiver, stainless steel piping, control panel, concrete containment structure complete and in place.	1	LS	\$336,000.00	\$336,000.00	\$278,300.00	\$278,300.00	\$305,000.00	\$305,000.00	\$168,000.00	\$168,000.00	\$255,000.00	\$255,000.00	\$225,000.00	\$225,000.00
6	Furnish and install deep well pump including, but not limited to: vertical turbine well pump and motor, complete and in place, and spare bowl assembly for well pump.	1	LS	\$373,000.00	\$373,000.00	\$375,900.00	\$375,900.00	\$365,000.00	\$365,000.00	\$365,000.00	\$365,000.00	\$367,000.00	\$367,000.00	\$300,000.00	\$300,000.00
7	Furnish and install vertical turbine booster pump including, but not limited to: pump and motor complete and in place, and spare bowl assembly for booster pump	1	LS	\$210,000.00	\$210,000.00	\$217,400.00	\$217,400.00	\$225,000.00	\$225,000.00	\$235,000.00	\$235,000.00	\$345,000.00	\$345,000.00	\$450,000.00	\$450,000.00
8	Furnish and install concrete pump bases including, but not limited to: pump bases, checker plate cover, and appurtenances, complete in place ready for installation of pumping facilities as identified on the construction plans.	1	LS	\$68,000.00	\$68,000.00	\$11,700.00	\$11,700.00	\$20,000.00	\$20,000.00	\$10,000.00	\$10,000.00	\$23,000.00	\$23,000.00	\$50,000.00	\$50,000.00
9	Furnish and install aqueous ammonia disinfection system including, but not limited to: aqueous ammonia system startup and training, storage tank, concrete containment pad, chemical feed pump, skid assembly, and appurtenances, complete in place.	1	LS	\$85,000.00	\$85,000.00	\$250,300.00	\$250,300.00	\$165,000.00	\$165,000.00	\$170,000.00	\$170,000.00	\$250,000.00	\$250,000.00	\$225,000.00	\$225,000.00

Item No.	Description	Qty	Unit	Engineer's Estimate		1		2		3		4		5	
				Unit	Total	Pacific Hydrotech Corp.		Stanek Construction, Inc.		Schuler Engineering Corp.		S.S. Mechanical Corp.		Norman A. Olsson Construction, Inc.	
				Price	Amount	Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total
				Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount
10	Furnish and install sodium hypochlorite disinfection system including, but not limited to: hypochlorite system startup and training, bulk storage tank, metering pumps, pump skid, piping, valves, dosing control panel, concrete containment pad, floor drains, safety showers and eyewash stations, and appurtenances, complete in place.	1	LS	\$105,000.00	\$105,000.00	\$198,300.00	\$198,300.00	\$160,000.00	\$160,000.00	\$191,000.00	\$191,000.00	\$190,000.00	\$190,000.00	\$210,000.00	\$210,000.00
11	Furnish and install clearwell, pump station building, chemical storage building, site wall and vehicle gates, including but not limited to: roof hatches, air conditioning units, metal ductwork, diffusers, registers, grilles, exhaust fans, testing and balancing, fire protection system, restroom fixtures, and all appurtenances as identified on the construction plans complete in place.	1	LS	\$1,286,000.00	\$1,286,000.00	\$1,522,100.00	\$1,522,100.00	\$1,450,000.00	\$1,450,000.00	#####	\$1,500,000.00	\$1,600,000.00	\$1,600,000.00	\$1,400,000.00	\$1,400,000.00
12	Furnish and install all air conditioning equipment including air conditioning units, metal ductwork, diffusers, registers, grilles, exhaust fans, appurtenances, testing and balancing.	1	LS	\$50,000.00	\$50,000.00	\$111,100.00	\$111,100.00	\$100,000.00	\$100,000.00	\$61,000.00	\$61,000.00	\$75,000.00	\$75,000.00	\$70,000.00	\$70,000.00
13	Furnish and install all electrical controls and instrumentation, including, but not limited to: PLC, switchgear, VFD starter, conductors and cable, transformer, conduits, field instruments, trenching, house-keeping pads, lights and receptacles, panels, pull boxes, uninterruptable power supply, vibration monitoring panel, and appurtenances, complete in place.	1	LS	\$750,000.00	\$750,000.00	\$1,060,600.00	\$1,060,600.00	\$1,050,000.00	\$1,050,000.00	#####	\$1,085,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00
14	Furnish and install conduit sleeve and reduced pressure principle backflow device and appurtenances, complete in place.	1	LS	\$10,000.00	\$10,000.00	\$2,200.00	\$2,200.00	\$5,000.00	\$5,000.00	\$18,300.00	\$18,300.00	\$5,000.00	\$5,000.00	\$65,000.00	\$65,000.00
15	Furnish and Install Erosion Control Measures.	1	LS	\$6,000.00	\$6,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
16	Furnish and Install Excavation Safety Measures.	1	LS	\$152,500.00	\$152,500.00	\$166,400.00	\$166,400.00	\$180,000.00	\$180,000.00	\$192,000.00	\$192,000.00	\$10,000.00	\$10,000.00	\$200,000.00	\$200,000.00
17	Startup Testing and Training.	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	\$20,000.00	\$20,000.00
18	Prepare Operation & 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	\$10,000.00	\$10,000.00
19	Prepare and Maintain Record Drawings.	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	\$10,000.00	\$10,000.00
20	Allowance for Well Rehabilitation under Separate Contract.	1	LS	\$0.00	\$0.00	\$2,800.00	\$2,800.00	\$5,000.00	\$5,000.00	\$1,000.00	\$1,000.00	\$10,000.00	\$10,000.00	\$26,000.00	\$26,000.00
	Subtotal				\$4,741,500.00		\$5,306,200.00		\$5,500,000.00		\$5,324,800.00		\$6,087,000.00		\$6,220,200.00
A-1	Alternative Item: Builder's "All-Risk".				\$20,000.00		\$35,000.00		\$15,000.00		\$16,950.00		\$20,000.00		\$7,000.00
	Sub-Total, Bid Items 1 thru 19 + A1				\$4,761,500.00		\$5,341,200.00		\$5,515,000.00		\$5,341,750.00		\$6,107,000.00		\$6,227,200.00
	Adjustment (+ or -)				\$0.00		\$0.00		\$0.00		\$175,000.00		-\$250,000.00		\$0.00
	Total Amount of Bid				\$4,761,500.00		\$5,341,200.00		\$5,515,000.00		\$5,516,750.00		\$5,857,000.00		\$6,227,200.00
							Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:
							Vertical Turbine Pump and Motor (Well Pump): 140 days		Vertical Turbine Pump and Motor (Well Pump): 160 days		Vertical Turbine Pump and Motor (Well Pump): 126-140 days		Vertical Turbine Pump and Motor (Well Pump): 210 days		Vertical Turbine Pump and Motor (Well Pump): 210 days
							Vertical Turbine Pump and Motor (Booster Pump): 140 days		Vertical Turbine Pump and Motor (Booster Pump): 160 days		Vertical Turbine Pump and Motor (Booster Pump): 126-140 days		Vertical Turbine Pump and Motor (Booster Pump): 210 days		Vertical Turbine Pump and Motor (Booster Pump): 210 days
							Steel Column Pipe: 30 days		Steel Column Pipe: 30 days		Steel Column Pipe: 126-140 days		Steel Column Pipe: 80 days		Steel Column Pipe: 210 days
							Magnetic Flow Meter: 126 days		Magnetic Flow Meter: 90 days		Magnetic Flow Meter: 70-84 days		Magnetic Flow Meter: 140 days		Magnetic Flow Meter: 210 days
							Pressure Relief Valve: 45 days		Pressure Relief Valve: 60 days		Pressure Relief Valve: 70-79 days		Pressure Relief Valve: 140 days		Pressure Relief Valve: 150 days
							Butterfly Valve: 126 days		Butterfly Valve: 150 days		Butterfly Valve: 84-98 days		Butterfly Valve: 110 days		Butterfly Valve: 150 days
							Silent Check Valves: 126 days		Silent Check Valves: 150 days		Silent Check Valves: 84-98 days		Silent Check Valves: 110 days		Silent Check Valves: 150 days

Item No.	Description	Engineer's Estimate		1 Pacific Hydrotech Corp. Perris, CA		2 Stanek Construction, Inc. Escondido, CA		3 Schuler Engineering Corp. Corona, CA		4 S.S. Mechanical Corp. Huntington Beach, CA		5 Norman A. Olsson Construction, Inc. Orange, CA		
		Qty	Unit	Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total	
				Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price
						Electric Actuators: 126 days		Electric Actuators: 150 days		Electric Actuators: 84-98 days		Electric Actuators: 110 days		Electric Actuators: 150 days
						CML Steel Pipe and Fittings: 56 days		CML Steel Pipe and Fittings: 60 days		CML Steel Pipe and Fittings: 56-72 days		CML Steel Pipe and Fittings: 80 days		CML Steel Pipe and Fittings: 120 days
						Fiberglass Reinforced Plastic Tanks: 112 days		Fiberglass Reinforced Plastic Tanks: 120 days		Fiberglass Reinforced Plastic Tanks: 112-126 days		Fiberglass Reinforced Plastic Tanks: 140 days		Fiberglass Reinforced Plastic Tanks: 180 days
						Surge Tank and Air Compressor: 112 days		Surge Tank and Air Compressor: 180 days		Surge Tank and Air Compressor: 119-134 days		Surge Tank and Air Compressor: 168 days		Surge Tank and Air Compressor: 210 days
						Aqueous Ammonia Feed System: 112 days		Aqueous Ammonia Feed System: 120 days		Aqueous Ammonia Feed System: 112-126 days		Aqueous Ammonia Feed System: 168 days		Aqueous Ammonia Feed System: 180 days
						Sodium Hypochlorite Feed System: 112 days		Sodium Hypochlorite Feed System: 120 days		Sodium Hypochlorite Feed System: 112-126 days		Sodium Hypochlorite Feed System: 168 days		Sodium Hypochlorite Feed System: 180 days
						Magnetic Flowmeters: 112 days		Magnetic Flowmeters: 90 days		Magnetic Flowmeters: 70-84 days		Magnetic Flowmeters: 140 days		Magnetic Flowmeters: 210 days
						Switchboard: 140 days		Switchboard: 180 days		Switchboard: 140 days		Switchboard: 210 days		Switchboard: 210 days
						Variable Frequency Drive (VFD): 140 days		Variable Frequency Drive (VFD): 180 days		Variable Frequency Drive (VFD): 140 days		Variable Frequency Drive (VFD): 210 days		Variable Frequency Drive (VFD): 210 days
						Main Control Panel: 56 days		Main Control Panel:		Main Control Panel: 60 days		Main Control Panel: 210 days		Main Control Panel: 210 days
						Motor Control Center: 140 days		Motor Control Center:		Motor Control Center: 140 days		Motor Control Center: 210 days		Motor Control Center: 210 days
						Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:
						Vertical Turbine Pump and Motor (Well Pump): Flowserve/USEM		Vertical Turbine Pump and Motor (Well Pump): Flowserve		Vertical Turbine Pump and Motor (Well Pump): Goulds		Vertical Turbine Pump and Motor (Well Pump): Flowserve/USEM		Vertical Turbine Pump and Motor (Well Pump): Goulds
						Vertical Turbine Pump and Motor (Booster Pump): Flowserve/USEM		Vertical Turbine Pump and Motor (Booster Pump): Flowserve		Vertical Turbine Pump and Motor (Booster Pump): Goulds		Vertical Turbine Pump and Motor (Booster Pump): Flowserve/USEM		Vertical Turbine Pump and Motor (Booster Pump): Goulds
						Steel Column Pipe: Flowserve		Steel Column Pipe: Flowserve		Steel Column Pipe: Goulds		Steel Column Pipe: Southland		Steel Column Pipe: Goulds
						Magnetic Flow Meter: Endress & Hauser		Magnetic Flow Meter: ABB		Magnetic Flow Meter: ABB		Magnetic Flow Meter: ABB		Magnetic Flow Meter: ABB
						Pressure Relief Valve: Cla-Val		Pressure Relief Valve: Cla-Val		Pressure Relief Valve: Cla-Val		Pressure Relief Valve: Cla-Val		Pressure Relief Valve: Cla-Val
						Butterfly Valve: Pratt		Butterfly Valve: Pratt		Butterfly Valve: K-Flo		Butterfly Valve: K-Flo		Butterfly Valve: Crispin
						Silent Check Valves: Pratt		Silent Check Valves: Pratt		Silent Check Valves: Crispin		Silent Check Valves: Crispin		Silent Check Valves: Apco
						Electric Actuators: Auma		Electric Actuators: Auma		Electric Actuators: Auma		Electric Actuators: Auma		Electric Actuators: Alma
						CML Steel Pipe and Fittings: Levco		CML Steel Pipe and Fittings: Southland		CML Steel Pipe and Fittings: Levco		CML Steel Pipe and Fittings: Southland		CML Steel Pipe and Fittings: Levco
						Fiberglass Reinforced Plastic Tanks: Xerxes		Fiberglass Reinforced Plastic Tanks: Design-Tanks		Fiberglass Reinforced Plastic Tanks: Xerxes		Fiberglass Reinforced Plastic Tanks: Xerxes		Fiberglass Reinforced Plastic Tanks: Design Tanks
						Surge Tank and Air Compressor: 22 Technology		Surge Tank and Air Compressor: Sigma Industries		Surge Tank and Air Compressor: 22 Technology		Surge Tank and Air Compressor: Southgate/Quincey		Surge Tank and Air Compressor: 22 Technology/Ingersoll Rand
						Ammonia Feed System: Superior Water Technologies		Ammonia Feed System: Superior Water Tech		Ammonia Feed System: D&H Water/Superior Water		Ammonia Feed System: D&H/Blue White		Ammonia Feed System: Superior
						Sodium Hypochlorite Feed System: Superior Water Technologies		Sodium Hypochlorite Feed System: Superior Water Tech		Sodium Hypochlorite Feed System: D&H Water		Sodium Hypochlorite Feed System: D&H/Blue White		Sodium Hypochlorite Feed System: Superior
						Magnetic Flowmeters: Endress & Hauser		Magnetic Flowmeters: ABB		Magnetic Flowmeters: ABB		Magnetic Flowmeters: ABB		Magnetic Flowmeters: ABB
						Switchboard: Cutler Hammer		Switchboard: Cutler Hammer		Switchboard: Cutler Hammer		Switchboard: Cutler Hammer		Switchboard: Cutler Hammer
						Variable Frequency Drive (VFD): Allen Bradley		Variable Frequency Drive (VFD): Allen Bradley		Variable Frequency Drive (VFD): Allen Bradley		Variable Frequency Drive (VFD): Allen-Bradley		Variable Frequency Drive (VFD): Allen Bradley
						Main Control Panel: Soffa Electric		Main Control Panel: Soffa-Electric		Main Control Panel: Allen Bradley		Main Control Panel: Soffa Electric		Main Control Panel: Soffa
						Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		Motor Control Center: Soffa Electric		Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley
						Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:
						HVAC: Christian Brothers		Electrical: Leed Electric		Electrical: Leed Electric		HVAC: Modernair		HVAC: Modern Air
						Coatings: National Coating		HVAC: Christian Brothers		Masonry: Kretchmer & Smith		Electrical: Leed Electric		Fire Sprinklers: Qualco
						Roofing: Berry Roofing		Shoring: Vertical Earthworks		Fire Protection: Summit Fire Prot.		Coating: National Coating		Painting/Coating: National Coating
						Earth Shoring: Dave McMahon Construction		Asphalt: Western Paving		Paving: Regan Paving		Shoring: Dave McMahon Const.		Masonry: Kretchmer & Smith

				1		2		3		4		5	
		Engineer's Estimate		Pacific Hydrotech Corp. Perris, CA		Stanek Construction, Inc. Escondido, CA		Schuler Engineering Corp. Corona, CA		S.S. Mechanical Corp. Huntington Beach, CA		Norman A. Olsson Construction, Inc. Orange, CA	
Item No.	Description	Qty	Unit	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
						AC Paving: Resan Paving		Painting: KNK Painting		Painting/Coating: Haight Painting		Masonry: Kretchmer & Smith	Structural Steel: Remco
						Well Equipping: Bakersfield Well & Pump		Deep Well Pump: Bakersfield Well & Pump		Fence: Alcorn Fence		Paving: Handy & Harper, Inc.	AC Paving: Regan Paving
						Fence: Alcorn Fence		Roofing: Letner Roofing		Roofing: Coastline Roofing		Roofing: Division 7	Curb & Gutter: HerCon Const.
						Structural Steel: Remco		Rebar: Harris Rebar		HVAC: Menifee Valley AC		Rebar: Harris Rebar	Roofing: Stone Roofing
						Rebar: Harris Rebar		Acoustic Panels: CE Pickup Co.		Structural Steel: Remco		Deepwell: Bakersfield Well & Pump	Fence/Gate: Valley Cities Fence
						Electrical: Leed Electric		Masonry: Kretschmar & Smith		Concrete Flatwork: DM Contracting			Rebar: Harris Rebar
								Fencing: Gonzales Fence		Rebar: Harris Rebar			Electrical: Leed Electric

EXHIBIT "B"



November 18, 2013

Mr. Jacob Moeder, P.E.
Irvine Ranch Water District
3512 Michelson Dr.
Irvine, CA 92612-1799

**Subject: Construction Phase Services for Orange Park Acres Well No. 1
(Project No. 11405)**

Dear Mr. Moeder:

This letter proposal provides our estimate of labor hours and fees for providing construction phase engineering services for the OPA-1 (Project No. 11405). Through the course of the Design Phase it became apparent that the original Scope of Work for the Construction Phase Services did not include all of the services desired by the District. As such, URS has consolidated all of the required services that includes our original services as outlined in our proposal dated September 18, 2012 and additional services to be provided during the construction phase as requested by the District. We respectfully request that IRWD review the detailed descriptions provided below.

Construction Phase Services:

URS will provide construction phase services including Project Management, submittal/shop drawing review, response to requests for information, and record drawings preparation. These services are detailed below:

1. Project Meetings – URS will attend/conduct twenty (20) progress meetings of two hours each during the course of the project construction and provide agendas and meeting minutes.
2. Contractor's Request for Information (RFI) – URS will respond to approximately sixty (60) Requests for Information.
3. Minor Plan Revisions – URS has budgeted sixty (60) hours of staff time for minor plan revisions to the construction drawings.
4. Site Visits – URS has budgeted six (6) site visits of two hours each during construction.

URS Corporation
2020 East First Street, Suite 400
Santa Ana, CA 92705
Tel: 714.835.6886
Fax: 714.433.7701

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5. Shop Drawing Reviews – URS has budgeted for the review of one hundred (140) shop drawing submittals seventy (70) additional resubmittals. Submittals will be reviewed for completeness and conformity with the contract documents. URS will deliver copies of the reviewed submittals to the IRWD Inspector, IRWD Project Manager, IRWD File and Contractor as required.
6. Record Drawings – URS will prepare record drawings on 24-inch by 36-inch mylars at construction completion, using the Contractor's and IRWD Inspector's red lines. URS will prepare final record drawings mylars, reissued signed mylars (as needed), AutoCAD electronic files on CD, and one color PDF file of the entire construction plan set on CD and deliver the record drawing package to IRWD.
7. Post Construction Noise Study:

URS will provide a post-construction noise study of the OPA-1 Well Facility during full capacity operations after the facility start-up tasks have been completed. The post-construction noise survey will be conducted for a 48 hour period on a continuous basis to evaluate a full range of operating scenarios. Upon completion of the noise survey, URS will prepare an addendum to the original Noise Study prepared during the design phase of the project. If necessary, URS will provide additional noise mitigation measures recommendations in the event the operations of the project do not meet the required City of Orange Noise Ordinance.

8. Energy Control Procedures (ECP's) Preparation:

URS will prepare ECP documentation for OPA-1 and will include the following equipment designations:

- Well Pump No. 1 (DWL-301)
- Well Pump No. 1 SSRV
- Booster Pump No. 1 (P-110)
- Booster Pump No. 1 VFD
- Motor Control Center
- Compressor Unit (B-209)
- Surge Tank (T-209)
- Sodium Hypochlorite Tank (T-812)
- Sodium Hypochlorite Metering Pumps (P 810 and P-820)
- Aqueous Ammonia Tank (T-912)
- Aqueous Ammonia Metering Pumps (P-910 and p-920)
- Ventilation System Chemical Building



- Ventilation System Pump Building
- Air Conditioning Unit Motor Control Room

These procedures shall be developed for each piece of equipment that may include energy prior to being serviced or maintained. Energy is meant to include electrical energy, mechanical energy, hydraulic energy, and chemical energy. The ECPs will be prepared using the District's standard templates.

9. Equipment Inventory Support for Asset Management:

URS shall assist the DISTRICT in the development of the equipment schedules that will be used as the basis for the asset management system. URS shall produce the equipment schedules included in the Contract Documents in an Excel format and ensure that the schedules are correctly interpreted by District's staff.

10. Permit Assistance:

URS will provide assistance to the District in securing required permits for construction through the City of Orange (Water Department, Public Works Department and City Fire Department). This task will be budgeted based on 20 hours of the Project Managers Time and 40 hours of a Project Engineers Time. This task will be authorized on verbal authorization from the District's Project Manager.

11. Conformed Drawing Set:

URS will prepare a conformed set of plans and specifications to be issued prior to the bid award.

12. Change Order Review Allocation:

URS will review change orders submitted by the contractor. This task will be authorized on verbal authorization from the District's Project Manager.

13. Miscellaneous Services During Construction:

This task is to include miscellaneous services during the construction phase that may come up that have not been included in Tasks 1 thru 13 above. This task is to be authorized on verbal authorization from the District's Project Manager.



II. Budget

The total fee for final engineering phase services for the above services is \$156,490. A breakdown of labor hours and costs is attached (see Table 1).

Should you have any questions or need additional information, please feel free to call me at 714.648-2857.

Sincerely,

URS Corporation

Joseph Long, PE
Manager Water Resources

Tariq Hussain
Vice President

Encl.

Table 1 - Estimated Labor Hours and Fees
 Irvine Ranch Water District
 Orange Park Acres Well No. 1 Wellhead Facilities Project
 Construction Phase Services
 November 18, 2013

Task No.	Task Description							TOTAL HOURS	TOTAL LABOR	Electrical Subconsultant Moraes/Pham	Architectural Subconsultant Gillis+Panichapan	Structural Subconsultant Simon Wong	Direct Costs / Materials ¹	Cost Allocation	TOTAL
		Project Manager	Principal Engineer - QA/QC	Project Engineer	Staff Engineer	Senior CAD Technician	Admin / Permit Coord. / Repro								
		\$185	\$170	\$130	\$80	\$75	\$60								
Construction Phase Services															
1.	Project Meetings (20)	20		40				60	\$8,900	\$1,080					\$9,980
2.	Contractor's RFI (60)	24		52			4	80	\$11,440	\$3,560	\$4,240	\$4,460			\$23,700
3.	Minor Plan Revisions (60 Hours)	6	6	16		40		68	\$7,210	\$2,800		\$4,460			\$14,470
4.	Site Visits (6)	12		12				24	\$3,780	\$1,080	\$1,740				\$6,600
5.	Shop Drawing Reviews (140)	20		120			4	144	\$19,540	\$3,400	\$1,210		\$550		\$24,700
6.	Prepare Record Drawings	10	6	28		108		152	\$14,610	\$2,000	\$690		\$500		\$17,800
7.	Post Construction Noise Study	8		12	24		4	48	\$5,200						\$5,200
8.	Energy Control Procedures	16		40			4	60	\$8,400						\$8,400
9.	Equipment Inventory Support for Asset Management	16		80				96	\$13,360						\$13,360
10.	Permit Assistance	20		40				60	\$8,900						\$8,900
11.	Conformed Drawing Set (Plans and Specifications)	4		16		32		52	\$5,220						\$5,220
12.	Change Order Review Allocation	16		40				56	\$8,160						\$8,160
13.	Miscellaneous Services During Construction (To be authorized by District Staff)													\$10,000	\$10,000
SUBTOTAL ADDITIONAL TASK 4 SERVICES		80		228	24	32	8	372	\$49,240					\$10,000	\$59,240
TOTAL		172	12	496	24	180	16	900	\$114,720	\$13,920	\$7,880	\$8,920	\$1,050	\$10,000	\$156,490

Notes & Assumptions:

1) Direct Costs / Materials include costs such as mileage to meetings/site, courier fees, and document reproduction costs.

EXHIBIT "C"

IRVINE RANCH WATER DISTRI

Expenditure Authorization

Project Name: OPA / REGIONAL GROUNDWATER PROJECT
EPMS Project No: 11405 **EA No:** 5
Oracle Project No: 1250
Project Manager: MORI, RICHARD
Project Engineer: MOEDER, JACOB
Request Date: November 21, 2013

ID Split: Regional Potable Water Splits (11/08)
Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	4.3	BONDS YET TO BE SOLD**
113	5.2	BONDS YET TO BE SOLD**
115	7.3	CAPITAL FUND
121	15.3	BONDS YET TO BE SOLD**
130	11.8	BONDS YET TO BE SOLD**
140	4.2	BONDS YET TO BE SOLD**
150	31.2	BONDS YET TO BE SOLD**
153	3.4	BONDS YET TO BE SOLD**
154	1.5	BONDS YET TO BE SOLD**
161	8.0	BONDS YET TO BE SOLD**
182	3.0	BONDS YET TO BE SOLD**
184	2.8	BONDS YET TO BE SOLD**
186	1.0	BONDS YET TO BE SOLD**
188	1.0	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$3,114,800
This Request:	\$6,031,900
Total EA Requests:	\$9,146,700
Previously Approved Budget:	\$7,407,800
Budget Adjustment Requested this EA:	\$1,738,900
Updated Budget:	\$9,146,700
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	900	0	900	0	900	900	12/11	12/12
ENGINEERING - PLANNING OUTSIDE	2,100	0	2,100	0	2,100	2,100	12/11	12/12
ENGINEERING DESIGN - IRWD	11,000	120,000	131,000	11,000	120,000	131,000	1/09	6/13
ENGINEERING DESIGN - OUTSIDE	0	675,000	675,000	0	675,000	675,000	1/09	6/13
ENGINEERING - CA&I IRWD	120,000	60,000	180,000	0	180,000	180,000	3/13	3/14
ENGINEERING - CA&I OUTSIDE	122,000	258,000	380,000	30,000	350,000	380,000	3/13	3/14
CONSTRUCTION	5,438,600	1,818,400	7,257,000	1,600,000	5,657,000	7,257,000	3/13	3/14
LEGAL	5,000	5,000	10,000	0	10,000	10,000	1/09	3/14
WATER QUALITY	0	20,000	20,000	0	20,000	20,000	12/11	3/14
ENGINEERING ENVIRONMENTAL-OUTS	45,000	10,000	55,000	15,000	40,000	55,000	3/11	7/12
Contingency - 5.00% Subtotal	\$287,300	\$148,400	\$435,700	\$82,900	\$352,800	\$435,700		
Subtotal (Direct Costs)	\$6,031,900	\$3,114,800	\$9,146,700	\$1,738,900	\$7,407,800	\$9,146,700		
Estimated G/A - 170.00% of direct labor*	\$204,200	\$360,000	\$564,200	\$18,700	\$545,500	\$564,200		
Total	\$6,236,100	\$3,474,800	\$9,710,900	\$1,757,600	\$7,953,300	\$9,710,900		
Direct Labor	\$131,900	\$200,000	\$331,900	\$11,000	\$320,900	\$331,900		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: _____


Department Director: _____

Finance: _____


Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$9,906,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

December 16, 2013

Prepared by: Christopher Smithson 

Submitted by: Cheryl Clary

Approved by: Paul Cook 

ACTION CALENDAR

ESTABLISHING/SETTING CONNECTION FEES AS OF JANUARY 2014

SUMMARY:

The Board approved the consolidation and formation of several new improvement districts (IDs) as part of the Long Term Financial Plan (LTFP) at the Board Public Hearing on November 11, 2013. With the formation of new improvement districts (IDs), the following additional steps are required:

- Establish /adjust connection fees;
- Approve new regional capital cost allocations.

Staff recommends that the Board approve the proposed changes to the Rates and Charges included as Exhibit "A", effective January 1, 2014, which addresses the following:

- Establish connection fees in:
 - 153/253 – the developing IDs;
 - 185/285 – the newly formed IDs identified as the portion of the Opportunity Study Area (OSA), previously included in IDs 135/235; and
 - 125/225 – the developed IDs.
- Set or adjust connection fees in:
 - 112/212 – the Great Park Neighborhoods;
 - 113/213 – the Tustin base development; and
 - 188/288 – The Portola development.

Exhibit "B" provides a summary of the changes for residential and commercial customers in each of the IDs. Staff's recommendation for new proposed water, sewer and recycled water regional capital cost allocations are included in a separate write-up.

BACKGROUND:

The master consolidation resulting from the LTFP included significant changes for both the remaining and newly formed IDs. A fundamental concept in the District's capital funding plan is that the cost of new capital facilities is shared equally between the connection fees paid by the developer and property taxes paid by the property owner. The District used a sophisticated financial model to factor in variables such as regional capital costs, future development, growth rates, inflation and other variables in order to determine connection fees. Connection fee increases were modeled for both residential and commercial development.

Staff recommends that the update to rates and charges, attached as Exhibit "A", become effective January 1, 2014 and expects that they will be re-evaluated in June/July 2014 as part of the budget process. Any recommended changes to property taxes as a result of the master consolidation will be addressed in the same timeframe.

Establishing Connection Fees:

The long term financial plan (LTFFP) process resulted in the formation of six new IDs:

Area	Water	Sewer
Developed areas within the District	125	225
Future development	153	253
Newly formed ID within OSA	185	285

The developed IDs (125/225) connection fee is a placeholder until staff identifies a redevelopment connection fee, anticipated in 2014. Several small lots remain undeveloped in this area and the connection fees will fund a very small portion of the future capital demands. The future development will have two connection fees, one for ID 153/253 and one for Planning Area (PA) 30, located within the developing ID. The recommended 153/253 connection fee will receive the benefit of native water and golf course revenue. The second connection fee for PA 30 will include a buy-in to existing facilities.

The newly formed ID within the OSA (IDs 185/285) will utilize the previously established connection fee from its former ID 135/235. These rates were set based upon the future development being funded entirely from connection fees. After the land owner election for bonding authority, anticipated to be held in March 2014, staff will request an adjustment to the connection fees.

Setting or Adjusting Connection Fees:

The boundaries in the IDs 112/212, 113/213 and 188/288 remain unchanged. Setting or adjusting connection fees in these IDs are a recalibration of fees based on updated demand projections and new regional cost allocations from the financial model.

The recommended connection fees are included in the Rates and Charges included as Exhibit "A".

FISCAL IMPACTS:

Minimal impact is expected for the FY2013-14.

ENVIRONMENTAL COMPLIANCE:

Not Applicable

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on December 9, 2013.

RECOMMENDATION:

THAT THE BOARD APPROVE THE PROPOSED CHANGES TO THE RATES AND CHARGES FOR CONNECTION FEES AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO 2013-___

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.

LIST OF EXHIBITS:

- Exhibit "A" – Proposed Changes to Rates and Charges
- Exhibit "B" – Proposed Connection Fees by ID
- Exhibit "A" – Resolution Adopting Changes to Rates and Charges

Exhibit "A"

Section

3

Developer Services

Water Connection Fees

Residential

	IMPROVEMENT DISTRICT	0-5.8 DU\$/acre	5.9-10.8 DU\$/acre	10.9-25.8 DU\$/acre	25.9-40.0 DU\$/acre
Connection Fees Per Dwelling Unit	101*	\$3,505	\$3,092	\$2,618	\$2,212
	112	\$1,000 \$1,400	\$1,000 \$1,400	\$1,000 \$1,400	\$1,000 \$1,400
	113	\$2,435 \$2,536	\$2,435 \$2,536	\$2,435 \$2,536	\$2,435 \$2,536
development shall be gross acres excluding private parks.	125	\$2,500 \$1,828	\$2,500 \$1,828	\$2,500 \$1,828	\$2,500 \$1,828
	153	\$1,836 \$1,828	\$1,836 \$1,828	\$1,836 \$1,828	\$1,836 \$1,828
	153 PA 30	\$3,431 \$2,628	\$3,431 \$2,628	\$3,431 \$2,628	\$3,431 \$2,628
	185	\$2,468	\$2,468	\$2,468	\$2,468
	188	\$1,400 \$0	\$1,400 \$0	\$1,400 \$0	\$1,400 \$0 *
	All others*				

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Commercial, Industrial and Public Authority – Office Building

	IMPROVEMENT DISTRICT	Commercial	Industrial	Public Authority
Connection Fees Per Gross Acre	101*	\$19,446	\$29,618	\$19,446
	112	\$6,500 \$5,600	\$6,500 \$5,600	\$6,500 \$5,600
	113	\$17,785 \$18,526	\$0	\$8,892 \$9,263
	125	\$12,400 \$9,606	\$17,603 \$13,636	\$12,400 \$9,606
	153	\$9,648 \$9,606	\$13,696 \$13,636	\$9,648 \$9,606
	PA 30	\$17,025 \$9,606	\$24,167 \$13,636	\$17,025 \$9,606
	185	\$11,533	\$11,533	\$11,533
	188	\$5,526 \$31,910	\$5,526 \$31,910	\$5,526 \$31,910
	All others*			

Parks, Churches and Commercial Recreational Facilities

	IMPROVEMENT DISTRICT	Indoor Water Use	Outdoor ⁽¹⁾ Water Use
Connection Fees Per Fixture Unit	101*	\$60.90	\$214.31
(1) As calculated per UPC as revised.	125	\$41.22 \$1.95	\$144.45 \$11.98
	153	\$32.11 \$1.95	\$112.54 \$11.98
	PA 30	\$56.62 \$1.95	\$198.46 \$11.98
	185	\$66.34	\$233.01
	188	\$27.61 \$59.49	\$97.13 \$61.11
	All others*		

*Connection fees will be set by the Board of Directors upon request for initial service for each such improvement

Schools (Public and Private)

	IMPROVEMENT DISTRICT	Primary & Intermediate	Secondary	Primary Intermediate & Secondary
Connection Fees Per	101*	\$4,799.18	\$6,436.40	\$206.17
100 Students Average Daily Attendance	125	\$3,241.25 \$2,512.60	\$4,352.01 \$3,373.65	\$145.07 \$112.46
	153	\$2,525.16 \$2,512.60	\$3,390.52 \$3,373.65	\$113.02 \$112.46 *
⁽²⁾ Minimum required	PA 30	\$4,453.08 \$2,512.60	\$5,979.12 \$3,373.65	\$199.30 \$112.46
	185	\$5,005.35	\$7,015.21	\$224.91
	188	\$2,524.95	\$3,378.72 \$16,893.61	\$107.82 \$539.12

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Sewer Connection Fees

Residential

	IMPROVEMENT DISTRICT	0-5.8 DUs/acre	5.9-10.8 Dus/acre	10.9-25.8 Dus/acre	25.9-40.0 Dus/acre
Connection Fees Per Dwelling Unit	1 (201)*	\$6,223	\$5,538	\$4,558	\$3,596
	212	\$4,725 \$3,920	\$4,725 \$3,920	\$4,725 \$3,920	\$4,725 \$3,920
	213	\$4,260 \$4,438	\$4,260 \$4,438	\$4,260 \$4,438	\$4,260 \$4,438
Total acreage for any given development shall be gross acres excluding private parks.	240	\$3,433	\$3,433	\$3,433	\$3,433
	225	\$2,700 \$2,064	\$2,700 \$2,064	\$2,700 \$2,064	\$2,700 \$2,064
	253	\$2,134 \$2,064	\$2,134 \$2,064	\$2,134 \$2,064	\$2,134 \$2,064
Parks.	253 PA 30	\$3,581 \$2,064	\$3,581 \$2,064	\$3,581 \$2,064	\$3,581 \$2,064
	256	\$24,500	\$24,500	\$24,500	\$24,500
	285	\$4,410	\$4,410	\$4,410	\$4,410
	288	\$2,400 \$0	\$2,400 \$0	\$2,400 \$0	\$2,400 \$0
	OPA1 (Ridgeline)	\$4,200	\$4,200	\$4,200	\$4,200
	All others*				

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Commercial, Industrial and Public Authority – Office Building

	IMPROVEMENT DISTRICT	Commercial	Industrial	Public Authority
Connection Fees Per Gross Acre	1 (201)*	\$34,874	\$60,845	\$34,874
	212	\$28,240 \$15,680	\$28,240 \$15,680	\$28,240 \$15,680
	213	\$25,380 \$26,439	\$0	\$12,597 \$13,123
	240	\$15,678	\$0	\$15,678
	225	\$13,200 \$9,440	\$21,904 \$15,615	\$13,200 \$9,440
	253	\$9,794 \$9,440	\$16,252 \$15,615	\$9,794 \$9,440
	253 PA 30	\$15,966 \$9,440	\$26,493 \$15,615	\$15,966 \$9,440
	285	\$8,831	\$8,831	\$8,831
	288	\$9,474 \$5,768	\$9,474 \$5,768	\$9,474 \$5,768
	All others*			

Parks, Churches and Commercial Recreational Facilities

	IMPROVEMENT DISTRICT	Fee
Connection Fees Per Fixture Unit	1 (201)*	\$385.84
	240	\$233.24 \$233.24
	225	\$206.89 \$147.48
	253	\$153.50 \$147.48
	253 PA 30	\$250.23 \$147.48
	288	\$62.86
	All others*	

*Connection fees will be set by the Board of Directors upon request for initial service for each such improvement district.

Schools (Public and Private)

	IMPROVEMENT DISTRICT	Primary & Intermediate	Secondary
Connection Fees Per	1 (201)*	\$18,283	\$24,381
100 Students Average Daily Attendance	240	\$11,024 \$11,024	\$14,701 \$14,701
	225	\$9,720 \$6,929	\$12,960 \$9,239
	253	\$7,212 \$6,806	\$9,616 \$9,075
	253 PA 30	\$11,757 \$3,026	\$15,676 \$4,033
	288	\$3,026	\$4,033
	All Others*		

Exhibit "B"

**IRVINE RANCH WATER DISTRICT
Proposed Connection Fees**

IDs	Type		Water	Sewer	Total
112/212	Residential per DU	Current	\$1,400	\$3,920	\$5,320
		Proposed	\$1,000	\$4,725	\$5,725
	Commercial per Acre	Current	\$5,600	\$15,680	\$21,280
		Proposed	\$6,500	\$28,240	\$34,740
113/213	Residential per DU	Current	\$2,536	\$4,438	\$6,974
		Proposed	\$2,435	\$4,260	\$6,695
	Commercial per Acre	Current	\$18,526	\$26,439	\$44,965
		Proposed	\$17,785	\$25,380	\$43,165
125/225	Residential per DU	Current	\$1,828	\$2,064	\$3,892
		Proposed	\$2,500	\$2,700	\$5,200
	Commercial per Acre	Current	\$9,606	\$9,410	\$19,016
		Proposed	\$12,400	\$13,200	\$25,600
153/253	Residential per DU	Current	\$1,828	\$2,064	\$3,892
		Proposed	\$1,836	\$2,134	\$3,970
	Commercial per Acre	Current	\$9,606	\$9,410	\$19,016
		Proposed	\$9,648	\$9,794	\$19,442
PA 30	Residential per DU	Current	\$2,628	\$2,864	\$5,492
		Proposed	\$3,431	\$3,581	\$7,012
	Commercial per Acre	Current	\$12,806	\$12,610	\$25,416
		Proposed	\$17,025	\$15,966	\$32,991
185/285	Residential per DU	Current	\$2,468	\$4,410	\$6,878
		Proposed	\$2,468	\$4,410	\$6,878
	Commercial per Acre	Current	\$11,533	\$8,831	\$20,364
		Proposed	\$11,533	\$8,831	\$20,364
188/288	Residential per DU	Current	N/A	N/A	\$0
		Proposed	\$1,400	\$2,400	\$3,800
	Commercial per Acre	Current	\$31,910	\$5,768	\$37,678
		Proposed	\$5,526	\$9,474	\$15,000

Exhibit "C"

RESOLUTION NO. 2013-

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

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

WHEREAS, Section 35423, 35470, and Section 35501 of the California Water Code empower the District to establish, print and distribute equitable rules and regulations and prescribe and collect rates or other charges for water and sewer service, and such authority to prescribe and collect rates or other charges for water and sewer service includes connection fees for connection and service capacity; and

WHEREAS, the Board of Directors of IRWD, by adoption of Resolution No. 2009-4 approved and adopted amended "Rules and Regulations of Irvine Ranch Water District for Water, Sewer, Recycled Water, and Natural Treatment System Service effective February 9, 2009"; and

WHEREAS, Exhibit "B" of said Rules and Regulations sets forth Rates and Charges, which Exhibit "B" may be changed from time to time by adoption of changes to any of the rates and charges or any new rates and charges as may be established and set forth therein; and

WHEREAS, Section 21080(b) (8) of the Public Resources Code provides that the establishment, modification, structuring, restructuring or approval of rates, tolls, fares, or other charges by public agencies are exempt from the requirements of the California Environmental Quality Act (CEQA) provided that certain findings are made specifying the basis for the claim of exemption; and

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

WHEREAS, the Board of Directors of IRWD deems it advisable and finds that it would be in the best interest of the District to amend or establish connection fees, consistent with applicable constitutional and statutory requirements; and

WHEREAS, the proposed revisions to the connection fees, as set forth in Exhibit “A” to this resolution, do not modify or establish any property-related fees or charges subject to the notice and hearing procedures of Article XIII D of the Constitution of the State of California; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of IRWD as follows:

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

Section 2. It is hereby found and determined that relative to Article XIII B of the Constitution of the State of California, the charges or fees or regulatory fees established or increased hereby do not produce revenues exceeding the costs reasonably borne in providing the regulation, product or service and/or are used for debt service or qualified capital outlay projects and accordingly do not constitute proceeds of taxes, the appropriation of which is limited under Article XIII B, and that the documentation used in making such determinations has been on file in the office of IRWD for not less than 15 days prior to the date hereof, pursuant to Section 7910 of the Government Code of the State of California. It is hereby further found and determined that relative to the requirements of Sections 66013 and 66016 of the Government Code of the State of California, the availability of such documentation also satisfies the requirement to make publicly available the data indicating the estimated cost and revenue sources to provide the service for which the fee is imposed at least 10 days prior to the meeting at which this resolution is adopted, and that the connection fees established or increased hereby do not exceed the estimated reasonable cost of providing the service for which they are imposed.

Section 3. The new and/or revised connection fees as set forth in Exhibit “A” attached to this resolution and by this reference incorporated herein are hereby adopted, and the corresponding rate(s), fee(s) or charge(s), if any, as set forth in Rules and Regulations Exhibit “B” currently in effect, are hereby superseded. Staff is directed to incorporate the hereby adopted new and/or revised connection fee(s) into Exhibit “B” to the Rules and Regulations.

Section 4. That the provisions of this Resolution shall be effective upon adoption.

Section 5. That the Secretary is hereby ordered and directed to post a certified copy of this Resolution in a public place within the Irvine Ranch Water District.

ADOPTED, SIGNED and APPROVED this 24th day of June, 2013.

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

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

APPROVED AS TO FORM:
BOWIE, ARNESON, WILES & GIANNONE
Legal Counsel - IRWD

By: _____

December 16, 2013

Prepared by: K. Welch/M. Hoolihan

Submitted by: K. Burton/G. Heiertz

Approved by: Paul Cook

ACTION CALENDAR

VERIFICATION OF SUFFICIENT WATER SUPPLIES FOR CITY OF IRVINE PLANNING AREA 6 (TENTATIVE TRACT MAP 17607)

SUMMARY:

In September 2013, staff approved a request by the City of Irvine to complete a Verification of Sufficient Water Supplies (WSV) for Tentative Tract Map 17607 in Planning Area 6 within the City's Northern Sphere Area proposed development area. Staff has prepared an Addendum to the Assessment of Water Supply for the Northern Sphere Area and completed the WSV for the Tentative Tract Map 17607 and is recommending Board approval.

BACKGROUND:

The City of Irvine's proposed project is within PA 6 which is located within the designation of the Northern Sphere Area (NSA) development. On March 11, 2002, the Board approved a Water Supply Assessment (WSA) for the NSA as requested by the City of Irvine in accordance with SB 610. As requested by the City of Irvine, the Board approved an amended WSA for the NSA on April 26, 2004, and the Board approved a second amended WSA for the NSA on August 23, 2004. The overall WSA approved for the NSA includes 12,350 Dwelling Units (DUs) and 7,316 thousand square feet (KSF) of mixed use (commercial and industrial). The overall PA 6 includes 2,329 acres with a maximum of 4,500 DUs, 125,000 KSF of Multi-Use, 175 KSF of commercial, and 2,400 KSF of Medical Science. The proposed project within PA 6 includes approximately 58 acres consisting of 556 DUs and 11.6 acres of greenbelt and parks. The proposed project is located east of State Route-133, north of Irvine Boulevard and south of Portola Parkway adjacent to the Great Park Neighborhood District 8 development.

On November 21, 2011, the City of Irvine approved an Addendum to the Northern Sphere Area Final Program Environmental Impact Report (FPEIR) which included a General Plan Amendment and Zone Change for PA 6. The City's Addendum consisted of a change in land use from Medical and Science to Multi-Use and allowed up to 790 additional DUs in PA 6. The City determined that the PA 6 GPA/ZC would not result in any new significant impacts or any increase in severity of any impacts addressed in the NSA FPEIR. Section 10910(h)(1) requires an additional WSA for an area that was part of an existing WSA when there are "changes in the project that result in a substantial increase in water demand for the project". Staff has prepared an Addendum to the WSA for the NSA development to document this change in land use but it does not change the Board's determination that a sufficient water supply is available for the project. The Addendum to the Assessment of Water Supply is attached as Exhibit "A".

As required under SB 221, and as part of the tract map approval process for projects including 500 or more dwelling units, the City has requested a WSV for Tentative Tract Map 17607, PA 6. This is the fifth WSV the City has requested for the NSA and is attached as Exhibit "B".

The WSV for the requested tract map is based upon the WSA containing IRWD's determination that a sufficient water supply is available. The completed WSV contains supplemental information to the WSA concerning actions on state water supplies since the WSA was approved. This information, together with the WSA completed by IRWD, reflects IRWD's confirmation that the project water demands, together with demands from any other developments that have previously received a WSV, will-serves or other approvals by IRWD, are, in the aggregate, within the demands identified by that WSA. In accordance with this procedure, this WSV is based on the respective WSA and information contained in the WSV. In addition to reliance on the WSA, the WSV law requires several elements not covered or required in WSAs. These elements are primarily covered in Sections 1(b)(ii), 1(b)(iii), and 1(b)(iv) of the "Detailed Verification" section of the attached WSV.

Estimates show 113 acre-feet per year (AFY) of potable water demands (an increase of 36 AFY from the original WSA) and 27 AFY of non-potable demands are associated with the project. These demands were included in both the Addendum to Assessment of Water Supply for the Northern Sphere Area and Verification of Sufficient Water Supplies for Planning Area 6 (Tentative Tract Map 17607).

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This study 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 December 9, 2013.

RECOMMENDATION:

That the Board approve the Addendum to Assessment of Water Supply for Northern Sphere Area and Verification of Sufficient Water Supplies for Planning Area 6 (Tentative Tract Map 17607).

LIST OF EXHIBITS:

Exhibit "A" – Addendum to Assessment of Water Supply for Northern Sphere Area
Exhibit "B" – Verification of Sufficient Water Supplies for Planning Area 6 (Tentative Tract Map 17607)

EXHIBIT "A"

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

Project Title: Northern Sphere Area
Date of Water Supply Assessment: March 11, 2002
First Amended Water Supply Assessment: April 26, 2004
Second Amended Water Supply Assessment: August 23, 2004

The above-designated Water Supply Assessment (Assessment) is hereby supplemented with the information provided herein in this Addendum. The Assessment, together with this Addendum, shall constitute the assessment required to be furnished to the City of Irvine pursuant to Water Code Section 10910. In lieu of determining whether there presently exists any circumstance requiring a new Assessment under Water Code Section 10910(h) in this instance, Irvine Ranch Water District (IRWD) has elected to prepare this Addendum in the manner as would satisfy said subsection (h).

Assessment of Availability of Water Supply

On _____ the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Addendum 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 Water Supply Assessment and supporting information contained therein, this Addendum, and supporting information in the records of IRWD.

Signature

Date

Title

**Addendum to Irvine Ranch Water District
Water Supply Assessment for Northern Sphere Area
Evaluation of Planning Area 6 General Plan Amendment/Zone Change**

The information below is intended to supplement information related to assessment of demands and supplies as provided in the Water Supply Assessment for Northern Sphere Area (“Assessment” approved March 11, 2002, Amended April 26, 2004 and Second Amended August 23, 2004). Capitalized terms used herein shall have the meanings given them in the Assessment, unless otherwise defined herein.

On November 21, 2011, the project lead agency, the City of Irvine, approved an Addendum to the Northern Sphere Area Final Program Environmental Impact Report (FPEIR) which included Planning Area 6 General Plan Amendment and Zone Change. The City of Irvine’s findings did not result in any new significant impacts which were not previously addressed in the Northern Sphere FPEIR or any increase in severity of any impacts addressed in the Northern Sphere FPEIR.

The Assessment contains water demand information found on page 5 and in Figures 1 through 8. The Figures 1 through 8 in the Assessment compared projected potable and nonpotable water supplies and demands which provide an overview of IRWD water supply capabilities through 2022 reflecting the 20-year planning horizon. This Assessment is supplemented with the information provided herein as follows:

- The water demand for the Planning Area 6 portion of the Project is revised in accordance with updated information provided by the lead agency and applicant. Water demands as shown in Figures 1 through 8 herein are revised in order to reflect the land use change designated in the City of Irvine’s Planning Area 6 General Plan Amendment and Zone Change.
- Figures 1 through 8 herein are revised to reflect IRWD’s water supply capabilities through 2033, updating the 20-year planning horizon.
- Figures 1 through 8 herein are revised to reflect IRWD’s recalibrated and updated demand projections based on water use and development phasing.
- This Addendum incorporates and updates supporting information on IRWD’s potable and nonpotable water supplies.

See the Assessment, incorporated herein by reference.

The following information has been added:

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.

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 required to be updated in years ending with "five" and "zero," and IRWD's most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in the Assessment and this Addendum.

See Assessment: Assessment Methodology "**Water use factors; dry-year increases.**"

The following information is added:

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

See Assessment: Assessment Methodology "**Planning horizon.**"

The following information is added:

For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2033, which is considered to represent build-out or "ultimate development".

See Assessment: Assessment Methodology “*Margins of safety.*”

The following information is added:

- “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.
- As to imported water, MWD’s 2010 Regional Urban Water Management Plan (RUWMP) shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods through 2035, including a repeat of the 1990-1992 multiple dry-year hydrology and the 1977 single dry-year hydrology. (“IMPORTED SUPPLY - ADDITIONAL INFORMATION,” below, for a summary of information provided by MWD.)

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 will have an effect on State Water Project (SWP) operations and supplies in 2008 and subsequent years. On June 4, 2009, a federal biological opinion imposed rules that will 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 process are defining long-term solutions for the Delta (MWD 2010 IRP Update). 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 comprehensively address the impacts of the SWP cut back on MWD’s water supply development targets, MWD brought to its Board a strategy and work plan to update the long-term Integrated Resources Plan (IRP) in December 2007. As part of the IRP Update, MWD developed a region-wide collaborative process that included a broad-based stakeholder involvement. MWD held several stakeholder forums in 2008 and 2009 and the MWD Board adopted the 2010 IRP Update on October 12, 2010. In the 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 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. Based on MWD's Findings and Conclusions as stated in the MWD 2010 IRP Update, MWD's reliability goal that full-service demands at the retail level will be satisfied for all foreseeable hydrologic conditions remains unchanged in the 2010 IRP Update, and MWD will accomplish this through its core resources strategies. 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 will collaborate with the 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.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: MWD states it is sufficiently reliable to meet full-service demands at the retail level for all foreseeable hydrologic conditions. For purposes of ensuring a conservative analysis, IRWD has compiled information from the prior "MWD IRP Implementation Report" (October 2010) and MWD's RUWMP (November 2010), to provide information in this assessment relative to how reduced SWP supplies could potentially affect IRWD's supplies from MWD.

Based on IRWD's evaluation of MWD's SWP supplies, IRWD estimates that the 22% used by MWD's October 2007 IRP Implementation Report as a potential reduction of MWD's SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2015 through 2035.¹ For this purpose it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. As shown in MWD's RUWMP (Tables A.3-7), SWP deliveries on average over the 20-year period are 1,682,000 acre-feet and Colorado average supplies are 656,000 acre-feet. A 22% reduction of SWP supplies equates to 370,000 acre-feet which is approximately 16% of MWD's total imported supplies. Based on this estimate, this assessment projects a 16% reduction in MWD supplies available to IRWD for the years 2010 through 2035, 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.

As an alternative means of analyzing the 22% stated reduction, Figures 1a, 2a, and 3a show IRWD 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 Shortage Stage 2 and a 10% cutback is applied to IRWD's actual usage rather than its connected capacity. In February 2009, MWD adopted a Water Supply Allocation Plan based on its declared level of shortage. In response to potential water shortages and a request by MWD to have water service providers within its service area adopt a water conservation ordinance, 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

¹ MWD's 2010 RUWMP cites to DWR's Water Allocation Analysis dated March 22, 2010, which incorporated the Delta smelt biological opinion's effect on SWP operations, export restrictions could reduce deliveries to MWD by 150 to 200 thousand acre-feet for 2010. DWR estimated that approximately 520,000 AF had been lost to the SWP for 2010 of which nearly 240,000 AF would have been available to MWD. This amount is equivalent to about 16% reduction in SWP supplies, a smaller percentage reduction than MWD's 2007 figure of 22% that was used by IRWD for purposes of this analysis.

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.

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 can be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.³ 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 2033 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

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 "2010-11 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) 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 enough 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 (RRB) to operate IRWD's Strand Ranch portion 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.

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 2010 IRP Update, MWD recognizes there is a significant uncertainty in the impact of climate change on water supply and changes in weather patterns could significantly affect water supply reliability. MWD plans to hedge against supply and environmental uncertainties by implementing a supply buffer equivalent to 10 percent of total retail demand. This buffer will be implemented through meeting the SB7 water use efficiency goals, implementing aggressive adaptive actions, development of local supplies and transfers.

Per MWD’s RUWMP, MWD continues to incorporate current climate change science into its planning efforts. As stated in MWD’s RUWMP, the 2010 IRP Update supports 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 and 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 (2010 RUWMP) 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 the long term Delta plan in its 2010 RUWMP (pages 3-18 to 3-21).

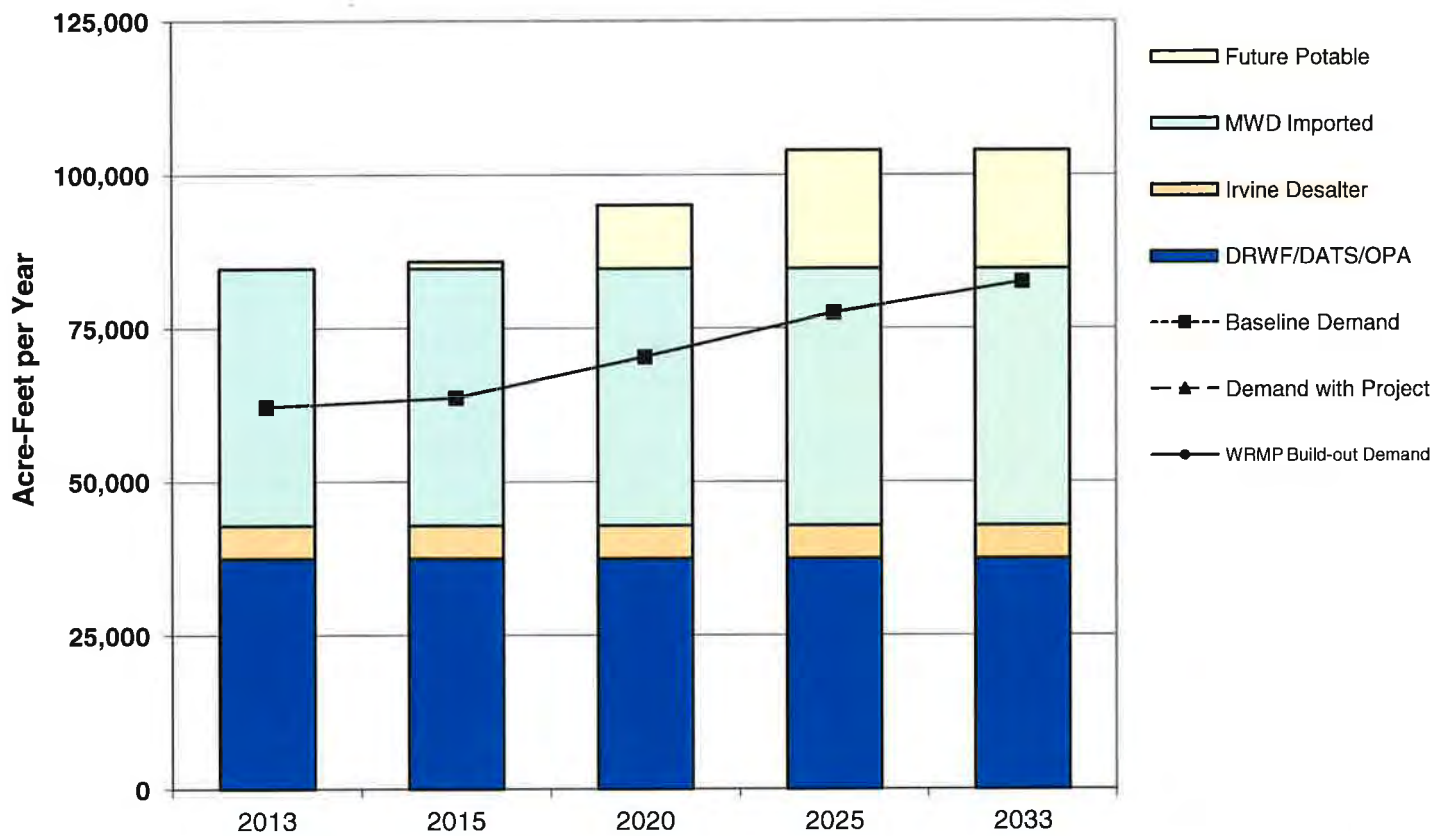
IRWD has also addressed supply interruption planning in its WRMP and UWMP.

Detailed Assessment

See Assessment, Section 1. The following information has been added:

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**

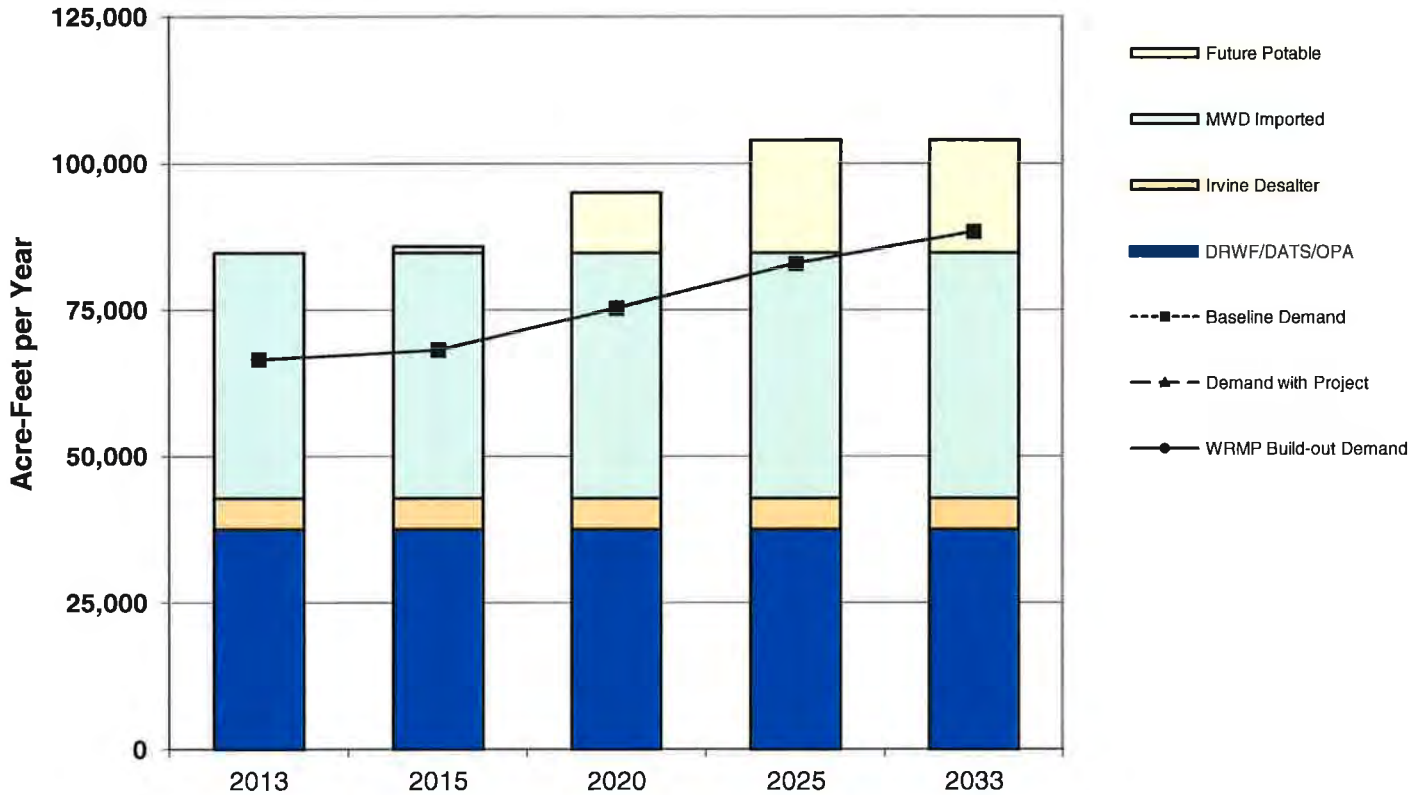


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	62,145	63,693	70,349	77,492	82,603
Demand with Project	62,145	63,693	70,384	77,528	82,639
WRMP Build-out Demand	62,145	63,693	70,384	77,528	82,639
Reserve Supply with Project	28,955	28,525	31,043	32,783	27,672

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.

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

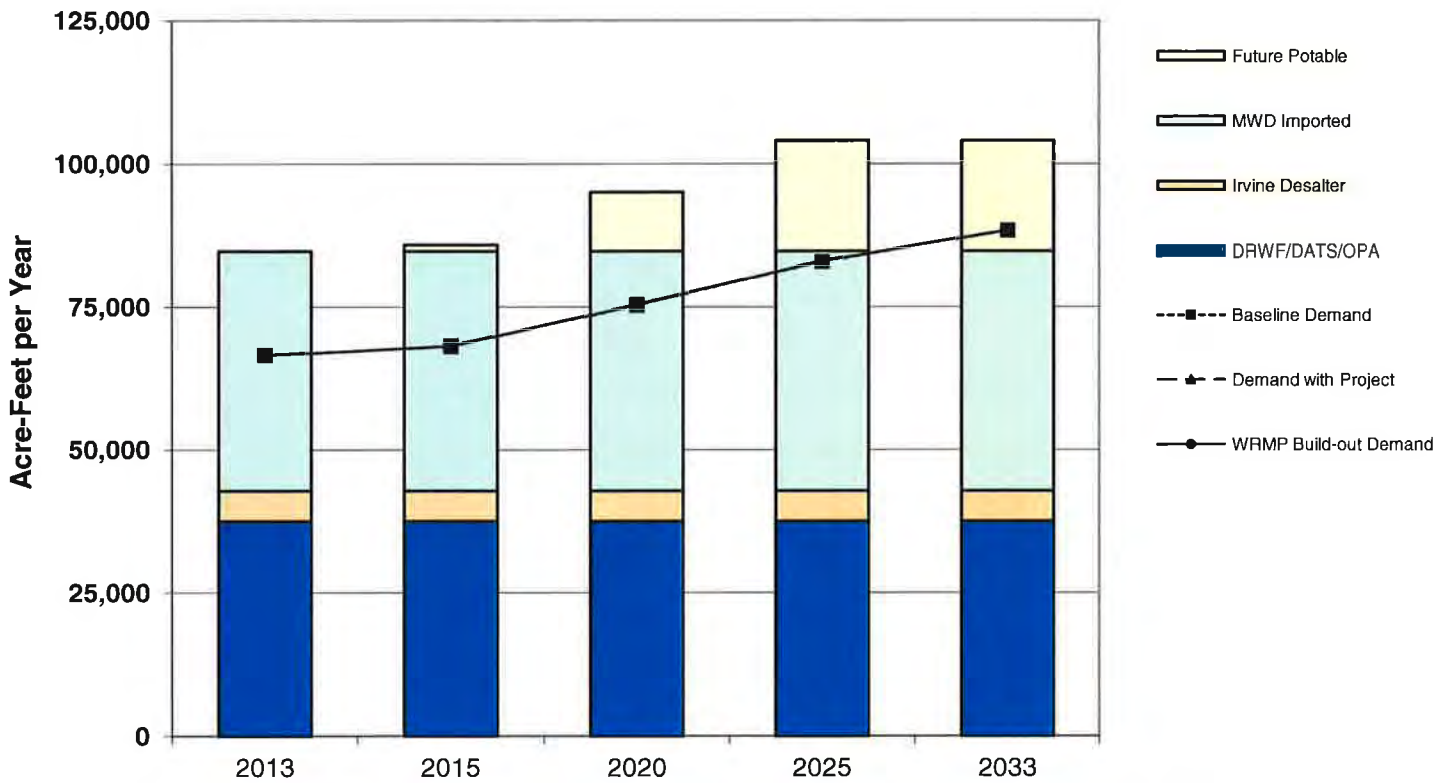


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	24,605	24,066	26,116	27,356	21,887

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) 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.

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

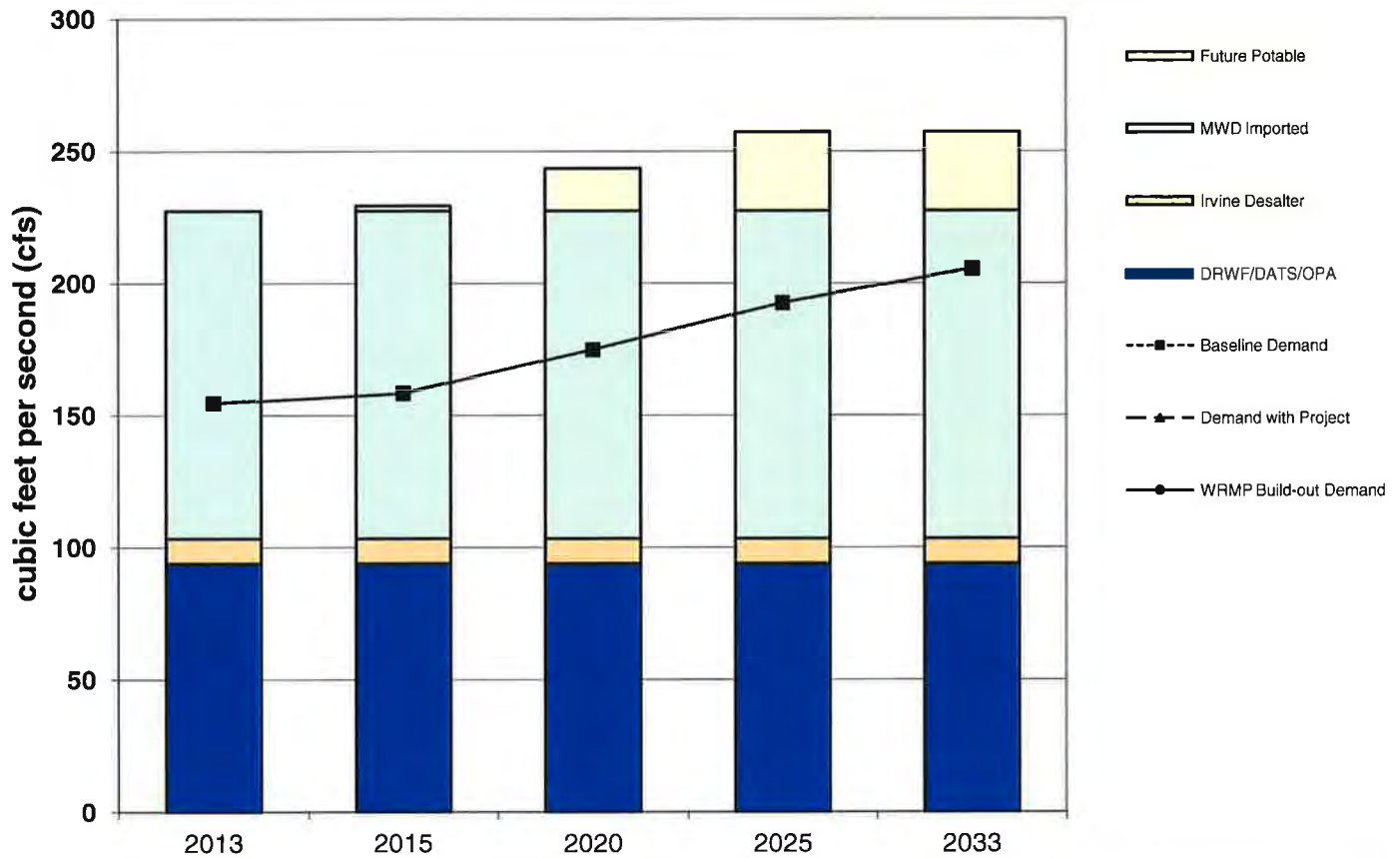


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	24,605	24,066	26,116	27,356	21,887

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) 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).

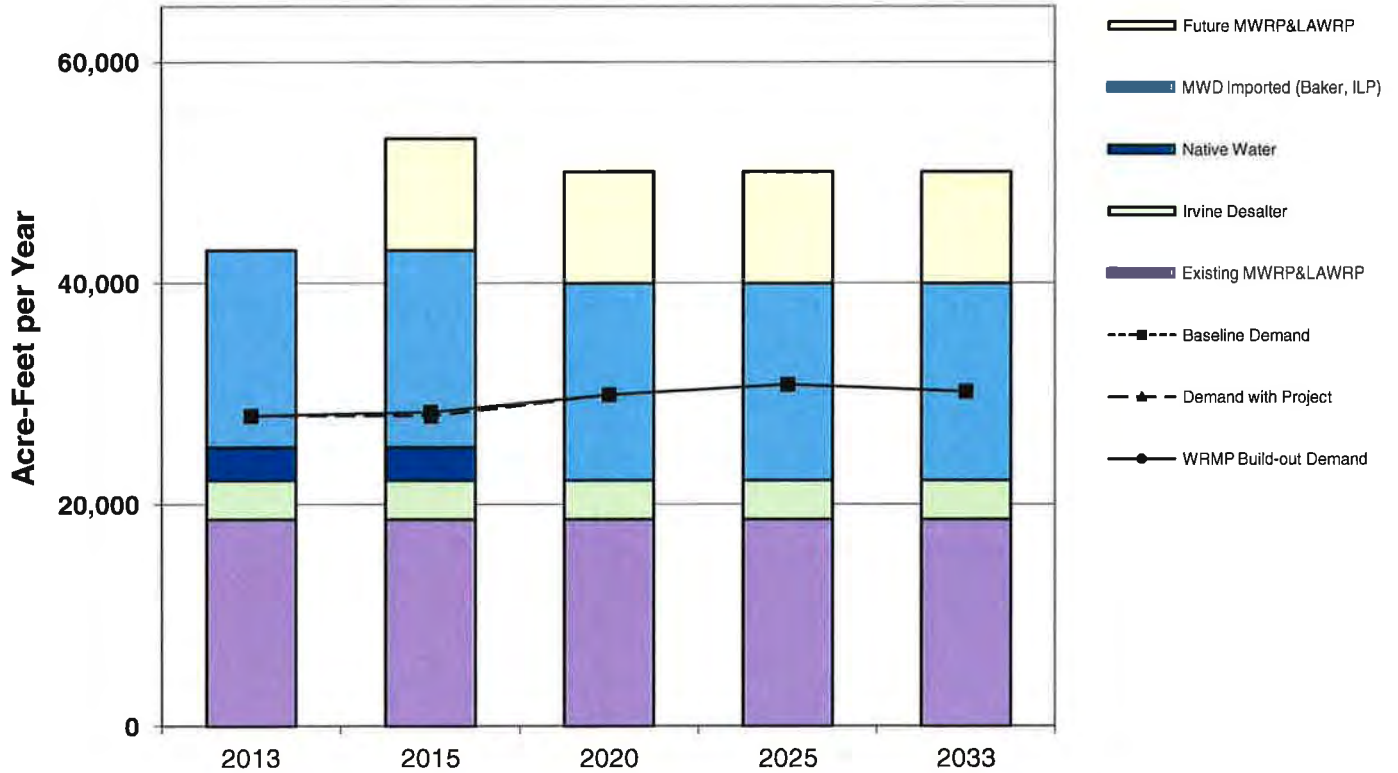
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

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



(in cfs)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	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	9.5	9.5	9.5	9.5	9.5
Wells 21 & 22	10.9	10.9	10.9	10.9	10.9
Supplies Under Development					
Future Potable	-	2.0	16.1	29.7	29.7
Maximum Supply Capability	238.4	240.4	254.5	268.1	268.1
Baseline Demand	154.5	158.4	174.9	192.7	205.4
Demand with Project	154.5	158.4	175.0	192.7	205.5
WRMP Build-out Demand	154.5	158.4	175.0	192.7	205.5
Reserve Supply with Project	83.9	82.0	79.5	75.4	62.6

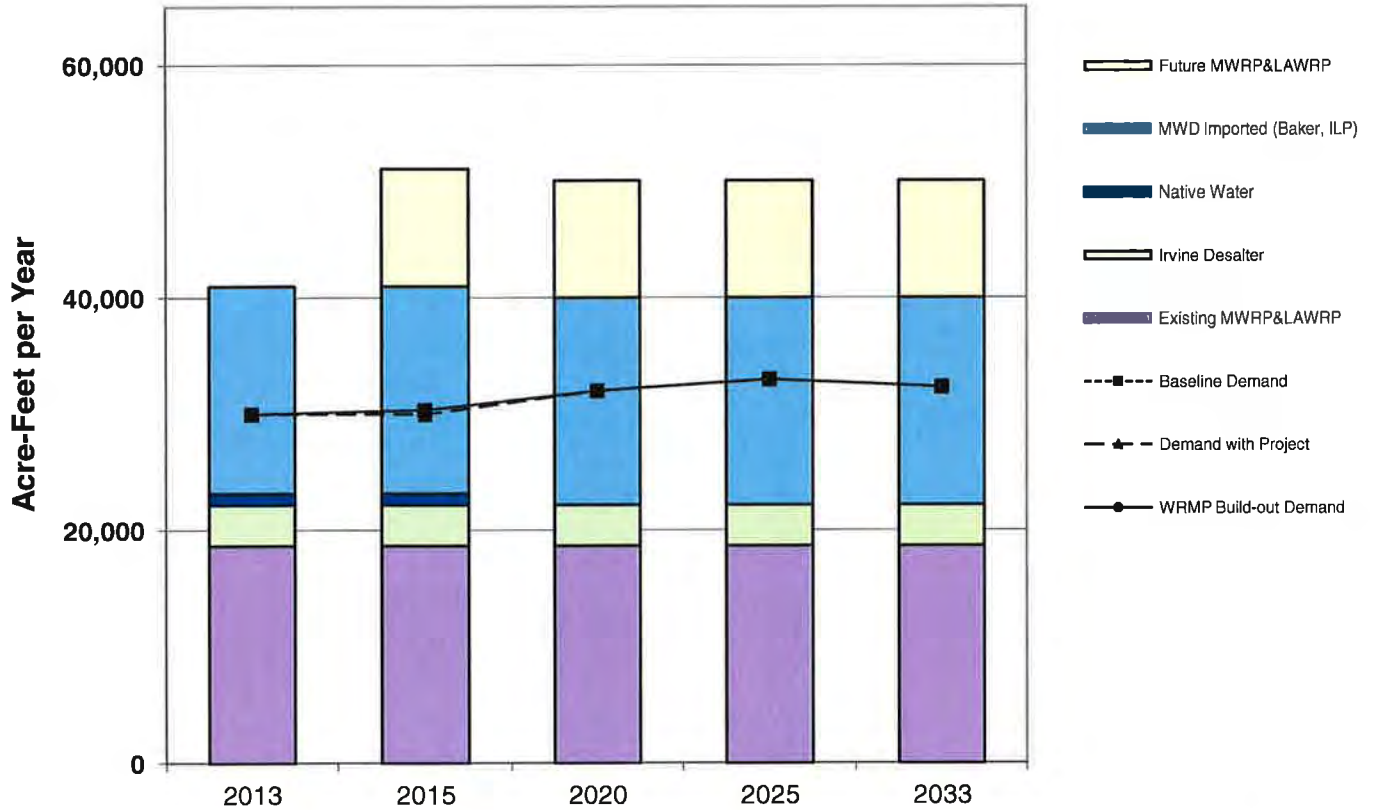
**Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	3,000	3,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	53,097	50,097	50,097	50,097
Baseline Demand	28,008	28,344	29,907	30,823	30,195
Demand with Project	28,008	28,008	29,907	30,823	30,195
WRMP Build-out Demand	28,008	28,344	29,907	30,823	30,195
Reserve Supply with Project	14,988	24,753	20,190	19,274	19,902

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.

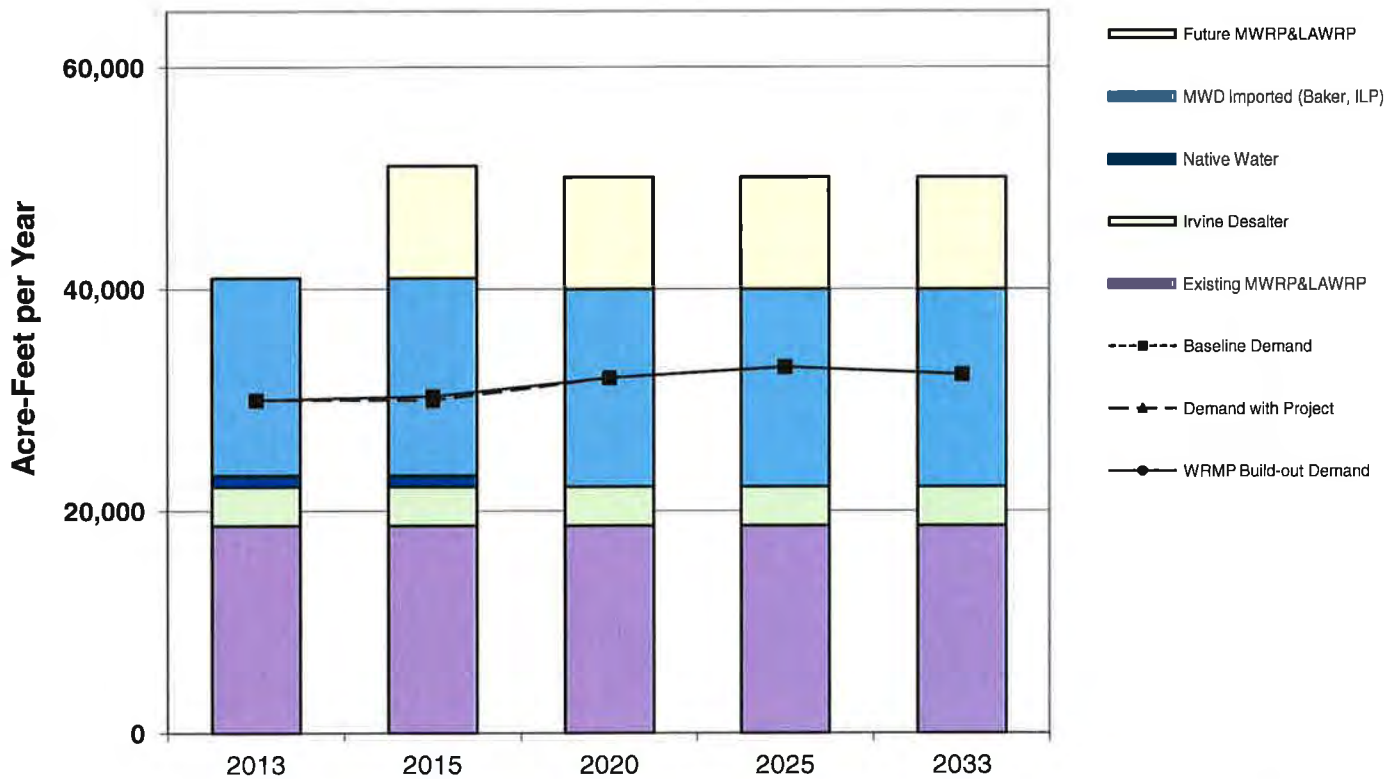
Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	1,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,969	30,328	32,001	32,981	32,309
Demand with Project	29,969	29,969	32,001	32,981	32,309
WRMP Build-out Demand	29,969	30,328	32,001	32,981	32,309
Reserve Supply with Project	11,028	21,128	18,096	17,116	17,788

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.

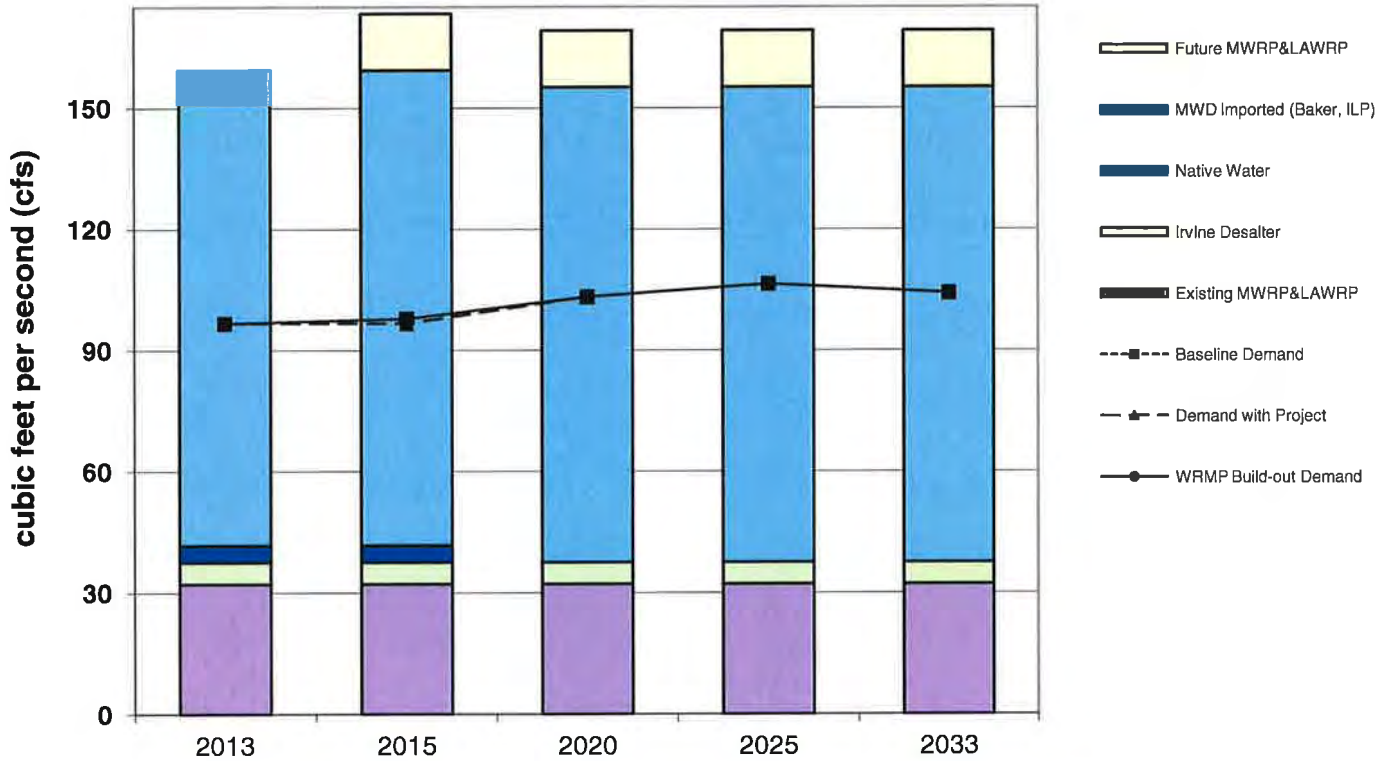
**Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	1,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,969	30,328	32,001	32,981	32,309
Demand with Project	29,969	29,969	32,001	32,981	32,309
WRMP Build-out Demand	29,969	30,328	32,001	32,981	32,309
Reserve Supply with Project	11,028	21,128	18,096	17,116	17,788

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.

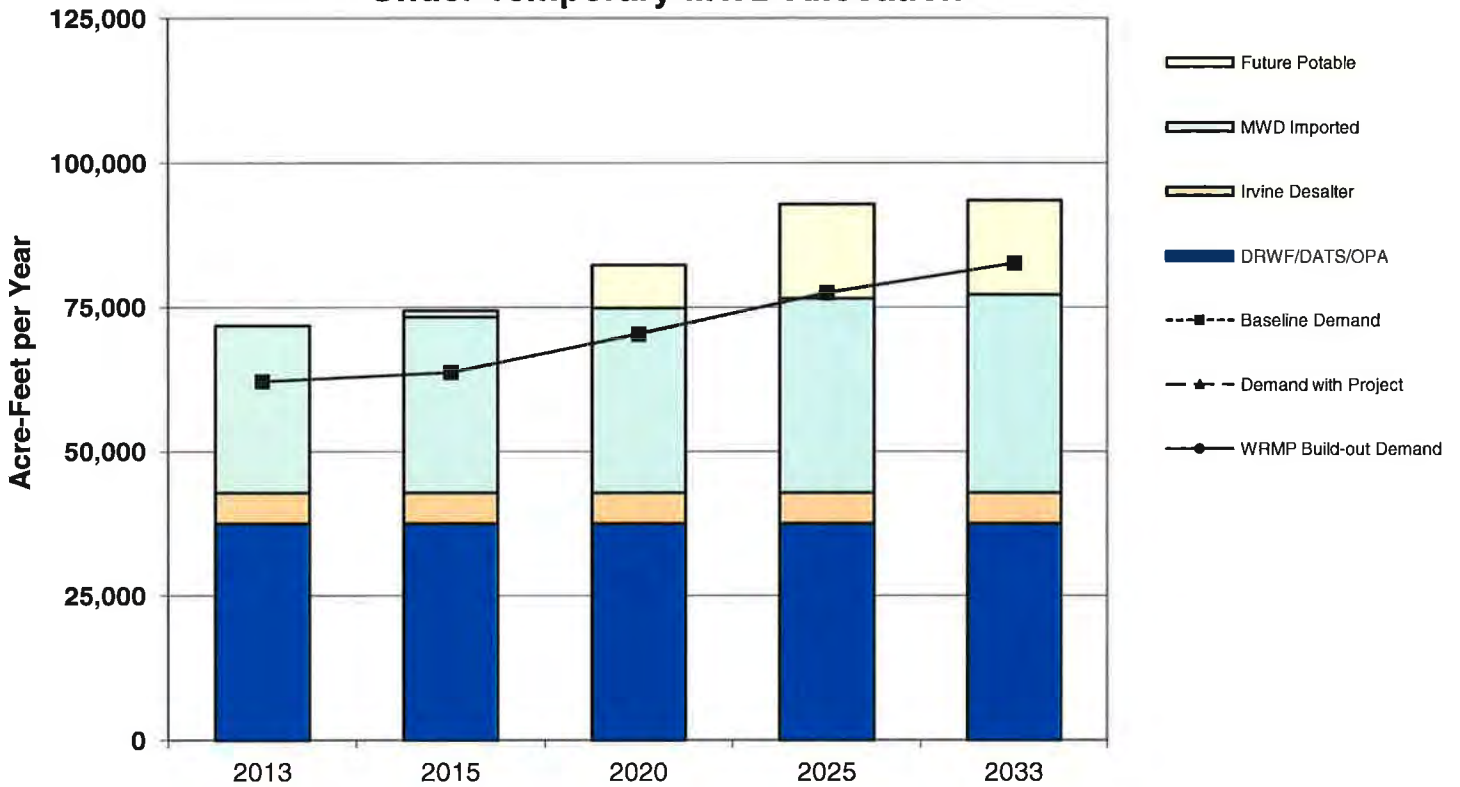
**Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water**



(in cfs)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
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	4.2	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
Maximum Supply Capability	159.5	173.4	169.2	169.2	169.2
Baseline Demand	96.7	97.9	103.3	106.4	104.3
Demand with Project	96.7	96.7	103.3	106.4	104.3
WRMP Build-out Demand	96.7	97.9	103.3	106.4	104.3
Reserve Supply with Project	62.8	75.6	66.0	62.8	65.0

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***

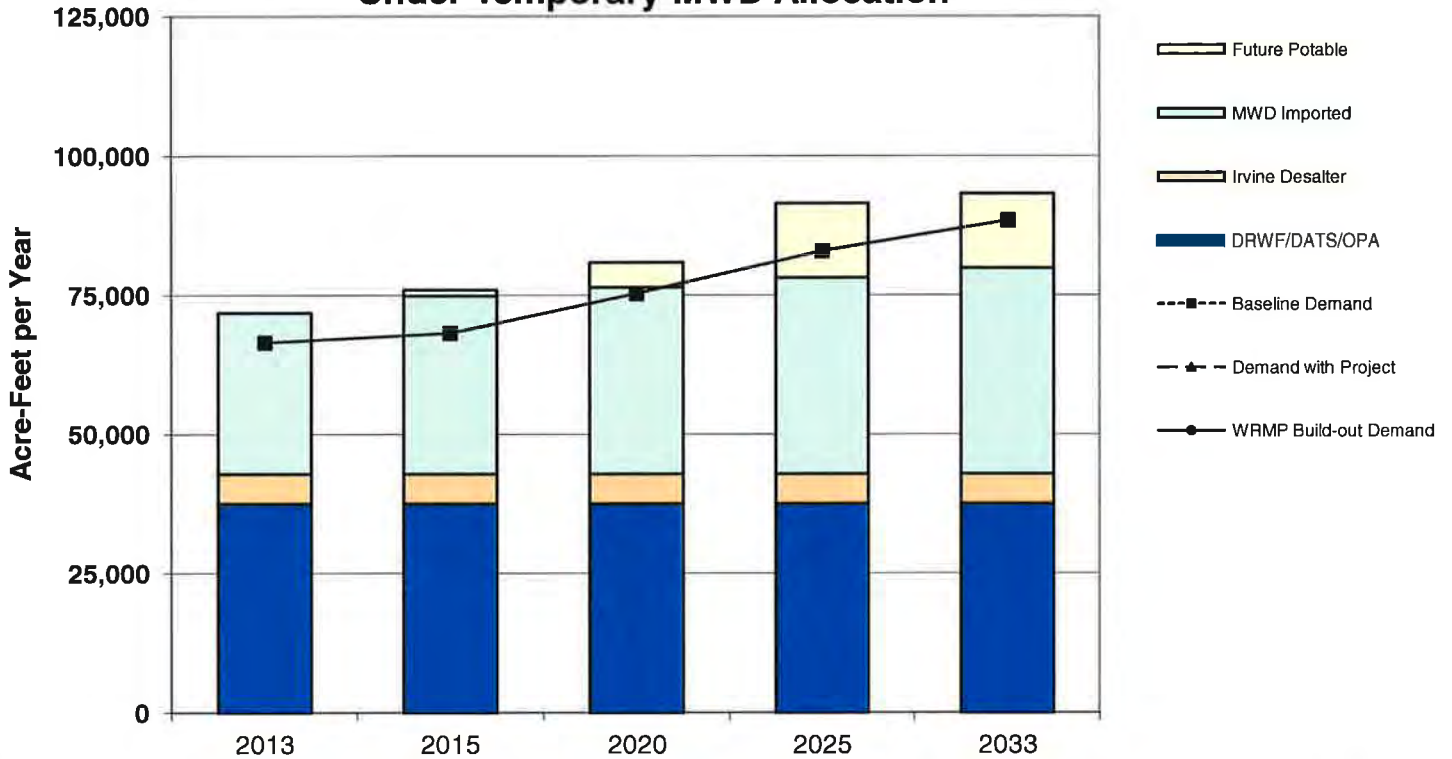


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	7,469	16,352	16,352
Maximum Supply Capability	78,170	80,767	88,674	99,191	99,868
Baseline Demand	62,145	63,693	70,349	77,492	82,603
Demand with Project	62,145	63,693	70,384	77,528	82,639
WRMP Build-out Demand	62,145	63,693	70,384	77,528	82,639
Reserve Supply with Project	16,026	17,075	18,289	21,663	17,229

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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available native water only.

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

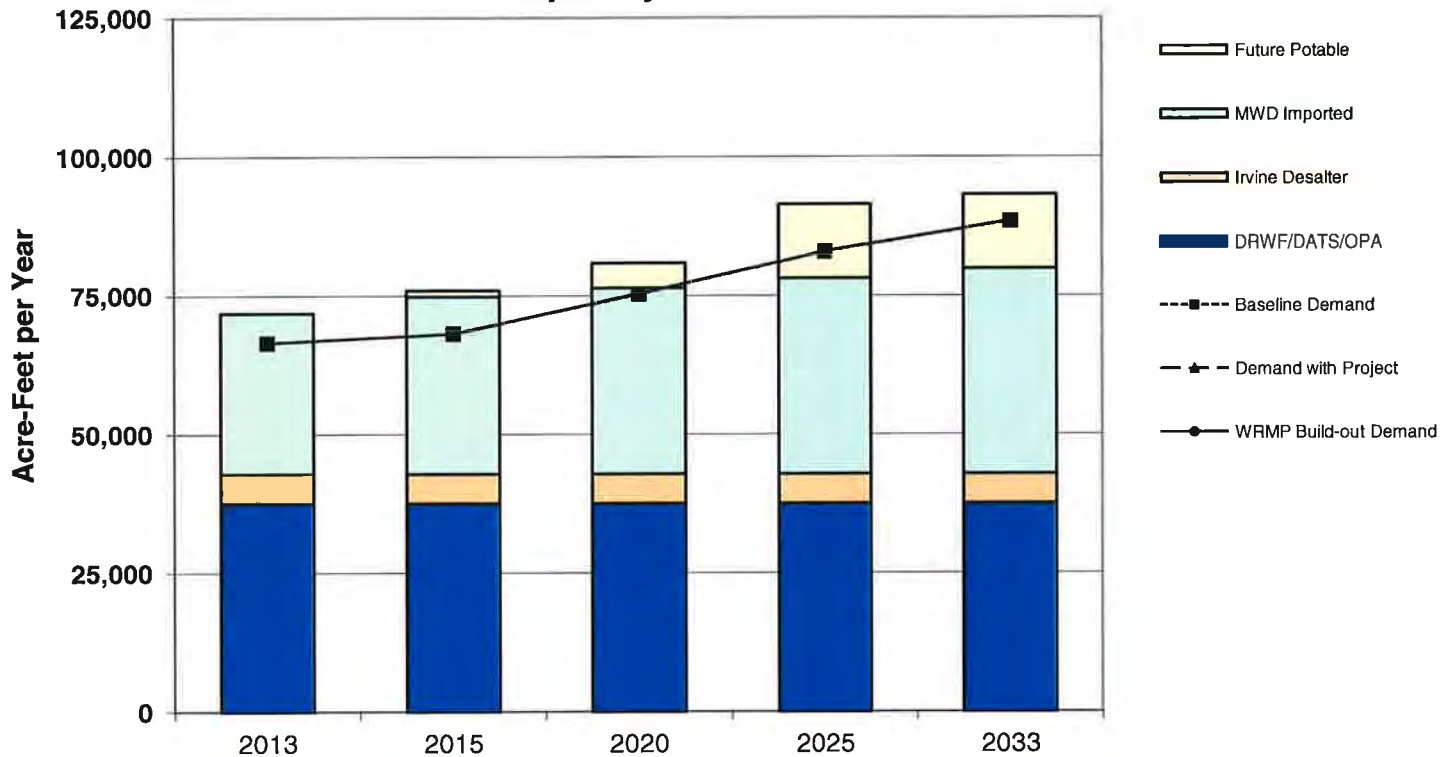


(in acre-feet per year)	2013	2015	2020	2025	2033
<u>Current Potable Supplies</u>					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<u>Supplies Under Development</u>					
Future Potable	-	1,118	4,469	13,352	13,352
Maximum Supply Capability	78,170	82,291	87,243	97,806	99,571
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	11,675	14,140	11,932	14,852	11,147

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional 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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available native water only.

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



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	4,469	13,352	13,352
Maximum Supply Capability	78,170	82,291	87,243	97,806	99,571
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	11,675	14,140	11,932	14,852	11,147

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional 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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available 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
			49,916
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	9.5	5,309	3
			49,170
Total Potable Current Supplies	238.4		99,086
Nonpotable - Reclaimed Water			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
			23,315
Nonpotable - Imported			
Baker Aqueduct	52.7	12,221	5
Irvine Lake Pipeline	65.0	9,000	6
			21,221
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	5.4	3,514	7
			3,514
Nonpotable Native			
Irvine Lake	4.2	3,048	8
			3,048
Total Nonpotable Current Supplies	159.5		51,098
Total Combined Current Supplies	397.9		150,185
Supplies Under Development			
Potable Supplies			
Well 106	2.0	1,118	
Well 53	5.6	3,658	
Future OPA Wells	8.0	5,225	
Baker Water Treatment Plant	10.5	6,858	
Wells 51 & 52	3.6	2,351	
Total Potable Under Development Supplies	29.7	19,211	19,211
Nonpotable Supplies: MWRP&LAWRP Reclaimed			
	20.0	14,450	9
			14,450
Total Under Development	49.7		33,661
Total Supplies			
Potable Supplies	268.1		118,297
Nonpotable Supplies	179.4		65,548
Total Supplies (Current and Under Development)	447.5		183,846

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 3, page 22).

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 18.0 mgd treatment capacity (17,400 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)

5 By 2020, Baker capacity will be allocated to Baker Water Treatment Plant (WTP) participants and IRWD will own 46.50 cfs in Baker Aqueduct after 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 3, page 22).

6 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.

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

8 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake. By 2020, native water will be treated through Baker WTP.

9 Future estimated MWRP & LAWRP reclaimed water production.

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 23 (b)(1)(iii))

2. Information concerning supplies

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

See the Assessment, Section 2(b), incorporated herein by reference.

The following information is added:

OCWD's analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006). (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER (i).)

With the addition of the Concentrated Treatment System (CATS), IRWD has increased the yield of DATS. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER (iii).)

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER.)

In 2013, IRWD completed construction of treatment facilities, pipelines and wellhead facilities for Wells 21 and 22. Water supplied through this project became available in March 2013. The wells are operated within the Orange County Groundwater Basin. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER.)

IRWD is pursuing the installation of production facilities in the west Irvine, Anaheim, 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, a site for an additional well and treatment facility has been acquired by IRWD. The production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. An agreement with the City of Anaheim would be developed for production within Anaheim. Appropriate environmental review would be conducted for each facility. (See discussion of the Act in Assessment Section 2(b) - under POTABLE SUPPLY – GROUNDWATER.)

IRWD plans to construct the Baker Water Treatment Plan project (the Baker WTP) in partnership with El Toro Water District, Mouton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP will be supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD will own 10.5 cfs of treatment capacity rights in the Baker WTP.⁴ Initiation of the construction of the Baker WTP is anticipated in 2014. (See Assessment, Section 2(b) – POTABLE SUPPLY – *Under Development*.)

⁴ The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (See Assessment, Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) shall be apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD shall retain 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and shall retain 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply.

IRWD has prepared a Final Environmental Impact Report for the Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project (February, 2006) and the expansion project is under construction. With this expansion, IRWD plans to increase its capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand in the year 2033. (Initial upgrades that are within existing permit authorizations and CEQA compliance are completed.) Additional reclamation capacity will augment local nonpotable supplies and improve reliability (See Assessment, Section 2(b) – NONPOTABLE SUPPLY—RECLAIMED.)

•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 its most recently adopted RUWMP, MWD has extended its planning timeframe out through 2035 to ensure that MWD's 2010 RUWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the RUWMP 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 RUWMP summarizes MWD's planning initiatives over the past ten years, which includes the Integrated Resources Plan (IRP), the IRP Update, the Water Surplus and Drought Management Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's IRP Update (October 2010) showed that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period 2015 through 2035. The RUWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2035. 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 to supplement its RUWMP in years when the RUWMP is not being updated.

IRWD is permitted by the statute 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 RUWMP. 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.

See also the Assessment, Section 2(b)(2) Adopted capital outlay program to finance delivery of the water supplies.

With respect to future groundwater wells (PR Nos. 11405, 11473) and the MWRP

Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No. 11218), IRWD adopted its fiscal year 2013-14 capital budget on June 10, 2013 (Resolution No. 2013-21), budgeting portions of the funds for such projects. IRWD has financed its expected 24% share of the costs of the Baker WTP from general obligation bonds. See also MWD's 2010 RUWMP, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

See the Assessment, Section 3. 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.

See Assessment, Section 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 2010 UWMP, sections 4-D through 4-J.

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

The Orange County Groundwater Basin ("Basin") is described at pages 3-1 through 3-14 of the OCWD Master Plan Report, dated April, 1999 ("MPR") and in the more recent Groundwater Management Plan ("GMP") at pages 2-1 through 6-33⁵. 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 366,000 AFY.

The Department of Water Resources has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (2003). The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD MPR, including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan ("LTFP") which provides updated information and was received by the OCWD Board in July 2009. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin.

⁵ OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

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.

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. (Source: 2010-2011 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District; OCWD MPR, *supra*.)

OCWD’s efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD’s management of overdraft to maximize its 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 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 has been updated and shows the amounts pumped, by groundwater source (in AFY):

Year (ending 6/30)	DRWF/DATS/ OPA/Wells 21 & 22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD⁶
2013	38,617	8,629	0	0
2012	35,939	7,059	0	0
2011	34,304	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16
2007	37,864	5,407	0	6
2006	37,046	2,825	0	268
2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598

The following table has been updated and summarizes future IRWD groundwater production from currently available and under-development supplies (in AFY).

Year (ending 6/30)	DRWF⁷	Future GW⁸	IDP (Potable)	IDP (Nonpotable)
2015	37,500	1,120	5,300	3,500
2020	37,500	10,300	5,300	3,500
2025	37,500	19,200	5,300	3,500
2033	37,500	19,200	5,300	3,500

See the Assessment, Section 4.

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water

⁶ 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.

⁷ 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 1,000 AFY projected for the OPA well.

⁸ Under development.

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.⁹

See also the Assessment, Section 6. The following are added:

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

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

The Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010

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

Board Information Report, Metropolitan Water District of Southern California, October 9, 2007

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

Groundwater Management Plan, Orange County Water District, March, 2004

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

Orange County Water District Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy, February, 2007

2010-2011 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2012

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

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

⁹ OCWD has adopted a basin production percentage of 70% for 2013-14. In prior years OCWD has maintained a basin production percentage that is higher 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.

EXHIBIT "B"

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

To: (Lead Agency)
City of Irvine
P.O. Box 19575
Irvine, CA 92623-9575

(Applicant)
Irvine Community Development Company
550 Newport Center Drive
P.O. Box 6370
Newport Beach, CA 92658-6370

Project Information

Project Title: Vesting Tentative Tract Map 17607 (PA 6) (see Exhibit A)
 Tentative Map Application Nos. 00572913-PTT Verification requested prior to tentative map application

Number of residential units in Project: 556
Non-residential uses in Project (type, no. of employees, sq. ft. of floor space, acreage): (see Exhibit B)
Acreage to be devoted to landscape (excluding individual residence yards): (see Exhibit B)

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

A water supply assessment that included the Project was adopted by IRWD on March 11, 2002 and an Addendum to the water supply assessment was adopted by IRWD on _____. A copy is attached hereto and incorporated herein by this reference (see Exhibit C).

Verification of Availability of Sufficient Water Supply

On _____, 2013, the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Verification and made the following determination regarding the above-described Project:

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

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

Signature Date Title

WATER SUPPLY VERIFICATION INFORMATION

Purpose of Verification

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

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

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

Methodology of Verification for Project With Prior Water Supply Assessment

As referenced on the cover page of this verification (the “Verification”), the Project was included within an assessment of water supply approved by IRWD. The Assessment contained IRWD’s determination that a sufficient water supply is available for the Project. The Assessment was updated by the Addendum to the Northern Sphere Area (the “Addendum”) in December 2013. The Addendum did not change IRWD’s determination that a sufficient water supply is available for the project. As described in the Assessment, IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. However, upon approval of each assessment containing a determination of a sufficient supply, IRWD attributes the demands identified by that assessment to IRWD’s existing and committed demand. Thereafter, each verification approved by IRWD for a subdivision covered by that assessment is based on the assessment, and reflects IRWD’s confirmation that the water demands of the subdivision, together with any other subdivisions or developments that have previously received verifications, will-serves or other approval by IRWD under the same assessment, are, in the aggregate, within the demand identified by that assessment. In accordance with that procedure, this Verification is based on the Assessment and the Addendum. The Addendum shows the determination of sufficiency extends through 2025,

which covers the full the full 20-year projection required in this Verification.

In addition, this Verification includes the elements required by the Verification Law that are not included within the required contents of assessments.

Supporting Documentation

As noted above, the principal supporting document for this Verification is the Assessment. Other documentation supports the Assessment and this Verification: IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. (The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update was adopted in June 2011.)

In addition to the Assessment, the most recent WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 5 of this Verification. This includes the Metropolitan Water District of Southern California's Regional Urban Water Management Plan (RUWMP) detailing an evaluation by Metropolitan Water District of Southern California (MWD), the wholesaler of IRWD's imported water supplies, of the reliability of MWD's supplies. (2010 RUWMP adopted in November 2010.)

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

Sufficiency Calculation Methodology

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

Summary of Results of Demand-Supply Comparisons

The Assessment contains Figures 1 through 8 comparing projected potable and nonpotable water supplies and demands which provide an overview of IRWD potable and nonpotable water supply capabilities through 2022. The Addendum contains updated Figures in order to reflect updated information on project demands, supplies, as well as updating the 20-year planning horizon through 2033. In addition, since the date of the approved Assessment for this project (March 2002), IRWD has recalibrated and updated demand projections based on water use and development phasing.

Detailed Verification

1. Determination of sufficiency of water supply

(a) Supply and demand comparison

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

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

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

Source	1980	1985	1990	1995	2000	2005	2010
Potable – imported	29,510	43,320	44,401	28,397	36,777	19,306	19,306
Potable – groundwater	827	38	10,215	20,020	20,919	37,160	37,160
Nonpotable - reclaimed	9,196	12,399	11,589	10,518	14,630	15,296	15,296
Nonpotable - imported*	9,556	12,260	24,899	2,333	16,343	5,304	5,304
Nonpotable – groundwater	-	36	816	1,834	2,890	2,285	2,285
Nonpotable – native	11,909	3,587	2,778	5,980	4,949	7,251	7,251
Total	60,998	71,639	94,699	69,082	96,508	86,602	86,602

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

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

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect the implementation of water shortage emergency measures. In February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan, which is a supporting document for Section 15. 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. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for any water savings that could be achieved by these measures.

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

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect any allocated reductions by IRWD. As noted under the preceding item (ii), IRWD’s water shortage contingency plan and Rules and Regulations provide for voluntary and mandatory water conservation measures that could be invoked in declared water shortage emergencies. These include reductions to certain water uses. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand

projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for water savings that could be achieved by any allocated reductions.

With respect to items (ii) and (iii) above, it is noted that MWD has in effect a management plan for dealing with periodic surplus and shortage conditions, known as Metropolitan Report No. 1150, *Water Surplus and Drought Management Plan (RUWMP, II-15)* and also in 2010 RUWMP pages 2-20 through 2-22). MWD's demand projections account for the effects of long-term conservation best management practices.

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

Local. IRWD directly relies (for a portion of its full build-out annual demand in single and multiple dry-year projections) on the following under development supplies (see 1(a), above): the Irvine Wells (see the Assessment, Section 2(b)(1)(vi) – “POTABLE SUPPLY – GROUNDWATER”). In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan (“LTFP”) which provides updated information and was received by the OCWD Board in July 2009. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft which provides sufficient storage space to accommodate increased supplies from one wet year while also provides enough water in storage to offset decreased supplies during a two- to three year drought. (Source: “Evaluation of Orange County Groundwater Basin Storage and Operational Strategy”, February 2007 as referenced in *2010-11 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*).

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

IRWD's own reclaimed water expansion program is also shown as an under development supply. IRWD also has a currently available reclaimed water supply from its own existing reclamation program. The reclaimed water supplies are discussed in Section 2 below (see the Assessment, Section 1 – Figures 5, 6, 7 and 8 (supplies denominated “MWRP” and “LAWRP”), Section 2(a), and Section 2(b)(1) - “NONPOTABLE SUPPLY – RECLAIMED”), IRWD has prepared a Final Environmental Impact Report for the Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project (February, 2006) and the expansion project is under construction. With this expansion, IRWD plans to increase its capacity on the existing MWRP site to produce sufficient reclaimed water to meet the projected demand in the year 2033. Additional reclamation capacity will augment local nonpotable supplies and improve reliability.

As noted in the Assessment, IRWD's demand projections reflect the effect of IRWD's water conservation pricing and other conservation practices; in particular, IRWD's water use factors used to derive its demand projections are based on average water use and incorporate

the effect of IRWD's tiered-rate conservation pricing and its other long-term water conservation programs. System losses at a rate of approximately 5% are built into the water use factors. As discussed above, IRWD's supply and demand projections do not take into account water savings that could be achieved by water shortage emergency measures.

Imported. MWD, the supplier of IRWD's imported supplies, relies upon several of the listed projects and programs. MWD supports and provides financial incentives to water reclamation, groundwater recovery, water conservation, ocean desalination and other local resource development programs. MWD calculates its demand forecast by first estimating total retail demand for the region and then factoring in impacts of conservation. Next, it derives projections of local supplies using data on current and expected local supply programs and Integrated Resource Planning (IRP) Local Resource Program Target. The difference between the resulting local demands is the expected regional demand on MWD. These estimates of demands on MWD were developed for a single dry year, multiple dry years and average years. (2010 *RUWMP*, pages 2-12 to 2-14)

MWD also relies upon the implementation of the CALFED Bay-Delta Program, as an under development supply, to attain an increase in its existing Bay-Delta deliveries. Other under development programs relied upon by MWD include: additional transfers and storage agreements such as ICS Exchange, Agreements with CVWD, Additional Palo Verde Irrigation District Transfers, Arizona Programs – CAP, Hayfield Groundwater Extraction Project, Mojave Groundwater Storage Program, North of Delta/In-Delta Transfers, San Bernardino Valley Water MWD Central Feeder, Shasta Return, and Semitropic Agricultural Water Reuse. (2010 *RUWMP*, Sections 3.1, 3.2, and 3.3) See also MWD's 2010 *RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to MWD's current and under development supplies.

In addition to MWD's existing regional supply assessments, the water supply verification has considered MWD information concerning recent events. See the Addendum: "Recent Actions on Delta Pumping."

2. Required information concerning *under-development* supplies

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

See the Assessment, Section 2(b)(1) and Addendum, incorporated herein by reference. See also MWD's 2010 *RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to written contracts and other proof related to MWD's supplies.

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

See the Assessment, Section 2(b)(2) and Addendum, incorporated herein by reference. See also MWD's 2010 *RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

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

See the Assessment, Section 2(b)(3) and Addendum, incorporated herein by reference. See also MWD's 2010 *RUWMP*, Appendix A.3 Justifications for Supply Projections with respect

to permits related to MWD's supplies.

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

See the Assessment, Section 2(b)(4) and Addendum, incorporated herein by reference. See also MWD's 2010 *RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

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

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

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

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

5. References

Water Resources Master Plan, Irvine Ranch Water District, March, 2002 (supplemented January, 2004)

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

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

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

2010 Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November, 2010

The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, Metropolitan Water District of Southern California, November, 2005

Integrated Water Resources Plan Update, Metropolitan Water District of Southern California, July, 2004

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

Board Information Report, Metropolitan Water District of Southern California, October 9, 2007

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

Master Plan Report, Orange County Water District, April, 1999

Groundwater Management Plan, Orange County Water District, March, 2004

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

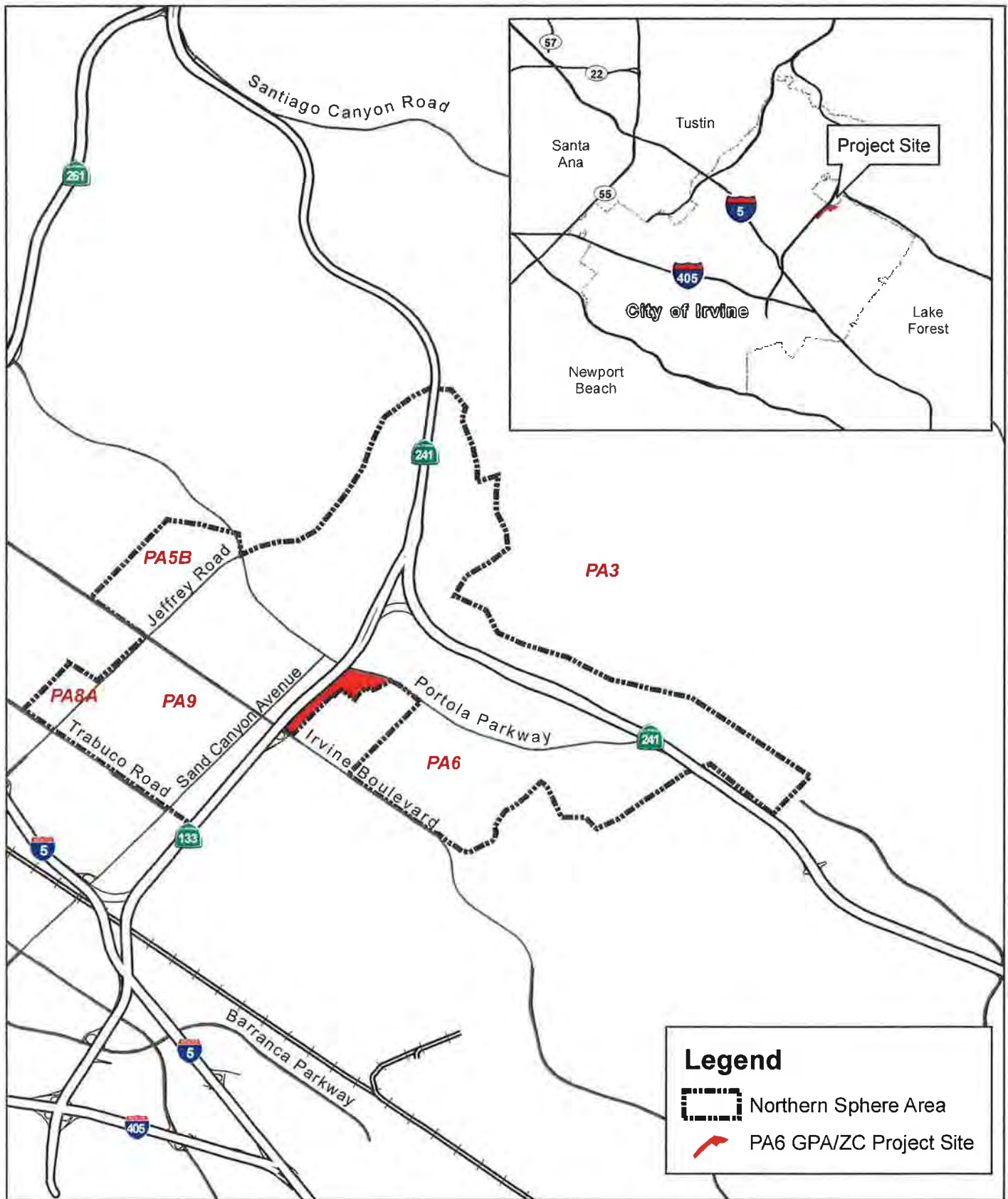
Orange County Water District Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy, February, 2007

2010-11 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2012

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

Exhibit A

Depiction of Project Area



Source: City of Irvine Northern Sphere Area Final Program EIR, 2002
 US Census Bureau, Geography Division, 2010



Exhibit B

Non-residential Uses Included in Project

September 5, 2013

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

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

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

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

Proposed Project Information

Project Title: Vesting Tentative Tract Map 17607.

Location of project: City of Irvine: Planning Area 6.

Planning Area(s): PA 6.

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

If yes, date and project title of Water Supply Assessment March 12, 2002: WSA for PA Northern Sphere GPA/ZC EIR (SCH#2001051010).

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

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

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

- Tentative Map Application No.* 00572913-PTT Tentative Tract No.* 17607
 Verification is being requested prior to tentative map application (Government Code §66473.7(1) (Indicate next project approval sought: _____))

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

Type of development included in the project:

- Residential: No. of dwelling units: 556
- Shopping center or business: No. of employees _____ Sq. ft. of floor space _____
- Commercial office: No. of employees _____ Sq. ft. of floor space _____
- Hotel or motel: No. of rooms _____
- Industrial, manufacturing, processing or industrial park: No. of employees _____
No. of acres _____ Sq. ft. of floor space _____
- Mixed use (check and complete all above that apply)
- Other: _____

Total acreage of project: 55.8 AC

Acreage devoted to landscape:

Greenbelt 7.9 AC golf course 0 parks 3.7 AC
Agriculture 0 other landscaped areas _____

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

None

Is the project included in the existing General Plan? YES. If no, describe the existing General Plan Designation _____

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

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

CITY OF IRVINE

By: [Signature]

REQUEST RECEIVED:

Date: Sept. 20, 2013

By: [Signature]
Irvine Ranch Water District

REQUEST COMPLETE:

Date: Sept. 25, 2013

By: [Signature]
Irvine Ranch Water District

Exhibit C

Water Supply Assessment

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

Project Title: Northern Sphere Area
Date of Water Supply Assessment: March 11, 2002
First Amended Water Supply Assessment: April 26, 2004
Second Amended Water Supply Assessment: August 23, 2004

The above-designated Water Supply Assessment (Assessment) is hereby supplemented with the information provided herein in this Addendum. The Assessment, together with this Addendum, shall constitute the assessment required to be furnished to the City of Irvine pursuant to Water Code Section 10910. In lieu of determining whether there presently exists any circumstance requiring a new Assessment under Water Code Section 10910(h) in this instance, Irvine Ranch Water District (IRWD) has elected to prepare this Addendum in the manner as would satisfy said subsection (h).

Assessment of Availability of Water Supply

On _____ the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Addendum 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 Water Supply Assessment and supporting information contained therein, this Addendum, and supporting information in the records of IRWD.

Signature

Date

Title

**Addendum to Irvine Ranch Water District
Water Supply Assessment for Northern Sphere Area
Evaluation of Planning Area 6 General Plan Amendment/Zone Change**

The information below is intended to supplement information related to assessment of demands and supplies as provided in the Water Supply Assessment for Northern Sphere Area ("Assessment" approved March 11, 2002, Amended April 26, 2004 and Second Amended August 23, 2004). Capitalized terms used herein shall have the meanings given them in the Assessment, unless otherwise defined herein.

On November 21, 2011, the project lead agency, the City of Irvine, approved an Addendum to the Northern Sphere Area Final Program Environmental Impact Report (FPEIR) which included Planning Area 6 General Plan Amendment and Zone Change. The City of Irvine's findings did not result in any new significant impacts which were not previously addressed in the Northern Sphere FPEIR or any increase in severity of any impacts addressed in the Northern Sphere FPEIR.

The Assessment contains water demand information found on page 5 and in Figures 1 through 8. The Figures 1 through 8 in the Assessment compared projected potable and nonpotable water supplies and demands which provide an overview of IRWD water supply capabilities through 2022 reflecting the 20-year planning horizon. This Assessment is supplemented with the information provided herein as follows:

- The water demand for the Planning Area 6 portion of the Project is revised in accordance with updated information provided by the lead agency and applicant. Water demands as shown in Figures 1 through 8 herein are revised in order to reflect the land use change designated in the City of Irvine's Planning Area 6 General Plan Amendment and Zone Change.
- Figures 1 through 8 herein are revised to reflect IRWD's water supply capabilities through 2033, updating the 20-year planning horizon.
- Figures 1 through 8 herein are revised to reflect IRWD's recalibrated and updated demand projections based on water use and development phasing.
- This Addendum incorporates and updates supporting information on IRWD's potable and nonpotable water supplies.

See the Assessment, incorporated herein by reference.

The following information has been added:

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.

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 required to be updated in years ending with "five" and "zero," and IRWD's most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in the Assessment and this Addendum.

See Assessment: Assessment Methodology "**Water use factors; dry-year increases.**"

The following information is added:

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

See Assessment: Assessment Methodology "**Planning horizon.**"

The following information is added:

For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2033, which is considered to represent build-out or "ultimate development".

See Assessment: Assessment Methodology “**Margins of safety.**”

The following information is added:

- “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.
- As to imported water, MWD’s 2010 Regional Urban Water Management Plan (RUWMP) shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods through 2035, including a repeat of the 1990-1992 multiple dry-year hydrology and the 1977 single dry-year hydrology. (“IMPORTED SUPPLY - ADDITIONAL INFORMATION,” below, for a summary of information provided by MWD.)

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 will have an effect on State Water Project (SWP) operations and supplies in 2008 and subsequent years. On June 4, 2009, a federal biological opinion imposed rules that will 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 process are defining long-term solutions for the Delta (MWD 2010 IRP Update). 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 comprehensively address the impacts of the SWP cut back on MWD’s water supply development targets, MWD brought to its Board a strategy and work plan to update the long-term Integrated Resources Plan (IRP) in December 2007. As part of the IRP Update, MWD developed a region-wide collaborative process that included a broad-based stakeholder involvement. MWD held several stakeholder forums in 2008 and 2009 and the MWD Board adopted the 2010 IRP Update on October 12, 2010. In the 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 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. Based on MWD's Findings and Conclusions as stated in the MWD 2010 IRP Update, MWD's reliability goal that full-service demands at the retail level will be satisfied for all foreseeable hydrologic conditions remains unchanged in the 2010 IRP Update, and MWD will accomplish this through its core resources strategies. 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 will collaborate with the 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.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: MWD states it is sufficiently reliable to meet full-service demands at the retail level for all foreseeable hydrologic conditions. For purposes of ensuring a conservative analysis, IRWD has compiled information from the prior "MWD IRP Implementation Report" (October 2010) and MWD's RUWMP (November 2010), to provide information in this assessment relative to how reduced SWP supplies could potentially affect IRWD's supplies from MWD.

Based on IRWD's evaluation of MWD's SWP supplies, IRWD estimates that the 22% used by MWD's October 2007 IRP Implementation Report as a potential reduction of MWD's SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2015 through 2035.¹ For this purpose it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. As shown in MWD's RUWMP (Tables A.3-7), SWP deliveries on average over the 20-year period are 1,682,000 acre-feet and Colorado average supplies are 656,000 acre-feet. A 22% reduction of SWP supplies equates to 370,000 acre-feet which is approximately 16% of MWD's total imported supplies. Based on this estimate, this assessment projects a 16% reduction in MWD supplies available to IRWD for the years 2010 through 2035, 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.

As an alternative means of analyzing the 22% stated reduction, Figures 1a, 2a, and 3a show IRWD 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 Shortage Stage 2 and a 10% cutback is applied to IRWD's actual usage rather than its connected capacity. In February 2009, MWD adopted a Water Supply Allocation Plan based on its declared level of shortage. In response to potential water shortages and a request by MWD to have water service providers within its service area adopt a water conservation ordinance, 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

¹ MWD's 2010 RUWMP cites to DWR's Water Allocation Analysis dated March 22, 2010, which incorporated the Delta smelt biological opinion's effect on SWP operations, export restrictions could reduce deliveries to MWD by 150 to 200 thousand acre-feet for 2010. DWR estimated that approximately 520,000 AF had been lost to the SWP for 2010 of which nearly 240,000 AF would have been available to MWD. This amount is equivalent to about 16% reduction in SWP supplies, a smaller percentage reduction than MWD's 2007 figure of 22% that was used by IRWD for purposes of this analysis.

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.

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 can be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.³ 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 2033 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

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 "2010-11 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) 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 enough 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 (RRB) to operate IRWD's Strand Ranch portion 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.

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 2010 IRP Update, MWD recognizes there is a significant uncertainty in the impact of climate change on water supply and changes in weather patterns could significantly affect water supply reliability. MWD plans to hedge against supply and environmental uncertainties by implementing a supply buffer equivalent to 10 percent of total retail demand. This buffer will be implemented through meeting the SB7 water use efficiency goals, implementing aggressive adaptive actions, development of local supplies and transfers.

Per MWD’s RUWMP, MWD continues to incorporate current climate change science into its planning efforts. As stated in MWD’s RUWMP, the 2010 IRP Update supports 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 and 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 (2010 RUWMP) 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 the long term Delta plan in its 2010 RUWMP (pages 3-18 to 3-21).

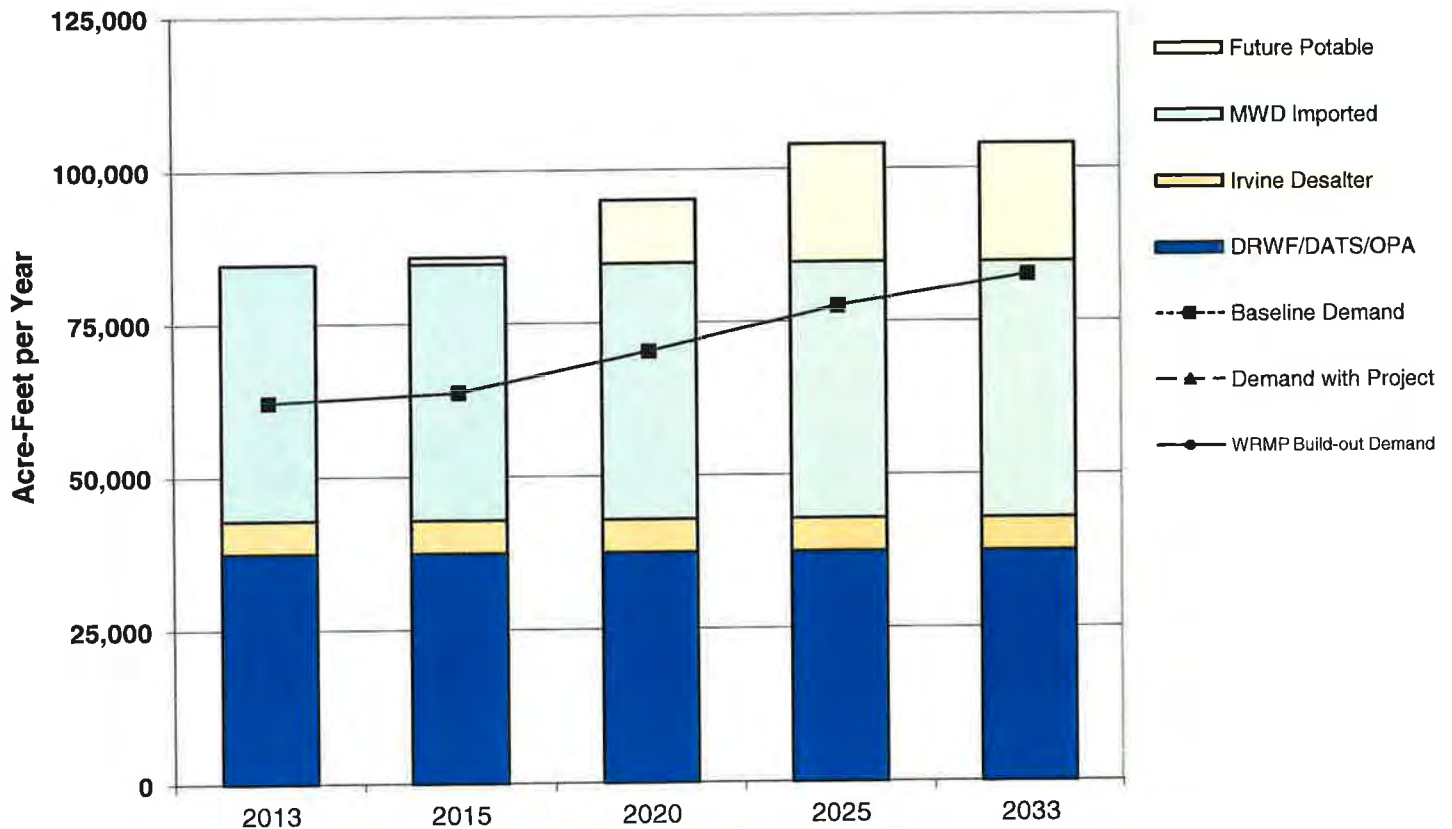
IRWD has also addressed supply interruption planning in its WRMP and UWMP.

Detailed Assessment

See Assessment, Section 1. The following information has been added:

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**

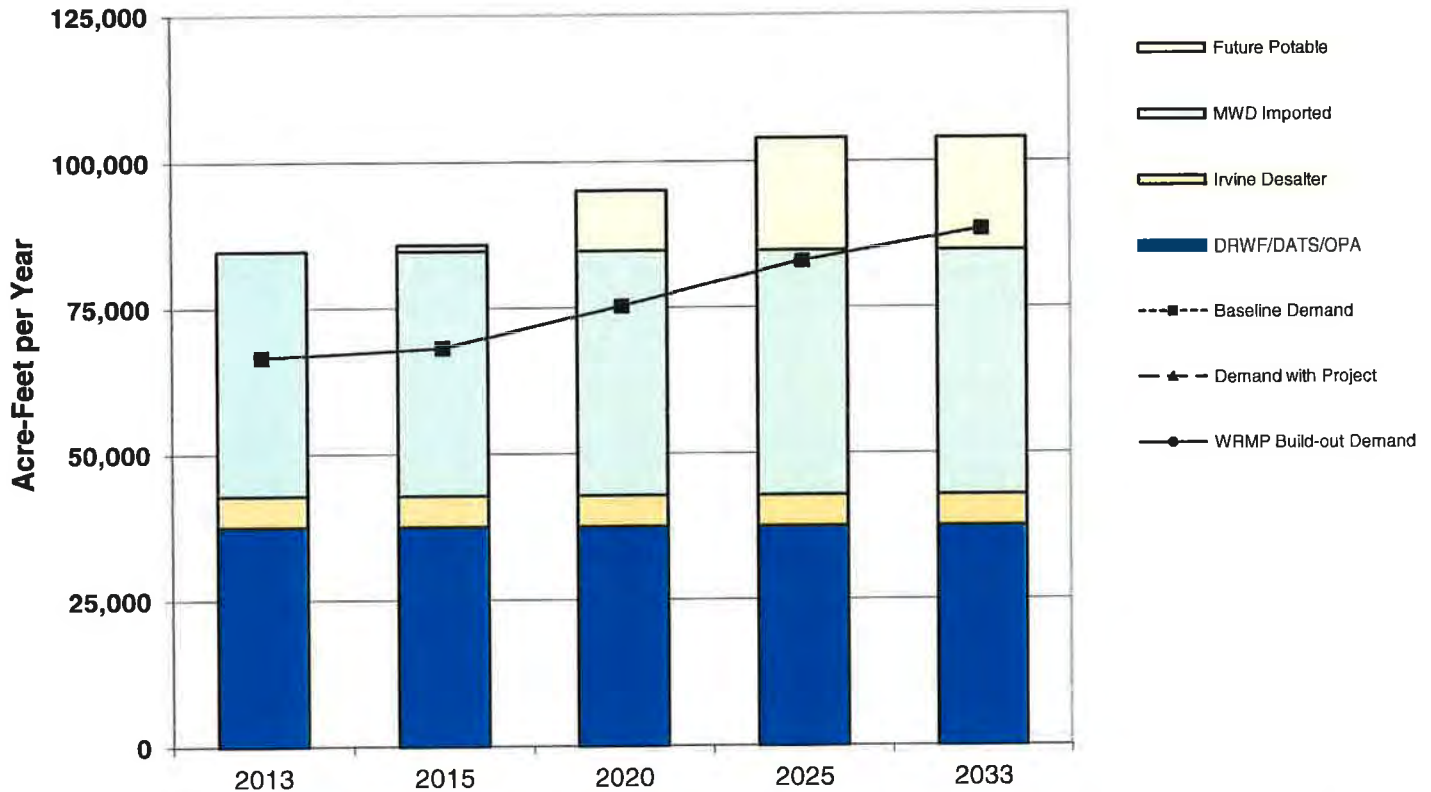


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	62,145	63,693	70,349	77,492	82,603
Demand with Project	62,145	63,693	70,384	77,528	82,639
WRMP Build-out Demand	62,145	63,693	70,384	77,528	82,639
Reserve Supply with Project	28,955	28,525	31,043	32,783	27,672

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.

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

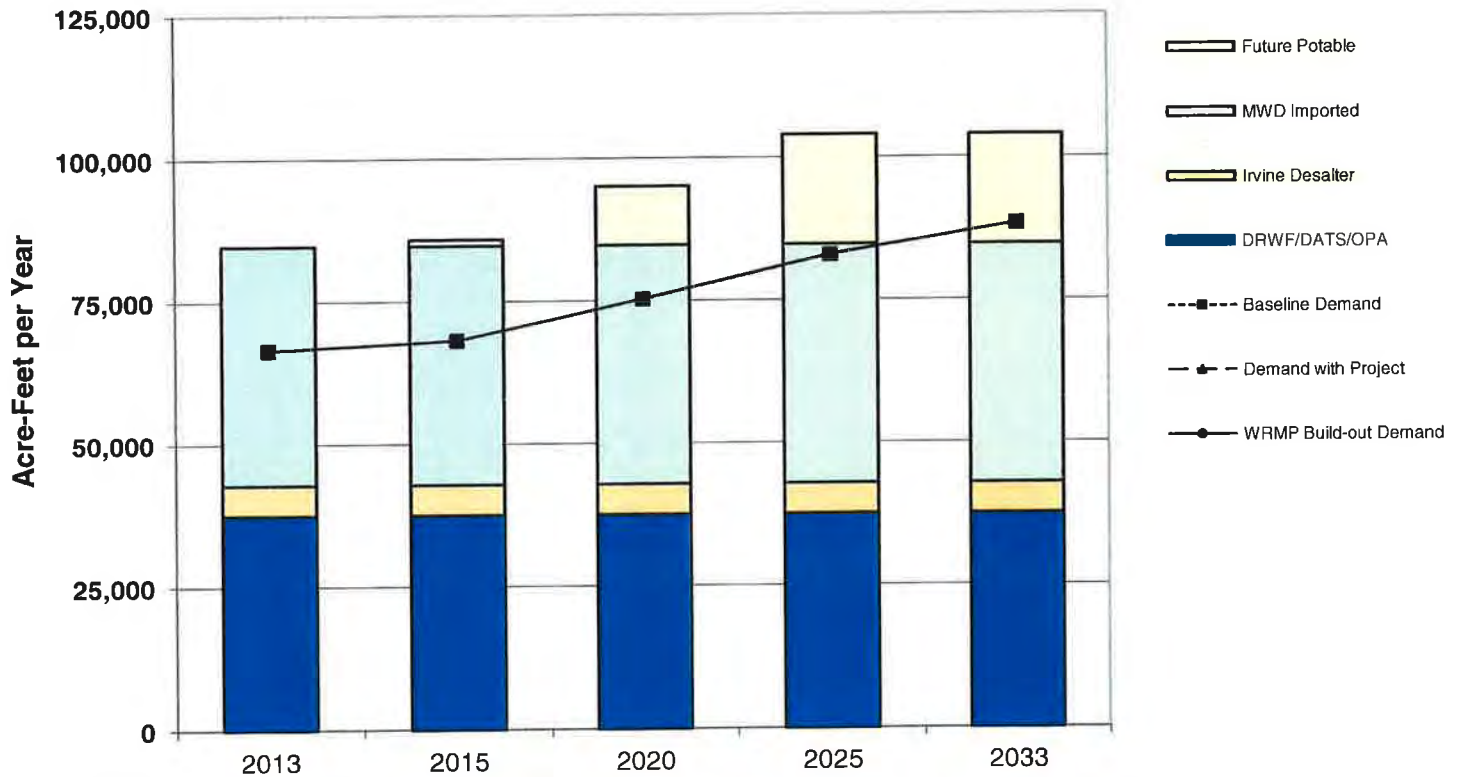


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	24,605	24,066	26,116	27,356	21,887

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) 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.

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

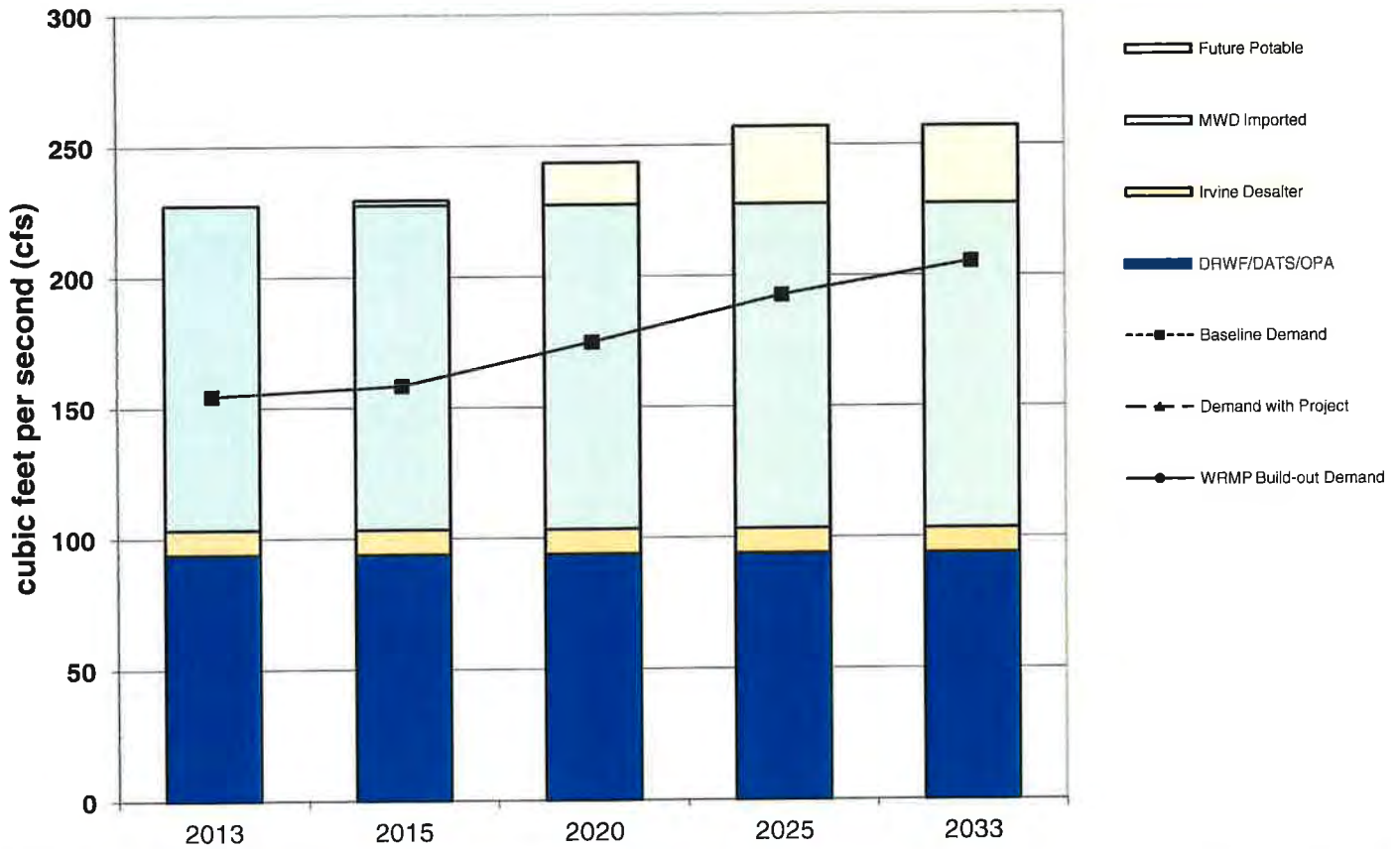


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	10,328	19,211	19,211
Maximum Supply Capability	91,100	92,217	101,427	110,311	110,311
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	24,605	24,066	26,116	27,356	21,887

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) 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).

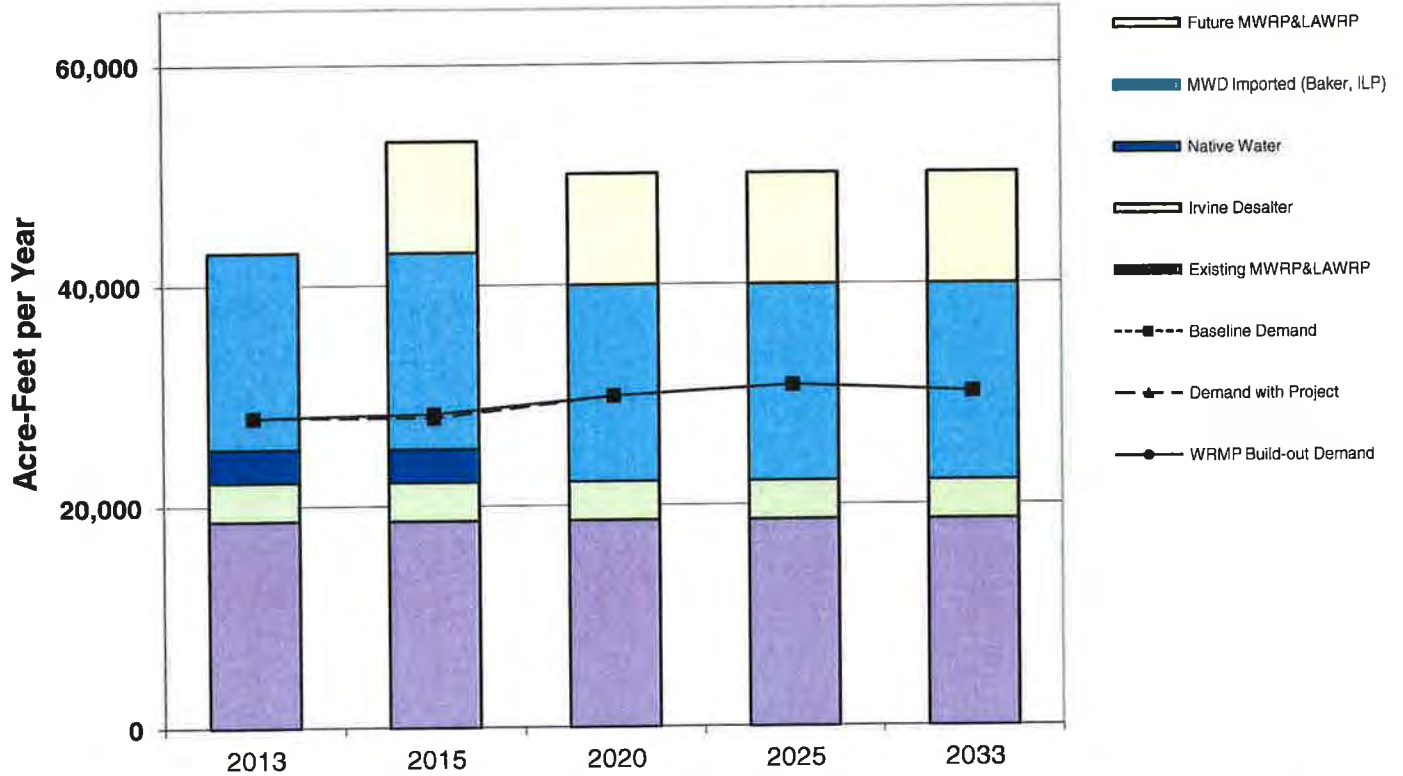
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

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



(in cfs)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	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	9.5	9.5	9.5	9.5	9.5
Wells 21 & 22	10.9	10.9	10.9	10.9	10.9
Supplies Under Development					
Future Potable	-	2.0	16.1	29.7	29.7
Maximum Supply Capability	238.4	240.4	254.5	268.1	268.1
Baseline Demand	154.5	158.4	174.9	192.7	205.4
Demand with Project	154.5	158.4	175.0	192.7	205.5
WRMP Build-out Demand	154.5	158.4	175.0	192.7	205.5
Reserve Supply with Project	83.9	82.0	79.5	75.4	62.6

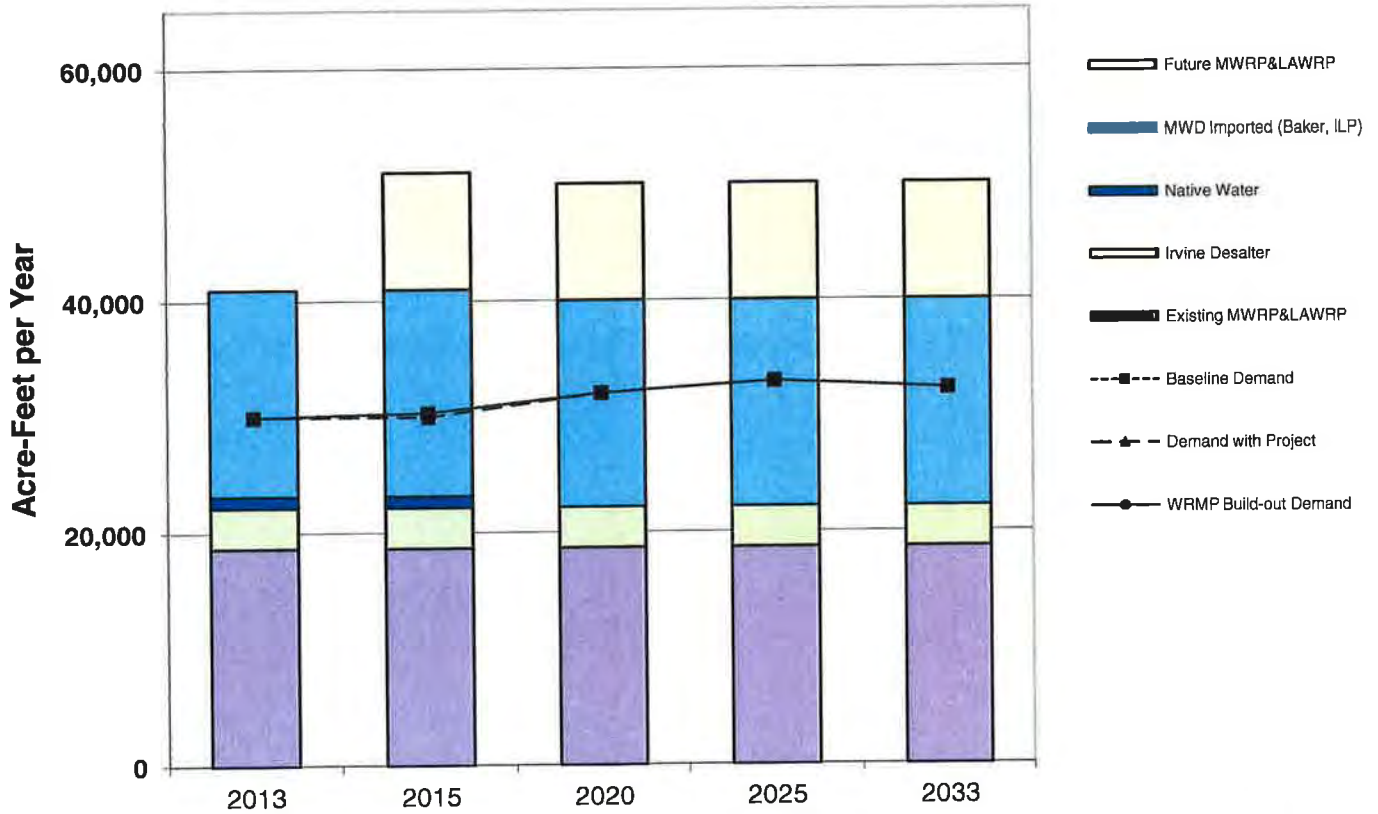
**Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	3,000	3,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	53,097	50,097	50,097	50,097
Baseline Demand	28,008	28,344	29,907	30,823	30,195
Demand with Project	28,008	28,008	29,907	30,823	30,195
WRMP Build-out Demand	28,008	28,344	29,907	30,823	30,195
Reserve Supply with Project	14,988	24,753	20,190	19,274	19,902

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.

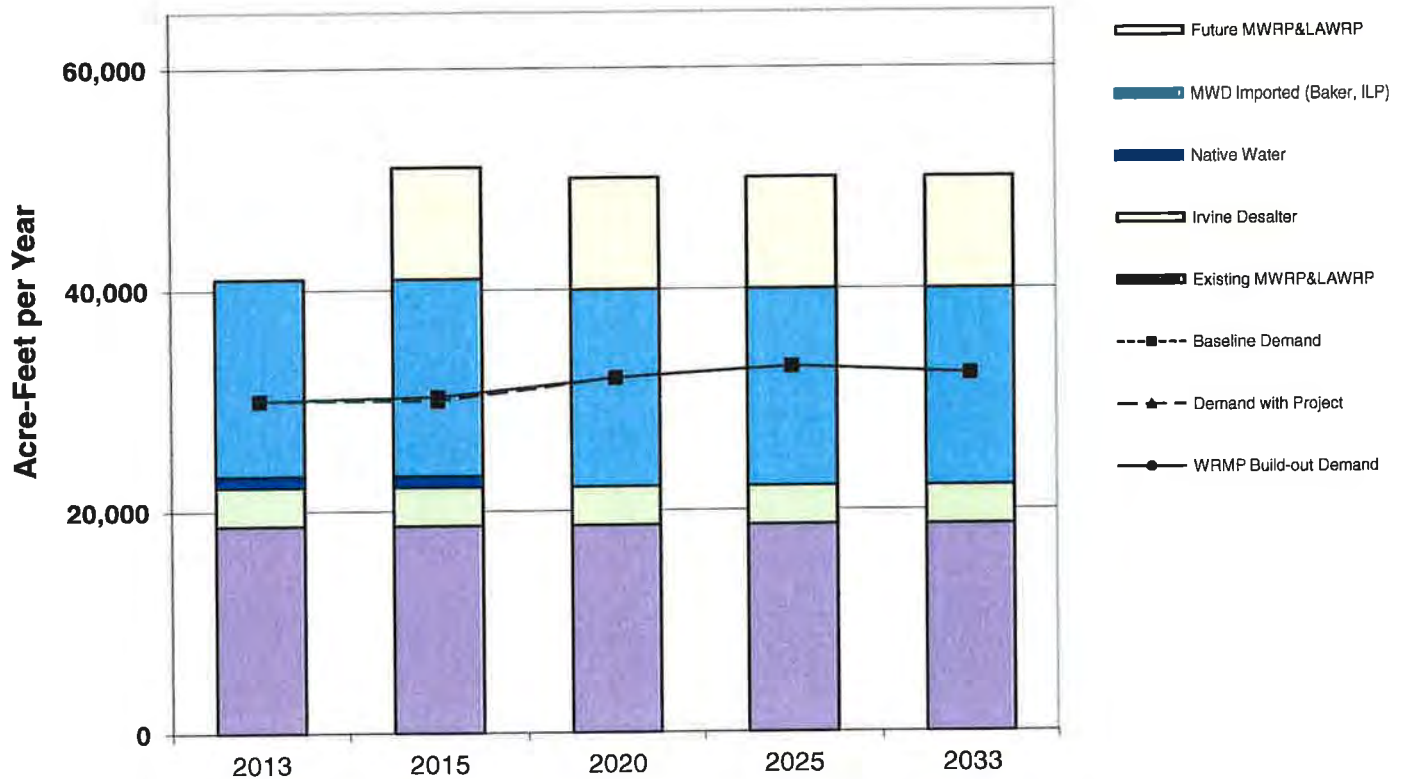
Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	1,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,969	30,328	32,001	32,981	32,309
Demand with Project	29,969	29,969	32,001	32,981	32,309
WRMP Build-out Demand	29,969	30,328	32,001	32,981	32,309
Reserve Supply with Project	11,028	21,128	18,096	17,116	17,788

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.

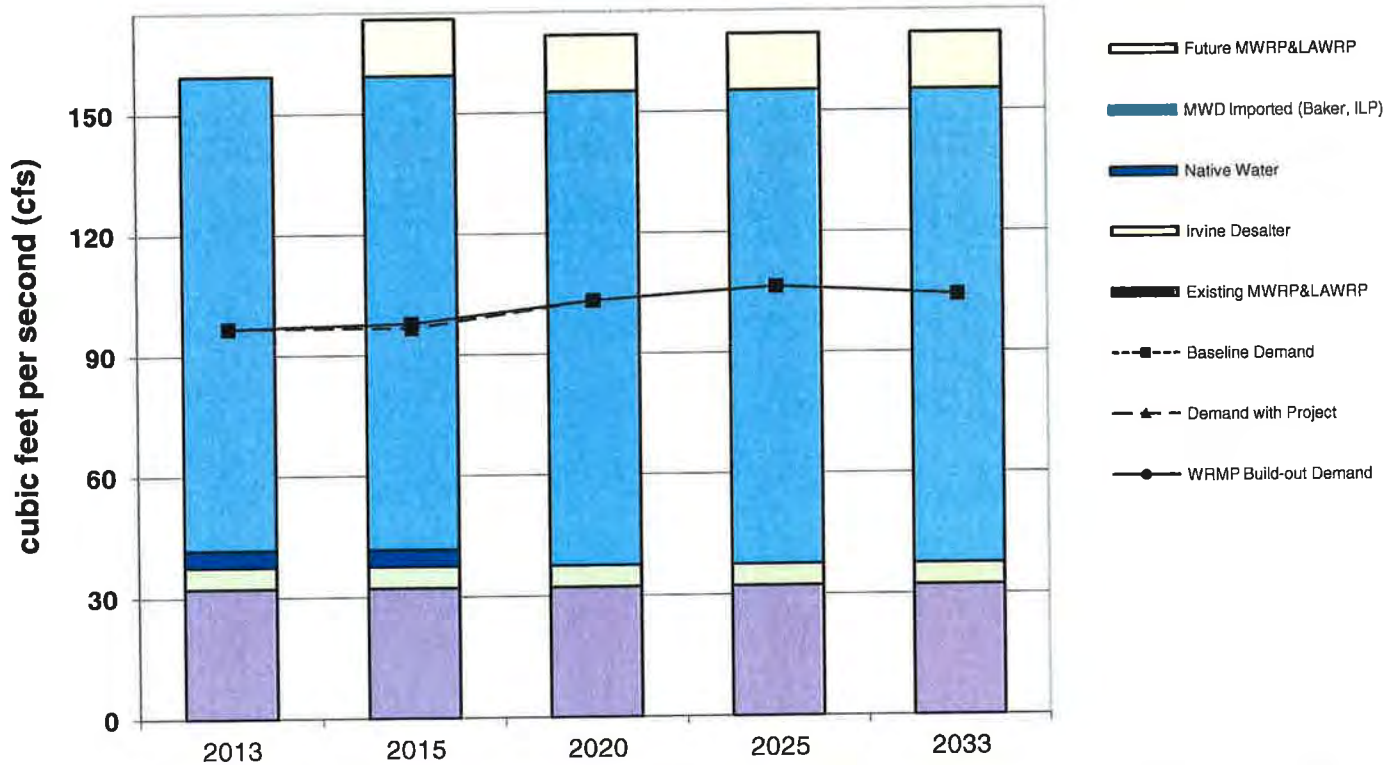
Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
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	1,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,969	30,328	32,001	32,981	32,309
Demand with Project	29,969	29,969	32,001	32,981	32,309
WRMP Build-out Demand	29,969	30,328	32,001	32,981	32,309
Reserve Supply with Project	11,028	21,128	18,096	17,116	17,788

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.

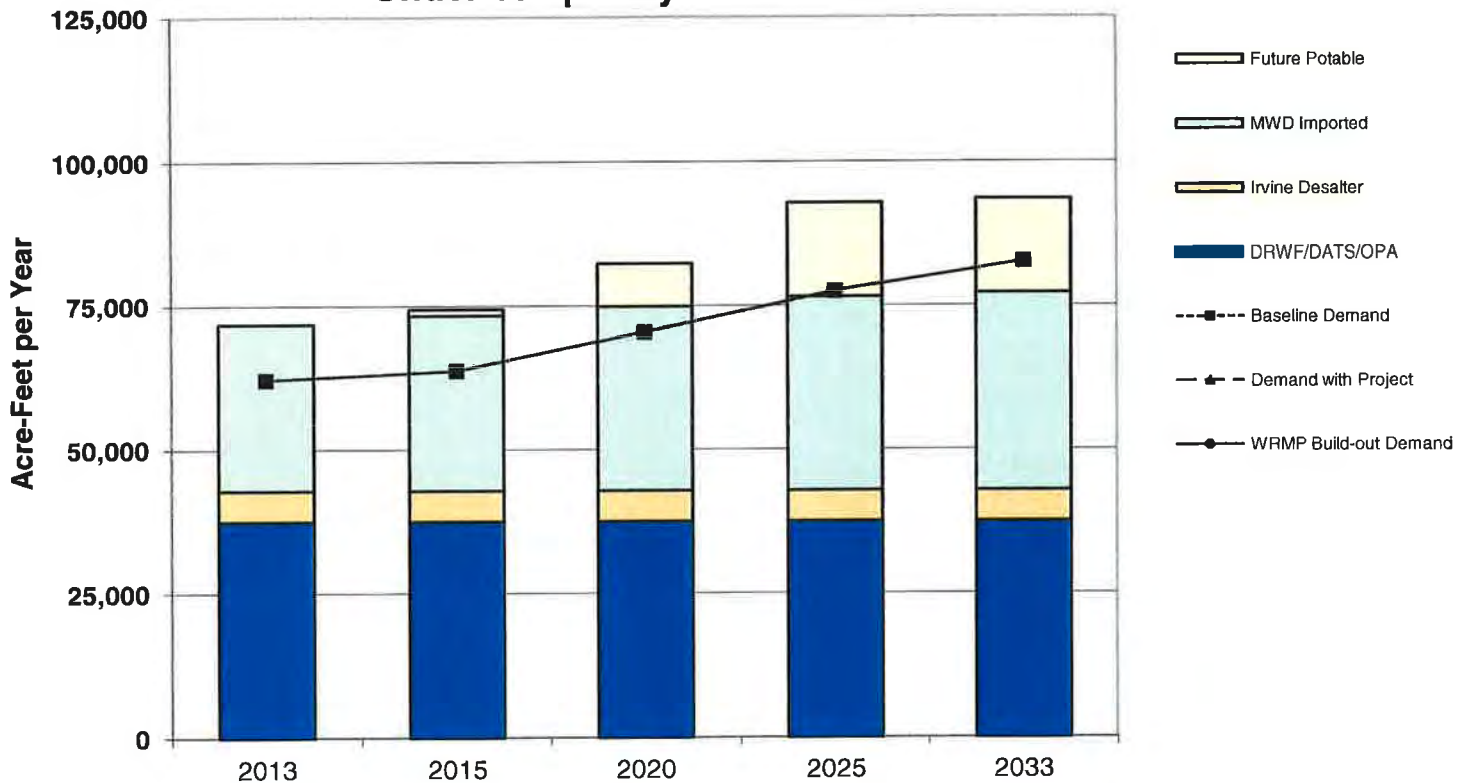
Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water



(in cfs)	2013	2015	2020	2025	2033
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
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	4.2	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
Maximum Supply Capability	159.5	173.4	169.2	169.2	169.2
Baseline Demand	96.7	97.9	103.3	106.4	104.3
Demand with Project	96.7	96.7	103.3	106.4	104.3
WRMP Build-out Demand	96.7	97.9	103.3	106.4	104.3
Reserve Supply with Project	62.8	75.6	66.0	62.8	65.0

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*

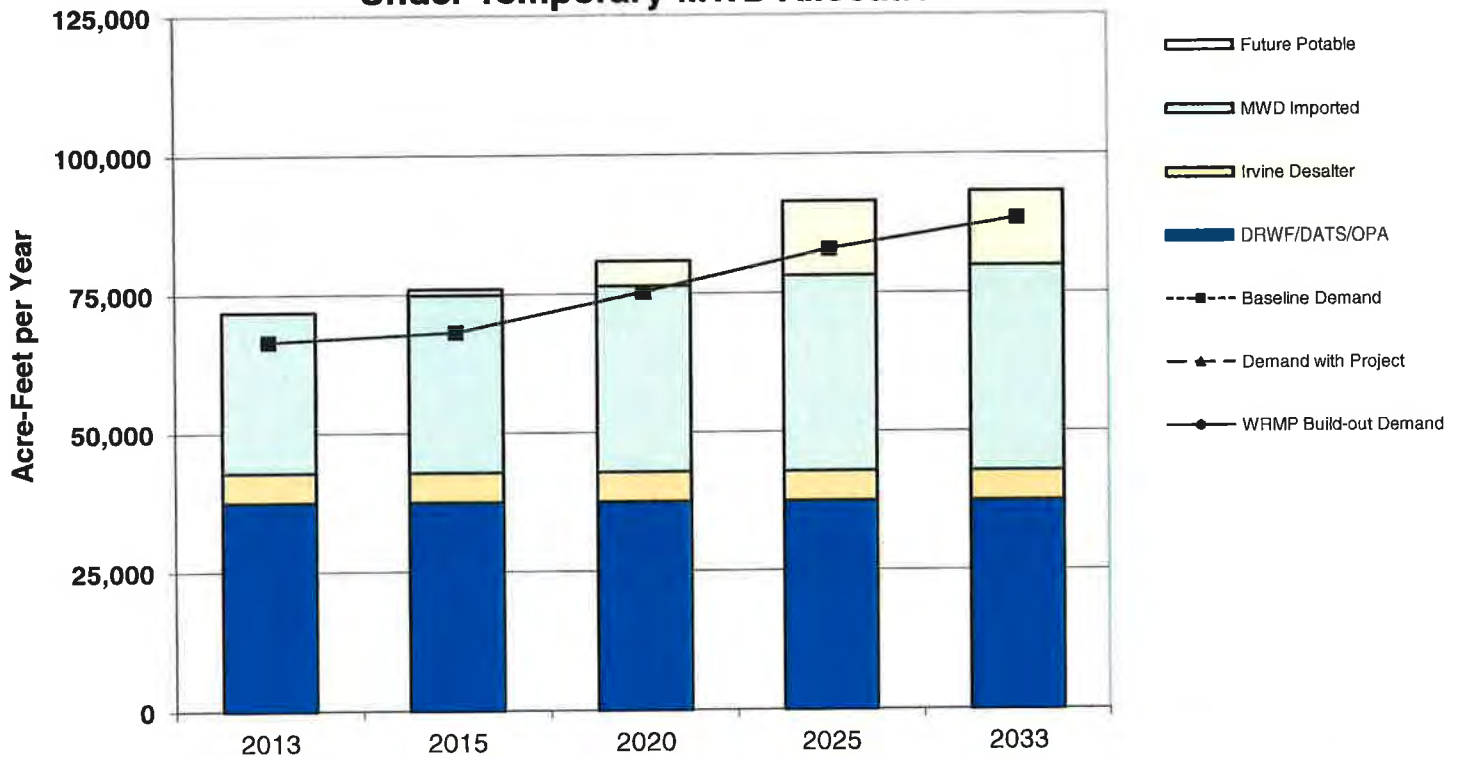


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	7,469	16,352	16,352
Maximum Supply Capability	78,170	80,767	88,674	99,191	99,868
Baseline Demand	62,145	63,693	70,349	77,492	82,603
Demand with Project	62,145	63,693	70,384	77,528	82,639
WRMP Build-out Demand	62,145	63,693	70,384	77,528	82,639
Reserve Supply with Project	16,026	17,075	18,289	21,663	17,229

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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available native water only.

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

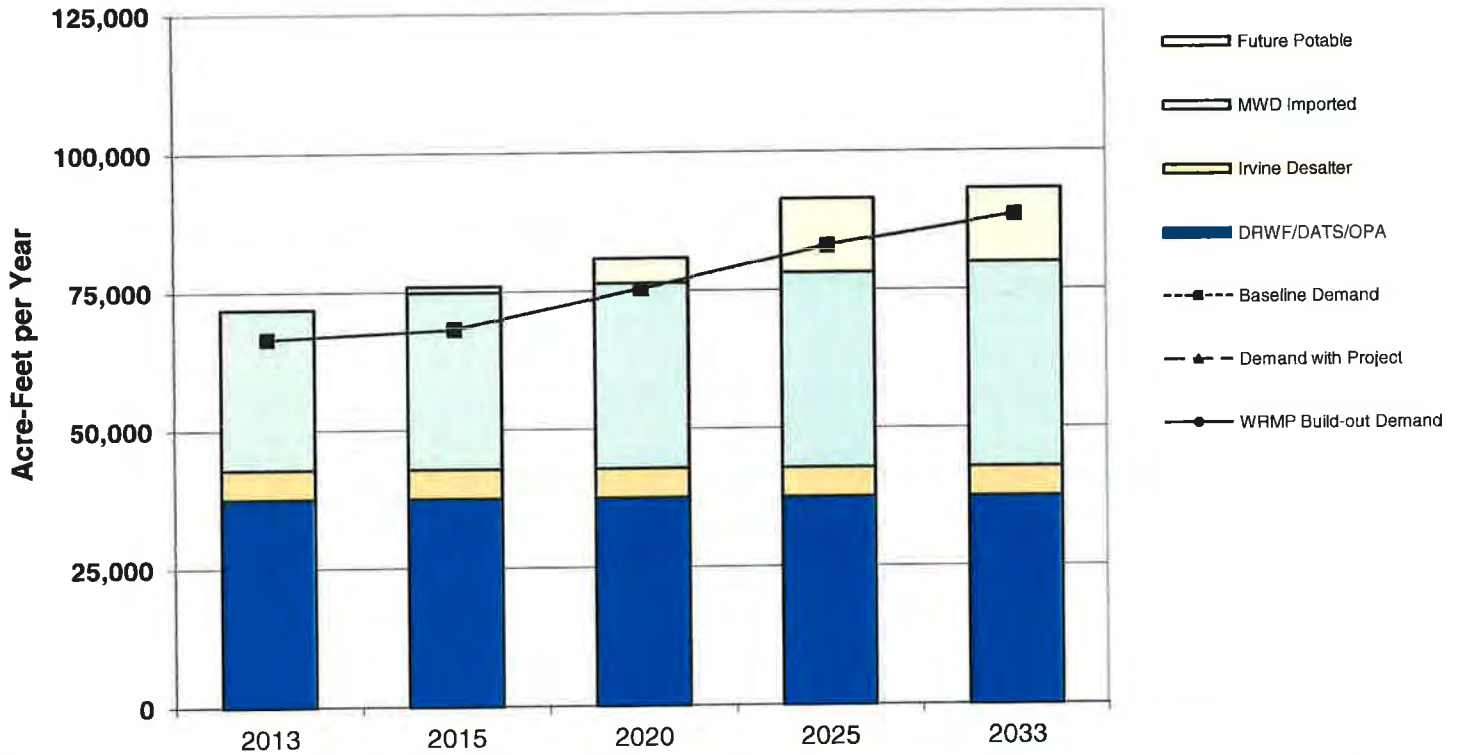


(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	4,469	13,352	13,352
Maximum Supply Capability	78,170	82,291	87,243	97,806	99,571
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	11,675	14,140	11,932	14,852	11,147

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional 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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available native water only.

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



(in acre-feet per year)	2013	2015	2020	2025	2033
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	-	1,118	4,469	13,352	13,352
Maximum Supply Capability	78,170	82,291	87,243	97,806	99,571
Baseline Demand	66,495	68,151	75,273	82,917	88,385
Demand with Project	66,495	68,151	75,311	82,955	88,423
WRMP Build-out Demand	66,495	68,151	75,311	82,955	88,423
Reserve Supply with Project	11,675	14,140	11,932	14,852	11,147

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional 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).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 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 supplies (under "Future Potable") will be limited to available 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
			49,916
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	9.5	5,309	3
			49,170
Total Potable Current Supplies	238.4		99,086
Nonpotable - Reclaimed Water			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
			23,315
Nonpotable - Imported			
Baker Aqueduct	52.7	12,221	5
Irvine Lake Pipeline	65.0	9,000	6
			21,221
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	5.4	3,514	7
			3,514
Nonpotable Native			
Irvine Lake	4.2	3,048	8
			3,048
Total Nonpotable Current Supplies	159.5		51,098
Total Combined Current Supplies	397.9		150,185
Supplies Under Development			
Potable Supplies			
Well 106	2.0	1,118	
Well 53	5.6	3,658	
Future OPA Wells	8.0	5,225	
Baker Water Treatment Plant	10.5	6,858	
Wells 51 & 52	3.6	2,351	
Total Potable Under Development Supplies	29.7	19,211	
			19,211
Nonpotable Supplies: MWRP&LAWRP Reclaimed			
	20.0	14,450	9
Total Under Development	49.7		14,450
Total Supplies			33,661
Potable Supplies	268.1		118,297
Nonpotable Supplies	179.4		65,548
Total Supplies (Current and Under Development)	447.5		183,846

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 3, page 22).

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 18.0 mgd treatment capacity (17,400 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)

5 By 2020, Baker capacity will be allocated to Baker Water Treatment Plant (WTP) participants and IRWD will own 46.50 cfs in Baker Aqueduct after 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 3, page 22).

6 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.

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

8 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake. By 2020, native water will be treated through Baker WTP.

9 Future estimated MWRP & LAWRP reclaimed water production.

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 23 (b)(1)(iii))

2. Information concerning supplies

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

See the Assessment, Section 2(b), incorporated herein by reference.

The following information is added:

OCWD's analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006). (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER (i).)

With the addition of the Concentrated Treatment System (CATS), IRWD has increased the yield of DATS. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER (iii).)

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER.)

In 2013, IRWD completed construction of treatment facilities, pipelines and wellhead facilities for Wells 21 and 22. Water supplied through this project became available in March 2013. The wells are operated within the Orange County Groundwater Basin. (See Assessment, Section 2(b) – POTABLE SUPPLY – GROUNDWATER.)

IRWD is pursuing the installation of production facilities in the west Irvine, Anaheim, 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, a site for an additional well and treatment facility has been acquired by IRWD. The production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. An agreement with the City of Anaheim would be developed for production within Anaheim. Appropriate environmental review would be conducted for each facility. (See discussion of the Act in Assessment Section 2(b) - under POTABLE SUPPLY – GROUNDWATER.)

IRWD plans to construct the Baker Water Treatment Plan project (the Baker WTP) in partnership with El Toro Water District, Mouton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP will be supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD will own 10.5 cfs of treatment capacity rights in the Baker WTP.⁴ Initiation of the construction of the Baker WTP is anticipated in 2014. (See Assessment, Section 2(b) – POTABLE SUPPLY – *Under Development*.)

⁴ The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (See Assessment, Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) shall be apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD shall retain 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and shall retain 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply.

IRWD has prepared a Final Environmental Impact Report for the Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project (February, 2006) and the expansion project is under construction. With this expansion, IRWD plans to increase its capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand in the year 2033. (Initial upgrades that are within existing permit authorizations and CEQA compliance are completed.) Additional reclamation capacity will augment local nonpotable supplies and improve reliability (See Assessment, Section 2(b) – NONPOTABLE SUPPLY—RECLAIMED.)

•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 its most recently adopted RUWMP, MWD has extended its planning timeframe out through 2035 to ensure that MWD's 2010 RUWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the RUWMP 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 RUWMP summarizes MWD's planning initiatives over the past ten years, which includes the Integrated Resources Plan (IRP), the IRP Update, the Water Surplus and Drought Management Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's IRP Update (October 2010) showed that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period 2015 through 2035. The RUWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2035. 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 to supplement its RUWMP in years when the RUWMP is not being updated.

IRWD is permitted by the statute 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 RUWMP. 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.

See also the Assessment, Section 2(b)(2) Adopted capital outlay program to finance delivery of the water supplies.

With respect to future groundwater wells (PR Nos. 11405, 11473) and the MWRP

Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No. 11218), IRWD adopted its fiscal year 2013-14 capital budget on June 10, 2013 (Resolution No. 2013-21), budgeting portions of the funds for such projects. IRWD has financed its expected 24% share of the costs of the Baker WTP from general obligation bonds. See also MWD's 2010 RUWMP, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

See the Assessment, Section 3. 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.

See Assessment, Section 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 2010 UWMP, sections 4-D through 4-J.

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

The Orange County Groundwater Basin ("Basin") is described at pages 3-1 through 3-14 of the OCWD Master Plan Report, dated April, 1999 ("MPR") and in the more recent Groundwater Management Plan ("GMP") at pages 2-1 through 6-33⁵. 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 366,000 AFY.

The Department of Water Resources has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (2003). The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD MPR, including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan ("LTFP") which provides updated information and was received by the OCWD Board in July 2009. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin.

⁵ OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

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.

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. (Source: 2010-2011 Engineer’s Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District; OCWD MPR, *supra*.)

OCWD’s efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD’s management of overdraft to maximize its 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 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 has been updated and shows the amounts pumped, by groundwater source (in AFY):

Year (ending 6/30)	DRWF/DATS/ OPA/Wells 21 & 22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD⁶
2013	38,617	8,629	0	0
2012	35,939	7,059	0	0
2011	34,304	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16
2007	37,864	5,407	0	6
2006	37,046	2,825	0	268
2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598

The following table has been updated and summarizes future IRWD groundwater production from currently available and under-development supplies (in AFY).

Year (ending 6/30)	DRWF⁷	Future GW⁸	IDP (Potable)	IDP (Nonpotable)
2015	37,500	1,120	5,300	3,500
2020	37,500	10,300	5,300	3,500
2025	37,500	19,200	5,300	3,500
2033	37,500	19,200	5,300	3,500

See the Assessment, Section 4.

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water

⁶ 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.

⁷ 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 1,000 AFY projected for the OPA well.

⁸ Under development.

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.⁹

See also the Assessment, Section 6. The following are added:

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

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

The Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010

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

Board Information Report, Metropolitan Water District of Southern California, October 9, 2007

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

Groundwater Management Plan, Orange County Water District, March, 2004

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

Orange County Water District Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy, February, 2007

2010-2011 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2012

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

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

⁹ OCWD has adopted a basin production percentage of 70% for 2013-14. In prior years OCWD has maintained a basin production percentage that is higher 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.

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

To: (Lead Agency)
City of Irvine _____
P.O. Box 19575 _____
Irvine, CA 92623-9575 _____

(Applicant)
Irvine Community Development Company _____
550 Newport Center Drive _____
P.O. Box 6370 _____
Newport Beach, CA 92658-6370 _____

Project Information

Project Title: Northern Sphere Area (see Exhibit A)

- Residential: No. of dwelling units: _____
- Shopping center or business: No. of employees _____ Sq. ft. of floor space _____
- Commercial office: No. of employees _____ Sq. ft. of floor space _____
- Hotel or motel: No. of rooms _____
- Industrial, manufacturing 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 March 11, 2002, the Board of Directors of the Irvine Ranch Water District (IRWD) 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.

Leslie Dinkush 3/12/02 District
Signature Date Title
Secretary

Water Supply Assessment Information

Purpose of Assessment

Irvine Ranch Water District ("IRWD") is the public water system that will supply water service (both potable and nonpotable) to 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 with large water demands. The project identified on the cover page of this Assessment 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.

Beginning in 2002, Section 10910 contains new requirements for the information to be set forth in the assessment. The newly-amended statute also calls for the assessment to be submitted before the lead agency begins to prepare the environmental document required for a project. Although the draft environmental impact report (EIR) for this project was issued in December, 2001, IRWD and the Applicant have decided to submit this assessment to provide the City with the water supply information that would be provided in accordance with the 2002 requirements. To accommodate this assessment, prior to the close of the comment period on the City's draft EIR, IRWD requested a 30-day extension of time in order to submit this assessment and supporting documentation.

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 WRMP. IRWD's latest WRMP was completed in 1999, and since that time, several significant changes in existing and proposed land uses within IRWD have occurred. IRWD has taken these changes, listed below, into consideration in revising the WRMP in March, 2002. (The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's next update of that document is anticipated in 2005. With the changes described below, IRWD's projected year 2020 water demand will be approximately 9% lower than the projected demand shown in the 2000 UWMP.)

The land use changes incorporated in the 2002 WRMP (and reflected in this assessment) include the following:

- In 2001, IRWD consolidated with the neighboring Los Alisos Water District (LAWD), thereby adding the majority of the City of Lake Forest to IRWD's service area. IRWD has now integrated the supplies and demands of the two districts.

- In late 2001, The Irvine Company announced the planned dedication of a large area as permanent open space. The majority of this land is located in the northwestern portion of IRWD (City of Orange sphere of influence), with an additional area near Laguna Canyon Road. IRWD has made appropriate reductions in its demand calculations.

- Proposed development uses have replaced agricultural uses previously used to compute demand for portions of the project and adjacent areas in Spectrum 8.

- The alternative proposals for reuse of the MCAS-EI Toro property have different water demands. To ensure that IRWD will be able to provide a sufficient water supply capacity irrespective of which reuse proposal is implemented, the 1999 WRMP assumed the highest water-demand generating land use plan for the property. This plan, the "Millennium Plan," is no longer being considered and has been replaced by a non-aviation "great park" alternative. The park proposal results in lower overall demand, but higher nonpotable demand (for irrigation) than the Millennium Plan. The water demand of the park proposal remains higher than that of the aviation land use plan, and thus provides the current basis of IRWD water supply planning.

- All other refinements of future land uses have been included in the 2002 WRMP, along with updated information on existing land uses.

The updated WRMP was received and filed by the IRWD Board of Directors on March 11, 2002. In addition to the 2002 WRMP and the 2000 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 are available from IRWD on request.

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. 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 2000 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, page 2-10).

Planning horizon. For consistency with IRWD's WRMP and the City's draft EIR for the project, the assessment reviews demands and supplies through the year 2025, which is

considered to represent build-out or "ultimate development". This exceeds the 20-year projection required by the statute (see Water Code Sections 10631 and 10910).

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2025):

- Existing and committed demand (without the project) ("baseline"). This provides a baseline condition as of the date of this assessment, consisting of demands from existing land uses, plus land uses from developments that are already in progress and/or that hold water supply assessments, verifications or will-serve letters previously issued by IRWD.
- 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 (see, e.g., discussion of MCAS-EI Toro, above).

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 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; reclaimed wastewater, 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. Comparisons of demand and supply are made in several different ways, based on the three demand projections noted above (baseline, with-project and full build-out):

- 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 all of IRWD's potable supply, and reclaimed water, groundwater and imported water comprise most 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 projects that through the continued implementation of MWD's supplies under development, it can meet 100 percent of its member agencies' supplemental water demands over the next 20 years, even in a repeat of the worst drought. (See Section 2(b)(1) "IMPORTED SUPPLY - ADDITIONAL INFORMATION," below, for a summary of information provided by MWD.) Reclaimed 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 nonpotable 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 more than adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under normal and both dry-year conditions through the year 2025. (Figures 1 through 3.)
- Sufficient *currently available* potable supplies are also available to meet annual *full build-out* demands under normal conditions. (Figure 1.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of a small amount of the *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 including full build-out. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are more than adequate to meet all demand projections including full build-out, under both annual and peak-flow (maximum day) conditions, in both normal and dry years. However, IRWD is proceeding with the implementation of *under-development* nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions. (Figures 5 through 8.)

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:

- Significant quantities of "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.
- The potential exists for the treatment and conversion of some reserve nonpotable supplies to potable water.
- 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.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of margins of safety and reserves in its regional supply assessments.
- 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, providing additional reliability during dry years or emergencies.

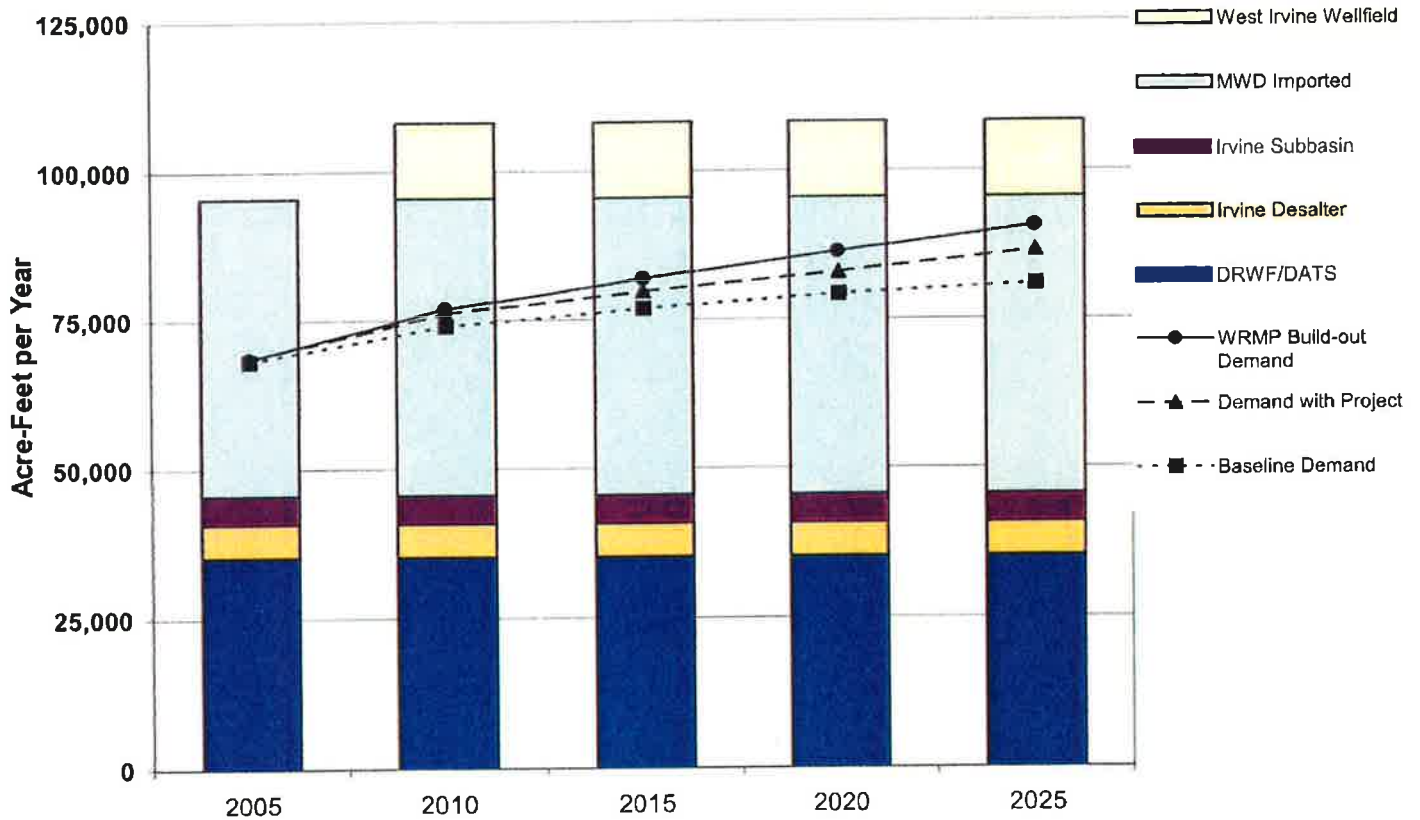
Detailed Assessment

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) and Figures 5 - 8 (nonpotable water):

Figure 1

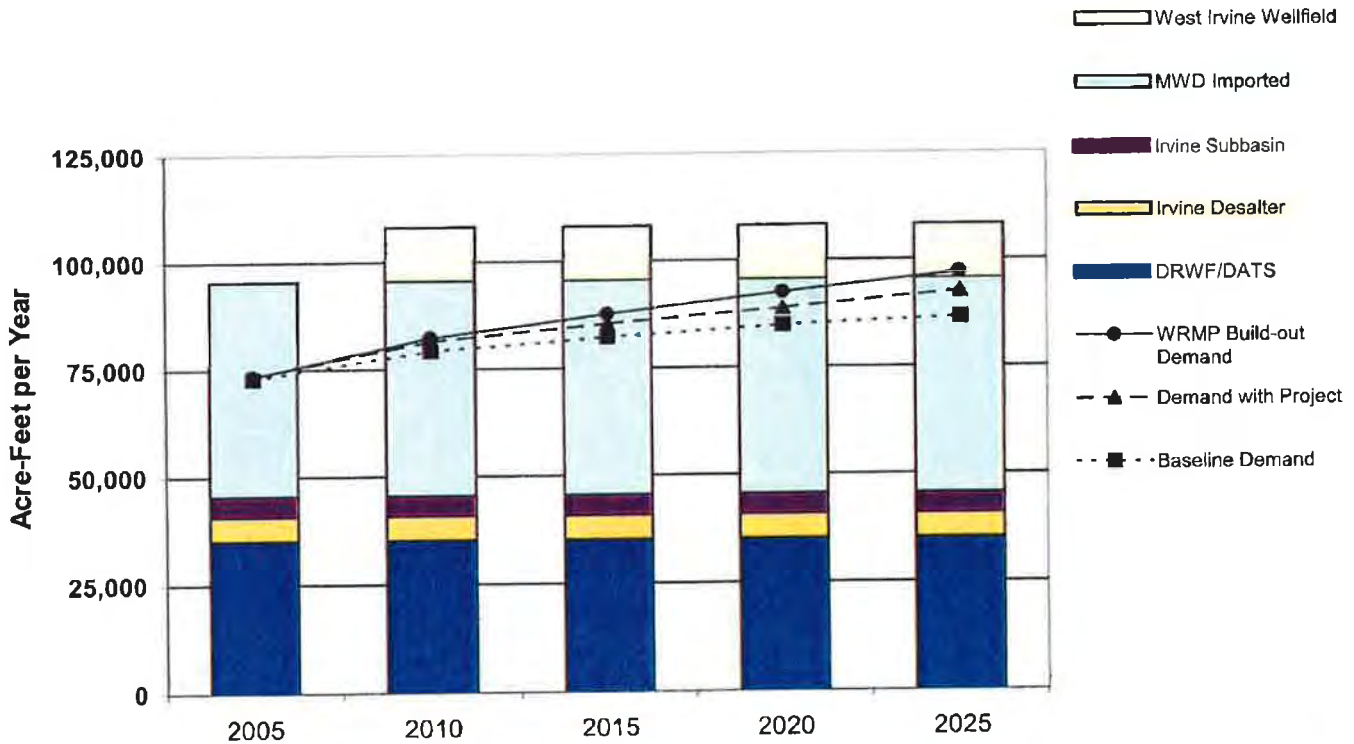
IRWD Normal-Year Supply & Demand - Potable Water



(in acre-feet per year)	2005	2010	2015	2020	2025
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	49,916	49,916	49,916	49,916	49,916
DRWF/DATS	35,200	35,200	35,200	35,200	35,200
Irvine Subbasin	4,800	4,800	4,800	4,800	4,800
Irvine Desalter	5,568	5,568	5,568	5,568	5,568
Supplies Under Development					
West Irvine Wellfield	-	12,700	12,700	12,700	12,700
Maximum Supply Capability	95,484	108,184	108,184	108,184	108,184
Baseline Demand	68,101	73,967	76,827	79,261	80,819
Demand with Project	68,512	76,115	79,748	82,956	86,479
WRMP Build-out Demand	68,512	76,860	81,866	86,374	90,596
Reserve Supply with Project	26,972	32,069	28,436	25,227	21,705

Figure 2

IRWD Single Dry-Year Supply & Demand - Potable Water

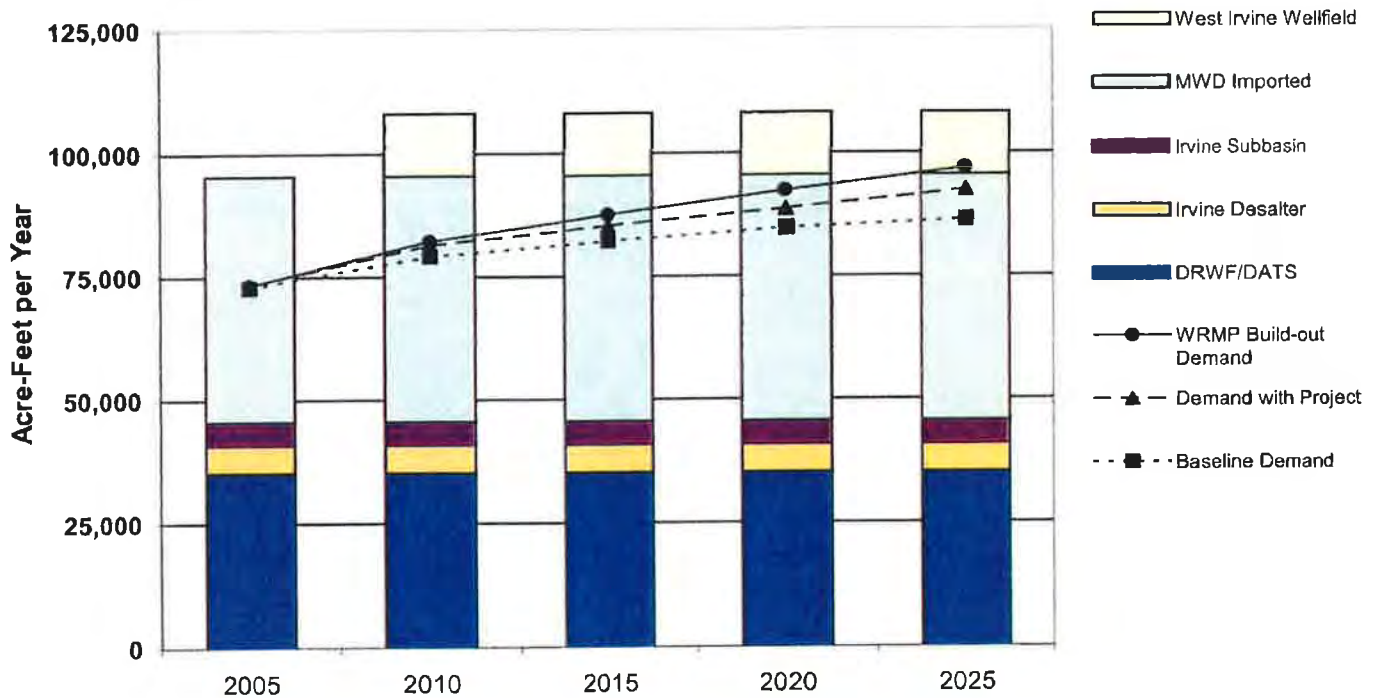


(in acre-feet per year)	2005	2010	2015	2020	2025
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF	49,916	49,916	49,916	49,916	49,916
DRWF/DATS	35,200	35,200	35,200	35,200	35,200
Irvine Subbasin	4,800	4,800	4,800	4,800	4,800
Irvine Desalter	5,568	5,568	5,568	5,568	5,568
Supplies Under Development					
West Irvine Wellfield	-	12,700	12,700	12,700	12,700
Maximum Supply Capability	95,484	108,184	108,184	108,184	108,184
Baseline Demand	72,868	79,145	82,205	84,809	86,476
Demand with Project	73,308	81,443	85,331	88,763	92,532
WRMP Build-out Demand	73,308	82,240	87,596	92,420	96,937
Reserve Supply with Project	22,176	26,741	22,853	19,420	15,652

Notes: Supplies identical to Normal-Year based on Report on Metropolitan's Water Supplies (2/11/02) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year.

Figure 3

IRWD Multiple Dry-Year Supply & Demand - Potable Water

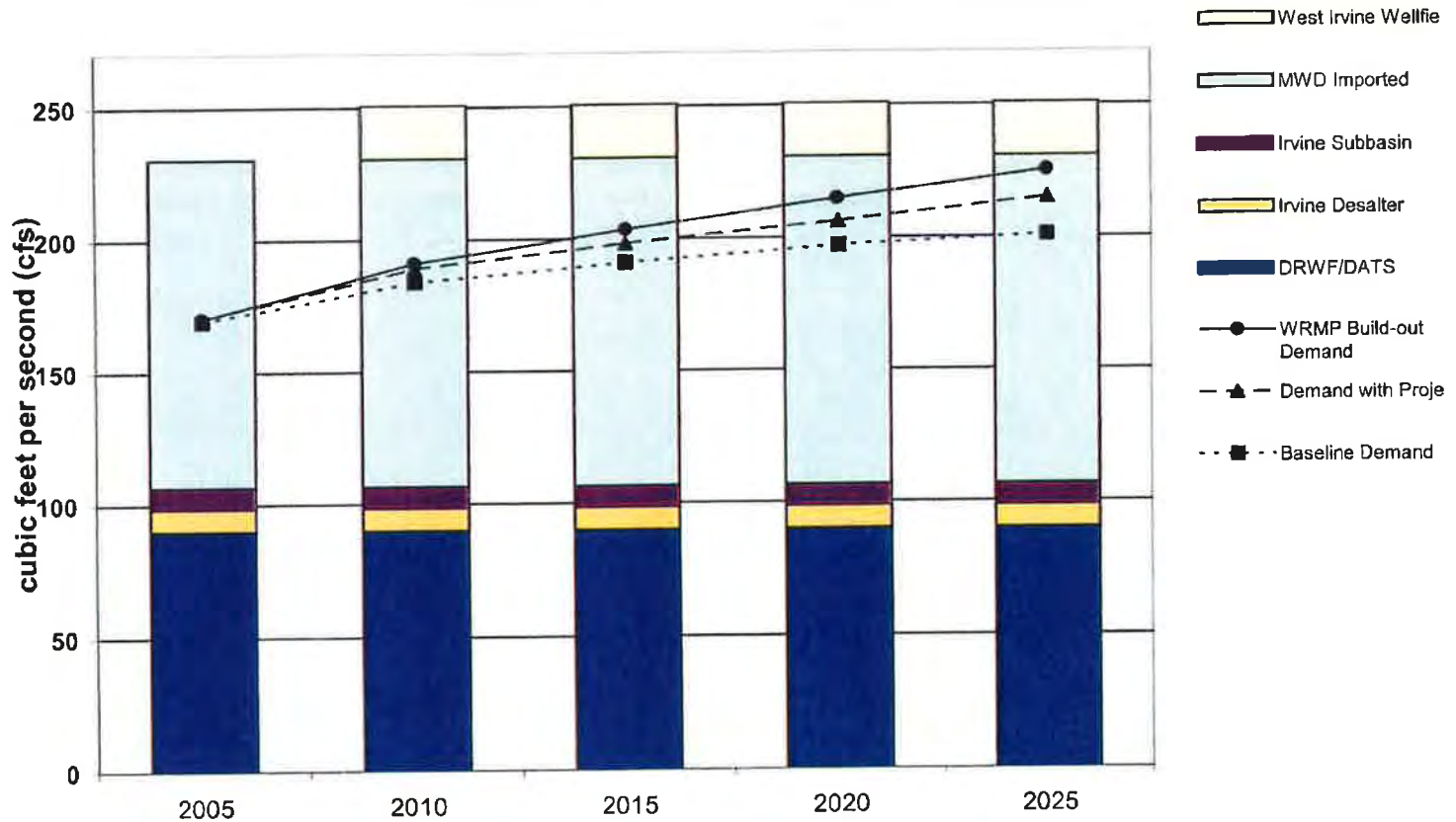


(in acre-feet per year)	2005	2010	2015	2020	2025
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	49,916	49,916	49,916	49,916	49,916
DRWF/DATS	35,200	35,200	35,200	35,200	35,200
Irvine Subbasin	4,800	4,800	4,800	4,800	4,800
Irvine Desalter	5,568	5,568	5,568	5,568	5,568
Supplies Under Development					
West Irvine Wellfield	-	12,700	12,700	12,700	12,700
Maximum Supply Capability	95,484	108,184	108,184	108,184	108,184
Baseline Demand	72,868	79,145	82,205	84,809	86,476
Demand with Project	73,308	81,443	85,331	88,763	92,532
WRMP Build-out Demand	73,308	82,240	87,596	92,420	96,937
Reserve Supply with Project	22,176	26,741	22,853	19,420	15,652

Notes: Supplies identical to Normal-Year based on Report on Metropolitan's Water Supplies (2/11/02) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year.

Figure 4

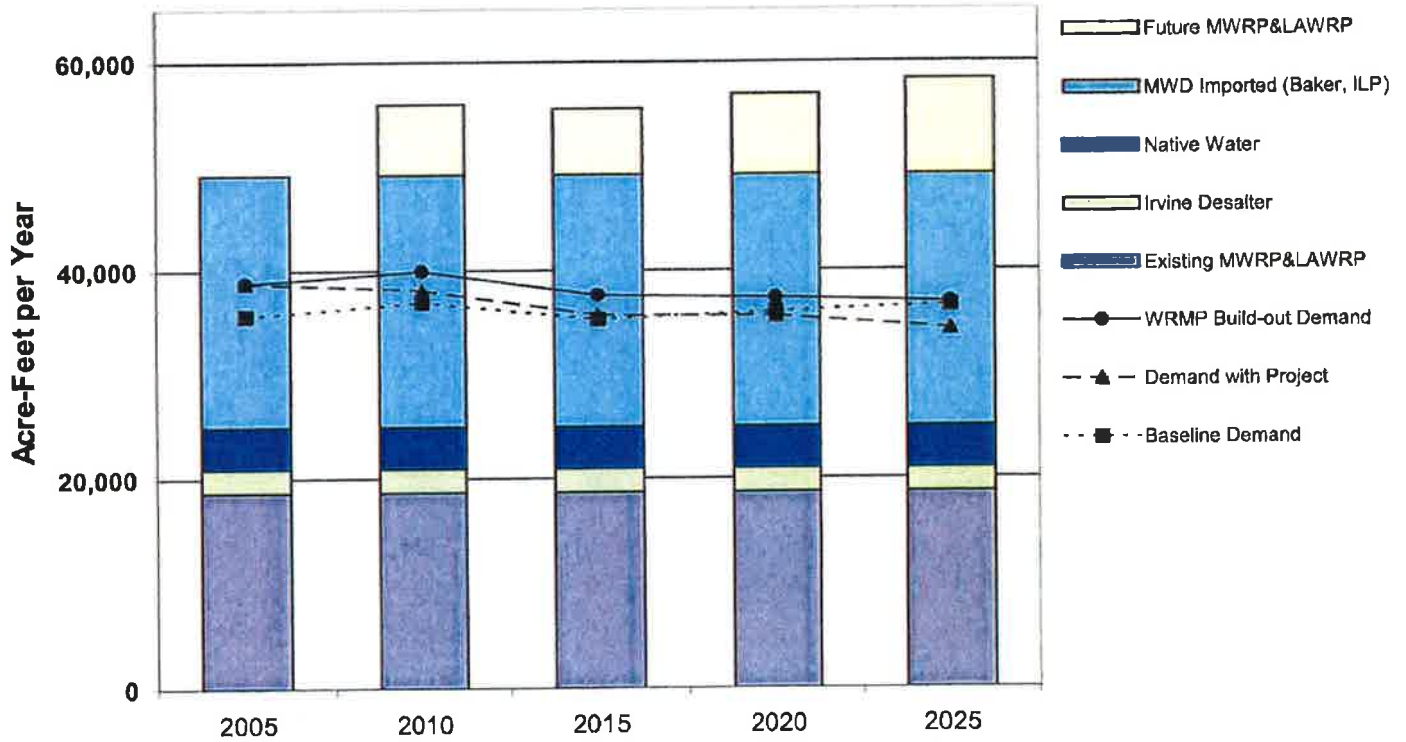
IRWD Maximum-Day Supply & Demand - Potable Water



(in cfs)	2005	2010	2015	2020	2025
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	124.1	124.1	124.1	124.1	124.1
DRWF/DATS	90.0	90.0	90.0	90.0	90.0
Irvine Subbasin	8.0	8.0	8.0	8.0	8.0
Irvine Desalter	8.5	8.5	8.5	8.5	8.5
Supplies Under Development					
West Irvine Wellfield	-	20.0	20.0	20.0	20.0
Maximum Supply Capability	230.6	250.6	250.6	250.6	250.6
Baseline Demand	169.3	183.9	191.0	197.1	200.9
Demand with Project	170.3	189.2	198.3	206.2	215.0
WRMP Build-out Demand	170.3	191.1	203.5	214.7	225.2
Reserve Supply with Project	60.3	61.4	52.3	44.4	35.6

Figure 5

IRWD Normal-Year Supply & Demand - Nonpotable Water

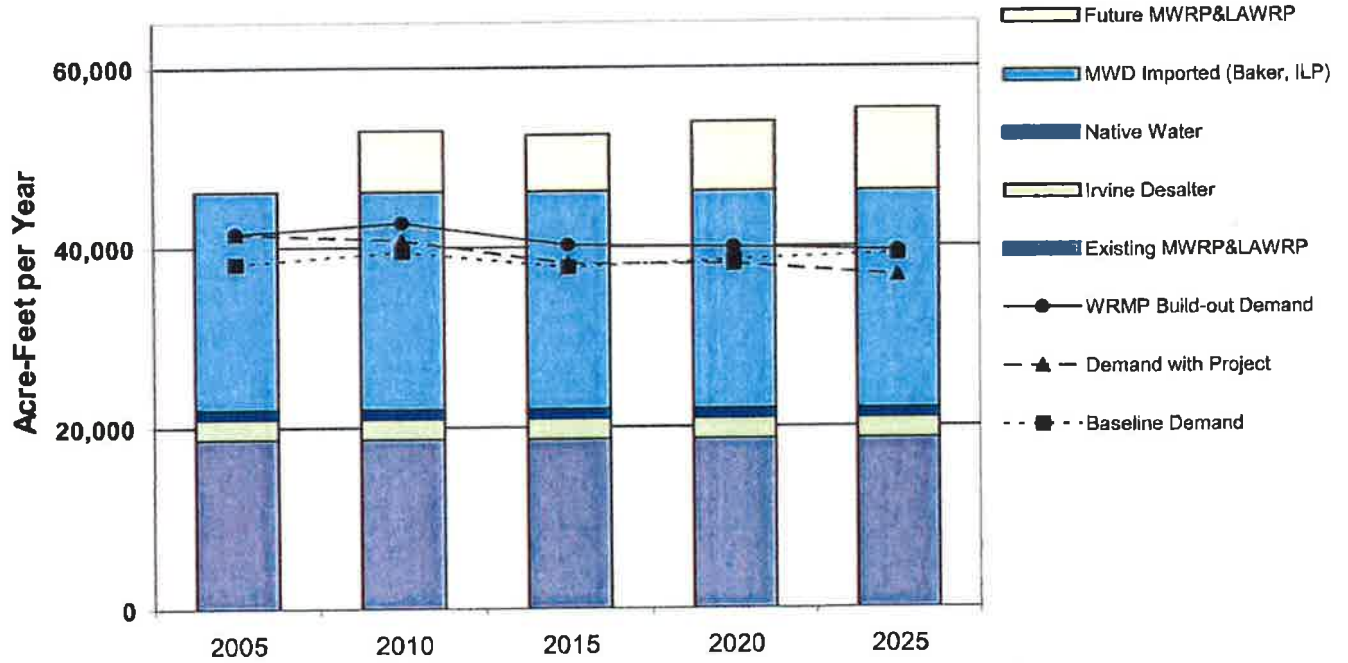


(in acre-feet per year)	2005	2010	2015	2020	2025
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	24,262	24,262	24,262	24,262	24,262
Irvine Desalter	2,282	2,282	2,282	2,282	2,282
Native Water	4,000	4,000	4,000	4,000	4,000
Supplies Under Development					
Future MWRP&LAWRP	-	6,794	6,311	7,687	9,107
Maximum Supply Capability	49,201	55,995	55,512	56,888	58,308
Baseline Demand	35,640	36,918	35,271	36,011	36,588
Demand with Project	38,825	38,129	35,657	35,573	34,346
WRMP Build-out Demand	38,825	39,924	37,581	37,345	36,898
Reserve Supply with Project	10,375	17,866	19,855	21,315	23,962

Notes: Demands "with project" are less than "baseline" demands in 2020 and 2025 due to proposed conversion of agricultural land to residential and nonresidential uses.

Figure 6

IRWD Single Dry-Year Supply & Demand - Nonpotable Water

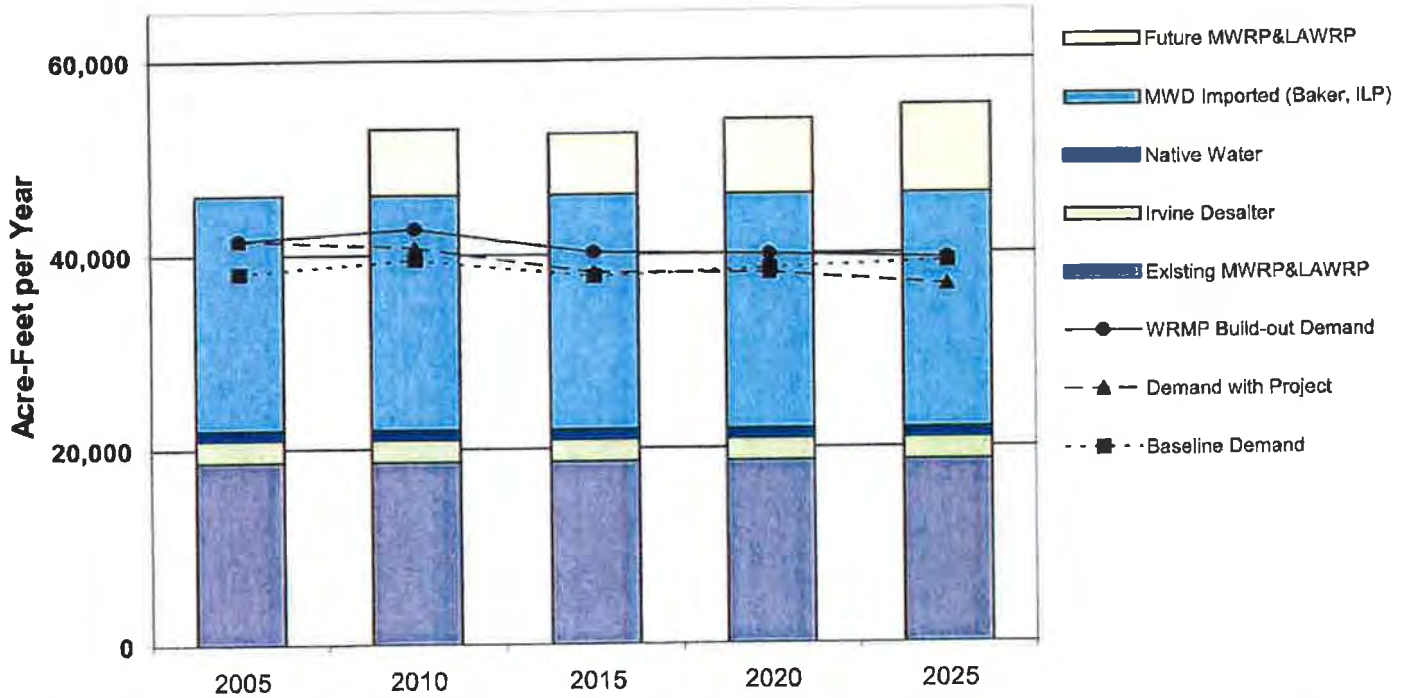


(in acre-feet per year)	2005	2010	2015	2020	2025
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	24,262	24,262	24,262	24,262	24,262
Irvine Desalter	2,282	2,282	2,282	2,282	2,282
Native Water	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future MWRP&LAWRP	-	6,794	6,311	7,687	9,107
Maximum Supply Capability	46,201	52,995	52,512	53,888	55,308
Baseline Demand	38,135	39,502	37,740	38,532	39,149
Demand with Project	41,543	40,798	38,153	38,063	36,751
WRMP Build-out Demand	41,543	42,718	40,212	39,959	39,481
Reserve Supply with Project	4,658	12,197	14,359	15,825	18,557

Notes: Demands "with project" are less than "baseline" demands in 2020 and 2025 due to proposed conversion of agricultural land to residential and nonresidential uses.

Figure 7

IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water

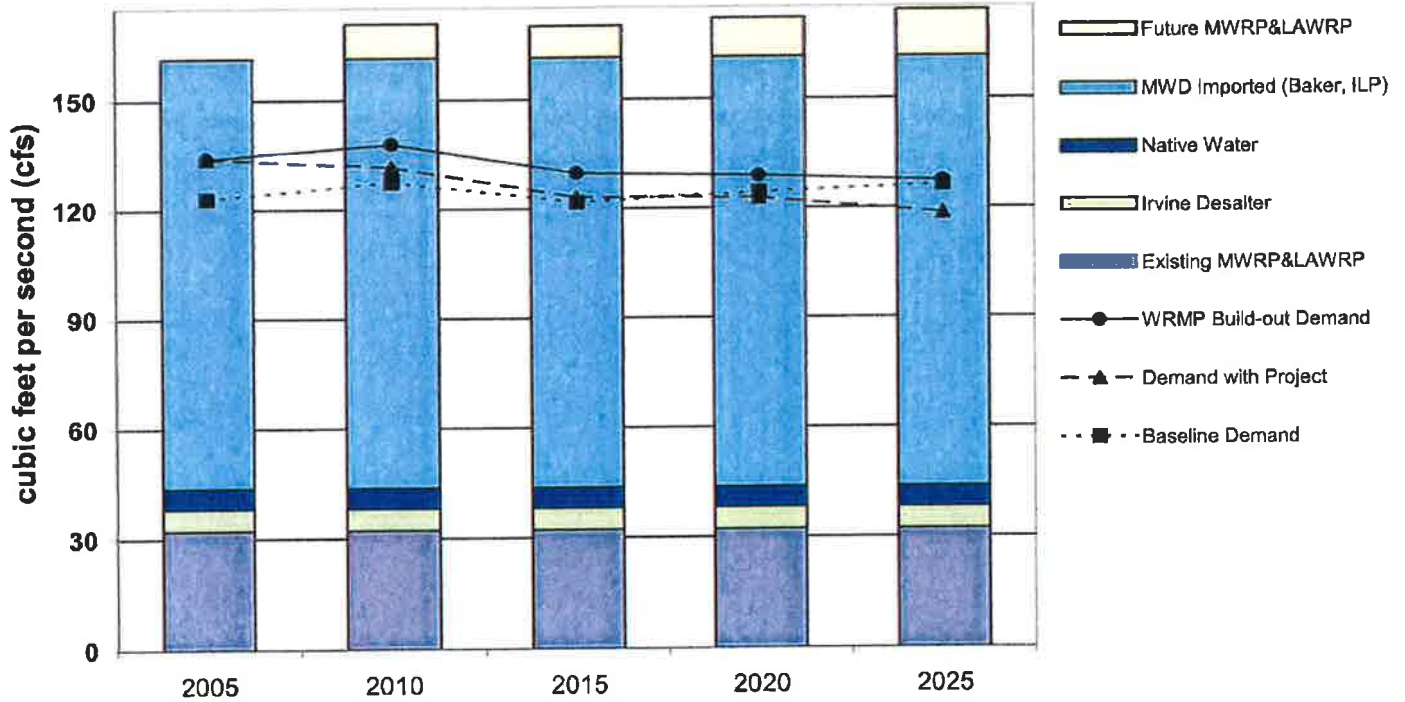


(in acre-feet per year)	2005	2010	2015	2020	2025
<u>Current Nonpotable Supplies</u>					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	24,262	24,262	24,262	24,262	24,262
Irvine Desalter	2,282	2,282	2,282	2,282	2,282
Native Water	1,000	1,000	1,000	1,000	1,000
<u>Supplies Under Development</u>					
Future MWRP&LAWRP	-	6,794	6,311	7,687	9,107
Maximum Supply Capability	46,201	52,995	52,512	53,888	55,308
Baseline Demand	38,135	39,502	37,740	38,532	39,149
Demand with Project	41,543	40,798	38,153	38,063	36,751
WRMP Build-out Demand	41,543	42,718	40,212	39,959	39,481
Reserve Supply with Project	4,658	12,197	14,359	15,825	18,557

Notes: Demands "with project" are less than "baseline" demands in 2020 and 2025 due to proposed conversion of agricultural land to residential and nonresidential uses.

Figure 8

IRWD Maximum-Day Supply & Demand - Nonpotable Water



(in cfs)	2005	2010	2015	2020	2025
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
Irvine Desalter	6.0	6.0	6.0	6.0	6.0
Native Water	5.5	5.5	5.5	5.5	5.5
MWD Imported (Baker, ILP)	117.7	117.7	117.7	117.7	117.7
Supplies Under Development					
Future MWRP&LAWRP	-	9.4	8.7	10.6	12.6
Maximum Supply Capability	161.4	170.8	170.1	172.0	174.0
Baseline Demand	123.1	127.5	121.8	124.3	126.3
Demand with Project	134.1	131.7	123.1	122.8	118.6
WRMP Build-out Demand	134.1	137.9	129.8	129.0	127.4
Reserve Supply with Project	27.3	39.1	47.0	49.2	55.4

Notes: Demands "with project" are less than "baseline" demands in 2020 and 2025 due to proposed conversion of agricultural land to residential and nonresidential uses.

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 shown 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
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000	2
Deep Aquifer Treatment System-DATS	10.0	7,200	2
Irvine Desalter	8.5	5,568	3
Irvine Subbasin	8.0	4,800	3
Total Potable Current Supplies	230.6		95,484
Nonpotable - Reclaimed Water			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
Nonpotable - Imported			
Baker Aqueduct	52.7	15,262	5
Irvine Lake Pipeline	65.0	9,000	6
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	6.0	2,282	7
Nonpotable Native			
Irvine Lake	5.5	4,000	8
Total Nonpotable Current Supplies	161.4		53,859
Total Combined Current Supplies	392.0		149,343
Supplies Under Development			
Potable Groundwater - West Irvine Wellfield	20.0	12,700	9
Nonpotable Reclaimed - Future MWRP&LAWRP Reclaimed	20.0	14,450	10
Total Supplies (Current and Under Development)			
Potable Supplies	250.6		108,184
Nonpotable Supplies	181.4		68,309
Total Supplies	432.0		176,493

- 1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 1, page 18).
- 2 Contract amount - See Potable Supply-Groundwater(iii).
- 3 Contract amount - See Potable Supply-Groundwater (iv) and (v). Maximum day well capacity (cfs) is compatible with contract amount.
- 4 MWRP 18.0 mgd treatment capacity (17,400 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)
- 5 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 2.5 (see Footnote 1, page 18).
- 6 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.
- 7 Contract amount - See Nonpotable Supply-Groundwater (i) and (ii). Maximum day well capacity (cfs) is compatible with contract amount.
- 8 Based on 69 years historical average of Santiago Creek Inflow into Irvine Lake.
- 9 Estimated combined capacity of wells.
- 10 Future estimated MWRP & LAWRP reclaimed water production.

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

Source	1980	1985	1990	1995	2,000
Potable - imported	29,510	43,320	44,401	28,397	36,777
Potable - groundwater	827	38	10,215	20,020	20,919
Nonpotable - reclaimed	9,196	12,399	11,589	10,518	14,630
Nonpotable - imported*	9,556	12,260	24,899	2,333	16,343
Nonpotable - groundwater	-	36	816	1,834	2,890
Nonpotable - native	11,909	3,587	2,778	5,980	4,949
Total	60,998	71,639	94,699	69,082	96,508

*Includes water purchased for delivery to storage in Irvine Lake.

(Source: water purchase and production records.)

(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.^{1 2}

• **POTABLE SUPPLY - IMPORTED**³

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

¹ 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) and 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 an arbitrary and conservatively low estimate of annual AFY volumes from these connections; additional volumes of water are likely to be available from these sources.

² 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, IRWD has no current plans to do so.

³ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

Los Alisos Water District ("LAWD"),⁴ 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 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 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, and the Participants would be

⁴ 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.

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 has recently been consolidated with MWDOC). 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. 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. 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.

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).

• POTABLE SUPPLY - GROUNDWATER

(i) Orange County Water District Act, 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 (§ 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 until 2020. This is described in detail in the OCWD Master Plan Report, dated April, 1999.

(ii) *Irvine Ranch Water District v. Orange County Water District*, OCSC 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 (Resolution No. 86-2-15, adopted on February 19, 1986 and reaffirmed on June 2, 1999), and anticipates doing so. However, 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 (DWRWF) / Deep Aquifer Treatment System (DATS)
(currently available)***

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

Irvine Subbasin / Irvine Desalter (currently available)

(iv) First Amended and Restated Agreement, dated March 11, 2002, 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 annual yield of the Irvine Subbasin would be allocated 1,000 AFY to IRWD and 12,000 AFY to TIC. The restated Irvine Subbasin Agreement will continue the foregoing allocations on a temporary basis, until TIC commences building the project assessed herein. At that time (but not later than January 1, 2006), the Subbasin production capability, wells and other facilities, and associated rights will be transferred from TIC to IRWD, and IRWD will assume the production from the Subbasin. Provision is made for an earlier transfer to the extent needed for IRWD to start operation of the Irvine Desalter Project (see following paragraph (v)). In consideration of the transfer, IRWD is required to count the supplies attributable to the transferred Subbasin production in calculating available supplies for the 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. As necessary, IRWD plans to treat 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 has reserved water rights from conveyances of its lands as development over the Subbasin has occurred, and under the Irvine Subbasin Agreement TIC will transfer 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 will be delivered into the IRWD potable system, and the remainder will be delivered into the IRWD nonpotable system.

West Irvine Wells (under development)

(vi) IRWD is pursuing the installation of production facilities in the west Irvine portion of the Basin, located approximately between the 55 freeway and Peters Canyon Channel. This supply is considered to be under development; however, one well has been drilled (1992), a site for an additional well and treatment facility has been acquired by IRWD, and IRWD is in negotiation for the purchase of a third well site. The production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. See discussion of the Act under Potable Supply - Groundwater, paragraph (i), above.

• **NONPOTABLE SUPPLY - RECLAIMED**

Water Reclamation Plants (currently available)

Water Code Section 1210. IRWD supplies its own reclaimed water from wastewater collected by IRWD and delivered to IRWD's Michelson Water Reclamation Plant (MWRP) and Los Alisos Water Reclamation Plant (LAWRP). MWRP currently has a permitted capacity of 18 million gallons per day (MGD) and LAWRP currently has a permitted capacity of 5.5 MGD. Water Code Section 1210 provides that the owner of a wastewater 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 reclaimed water, and do not permit stream discharge of reclaimed water; thus, no issue of downstream appropriation arises, and IRWD is entitled to deliver all of the effluent to meet contractual and customer demands.

Water Reclamation Plant Expansion (under development)

IRWD has prepared its Waste Water Management and Action Program Final Environmental Impact Report (November, 1979) to address impacts associated with its Wastewater Management and Action Program (WMAP). IRWD plans to increase its capacity on the existing plant sites to produce sufficient reclaimed water to meet the projected demand in the year 2025. Additional reclamation capacity will augment local nonpotable supplies and improve reliability.

• **NONPOTABLE SUPPLY - IMPORTED**⁵

Baker Pipeline (currently available)

Santiago Aqueduct Commission Joint Powers Agreement, dated April 13, 1961, as amended September 11, 1961, 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 has 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. 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. 90005 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 pits downstream of Santiago Dam. The combined total of native water that may be

⁵ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

diverted to storage under these licenses and permit is 28,000 AFY. 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.⁶ 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 is shown in currently available supplies, based on averaging of historical data. IRWD's ability to supplement Irvine Lake storage with imported untreated water 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.

⁶ The 1956 Agreement provides for facilities to deliver MWD imported water into the 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. This report, entitled "Report on Metropolitan's Water Supplies" (February 11, 2002) ("MWD Report"), is consistent with MWD's Regional Urban Water Management Plan (December, 2000) ("RUWMP"). The MWD Report indicates that MWD's regional water demand projections used in the RUWMP are 7% to 11% percent higher than the aggregated projections of MWD's member agencies. As stated in the MWD Report, "this difference indicates that Metropolitan's supplies developed in accordance with the RUWMP would provide a measure of "margin of safety" or flexibility to accommodate some delays in local resources development or adjustments in development plans."

The MWD Report is intended to serve two primary purposes, described therein:

"Demonstrate Metropolitan's ability to meet projected demands over the next 20 years and to provide additional resource reserves as a "margin-of-safety" that mitigates against uncertainties in demand projections and risks in implementing supply programs."

"Demonstrate that Metropolitan is implementing a comprehensive plan to secure reliable water supplies in accordance with policy principles and objectives established by Metropolitan's Board of Directors."

The MWD Report finds "that current practices allow Metropolitan to bring water supplies on-line at least ten years in advance of demand with a very high degree of reliability." Furthermore, demand and supply comparisons "demonstrate that there are sufficient supplies that can be reasonably relied upon to meet projected supplemental demands and that there are additional reserve supplies that could provide a "margin of safety" to mitigate against uncertainties in demand projections and risks in fully implementing all supply programs under development."

More particularly, MWD has documented sufficient *currently available* supplies to meet 100% of MWD's member agencies' supplemental water demands for 20 years under average-year conditions, for 15 years under multiple dry-year conditions (with 7-12% reserve capacity), and for 10 years under single dry-year conditions (with 7-24% reserve capacity). With the addition of *supplies under development*, MWD will be able to meet 100% of its agencies' supplemental water needs under all supply and demand conditions through 2030 with 15-20% reserve capacity. Reference is made to the MWD Report for more detailed discussion.

MWD's margin of safety in its demand projections and 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 west Irvine wells, MWRP expansion 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 subregional and local distribution systems.

With respect to west Irvine wells (Project Nos. 15421 and 15427) and the MWRP expansion (Project No. 38820), IRWD has adopted its fiscal year 2001/02 capital budget on June 11, 2001 (Resolution No. 2001-21), budgeting 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 source of funding is previously authorized general obligation bonds and/or capital funds held by IRWD Improvement Districts. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development. IRWD has maintained a successful program for the issuance of general obligation bonds on favorable borrowing terms. IRWD has approximately \$500 million (water) and \$720 million (wastewater) of unissued bond authorization. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development.

(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.

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

See response to preceding item (3). In addition, the MWRP expansion will require approval of amendments to IRWD's permit issued by the Regional Water Quality Control Board.

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. Water has not been produced from the Irvine Desalter, which has not been constructed, but other Irvine Subbasin water has been produced by IRWD. As described under Potable Supply - Groundwater, paragraph (iv), TIC also holds water rights and contractual entitlements to the Irvine Subbasin groundwater, but existing contract provides that those rights and entitlements will be transferred to IRWD at the commencement of the project. 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 2000 UWMP, section III-3.

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

The Orange County Groundwater Basin ("Basin") is described at pages 3-1 through 3-14 of the OCWD Master Plan Report, dated April, 1999 ("MPR"). 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 380,000 AFY.

The Department of Water Resources has identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (1975, 1980). (Bulletin 118 is currently being updated by the Department.) The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD MPR, including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. 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.

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 also operates the basin to keep the target dewatered basin storage at 200,000 acre-feet as an appropriate accumulated overdraft. 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. (Source: 1999-2000 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District; OCWD MPR, *supra*.)

OCWD's efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD's management of overdraft to maximize its 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 MPR, section 3.2)

(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	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD⁷
2001	20,377	1,687	3,967	543
2000	20,580	2,890	4,862	346
1999	20,432	1,035	3,845	404
1998	20,149	1,622	4,172	89
1997	19,894	2,528	6,280	508

(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 the its Dyer Road Wellfield (including the Deep Aquifer Treatment System), in the main portion of the Basin.

Although, as the preceding table shows, TIC's production from the Subbasin has declined as its use of the Subbasin for agricultural water has diminished, OCWD's and other historical production records for the Subbasin show that production has been as high as 13,000 AFY. Under the Irvine Subbasin Agreement, all of the Subbasin production capability will be turned over by TIC to IRWD at the commencement of the project assessed herein, with earlier transfer if and as necessary for IRWD to operate its Irvine Desalter Project. Plans are also underway to expand IRWD's main Orange County Groundwater Basin supply, with wells in the West Irvine Wellfield (characterized as *under-development* supplies herein). (IRWD anticipates the development of 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.

⁷ 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.

(In AFY)

Year (ending)	DRWF ⁸	W Irvine ⁹	Subbasin ¹⁰	IDP (Potable)	IDP (Nonpotable)
2005	35,200	0	4,800	5,568	2,282
2010	35,200	12,700	4,800	5,568	2,282
2015	35,200	12,700	4,800	5,568	2,282
2020	35,200	12,700	4,800	5,568	2,282
2025	35,200	12,700	4,800	5,568	2,282

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

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

The OCWD MPR examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. According to the OCWD MPR, production from the Basin can be maintained at 75% of the Basin producers' 2020 demand level, including demands from areas in IRWD and other producers to be annexed to OCWD.

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. OCWD is moving forward with a number of replenishment supply projects, including the Groundwater Replenishment System Project ("GWRS"). The OCWD MPR indicates that the GWRS will produce over 100,000 afy of new replenishment supply from recycled water.

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

⁸ 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.

⁹ Under development.

¹⁰ Subbasin potable water production (other than Irvine Desalter Project). Amounts shown are available as potable-quality production, without treatment.

Basin is "mined" in anticipation of the eventual availability of replenishment water. (OCWD MPR, section 14.6.)

See also, Figures 1-8. 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.

5. This Water Supply Assessment is being completed for a project included in a prior water supply assessment. Date of prior 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, March, 2002

2000 Urban Water Management Plan, Irvine Ranch Water District/Los Alisos Water District, December, 2000

The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December, 2000

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

Report on Metropolitan's Water Supplies, Metropolitan Water District of Southern California, February 11, 2002

Master Plan Report, Orange County Water District, April, 1999

1999-2000 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

Exhibit A
Depiction of Project Area

Exhibit B
Uses Included in Project

**Table 2-3
Existing and Proposed Zoning**

Planning Area	Existing Zone Category	Proposed Zone Category	Implementation District	Acres	Maximum Development Intensity
3	1.3 Conservation Open Space Reserve 1.7 Landfill Overlay	1.4 Preservation	C, D, E, F	3,015	
		1.5 Recreation/Landfill Overlay		730	
Subtotal				3,745	
5B	1.1 Exclusive Agriculture	2.3I Medium Density Residential		319	1,900 dwelling units
6	1.2 Development Reserve 1.3 Conservation Open Space Reserve	1.4 Preservation	Q, R	852	
		1.5 Recreation		258	
		1.6 Water Bodies		25	
		2.3K Medium Density Residential		866	4,500 dwelling units
		3.1 Multi-Use		20	125,000 sq. ft.
		4.2 Community Commercial		20	175,000 sq. ft.
		5.5F Medical and Science		285	2,400,000 sq. ft.
		6.1 Institutional		3	
Subtotal				2,329	4,500 dwelling units 2,700,000 sq. ft.
8A	1.3 Conservation Open Space Reserve	2.3H Medium Density Residential		73	400 dwelling units
9	1.1 Exclusive Agriculture 1.3 Conservation Open Space Reserve	1.5 Recreation		72	
		2.3J Medium Density Residential		678	3,750 dwelling units
		2.4B Medium-High Density Residential		89	1,800 dwelling units
		3.1 Multi-Use		60	450,000 sq. ft.
		4.4 Commercial Recreation		51	
		5.5E Medical and Science		317	4,166,000 sq. ft.
		6.1 Institutional		10	
Subtotal				1,277	5,550 dwelling units 4,616,000 sq. ft.
TOTALS				7,743	12,350 units 7,316,000 s.f.

December 16, 2013 ^{DB} *9/1* *RKM*
Prepared by: S. Toland/J. McGehee/R. Mori
Submitted by: K. Burton *K.B.*
Approved by: Paul Cook *[Signature]*

ACTION CALENDAR

BAKER WATER TREATMENT PLANT AND RAW WATER CONVEYANCE FACILITIES CONSTRUCTION AWARD AND CONSTRUCTION PHASE AUTHORIZATIONS

SUMMARY:

The Baker Water Treatment Plant (WTP) is a regional, multi-agency project between El Toro Water District (ETWD), Irvine Ranch Water District (IRWD), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), and Trabuco Canyon Water District (TCWD). Construction bids for both the Baker WTP and the Raw Water Conveyance Facilities (RWCF) projects were received on September 26, 2013 and October 1, 2013, respectively. The Board of Directors for each of the project partner agencies approved their participation in the project in November 2013. Multiple agreements have been developed to formalize the contractual and financial obligations of each agency. Construction phase services will be performed by a blended team comprised of staff and representatives from multiple engineering consultants. To support the Project and the upcoming construction phase activities, staff recommends that the Board:

- Waive bid irregularities and authorize the General Manager to execute a construction contract with PCL Construction Incorporated in the amount of \$77,520,613 to construct the Baker WTP;
- Waive bid irregularities and authorize the General Manager to execute a construction contract with Pacific Hydrotech Corporation in the amount of \$4,995,744 to construct the Baker RWCF;
- Approve the Amended and Restated Agreement for Construction, Operation, and Maintenance of the Baker Water Treatment Plant;
- Approve the Agreement Relating to Baker Pipeline Capacity Transfers Among Baker Water Treatment Plant Participants;
- Approve the Agreement between ETWD and IRWD Providing for Domestic Water Interconnection;
- Authorize the General Manager to execute a Professional Services Agreement with Carollo Engineers in the amount of \$3,418,900 for engineering services during construction;
- Authorize the General Manager to execute a Professional Services Agreement with Jacobs Engineering in the amount of \$810,600 for construction management services;
- Authorize the General Manager to execute a Professional Services Agreement with HDR Engineering in the amount of \$1,253,936 for construction management services;
- Authorize the General Manager to execute a Professional Services Agreement with Arcadis-US in the amount of \$145,662 for construction support services;
- Authorize the General Manager to execute a Professional Services Agreement with Ninyo & Moore in the amount of \$363,860 for construction phase geotechnical and concrete testing services;

- Authorize the General Manager to execute a Professional Services Agreement with CNC Engineering in the amount of \$139,875 for construction phase surveying services;
- Authorize the General Manager to execute a Professional Services Agreement with VCS Environmental in the amount of \$33,541 for construction phase biological and cultural monitoring services;
- Authorize a budget decrease in the FY 2013-14 Capital Budget for the Baker Water Treatment Plant Project 11218 for the design and bidding phase in the amount of \$72,901,500, from \$80,010,000 to \$7,108,500;
- Authorize the addition to the FY 2013-14 Capital Budget of the Baker Water Treatment Plant Project 11747 for the construction phase in the amount of \$96,852,000;
- Approve an Expenditure Authorization in the amount of <\$6,751,500> for the Baker Water Treatment Plant, Project 11218; and
- Approve an Expenditure Authorization in the amount of \$96,852,000 for the Baker Water Treatment Plant, Project 11747.

BACKGROUND:

The Baker WTP will be a new 28.1 million gallons per day (MGD) surface water treatment plant located at the site of the former Baker Filtration Plant in Lake Forest. The plant will treat untreated imported water from Metropolitan Water District (MWD) via the Santiago Lateral and local water from Irvine Lake. The untreated water will be conveyed to the Baker Plant through the Santiago Aqueduct Commission's (SAC) existing Baker Pipeline. The plant will greatly enhance both treated water supply and water system reliability in South Orange County. Project partners include ETWD, MNWD, SMWD, and TCWD. Each agency's capacity subscription in the plant is summarized below:

- ETWD – 3.2 MGD (5.0 cubic feet per second [cfs])
- IRWD – 6.8 MGD (10.5 cfs)
- MNWD – 8.4 MGD (13.0 cfs)
- SMWD – 8.4 MGD (13.0 cfs)
- TCWD – 1.3 MGD (2.0 cfs)

The project will be constructed under two separate construction projects. The Baker WTP construction contract includes all on site facilities consisting of various pipelines, pump stations, chemical systems, buildings, a membrane filtration treatment system, ultra violet (UV) disinfection system, residuals handling facilities, the product water pipeline and connection facilities to the South County Pipeline (SCP). The RWCF Project includes all off site facilities related to the raw water delivery system consisting of the Irvine Lake pump station, pipeline connections to the Baker and Irvine Lake pipelines, OC-33 improvements, and air/vac valve improvements on the Baker and Santiago Lateral pipelines.

Construction Award:

Baker WTP Project: The bid notice was issued on August 6, 2013. Pre-qualified contractors included Archer Western, McCarthy, PCL Construction, Inc. (PCL), J.F. Shea Construction,

W.M. Lyles, and Shimmick Construction. Prior to the mandatory pre-bid meeting, McCarthy and Lyles notified IRWD that they would not submit bids due to scheduling conflicts with other projects. Near the end of the bid phase, Shimmick notified IRWD of their intent to withdraw from the bidding process. Bids were received on September 26, 2013 from Archer Western Contractors, PCL, and J. F. Shea Construction, Inc. A Bid Summary is included as Exhibit "A". Staff recommends award to the apparent low bidder, PCL. PCL submitted a bid total of \$77,520,613, consisting of a Base Bid subtotal of \$76,968,613 and Alternative Bid Item A-1 for Builder's Risk Insurance of \$552,000. Staff will perform a separate evaluation of the Builder's Risk cost and determine if IRWD or the contractor will provide coverage. The determination will be presented to the Board early next year before the contractor mobilizes.

Baker RWCF Project: The bid notice was issued on September 3, 2013. Pre-qualified contractors included ARB Inc., Caliaqua, Inc., Clarke Contracting Corp., Gateway Pacific Contractors, Hillcrest Contracting, Olsson Construction, Pacific Hydrotech Corp. (Pacific Hydrotech), RC Foster Corp., Schuler Engineering Corp., SS Mechanical Corp., and Stanek Constructors. Bids were received on October 1, 2013 from Olsson Construction, Pacific Hydrotech, and Schuler Engineering Corp. A Bid Summary is included as Exhibit "B". Staff recommends award to the apparent low bidder, Pacific Hydrotech for their submitted bid total of \$4,995,744.

Potential Irregularities in Construction Bid

Baker WTP Project: Staff identified a potential irregularity in the bid submitted by PCL. Staff conferred with legal counsel and legal counsel concurred that there is a sufficient basis for a factual finding by the Board that the irregularity in PCL's bid is inconsequential and cannot have affected the bid amount or given the bidder a competitive advantage over the other bidders as follows:

- (1) In the bid form entitled "Statements by Bidder," the instructions call for the name and location of plant of manufacturer or supplier proposed to be used for various manufactured items. Part A of the Statements calls for lead times. Part B asks for names, with instructions to list one manufacturer. Manufacturers were listed by the low bidder in Part B. The low bid did not list plant locations in either Part A or B. The general instructions found in the Statements By Bidder form specify that the named manufacturers and suppliers are listed for information purposes only and can be substituted with the District's approval without any liability of the District to a listed manufacturers or supplier. Plant locations were for the District's information; omission of plant locations did not afford any competitive advantage.

The above described irregularity did not result in (1) a failure to meet the District's specification; (2) permit a lower bid to be submitted; or (3) impair the District's ability to compare and rank the bids.

Baker RWCF Project Bid: Staff identified potential irregularities in the bid submitted by Pacific Hydrotech. Staff conferred with legal counsel and legal counsel concurred that there is a sufficient basis for a factual finding by the Board that the irregularities in Pacific Hydrotech's bid

are inconsequential and cannot have affected the bid amount or given the bidder a competitive advantage over the other bidders as follows:

- (1) In the bid form entitled "Statements by Bidder," the instructions call for the name and location of plant of manufacturer or supplier proposed to be used for various manufactured items. Part A of the Statements calls for lead times. Part B asks for names, with instructions to list one manufacturer. Manufacturers were listed by the low bidder in Part B. The low bid did not list plant locations in either Part A or B. It should be noted that this irregularity was consistent in all three bids received by the respective bidders. The general instructions found in the Statements By Bidder form specify that the named manufacturers and suppliers are listed for information purposes only and can be substituted with the District's approval without any liability of the District to a listed manufacturers or supplier. Plant locations were for the District's information; omission of plant locations did not afford any competitive advantage.
- (2) On October 17, 2013, staff received a letter from Pacific Hydrotech Corp. stating that their Electrical Subcontractor, Vanciu Electric Inc., had withdrawn their bid as a result of a potential conflict of interest, and that Pacific Hydrotech intended to utilize LEED Electric as a substitution and honor their submitted bid price. Attached to Pacific Hydrotech's letter, was a separate letter from Vanciu Electric stating that a shareholder of Vanciu Electric is also directly involved with Santa Margarita Water District (SMWD), thereby posing a potential conflict of interest. At the time of their bid, they did not realize that SMWD was a partner in the Baker RWCF project. IRWD legal counsel has reviewed the letter and provided recommendations to staff regarding the appropriate written notification pursuant to Public Contract Code Section 4107. Staff has issued the appropriate notification to Vanciu Electric confirming their intent to withdraw. IRWD legal counsel has confirmed that the substitution recommended by Pacific Hydrotech is acceptable.

The above described irregularities did not result in (1) a failure to meet the District's specification; (2) permit a lower bid to be submitted; or (3) impair the District's ability to compare and rank the bids.

Project Agreements:

At the onset of the project, a Baker Project Committee (Baker PC), consisting of key staff from each agency, was established to provide oversight for the development of the project. The Baker PC and legal counsel for each agency have been working collaboratively to develop the following agreements related to the Project:

- Amended and Restated Agreement for Construction, Operation, and Maintenance of the Baker Water Treatment plant between ETWD, IRWD, MNWD, SMWD, TCWD, and Municipal Water District of Orange County (MWDOC);
- Agreement Relating to Baker Pipeline Capacity Transfers Among Baker Water Treatment Plant Participants between ETWD, IRWD, MNWD, SMWD, TCWD, and MWDOC;

- Agreement between ETWD and IRWD Providing for Domestic Water Interconnection;
- Installment Sale Agreement between IRWD and ETWD; and
- Agreement between ETWD, MNWD, and SMWD Providing for Domestic Water Interconnection.

These agreements, with the exception of the last two, are presented for review and approval. Each of these agreements have been reviewed and approved by the respective Board for each of the project partners. The Installment Sale Agreement between IRWD and ETWD was approved by the Board on November 11, 2013, and IRWD is not a party to the Agreement between ETWD, MNWD, and SMWD Providing for Domestic Water Interconnection.

The Baker WTP Agreement: The Agreement for Construction, Operation, and Maintenance of the Baker WTP and Amendment No. 1 to the agreement were executed in December 2008 and December 2009, respectively, during the preliminary design phase. Upon completion of the final design in July 2013, the Baker PC determined that the agreement needed to be updated to reflect new items identified during the final design phase and to accurately reflect the final configuration of the project. Due to the number of needed revisions, legal counsel recommended the preparation of an amended and restated agreement in lieu of another amendment.

While the general framework of the original agreement remains unchanged, the Baker PC has incorporated additional language to address the change in product water delivery from the Allen-McColloch Pipeline (AMP) to the SCP, addition of a pump station to ensure continuous delivery of water from the Baker Pipeline to TCWD's Dimension WTP, delineation of financial responsibilities associated with the Product Water Facilities, and revisions related to the use of Irvine Lake water. The amended and restated agreement also corrects minor inconsistencies identified in the original agreement and captures comments from each of the partner agencies. The agreement, attached as Exhibit "C", has been reviewed by staff and legal counsel and has been reviewed and approved by the respective Board for each of the project partners. Staff recommends approval of the agreement.

The Baker Pipeline Capacity Transfer Agreement: The Baker WTP Agreement provides that each agency is required to secure capacity in all five reaches of the Baker Pipeline, separately from the Baker WTP Agreement and through a means permitted under the SAC Agreement that, at a minimum, matches each agency's respective capacity right in the Baker WTP. In March 2010, the agencies entered into a Baker Pipeline Capacity Transfer Memorandum of Understanding (MOU) to establish the terms for the Baker Pipeline capacity transfers. The purpose of this agreement is to supersede the MOU and to formally establish the final terms for the Baker Pipeline capacity transfers among the Baker WTP project partners.

In lieu of negotiating individual capacity transactions, the project partners have decided to satisfy the Baker WTP matching-capacity requirement in a single transaction by entering into this agreement to collectively implement Baker Pipeline capacity purchases and sales among themselves on a pooled basis. The agreement also considers SAC capacity holders who are not involved with the Baker WTP and ensures that the capacity purchases and sales will not adversely affect them. In general, IRWD and SMWD have excess capacity that will be sold and

ETWD, MNWD, and TCWD require additional capacity that will be purchased. The cost associated with the capacity purchases and sales is summarized below:

- ETWD – Purchasing capacity in the amount of \$1,309,395
- IRWD – Selling capacity in the amount of \$708,063
- MNWD – Purchasing capacity in the amount of \$3,404,426
- SMWD – Selling capacity in the amount of \$4,117,110
- TCWD – Purchasing capacity in the amount of \$111,352

The agreement, attached as Exhibit “D”, has been reviewed by staff and legal counsel and has been reviewed and approved by the respective Board for each of the project partners. Staff recommends approval of the agreement.

The IRWD/ETWD Interconnection Agreement: When the delivery method for the Baker WTP product water changed from the AMP to the SCP, ETWD no longer had a means for receiving product water directly into its system, because ETWD does not have a connection to the SCP. ETWD requested IRWD to evaluate options for delivering product water to ETWD through IRWD’s Zone 1 system. Staff and Dudek, IRWD’s Lake Forest Sub-Area Master Plan consultant, evaluated various options and confirmed that product water could be delivered through the Zone 1 system to ETWD via an existing interconnection with the implementation of various improvements. The evaluation also determined that IRWD could not guarantee product water delivery to ETWD under all scenarios. As a result, ETWD is purchasing capacity in the product water facilities to ensure that they can receive product water at all times, including during times when product water cannot be delivered to ETWD through the Zone 1 system.

This agreement provides the framework and establishes the obligations by and between IRWD and ETWD related to the interconnection. As part of the agreement, IRWD will quitclaim the existing interconnection site and other ancillary facilities to ETWD, who will in turn construct a new pump station at the existing site and utilize the quitclaimed facilities as part of the new ETWD owned and operated interconnection.

The ETWD Board approved the agreement in October 2013. The agreement, attached as Exhibit “E”, has been reviewed by staff and legal counsel. Staff recommends approval of the agreement.

Construction Phase Services:

The construction management (CM) team, which will administer both the Baker WTP and RWCF construction contracts, will consist of a combination of IRWD staff and consultants. The organizational chart for the CM Team is included as Exhibit “F”. A total of six consultant firms were invited to submit proposals for CM services including Anderson-Penna, Arcadis, CDM-Smith, HDR, CH2M-Hill, and Jacobs. Each firm proposed candidates for one or more of the four full-time positions (resident engineer, field engineer, and construction inspector) and for part-time positions including construction inspector and construction scheduler. Staff evaluated each of the proposals and conducted interviews with select candidates in order to identify the

most qualified candidate for each position. Staff interviewed each of the proposing firms and selected individuals who clearly demonstrated experience working on jobs similar to the scope and magnitude of the Project. The established consultant budgets are based on billing rates that will be held through the anticipated 27-month construction duration and are inclusive of other direct costs (ODCs). Staff's recommended consultant selections are described below.

IRWD Staff: Staff will fill the two full-time roles of Construction Manager and Project Administrator. As a result, staff will maintain direct control of the project management, project administration, and contractor oversight. Staff responsibilities will include daily project management, resolution of field issues, change request negotiations, requests for information (RFI) responses, submittal reviews, project schedule tracking, and progress pay requests. Staff will also fill part-time positions for electrical inspection, SCADA/I&C support, and engineering and operations support. The estimated construction management cost for staff, including general and administrative costs (G&A), is \$2,187,127 as summarized in Exhibit "G". Staff costs include the modified G&A rate of 78.6 percent as defined by the Baker WTP Agreement.

Carollo Engineers: Carollo Engineers (Carollo) will be the lead engineering firm representing the design team during construction. Carollo will subcontract with RBF and the other key firms responsible for the design to lead the engineering services during construction effort. Carollo performed the design of the primary treatment process elements, the plant hydraulics, and primary equipment for the plant. Although RBF was the lead firm during the design phase, staff determined that Carollo was best suited to lead the engineering team during the construction phase due to their focus on the primary treatment process elements and because Carollo will have a full-time on site role as part of the CM team.

Carollo has committed Mike Bundy as a full-time, onsite project engineer. Mr. Bundy will coordinate with the design team members who are responsible for the various design disciplines to ensure that the project is constructed in accordance with the original design intent and the Contract Documents. The Carollo team will be responsible for shop drawing reviews, responding to RFIs, assistance with change orders, startup, testing and training, development of the DPH-required Operations Plan, and other miscellaneous tasks.

Carollo's scope of work and fee, in the total amount of \$3,418,900, is included as Exhibit "H". This fee is broken down into two major categories: engineering services during construction for the Baker WTP and RWCF projects in the amount of \$2,803,400 and special services during construction in the amount of \$615,500. Special services that are non-CM related include such tasks as preparing electronic O&M manuals, preparing energy control procedures, conducting chlorine contact basin tracer studies, membrane and UV system testing through the warranty period, and providing equipment inventory support for IRWD's asset management system.

Jacobs Engineering: Staff selected Mike Alexander from Jacobs Engineering (Jacobs) as the full-time, on site resident engineer. Mr. Alexander possesses extensive experience gained through various leadership roles, ranging from resident engineer to construction manager, on complex water treatment plant construction projects. Mr. Alexander also brings recent, relevant experience as startup manager on many of the treatment processes utilized at the plant. His responsibilities will include construction contract administration, assistance with weekly

construction meetings, plan review, construction management procedure development, schedule management and tracking, field issues resolution, contractor change request review and negotiation, monthly progress pay request review, and coordination with District operations and engineering staff. Jacobs' proposal, in the total amount of \$810,600, is included as Exhibit "T" along with the consultant selection matrix for this position.

HDR Engineering: Staff selected Sean Hoss as the full-time, on site field engineer and Jin Chong as the full-time, on site construction inspector, both of whom are from HDR Engineering (HDR). Staff selected these individuals due to their specific experience with projects similar to the Project. Mr. Hoss, as the field engineer, will be responsible for managing and maintaining the document control system (DCS), logging and tracking contractor submittals, RFIs, change requests/orders, and general project file management. Mr. Hoss will also participate in a variety of daily field engineering needs, including resolving field conflicts, reviewing change requests, and assisting the resident engineer and construction manager as needed. Mr. Chong will fill the role of lead construction inspector and will be responsible for all inspection activities, including buried and exposed pipeline installation, setting of rebar and placement of structural concrete, paving and grading, and mechanical equipment installation. Mr. Chong is also certified as a specialty welding inspector, which eliminates the need for hiring a separate third-party welding inspection firm. HDR's proposal, in the total amount of \$1,253,936, is included as Exhibit "J" along with the consultant selection matrix for these positions.

Arcadis-US: Staff selected Arcadis-US (Arcadis) as the provider of the web-based DCS. Staff has been successfully using the Arcadis DCS system for the Michelson Water Recycling Plant (MWRP) Phase 2 Expansion and Biosolids projects. The DCS is easy to implement and user friendly. The scope of work for the DCS system includes project setup for both the WTP and RWCF construction projects, training sessions for the contractor and the CM team, and ongoing routine maintenance.

Staff also selected Jon Westervelt as the part-time construction scheduler from Arcadis. Mr. Westervelt has significant experience in construction scheduling, construction operations, and construction management. Mr. Westervelt will be responsible for reviewing the contractor's baseline schedule to ensure that the construction sequence and logic ties are accurate and complete. He will also assist the CM team with reviewing the contractor's monthly updates, and will identify potential schedule delays and associated corrective measures. Arcadis' proposal, in the total amount of \$145,662, is included as Exhibit "K" along with the consultant selection matrix for this position.

Ninyo & Moore: Staff requested proposals from NMG, Ninyo & Moore, GMU, and LGC to provide soils and materials testing throughout the construction of the Project. The scope of services includes soil and compaction testing of proposed structural subgrades, pipe bedding, and miscellaneous excavations. The selected geotechnical consultant will also be responsible for the testing of concrete cylinders, hot mix asphaltic concrete mixes, and other materials of construction.

Staff received proposals from GMU, LGC, and Ninyo & Moore. NMG declined to submit due to their staffing commitments to the MWRP Biosolids project. Staff reviewed the proposals with

a focus on identifying the firm that best demonstrated a clear understanding of the scope, an appropriate blend of field and office engineering staff, and sufficient working hours to provide the anticipated level of service. Based on these criteria, staff recommends the selection of Ninyo & Moore as the geotechnical engineer in the amount of \$363,860. The consultant selection evaluation matrix and Ninyo & Moore's scope of work and fee are included as Exhibit "L".

CNC Engineering: Staff requested proposals from Borchard, Guida, Bush & Associates, and CNC Engineering (CNC) to provide surveying services throughout the construction of the Project. The scope of services includes the establishment of survey control and monitoring and verification of the Contractor's surveying activities. Staff received proposals from all four firms and reviewed the proposals for project understanding and qualifications and experience. Based on these criteria, staff recommends the selection of CNC as the surveyor in the amount of \$139,875. The consultant selection evaluation matrix and CNC's scope of work and fee are included as Exhibit "M".

VCS Environmental: During the CEQA process, the Environmental Impact Report established requirements for biological and cultural resource monitoring that were summarized in the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). Staff requested proposals from Dudek, VCS Environmental (VCS), ESA, and Harmsworth to provide biological, paleontology, and archaeology monitoring services as needed during excavation and other construction activities. Staff reviewed the proposals for project understanding, qualifications and experience, and anticipated level of service. Based on these criteria, staff recommends the selection of VCS as the environmental consultant in the amount of \$33,541. The consultant selection evaluation matrix and VCS's scope of work and fee are included as Exhibit "N".

Other Services During Construction: Staff established estimated budgets for additional anticipated specialty inspection, material testing, and other field support that may be needed during the construction phase. At this time, specific needs have not yet been identified. Staff anticipates that additional services may be required associated with stainless steel metallurgy testing and verification, special coating and inspection services, additional permits and/or agency coordination, third-party electrical and controls support, and potentially a second, part-time construction inspector. Staff anticipates that many of these services will be required as the construction activities advance into full production. The Baker PC established a budget for these services that is included in the capital budget request described below.

Schedule:

The Board of Directors for each of the project partner agencies approved their participation in the project in November 2013. Staff anticipates the following project milestones:

Notice of Award for the Baker WTP and RWCF	January 6, 2014
Notice to Proceed for the Baker WTP and RWCF	February 2014
Notice of Completion for the RWCF	April 2015
Notice of Completion for the Baker WTP	April 2016

FISCAL IMPACTS:

Project 11218 (1417) is included in the FY 2013-14 Capital Budget and covered all expenses during the design and bidding phases. Staff recommends that the budget for Project 11218 (1417) be reduced in the FY 2013-14 Capital Budget in the amount of \$72,901,500, from \$80,010,000 to \$7,108,500; and that a new project, Baker Water Treatment Plant, Project 11747 (5027), be added to the FY 2013-14 Capital Budget in the amount of \$96,852,000 as shown in the table below and in Exhibit "O".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11218 (1417)	\$80,010,000	<\$72,901,500>	\$ 7,108,500	\$13,860,000	<\$ 6,751,500>	\$ 7,108,500
11747 (5027)	\$0	\$96,852,000	\$ 96,852,000	\$0	\$96,852,000	\$ 96,852,000
Total	\$80,010,000	\$23,950,500	\$103,960,500	\$13,860,000	\$90,100,500	\$103,960,500

The Baker WTP Project total cost is estimated at \$103,645,992, which includes all design, support, and construction contracts. The cost also includes items that are not typically requested directly in the Capital Budget, such as general and administration expenses, and payments to IRWD, such as the non-reclaimable waste connection fee and land use cost. The table below presents the capacity right percentages for the treatment facilities and product water facilities for each project partner along with their total estimated cost responsibility.

Project Partner	Capacity Right % (Treatment Facilities)	Capacity Right % (Product Water Facilities)	Total Cost
ETWD	11.494%	15.151%	\$ 12,250,037
IRWD	24.138%	0%	\$ 22,793,921
MNWD	29.885%	39.394%	\$ 31,850,793
SMWD	29.885%	39.394%	\$ 31,850,793
TCWD	4.598%	6.061%	\$ 4,900,448
Total	100%	100%	\$103,645,992

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:

The project agreements and construction phase services consultant selections were taken to the Engineering and Operations Committee on November 19, 2013. Construction awards are not routinely taken to Committee prior to submittal for Board approval.

RECOMMENDATION:

THAT THE BOARD WAIVE BID IRREGULARITIES AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PCL CONSTRUCTION INCORPORATED IN THE AMOUNT OF \$77,520,613 TO CONSTRUCT THE BAKER WATER TREATMENT PLANT; WAIVE BID IRREGULARITIES AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PACIFIC HYDROTECH CORPORATION IN THE AMOUNT OF \$4,995,744 TO CONSTRUCT THE BAKER RAW WATER CONVEYANCE FACILITIES; APPROVE THE AMENDED AND RESTATED AGREEMENT FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE BAKER WATER TREATMENT PLANT; APPROVE THE AGREEMENT RELATING TO BAKER PIPELINE CAPACITY TRANSFERS AMONG BAKER WATER TREATMENT PLANT PARTICIPANTS; APPROVE THE AGREEMENT BETWEEN EL TORO WATER DISTRICT AND IRWD PROVIDING FOR DOMESTIC WATER INTERCONNECTION; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH CAROLLO ENGINEERS IN THE AMOUNT OF \$3,418,900 FOR ENGINEERING SERVICES DURING CONSTRUCTION; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH JACOBS ENGINEERING IN THE AMOUNT OF \$810,600 FOR CONSTRUCTION MANAGEMENT SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH HDR ENGINEERING IN THE AMOUNT OF \$1,253,936 FOR CONSTRUCTION MANAGEMENT SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH ARCADIS-US IN THE AMOUNT OF \$145,662 FOR CONSTRUCTION SUPPORT SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH NINYO & MOORE IN THE AMOUNT OF \$363,860 FOR CONSTRUCTION PHASE GEOTECHNICAL AND CONCRETE TESTING SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH CNC ENGINEERING IN THE AMOUNT OF \$139,875 FOR CONSTRUCTION PHASE SURVEYING SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH VCS ENVIRONMENTAL IN THE AMOUNT OF \$33,541 FOR CONSTRUCTION PHASE BIOLOGICAL AND CULTURAL MONITORING SERVICES; AUTHORIZE A BUDGET DECREASE IN THE FY 2013-14 CAPITAL BUDGET FOR THE BAKER WATER TREATMENT PLANT PROJECT 11218 (1417) FOR THE DESIGN AND BIDDING PHASE IN THE AMOUNT OF \$72,901,500, FROM \$80,010,000 TO \$7,108,500; AUTHORIZE THE ADDITION TO THE FY 2013-14 CAPITAL BUDGET OF THE BAKER WATER TREATMENT PLANT PROJECT 11747 (5027) FOR THE CONSTRUCTION PHASE IN THE AMOUNT OF \$96,852,000; APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF <\$6,751,500> FOR THE BAKER WATER TREATMENT PLANT, PROJECT 11218 (1417); AND APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$96,852,000 FOR THE BAKER WATER TREATMENT PLANT, PROJECT 11747 (5027).

LIST OF EXHIBITS:

- Exhibit "A" – Baker WTP Bid Summary
- Exhibit "B" – Baker RWCF Bid Summary
- Exhibit "C" – Amended and Restated Agreement for Construction, Operation, and Maintenance of the Baker Water Treatment Plant
- Exhibit "D" – Agreement Relating to Baker Pipeline Capacity Transfers Among Baker Water Treatment Plant Participants
- Exhibit "E" – Agreement between ETWD and IRWD for Providing Domestic Water Interconnection
- Exhibit "F" – Construction Management Team Organizational Chart
- Exhibit "G" – Estimated Construction Management Costs for District Staff
- Exhibit "H" – Carollo Engineering Services Scope of Work and Fee
- Exhibit "I" – Resident Engineer Consultant Selection Matrix and Jacobs Engineering Construction Management Scope of Work and Fee
- Exhibit "J" – Construction Inspector Consultant Selection Matrix, Field Engineer Consultant Selection Matrix, and HDR Engineering Construction Management Scope of Work and Fee
- Exhibit "K" – Arcadis-US Construction Management Proposal
- Exhibit "L" – Geotechnical Engineer Consultant Selection Matrix and Ninyo & Moore Geotechnical Services Scope of Work and Fee
- Exhibit "M" – Surveying Services Consultant Selection Matrix and CNC Engineering Surveying Services Scope of Work and Fee
- Exhibit "N" – Environmental Services Consultant Selection Matrix and VCS Environmental Services Construction Proposal
- Exhibit "O" – Expenditure Authorizations

EXHIBIT "A"
 Bid Summary
 Baker Water Treatment Plant, PR 11218 (1417)

Bid Item	Description	Unit	Quantity	Engineer's Estimate RBF Consulting Irvine, CA		1 PCL Construction, Inc. San Marcos, CA		2 J. F. Shea Construction, Inc. Walnut, CA		3 Archer Western Contractors LLC San Diego, CA	
				Unit Price	Total Bid Amount	Unit Price	Total Bid Amount	Unit Price	Total Bid Amount	Unit Price	Total Bid Amount
1	Overall Project: Furnish all labor, materials, equipment, services and appurtenant work, except for Items 3, 4, 5, 6, 7, 8, 13, 14 and 17 below, for the construction of the Baker Water Treatment Plant.	1	LS	\$ 50,880,547.00	\$ 50,880,547.00	\$ 61,544,939.00	\$ 61,544,939.00	\$ 70,524,980.00	\$ 70,524,980.00	\$ 70,530,229.00	\$ 70,530,229.00
2	Mobilization/Demobilization (maximum of 4% of total for Bid Items 1, 9, 10, 11, 12, 15, and 16)	1	LS	\$ 2,075,825.00	\$ 2,075,825.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,900,000.00	\$ 2,900,000.00
3	Membrane Filtration System procurement package (excludes pre-bid item for special engineering services work)	1	LS	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00	\$ 8,479,579.00
4	UV Disinfection System package	1	LS	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00	\$ 889,519.00
5	Hirsch security system controllers	1	LS	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00	\$ 129,337.00
6	DN Tank modifications	1	LS	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00	\$ 261,443.00
7	Pivot Interiors, control room furnishings	1	LS	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00	\$ 52,943.00
8	Beavens Systems, TCWD Dimension Plant SCADA system integration	1	LS	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00	\$ 29,853.00
9	Roof top fall arrest system	1	LS	\$ 201,139.00	\$ 201,139.00	\$ 125,000.00	\$ 125,000.00	\$ 100,000.00	\$ 100,000.00	\$ 300,000.00	\$ 300,000.00
10	Project Dewatering (compliance with, NPDES Permit)	1	LS	\$ 48,275.00	\$ 48,275.00	\$ 100,000.00	\$ 100,000.00	\$ 20,000.00	\$ 20,000.00	\$ 50,000.00	\$ 50,000.00
11	Trench and Project Safety Measures, Sheeting, Shoring and Bracing	1	LS	\$ 323,443.00	\$ 323,443.00	\$ 100,000.00	\$ 100,000.00	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00
12	Testing, Training, and Facility Startup	1	LS	\$ 386,200.00	\$ 386,200.00	\$ 30,000.00	\$ 30,000.00	\$ 500,000.00	\$ 500,000.00	\$ 200,000.00	\$ 200,000.00
13	Draft and Final Operation & Maintenance Manuals	1	LS	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00
14	Draft and Final Record Drawings	1	LS	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00
15	Erosion Control	1	LS	\$ 33,793.00	\$ 33,793.00	\$ 100,000.00	\$ 100,000.00	\$ 250,000.00	\$ 250,000.00	\$ 137,000.00	\$ 137,000.00
16	System Integration	1	LS	\$ 598,610.00	\$ 598,610.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00
17	Water for Testing and Startup	1	LS	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00
18	RAMAir HVAC Controls per Section 15900	1	LS	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00	\$ 375,000.00
SUBTOTAL, Base Bid Items					\$ 65,016,506.00		\$ 76,968,613.00		\$ 86,563,654.00		\$ 86,785,903.00
Alternative Bid Items											
Item No.	Description	Approx. Qty.	Unit Price Dirs./Cts.								
A-1	Builders' Risk Insurance	1	LS	\$ -	\$ -	\$ 552,000.00	\$ 552,000.00	\$ 400,000.00	\$ 400,000.00	\$ 338,528.00	\$ 338,528.00
Subtotal, Alternative Bid Items					\$ -		\$ 552,000.00		\$ 400,000.00		\$ 338,528.00
Subtotal, Base Bid and Alternative Bid Items					\$ 65,016,506.00		\$ 77,520,613.00		\$ 86,963,654.00		\$ 87,124,431.00
ADDITION (+) OR DEDUCTION (-)					\$ -		\$ -		\$ (700,000.00)		\$ -
TOTAL AMOUNT OF BID					\$ 65,016,506.00		\$ 77,520,613.00		\$ 86,263,654.00		\$ 87,124,431.00

	1 PCL Construction, Inc. San Marcos, CA	2 J. F. Shea Construction, Inc. Walnut, CA	3 Archer Western Contractors LLC San Diego, CA
Item - Lead Time for Delivery	<u>Calendar Days</u>	<u>Calendar Days</u>	<u>Calendar Days</u>
Pall Membrane System	214	300	154
Wedeco UV System	228	280	168
Chemical Metering Pumps	140	247	84
Stainless Steel Slide Gates	182	250	168
Membrane Feed Water Strainers	196	245	189
Vertical Shaft Flocculators	168	275	140
Inclined Plate Settlers	140	150	126
Sleeve Valves	238	250	168
Surge Tanks	168	165	140
Bladder Tanks	168	165	140
Medium Duty Submersible Pumps	126	275	140
Stainless Steel Pipe	156	250	154
HDPE Pipe	120	200	120
Magnetic Flow Meters	154	154	154
Membrane Boiler System	140	235	60
Steel Pipe (CML&C, CML&EC, EL&C)	156	250	168
Vertical Turbine Pumps	238	280	182
Variable Frequency Drives	196	196	196
Control Panels with PLC's	220	220	220
MCCs	196	196	196
Automatic Transfer Switches	196	196	196
Switchboards	196	196	196
Generators	230	230	240
Duplex Air Compressor	112	220	84
Water Softener Vessels	172	240	112
Polymer Blending Equipment	126	230	126
Circular Sludge Collectors	252	200	196
Centrifuge Thickening Equipment	280	230	483
Shaftless Screw Conveyors	168	240	140

	1 PCL Construction, Inc. San Marcos, CA	2 J. F. Shea Construction, Inc. Walnut, CA	3 Archer Western Contractors LLC San Diego, CA
Item - List Manufacturer	Item - List Manufacturer	Item - List Manufacturer	Item - List Manufacturer
Membrane System	Pall	Pall	Pall
UV System	Wedeco	Wedeco	Wedeco
04200 Concrete Unit Masonry	Orco Block Co.	Orco Block	Orco Block
07730 Roof Top Fall Arrest System	Flexible Lifeline Systems	Flexible Lifeline	Twin Multi-Span Lifeline Systems
10880 Truck Scale	Cardinal Scale Manufacturing	Mettler Toledo	Twin Flextraxx Systems
11229 Vertical Shaft Flocculators	Philadelphia Mixer	Chemineer	Mettler-Toledo
11246 Polymer Blending Equipment	VeloDyne	Velodyne	Chemineer
11263 Chlorine Dioxide Generation System	Siemens	Siemens-Millennium	Velodyne
11294B Stainless Steel Slide Gates	Waterman	Rodney Hunt	Siemens
11305 Surge Tank	Pulsco	Pulsco	Waterman
11306 Bladder Tank	Pulsco	Pulsco	Pulsco
11312D Vertical Turbine Pumps	ITT (Goulds)	Sulzer Pumps	Pulsco
11312K Medium Duty Submersible Pumps	ABS	Flygt	ITT Goulds
11350 Inclined Plate Settlers	Meurer Research	Jim Meyers & Sons	Flygt
11351 Rectangular Sludge Collectors	Polychem a division of Brentwood Industries	Polychem	MRI
11352 Circular Sludge Collectors	Ovivo/Eimco	Westech	Polychem
11358 Centrifuge Thickening Equipment	Westfalia	GEA Westfalia	Westech
11372A Duplex Air Compressor	Garnder Denver	Mattei	GEIA Westfalia
11900 Membrane Feed Water Strainers	Fluid Engineering	Hydac	Gardner Denver
13206 FRP Tanks	Pacific Tank Ltd.	Midwestern Fab	Boll
13209 Welded Steel Tanks	South Gate Engineering	Integrated 8 Solutions	Pacific
13447 Electric Motorized Actuators	AUMA	Rotork	Crosno
14555 Shaftless Screw Conveyors	JDV Equipment	JDV	Rotork
15056 Ductile Iron Piping	McWane	US Pipe	IDV
15064 PVC Pressure Piping	Ipex	Napco	US Pipe
15076 CML&C Steel Pipe	Jisco	Midamerica	Vinyl Tech
15100 Manual Valves	Dezurik	Dezurik	JIFCO
15111 Specialty Ball Valves	Apollo	Apollo	PRATT
15114 Specialty Check Valves	Apco	Crane	METSO
15115 Globe and Angle Valves	Crane	Crane	APCO
15123 High Performance Butterfly Valves	Dezurik	Dezurik	Crane
15130 Sleeve Valves	Bailey Valve	Bailey	Dezurik
15255 Stainless Steel Piping	Mid American	Midamerica	Bailey
15466 Water Softener Vessels	Culligan	Culligan	JIFCO
15800 HVAC Systems	Compu-Aire	USA	Culligan
15800 Membrane Boiler System	Patterson-Kelley	Patterson-Kelley	Daiken
16155 Motor Control Centers	Allen Bradley	Allen Bradley	Patterson-Kelley
16418 Variable Frequency Drives	Allen Bradley	Allen Bradley	Allen Bradley
16621 Generators	Caterpillar	Caterpillar	Allen Bradley
			Catterpillar

	1 PCL Construction, Inc. San Marcos, CA	2 J. F. Shea Construction, Inc. Walnut, CA	3 Archer Western Contractors LLC San Diego, CA
Item - List Manufacturer	Item - List Manufacturer	Item - List Manufacturer	Item - List Manufacturer
16625 Automatic Transfer Switch	Zenith	Asco	ASCO
17200 Magnetic Flow Meters	ABB	ABB	ABB
17300 Control Panels with PLCs	Modicon	Modicon	Modicon

IRWD
 Bid Summary
 Baker Water Treatment Plant, PR 11218 (1417)
 List of Subcontractors

1 PCL Construction, Inc. San Marcos, CA		2 J. F. Shea Construction, Inc. Walnut, CA		3 Archer Western Contractors San Diego, CA	
Subcontractor Name, Address	Work to be Subcontracted	Subcontractor Name, Address	Work to be Subcontracted	Subcontractor Name, Address	Work to be Subcontracted
KDC Systems, Los Alamitos, CA	System Integration	KDC, Los Alamitos, CA	System Integration	KDC Systems, 4462 Corporate Center Dr., Los Alamitos, CA	System Integration
Golden State Boring & Pipe Jacking, Chino, CA	Jack & Bore				
RB Sheet Metal, Mentone, CA	Metal Panels - Willard Roof	R B Sheet Metal, Mentone, CA	Sheet Metal/Roofing	RB Sheet Metal, Inc. 1893 Capri Ave., Unit G, Mentone, CA	Metal Panels Roofing
Cor-Ray Painting Co., Santa Fe Springs, CA	Water proof & painting	Cor-ray Painting, Santa Fe Springs, CA	Painting	C L Industrial Coatings 11650 Western Ave., Stanton, Ca 900680	Painting
Gerdau Reinforcing Steel, San Diego, CA	Rebar supply & install	Gerdau, San Bernardino, CA	Rebar	Gerdau 5425 Industrial Pkwy., San Bernardino, CA	Rebar
Best Interiors, Anaheim, CA	Drywall & metal framing	Allied Steel, Riverside, CA	Metals		
McGuire Contracting, Fontana, CA	Structural Concrete			McGuire Contracting 16579 Slover Ave., Fontana, CA	Structural Concrete
Western Paving Contracting, Irwindale, CA	AC Paving	Western Paving, Irwindale, CA	AC Paving	Emperial Paving Company 12070 Telegraph Road., Ste. 207, Santa Fe Springs, Ca 90670	Asphalt
McKenna General Engineering, Corona, CA	Earthwork				
Allied Steel, Riverside, CA	Structural Steel Supply & Install			Allied Steel 1027 Palmyrita Ave., Riverside, Ca 92507	Structural Steel

IRWD
 Bid Summary
 Baker Water Treatment Plant, PR 11218 (1417)
 List of Subcontractors

1 PCL Construction, Inc. San Marcos, CA		2 J. F. Shea Construction, Inc. Walnut, CA		3 Archer Western Contractors San Diego, CA	
Subcontractor Name, Address	Work to be Subcontracted	Subcontractor Name, Address	Work to be Subcontracted	Subcontractor Name, Address	Work to be Subcontracted
Herrera & Sons, Fallbrook, CA	Masonry & Veneer	Kretschmar & Smith, Riverside, CA	Masonry	Herrera & Sons 1104 Arroyo Pacifica, Fallbrook CA 92028	Masonry
Los Angeles Air Conditioning, La Verne, CA	HVAC	AMF, Fullerton, CA	HVAC	Los Angeles Air Conditioning, 1714 Lindbergh St., La Verne, CA	HVAC
Astro Mechanical, El Cajon, CA	Plumbing			ASTRO Mechanical, 603 S. Marshal Ave., El Cajon, CA 92020	Plumbing
Helix Electric, San Diego, CA	Electrical	Helix, San Diego, CA	Electrical	Helix Electric 6795 Flanders Drive, San Diego, CA 92121	Electrical & Instrumentation
				Steve Bubalo Construction Co. 128 E. Live Oak Ave., Monrovia, CA 91016	Underground Pipe
				Condon Johnson & Associates 3125 E. Guasti Rd., Ontario, CA	Shoring

Bid Date: October 1, 2013 at 2:00 p.m.

Bid Summary EXHIBIT "B"

Baker Water Treatment Plant Raw Water Conveyance Facilities, PR 11218 (1417)

Bid Item	Description	Unit	Quantity	Engineer's Estimate		1		2		3	
				Unit Price	Total Bid Amount	Pacific Hydrotech Corp. Perris, CA	Total Bid Amount	Schuler Engineering Corporation Corona, CA	Total Bid Amount	Norman A. Olsson Construction, Inc. Orange, CA	Total Bid Amount
1	Raw Water Pump Station: Furnish all labor, materials, equipment, services and appurtenant work, except for Items 2 through 9 below, for the construction of the Baker Water Treatment Plant Raw Water Pump Station, Rattlesnake Reservoir Piping Modifications, and Baker Pipeline Air Valves	1	LS	\$ 3,372,000.00	\$ 3,372,000.00	\$ 4,283,200.00	\$ 4,283,200.00	\$ 4,625,000.00	\$ 4,625,000.00	\$ 4,764,000.00	\$ 4,764,000.00
2	OC-33 Turnout and Santiago Lateral Air Valves: Furnish all labor, materials, equipment, services and appurtenant work, except for Item 1 and Item 3 through 10 below, for the construction of the OC-33 Turnout Improvements and Santiago Lateral Air Valves	1	LS	\$ 421,000.00	\$ 421,000.00	\$ 429,000.00	\$ 429,000.00	\$ 390,000.00	\$ 390,000.00	\$ 550,000.00	\$ 550,000.00
3	Mobilization/Demobilization (maximum of 4% of Total for Bid Items 1, 2, 4, 5, 6, 7, and 8)	1	LS	\$ 158,000.00	\$ 158,000.00	\$ 198,000.00	\$ 198,000.00	\$ 228,000.00	\$ 228,000.00	\$ 220,000.00	\$ 220,000.00
4	Project Dewatering (including compliance with NPDES Permit	1	LS	\$ 30,000.00	\$ 30,000.00	\$ 21,400.00	\$ 21,400.00	\$ 320,000.00	\$ 320,000.00	\$ 20,000.00	\$ 20,000.00
5	Trench and Project Safety Measures, Sheeting, Shoring and Bracing	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 1,300.00	\$ 1,300.00	\$ 20,000.00	\$ 20,000.00	\$ 80,000.00	\$ 80,000.00
6	Startup and Testing	1	LS	\$ 49,000.00	\$ 49,000.00	\$ 1,000.00	\$ 1,000.00	\$ 45,000.00	\$ 45,000.00	\$ 50,000.00	\$ 50,000.00
7	Operation & 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
8	Final Record Drawings	1	LS	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00
9	Extended Warranty	1	LS	\$ 80,000.00	\$ 80,000.00	\$ 20,700.00	\$ 20,700.00	\$ 10,000.00	\$ 10,000.00	\$ 40,000.00	\$ 40,000.00
	SUBTOTAL, Base Bid Items				\$ 4,185,000.00		\$ 4,979,600.00		\$ 5,663,000.00		\$ 5,749,000.00
	Alternative Bid Items										
Item No. A-1	Builder's Risk Insurance	1	LS		\$ -	\$ 16,144.00	\$ 16,144.00	\$ 54,400.00	\$ 54,400.00	\$ 15,000.00	\$ 15,000.00
	SUBTOTAL, Alternative Bid Items				\$ -	\$ 16,144.00	\$ 16,144.00	\$ 54,400.00	\$ 54,400.00	\$ 15,000.00	\$ 15,000.00
	SUBTOTAL, Base Bid and Alternative Bid Items				\$ 4,185,000.00	\$ 4,995,744.00	\$ 4,995,744.00	\$ 5,717,400.00	\$ 5,717,400.00	\$ 5,764,000.00	\$ 5,764,000.00
	ADDITION (+) OR DEDUCTION (-)				\$ -	\$ -	\$ -	\$ (152,000.00)	\$ (152,000.00)	\$ -	\$ -
	TOTAL AMOUNT OF BID				\$ 4,185,000.00	\$ 4,995,744.00	\$ 4,995,744.00	\$ 5,565,400.00	\$ 5,565,400.00	\$ 5,764,000.00	\$ 5,764,000.00

Bid Date: October 1, 2013 at 2:00 p.m.

Bid Summary
Baker Water Treatment Plant Raw Water Conveyance Facilities, PR 11218 (1417)

	1 Pacific Hydrotech Corp. Perris, CA	2 Schuler Engineering Corporation Corona, CA	3 Norman A. Olsson Construction, Inc. Orange, CA
Lead Time for Delivery Of:	Calendar Days	Calendar Days	Calendar Days
Vertical Turbine Pumps with Motors	140	168	210
Steel Pipe	60	168	90
Ball Valve	168	168	210
Check Valves	112	112	210
Pressure Reducing Valves	42	70	210
Butterfly Valves	98	98	90
Magnetic Flow Meter	42	140	210
Magnetic Flow Meter - OC-33	42	140	90
Switchboard	182	182	240
Motor Control Center	182	182	240
Variable Frequency Drivers	182	182	240
Control Panels with PLC's	70	56	240
MWD 4-inch HP BFV	84	56	90

List of Manufacturers	Manufacturer	Manufacturer	Manufacturer
Vertical Turbine Pumps	Goulds	Goulds	Goulds
Motors	General Electric	General Electric	General Electric
Magnetic Flow Meter	ABB	ABB	ABB
Magnetic Flow Meter - OC-33	ABB	ABB	ABB
Ball Valve	PRATT	PRATT	PRATT
Butterfly Valves	PRATT	PRATT	DeZurik
Pressure Reducing Valves	Cla-Val	Cla-Val	Cla-Val
Steel Pipe	Southland	Levco Fab	Southland
Air Release Valves	Crispin	Crispin	Apco
Variable Frequency Drives	Allen Bradley	Allen Bradley	Allen Bradley
Motor Control Center	Allen Bradley	Allen Bradley	Allen Bradley
Control Panels with PLCs	Control Technologies	Modicon/Trimax	Modicon
Check Valves	PRATT	PRATT	Apco

Bid Date: October 1, 2013 at 2:00 p.m.

Bid Summary
Baker Water Treatment Plant Raw Water Conveyance Facilities, PR 11218 (1417)

1 Pacific Hydrotech Corp. Perris, CA		2 Schuler Engineering Corporation Corona, CA		3 Norman A. Olsson Construction, Inc. Orange, CA	
List of Subcontractors		List of Subcontractors		List of Subcontractors	
Subcontractor/ Address	Work to be Subcontracted	Subcontractor/ Address	Work to be Subcontracted	Subcontractor/ Address	Work to be Subcontracted
Apex Plastering El Monte, Ca	Lath & Plaster	Apex Plastering El Monte, Ca	Plastering	Apex Plastering El Monte, CA	Stucco
AMS Fullerton, Ca	HVAC	Menifee Valley AC Lake Elsinor, CA	HVAC	Christian Bros. Mira Loma, CA	HVAC
National Coating & Lining Murrieta, CA	Painting/Coating	Haight Painting Alta Loma, CA	Painting	Murphy Industrial Signal Hill, CA	Painting
Regan Paving Corona, CA	Paving	Regan Paving Corona, CA	Paving	Hardy & Harper Santa Ana, CA	AC Paving
REMCO Bloomington, CA	Structural Steel			REMCO Bloomington, CA	Structural Steel
Amber Steel Rialto, CA	Rebar	D & D Reinforcing Crestline, Ca	Reinforcing Steel	Amber Steel Rialto, CA	Rebar
Vanciu Electric Mission Viejo, Ca	Electric	Davis Electric Yucaipa, Ca	Electric	Halcyon Electric Placentia, Ca	Electrical
		AriThane Foam Products Corona, CA	Roofing	Stone Roofing Azusa, Ca	Roofing
		Winegardner Yucaipa, Ca	Masonry	Winegardner Yucaipa, Ca	Masonry

EXHIBIT "C"

12/10/13 Final for Approval

**AMENDED AND RESTATED
AGREEMENT FOR CONSTRUCTION, OPERATION AND
MAINTENANCE OF BAKER WATER TREATMENT PLANT**

THIS AMENDED AND RESTATED AGREEMENT ("Agreement"), dated this _____ day of _____, 2013 ("Effective Date"), is made and entered into by and among EL TORO WATER DISTRICT ("ETWD"), IRVINE RANCH WATER DISTRICT ("IRWD"), MOULTON NIGUEL WATER DISTRICT ("MNWD"), SANTA MARGARITA WATER DISTRICT ("SMWD"), each of the foregoing a California Water District formed under and existing pursuant to Section 34000 *et seq.* of the California Water Code, and TRABUCO CANYON WATER DISTRICT ("TCWD"), a County Water District formed under and existing pursuant to Section 30000 *et seq.* of the California Water Code, each sometimes individually referred to as a "Party" and collectively as "Parties." In addition, the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY ("MWDOC"), a Municipal Water District formed under and existing pursuant to Section 71000 *et seq.* of the California Water Code, shall be a signatory to this Agreement but shall participate only as expressly stated herein.

RECITALS:

WHEREAS, the Parties, along with other agencies, are members of the Santiago Aqueduct Commission ("SAC"), a joint exercise of powers agency formed by agreement on September 11, 1961 to build, operate and manage the Santiago Aqueduct Pipeline. The Santiago Aqueduct Pipeline was modified in conjunction with the construction of the Allen McColloch Pipeline ("AMP") and is now known as the "V.P. Baker Pipeline" or "Baker Pipeline;" and

WHEREAS, under a separate agreement amended and restated effective July 1, 2007, IRWD currently maintains and operates the Baker Pipeline under the direction and on behalf of SAC for the benefit of the owners of capacity in the Baker Pipeline; and

WHEREAS, the Parties are South Orange County water suppliers who rely significantly or totally on treated water supplied by The Metropolitan Water District of Southern California ("MWD") through MWDOC, conveyed from MWD's Diemer Plant through the Allen McColloch Pipeline, as a source of water to provide potable water service within their service areas. Except as expressly stated herein, MWDOC's participation in this Agreement shall be limited to assisting the Parties and MWD in the water billing function; and

WHEREAS, the Baker Pipeline is supplied with untreated water obtained from MWD by MWDOC and conveyed through MWD's Santiago Lateral to a connection between the Santiago Lateral and the Baker Pipeline. Under certain hydraulic conditions, the Baker Pipeline can also be supplied, or in other hydraulic conditions could, with the addition of certain improvements be supplied with untreated water from Irvine Lake, through the Irvine Lake Pipeline. The Baker Pipeline currently serves only the untreated water demands of the SAC agencies, which have decreased over time, and its capacity is underutilized; and

WHEREAS, new treatment technologies are capable of economically treating untreated water to drinking water standards; and

WHEREAS, the Parties and MWDOC, under a memorandum of understanding and amendments thereto, jointly financed a feasibility study, benchmarking and pilot testing, and have determined that construction and operation of facilities to treat water from the Baker Pipeline to a quality suitable for potable use would make cost-effective use of the underutilized Baker Pipeline and would increase water supply reliability by providing an alternative source of treated water; and

WHEREAS, the Parties and MWDOC entered into the Agreement For Construction, Operation And Maintenance of Baker Water Treatment Plant , dated December 15, 2008, and amended by Amendment No. 1 thereto, dated December 23, 2009 (the “Original Agreement”) to provide for the construction, operation and maintenance of water treatment facilities to treat untreated water supplied through the Baker Pipeline, provide for their respective participation, rights and obligations therein, and make related provisions concerning the Baker Pipeline; and

WHEREAS, Amendment No. 1 to the Original Agreement was entered into when the preliminary design of the Baker WTP was substantially completed, to provide for an increase in the rated capacity of the Baker WTP, change the Parties’ respective Capacity Rights to reflect their participation in the revised capacity and make certain other provisions related to the increase; and

WHEREAS, the Allen McColloch Pipeline will not be used for the delivery of product water as contemplated in the Original Agreement, and instead the South County Pipeline will be used for such purposes; and

WHEREAS, in addition to such product water delivery conveyance facilities, the Parties have developed and desire to set out additional details and clarification of certain provisions relating to the use and operation of the Baker WTP; and

WHEREAS, the Parties and MWDOC desire to enter into this Agreement for the purpose of amending, restating and superseding the Original Agreement in its entirety;

NOW, THEREFORE, in consideration of the promises and covenants herein contained, the Parties agree as follows:

AGREEMENT:

Section 1. Definitions.

1.1 “Baker Pipeline” means the facility initially known as the Santiago Aqueduct and subsequently known as the V.P. Baker Pipeline or Baker Pipeline.

1.2 “Baker WTP” means the Baker Water Treatment Plant, a facility for the treatment of untreated water to render it suitable for potable use. The Baker WTP shall include the following components: (1) the Treatment Facilities; and (2) the Product Water Facilities.

1.3 “Baker WTP Subscriber” or “Subscriber” means, at any time, any agency who is

a Party to this Agreement, as originally executed or as may be amended to add or delete Parties as provided herein.

1.4 “Capacity Right” means a Subscriber’s undivided percentage ownership interests in the actual total production capacity of the Baker WTP Treatment Facilities or in the Product Water Facilities, as applicable. The total Capacity Rights in the Baker WTP Treatment Facilities or in the Product Water Facilities, as applicable, shall be deemed to equal the sum of all Subscribers’ Capacity Rights expressed as percentages totaling 100%. The Capacity Rights equate to approximate nominal flow rates, but no change in the percentage Capacity Rights shall occur by reason of any variance between actual flow rates and the nominal flow rates, or increase or decrease in the nominal flow rates as a result of re-rating of the capacity of the Baker WTP or any component thereof, except by amendment to this Agreement. The Capacity Rights are shown in Tables A-1 and A-2 set forth in Exhibit 1 attached hereto, or any amended Tables A-1 or A-2 substituted therefor as provided herein.

1.5 “CFS” means cubic feet per second.

1.6 “Product Water Facilities” means the facilities located downstream of product water pipeline Station 15+51.92 as shown on Drawing C030 of the Construction Plans for the Baker Water Treatment Plant, Volume 3A, dated July 2013 including the product water pipeline between the two existing 16 million gallon reservoirs and the product water pump station; the product water pump station and associated ancillary facilities and equipment; the product water pipeline between the product water pump station and the SCP; the SCP valve vault and ancillary facilities and equipment; and the pipeline connection to the SCP.

1.7 “Project Committee” shall have the meaning specified in Section 6.

1.8 “Rated Capacity” means the approximate nominal rated capacity of the Baker WTP Treatment Facilities or Product Water Facilities, as applicable to the context, which is agreed to be the figure shown as the total in the column under the heading “Approximate Flow Rate (in CFS) corresponding to Capacity Right” in Table A-1 or A-2, respectively, set forth in Exhibit 1.

1.9 “SAC” means the Santiago Aqueduct Commission, a joint exercise of powers agency formed and existing pursuant the SAC Agreement.

1.10 “SAC Agreement” means the Santiago Aqueduct Commission 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, and as may hereafter be amended.

1.11 “SCP” means the facility jointly owned and operated by MWD and SMWD, known as the South County Pipeline.

1.12 “TCWD Pump Station” means the pump station located at the site of the Baker WTP that delivers untreated water from the Baker Pipeline to TCWD’s existing water treatment facilities.

1.13 “Treatment Facilities” means all components of the Baker WTP other than the Product Water Facilities. Treatment Facilities includes, without limitation, (1) the treatment plant; (2) the TCWD pump station; (3) the pump station for deliveries from Irvine Lake; and (4) all associated lands, leaseholds and rights-of way.

Section 2. Design and Construction of the Baker WTP; Capacity Rights.

2.1 **Design; CEQA.** The Parties acknowledge and agree that the Baker WTP has been designed as set forth in the Construction Plans for the Baker Water Treatment Plant, dated July 2013, and the Construction Plans for the Baker Water Treatment Plant Raw Water Conveyance Facilities, dated August 2013. The Parties further acknowledge and agree that pursuant to the California Environmental Quality Act, an environmental impact report for the Baker WTP project was certified by IRWD on April 25, 2011, acting as lead agency

2.2 **Construction; Change Orders; Permits, Land and Right-of-Way.** Subject to funding and reimbursement as provided herein, IRWD has been and shall continue to be responsible for overseeing and implementing the planning, environmental documentation, land and right-of-way acquisition, permitting, design and construction of the Baker WTP, including the procurement and award of all contracts IRWD deems necessary for such purpose. The foregoing notwithstanding, Project Committee approval shall be required for (1) the award of any original contracts for environmental documentation, design and construction, (2) the issuance of any design change variance over \$30,000, and (3) the issuance of any construction change order over \$100,000. Upon the issuance of a construction change order in an amount that, together with the amount of previously issued change orders, exceeds \$100,000 in the aggregate as calculated since the award of the contract or since the giving of the most recent prior notification under this sentence (excluding for such purpose any individual construction change order with an amount over \$100,000), IRWD shall provide written notification of the issuance of such aggregate amount to each Party.

The Baker WTP is proposed to be constructed on property currently owned by IRWD. IRWD’s responsibilities shall not include legal entitlements necessary to introduce Baker WTP product water into the SCP or any unavailability of the SCP to deliver product water. The Parties (other than IRWD) and MWDOC shall be responsible for all such legal entitlements and all contractual and other arrangements relating to the ownership, use, operation and maintenance of the SCP including any SCP outage.

2.3 **Oversizing.** The Parties acknowledge and agree that the Baker WTP has been designed to have a nominal capacity approximately equal to the Rated Capacity through each component. It is agreed that oversizing of components shall be minimized, but some components may be oversized if deemed efficient by IRWD and approved by the Project Committee for ease of future expansion. The Parties’ Capacity Rights shall include any such oversizing, and such Parties shall be entitled to credit for their Capacity Right share of oversizing if and to the extent they are participants in any future expansion, or reimbursement therefor from the expansion participants, if and to the extent such Parties do not participate in the expansion. Such oversizing credit or reimbursement shall be calculated based on the depreciated replacement cost of the oversizing. For this purpose, (i) pumps and electrical improvements

shall be deemed to have a useful life of twenty (20) years and all other improvements shall be deemed to have a useful life of fifty (50) years, (ii) each improvement's useful life shall be measured from its initial installation or most recent replacement or refurbishment, whichever is later, and (iii) cost shall be based on the prorated amount of IRWD's documented cost of installation of the oversized component attributable to the oversizing. The determination whether to oversize any components shall be made during preliminary design of the Baker WTP. It is acknowledged that the Rated Capacity is the design capacity of the Baker WTP and is the sum of the nominal flow rates corresponding to the Capacity Rights subscribed by the Parties. Such nominal flow rates, together with the corresponding Capacity Rights, are set forth in Tables A-1 and A-2, contained in Exhibit "1" to this Agreement, which is attached hereto and incorporated herein by this reference.

2.4 Variance From Rated Capacity. It is acknowledged that the design or rated capacity of the Baker WTP may vary from the Rated Capacity as initially constructed or may change from time to time thereafter, due to regulatory requirements or other unforeseen circumstances, and neither IRWD nor any other Party shall have any liability therefor; provided, any Party shall be entitled to submit for consideration by the Project Committee a proposal for mitigation of such circumstances. Such change or variation shall not entitle any Party to an adjustment of its Capacity Right percentage, which shall be and remain fixed. The rights and obligations of the Parties shall be determined in accordance with their Capacity Rights, and not their corresponding approximate nominal flow rates as shown in Tables A-1 and A-2.

2.5 Ownership and Operation; Modification. Subject to the Capacity Rights as described herein, IRWD shall own and operate the Baker WTP. The Subscribers will own capacity, represented by their Capacity Rights, but will not otherwise have ownership interests in any Baker WTP physical facilities, lands, or rights-of-way. The Baker WTP shall not be governed by SAC or in any way subject to the SAC Agreement. IRWD shall operate the Baker WTP in an efficient and economical manner, maintaining it in good repair and working order, all in accordance with recognized sound engineering and management practices. The Parties acknowledge that, with notice to the Subscribers stating the cause and with the approval of the Project Committee, IRWD may modify the Baker WTP and allocate the cost thereof as provided in this Agreement, if such modification is determined to be necessary to satisfy regulatory requirements or for other reasons consistent with sound engineering and management practices.

2.6 Manager/Operator Other Than IRWD. If IRWD optionally terminates all of its Capacity Rights, then unless the remaining Parties and IRWD mutually agree upon an arrangement for IRWD to continue as a contract manager/operator, the Project Committee shall select another manager/operator for the Baker WTP, except for the Irvine Lake pump station, with respect to which IRWD shall continue to be the manager/operator. Irrespective of whether IRWD continues to serve as manager/operator of the Baker WTP, IRWD shall continue to own the Baker WTP, and upon IRWD's termination of all of its Capacity Rights, the Parties shall execute a lease for the use of the IRWD lands occupied by the Baker WTP by the remaining Parties incorporating standard commercial lease terms as applicable and as are not inconsistent with the exercise of the Capacity Rights or the provisions of this Agreement. The then-unused portion of the land use cost included within the capital cost as described in Section 3 shall be deemed to constitute the entire rental amount due under such lease, and no additional rental or land use cost shall be due to IRWD during the lease term. The term of the lease shall be the

same as the term of this Agreement.

Section 3. Project Capital Design and Construction Costs.

3.1 **Capital Costs; Land.** The capital costs of the design and construction of the Baker WTP shall include, but are not limited to, the costs of environmental documentation, design, permits, performance and payment bonds, legal fees, land and right-of-way acquisition, surveying, geotechnical services, construction, construction management, inspection and accounting. The capital costs shall include the cost for the use of land furnished by IRWD as a site for the Baker WTP, in the amount \$ 440,000, acknowledged by the Parties to be the product of 4 acres, which represents the footprint of the plant area, pipeline area and ancillary areas related to plant operations, and \$ 110,000 per acre, which represents the appraised value for institutional use as determined by an appraisal prepared by an MAI appraiser selected and retained by IRWD. Exhibit "2" to the Original Agreement is hereby deleted from the Agreement.

3.2 **Deposits.** Each Party shall make deposits of its share of the capital costs based on its Capacity Right percentage, upon presentation of invoice, for projected expenditure amounts for the following milestone periods and on the deposit dates indicated:

TABLE B¹

Milestone Period	Date(s) of Deposits	Costs
No. 1: Execution of the Original Agreement to completion of preliminary design	One deposit, due thirty (30) days following execution	Preliminary design; environmental documentation
No. 2: From completion of preliminary design to completion of final design	Quarterly deposits, due each January 1, April 1, July 1 and October 1 for the ensuing quarter	Final design; permits; land & right-of way acquisition (other than land use cost)
No. 3: Completion of Final Design to Completion of Construction	Quarterly deposits, due each January 1, April 1, July 1 and October 1 for the ensuing quarter	Construction; land use cost; construction management and support services; permits; land & right-of way acquisition (other than land use cost)

Feasibility study, benchmarking, pilot testing and related costs were previously incurred by the Parties in shares specified under the memorandum of understanding referenced in the recitals of this Agreement. It is acknowledged and agreed that, prior to the calculation of the Milestone No. 1 preliminary design and environmental documentation cost deposits, such previously-incurred costs were reconciled and adjusted to equal the Parties' respective Capacity

¹ Shading indicates milestone completed as of the Effective Date.
11/20/13.

Right shares by means of credits and debits applied to the Parties' Milestone No. 1 deposit amounts, and further, that pursuant to Amendment No 1 to the Original Agreement, the Parties' costs incurred prior to the date of Amendment No. 1 were reconciled and adjusted in the manner provided in this Section 3.2 to reflect the changes in the Rated Capacity and the Capacity Rights effectuated by said amendment.

At the second and each subsequent deposit date, the projected expenditure deposit amount shall be adjusted by IRWD to include excess or shortfall from the preceding deposit. Within one hundred twenty (120) days following project completion or resolution of all cost-related disputes with project contractors and vendors under the project contracts, whichever occurs later, the Parties shall pay or be refunded, as the case may be, their shares of any difference between the deposit amounts and the actual costs. Any costs, invoices, reimbursements or recoveries received by IRWD after such one hundred twenty day (120) period will be allocated and billed or refunded, as applicable, to the Parties with the first year's operation and maintenance costs.

3.3 Allocation Between Treatment Facilities and Product Water Facilities. The allocation of construction costs among the Parties pursuant to Section 3.2 will utilize the Capacity Rights, which are different for the Treatment Facilities and the Product Water Facilities, and as a result it is necessary to allocate all Baker WTP construction costs between the Treatment Facilities and the Product Water Facilities. It is acknowledged that for such purpose use of the engineer's estimate is a more accurate method than bid items which can be affected by the competitive bidding process. For such purpose, the engineer's estimate for the Product Water Facilities, equating to 11.54% of the construction cost associated with the Construction Plans for the Baker Water Treatment Plant, dated July 2013, will be used to proportionately allocate construction costs between the Treatment Facilities and the Product Water Facilities.

Section 4. Operation, Maintenance, Repair and Replacement Costs.

4.1 Classification of Costs as Fixed or Variable. Operation, maintenance, repair and replacement costs shall be classified by IRWD as either fixed or variable costs. "Fixed costs" are costs that do not vary with the quantity of product water delivered from the Baker WTP. "Variable costs" are costs that vary with the quantity of product water delivered from the Baker WTP. Costs shall be classified as either "Fixed costs" or "Variable costs" in accordance with standard accounting practices for water production facilities and shall be subject to review by the Project Committee during the annual budget approval process pursuant to Section 4.2 and Section 4.3. Exhibits "3" and "4" to the Original Agreement are hereby deleted from the Agreement.

4.2 Fixed Costs – General. Fixed costs shall be allocated to the Parties based on their respective Treatment Facilities and Product Water Facilities Capacity Rights percentages, set forth in Tables A-1 and A-2. Table A-3, set forth in Exhibit "1," does not affect Capacity Rights, applies only to the allocation of variable costs as provided below and shall not be used to allocate fixed costs. Annually, by April 1 of each year, IRWD shall prepare a budget for fixed costs of the Baker WTP during the next budget year (July 1 – June 30) for approval by the Project Committee, and shall provide each Party with a copy of the budget. Each Party's share of the budgeted fixed costs for the budget year shall be payable by advance deposits made

quarterly in four (4) equal installments or as otherwise determined by the Project Committee, and shall be due upon presentation of invoices by IRWD. In the second and each subsequent budget year, any excess/shortfall from the preceding budget year's deposits shall be subtracted from/added to the second quarterly deposit or otherwise addressed as determined by the Project Committee. If and for so long as the Project Committee fails to approve a budget for fixed costs, the Parties' obligations under this Section shall continue to be performed as though the prior year's budget were in effect for the current budget year, and IRWD may reduce the production of the Baker WTP as necessary to operate within such budget.

- 4.2.1 **Fixed Costs – Treatment Facilities.** Fixed costs attributable to the Treatment Facilities shall be allocated to all of the Parties in accordance with their Table A-1 Capacity Rights in the Treatment Facilities.
- 4.2.2 **Fixed Costs – Product Water Facilities.** Fixed costs attributable to the Product Water Facilities shall be allocated to all of the Parties, excluding IRWD, in accordance with their Table A-2 Capacity Rights in the Product Water Facilities.

4.3 **Variable Costs – General.** Variable costs shall be allocated to the Parties as provided in subparagraphs 4.3.1, 4.3.2 and 4.3.3. Each Party's variable costs shall be due and payable upon presentation of monthly invoices by IRWD. IRWD will provide MWDOC and SMWD with the calculation of the quantities of Baker WTP product water delivered to each of the Parties for the purpose of assisting MWDOC and SMWD in determining the SCP flows to be invoiced to the Parties. IRWD shall meter the total quantity of product water delivered from the Baker WTP (upstream of all turnout points). IRWD shall also calculate the total quantity of Baker WTP product water delivered to IRWD, including the amount delivered to IRWD for ETWD in the event ETWD is not taking product water from the Product Water Facilities, by subtracting from such metered product water delivered from the Baker WTP, the flow metered at the product water pump station discharge. On a monthly basis IRWD shall determine any discrepancy between (i) the calculated amount of Baker WTP product water delivered to IRWD and (ii) IRWD's Capacity Right, or in the event ETWD is not taking product water from the Product Water Facilities, the sum of IRWD's and ETWD's Capacity Rights, and reconcile the discrepancy by adjusting the respective amounts of the flows delivered to IRWD (and if applicable, ETWD) and to the Product Water Facilities in the following month. Annually, by April 1 of each year, IRWD shall prepare a budget for variable costs of the Baker WTP during the next budget year for approval by the Project Committee, and shall provide each Party with a copy of the budget. If and for so long as the Project Committee fails to approve a budget for variable costs, the Parties' obligations under this Section shall continue to be performed as though the prior year's budget were in effect for the current budget year, and IRWD may reduce the production of the Baker WTP as necessary to operate within such budget.

Meter error or loss shall be divided among the Parties on a pro-rata basis.

- 4.3.1 **Variable Costs – Allocation Basis and Methodology.** The Parties acknowledge that the quantity of Baker WTP product water delivered to each Party during each monthly billing period shall be deemed equal to each Party's full Capacity Right share of the total metered quantity of

Baker WTP product water delivered from the Baker WTP for such monthly billing period, based on the following: (i) with respect to Parties other than IRWD and ETWD, product water delivered into the Product Water Facilities will be deemed to be the first water delivered from the SCP to each Party during each monthly billing period; (ii) IRWD shall, through metering, calculation and adjustments described below, take delivery of its Capacity Right share of product water directly to IRWD, upstream of the delivery of product water to the Product Water Facilities; and (iii) ETWD shall be deemed to take delivery of its Capacity Right share of product water either through IRWD's product water delivery point and by means of an interconnection between IRWD's and ETWD's systems under separate arrangements between IRWD and ETWD or, when IRWD is not able to deliver water to ETWD through such interconnection, through the Product Water Facilities. ETWD's use of the Product Water Facilities during any billing period shall be prorated based on the number of days (rounded to the nearest whole day) ETWD used the Product Water Facilities.

4.3.2 **Variable Costs – Treatment Facilities.** Variable costs attributable to the Treatment Facilities will be allocated to all of the Parties based on their Table A-1 Capacity Right shares of the total metered quantity of Baker WTP product water delivered from the Baker WTP (upstream of all turnout points) for each monthly billing period.

4.3.3 **Variable Costs – Product Water Facilities.** Variable costs attributable to the Product Water Facilities will be allocated to all of the Parties, excluding IRWD, and, in the event ETWD is not taking product water from the Product Water Facilities, excluding ETWD, based on the actual quantity of Baker WTP product water delivered to each Party for each monthly billing period. For this purpose, the Variable Costs attributable to the Product Water Facilities will be allocated to the Parties based on their Table A-2 Capacity Rights shares for the number of days, determined as provided in Section 4.3.1, when ETWD is using the Product Water Facilities, and will be allocated to the Parties based on their Table A-3 Product Water Facilities variable cost allocation shares, for the number of days, determined as provided in Section 4.3.1, when ETWD is not using the Product Water Facilities.

4.4 **Payment.** Each Party shall pay invoices presented to it by IRWD under Sections 3.2, 4.2 and 4.3 within forty-five (45) days of receipt. In the event that a Party fails to pay the charges within such forty-five-day period, the Party shall be assessed and shall pay a penalty of one and one-half percent (1.5%) of the total outstanding charges each succeeding forty-five-day period or portion thereof that the amount remains unpaid until said charges are paid in full. Funds deposited with IRWD under Sections 3.2 and 4.2 shall earn interest for the benefit of the Party depositing the same at a rate equivalent to the average prevailing rate of earnings on IRWD's invested funds.

4.5 IRWD Labor and Equipment Costs. All design, construction and operation costs allocated to the Parties under this Section and Section 3 shall include the cost of IRWD labor and equipment, on a time and materials basis, using the actual number of man-hours and equipment-hours required (including travel time to and from IRWD facilities), multiplied by the applicable rates for the crew members and equipment deployed. After-hours services (defined as between 4:00 pm on a working day and 6:30 am on the next following working day; “working day” to exclude Saturdays, Sundays and IRWD-designated holidays) will be charged at time and a half.

Equipment will be charged at the prevailing IRWD equipment rates which are subject to adjustment in accordance with standard IRWD practices, without the need for an amendment to this Agreement.

The labor rates are comprised of a direct component that is adjusted periodically whenever IRWD’s Board of Directors approves a salary schedule adjustment (generally, one cost of living adjustment and one competitive wage adjustment each year), and an indirect (general and administrative overhead or “G&A”) component. The G&A component includes a “benefits burden” and a “contract burden.” The G&A benefits-burden rate of 45.3% and the contract burden rate of 33.3% shall become effective on the Effective Date and remain in effect through June 30, 2018, and thereafter are subject to adjustment by IRWD by amendment to this Agreement, beginning on or after June 30, 2018 and thereafter, not more frequently than five (5) year intervals from the prior adjustment.

Such labor rate components shall be applied as follows for each crew member used:

Labor Rate = base hourly salary + (base hourly salary X (benefits burden rate + contract burden rate))

Services contracted by IRWD to others and/or materials used shall be at IRWD’s direct cost and shall not include an IRWD indirect (general and administrative overhead) component.

4.6 Records and Accounts. IRWD shall keep appropriate records and accounts of all costs and expenses relating to conveyance, treatment, and delivery of product water, and the planning, design, construction, replacement, operation, maintenance and repair of the Baker WTP. Said records and accounts shall be provided by IRWD to the Project Committee annually, in advance of the preparation of the annual budgets, and shall be subject to reasonable inspection by any authorized representative of any Party at its expense. Further, said accounts and records shall be audited annually by an independent certified public accounting firm appointed by IRWD pursuant to generally accepted auditing standards as part of IRWD’s annual audit process.

4.7 Sewer Costs. The Baker WTP’s non-reclaimable wastewater will be discharged to IRWD’s sewer collection system. For such purpose, the Baker WTP shall be considered an IRWD sewer service customer and shall pay sewer connection fees in accordance with IRWD’s applicable sewer connection fee schedule in effect on the Effective Date based on average daily flow of 75,000 gallons per day and monthly sewer charges in accordance with IRWD’s applicable sewer rate schedule in effect from time to time. The connection fees, calculated to be \$1,194,000, shall be included in the capital costs to be allocated and paid under Section 3, and the monthly sewer charges

shall be included in the variable charges to be allocated and paid under Section 4.3.2.

4.8 TCWD Pump Station Costs. The Parties acknowledge that the operation of the TCWD Pump Station is necessary to allow the Baker WTP to be supplied by the Baker Pipeline without impeding TCWD's continued ability to operate its existing water treatment facilities supplied by the Baker Pipeline. IRWD agrees to operate, maintain, repair and replace the TCWD Pump Station for the term of this Agreement, whenever necessary to permit operation of both the Baker WTP and TCWD's water treatment facilities. Commencing upon the startup of the Baker WTP, the costs of the TCWD Pump Station operation, maintenance, repair and replacement will be allocated among the Parties under Sections 4.1 – 4.3 in the same manner as other costs attributable to the Treatment Facilities.

4.9 Other Costs. The Parties acknowledge that costs, anticipated or unanticipated, may arise relating to the Baker WTP, such as those mentioned in Section 7.1, MWD requirements, and costs to resolve claims or rights asserted by third parties claiming to have been impacted by the construction or operation of the Baker WTP. Such costs, if approved by the Project Committee as contemplated in Section 7.1, will be shared in proportion to Capacity Rights set forth in Table A-1 or A-2, as applicable.

Section 5. Capacity Right Adjustments and Transfers.

5.1 Transfers Among Subscribers. If any Subscriber determines that its Capacity Right is in excess of its needs, it may transfer, sell or lease such excess to another existing Subscriber or Subscribers, in any manner as such Subscribers shall agree among themselves.

5.2 Subscribers' First Right of Refusal. If any Subscriber has determined that its Capacity Right is in excess of its needs, and wishes to offer the excess for transfer, sale or lease to an agency or agencies other than the existing Subscribers, the Subscriber shall first make a written offer to transfer, sell or lease the excess to all other existing Subscribers. The existing Subscribers shall have the first right of refusal to acquire the excess based on such offer; if the exercise of such rights of refusal are in the aggregate greater than the amount of the excess offered, the exercising and offering Subscribers shall agree among themselves upon a fair method of resolving the oversubscription. In the absence of such an agreement, the oversubscription shall be allocated in proportion to each exercising Subscriber's Capacity Right percentage.

5.3 Transfers to Other Agencies. If there is excess offered in such manner and existing Subscribers do not exercise their rights of first refusal to acquire or lease all of the excess Capacity Rights offered, then the offering Subscriber shall be entitled to offer the unsubscribed portion, on the same terms, to non-Subscribers. The addition of the new Subscriber shall require an amendment to this Agreement.

5.4 Substitution of Capacity Rights Tables. In the event of any transfer, sale or lease pursuant to Section 5.1, 5.2 or 5.3, the affected Subscribers shall so notify all other Subscribers and prepare and submit to all other Subscribers a new Table A-1 and or A-2, which shall be deemed substituted for the existing Table A-1 and/or A-2 in Exhibit "1" as a ministerial matter without the need for amendment. Transfers, sales and leases as provided in Sections 5.1,

5.2 and 5.3 shall be transacted in percentage Capacity Rights, only, and not in flow-rates. The aggregate design or rated capacity of the Baker WTP shall not be modified except by amendment, including an amendment to expand the Baker WTP.

5.5 Amendment to Delete Subscriber; Limitation on Termination. If an existing Subscriber has disposed of all of its Capacity Rights either by negotiated transfer, sale or lease to another Subscriber and/or to a non-Subscriber as provided in Section 5.1, 5.2 or 5.3, then an amendment hereto shall be executed as a ministerial matter to delete such Subscriber as a Party to this Agreement. No other method of termination of Subscribers' interests shall be permitted, except for optional termination of a Capacity Right as provided in Section 5.9 and termination of the Agreement as provided in Section 7.

5.6 No Cost Reduction For Excess Capacity. A Subscriber having Capacity Rights in excess of its needs shall remain responsible for both fixed and variable costs allocable to such capacity under Section 4 and shall not be relieved of such costs unless and until the Subscriber has disposed of the Capacity Rights in accordance with Section 5.1, 5.2 or 5.3.

5.7 Temporary Emergency Use. The provisions of Sections 5.1 through 5.3 notwithstanding, a Subscriber may by separate agreement allow the use of all or a portion of its Capacity Right by any Party on a temporary, emergency basis. Such Subscriber may determine the value of the temporary, emergency use. The temporary, emergency use shall in no event exceed the Subscriber's Capacity Right. The agreement for temporary, emergency use shall include rental or other sufficient use rights for the Baker Pipeline, in compliance with Section 8.

5.8 Baker Pipeline Sufficient Capacity Requirements Applicable to Transfers. In conjunction with all transfers, sales, leases or temporary, emergency use rights under this Section 5, all Subscribers and new Subscribers shall be in compliance with Section 8.

5.9 Optional Termination. In addition to the rights under Sections 5.1 through 5.3, any Party has the right to optionally terminate all or a portion of its Capacity Right as provided in this Section.

5.9.1 Determination Dates. IRWD shall provide written notice to all Parties at the following times: (1) within five (5) days following substantial completion of the preliminary design of the Baker WTP; and (2) within five (5) days following the determination of the Project Committee, after the opening of bids for construction of the Baker WTP, that the Project Committee will not direct IRWD to reject all bids in order to permit redesign and rebidding at the same plant capacity. In each notice, IRWD shall specify the date of the substantial completion of the preliminary design or the date of such Project Committee determination regarding bid results, as applicable (each, a "Determination Date"). Within forty-five (45) days after a Determination Date, any Party may elect to terminate all or a portion of its Capacity Right, by delivery of a written notice during said forty-five (45) day period to all Parties, specifying the portion of its Capacity Right to be terminated and the portion, if any, it is retaining, each portion to be stated both as a flow rate in CFS and as a percentage of total

Capacity Rights (e.g., if 10% is held, terminating 5% and retaining 5%). It is acknowledged by the Parties that the elective termination process relative to the first and second Determination Dates has been completed, no such elections were made, and such elective termination rights have expired.

- 5.9.2 **Elective Termination.** Any Party who wishes to acquire any of the terminated Capacity Rights shall so advise the other Parties in writing within thirty (30) days following the final date for the notice required to be given by the terminating Parties under Section 5.9.1, specifying the amount the Party wishes to acquire. If the aggregate amount of terminated Capacity Rights requested in such notices from the interested Parties does not exceed the total available amount of terminated Capacity Rights, each such Party shall receive the amount it requested. If the aggregate amount of terminated Capacity Rights requested in such notices exceeds the total available amount of terminated Capacity Rights, the shortfall shall be allocated to the requesting Parties in proportion to their existing Capacity Rights preceding the Determination Date. IRWD shall prepare and submit to all Subscribers a new Table A-1 and Table A-2 reflecting the changes, which shall be deemed substituted for the existing Table A-1 and Table A-2 in Exhibit "1" as a ministerial matter without the need for amendment. To the extent of any terminated Capacity Rights that no Party wishes to acquire, with the approval of the Project Committee, the Baker WTP shall be reduced in size to delete any or all of the flow represented by the unwanted terminated Capacity Rights, except as provided in Section 5.9.5.
- 5.9.3 **Termination of Cost Obligations.** The terminating Party shall, in any event, remain obligated for the share of costs allocable to the terminated Capacity Right under Section 3 through the applicable Determination Date, but shall be relieved of its obligations with respect to the terminated Capacity Right's share of all subsequently incurred costs, and Section 5.6 shall not apply.
- 5.9.4 **Substitution of Capacity Rights Tables.** In the event of an exercise of an optional termination(s) under this Section, IRWD shall prepare and submit to all Parties a new Table A-1 and Table A-2, which shall be deemed substituted for the existing Table A-1 and Table A-2 in Exhibit "1" as a ministerial matter without the need for amendment, deleting the terminated Capacity Right, reflecting downsizing of the Baker WTP, if any, and adjusting the remaining percentages to reflect terminated Capacity Rights transferred to acquiring Parties and/or proportional allocation to all Parties of any terminated Capacity Right not acquired, as necessary to cause the total to remain 100%.
- 5.9.5 **Termination of Agreement For Insufficient Capacity.** The foregoing notwithstanding, if optional terminations timely exercised under this

Section after any Determination Date, after giving effect to any timely acquisitions of the terminated Capacity Rights by other Parties or non-Parties pursuant to Section 5.9.2, reduce the total nominal design capacity to less than the Rated Capacity, then the Project Committee shall decide, based on the vote of the remaining Capacity Rights, whether to terminate this Agreement; provided, however, that the Parties' respective obligations to pay any costs for which IRWD has not then been reimbursed under Section 3, including any costs due under outstanding contracts, shall survive the termination.

- 5.9.6 **No Further Elections To Terminate After Redesign.** If after a bid opening the project is reduced in size to delete terminated Capacity Rights and redesigned under Section 5.9.2, then anything to the contrary herein notwithstanding, no further Determination Date(s) shall be deemed to occur under Section 5.9.1.

Section 6. Project Committee.

The Project Committee shall consist of one representative selected by each Party and one representative selected by MWDOC. The MWDOC representative shall be a nonvoting member of the Project Committee. Each Party and MWDOC shall also select an alternate representative to serve in the absence of its Project Committee representative. The primary purpose of the Project Committee shall be to facilitate communication among the Parties and aid in the administration of this Agreement. IRWD shall submit to the Project Committee any proposed design of a new component of the Baker WTP, any modification of the Baker WTP, any proposed change order requiring Project Committee approval under Section 2.2, each proposed annual budget, and any other required submission subject to Project Committee review and/or approval pursuant to this Agreement. Any other Party may also submit to the Project Committee any proposed design of a new component or modification of the Baker WTP. Decisions of the Project Committee shall require a simple majority of the Capacity Rights, with each representative having a vote weighted according to the Capacity Right percentage of the Party he or she represents, but in no event shall the vote of a Party who has exercised optional termination be weighted to reflect any terminated Capacity Right. The Project Committee shall meet periodically as needed or as requested by any Party, but at least once a year, to review and approve such items submitted to the Project Committee. If a Party fails to provide a written indication to the Project Committee within sixty (60) days from the request to allow sufficient time for any necessary governing board consideration how it wishes to cast its vote, then the Party's Capacity Right-weighted vote shall be deemed to be a vote in favor of the requested approval.

Section 7. Term.

7.1 **Termination Events; Extension.** This Agreement shall terminate on the earliest of the following events: (1) the date of any termination pursuant to Section 5.9.5, (2) 50 years from the date of this Agreement, (3) such time as a man-made or natural disaster destroys at least 50% of the Baker WTP, or (4) such time as regulatory changes applicable to the Baker WTP have been or will be imposed and/or implemented by regulatory agencies, with which IRWD

cannot comply, as determined by the Project Committee, or which the Project Committee determines would necessitate cost-prohibitive changes to the Baker WTP. The foregoing term is established by the Parties to coincide with the useful life of the Baker WTP. It is the intention of the Parties to negotiate in good faith an extension of the term of this Agreement, which negotiations shall commence not later than 10 years prior to anticipated termination of the Agreement under (2) above. Any such extension shall require an amendment to this Agreement approved by those parties willing to extend the term. Upon termination, the Capacity Rights shall expire, and no compensation shall be payable to any Party on account of such termination. If termination occurs under (3) above, any proceeds of insurance carried pursuant to Section 10.4 and funded as fixed costs under Section 4.1 shall be divided according to Capacity Rights.

7.2 Assets and Demolition Costs. Upon termination, all Baker WTP physical facilities, lands and rights-of-way shall be retained by IRWD as the owner. Costs for such termination, including demolition and decommissioning costs, shall be borne by IRWD.

Section 8. Baker Pipeline Capacity.

8.1 Minimum Baker Pipeline Capacity. Each Party shall have secured the rights, separately from this Agreement and through a means permitted under the SAC Agreement, to capacity or additional capacity through Reaches 1U, 2U, 3U, 4U and 5U of the Baker Pipeline at least sufficient to utilize the nominal flow rate corresponding to its Capacity Right in the Treatment Facilities. The Parties acknowledge that, concurrently with this Agreement, they are entering into an agreement for transfers of Baker Pipeline capacity among the Parties, in order to satisfy the foregoing requirement for the initial Subscribers. Exhibit "5" to the Original Agreement is hereby deleted from the Agreement.

8.2 Term of Leased Baker Pipeline Capacity. If Baker Pipeline capacity is acquired or held by lease, the lease shall have a term at least equal to the remaining term specified in clause (1) of Section 7.1.

8.3 Right To Obtain Product Water Limited By Baker Pipeline Capacity. Anything in this Agreement to the contrary notwithstanding, a Subscriber's right to receive Baker WTP product water shall be deemed to be the lesser of the Subscriber's Capacity Right in the Treatment Facilities as shown in Table A-1 and its Baker Pipeline capacity, in each reach. IRWD will operate the Baker WTP to produce a flow not greater than the sum of the flow rates permitted by the preceding sentence and the Parties' variable costs shall be allocated accordingly; provided, however, fixed costs shall be allocated as provided in Section 4.2 without reduction on account of the limitation on any Party's flow rate under this Section.

8.4 Supply From Irvine Lake. As an alternative to MWD untreated water supplied through the Santiago Lateral, water may be supplied from Irvine Lake to the Baker WTP. IRWD may, at its sole discretion, supply Irvine Lake water to the Baker WTP. Any such water supplied shall be made available at the lesser of IRWD's prevailing sale price for agricultural water or ninety percent (90%) of Metropolitan Water District of Southern California's prevailing sale price for the applicable classification of imported untreated water. In either case, an amount to recover Irvine Lake pump station variable operation, maintenance, repair and replacement costs (as defined in Section 4.1 – 4.3) shall be added to the price. IRWD's election to supply Irvine

Lake water to the Baker WTP and the timing and quantity thereof shall not be subject to approval by any of the Parties or MWDOC. IRWD agrees to use its best efforts to make Irvine Lake water available to the project during outages of the Santiago Lateral. Nothing in this Agreement is intended to establish any rights in conflict with, or to establish any rights of any Party other than IRWD in or under, the agreements and conveyance documents relating to the ownership, operation and maintenance of Irvine Lake.

Section 9. Interpretation.

This Agreement shall not be construed against the Party preparing it, but shall be construed as if all of the Parties prepared it.

Section 10. Indemnification; Insurance.

10.1 Indemnification By IRWD and SMWD.

10.1.1. Indemnification By IRWD. IRWD shall assume the defense of, indemnify and hold harmless the other Parties and MWDOC and each of their officers, employees and agents from and against any and all actions, damages, liability or claims for death, injury, loss, damage or expense to persons or property arising from or related to, or claimed to have arisen from or be related to, IRWD's negligent acts or omissions in the design, construction, replacement, operation, maintenance, and/ or repair of the Baker WTP, except to the extent such actions, damages, claims, losses, expenses or liability have arisen from or relate to the negligent acts or omissions of an indemnified Party or MWDOC related to the Baker WTP; provided, however, IRWD assumes no liability with respect to interruptions or reductions in Baker WTP product water deliveries or the quality of the source water. The foregoing indemnification obligation shall not relieve the Parties' respective obligations to pay their shares of any and all costs of the design, construction, replacement, operation, maintenance, and/ or repair of the Baker WTP. IRWD shall require each of the contractors and consultants retained by IRWD for the provision of services or work on the Baker WTP to include all of the Parties and MWDOC and each of their officers, employees and agents as indemnified parties in the indemnification provisions of the respective contract.

10.1.2 Indemnification By SMWD. SMWD shall assume the defense of, indemnify and hold harmless the other Parties and MWDOC and each of their officers, employees and agents from and against any and all actions, damages, liability or claims for death, injury, loss, damage or expense to persons or property arising from or related to, or claimed to have arisen from or be related to, SMWD's negligent acts or omissions in the replacement, operation, maintenance, and/ or repair of the SCP, except to the extent such actions, damages, claims, losses, expenses or liability have arisen from or relate to the negligent acts or omissions of an indemnified Party or MWDOC related to the SCP; provided, however, SMWD assumes no liability with respect to interruptions or reductions in Baker WTP product water deliveries or the quality of the source water. The foregoing indemnification obligation shall not relieve the Parties' respective obligations to pay their shares of any and all costs of the design, construction, replacement, operation, maintenance, and/ or repair of the SCP. SMWD shall require each of the contractors and consultants retained by SMWD for the provision of services or work on the SCP to include all of the Parties and MWDOC and each of their officers, employees and agents

as indemnified parties in the indemnification provisions of the respective contract.

10.2 Indemnification By Parties. Each Party shall assume the defense of, indemnify and hold harmless the other Parties and each of their officers, employees and agents from and against any and all actions, damages, liability or claims for death, injury, loss, damage or expense to persons or property arising from or related to, or claimed to have arisen from or be related to, the negligent acts or omissions of the indemnifying Party in connection with the Baker WTP, except to the extent such actions, damages, claims, losses, expenses or liability have arisen from or relate to the negligent acts or omissions of the indemnified Party in connection with the Baker WTP.

10.3 Liability To Third Parties. Liability to third parties not determined to have arisen from any Party's negligent act or omission and not otherwise covered under insurance provided by contractors or consultants under Section 10.4 or provided for the operation of the Baker WTP under Section 10.4 and included as a fixed operations cost under Section 4.1 shall be borne by the Parties in proportion to their respective Capacity Rights.

10.4 Insurance. IRWD shall require its contractors and consultants for the Baker WTP to include the other Parties and MWDOC, their officers, agents and employees as additional insureds in the insurance coverages that IRWD requires the contractors and consultants for the Baker WTP to obtain and maintain. With respect to operation of the Baker WTP, IRWD shall maintain in full force and effect appropriate public liability and property damage insurance and shall add the name of the other Parties and MWDOC, their officers, agents and employees to such policies as additional insureds. A proportionate amount of IRWD's cost of insurance relative to the operation of the Baker WTP as herein provided shall be included within the fixed costs under Section 4.1. Subject to termination as described in clause (3) of Section 7.1, IRWD shall be obligated to repair property damage to the Baker WTP if, and only to the extent, it receives insurance proceeds and/or the Parties contribute funds therefor in proportion to their Capacity Rights under Section 4.2.

Section 11. Successors and Assigns; No Third Party Beneficiaries.

This Agreement shall be binding upon and shall inure to the benefit of each of the Parties and MWDOC, and each of their respective successors, assigns, trustees or receivers. All the covenants contained in this Agreement are for the express benefit of each and all such Parties. This Agreement is not intended to benefit any third parties.

Section 12. Severability.

Should any provision of this Agreement be held invalid or illegal, such invalidity or illegality shall not invalidate the whole of this Agreement, but, rather, the Agreement shall be construed as if it did not contain the invalid or illegal part, and the rights and obligations of the Parties and MWDOC shall be construed and enforced accordingly.

Section 13. Governing Law.

This Agreement shall be construed and enforced pursuant to the laws of the State of California. Any action or proceeding brought to enforce this Agreement, or related to this Agreement, shall be brought in Orange County, California, notwithstanding Code of Civil Procedure Section 394.

Section 14. Dispute Resolution.

The Parties desire to resolve as quickly and as amicably as possible any disputes as to the meaning of any portion of this Agreement, the validity of any determination or calculation, or the rights or obligations of the Parties pursuant hereto. Therefore, prior to initiation by a Party of any litigation or other proceeding in connection with this Agreement, the Parties shall meet and make good-faith efforts to resolve any such disputes on an informal basis. The Party that first raises a claim against another Part(ies) in connection with a dispute shall be responsible for providing written notice to such other Part(ies) and thereby initiating the informal dispute resolution efforts. Such informal efforts may include mediation of the dispute if agreed by the Parties involved in the dispute. Not sooner than thirty (30) days after diligent efforts to resolve a dispute have been initiated, if the Parties have been unable to resolve the dispute on such informal basis, any Party involved in the dispute may, in its discretion and after providing written notice to the other Part(ies) that the informal dispute-resolution efforts are being terminated, proceed to take any and all such action to enforce or protect its rights as permitted by law and/or this Agreement. If a Party initiates informal dispute-resolution with respect to a dispute, any statutory limitation for filing of a court action or commencement of any other proceeding shall be tolled for a period of days equal to the number of days that elapsed between delivery of the notice initiating informal dispute-resolution and the notice terminating informal dispute-resolution.

Section 15. Amendments.

Except as provided in this Agreement, this Agreement may be amended or supplemented only by a written agreement among the Parties and if, and only if, MWDOC's rights and obligations are affected, MWDOC.

Section 16. Entire Agreement.

Each Party and MWDOC represents, warrants and agree that no promise or agreement not expressed herein has been made to them, that this Agreement contains the entire agreement among them, that this Agreement supersedes any and all prior agreements or understandings among them unless otherwise provided herein, and that in executing this Agreement, each is relying solely on its own judgment and knowledge and no signatory is relying on any statement or representation made by any other signatory or its representatives concerning the subject matter, basis or effect of this Agreement other than as set forth herein.

Section 17. Attorneys' Fees.

If any Party to this Agreement is required to initiate or defend any action or proceeding, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorneys' fees. Attorneys' fees shall include attorneys' fees on any appeal, and in addition a Party entitled to attorneys' fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation.

Section 18. Headings.

Headings used in this Agreement are for reference only and shall not affect the construction of this Agreement

Section 19. Notices.

All notices that may or are required to be given pursuant to this Agreement shall be deemed sufficiently given if in writing and if either served personally upon the recipient or mailed by certified or registered mail to:

- | | |
|-------------|---|
| If to ETWD: | El Toro Water District
24251 Los Alisos Boulevard
Lake Forest, CA 92630
Attn: General Manager |
| If to IRWD: | Irvine Ranch Water District
15600 Sand Canyon Ave.
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager |
| If to MNWD: | Moulton Niguel Water District
27500 La Paz Road
P.O. Box 30203
Laguna Niguel, CA 92607-0203
Attn: General Manager |
| If to SMWD: | Santa Margarita Water District
26111 Antonio Parkway
P.O. Box 7005
Mission Viejo, CA 92690-7005
Attn: General Manager |

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date first hereinabove written.

EL TORO WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

IRVINE RANCH WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

MOULTON NIGUEL WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

11/20/13.

SANTA MARGARITA WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

TRABUCO CANYON WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

MUNICIPAL WATER DISTRICT OF ORANGE
COUNTY

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

11/20/13.

12/10/13 Final for Approval

Exhibit 1

TABLE A-1 (Treatment Facilities)

Subscriber	Approximate Flow Rate (in CFS) corresponding to Capacity Right	Capacity Right (% of total)
ETWD	5.0	11.494 %
IRWD	10.5	24.138 %
MNWD	13.0	29.885 %
SMWD	13.0	29.885 %
TCWD	2.0	4.598 %
Totals	43.5	100.000 %

TABLE A-2 (Product Water Facilities)

Subscriber	Approximate Flow Rate (in CFS) corresponding to Capacity Right	Capacity Right (% of total)
ETWD	5.0	15.151 %
IRWD	0	0.000 %
MNWD	13.0	39.394 %
SMWD	13.0	39.394 %
TCWD	2.0	6.061 %
Totals	33.0	100.000 %

TABLE A-3 (Product Water Facilities Variable Cost Allocation, ETWD not taking product water)

Subscriber	Approximate Flow Rate (in CFS) corresponding to Capacity Right	Variable Cost Allocation
ETWD	0	0.000 %
IRWD	0	0.000 %
MNWD	13.0	46.429 %
SMWD	13.0	46.429 %
TCWD	2.0	7.142 %
Totals	28.0	100.000 %

EXHIBIT "D"

12/10/13 Final For Approval AGREEMENT RELATING TO BAKER PIPELINE CAPACITY TRANSFERS AMONG BAKER WATER TREATMENT PLANT PARTICIPANTS

THIS AGREEMENT ("Agreement"), dated this _____ day of _____, 2013 ("Effective Date"), is made and entered into by and among EL TORO WATER DISTRICT ("ETWD"), IRVINE RANCH WATER DISTRICT ("IRWD"), MOULTON-NIGUEL WATER DISTRICT ("MNWD"), SANTA MARGARITA WATER DISTRICT ("SMWD"), each of the foregoing a California Water District formed under and existing pursuant to Section 34000 *et seq.* of the California Water Code, and TRABUCO CANYON WATER DISTRICT ("TCWD"), a County Water District formed under and existing pursuant to Section 30000 *et seq.* of the California Water Code, each sometimes individually referred to as a "PARTY" and collectively as the "PARTIES." In addition, the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY ("MWDOC"), a Municipal Water District formed under and existing pursuant to Section 71000 *et seq.* of the California Water Code, shall be a signatory to this Agreement for the limited purposes expressly stated herein.

RECITALS:

WHEREAS, the PARTIES are developing a facility known as the "Baker Water Treatment Plant," or "Baker WTP," pursuant to the Baker WTP Agreement (defined below); and

WHEREAS, the proposed Baker WTP will be supplied with untreated water purchased from The Metropolitan Water District of Southern California and conveyed via the Santiago Lateral to the site of the Baker WTP by means of the 12-mile pipeline, known as the "V.P. Baker Pipeline" or "Baker Pipeline." Under certain hydraulic conditions, the Baker Pipeline can also be supplied, or in other hydraulic conditions could with the addition of certain improvements be supplied, with untreated water from Irvine Lake through the Irvine Lake Pipeline; and

WHEREAS, the Baker WTP Agreement provides that each PARTY, in order to use its Baker WTP capacity, shall have secured, separately from the Baker WTP Agreement and through a means permitted under the SAC Agreement, "matching" rights to capacity or additional capacity through Reaches 1U, 2U, 3U, 4U and 5U of the Baker Pipeline at least sufficient to utilize the nominal flow rate corresponding to such PARTY's Baker WTP capacity; and

WHEREAS, the Baker Pipeline, formerly known as the "Santiago Aqueduct Pipeline," was built and is operated and managed by the Santiago Aqueduct Commission ("SAC"), a joint exercise of powers agency formed by agreement on September 11, 1961, as amended, of which the PARTIES and MWDOC, along with other agencies, are members; and

WHEREAS, on an aggregate basis in each pipeline reach, there are excess Baker Pipeline capacities held by one or more PARTIES sufficient to offset the shortfall amounts of those

PARTIES who do not have current capacities sufficient to match their WTP capacity; and

WHEREAS, in lieu of negotiating individual capacity transactions, the PARTIES have decided to initially satisfy the Baker WTP matching-capacity requirement for all PARTIES in a single transaction, by entering into this Agreement to collectively implement Baker Pipeline capacity purchases and sales among themselves on a pooled basis, to report such transactions to SAC, and to request that SAC make its future calculations of Baker Pipeline cost-sharing in a manner as provided herein that will recognize such purchases and sales and will not adversely affect other SAC capacity holders; and

WHEREAS, in order to establish the current hydraulic capacity of the Baker Pipeline as a basis for determining the appropriate capacity transfer amounts to satisfy the matching requirement, the PARTIES conducted an hydraulic analysis in 2009, which identified some variations between the hydraulic capacities and the current contractual capacities of the pipeline reaches; and

WHEREAS, the PARTIES have entered into the Baker Pipeline Capacity Transfer Memorandum of Understanding dated March 25, 2010, (the "MOU") in order to set forth the material terms of their agreement to implement transfers of pipeline capacity; and

WHEREAS, the PARTIES desire to enter into this Agreement to supersede the MOU and set forth the material terms and supplemental terms for the Baker Pipeline capacity transfers; and

WHEREAS, the permanent assignment of Pipeline Capacity as set forth in this Agreement requires MWDOC's prior written approval, which is provided by MWDOC's authorized signature below.

NOW, THEREFORE, in consideration of the promises and covenants herein contained, the PARTIES agree as follows:

AGREEMENT:

Section 1. Definitions.

1.1 "Baker Pipeline" shall have the meaning specified in the Baker WTP Agreement.

1.2 "Baker WTP" shall have the meaning specified in the Baker WTP Agreement.

1.3 "Baker WTP Agreement" means that certain agreement entered into among the PARTIES and MWDOC, entitled "Agreement For Construction, Operation and Maintenance of Baker Water Treatment Plant," dated December 15, 2008, as amended by Amendment No. 1 thereto, dated December 23, 2009, and as may be hereafter amended.

1.4 "ENR Index" means, as of any date, the Construction Cost Index value published by the *Engineering News Record* for the Los Angeles Area.

- 1.5 “Pipeline Capacity” means capacity in the Baker Pipeline, identified by reach.
- 1.6 “SAC” shall have the meaning specified in the Baker WTP Agreement.
- 1.7 “SAC Agreement” shall have the meaning specified in the Baker WTP Agreement.
- 1.8 “Sale Date” means the date of the notice of award of the contract for construction of the Baker WTP.
- 1.9 “WTP Capacity Right” shall have the same meaning as the term “Capacity Right” specified in the Baker WTP Agreement.
- 1.10 “2009 Study” means the Baker Pipeline hydraulic and capacity valuation analysis, performed by and on behalf of the PARTIES and compiled in a memorandum dated October 23, 2009. The 2009 Study summary table is set forth in Exhibit “1” attached hereto and incorporated herein by this reference.

Section 2. Quantity and Value of Pipeline Capacity Rights To Be Transferred.

2.1 The PARTIES agree that for purposes of this Agreement, the existing contractual capacity rights in the Baker Pipeline, including all SAC participants and reflecting successors in interest to such capacity rights, are as specified in the “Contractual Pipeline Capacities (Existing)” table set forth in Exhibit “2A,” which exhibit is attached hereto and incorporated herein by this reference. The PARTIES acknowledge that such capacities shown in Exhibit “2A” are derived from the capacities set forth by Amendment No. 3 to the SAC Agreement, dated November 1, 1978, with subsequent transactions reported to SAC as reflected in the letter of “Clarification of the Second and Subsequent Amendments to the Santiago Aqueduct Commission Joint Powers Agreement Tables 12, 13, and 14,” issued by MWDOC in 1984, and in the May 16, 1988 and January 25, 2007 SAC “Description of V.P. Baker Aqueduct System” tables. The PARTIES acknowledge that the hydraulic analysis in the 2009 Study has been taken into account to derive the modified existing contractual pipeline capacity rights set forth in Exhibit “2B,” attached hereto and incorporated herein by this reference. It is further acknowledged that the revised pipeline capacity rights with non-participant adjustment have been calculated as shown in Exhibit “2C,” attached hereto and incorporated herein by this reference.

2.2 The PARTIES agree that the Pipeline Capacity sales and purchases herein are being made on a pooled basis, with the amount to be sold or purchased by each PARTY identified by pipeline reach in the “Proposed Pipeline Capacities” table in Exhibit “2D,” attached hereto and incorporated herein by this reference. The PARTIES acknowledge and agree that the purchase and sale amounts set forth in the “Proposed Pipeline Capacities” table have been calculated to produce the minimum transfers necessary to result in all PARTIES’ satisfaction of their current Baker WTP matching-capacity requirements, with adjustments as necessary to hold the capacity flow and percentage values (total and by reach) of those SAC capacity holders and beneficial holders who are not PARTIES at the same levels as their current flow and percentage values with no resultant increase in SAC cost-sharing obligations. Subject to Section 5.3 hereof,

the PARTIES acknowledge their mutual intention to enable the transfers made herein to be accomplished as sales and purchases made by separate transaction affecting only the participating buying and selling parties, and reported to SAC, as permitted by the Capacity Agreement (defined in Section 5.4 hereof).

2.3 The PARTIES agree that Exhibit "3A," attached hereto and incorporated herein by this reference, identifies the Pipeline Capacity prices, by pipeline reach, for purposes of the purchases and sales implemented under this Agreement. Pursuant to the MOU, such prices were derived from the 2009 Study, providing the value, in 2009 dollars, of the Pipeline Capacity in cubic feet per second (CFS) by reach. It is further acknowledged and agreed that the 2009 dollar valuation has been adjusted by the change in the ENR Index from the date of the 2009 Study, agreed to be 9,764, to the ENR Index effective July 1, 2013, agreed to be 10,307. Such ENR Index-adjusted Pipeline Capacity prices, which are to be used to calculate the corresponding purchase and sale prices for each PARTY, are set forth in Exhibit "3A."

Section 3. Purchases and Sales.

3.1 Exhibit "3B," attached hereto and incorporated herein by this reference, sets forth the capacities to be transferred. Each PARTY agrees to sell any and all Pipeline Capacity amounts as to which it is designated as a "seller" in Exhibit "3B," and agrees to purchase any and all Pipeline Capacity amounts as to which it is designated as a "purchaser" in Exhibit "3B". All such sales and purchases are agreed by the PARTIES to be made simultaneously on a pooled basis. All such sales and purchases are agreed by the PARTIES to be made on the Sale Date.

3.2 Exhibit "3C," attached hereto and incorporated herein by this reference, sets forth the aggregated purchase and sale prices, by PARTY, of the capacities to be purchased and sold. Each PARTY purchasing any Pipeline Capacity pursuant to Section 3.1 shall remit to IRWD full payment for its purchase price amount as stated in the Exhibit "3C" table. Payment shall be due in full by the 45th day after the Sale Date. By the 60th day after the Sale Date, IRWD shall remit to each PARTY selling any Pipeline Capacity pursuant to Section 3.1 the sale price amount identified for that PARTY in the Exhibit "3C" table.

3.3 Pursuant to Section 8.1 of the WTP Agreement, IRWD will substitute a new Exhibit 3C/Table C into the Baker WTP Agreement to show the revised Pipeline Capacities resulting from the implementation of this Agreement.

Section 4. Future Changes in WTP Capacity.

4.1 This Agreement is being entered into only to satisfy the WTP Capacity-matching requirements as of the Sale Date, inclusive of any changes in WTP Capacity Rights that occurred under Section 5.9 of the Baker WTP Agreement. If any PARTY subsequently exercises its right to transfer, sell or lease all or a portion of its WTP Capacity Rights pursuant to Section 5.1, 5.2 or 5.3 of the Baker WTP Agreement, such PARTY and the acquiring party (whether or not the acquiring party is a PARTY) shall be responsible for including as a part of their transaction, by separate agreement, any Pipeline Capacity that is necessary for the use of the WTP Capacity Right being transferred, sold or leased and for reporting the same to SAC, and the PARTIES to this Agreement who are not involved in that transaction shall have no responsibility therefor nor

right of approval thereof, nor shall there be any need for an amendment to this Agreement.

4.2 If the Baker WTP Agreement is terminated under Section 5.9.5 thereof, this Agreement shall be null and void and shall be deemed not to have taken effect. If the Baker WTP Agreement is terminated other than as provided by Section 5.9.5 thereof, the Pipeline Capacity transfers made hereunder shall remain in effect and shall not be affected thereby, except as may otherwise be mutually agreed to between or among any PARTIES in separate agreement(s).

Section 5. Pipeline Capacity To Be Governed By SAC Agreement; MWDOC Approval.

5.1 Except as expressly otherwise provided herein, the Pipeline Capacity shall not be governed by or subject to any provisions of the Baker WTP Agreement, and shall as to operations, cost responsibilities and in all other respects remain subject to the SAC Agreement and any applicable agreements amending or relating thereto.

5.2 The PARTIES may not consent to or approve any amendment to the SAC Agreement that would materially adversely affect the use of the Pipeline Capacity as contemplated in the Baker WTP Agreement.

5.3 The PARTIES agree that IRWD shall report the sales and purchases effected by this Agreement to SAC, and that SAC is hereby authorized by the PARTIES to recognize the Pipeline Capacity transfers under this agreement. The PARTIES acknowledge and agree that they will seek and support an amendment or letter of clarification to the SAC Agreement to: (1) modify the description of the Baker Pipeline to incorporate the hydraulic analysis from the 2009 Study; and (2) as a matter of information, only, and not required for the validity of the sales and purchases effected by this Agreement, conform the SAC Agreement capacity tables to reflect the sales and purchases effected by this Agreement. The sharing of maintenance and other costs under the SAC Agreement shall recognize the sales and purchases effected by this Agreement, commencing upon the effective date of such amendment or letter of clarification to the SAC Agreement or the date of the filing of a notice of completion for the Baker WTP, whichever first occurs, and it is further agreed by the PARTIES that they will authorize and give direction to SAC to the effect that prorations and adjustments of maintenance and other costs as needed, shall be made as of such date. Exhibits "4A," "4B," "4C" and "4D," attached hereto and incorporated herein by this reference, modify the corresponding tables in Exhibits "2A," "2B," "2C" and "2D," respectively, by applying adjustments to the percentage cost-sharing obligations as necessary to result in no increase in SAC cost-sharing obligations of those SAC capacity holders and beneficial holders who are not PARTIES and thereby deriving the percentages (total and by reach) in Exhibit "4D" that will be used for purposes of calculating all of the SAC percentage-ownership-based cost-sharing obligations.

5.4 The PARTIES (including some of the PARTIES' predecessor agencies), MWDOC and certain other parties entered into an agreement, effective December 29, 1978, entitled "Water Capacity Agreement, Operation and Maintenance of System, Irvine Park To El Toro Reservoir Area" (the "Capacity Agreement"), which provides, among other things, that permanent assignment of any Pipeline Capacity shall be subject to the prior written approval of MWDOC and that any assignee shall sign an assumption of all obligations set forth in the

Capacity Agreement. MWDOC hereby approves the permanent assignment of Pipeline Capacity made pursuant to this Agreement, also referred to herein as “purchases and sales.”

5.5 Each PARTY purchasing any Pipeline Capacity pursuant to Section 3.1 hereof hereby agrees to assume all obligations set forth in the Capacity Agreement, the SAC Agreement and all other existing agreements governing the Pipeline Capacity, as they pertain to the Pipeline Capacity so purchased.

Section 6. MOU Superseded.

Upon the Effective Date, this Agreement shall supersede and replace the MOU.

Section 7. Interpretation.

This Agreement shall not be construed against any PARTY preparing it, but shall be construed as if all of the PARTIES prepared it.

Section 8. Successors and Assigns; No Third Party Beneficiaries.

This Agreement shall be binding upon and shall inure to the benefit of each of the PARTIES and MWDOC, and each of their respective successors, assigns, trustees or receivers. All the covenants contained in this Agreement are for the express benefit of each and all such Parties and MWDOC. This Agreement is not intended to benefit any third parties.

Section 9. Severability.

Should any provision of this Agreement be held invalid or illegal, such invalidity or illegality shall not invalidate the whole of this Agreement, but, rather, the Agreement shall be construed as if it did not contain the invalid or illegal part, and the rights and obligations of the PARTIES and MWDOC shall be construed and enforced accordingly, unless that provision declared to be invalid or illegal is so material that its omission deprives any PARTY or MWDOC of the basic benefit of their bargain or renders the remainder of this Agreement meaningless.

Section 10. Governing Law.

This Agreement shall be construed and enforced pursuant to the laws of the State of California. Any action or proceeding brought to enforce this Agreement, or related to this Agreement, shall be brought in Orange County, California, notwithstanding Code of Civil Procedure Section 394.

Section 11. Dispute Resolution.

The PARTIES and MWDOC, referred to in this Section as “SIGNATORIES” or singularly “SIGNATORY,” desire to resolve as quickly and as amicably as possible any disputes as to the meaning of any portion of this Agreement, the validity of any determination or calculation, or the rights or obligations of the SIGNATORIES pursuant hereto. Therefore, prior to initiation by a SIGNATORY of any litigation or other proceeding in connection with this

Agreement, the SIGNATORIES shall meet and make good-faith efforts to resolve any such disputes on an informal basis. The SIGNATORY that first raises a claim against another SIGNATORY(IES) in connection with a dispute shall be responsible for providing written notice to such other SIGNATORY(IES) and thereby initiating the informal dispute resolution efforts. Such informal efforts may include mediation of the dispute if agreed by the SIGNATORIES involved in the dispute. Not sooner than thirty (30) days after diligent efforts to resolve a dispute have been initiated, if the SIGNATORIES have been unable to resolve the dispute on such informal basis, any SIGNATORY involved in the dispute may, in its discretion and after providing written notice to the other SIGNATORY(IES) that the informal dispute-resolution efforts are being terminated, proceed to take any and all such action to enforce or protect its rights as permitted by law and/or this Agreement. If a SIGNATORY initiates informal dispute-resolution with respect to a dispute, any statutory limitation for filing of a court action or commencement of any other proceeding shall be tolled for a period of days equal to the number of days that elapsed between delivery of the notice initiating informal dispute-resolution and the notice terminating informal dispute-resolution.

Section 12. Amendments.

Except as provided in this Agreement, this Agreement may be amended or supplemented only by a written agreement among the PARTIES. If the written agreement transfers or assigns any Party's Pipeline Capacity or affects MWDOC's rights and obligations under the Agreement, MWDOC shall also be a signatory.

Section 13. Entire Agreement.

Each PARTY and MWDOC represent, warrant and agree that no promise or agreement not expressed herein has been made to them, that this Agreement contains the entire agreement among them pertaining to the matters described herein, that this Agreement supersedes any and all prior agreements or understandings among them with respect to these matters unless otherwise provided herein, and that in executing this Agreement, each is relying solely on its own judgment and knowledge and no signatory is relying on any statement or representation made by any other signatory or its representatives concerning the subject matter, basis or effect of this Agreement other than as set forth herein.

Section 14. Attorneys' Fees.

If any PARTY to this Agreement or MWDOC is required to initiate or defend any action or proceeding, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorneys' fees. Attorneys' fees shall include attorneys' fees on any appeal, and in addition a PARTY or MWDOC entitled to attorneys' fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation.

Section 15. Notices.

All notices that may or are required to be given pursuant to this Agreement shall be deemed sufficiently given if in writing and if either served personally upon the recipient or mailed by certified or registered mail to:

- If to ETWD: El Toro Water District
24251 Los Alisos Boulevard
Lake Forest, CA 92630
Attn: General Manager

- If to IRWD: Irvine Ranch Water District
15600 Sand Canyon Ave.
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

- If to MNWD: Moulton Niguel Water District
27500 La Paz Road
P.O. Box 30203
Laguna Niguel, CA 92607-0203
Attn: General Manager

- If to SMWD: Santa Margarita Water District
26111 Antonio Parkway
P.O. Box 7005
Mission Viejo, CA 92690-7005
Attn: General Manager

- If to TCWD: Trabuco Canyon Water District
32003 Dove Canyon Drive
Trabuco Canyon, CA 92679
Attn: General Manager

- If to MWDOC: Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708
Attn: General Manager

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///
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///

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date first hereinabove written.

EL TORO WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

IRVINE RANCH WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

MOULTON NIGUEL WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

SANTA MARGARITA WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

TRABUCO CANYON WATER DISTRICT

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

MUNICIPAL WATER DISTRICT OF ORANGE
COUNTY

By _____
President

By _____
Secretary

APPROVED AS TO FORM:

By _____

Exhibit 1

2009 Study – Summary Table

BAKER PIPELINE CAPACITY TRANSFERS

CAPACITY BY REACH - BASED ON 43.5 CFS TO NTP - MODIFICATION TO STAKEHOLDER CAPACITIES ONLY - WITHOUT HYDRAULIC CONTROL STRUCTURE ON SANTIAGO LATERAL WITH FOREBAY AT BAKER WTP	REACH	1U	2U	3U	4U	5U
	LENGTH (Feet)	8,400	16,425	7,950	28,500	6,070
	DIAMETER (Inches)	84	39	39	38	39
	HGL AT START (Feet)	832	816	788	770	703
	HGL AT END (Feet)	816	789	770	703	690

AGENCY	ALLOCATION BY REACH (CFS)					
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Baker Pipeline Valuation - For IRWD/PCWD						
East Orange County Water District	Capacity Allocation Per Agreement					
Revised Capacity Allocation						
The Irvine Company	Capacity Allocation Per Agreement					
Revised Capacity Allocation						
County of Orange	Capacity Allocation Per Agreement					
Revised Capacity Allocation						

Stakeholders to Baker WTP						
Santa Margarita Water District	Capacity Allocation Per Agreement	25.39	25.39	25.39	25.39	25.43
	Revised Capacity Allocation	23.76	30.56	28.28	28.28	31.87
	Capacity in Baker WTP / Pipeline	13.00	13.00	13.00	13.00	13.00
	Surplus/Deficit	10.75	17.56	15.28	15.28	18.87
Irvine Ranch Water District*	Capacity Allocation Per Agreement	67.40	12.50	12.50	12.50	7.51
	Revised Capacity Allocation	63.70	18.08	13.92	13.62	8.42
	Capacity in Baker Pipeline	48.50	14.50	10.50	10.50	10.50
	Surplus/Deficit	7.20	0.55	3.42	3.42	-1.08
Trabuco Canyon Water District**	Capacity Allocation Per Agreement	8.61	6.55	6.55	6.55	6.55
	Revised Capacity Allocation	8.05	7.89	7.30	7.30	8.21
	Capacity in Baker Pipeline	8.00	8.00	8.00	8.00	8.00
	Surplus/Deficit	0.05	-0.11	-0.70	-0.70	0.21
El Toro Water District	Capacity Allocation Per Agreement	-	-	-	-	-
	Revised Capacity Allocation	-	-	-	-	-
	Capacity in Baker WTP / Pipeline	5.00	5.00	5.00	5.00	5.00
	Surplus/Deficit	-5.00	-5.00	-5.00	-5.00	-5.00
Moulton Niguel Water District	Capacity Allocation Per Agreement	-	-	-	-	-
	Revised Capacity Allocation	-	-	-	-	-
	Capacity in Baker WTP / Pipeline	13.00	13.00	13.00	13.00	13.00
	Surplus/Deficit	-13.00	-13.00	-13.00	-13.00	-13.00
TOTAL - Calculated Revised Allocation		99.00	84.78	80.68	80.68	49.50

* IRWD capacity in reaches 1U and 2U includes ILP and Ag use
 ** TCWD capacity includes 0 cfs to Dimension WTP and 2 cfs to Baker WTP

BAKER WTP SUPPLY (CFS) = 43.50

Baker Pipeline Valuation

	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U	TOTAL
Value of Pipeline in each Reach (\$)	\$2,848,872	\$3,439,629	\$2,823,023	\$5,892,030	\$1,238,731	\$16,785,985
Per Agreement Unit Cost by Reach (cfs)	\$36,284.03	\$73,899.16	\$97,046.86	\$177,617.14	\$31,294.33	\$117,305.91
Revised Unit Cost by Reach (cfs)	\$28,784.36	\$62,799.80	\$51,758.67	\$114,483.62	\$24,984.26	\$280,758.62
Total Capacity in each Reach per Agreement dated 9/18/88	104.90	45.50	45.50	45.60	36.50	
Total Capacity in each Reach - Revised	99.00	54.78	50.68	50.68	49.50	

COST BALANCE BASED ON CAPACITY PURCHASES

VALUE CHANGE BY REACH (\$)**					
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Stakeholders to Baker WTP						SUM
Per Agreement	\$641,327	\$1,619,388	\$1,483,704	\$3,227,000	\$795,590	
Revised	\$836,654	\$1,918,858	\$1,483,878	\$3,227,007	\$795,611	
Baker Cost	\$347,937	\$816,287	\$872,835	\$1,486,287	\$324,635	
Surplus/Deficit	\$293,717	\$1,103,059	\$790,840	\$1,740,713	\$471,078	\$4,401,532 MWWD
	\$1,440,858	\$944,922	\$720,811	\$1,593,954	\$234,945	
	\$1,437,249	\$944,888	\$720,881	\$1,593,812	\$234,913	
	\$1,244,543	\$810,452	\$543,444	\$1,202,078	\$282,125	
	\$192,703	\$34,634	\$177,007	\$391,638	-\$25,861	\$768,819 IRWD
	\$217,480	\$495,125	\$377,000	\$835,237	\$204,912	
	\$218,483	\$496,411	\$377,823	\$835,730	\$204,987	
	\$214,115	\$502,318	\$414,053	\$915,898	\$189,714	
	\$1,338	-\$6,907	-\$36,230	-\$90,139	\$5,242	-\$116,698 TCWD
	-	-	-	-	-	
	-	-	-	-	-	
	\$133,822	\$313,948	\$288,783	\$572,418	\$124,821	
	-\$133,822	-\$313,948	-\$288,783	-\$572,418	-\$124,821	-\$1,403,793 RTWD
	-	-	-	-	-	
	\$347,937	\$816,287	\$872,835	\$1,486,287	\$324,635	
	-\$347,937	-\$816,287	-\$872,835	-\$1,486,287	-\$324,635	-\$3,649,862 MNWD
						\$0

** Negative Values = Paid By, Positive Values = Paid To

NET DIFFERENCE

Exhibit 2A

Contractual Pipeline Capacities (Existing)

and

Exhibit 2B

Pipeline Capacity Rights (Modified By 2009 Study Hydraulic Analysis)

**EXHIBIT 2
BAKER PIPELINE CAPACITY OWNERSHIP RIGHTS**

EXHIBIT 2A Contractual Pipeline Capacities (Existing) (per Section 2.1 of this Agreement)					
	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U
Length (LF)	9,400	10,425	7,950	28,500	6,070
HGL Elev at End of Reach ¹	815	786	765	723	715
Agency	CFS	CFS	CFS	CFS	CFS
East Orange County Water District	10.00	-	-	-	-
The Irvine Company	2.50	-	-	-	-
County of Orange	1.00	1.06	1.06	1.06	-
Irvine Ranch Water District	57.40	12.50	12.50	12.50	7.51
Santa Margarita Water District	25.39	25.39	25.39	25.39	25.43
Trabuco Canyon Water District	8.61	6.55	6.55	6.55	6.55
El Toro Water District	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-
Total Capacity	104.90	45.50	45.50	45.50	39.49

¹ Beginning HGL elevation of 832 at OC-33

EXHIBIT 2B Pipeline Capacity Rights (Modified by 2009 Study Hydraulic Analysis)					
	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U
Length (LF)	9,400	10,425	7,950	28,500	6,070
HGL Elev at End of Reach ¹	816	788	770	703	690
Agency	CFS	CFS	CFS	CFS	CFS
East Orange County Water District	10.00	-	-	-	-
The Irvine Company	2.50	-	-	-	-
County of Orange ²	1.00	1.28	1.18	1.18	-
Irvine Ranch Water District	53.70	15.05	13.92	13.92	9.42
Santa Margarita Water District	23.75	30.56	28.28	28.28	31.87
Trabuco Canyon Water District	8.05	7.89	7.30	7.30	8.21
El Toro Water District	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-
Total Capacity	99.00	54.78	50.68	50.68	49.50

¹ Beginning HGL elevation of 832 at OC-33
² County of Orange capacities over-allocated in reach 2U, 3U, and 4U from existing contractual pipeline capacities as defined in Exhibit 2A. See Exhibit 2C for adjustment to match existing contractual pipeline capacities.

Exhibit 2C

Revised Pipeline Capacities With Non-Participant Adjustment

and

Exhibit 2D

Proposed Pipeline Capacities

**EXHIBIT 2
BAKER PIPELINE CAPACITY OWNERSHIP RIGHTS**

EXHIBIT 2C Revised Pipeline Capacities With Non-Participant Adjustment ¹					
	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U
Length (LF)	9,400	10,425	7,950	28,500	6,070
HGL Elev at End of Reach ²	816	788	770	703	690
Agency	CFS	CFS	CFS	CFS	CFS
East Orange County Water District	10.00	-	-	-	-
The Irvine Company	2.50	-	-	-	-
County of Orange ³	1.00	1.06	1.06	1.06	-
Irvine Ranch Water District ⁴	53.70	15.11	13.95	13.95	9.42
Santa Margarita Water District ⁴	23.75	30.69	28.35	28.35	31.87
Trabuco Canyon Water District ⁴	8.05	7.92	7.32	7.32	8.21
El Toro Water District	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-
Total Capacity	99.00	54.78	50.68	50.68	49.50

¹ Non-participant (East Orange County Water District, The Irvine Company, County of Orange) existing contractual pipeline capacities remain unchanged in each pipeline reach as defined in Exhibit 2A.
² Beginning HGL elevation of 832 at OC-33
³ County of Orange capacity rights in Reach 2U, 3U, and 4U adjusted from modified pipeline capacity rights as defined in Exhibit 2B to match existing contractual pipeline capacities as defined in Exhibit 2A.
⁴ Pipeline capacity in pipeline reach 2U, 3U, and 4U for Irvine Ranch Water District, Santa Margarita Water District, and Trabuco Canyon Water District adjusted from revised pipeline capacity allocation totals as defined in Exhibit 1 to include County of Orange over-allocation as defined in Exhibit 2B.

EXHIBIT 2D Proposed Pipeline Capacities					
	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U
Length (LF)	9,400	10,425	7,950	28,500	6,070
HGL Elev at End of Reach ¹	816	788	770	703	690
Agency	CFS	CFS	CFS	CFS	CFS
East Orange County Water District ²	10.00	-	-	-	-
The Irvine Company ²	2.50	-	-	-	-
County of Orange ³	1.00	1.06	1.06	1.06	-
Irvine Ranch Water District ³	46.50	14.59	10.54	10.54	10.50
Santa Margarita Water District ³	13.00	13.08	13.05	13.05	13.00
Trabuco Canyon Water District ³	8.00	8.05	8.03	8.03	8.00
El Toro Water District ⁴	5.00	5.00	5.00	5.00	5.00
Moulton Niguel Water District ⁴	13.00	13.00	13.00	13.00	13.00
Total Capacity	99.00	54.78	50.68	50.68	49.50

¹ Beginning HGL elevation of 832 at OC-33
² Non-participant (East Orange County Water District, The Irvine Company, County of Orange) proposed pipeline capacities match existing contractual pipeline capacities in each pipeline reach as defined in Exhibit 2A.
³ Proposed pipeline capacity in pipeline reach 2U, 3U, and 4U for Irvine Ranch Water District, Santa Margarita Water District, and Trabuco Canyon Water District adjusted from revised pipeline capacity allocation totals as defined in Exhibit 1 to include County of Orange over-allocation as defined in Exhibit 2B.
⁴ Total capacity in each pipeline reach match totals as defined in Exhibit 1 for El Toro Water District and Moulton Niguel Water District.

Exhibit 3A

Pipeline Capacity Valuation Analysis (2009 and July 1, 2013)

EXHIBIT 3A

PIPELINE CAPACITY VALUATION ANALYSIS (2009 AND JULY 1, 2013)

REACH	1U	2U	3U	4U	5U	TOTAL
LENGTH (ft)	9,400	10,425	7,950	28,500	6,070	62,345
PROPOSED CAPACITY ALLOCATION (cfs)	99.00	54.78	50.68	50.68	49.50	-
PIPE DIAMETER	54	39	39	39	39	-
YEAR INSTALLED	1963	1981	1981	1963	1963	-
2013 Construction Cost	\$5,358,252	\$4,291,827	\$3,272,904	\$11,733,053	\$2,498,934	\$27,154,971
2013 Undepreciated Value	\$7,233,641	\$5,793,967	\$4,418,421	\$15,839,621	\$3,373,561	\$36,659,211
2013 Depreciated Value	\$2,411,214	\$3,321,874	\$2,533,228	\$5,279,874	\$1,124,520	\$14,670,710
2013 Depreciated Value per cfs	\$24,355.69	\$60,640	\$49,985	\$104,181	\$22,718	\$261,879

Assumptions include the following:

	2009	2013
Pipeline Useful Life (Years):	75	75
Pipe Unit Cost (per inch-diameter-foot)	\$10.00	\$ 10.56 (Adjusted for July 2013 LA ENR)
Design/Contingency Factor:	1.35	1.35

Formulas for Calculating Cost are as follows:

2013 Construction Cost = Pipe Length * Pipe Diameter * 2013 Pipe Unit Cost

2013 Undepreciated Value = 2013 Construction Cost * Design/Contingency Factor

2013 Depreciated Value = 2013 Undepreciated Value * [(Pipeline Useful Life - Years In Service)/Pipeline Useful Life]

December 2009 LA ENR = 9,764

July 2013 LA ENR = 10,307

Exhibit 3B

Summary of Pipeline Capacity Transfers, By Reach

EXHIBIT 3B

SUMMARY OF PIPELINE CAPACITY TRANSFERS, BY REACH

REACH	1U	2U	3U	4U	5U	
LENGTH (ft)	9,400	10,425	7,950	28,500	6,070	
PROPOSED CAPACITY ALLOCATION (cfs)	99.00	54.78	50.68	50.68	49.50	
AGENCY	BAKER PIPELINE CAPACITY ALLOCATION (cfs) ¹					
East Orange County Water District	Existing Pipeline Capacity ²	10.00	-	-	-	-
	Proposed Pipeline Capacity ⁴	10.00	-	-	-	-
	Surplus/(Deficit)	0	-	-	-	-
The Irvine Company	Existing Pipeline Capacity ²	2.50	-	-	-	-
	Proposed Pipeline Capacity ⁴	2.50	-	-	-	-
	Surplus/(Deficit)	0	-	-	-	-
County of Orange	Existing Pipeline Capacity ²	1.00	1.06	1.06	1.06	-
	Proposed Pipeline Capacity ⁴	1.00	1.06	1.06	1.06	-
	Surplus/(Deficit)	0	0	0	0	-
Irvine Ranch Water District	Modified Pipeline Capacity ³	53.70	15.11	13.95	13.95	9.42
	Proposed Pipeline Capacity ⁴	46.50	14.59	10.54	10.54	10.50
	Surplus/(Deficit)	7.20	0.52	3.41	3.41	(1.08)
Santa Margarita Water District	Modified Pipeline Capacity ³	23.75	30.69	28.35	28.35	31.87
	Proposed Pipeline Capacity ⁴	13.00	13.08	13.05	13.05	13.00
	Surplus/(Deficit)	10.75	17.61	15.30	15.30	18.87
Trabuco Canyon Water District	Modified Pipeline Capacity ³	8.05	7.92	7.32	7.32	8.21
	Proposed Pipeline Capacity ⁴	8.00	8.05	8.03	8.03	8.00
	Surplus/(Deficit)	0.05	(0.13)	(0.71)	(0.71)	0.21
El Toro Water District	Modified Pipeline Capacity ³	-	-	-	-	-
	Proposed Pipeline Capacity ⁴	5.00	5.00	5.00	5.00	5.00
	Surplus/(Deficit)	(5.00)	(5.00)	(5.00)	(5.00)	(5.00)
Moulton Niguel Water District	Modified Pipeline Capacity ³	-	-	-	-	-
	Proposed Pipeline Capacity ⁴	13.00	13.00	13.00	13.00	13.00
	Surplus/(Deficit)	(13.00)	(13.00)	(13.00)	(13.00)	(13.00)

¹ Positive Values Indicate Baker Pipeline Capacity to be sold. Negative Values indicated Baker Pipeline Capacity to be purchased.

² Contractual pipeline capacities (existing) per Exhibit 2A.

³ Pipeline capacity rights per Exhibit 2B.

⁴ Proposed pipeline capacities per Exhibit 2D.

Exhibit 3C

Pipeline Capacity Purchase and Sale Prices, By Party

EXHIBIT 3C

PIPELINE CAPACITY PURCHASE AND SALE PRICES, BY PARTY

AGENCY	CAPACITY PURCHASES (PAYMENTS)	CAPACITY REVENUE (RECEIPTS)	CAPACITY TRANSFER NET COST
East Orange County Water District	\$ -	\$ -	\$ -
The Irvine Company	\$ -	\$ -	\$ -
County of Orange	\$ -	\$ -	\$ -
Irvine Ranch Water District	\$ (24,535)	\$ 732,598	\$ 708,063
Santa Margarita Water District	\$ -	\$ 4,117,110	\$ 4,117,110
Trabuco Canyon Water District	\$ (117,341)	\$ 5,988	\$ (111,352)
El Toro Water District	\$ (1,309,395)	\$ -	\$ (1,309,395)
Moulton Niguel Water District	\$ (3,404,426)	\$ -	\$ (3,404,426)

Footnotes:

- (1) Positive Values indicate net payments to the Agency.
 Negative Values indicate net payments from the Agency.

Exhibit 4A

Contractual Pipeline Capacities (Existing) -- Maintenance Shares, Total and By Reach

and

Exhibit 4B

**Pipeline Capacities (Per 2009 Study Hydraulic
Analysis) -- Maintenance Shares, Total and By Reach**

**EXHIBIT 4
BAKER PIPELINE MAINTENANCE SHARES**

Exhibit 4A Contractual Pipeline Capacities (Existing) -- Maintenance Shares, Total and By Reach ¹												
Length (LF)	Reach 1U		Reach 2U		Reach 3U		Reach 4U		Reach 5U		Total Pipeline	
	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length Total	%
	9,400		10,425		7,950		28,500		6,070		62,345	
East Orange County Water District ¹	94,000	9.53%	-	-	-	-	-	-	-	-	94,000	2.80%
The Irvine Company ¹	23,500	2.38%	-	-	-	-	-	-	-	-	23,500	0.70%
County of Orange ¹	9,400	0.95%	11,051	2.33%	8,427	2.33%	30,210	2.33%	-	-	59,088	1.76%
Irvine Ranch Water District	539,560	54.72%	130,313	27.47%	99,375	27.47%	356,250	27.47%	45,586	19.02%	1,171,085	34.87%
Santa Margarita Water District	238,666	24.21%	264,691	55.80%	201,851	55.80%	723,615	55.80%	154,360	64.39%	1,583,185	47.14%
Trabuco Canyon Water District	80,934	8.21%	68,284	14.40%	52,073	14.40%	186,675	14.40%	39,759	16.59%	427,726	12.73%
El Toro Water District	-	-	-	-	-	-	-	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-	-	-	-	-	-	-	-
Total	986,060	100%	474,339	100%	361,726	100%	1,296,750	100%	239,705	100%	3,358,584	100%

¹The Baker Pipeline maintenance share, by capacity holder, is based upon the percentage of the sum of the capacity * length in each pipeline reach divided by the total capacity * total length of the Baker Pipeline. Capital improvement and replacement costs are determined by the maintenance share percentage in each pipeline reach where capital improvements or replacement costs occur, as defined by the SAC Agreement.

Exhibit 4B Pipeline Capacities (Per 2009 Study Hydraulic Analysis) -- Maintenance Shares, Total and By Reach ¹												
Length (LF)	Reach 1U		Reach 2U		Reach 3U		Reach 4U		Reach 5U		Total Pipeline	
	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length Total	%
	9,400		10,425		7,950		28,500		6,070		62,345	
East Orange County Water District	94,000	10.10%	-	-	-	-	-	-	-	-	94,000	2.58%
The Irvine Company	23,500	2.53%	-	-	-	-	-	-	-	-	23,500	0.64%
County of Orange	9,400	1.01%	13,344	2.34%	9,381	2.33%	33,630	2.33%	-	-	65,755	1.80%
Irvine Ranch Water District	504,780	54.24%	156,897	27.47%	110,664	27.47%	396,720	27.47%	57,179	19.03%	1,226,240	33.60%
Santa Margarita Water District	223,250	23.99%	318,588	55.79%	224,826	55.80%	805,980	55.80%	193,451	64.38%	1,766,095	48.39%
Trabuco Canyon Water District	75,670	8.13%	82,253	14.40%	58,035	14.40%	208,050	14.40%	49,835	16.59%	473,843	12.99%
El Toro Water District	-	-	-	-	-	-	-	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-	-	-	-	-	-	-	-
Total	930,600	100%	571,082	100%	402,906	100%	1,444,380	100%	300,465	100%	3,649,433	100%

¹Based on pipeline capacity rights as defined in Exhibit 2B per the 2009 Hydraulic Analysis

Exhibit 4C

**Revised Pipeline Capacities With Non-Participant
Adjustment -- Maintenance Shares, Total and By Reach**

and

Exhibit 4D

Proposed Pipeline Capacities -- Maintenance Shares, Total and By Reach

**EXHIBIT 4
BAKER PIPELINE MAINTENANCE SHARES**

Exhibit 4C Revised Pipeline Capacities With Non-Participant Adjustment – Maintenance Shares, Total and By Reach												
	Reach 1U		Reach 2U		Reach 3U		Reach 4U		Reach 5U		Total Pipeline	
Length (LF)	9,400		10,425		7,950		28,500		6,070		62,345	
	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length Total	%
East Orange County Water District ¹	94,000	9.53%	-	-	-	-	-	-	-	-	94,000	2.58%
The Irvine Company ¹	23,500	2.38%	-	-	-	-	-	-	-	-	23,500	0.64%
County of Orange ²	9,400	0.95%	11,051	2.33%	8,427	2.33%	30,210	2.33%	-	-	59,088	1.62%
Irvine Ranch Water District	504,780	54.24%	157,522	27.58%	110,902	27.53%	397,575	27.53%	57,179	19.03%	1,227,958	33.65%
Santa Margarita Water District	223,250	23.99%	319,943	56.02%	225,383	55.94%	807,975	55.94%	193,451	64.38%	1,770,002	48.50%
Trabuco Canyon Water District	75,670	8.13%	82,566	14.46%	58,194	14.44%	208,620	14.44%	49,835	16.59%	474,885	13.01%
El Toro Water District	-	-	-	-	-	-	-	-	-	-	-	-
Moulton Niguel Water District	-	-	-	-	-	-	-	-	-	-	-	-
Total	930,600	99.22%	571,082	100.39%	402,906	100.24%	1,444,380	100.24%	300,465	100%	3,649,433	100%
Adjustment ³	0	0.78%	0	-0.39%	0	-0.24%	0	-0.24%	0	0%	0	0%

¹ East Orange County Water District and The Irvine Company proposed pipeline capacities and maintenance shares in Reach 1U held to existing contractual pipeline capacities as defined in Exhibit 2A and existing maintenance shares as defined in Exhibit 4A.

² County of Orange pipeline capacities and maintenance shares in Reach 1U, 2U, 3U, and 4U held to existing contractual pipeline capacities as defined in Exhibit 2A and existing maintenance shares as defined in Exhibit 4A.

³ Adjustment is the difference from holding the County of Orange existing contractual pipeline capacities and maintenance shares in reach 1U, 2U, 3U, and 4U, and the East Orange County Water District and The Irvine Company existing contractual pipeline capacities and maintenance shares in reach 1U as defined in Exhibit 2B and Exhibit 4B to existing contractual pipeline capacities and maintenance shares as defined in Exhibit 2A and Exhibit 4A. Adjustment is proportionally distributed among Irvine Ranch Water District, Santa Margarita Water District, and Trabuco Canyon Water District.

Exhibit 4D Proposed Pipeline Capacities -- Maintenance Shares, Total and By Reach												
	Reach 1U		Reach 2U		Reach 3U		Reach 4U		Reach 5U		Total Pipeline	
Length (LF)	9,400		10,425		7,950		28,500		6,070		62,345	
	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length	%	Capacity * Length Total	%
East Orange County Water District ¹	94,000	9.53%	-	-	-	-	-	-	-	-	94,000	2.58%
The Irvine Company ¹	23,500	2.38%	-	-	-	-	-	-	-	-	23,500	0.64%
County of Orange ¹	9,400	0.95%	11,051	2.33%	8,427	2.33%	30,210	2.33%	-	-	59,088	1.62%
Irvine Ranch Water District	437,100	47.46%	152,101	26.52%	83,793	20.73%	300,390	20.73%	63,735	21.22%	1,037,119	28.42%
Santa Margarita Water District	122,200	13.35%	136,359	23.65%	103,747	25.61%	371,925	25.61%	78,910	26.26%	813,141	22.28%
Trabuco Canyon Water District	75,200	8.15%	83,921	14.64%	63,839	15.81%	228,855	15.81%	48,560	16.16%	500,375	13.71%
El Toro Water District	47,000	5.05%	52,125	9.13%	39,750	9.87%	142,500	9.87%	30,350	10.10%	311,725	8.54%
Moulton Niguel Water District	122,200	13.13%	135,525	23.73%	103,350	25.65%	370,500	25.65%	78,910	26.26%	810,485	22.21%
Total ²	930,600	100%	571,082	100%	402,906	100%	1,444,380	100%	300,465	100%	3,649,433	100%

¹ Non-participants (East Orange County Water District, The Irvine Company, County of Orange) proposed maintenance share percentages match existing maintenance share percentages in each pipeline reach as defined in Exhibit 4A. Proposed total maintenance share percentages match revised total maintenance share percentages as defined in Exhibit 4C.

² Total capacity * length in each pipeline reach held at revised pipeline capacities in Exhibit 4B.

EXHIBIT "E"

09/24/13 Final for Approval

AGREEMENT BETWEEN
EL TORO WATER DISTRICT
AND IRVINE RANCH WATER DISTRICT
PROVIDING FOR DOMESTIC WATER
INTERCONNECTION

This AGREEMENT PROVIDING FOR DOMESTIC WATER INTERCONNECTION ("Agreement") is entered into the ____ day of _____, 2013, by and between the EL TORO WATER DISTRICT ("ETWD") and the IRVINE RANCH WATER DISTRICT ("IRWD"), each, a California water district formed and existing under Section 34000 *et seq.* of the California Water Code (each, a "Party" and together, the "Parties").

RECITALS

A. ETWD and IRWD, along with other parties, have entered into an agreement, entitled "Agreement For Construction, Operation and Maintenance of Baker Water Treatment Plant," dated December 15, 2008, as amended by Amendment No. 1 thereto, dated December 23, 2009, and as may be hereafter amended (the "Baker WTP Agreement"), providing for the development of a facility known as the "Baker Water Treatment Plant," or "Baker WTP."

B. The Baker WTP will be equipped to provide for delivery of product water from the Baker WTP to IRWD via a connection directly into IRWD's distribution system (the "IRWD Baker Connection"). The IRWD Baker Connection is not metered, but the flow delivered through the IRWD Baker Connection can be measured by subtraction, using other Baker WTP metered flows.

C. The Baker WTP will be equipped to provide for delivery of product water from the Baker WTP to the Baker WTP Agreement parties other than IRWD via delivery through the Product Water Facilities (as that term is defined in the Baker WTP Agreement) to the South County Pipeline ("SCP Delivery").

D. Due to the proximity of ETWD's and IRWD's distribution systems, it is also possible to deliver Baker WTP product water to ETWD through the IRWD Baker Connection and then through an interconnection between IRWD's and ETWD's distribution systems ("Interconnection Delivery").

E. The Baker WTP Agreement recognizes that ETWD's primary method of taking delivery of Baker WTP product water is Interconnection Delivery under separate arrangements between IRWD and ETWD, and, to the extent IRWD is not able to deliver water to ETWD by Interconnection Delivery, then by SCP Delivery.

F. ETWD and IRWD desire to set forth the terms for Interconnection Delivery to be used by ETWD in conjunction with the SCP Delivery available to ETWD under the Baker WTP Agreement.

AGREEMENT

1. Relationship To Baker WTP Agreement. This Agreement shall serve as the separate agreement between ETWD and IRWD contemplated in Section 4.3.1 of the Baker WTP Agreement.

2. Interconnection.

2.1. Existing Facilities and Property. IRWD shall quitclaim to ETWD, at no cost (i) the existing interconnection located near the intersection of El Toro Road and 2nd Street, between IRWD's Lake Forest Zone 1 distribution system and ETWD's Zone R-6 distribution system; (ii) the existing 10-inch pipeline and meter; (iii) the site on which the facilities described in (i) and a portion of the facilities described in (ii) are located, consisting of the property and easements for ingress and egress and water and sewer transmission granted to IRWD's predecessor in interest, Los Alisos Water District, by instruments recorded May 15, 1973, in Book 10697, page 58, and Book 10697, Page 62 of Orange County Official Records, and easements reserved for water line purposes by map of Tract No. 8076 recorded May 11, 1973, in Book 322, page 27 of Miscellaneous Maps, Orange County Official Records; and (iv) an existing fire hydrant at the end of Front Street and a portion of IRWD's existing 8-inch pipeline that delivers flow to the existing fire hydrant, all as depicted on Exhibits "A-1," "A-2" and "A-3," attached hereto and incorporated herein by this reference.

2.2. Demolition and Construction. IRWD will, at its expense, disconnect the pipeline referred to in clause (iv) of Section 2.1 from IRWD's water system and connect it to ETWD's water system. Except as provided in the preceding sentence, ETWD will be solely responsible for all costs associated with the facilities and property quitclaimed pursuant to Section 2.1 and for the Interconnection, as defined below. ETWD will have sole responsibility for design and construction of a new pump station to be connected to the interconnection and any required improvements to the suction and/or discharge pipelines into and out of the pump station and the installation of an influent meter to the pump station (collectively, the "2nd Street Pump Station"); and for demolition of any of the existing interconnection facilities as necessary in connection therewith. The interconnection and the 2nd Street Pump Station, together with meter(s), valve(s), vault(s), piping and isolation valves are collectively referred to herein as the "Interconnection." ETWD will cause the 2nd Street Pump Station to be designed with all necessary equipment for, and operated to provide, continuous transmission of pump station operating information including, but not limited to, flow and pressure data, to IRWD's SCADA system. ETWD will design the influent metering and communications facilities in accordance with IRWD standards and requirements. ETWD will provide an opportunity for IRWD to review the design of the influent metering and communications

facilities to confirm that IRWD's requirements are included. ETWD will also conduct a transient surge analysis for the proposed Interconnection to determine if any surge protection facilities are required to protect IRWD's distribution system from surge events associated with the operation of the Interconnection, and will include any such identified surge protection facilities in the design and construction of the Interconnection. ETWD will accomplish any environmental review and certification under the California Environmental Quality Act relating to the Interconnection and the activities described herein.

- 2.3. IRWD Controls. IRWD agrees to add controls and metering to its existing pressure reducing valve at the Lake Forest Zone 2 East Pump Station, to permit the monitoring of the back feed of Lake Forest Zone 2 water to IRWD's Lake Forest Zone 1 El Toro Road Tanks as necessary to maintain a minimum water level in the tanks as defined in the Dudek Engineering memo dated November 16, 2011. The parties acknowledge that as described in the Dudek memo dated July 27, 2011, it is anticipated that approximately 500 gpm will need to be back fed from the Lake Forest Zone 2 system to the Lake Forest Zone 1 system to support Interconnection Delivery of 5 cfs flow to ETWD during low demand periods. This condition is anticipated to occur when the IRWD Lake Forest service area demands are less than 10.5 cfs, which is anticipated to be about a 3.5 month period (January to mid-April) annually.
3. Ownership, Maintenance and Operation; Vault and Site Access. ETWD shall, at its sole cost, own, operate, maintain and replace the Interconnection and the capacity therein. ETWD hereby grants IRWD rights of access to the Interconnection metering and communications facilities, including any secured gates and doors.
4. Water Pressure, Quality and Flow Requirements.
 - 4.1. Water Supply. The Interconnection is anticipated to be designed to supply a flow of five (5) cubic feet per second (cfs), provided, however, that IRWD makes no guarantee as to any specified water flow rate, quantity, pressure, or quality of the water that may be delivered from its system to ETWD's system through the Interconnection for any purpose; provided, the foregoing shall not be deemed to limit any responsibility IRWD may have with respect to quality of Baker WTP product water under the Baker WTP Agreement, subject to Section 10.1.1 thereof.
 - 4.2. System Modifications. Although IRWD's Lake Forest service area is predominantly built-out and IRWD does not anticipate major modifications to its Lake Forest distribution system, IRWD is unable to make assurances to ETWD that future changes to the system will not preclude or inhibit Interconnection Delivery. If IRWD makes future modifications to its distribution system that may preclude or inhibit Interconnection Delivery, IRWD will coordinate such modifications with ETWD. If feasible and if so requested by ETWD, IRWD agrees, at ETWD's expense, to incorporate in the design and construction of such modifications any features that would maintain the capability for Interconnection Delivery without interfering with IRWD's reasonable use of its

distribution system. If ETWD does not elect to have IRWD incorporate such features at ETWD's cost, this Agreement shall terminate upon IRWD's notice to ETWD that IRWD will proceed with the future modifications to its distribution system without such features.

5. Operational Limitations.

5.1. Product Water. The production of product water from the Baker WTP is governed by, and subject to all of the limitations of, the Baker WTP Agreement.

5.2. Interconnection Delivery. Subject to Section 5.1, IRWD agrees to use its best efforts to operate its water distribution system in a manner that will allow ETWD to operate the Interconnection to deliver all of ETWD's Baker WTP product water to its R-6 Zone distribution system by Interconnection Delivery, except in the event of an AMP outage, a significant fire event in IRWD's Lake Forest service area, an extended maximum day demand scenario in IRWD's Lake Forest service area, a planned outage for maintenance of storage tank(s) and/or distribution system piping/facilities in IRWD's Lake Forest service area, low pressure events in IRWD's Lake Forest service area, or a pipeline break, pump station failure, significant power outage, or other an unplanned outage in IRWD's Lake Forest service area. If a planned activity is anticipated to interrupt or reduce Interconnection Delivery, IRWD agrees to coordinate the activity in advance with ETWD to the extent reasonably feasible. IRWD agrees to use its best efforts to avoid planned maintenance during the summer and other high demand periods. IRWD will notify ETWD whenever it is aware that Interconnection Delivery is or will be unavailable.

5.3. SCP Delivery. In the event Interconnection Delivery is not available, ETWD will receive SCP Delivery. ETWD acknowledges that SCP Delivery is not provided for by this Agreement and shall be governed by the Baker WTP Agreement.

6. No Dedication of Capacity. ETWD acknowledges and agrees that this Agreement provides only for transmission of water through Interconnection Delivery, and nothing herein creates any implied dedication of any facilities or capacity in facilities, or any other right or entitlement in or to water or capacity in IRWD's water system.

7. Term and Termination of Agreement. ETWD may, at its option, terminate this Agreement by providing 30 days' prior written notice to IRWD. Unless earlier terminated by ETWD as provided in this Section, or by IRWD as provided in Section 4.2, this Agreement shall be in effect for as long as ETWD remains a Party to the Baker WTP Agreement, and shall terminate automatically upon the termination of ETWD's participation in the Baker WTP Agreement. Unless the Parties, by mutual agreement, provide for the conversion of the Interconnection to an emergency interconnection, upon termination, ETWD shall properly disconnect the Interconnection from IRWD's water distribution system or otherwise take the Interconnection out of service, at ETWD's sole cost.

8. Metering. The Interconnection meters shall be used for the purpose of measurement, invoicing and payment of water supplied through the Interconnection.

9. Invoicing and Payment.

9.1. Baker WTP Product Water. The water supplied to ETWD through Interconnection Delivery shall be considered Baker WTP product water, up to the amount of ETWD's allocated share of Baker WTP product water for each applicable billing period under the Baker WTP Agreement. Such quantity of product water supplied to ETWD through Interconnection Delivery, together with any quantity of product water that is delivered to ETWD through the SCP Delivery under the Baker WTP Agreement, will be billed to ETWD for each billing period under the Baker WTP Agreement, and no amount shall be due to IRWD for such quantity of water under this Agreement. To the extent any water is supplied to ETWD through the interconnection in excess of ETWD's allocated share of Baker WTP product water for an applicable billing period under the Baker WTP Agreement, such excess quantity of water will be invoiced as provided in Section 9.2.

9.2. Water Other Than Baker WTP Product Water. Except for water deemed to be Baker WTP product water under Section 9.1, any water supplied through the interconnection shall be invoiced by IRWD to ETWD. The water supplied will be charged at the prevailing rate paid by IRWD for full-service Metropolitan Water District treated water or equivalent, plus any incremental increase in readiness-to-serve charges paid by IRWD and attributable to the water supplied. Each invoiced amount shall be due and payable within thirty (30) days of mailing of the invoice. Alternatively, IRWD may, at its election, include any such invoiced amounts with amounts billed by IRWD to ETWD for water, operation and maintenance under the Baker WTP Agreement.

9.3. Energy Costs. ETWD shall pay to IRWD, upon invoice including supporting calculations, the actual cost of energy required to back feed from the Lake Forest Zone 2 system to the Lake Forest Zone 1 system to support Interconnection Delivery, as described in Section 2.3. The controls and metering described in Section 2.3 will be used by IRWD to totalize the volume of flow that is back fed and will serve as the basis for billing such actual energy costs. Each invoiced amount shall be due and payable within thirty (30) days of mailing of the invoice. Alternatively, IRWD may, at its election, include any such invoiced amounts with amounts billed by IRWD to ETWD for water, operation and maintenance under the Baker WTP Agreement

9.4. Fixed Operation and Maintenance Costs. ETWD shall pay to IRWD, upon invoice, fixed administration, operation and maintenance costs of Interconnection Delivery. Annually, by April 1 of each year, IRWD shall prepare a budget for such costs during the next budget year (July 1 – June 30) for approval by ETWD, and shall provide ETWD with a copy of the budget. The budgeted fixed costs for the budget year shall be payable by an advance deposit made annually by ETWD, and shall be due upon presentation of an invoice by IRWD. In the second and each subsequent budget year, any excess/shortfall from the preceding budget year's deposits shall be subtracted from/added to the second

annual deposit. If and for so long as the ETWD fails to approve a budget for fixed costs, the Parties' obligations under this Section shall continue to be performed as though the prior year's budget were in effect for the current budget year, and IRWD may reduce the use of the Interconnection as necessary to operate within such budget. IRWD and ETWD acknowledge that the foregoing process is intended to be patterned on the comparable process under Section 4.2 of the Baker WTP Agreement, in order to permit the parties to carry both processes out concurrently. For this purpose IRWD may use a single set of budget documents and invoices submitted to ETWD under both agreements, and such invoices shall be due as provided in the Baker WTP Agreement

9.5. Facility Costs. ETWD shall pay to IRWD, upon invoice, the capital cost of adding controls and metering pursuant to Section 2.3.

10. Indemnification.

10.1. Water Supply. ETWD shall indemnify and hold IRWD harmless from and against any and all claims arising from IRWD's inability or failure to provide Interconnection Delivery or arising from any condition of flow, pressure or quality of the water supplied. Said indemnification and hold-harmless obligations shall include, without limitation, all costs and attorneys' fees incurred in the defense of any claim or any action or proceeding brought against IRWD; provided, the foregoing shall not be deemed to limit any responsibility IRWD may have with respect to quality of Baker WTP product water under the Baker WTP Agreement, subject to Section 10.1.1 thereof. For claims *other than* as described in this paragraph 10.1, the following paragraphs shall apply.

10.2. Indemnification by IRWD. IRWD shall indemnify, defend and hold ETWD, its officers, agents, employees harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen out of the performance of this Agreement, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of ETWD, its officers, agents or employees or by any act or omission for which ETWD, its officers, agents or employees are liable without fault.

10.3. Indemnification by ETWD. ETWD shall indemnify, defend and hold IRWD, its officers, agents, employees harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen out of the performance of this Agreement, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of IRWD, its officers, agents or employees or by any act or omission for which IRWD, its officers, agents or employees are liable without fault.

11. Amendment. This Agreement may be amended only by a writing executed by both parties.

12. Notice. Any notice or other document and all billings and payments required or permitted to be given by either party hereto to the other party shall be deemed received upon delivery in person to the recipient or within two (2) business days after the date of deposit in the United States mail in the State of California, with postage prepaid, and addressed to the party for whom intended at the following address:

If to ETWD: El Toro Water District
24251 Los Alisos Boulevard
Lake Forest, CA 92630
Attn: General Manager

If to IRWD: Irvine Ranch Water District
P.O. Box 57000
15600 Sand Canyon Avenue
Irvine, California 92619-7000
Attention: General Manager

13. Severability. If any portion, provision or part of this Agreement is held, determined or adjudicated to be invalid, unenforceable, or void for any reason whatsoever, each such portion, provision, or part shall be severed from the remaining portions, provisions, or parts of this Agreement, and shall not affect the validity or enforceability of such remaining portions, provisions or parts.

14. Entire Agreement. This Agreement contains the entire understanding and agreement between the parties with respect to the compromise set forth herein. No other representations, covenants, undertakings or other prior or contemporaneous oral agreements respecting such matters which are not specifically incorporated herein shall be deemed in any way to exist or bind either of the parties. The parties, and each of them, acknowledge that they have not executed this Agreement in reliance on any such promises, representations, or warranties.

15. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Parties.

16. No Third Party Beneficiaries. No person or entity other than ETWD and IRWD shall be deemed to be a third party beneficiary hereof, and nothing in this Agreement, either express or implied, is intended to confer upon any person or entity, other than the parties and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

17. Authority. The representative of each party signing this Agreement warrants and represents that he/she has the full authority to execute the Agreement on behalf of the party on whose signature he/she so executes and he/she is acting within the express scope of such authority.

IRVINE RANCH WATER DISTRICT

EL TORO WATER DISTRICT

By _____
Paul Cook
General Manager

By _____
General Manager

By _____
Leslie Bonkowski
Secretary

By _____
Secretary

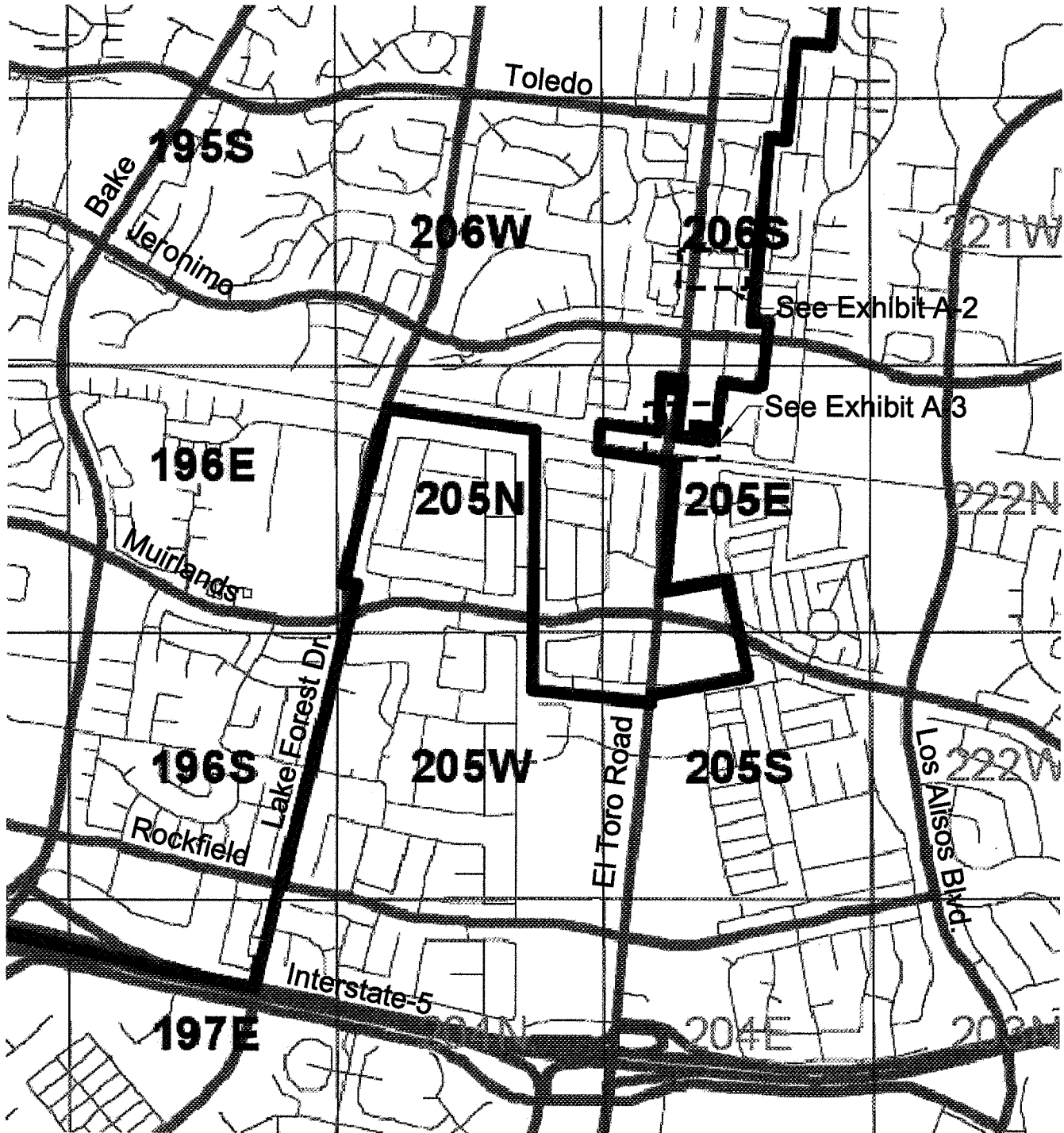
Approved as to form:

Approved as to form:

By: _____
IRWD Legal Counsel

By: _____
ETWD Legal Counsel

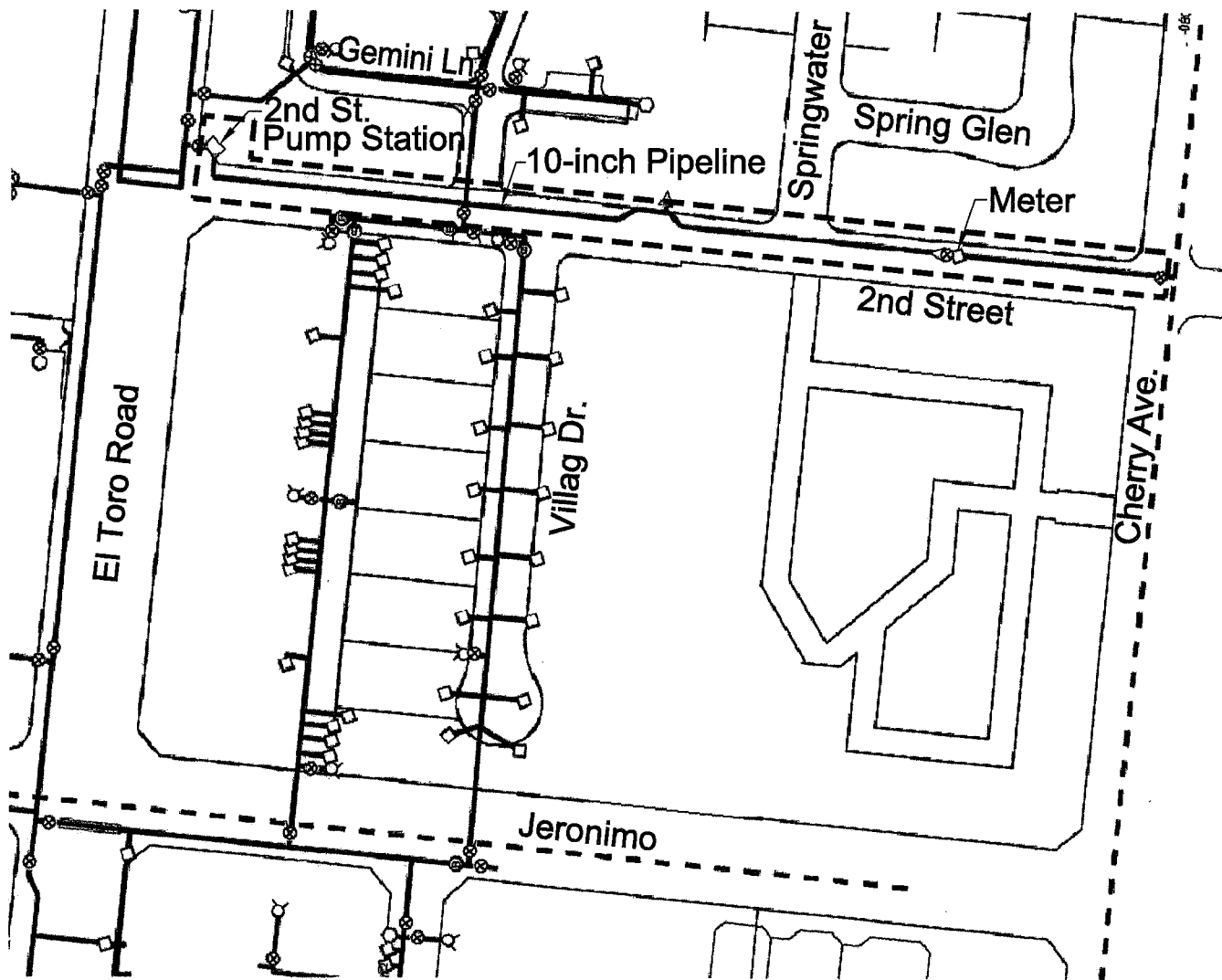
Exhibit "A-1" Vicinity Map



— IRWD Service Boundary
197E IRWD 2012 Atlas Sheet Numbers

EXHIBIT A-2

Exhibit "A-2"
2nd Street Pump Station,
Existing 10-inch Pipeline, and Meter




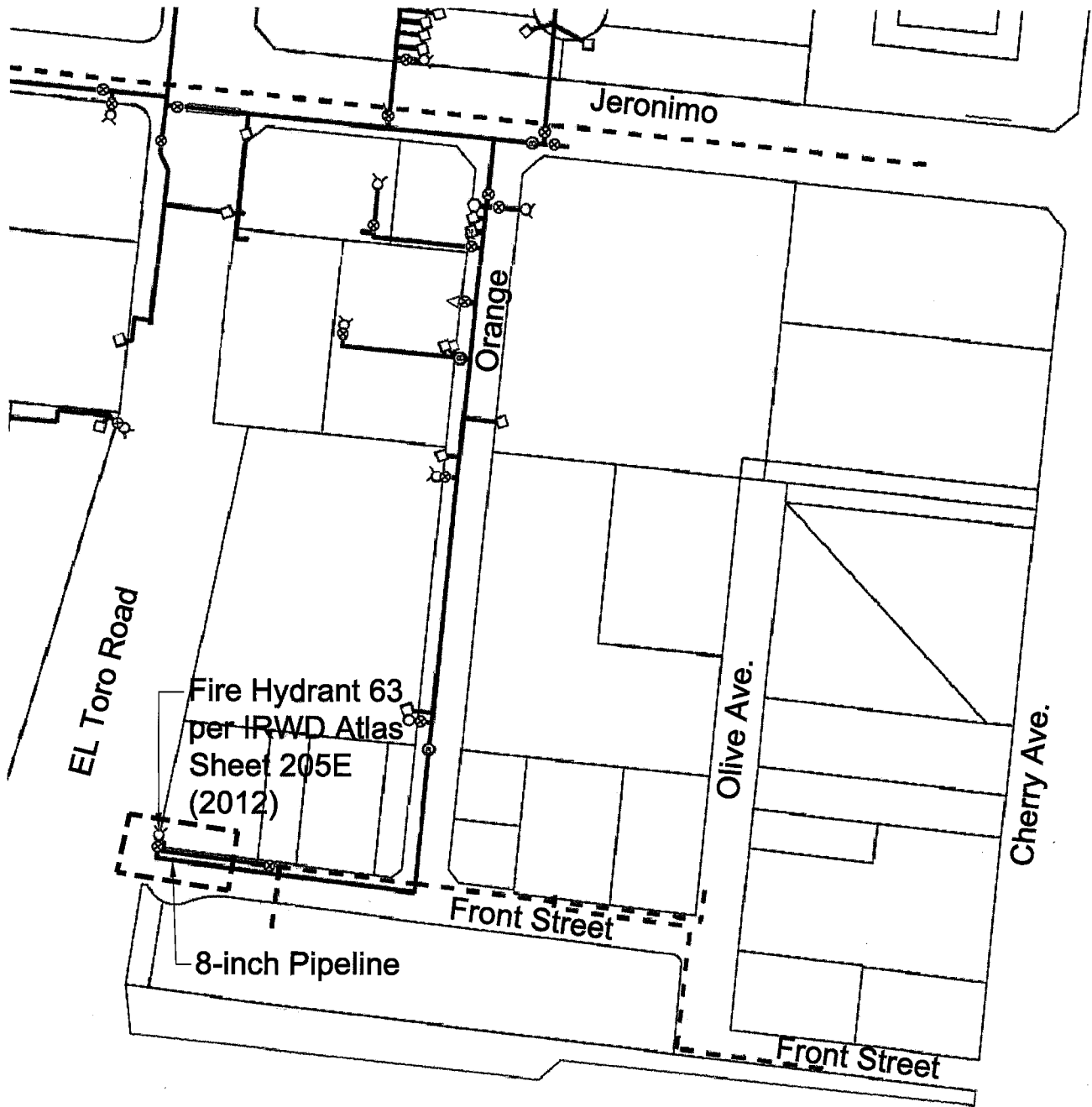

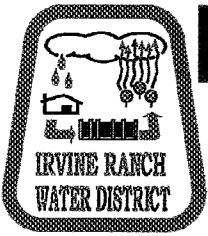
 General limits of facilities to be quitclaimed from IRWD to ETWD.

EXHIBIT A-3

Exhibit "A-3"
Existing Fire Hydrant on Front Street
and Existing 8-inch Pipeline



 General limits of facilities to be quitclaimed from IRWD to ETWD.



Proposed Baker WTP CM Team

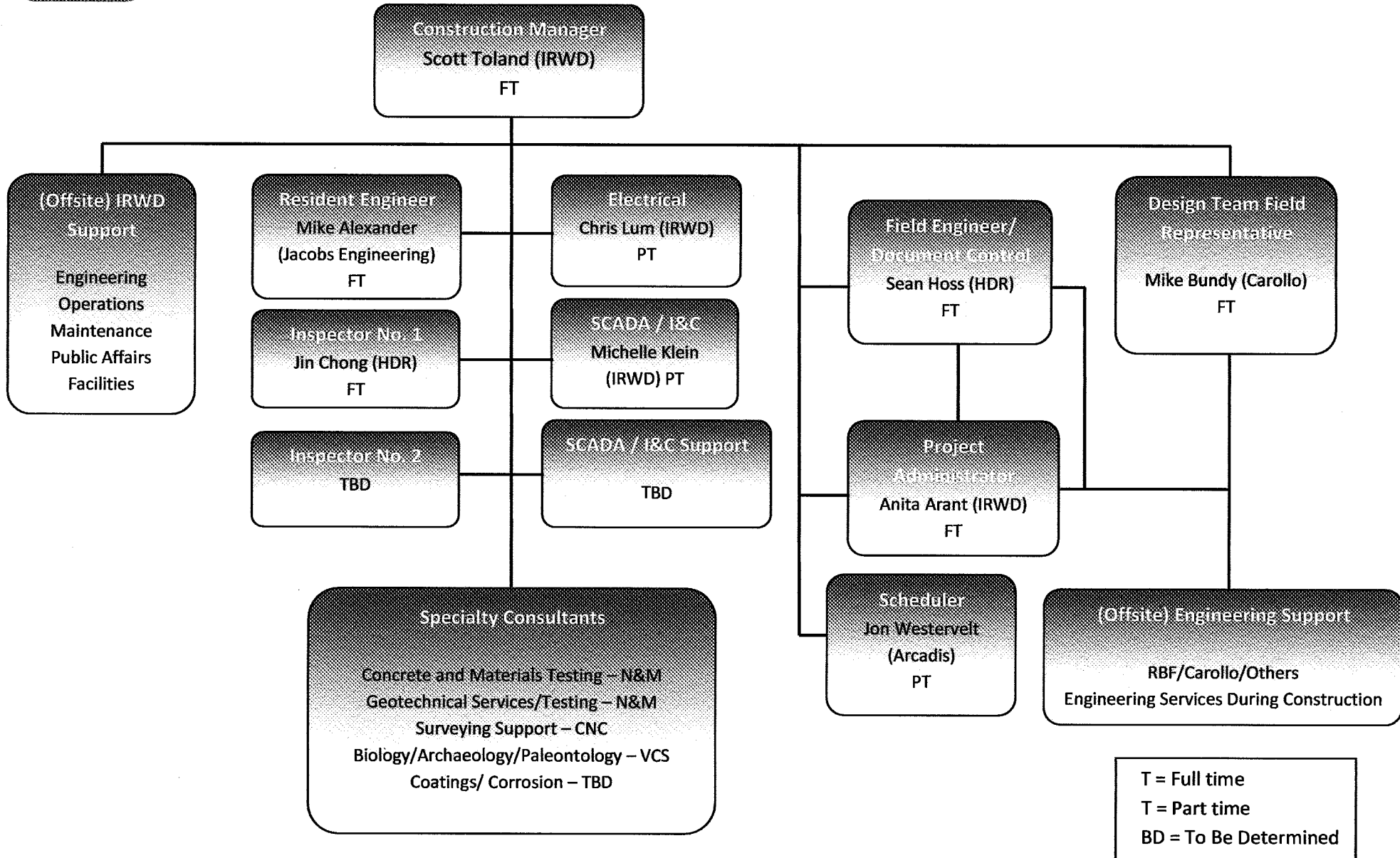


EXHIBIT "G"

Estimated IRWD Staff - Baker WTP CM Team and Support					
Role	Employee	Rate	Hours	% of FT	Total
Program Manager	Rich Mori	\$ 69.29	464	10%	\$ 32,153
Construction Manager	Scott Toland	\$ 62.23	4,632	100%	\$ 288,235
Project Administrator	Anita Arant	\$ 40.73	4,632	100%	\$ 188,638
Electrical Inspector	Chris Lum	\$ 47.03	2,316	50%	\$ 108,910
Raw Water PS Inspector	Rick Bouslog	\$ 43.19	1,040	22%	\$ 44,916
SCADA/I&C	Dave Mazarella	\$ 62.23	926	20%	\$ 57,647
SCADA/I&C	Michelle Klein	\$ 48.09	2,316	50%	\$ 111,368
Project Engineer	Joe McGehee	\$ 49.94	928	20%	\$ 46,348
IRWD Intern	TBD	\$ 14.00	2,316	50%	\$ 32,424
Operations	Startup	\$ 40.73	1,408	30%	\$ 57,348
Operations	Training	\$ 40.73	1,390	30%	\$ 56,608
Operations	Field Support/Other	-		30%	\$ 200,000
IRWD Staff Total:					\$ 1,224,595
G&A (Per Baker WTP Agreement)		78.6%	-	-	\$ 962,532
IRWD Staff w/G&A Total:					\$ 2,187,127

EXHIBIT "H"

TASK ORDER NO. 1

IRVINE RANCH WATER DISTRICT
(DISTRICT)

AND

CAROLLO ENGINEERS, A PROFESSIONAL CORPORATION
(ENGINEER)

This Task Order is issued by the DISTRICT and accepted by the ENGINEER pursuant to the mutual promises, covenants, and conditions contained in the Agreement for Professional Services between the above named parties dated the _____ day of _____, 2013, in connection with:

IRVINE RANCH WATER DISTRICT
BAKER WATER TREATMENT PLANT and
RAW WATER CONVEYANCE FACILITIES PROJECT

PURPOSE

The ENGINEER's scope of services, time of completion and compensation shall be as set forth herein. Services shall generally be described as construction support services for the Irvine Ranch Water District, Baker Water Treatment Plant, and Raw Water Conveyance Facilities Project. This Task Order is hereby made a part of the above-referenced "Agreement for Professional Services."

PROJECT SCOPE

The project scope of services consists of five primary tasks:

- Task 1 – Field Services
- Task 2 – Office Engineering
- Task 3 – Facilities Startup and Operations Services
- Task 4 – Additional Support Services
- Task 5 – Raw Water Conveyance Facilities

The scope of services is based on a duration of 27 months from Contractor Notice-of-Award, which is estimated to occur not later than December 17, 2014. The Scope of Services is based on completion of final commissioning in March 2016, and completion of all Project Close Out services by end of March 2016.

Budget and labor hour estimates for Subtasks 3.8, 3.9, 3.10, and 3.11 are included in this task order. However, the associated work efforts would extend beyond the 27 month duration referenced above.

The Scope of Services includes a full-time Field Engineer on site for the duration of the construction period. The Field Engineer shall be Michael Bundy, or another engineer as approved in writing by the District. Carollo will also provide a Processes Specialist to be onsite during plant start-up. The Process Specialist shall be Dan Hugaboom, or another specialist as approved in writing by the District. The Field Engineer will assist the

DISTRICT's Construction Manager in maintaining the intent of the design over the entire construction period. The role and responsibilities of the Field Engineer are defined for each of the primary tasks on the following pages.

TASK 1.0 – FIELD SERVICES

The purpose of the field services task is to define the construction support activities that will take place at the construction site. These activities include progress meetings, site visits, technical meetings, control strategy reviews, Supervisory Control and Data Acquisition (SCADA) system and Human-Machine Interface (HMI) review, and closeout procedures. The field services task does not include commissioning and start up activities. These activities are included in Task 3.

Subtask 1.1 – Construction Meetings

The Field Engineer shall attend and participate in certain project meetings at the job-site to keep abreast of construction activities and be involved in questions, which may arise concerning construction progress. These meetings include:

1. Preconstruction Meeting: The Field Engineer shall attend the preconstruction meeting for the project.
2. Weekly Construction Progress Meetings: These meetings are regularly scheduled meetings to be held at the job site. The Field Engineer shall attend and participate with DISTRICT staff in these meetings to verify construction quality and address construction issues as they relate to the design intent for the project.
3. Southern California Edison (SCE) Coordination Meetings: The Field Engineer and the Electrical Engineer shall attend up to three (3) coordination meetings with the DISTRICT, SCE, and the Contractor.

Subtask 1.2 – General Site Visits

Field verification of the design will be required at various stages of the project. The Field Engineer shall provide periodic inspections confirming construction of the project meets the design standards of the construction contract. During construction site visits that will be scheduled after the Weekly Construction Progress Meetings, the Field Engineer shall walk the job site with the DISTRICT to observe construction progress and discuss relevant construction issues.

Subtask 1.3 – Discipline Site Visits/Pre-Submittal and Coordination Meetings

Upon request of the Field Engineer, structural, mechanical, electrical and instrumentation engineers shall visit the site as required to confirm the construction meets the design intent, verify code compliance, resolve construction issues, and assist with claim resolutions. In addition, the discipline engineers and architects may be required to be on-site to answer questions, which may arise concerning construction activities. Twenty-four (24) site visits, each with a budgeted duration of three (3) hours, have been included in the Scope of Services.

Discipline and process engineers shall also attend and participate in pre-submittal meetings and other project meetings at the job-site or via conference call as required by the Contract Documents. These meetings are

required to answer questions regarding major construction components (excavation, concrete and rebar, piping, etc) and major equipment suppliers (MF system, UV system, motor control center, engine generator, etc.) and facilitate construction activities with respect to these items. These meetings are in addition to regularly scheduled Weekly Construction Progress Meetings to be held at the job site. The Field Engineer will schedule and coordinate these pre-submittals meetings and other project meetings. Thirty-eight (38) meetings, each with a budgeted average duration of two hours, have been included in the Scope of Services.

Subtask 1.4 – Process Control Strategy Development Assistance

ENGINEER shall provide the following services related to process control strategies and Programmable Logic Controller (PLC) programming logic:

1. Review Programmer's control strategy and PLC programming submittals.
2. Attend up to four (4) process control strategy review meetings with the DISTRICT and the Programmer.

The DISTRICT will take the lead with this effort with the ENGINEER providing minimal support. The Field Engineer shall schedule and coordinate the four (4) meetings. He will be responsible for having the right discipline engineers attend and contribute to the meetings.

Subtask 1.5 – SCADA & HMI Screen Development Assistance

ENGINEER shall provide the following services related to SCADA & HMI screen development:

1. Review Programmer's SCADA & HMI screen submittals.
2. Attend up to four (4) SCADA & HMI screen development meetings with the DISTRICT and the Programmer.

The DISTRICT will take the lead with this effort with the ENGINEER providing minimal support. The Field Engineer shall schedule and coordinate the four (4) meetings. He will be responsible for having the right discipline engineers attend and contribute to the meetings.

Subtask 1.6 – Project Closeout

Once the Contractor has indicated that the project is substantially complete, the Field Engineer assisted by the discipline engineers will apply the appropriate closeout procedures. These activities include conducting final inspection of the project with key team members, developing a final project punch list, and assist with the resolution of the punch list items.

TASK 2.0 – OFFICE ENGINEERING

The purpose of the Office Engineering work is to provide conformed contract documents, review submittals and shop drawings, respond to Contractor Request for Information (RFI), provide Design Clarification (DC), assist with Proposed Change Orders (PCO) and Change Order Request (COR), produce record drawings, and manage the entire scope of services.

The Field Engineer will direct and coordinate the office engineering activities.

Subtask 2.1 – Conformed Documents

ENGINEER shall provide one (1) set of conformed contract documents electronically and one (1) hard copy set. The electronic conformed specifications will be 8.5-inch by 11-inch PDF files, and the electronic conformed drawings will be full-size PDF files. The hard copy conformed specifications will be printed on 8.5-inch by 11-inch bond paper and the hard copy conformed drawings will be printed on full size bond paper.

Subtask 2.2 – Submittal and Shop Drawing Review

ENGINEER shall review equipment shop drawings and other project submittals as required by the contract documents. The purpose of reviewing submittals and shop drawings is to determine if the equipment and materials proposed by the Contractor meet the design intent for the project and the requirements stipulated in the Contract Documents. ENGINEER shall facilitate review of submittals and shop drawings by subconsultants, and coordinate final comments sent to Contractor.

It is estimated that the Contractor will submit 700 submittals and equipment operations and maintenance manuals. It is estimated that 50% of the submittals will require re-submittal. ENGINEER shall provide an initial review and one re-submittal review, which results in a total budget for the review of 1,050 submittals. Reviews of second re-submittals will be tracked with a separate task number and may be the financial responsibility of the Contractor.

It is estimated that the Field Engineer will review fifteen percent (15%) of the submittals. The submittals reviewed by the Field Engineer will generally be related to Divisions 1, 11, 13, 14, and 15 (except HVAC and plumbing).

Subtask 2.3 – Requests for Information/Design Clarifications

ENGINEER shall respond to Contractor's RFIs on the Contract Documents. The work will involve both written responses to formal requests for information, and informal verbal telephone and in-person responses. In the event that the response requires a significant change to the Contract Documents for clarity, the ENGINEER will issue a Design Clarification (DC).

ENGINEER estimates that it will review and respond in writing to 500 RFIs. DISTRICT staff or an appointed representative of the DISTRICT will review the ENGINEER's response to the RFI, as appropriate and forward to the Contractor.

It is estimated that the Field Engineer will respond to 100 RFIs.

Subtask 2.4 – Review Proposed Change Orders

ENGINEER shall review and provide engineering support for the review of Proposed Change Orders (PCO) submitted by the Contractor. The Field Engineer, at the request of the DISTRICT, shall either review the Change Order Request (COR) prepared by the DISTRICT, or when COR requires redesign, coordinate preparation of detailed specifications, drawings, and/or sketches by discipline engineers. The number of COR is estimated at 50 occurrences of which the Field Engineer will provide review of an estimated 20

occurrences. DISTRICT staff or an appointed representative will review and approve the ENGINEER's response. ENGINEER's review of PCO's shall include the following items:

1. Evaluate the impact of the PCO on the design intent.
2. Provide engineering services, including calculations and sketches, when required to facilitate performance.
3. Provide review of cost proposal submitted by Contractor.

Subtask 2.5 – Provide Record Drawings

DISTRICT staff or an appointed representative will provide a marked up set of the construction drawings for the ENGINEER. The Field Engineer will coordinate the preparation and provision of one (1) hard copy and one (1) electronic copy of record drawings. The electronic conformed drawings will be full-size PDF files and the hard copy conformed drawings will be printed on full-size bond paper.

Subtask 2.6 – Project Management

Carollo will coordinate the planning, the execution, the monitoring and controlling process, and the closing process throughout the duration of the construction management services project. The ENGINEER will prepare and submit a brief Project Budget Status Report with each monthly invoice. The Field Engineer will provide day-to-day communication and coordination with the DISTRICT Project Manager.

TASK 3.0 – FACILITIES STARTUP AND OPERATIONS SERVICES

Carollo Field Engineer shall provide startup coordination for the project. The coordination will require developing technical documents such as plans and protocols related to Factory Acceptance Testing (FAT), performance testing, and facility acceptance by the California Department of Public Health (DPH) as well as supervising and coordinating start-up site activities. The task will also include the day-to-day management of the start-up activities. In order to achieve this goal, the Field Engineer shall:

1. Facilitate sequencing and start-up meetings with the appropriate operations staff, equipment suppliers, and appropriate subcontractors including the initial facility startup meeting in order to enhance coordination and scheduling.
2. Interface between DISTRICT staff and equipment manufacturer representatives, specialist, and appropriate startup technicians provided by the suppliers.

Subtask 3.1 – Factory Acceptance Testing

Contract documents require FAT for major project components prior to delivery to the construction site. These tests are intended to confirm proper operation and compliance with contract documents. ENGINEER shall review and provide comments on the protocol submitted by Contractor outlining FAT activities. The ENGINEER shall plan for and attend a one-week factory acceptance test for each of the following systems:

1. Microfiltration Membrane (MF) System: The purpose of the FAT for the MF System is to control the quality of the equipment that is pre-fabricated and assembled prior to being shipped to the construction site. The

approach allows the Field Engineer to focus on the quality of the fieldwork and minimize the startup time. Per the contract requirements, the Field Engineer shall attend the FAT. The FAT includes the functional testing of the membrane valve rack that is delivered assembled to the site. The FAT also includes the testing of the membrane system software through simulation of operation of at least the master PLC and two rack remote I/O cabinets. Six 8-hour days are included in the membrane supplier contract for witnessed factory software testing.

2. Ultraviolet (UV) Disinfection System: FAT testing for the UV system will occur in Germany. In lieu of attending FAT testing, Carollo will have a UV expert spend two 8-hour days onsite confirming UV settings and programming prior to start-up.
3. PLC Control Panels: An electrical/instrumentation & controls engineer will spend one 8-hour day attending FAT testing for the control panels.
4. Motor Control Centers: An electrical/instrumentation & controls engineer will spend one 8-hour day attending FAT testing for the motor control centers.
5. Stand-by Engine Generators: An electrical/instrumentation & controls engineer will spend one 8-hour day attending FAT testing for the stand-by generators.

Subtask 3.2 – Direct Integrity Test Validation

The validation of the Direct Integrity Test (DIT) is a field activity that is scheduled after the functional testing of the MF system and the calibration of all the field instruments.

The Field Engineer shall review the protocol prepared by the MF supplier for integrity testing and will submit the protocol to the DPH for review and approval. The requirements for the protocol are included in Section 11005-38 Article 3.06. The Field Engineer will attend field integrity testing of the membrane system. Testing is budgeted for two days, after which the Field Engineer will analyze data and prepare a summary report.

Subtask 3.3 – Department of Public Health Operation Plan

The Field Engineer shall prepare and submit a draft Operational Plan for the new treatment facilities for review by the DPH. The Field Engineer shall review and integrate DPH's comments prior to submitting the final Operational Plan. It is anticipated that the DISTRICT will develop the Administration part of the Operational Plan. The Operational Plan will be used as the basis for developing the Operations and Maintenance Manual.

Subtask 3.4 – Development of Facility Start-up Protocol

The FIELD ENGINEER shall oversee the development of a systematic startup protocol for the facility prior to the completion of the construction phase of the project. Operation and startup assistance shall generally follow procedures outlined in the Contract Documents. The purpose of this plan is to assist the Contractor in getting the plant operational and ready for the 10-day testing. The Field Engineer shall review Contractor's proposed plan and assist to define initial process setpoints and operational parameters. The Field Engineer shall be available to resolve equipment and process issues and provide consultation and recommendations.

Subtask 3.5 – Operational Training

Once equipment is certified for operation, functional testing has been completed and prior to operational testing, training of individual equipment is to be provided by equipment manufacturers. Contractor is to submit materials outlining on-site training activities. The Field Engineer shall review these materials through the submittal process (as described in Subtask 2.2) to confirm proper training is being provided. The Field Engineer shall attend equipment manufacturer's training activities to confirm key components are described and relevant information is conveyed through the training seminars.

In addition, the Field Engineer shall also conduct process training for the microfiltration system, the UV system, the chemical facilities, and the solids handling system. Training will be tailored to cover the treatment process design and operating intent, and will supplement training provided by the equipment manufacturer or supplier. Each training session will be provided in the morning and repeated in the afternoon to maximize attendance of DISTRICT staff.

Subtask 3.6 – Arc Flash Training

The Electrical Engineer shall provide Arc-Flash Safety Training- in accordance with applicable electrical safety codes, including the National Fire Protection Association Standard to Electrical Safety in the Workplace (NFPA 70E). The Electrical Engineer shall prepare, schedule and conduct two (2) 8-hour Arc Flash training seminars for DISTRICT personnel. This training will include code and study review, hazard analysis and identification, and personal protection procedures.

Subtask 3.7 – Facility Start-up

The Field Engineer shall be on-site for the duration of the start-up and acceptance activities. These activities include functional, operational, and initial performance testing. Each piece of equipment is to be tested prior to startup to confirm compliance with the contract documents. Once all equipment is tested and ready for operation, the 10-day operational testing of the plant will be conducted. It is estimated that the start-up and acceptance activities will take two (2) months.

Subtask 3.8 – Develop Electronic Operations and Maintenance Manual

In addition to the Operational Plan described in Subtask 3.3, ENGINEER shall develop and populate an Electronic O&M Manual (EOM) with O&M content for the Baker Water Treatment Plant and the Raw Water Conveyance Facilities. ENGINEER shall develop a web-based, electronic content and document management system, based on Microsoft Sharepoint, that will contain a variety of operations and maintenance information including: facility and equipment descriptions, process schematics, area procedures and expectations (APEs), theory of operations, design criteria, standard and abnormal or emergency operating procedures (SOPs/EOPs), process control narratives, alarms and troubleshooting guides, design drawings and specifications, digital photographs, vendor operations and maintenance (O&M) manuals, and training videos. Beginning with a prototype process chapter, the EOM content, organization, and format will be customized to the needs of the DISTRICT, with standardized templates that can be used for future updates and changes to the facility O&M content.

The EOM will be organized by process area chapters that are anticipated to include the following:

- Raw Water Pump Station
- Flow Control Facility
- TCWD Pump Station
- Raw Water Flow Equalization and Pumping
- Microfiltration
- MFWW Equalization Basin
- Membrane Waste Washwater Treatment
- Blower/Compressors
- UV Disinfection
- CIP System
- CT Basin
- Clearwells & Product Water Pump Station
- Utility Water Systems
- Plant Waste Disposal and Equalization System
- Chemical Building
 - Primary Coagulant
 - Sodium Hypochlorite
 - Caustic Soda
 - Aqueous Ammonia
 - Sodium Bisulfite
 - Chlorine Dioxide
 - Hydrochloric Acid
 - Sodium Chlorite
 - Citric Acid

- Solids Handling Facilities
 - Sludge Pumps and Sludge Thickeners
 - Thickened Sludge Pumps
 - Decant Return PS
 - Centrifuges
 - Polymer
 - Conveyors

Within each process area chapter, ENGINEER will develop O&M content according to a standard template of sections that include: process overview, design criteria, theory of operation, equipment/instrument descriptions, process control strategies, standard and emergency operating procedures (SOPs/EOPs), alarms and alarm responses, design drawings and specifications, digital photographs, vendor operations and maintenance (O&M) manuals, and training videos. Using available information, chapters will also be developed to include electrical, yard piping, building support, and safety systems.

Beginning with a prototype process chapter, the EOM content, organization, and format will be customized for the District, with standardized templates that can be used for future updates and changes to the facility O&M content. Following the prototype chapter review meeting, ENGINEER will hold up to six (6) interim review meetings, each budgeted at 4 hours, with the DISTRICT to discuss O&M manual development progress and collect DISTRICT user feedback on completed O&M content. The EOM will be hosted by the ENGINEER during development and made available to the DISTRICT via a secure web site for ongoing review. Prior to facility startup, the complete EOM software and content will be migrated to the DISTRICT's servers, with assistance of DISTRICT information technology staff, and according to the software/hardware specification provided by the ENGINEER. It is assumed that the DISTRICT will provide the required software, hardware, and network infrastructure to operate the EOM under a separate procurement or contract. The ENGINEER will coordinate network requirements for EOM hosting with DISTRICT IT staff at the beginning of EOM development.

Using the EOM, DISTRICT staff will be able to access and update all of the O&M information in an electronic format with a user-friendly, graphical, user interface. The EOM will be capable of integration with other DISTRICT information systems, such as SCADA and computerized maintenance management systems (CMMS), to support operational best practices, real-time troubleshooting, and overall DISTRICT asset management efforts. ENGINEER shall provide up to two days of training for DISTRICT staff on content and system administration of the EOM. The completed EOM will also be used as a training tool for facility start-up, during which the operations procedures will be confirmed and refined to match actual operating conditions.

Subtask 3.9 – Membrane Monitored Testing and Warranty Period Evaluation

After successful initial performance test (IPT) and final completion of the construction project, a 26-week Monitored Test Period will be conducted on the membrane system to verify that it meets the performance

requirements for recovery, capacity, cleaning interval, filtered water quality, and energy consumption. At this time, the facilities will be operated by the DISTRICT. ENGINEER shall provide remote technical assistance by a membrane process engineer for this activity. Following testing, the ENGINEER will prepare a summary report.

During the 24-month warranty period, the DISTRICT will send monitoring data to the ENGINEER for analysis. The ENGINEER will review the data, interpret the data, and provide a summary report. The ENGINEER will work with the manufacturer on performance and warranty related issues for the duration of 24-month period. It is assumed that 16 hours will be required each month for these activities along with six 3-day visits over the 24 month period.

Subtask 3.10 – UV System Testing and Warranty Period Evaluation

Functional demonstrations and startup activities for the UV system will be required to verify overall performance of the UV system in the field. Functional demonstration includes activities such as proper placement of screens, functionality of wipers, and proper instrument calibration of field instruments. Startup activities require 30-day observation period where ENGINEER shall collect SCADA data to confirm proper operation of the system in dose pacing mode and that dose calculations are accurate.

During the 24-month warranty period, testing will be conducted to determine if system performance continues to meet specified requirements on items such as lamps (output and age), UV sensors, and ultraviolet transmittance (UVT) monitors. Final warranty testing will be performed at the 23rd month of system operation. Three field visits will occur every six months for the first 18 months of operation, each for one day. A two day site visit will be part of the 23rd month testing. A summary report will be prepared for each site visit.

Subtask 3.11 – Follow-up Services

The Field Engineer shall provide two follow-up training sessions. An intermediate training will be given twice (four hours per session) during the 5th month of operation and a one-day training session will be given during the 11th month of operation. These training activities will allow the DISTRICT to operate the facilities for a period of time and determine areas or facilities that need additional training. It is expected that the DISTRICT will provide an advanced list of items to be included in the training sessions.

During the 11th month of operation and prior to the end of the construction warranty period (one year), the Field Engineer shall conduct a one day site visit. The purpose of this site visit is to verify compliance of facilities with contract documents prior to the expiration of the contractor's warranty. The Field Engineer will determine if items and components are no longer within specified compliance or plant staff has observed issues during plant operations.

TASK 4.0 – ADDITIONAL SUPPORT SERVICES

The purpose of Task 4 is to cover the following activities:

Subtask 4.1 – CT Basin Tracer Study

The purpose of the tracer study is to confirm the actual baffling factor for the chlorine disinfection basin. The design baffling factor indicated on the Contract Documents is 0.60.

The ENGINEER shall develop the testing protocol. He will submit the protocol to the DISTRICT and the DPH for approval. When the testing protocol is approved, the ENGINEER shall perform the tracer testing and submit a draft report to the DPH. The ENGINEER shall review the comments received from the DPH, revise the report accordingly, and issue the final tracer study report. A budget of 300 hours has been assigned to this task. This will include preparation of protocol, testing, analysis, and working with DPH to obtain final approval.

Subtask 4.2 – Equipment Inventory Support for Asset Management

The ENGINEER shall assist the DISTRICT in the development of the equipment schedules that will be used as the basis for the asset management system. The ENGINEER shall produce the equipment schedules included in the Contract Documents in an Excel format and ensure that the schedules are correctly interpreted by DISTRICT's staff. A budget of 250 hours has been assigned to this subtask.

Subtask 4.3 – Energy Control Procedures

The ENGINEER shall develop the Energy Control Procedures (ECP). These procedures shall be developed for each piece of equipment that may include energy prior to being serviced or maintained. Energy is meant to include electrical energy, mechanical energy, hydraulic energy, and chemical energy. A budget of 350 hours has been assigned to this subtask. The ECPs will be prepared using the DISTRICT's standard templates.

Subtask 4.4 – Permitting Support During Construction

The ENGINEER shall provide additional permitting support to the DISTRICT and the Contractors during construction as follows:

- Prepare and submit process Riders for permits issued to IRWD (OC Parks, Boy Scouts, etc.) to keep the permits current during construction.
- Assist with processing Riders to OC Parks encroachment permits for construction activities.
- Assist with processing encroachment permits with OC Public Works as required for construction.
- Assist IRWD with conditions of approval compliance during construction.
- Assist IRWD with permit close-outs.

As part of this task, a budget of \$10,000 has been provided for miscellaneous permit fees. Permit fees shall be paid by the DISTRICT.

TASK 5.0 – RAW WATER CONVEYANCE FACILITIES

The purpose of Task 5 is to cover the activities related to the construction support services for the raw water conveyance facilities that are built off site of the Baker Water Treatment Plant.

These activities shall include attendance to ten (10) progress meetings, responses to fifty (50) RFI, preparation of engineering documents for ten (10) COR, review of sixty (60) shop drawing submittals with 30 re-submittals, and ten (10) other submittals, permitting assistance, review of construction drawings marked up by DISTRICT staff or appointed representative, production of record drawings, and start up assistance.

Subtask 5.1 – Attend Progress Meetings

The ENGINEER will attend progress meetings as needed. The DISTRICT will handle most of these meetings. Attendance to ten 4-hour meetings is budgeted for this task.

Subtask 5.2 – Respond to RFI

ENGINEER shall respond to Contractor's RFIs on the Contract Documents. The work will involve both written responses to formal requests for information, and informal verbal telephone and in-person responses. In the event that the response requires a significant change to the Contract Documents for clarity, the ENGINEER will issue a Design Clarification (DC).

ENGINEER estimates that it will review and respond in writing to 50 RFIs. DISTRICT staff or an appointed representative of the DISTRICT will review the ENGINEER's response to the RFI, as appropriate and forward to the Contractor.

Subtask 5.3 – Review Submittals

ENGINEER shall review equipment shop drawings and other project submittals as required by the contract documents. It is estimated that the Contractor will submit 60 submittals and equipment operations and maintenance manuals. It is estimated that 50% of the submittals will require re-submittal. ENGINEER shall provide an initial review and one re-submittal review. Reviews of second re-submittals will be tracked with a separate task number and may be the financial responsibility of the Contractor.

Subtask 5.4 – Prepare Engineering Documents for Change Orders

ENGINEER shall review and provide engineering support for the review of Proposed Change Orders (PCO) submitted by the Contractor. The Field Engineer, at the request of the DISTRICT, shall either review the Change Order Request (COR) prepared by the DISTRICT, or when COR requires redesign, coordinate preparation of detailed specifications, drawings, and/or sketches by discipline engineers. The number of COR is estimated at 10 occurrences of which the ENGINEER will provide review of an estimated 5 occurrences. DISTRICT staff or an appointed representative will review and approve the ENGINEER's response. ENGINEER's review of PCO's shall include the following items:

1. Evaluate the impact of the PCO on the design intent.
2. Provide engineering services, including calculations and sketches, when required to facilitate performance.
3. Provide review of cost proposal submitted by Contractor.

Subtask 5.5 – Site Visits

The ENGINEER will visit the site as recommended by the DISTRICT. Ten 4-hour site visits are budgeted under this task.

Subtask 5.6 – Permitting Assistance

The ENGINEER will provide permitting support to the DISTRICT and the Contractors as needed during construction. Assistance will be similar to Subtask 4.4. Forty-two (42) hours, including support staff time, is budgeted under this task.

Subtask 5.7 – Record Drawings

DISTRICT staff or an appointed representative will provide a marked up set of the construction drawings for the ENGINEER. The FIELD ENGINEER will coordinate the preparation and provision of one (1) hard copy and one (1) electronic copy of record drawings. The electronic conformed drawings will be full-size PDF files and the hard copy conformed drawings will be printed on full-size bond paper.

Subtask 5.8 – Start-up Assistance

The ENGINEER shall assist the DISTRICT and Contractor in development of a start-up plan. The ENGINEER will be on-site for two 8-hour days during start-up associated with the Raw Water Conveyance Facilities.

PROJECT SCHEDULE

The schedule for project completion is as follows:

- Preconstruction Meeting – January 15, 2014
- Substantial Completion – March 16, 2016
- Final Completion – May 16, 2016

PAYMENT

Agreement for Professional Services.

The ENGINEER shall submit monthly invoices based on the ENGINEER's expended hours at the time of billing. Monthly invoices shall be submitted to the DISTRICT no later than the 15th day of each month. Aggregate of monthly invoices for services under this Task Order shall not exceed the amount of _____ (\$ _____), which is based on a construction period of _____ () months. Should the construction period exceed _____ () months, an Amendment to the above-referenced "Agreement for Professional Services" may be required to extend the required services through the completion of construction. The DISTRICT and the ENGINEER agree to review the construction progress

at the midpoint and at the 90-percent complete point in accordance with the construction schedule to determine the effort required to complete the project tasks, as defined herein under the Project Scope, and to make the appropriate adjustments to the "Agreement for Professional Services."

A cost breakdown for tasks specified in the Project Scope is attached as Exhibit 1.

**Exhibit 1
Estimated Labor Hours & Fee Summary**

**IRVINE RANCH WATER DISTRICT
BAKER WATER TREATMENT PLANT**

TASK DESCRIPTION	ESTIMATED LABOR HOURS								EXPENSES		SUBCONSULTANTS				COSTS				
	Project Lead	Field Engineer	Process Specialist	Lead Engineer	Staff Engineer	CAD Technician	Senior CAD Technician	Support Staff	Total Hours	Reproductions / Mailing	Project Equipment / Communication Expense	RBF	Environ	RRM Design Group	Engineering Resources / Mechanical	Contract Labor	Subconsultants	Other Direct Costs	Total Costs
Hourly Rate	\$230	\$185	\$205	\$200	\$182	\$99	\$140	\$85			\$12.00								
Task 1 - Field Services																			
1.1.1 Pre-Construction Meeting	2	2	--	--	--	--	--	4	--	--	\$50	--	--	--	--	\$800	\$0	\$100	\$600
1.1.2 Weekly Construction Progress Meetings	--	234	--	--	--	--	--	234	--	--	\$2,810	--	--	--	--	\$43,300	\$0	\$2,800	\$48,100
1.1.3 SCE Coordination Meetings	--	9	--	9	--	--	--	18	--	--	\$220	--	--	--	--	\$3,500	\$0	\$200	\$3,700
1.2 General Site Visits	--	108	--	--	--	--	--	108	--	--	\$1,300	--	--	--	--	\$20,000	\$0	\$1,300	\$21,300
1.3 Discipline Site Visits/Pre-Submittal Conferences	--	74	--	32	--	--	--	106	--	--	\$1,270	\$8,000	--	\$3,000	--	\$20,100	\$9,000	\$1,300	\$30,400
1.4 Process Control Strategy Development Assistance	--	24	--	24	--	--	--	48	--	--	\$580	--	--	--	--	\$9,200	\$0	\$900	\$9,800
1.5 SCADA & HMI Screen Development Assistance	--	24	--	24	--	--	--	48	--	--	\$580	--	--	--	--	\$9,200	\$0	\$900	\$9,800
1.6 Project Closeout	13	170	--	64	13	--	--	260	--	--	\$3,120	--	--	--	--	\$48,300	\$0	\$3,100	\$52,400
FIELD SERVICES SUBTOTAL	16	645	0	183	13	0	0	828	\$0	\$9,930	\$8,000	\$0	\$3,000	\$0	\$166,400	\$9,000	\$10,000	\$174,400	
Task 2 - Office Engineering																			
2.1 Conformed Documents	--	18	--	--	182	--	--	180	380	8,000	\$4,320	--	--	--	--	\$44,800	\$0	\$12,300	\$57,200
2.2 Submittal and Shop Drawing Review	--	1,050	--	577	1,340	--	--	48	3,013	--	\$38,180	\$383,300	\$181,000	\$88,000	\$40,000	\$530,800	\$883,300	\$36,200	\$1,250,100
2.3 RFI Responses	45	650	--	100	80	40	40	30	985	500	\$11,820	\$81,000	\$43,000	\$20,000	\$8,000	\$175,700	\$152,000	\$12,200	\$340,000
2.4 Change Order Proposals Review	18	250	--	40	24	16	16	18	378	500	\$4,540	\$17,000	\$9,000	\$4,400	\$2,000	\$87,000	\$32,400	\$5,000	\$104,400
2.5 Record Drawings Preparation	--	72	--	40	--	200	200	--	512	4,000	\$6,140	\$40,000	\$20,000	\$10,000	\$5,000	\$89,100	\$75,000	\$10,100	\$154,200
2.6 Project Management	108	108	--	--	--	--	--	216	--	--	\$2,580	--	--	--	--	\$44,800	\$0	\$2,600	\$47,400
OFFICE ENGINEERING SUBTOTAL	169	2,148	0	787	1,606	286	256	272	6,464	\$13,000	\$66,670	\$501,300	\$263,000	\$123,400	\$55,000	\$892,100	\$942,700	\$78,600	\$1,893,300
Task 3 - Facilities Start-Up and Operations Services																			
3.1 Factory Acceptance Tests	--	220	40	220	--	--	--	--	480	500	\$5,780	--	--	--	--	\$82,600	\$0	\$8,300	\$99,200
3.2 Direct Integrity Test Validation	--	87	40	--	--	--	--	--	127	--	\$1,520	--	--	--	--	\$24,300	\$0	\$1,500	\$25,800
3.3 DPH Operation Plan	--	433	--	--	--	--	--	--	433	500	\$5,200	--	--	--	--	\$80,100	\$0	\$5,700	\$85,800
3.4 Facility Start-Up Protocol	--	347	40	--	--	--	--	--	387	--	\$4,840	--	--	--	--	\$72,400	\$0	\$4,600	\$77,000
3.5 Operational Training	--	120	80	--	--	--	--	--	200	--	\$2,400	--	--	--	--	\$38,600	\$0	\$2,400	\$41,000
3.6 Arc Flash Training	--	16	--	32	--	--	--	--	48	--	\$580	--	--	--	--	\$9,400	\$0	\$600	\$10,000
3.7 Facility Start-Up	--	434	228	96	--	--	--	--	758	--	\$8,070	\$8,000	--	--	--	\$145,800	\$8,000	\$9,100	\$162,900
3.8 Electronic O&M Manuals	150	--	--	220	1,300	29	30	78	1,807	--	\$21,880	--	--	--	--	\$302,800	\$0	\$21,700	\$324,500
3.9 Membrane MTP & Warranty Period	--	--	336	--	--	--	--	--	336	--	\$4,030	--	--	--	--	\$68,900	\$0	\$4,000	\$72,900
3.10 UV Testing & Warranty Period Evaluation	--	--	--	84	--	--	--	--	84	--	\$1,010	--	--	--	--	\$18,800	\$0	\$1,000	\$17,800
3.11 Follow-Up Services	--	--	40	--	--	--	--	--	40	--	\$480	--	--	--	--	\$8,200	\$0	\$500	\$8,700
FACILITIES START-UP AND OPERATIONS SUBTOTAL	150	1,657	802	652	1,300	29	30	78	4,898	\$1,000	\$58,370	\$8,000	\$0	\$0	\$0	\$860,200	\$8,000	\$57,400	\$925,600

**Exhibit 1
Estimated Labor Hours & Fee Summary**

**IRVINE RANCH WATER DISTRICT
BAKER WATER TREATMENT PLANT**

TASK DESCRIPTION	ESTIMATED LABOR HOURS								EXPENSES		SUBCONSULTANTS				COSTS				
	Project Lead	Field Engineer	Process Specialist	Lead Engineer	Staff Engineer	CAD Technician	Senior CAD Technician	Support Staff	Total Hours	Reproductions / Mailing	Project Equipment Communication Expense	REF	Environcon	RRM Design Group	Engineering Resources Mechanical	Carollo Labor	Subconsultants	Other Direct Costs	Total Costs
Task 4 - Additional Support Services																			
4.1 CT Basin Tracer Study	--	--	--	90	210	--	--	--	300	500	\$3,800	--	--	--	--	\$52,000	\$0	\$4,100	\$56,100
4.2 Equipment Inventory Support for Asset Management	--	--	--	90	160	--	--	--	250	--	\$3,000	--	--	--	--	\$43,900	\$0	\$3,000	\$46,900
4.3 Energy Control Procedures	--	--	--	90	260	--	--	--	350	--	\$4,200	--	--	--	--	\$90,100	\$0	\$4,200	\$94,300
4.4 Permitting Assistance	--	--	--	18	80	--	--	4	80	--	\$950	--	--	--	--	\$13,300	\$0	\$1,000	\$14,300
ADDITIONAL SUPPORT SERVICES SUBTOTAL	0	0	0	288	690	0	0	4	980	\$500	\$11,760	\$0	\$0	\$0	\$0	\$169,300	\$0	\$12,300	\$181,600
Task 5 - Raw Water Conveyance Facilities																			
5.1 Attend Progress Meetings	--	16	--	--	--	--	--	--	16	--	\$190	\$4,200	--	\$4,000	--	\$9,000	\$8,200	\$200	\$11,400
5.2 Respond to RFI	--	22	--	--	--	--	--	--	22	--	\$280	\$18,000	--	\$3,900	--	\$4,100	\$21,900	\$300	\$28,300
5.3 Review Submittals	--	88	--	--	--	--	--	--	88	--	\$1,080	\$52,000	--	\$18,000	\$14,900	\$16,300	\$85,600	\$1,100	\$103,300
5.4 Prepare Engineering Documents for CO	--	8	--	--	--	--	--	--	8	--	\$100	\$8,500	--	\$2,100	--	\$1,500	\$11,600	\$100	\$13,200
5.5 Site Visits	--	20	--	--	--	--	--	--	20	--	\$240	\$2,000	--	\$2,000	--	\$9,700	\$4,000	\$200	\$7,900
5.6 Permitting Assistance	--	--	--	--	--	--	--	--	0	--	\$0	\$8,800	--	--	--	\$0	\$8,800	\$0	\$8,800
5.7 Record Drawings Preparation	--	12	--	--	--	--	--	--	12	1,000	\$140	\$2,700	--	\$1,500	\$1,500	\$2,200	\$5,700	\$1,100	\$8,000
5.8 Start-Up Assistance	--	16	--	--	--	--	--	--	16	--	\$190	\$2,900	--	--	--	\$3,000	\$2,900	\$200	\$6,100
RAW WATER CONVEYANCE FACILITIES SUBTOTAL	0	192	0	0	0	0	0	0	192	\$1,000	\$2,180	\$38,100	\$0	\$32,500	\$16,400	\$33,800	\$147,000	\$3,200	\$184,000
TOTAL HOURS/COST	334	4,532	802	1,948	5,609	285	288	354	12,150	\$15,500	\$145,610	\$613,400	\$263,000	\$169,900	\$71,400	\$2,160,800	\$1,065,700	\$161,400	\$3,412,900

EXHIBIT "I"

**Baker Water Treatment Plant and Raw Water Conveyance Facilities
Construction Management Services
Resident Engineer Consultant Selection Matrix**

Anderson Penna	Jacobs	Arcadis	HDR
Matthew Smith	Mike Alexander	Ed Martin	Bruce Wundrack

Candidate Evaluation					
Interview	100%				
Relevant Construction Experience	30%	4	2	1	3
Start-up Experience	20%	4	1	3	2
Communication Skills	20%	4	1	3	2
Dispute Resolution	15%	4	1	3	2
Records Management	15%	4	2	3	1
Weighted Score		3.4	1.3	2.0	1.9

Experience				
Years	23	30	41	34

Fee				
Billing Rate (\$/hr)	\$160	\$175	\$200	\$173
Hours (579 days * 8 hrs/day)	4,632	4,632	4,632	4,632
TOTAL FEE	\$741,120	\$810,600	\$926,400	\$801,336

RANKINGS:	4 - Fourth	1 - First	3 - Third	2 - Second
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November 12, 2013

Scott Toland, PE
Senior Engineer
Irvine Ranch Water District
15600 Sand Canyon
Irvine, CA 92618

Re: Baker WTP Construction Management Staff Augmentation
Revised Fee and Commitment of Team

Dear Mr. Toland,

Per your request, this letter supplements Jacobs' Baker WTP Construction Management Staff Augmentation proposal dated August 9, 2013, based on IRWD's final selection of personnel and negotiated billing rates and project hours.

Jacobs is pleased to commit Mike Alexander to the Baker Project in the role of Resident Engineer. We are committed in maintaining Mr. Alexander in this role throughout the duration of the project, and will not remove Mr. Alexander from the project without prior written consent from the District. The scope of services for the position of Resident Engineer as defined by the District's Request For Proposal (RFP) is summarized herein:

Resident Engineer

The Resident Engineer shall possess extensive experience on complex water or wastewater treatment plant construction in the role of resident engineer or construction manager. The water/wastewater treatment plant construction experience shall include buried and above grade concrete structures, buried and exposed piping systems, installation of pumping systems, installation of chemical feed and storage systems, site grading/paving, electrical and instrumentation installations, and associated system integration, testing and startup. The Resident Engineer shall be responsible for verifying and maintaining contractor's performance with the construction documents, negotiating and evaluating change orders (including knowledge of reasonable construction costs and appropriate crew size for various construction activities), evaluating and processing monthly contractor pay requests, addressing and resolving construction issues, and experience with conflict resolution. The Resident Engineer shall be familiar with Critical Path Method (CPM) construction scheduling, sequence of construction activities, and contractor's methods of schedule manipulation. The Resident Engineer shall also participate in change request/change order development, preparation and execution.



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 Irvine, CA 92612 U.S.A.
 (949) 224-7500 Fax: (949) 224-7824

Duties of the Resident Engineer shall include, but not be limited to; field level construction contract administration; assisting CM with preconstruction and weekly construction meetings; reviewing construction plans, procedures and schedules; drafting and signing correspondence to contractors; participating in submittal reviews and RFI responses; directing changes to work approved by IRWD; documenting required changes; claims prevention; reviewing contractor cost proposals and claims; preparing and reviewing estimates for extra work; negotiating settlements for changes and claims; cost estimating, negotiating and recommending monthly progress payments; drafting and signing reports; reviewing and approving materials, equipment and testing procedures; coordinating with IRWD operations staff for contractor requested facility shutdowns needed for tie-ins and/or repairs; coordinating with external agencies and verifying that permit and/or easement requirements are being met; provide monthly progress reports to IRWD.

Below is our revised hourly rate for your use and approval:

Resident Engineer	Mike Alexander	\$175.00	4632	\$810,600
Contract Total				\$810,600

As requested in the District's RFP, the billing rate stated above is inclusive of Other Direct Costs (ODCs), computer/communication charges, vehicles, travel, per diem, personal protective equipment and annual escalation through the anticipated project duration of 27 months, with expected project start in February 2014. It is understood that IRWD will provide office space, office phone, access to office supplies, color copier/printer/scanner and internet access. Jacobs shall provide a computer for our staff and cell phone if needed.

Jacobs will provide staff augmentation support services to Irvine Ranch Water District (IRWD) for IRWD Baker Water Treatment Plant Project (Project). Jacobs staff assigned to the project will augment the IRWD staff and be under the daily direction of the IRWD Construction Manager (CM) Scott Toland or IRWD's designated representative. Under the direction of IRWD, Jacobs's field staff will perform the services listed above as the duties of the Resident Engineer.

Providing services under the direction of IRWD, Jacobs will be named as additional insured and additional indemnity by the IRWD contractors, designers and other entities providing services or working on the project.

Notwithstanding the Jacobs's review and evaluation of any design or construction documents provided by IRWD and others, the Jacobs shall have no responsibilities for

any deficiencies in the design or construction documents or for any failure by IRWD's engineer or contractor(s) to carry out their work in accordance with their contracts with the IRWD. Jacobs shall not have control over or charge of, and shall not be responsible for, the construction means, methods, techniques, sequences, or procedures utilized by the respective contractors.

CONTRACTOR SUBMITTALS: If Jacobs is called upon to review submittals from Construction Contractors, Jacobs shall review and approve or take other appropriate action upon Construction Contractor(s)' submittals such as shop drawings, product data and samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents. Review of such submittals will not be conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities or for substantiating instructions for installation or performance of equipment or systems designed by the Construction Contractor, all of which remain the responsibility of the Construction Contractor. The Jacobs's review shall not constitute approval of safety precautions or of construction means, methods, techniques, sequences or procedures.

SAFETY: In connection with performance of its services, Jacobs shall take all necessary precautions for the safety of its employees and shall comply with all applicable laws and regulations pertaining to occupational safety and health at the project site. Notwithstanding construction contractors shall remain solely responsible for the construction safety.

Jacobs shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work of each of the IRWD Contractors since these are solely the Contractors' responsibilities.

Jacobs is not responsible for the discovery, presence, handling, removal, or disposal of, or exposure of persons to, hazardous materials or toxic substances pre-existing at the Project Site. IRWD shall be responsible for injuries which are due to its own negligence, for loss of or damage to its own property and employees, for changes which it directs against recommendations, or which have the effect of reducing safety related features, and for injury or damage resulting from the release of or exposure to hazardous/toxic substances

CONSTRUCTION SITE SERVICES: If Jacobs is called upon to observe the work of IRWD's construction contractor(s) for the detection of defects or deficiencies in such work, Jacobs will not bear any responsibility or liability for such defects or deficiencies or for the failure to so detect. Jacobs shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work of each of the contractors since these are solely the Construction Contractor's responsibility under contract for construction between IRWD and Construction Contractor.

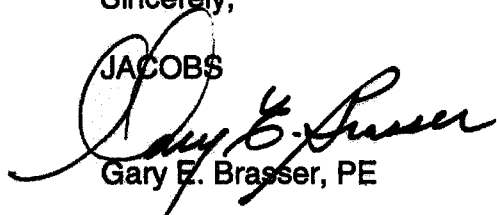


3161 Michelson Drive, Suite 500
Irvine, CA 92612 U.S.A.
(949) 224-7500 Fax: (949) 224-7824

If you should have any questions or concerns, please contact me at your earliest possible convenience.

Sincerely,

JACOBS



Gary E. Brasser, PE

Senior Vice President

Project Principal

EXHIBIT "J"

**Baker Water Treatment Plant and Raw Water Conveyance Facilities
Construction Management Services
Field Engineer Consultant Selection Matrix**

HDR	Arcadis	Jacobs
Sean Hoss	Nicholas Pailma	Michael Caraway

Candidate Evaluation			
Interview	100%		
Relevant Construction Experience	30%	1	2
Communication Skills	30%	1	2
Document Control	25%	2	1
Design Experience	15%	2	1
Weighted Score		1.4	1.6

N/A

N/A

Experience			
Years		7	7

Fee			
Billing Rate (\$/hr)		\$130	\$123
Hours (579 days * 8 hrs/day)		4,632	4,632
TOTAL FEE		\$602,160	\$569,736

N/A

N/A

RANKINGS:	1 - First	2 - Second	N/A
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November 7, 2013

Scott Toland, PE
Senior Engineer
Irvine Ranch Water District
15600 Sand Canyon
Irvine, CA 92618

Re: Baker WTP Construction Management Staff Augmentation
Revised Fee and Commitment of Team

Dear Mr. Toland,

Per your request, this letter supplements HDR's Baker WTP Construction Management Staff Augmentation proposal dated August 9, 2013, based on IRWD's final selection of personnel and negotiated billing rates and project hours.

HDR is pleased to commit Sean Hoss and Jin Chong to the Baker Project as field engineer and senior inspector positions, respectively. HDR will not remove either of these individuals from the project without prior written consent from the District. The scope of services for the two positions as defined by the District's Request For Proposal (RFP) are summarized herein:

Field Support Engineer

The Field Support Engineer shall manage and maintain a Document Control System (DCS), accurately logging and tracking contractor submittal processing, RFI responses, Change Request/Change Order logging, and general project file management. The Field Support Engineer will also be responsible for responding to Contractor generated RFIs, preparing and processing Change Requests, develop engineer calculations, attending meetings, recording meeting minutes, and other miscellaneous field tasks, including assisting the design engineer, resident engineer and construction manager in various tasks. The Field Support Engineer may also be requested to assist or cover selected field inspection assignments after proper training from the construction inspector.

Construction Inspector

The Inspector shall be experienced with the inspection of buried pipeline installation, paving/grading, mechanical equipment installation, exposed pipe installation, pumps and pump stations, protective coating systems, rebar and concrete installation, and welding inspection. The Inspector shall be responsible for preparing daily construction reports that identify contractor's on-site equipment, labor force, specific contractor activities performed throughout the day, and identify issues or discrepancies. The Inspector shall comprehend construction documents as well as approved shop drawings, and shall prepare in advance of the contractor's specific work elements by reviewing the plans and associated specifications and anticipating sequence and extent of work elements. The Inspector shall participate in

monthly contractor progress payment reviews to evaluate the percent completed on specific work tasks, and conduct routine reviews of the Contractor's As-Built records to ensure that all new utilities and exposed existing utilities are adequately documented. The Inspector shall provide photo documentation ~~of contractor's progress and/or issues to supplement weekly reports. The Inspector shall also~~ coordinate directly with the on-call geotech, survey and material testing subconsultants. The Inspector shall participate in change order reviews in order to share his/her knowledge of anticipated contractor efforts, crew size and cost for specific work elements. The Inspector shall identify deficiencies or missing elements of the work required by the construction documents and develop and track a corrections list that will be shared with the contractor. The Inspector shall be capable of working overtime if necessary to meet the contractor's schedule.

Below is our revised hourly chart for your use and approval:

Role	Name	Hourly Rate	Project Hours	Project Total
Field Engineer	Sean Hoss	\$130.00	4632	\$602,160
Senior Inspector	Jin Chong	\$134.00	4864*	\$651,776
Contract Total				\$1,253,936

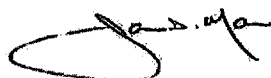
*232 hours assumed overtime is included

As requested in the District's RFP, the billing rates stated above are inclusive of Other Direct Costs (ODCs), computer/communication charges, vehicles, travel, per diem, personal protective equipment and annual escalation through the anticipated project duration of 27 months, with expected project start in February 2014. Inspector overtime as required by the project will be billed at the hourly billing rate stated above. It is understood that IRWD will provide office space, office phone, access to office supplies, color copier/printer/scanner and internet access. HDR's field staff shall provide his own computer and cell phone for use in the field office.

If you should have any questions or concerns, please contact me at your earliest possible convenience.

Sincerely,

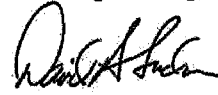
HDR Engineering, Inc.



James D. Morris, CCM

Southern California Construction Services Manager

HDR Engineering, Inc.



David Ludwin, P.E.

Senior Vice President

EXHIBIT "K"

**Baker Water Treatment Plant and Raw Water Conveyance Facilities
Construction Management Services
Scheduler Consultant Selection Matrix**

Arcadis CDM-Smith Jacobs

Candidate Evaluation				
Interview	100%			
General Construction Scheduler Experience	30%	1	3	2
Specific WTP Project Scheduler Experience	30%	1	3	2
Metrics for Measuring Schedule Compliance	20%	2	3	1
Report Preparation	10%	2	3	1
Conflict Resolution	10%	1	3	2
Weighted Score		1.1	2.7	1.6

Experience			
Years	20	12	25

Fee			
Billing Rate (\$/hr)	\$195	\$112	\$202
Hours (579 days * 8 hrs/day)	660	660	660
TOTAL FEE	\$128,700	\$73,920	\$133,320

RANKINGS:	1 - First	3 - Third	2 - Second
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ARCADIS U.S., Inc.
8001 Irvine Center Drive
Suite 1100
Irvine
California 92618
Tel 949.450.9901
Fax 949.450.9902

Scott Toland, PE
Senior Engineer
Irvine Ranch Water District
15800 Sand Canyon
Irvine, CA 92618

WATER SERVICES

Subject
Baker WTP Construction Management Staff Augmentation
Revised Fee and Commitment of Team

Date:
November 7, 2013

Dear Mr. Toland:

Contact:
David May

Per your request, this letter supplements ARCADIS' Baker WTP Construction Management Staff Augmentation proposal dated August 9, 2013, based on IRWD's final selection of personnel and negotiated billing rates and project hours.

Phone:
949.450.4006

ARCADIS is pleased to commit Jon Westervelt to the Baker Project in the part time role of Construction Scheduler. We are committed in maintaining Mr. Westervelt in this role throughout the duration of the project, and will not remove Mr. Westervelt from the project without prior written consent from the District. The scope of services for the position of Construction Scheduler as defined by the District's Request for Proposal (RFP) is summarized herein:

Email:
david.may@arcadis-us.com

Construction Scheduler

The project anticipates part-time services of a Construction Scheduler who is experienced with Primavera P6 construction schedules on projects extending over 1.5 years in duration with a construction value of \$30 million or larger. The part time services were defined in the RFP as 140 hours for the baseline schedule and up to 20 hours per month for the remaining 26 months. The Construction Scheduler shall participate in the detailed review of the contractor's baseline schedule, and provide comments regarding the completeness and compliance with the specifications. Once the baseline schedule is approved, the Construction Scheduler shall review progress updates on a monthly basis as determined by the CM to confirm if the contractor is maintaining an accurate schedule. The Construction Scheduler shall prepare a

Imagine the result

ARCADIS

Mr. Scott Toland
November 7, 2013

summary of the monthly schedule reviews and attend periodic meetings with the CM team and contractor at the discretion of IRWD. The summary shall identify errors or incomplete updates by the contractor, identify potential schedule delays, root cause, and recommend corrective measures. The scheduler may also be requested to participate in change order reviews.

In addition to the part time construction scheduler, ARCADIS will provide and maintain the Document Control System throughout the project duration.

Below is our revised hourly rate for your use and approval:

Role	Name	Hourly Rate	Project Hours	Project Total
Scheduler	Jon Westervelt	\$195.00	660	\$128,700
DCS (See Table A for details)				\$16,692
Contract Total				\$145,662

As requested in the District's RFP, the billing rates stated herein are inclusive of Other Direct Costs (ODCs), computer/communication charges, vehicles, travel, per diem, personal protective equipment and annual escalation through the anticipated project duration of 27 months, with expected project start in February 2014. It is understood that IRWD will provide office space, office phone, access to office supplies, color copier/printer/scanner and internet access. ARCADIS shall provide a computer for our staff and cell phone if needed.

If you should have any questions or concerns, please contact me at your earliest possible convenience.

Sincerely,

ARCADIS U.S., Inc.



David May
Principle in Charge

Enclosure

Irvine Ranch Water District
 Baker Water Treatment Plant
 PR (11218) 1417

Table A: Document Control System (DCS) Proposal

Task	Description	Project Engineer		Engineer		Total Cost
		Hours	Cost	Hours	Cost	
			\$179		\$135	
1	Set-Up of DCS for Two Projects	40	\$7,160	20	\$2,700	\$9,860.00
2	Training of Construction Staff	8	\$1,432			\$1,432.00
3	Maintenance (\$200/month)			27	\$5,400	\$5,400.00
		48	\$8,592	47	\$8,100	\$16,692.00

EXHIBIT "L"

**Baker Water Treatment Plant and Raw Water Conveyance Facilities
Geotechnical Services During Construction
Consultant Selection Matrix**

	GMU Geotechnical	LGC Geotechnical	Ninyo & Moore
Fee			
I. Water Treatment Plant			
1. Project Management	\$9,840	\$12,480	\$15,900
2. Field Coordination	\$9,840	\$10,560	\$8,600
3. Daily Reports	\$0	\$0	\$0
4. Observation and Field Testing	\$260,000	\$161,000	\$222,500
5. Laboratory Testing	\$22,000	\$16,576	\$19,700
6. Administration	\$20,090	\$8,500	\$13,920
7. Final Report	\$12,000	\$10,000	\$3,616
Fee Subtotal - Water Treatment Plant	\$333,770	\$219,116	\$284,236
II. Raw Water Pump Station			
8. Project Management	\$4,920	\$6,240	\$1,776
9. Field Coordination	\$9,840	\$2,640	\$1,232
10. Daily Reports	\$0	\$0	\$0
11. Observation and Field Testing	\$29,200	\$47,880	\$32,336
12. Laboratory Testing	\$2,800	\$6,000	\$5,260
13. Administration	\$10,250	\$3,640	\$5,256
14. Final Report	\$3,000	\$6,000	\$2,764
Fee Subtotal - Raw Water Pump Station	\$60,010	\$72,400	\$48,624
FEE SUBTOTAL - BASE SERVICES	\$393,780	\$291,516	\$332,860
III. Miscellaneous			
15. Special Services	\$40,600	\$30,800	\$31,000
TOTAL FEE	\$434,380	\$322,316	\$363,860

Proposed Hours - Observation and Field Testing			
I. Water Treatment Plant			
1. Yard Piping	320	80	480
2. Product Water Pipeline	160	80	396
3. PWP Jack and Bore Pits	80	80	120
4. Grading and Backfill	640	160	576
5. Structure Foundations	240	40	160
6. Buried Vaults	80	40	198
7. Concrete Materials	800	1,000	440
8. Roads and Paving	160	80	160
9. Misc Appurtenances, Facilities, and Structures	80	40	100
10. Other Testing	40	0	0
Proposed Hours Subtotal - Water Treatment Plant	2,040	1,360	2,630
II. Raw Water Pump Station			
1. Yard Piping	80	20	80
2. Grading and Backfill	40	120	120
3. Structure Foundations	20	20	40
4. Buried Vaults	20	8	24
5. Concrete Materials	80	240	80
6. Roads and Paving	16	40	24
7. Misc Appurtenances, Facilities, and Structures	20	20	16
8. Other Testing	16	0	0
Proposed Hours Subtotal - Raw Water Pump Station	212	448	384
TOTAL HOURS	2,252	1,808	3,014

Fee per Hour (Observation and Field Testing)	\$128.42	\$115.53	\$84.55
Fee per Hour (Total)	\$174.86	\$161.24	\$110.44
Percent of Total Fee (Observation and Field Testing)	73.4%	71.7%	76.6%

Hourly Billing Rates			
Field Technician	\$100	\$110	\$85
Field Supervisor	Not Provided	\$110	\$95
Staff Engineer / Geologist	\$120	\$85	\$120

RANKINGS:	2 - Second	3 - Third	1 - First
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September 16, 2013
Proposal No. P-16112

Mr. Richard Mori
Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 5700
Irvine, California 92618

Subject: Proposal for Construction Phase Geotechnical Services
Baker Water Treatment Plant and Raw Water Pump Station Projects
Orange County, California

Dear Mr. Mori:

Ninyo & Moore is pleased to submit this proposal to provide geotechnical services during construction of the proposed Baker Water Treatment Plant and Raw Water Pump Station Projects located in Orange County, California. We have prepared this proposal based on our review of the project Request for Proposal (RFP), plans and specifications. We understand that the project will generally consist of two projects. The Baker Water Treatment Plant Project will generally consist of several new structures including a partially buried Flow Control Facility, partially buried Trabuco Canyon Water District (TCWD) Pump Station, at-grade Chemical Building, buried Forebay structure, retaining walls, at grade Feedwater Pump Station, at-grade Treatment Building, partially buried CT Basin, at-grade Product Water Pump Station and a buried Water Treatment Facility. The project will also include yard piping, an Overflow Pipe and a Product Water Line. The Overflow Pipe will be up to 15 feet in depth. The Product Water Line will include "jack and bore of steel casing. We understand that the construction duration is set for 820 calendar days. The Raw Water Pump Station Project will generally consist of an at grade Raw Water Pump Station and a partially buried Surge Tank. We understand that the construction duration is set for 455 calendar days. The proposed structures for both projects will be supported by mat slabs or shallow spread footings. We also understand that both projects are anticipated to be under construction at the same time. The earthwork is anticipated to include corrective grading, including building pad overexcavation and recompaction of up to 15 feet in depth.

As indicated in the RFP, the hourly rates in our proposal, including prevailing wage rates, will remain unchanged for the duration of the project which is anticipated to be 28 months. The Baker Water Treatment Plant is conveniently located within a 10-minute drive of our Irvine office.

This will enable us to provide a quick turn around time on laboratory tests and quickly respond to last minute requests for field services. We will not charge for travel time to and from the site. Additionally, we will provide a multi-certified (soils and concrete) Field Technician as our lead inspector. This will allow us to provide our services in an efficient manner. With a multi-certified technician, we can often sample and test both soils and concrete with one technician, thereby avoiding the need of a second technician.

SCOPE OF SERVICES

Based on our understanding of the proposed project and our experience with similar projects, our scope of services will be as follows:

- Project coordination, management and technical support, including review of the project plans and specifications, work scheduling, and distribution of test data and daily reports.
- Attendance at pre-construction meetings and as-requested field meetings.
- Field geologic/engineering support to observe excavations, foundation subgrade, and shoring installation and to provide written recommendations where appropriate.
- Field soil technician services for observation, sampling and density testing during structure pad preparation, trench backfill operations, backfill of jack and bore pits, and during sub-grade preparation. Field density testing will be performed to evaluate the contractor's compaction operations.
- Field technician services for observation and documentation during placement of aggregate base and asphalt concrete (AC) pavement.
- Field technician services for observation and sampling of structural concrete and grout, including checking slump, temperature, and casting of concrete cylinders.
- Preparation of field daily reports and test data sheets.
- Laboratory testing, including proctor density, sand equivalent, and sieve analysis on representative samples obtained in the field, as well as compressive strength testing of concrete sampled in the field.
- Pick-up and transportation of construction material samples for testing at our laboratory.
- Preparation and submittal of a Final As-Graded Report, which includes a summary of our field density test results and presents the conclusions of our observations.

SCHEDULE

Our large base of professionals, as well as subconsultant/subcontractor professionals, enables Ninyo & Moore to be responsive to client needs and to successfully complete project tasks on time. Our current and anticipated work load is such that experienced personnel to be assigned to this project will be able to accomplish project assignments for the duration of this contract. Ninyo & Moore's project workload goal of approximately 70% enables our team to be responsive to even the most challenging schedules. Our project team is currently fully available and equipped to undertake the scope of services described in the RFP. Currently, backlog for geotechnical and environmental professionals over the period of performance, including subconsultants is less than 75 percent of current capacity, providing adequate staffing for the anticipated contract. We find no conflicts with existing projects to which the proposed key personnel have been committed.

ASSUMPTIONS

Based on our experience with similar projects, the following assumptions have been made in the preparation of our scope of services:

- Our services will be coordinated and scheduled as needed by our client or the project superintendent.
- Our services are subject to prevailing wage requirements.
- Our estimated fee does not include stand-by time or costs associated with retesting or re-inspecting materials that were found not to be in compliance with the project plans or specifications. Our services will depend on the construction schedule and the contractor's operations. Hours spent that exceed those in the attached table will be billed on a time-and-materials basis.


ESTIMATED FEE AND BUDGET

We propose to provide our services on a time-and-materials basis in accordance with the attached Schedule of Fees and Schedule of Fees for Laboratory Testing. Based on the scope of services described herein, our estimated fee for the Baker Water Treatment Plant Project is presented in Table 1. Our estimated fee for the Raw Water Pump Station Project is presented in Table 2. Our estimated fee for Special Services is presented in the attached Table 3. As requested in the Request for Proposal (RFP), we have also completed the Work Delineation and Fee Proposal form.

Ninyo & Moore appreciates the opportunity to provide this proposal and we look forward to working with you.

Respectfully submitted,
NINYO & MOORE


A. "Tino" Rodriguez
Principal, Construction Services


Jalal Vakili, PhD, PE
Principal Engineer

AR/CAP/JV/rad

Attachments: Table 1 – Breakdown of Estimated Fee for the Baker Water Treatment Plant
Table 2 – Breakdown of Estimated Fee for the Raw Water Pump Station
Table 3 – Breakdown of Estimated Fee for Special Services
Schedule of Fees
Schedule of Fees for Laboratory Testing
Work Delineation and Fee Proposal

Distribution: (3) Addressee

TABLE 1 - BREAKDOWN OF ESTIMATED FEE FOR THE BAKER WATER TREATMENT PLANT PROJECT

PROJECT COORDINATION, MANAGEMENT AND TECHNICAL SUPPORT			
Principal Engineer/Geologist	20 hours @ \$ 154.00 /hour	\$	3,080.00
Senior Project Engineer/Geologist	180 hours @ \$ 145.00 /hour	\$	26,100.00
Supervisory Technician	40 hours @ \$ 86.00 /hour	\$	3,440.00
	Subtotal	\$	32,620.00
FIELD SERVICES			
Senior Project Engineer/Geologist	40 hours @ \$ 145.00 /hour	\$	5,800.00
Field Technician			
Yard Piping	480 hours @ \$ 85.00 /hour	\$	40,800.00
Product Water Pipeline	400 hours @ \$ 85.00 /hour	\$	34,000.00
PWP Jack and Bore	120 hours @ \$ 85.00 /hour	\$	10,200.00
Grading and Backfill	580 hours @ \$ 85.00 /hour	\$	49,300.00
Structure Foundations	160 hours @ \$ 85.00 /hour	\$	13,600.00
Buried Vaults	200 hours @ \$ 85.00 /hour	\$	17,000.00
Concrete Materials Testing	440 hours @ \$ 85.00 /hour	\$	37,400.00
Roads and Paving	160 hours @ \$ 85.00 /hour	\$	13,600.00
Miscellaneous - Sample Pick-up	100 hours @ \$ 66.00 /hour	\$	6,600.00
Other Testing	hour @ \$ 85.00 /hour	\$	-
	Subtotal	\$	228,300.00
LABORATORY ANALYSES			
Proctor Density - D 1557 & D 698, CT 216 & AASHTO T-180 (Rock corrections add \$80)	24 tests @ \$ 180.00 /test	\$	4,320.00
Sand Equivalent, D 2419, CT 217	12 tests @ \$ 90.00 /test	\$	1,080.00
Sieve Analysis, D 422, CT 202	24 tests @ \$ 110.00 /test	\$	2,640.00
Concrete Compression Tests, C-39	440 tests @ \$ 22.00 /test	\$	9,680.00
AC Maximum Density	5 tests @ \$ 195.00 /test	\$	975.00
AC Extraction & Gradation	5 tests @ \$ 215.00 /test	\$	1,075.00
	Subtotal	\$	19,770.00
REPORT PREPARATION			
Principal Engineer/Geologist	2 hours @ \$ 154.00 /hour	\$	308.00
Senior Project Engineer/Geologist	12 hours @ \$ 145.00 /hour	\$	1,740.00
Staff Engineer/Geologist	4 hours @ \$ 120.00 /hour	\$	480.00
Technical Illustrator/CAD Operator	8 hours @ \$ 78.00 /hour	\$	624.00
Data Processing, Technical Editing, or Reproduction	8 hours @ \$ 58.00 /hour	\$	464.00
	Subtotal	\$	3,616.00
TOTAL ESTIMATED FEE (NOT INCLUDING SPECIAL SERVICES)			\$ 284,306.00

TABLE 2 - BREAKDOWN OF ESTIMATED FEE FOR THE RAW WATER PUMP STATION PROJECT

PROJECT COORDINATION, MANAGEMENT AND TECHNICAL SUPPORT			
Principal Engineer/Geologist	4 hours @ \$ 154.00 /hour	\$	616.00
Senior Project Engineer/Geologist	32 hours @ \$ 145.00 /hour	\$	4,640.00
Supervisory Technician	8 hours @ \$ 86.00 /hour	\$	688.00
Subtotal			\$ 5,944.00
FIELD SERVICES			
Senior Project Engineer/Geologist	16 hours @ \$ 145.00 /hour	\$	2,320.00
Field Technician			
Yard Piping	80 hours @ \$ 85.00 /hour	\$	6,800.00
Grading and Backfill	120 hours @ \$ 85.00 /hour	\$	10,200.00
Structure Foundations	40 hours @ \$ 85.00 /hour	\$	3,400.00
Buried Vaults	24 hours @ \$ 85.00 /hour	\$	2,040.00
Concrete Materials Testing	80 hours @ \$ 85.00 /hour	\$	6,800.00
Roads and Paving	24 hours @ \$ 85.00 /hour	\$	2,040.00
Miscellaneous - Sample Pick-up	16 hours @ \$ 66.00 /hour	\$	1,056.00
Other Testing	hour @ \$ 85.00 /hour	\$	-
Subtotal			\$ 34,656.00
LABORATORY ANALYSES			
Proctor Density - D 1557 & D 698, CT 216 & AASHTO T-180 (Rock corrections add \$80)	8 tests @ \$ 180.00 /test	\$	1,440.00
Sand Equivalent, D 2419, CT 217	4 tests @ \$ 90.00 /test	\$	360.00
Sieve Analysis, D 422, CT 202	8 tests @ \$ 110.00 /test	\$	880.00
Concrete Compression Tests, C-39	80 tests @ \$ 22.00 /test	\$	1,760.00
AC Maximum Density	2 tests @ \$ 195.00 /test	\$	390.00
AC Extraction & Gradation	2 tests @ \$ 215.00 /test	\$	430.00
Subtotal			\$ 5,260.00
REPORT PREPARATION			
Principal Engineer/Geologist	2 hours @ \$ 154.00 /hour	\$	308.00
Senior Project Engineer/Geologist	8 hours @ \$ 145.00 /hour	\$	1,160.00
Staff Engineer/Geologist	4 hours @ \$ 120.00 /hour	\$	480.00
Technical Illustrator/CAD Operator	6 hours @ \$ 78.00 /hour	\$	468.00
Data Processing, Technical Editing, or Reproduction	6 hours @ \$ 58.00 /hour	\$	348.00
Subtotal			\$ 2,764.00
TOTAL ESTIMATED FEE (NOT INCLUDING SPECIAL SERVICES)			\$ 48,624.00

TABLE 3 - BREAKDOWN OF ESTIMATED FEE FOR SPECIAL SERVICES

PROJECT COORDINATION, MANAGEMENT AND TECHNICAL SUPPORT		
Senior Project Engineer/Geologist	120 hours @ \$ 145.00 /hour	\$ 17,400.00
	Subtotal	\$ 17,400.00

FIELD SERVICES		
Field Technician	160 hours @ \$ 85.00 /hour	\$ 13,600.00
	Subtotal	\$ 13,600.00

TOTAL ESTIMATED FEE		\$ 31,000.00
----------------------------	--	---------------------

SCHEDULE OF FEES

HOURLY CHARGES FOR PERSONNEL

Principal Engineer/Geologist/Environmental Scientist	\$ 154
Senior Engineer/Geologist/Environmental Scientist.....	\$ 148
Senior Project Engineer/Geologist/Environmental Scientist.....	\$ 145
Project Engineer/Geologist/Environmental Scientist.....	\$ 142
Senior Staff Engineer/Geologist/Environmental Scientist.....	\$ 128
Staff Engineer/Geologist/Environmental Scientist.....	\$ 120
GIS Analyst	\$ 120
Field Operations Manager	\$ 95
Supervisory Technician	\$ 86
Nondestructive Examination Technician, UT, MT, LP	\$ 85
Senior Field/Laboratory Technician.....	\$ 85
Field/Laboratory Technician	\$ 85
ACI Concrete Technician.....	\$ 85
Concrete/Asphalt Batch Plant Inspector.....	\$ 85
Special Inspector (Concrete, Masonry, Steel, Welding, and Fireproofing).....	\$ 85
Technical Illustrator/CAD Operator.....	\$ 85
Geotechnical/Environmental/Laboratory Assistant	\$ 66
Information Specialist.....	\$ 66
Data Processing, Technical Editing, or Reproduction.....	\$ 58

OTHER CHARGES

Expert Witness Testimony.....	\$ 400 /hr
Concrete Coring Equipment (includes one technician)	\$ 160 /hr
PID/FID Usage.....	\$ 120 /day
Anchor load test equipment (includes technician)	\$ 89 /hr
Hand Auger Equipment.....	\$ 55 /day
Inclinometer Usage	\$ 32 /hr
Vapor Emission Kits.....	\$ 30 /kit
Level D Personal Protective Equipment (per person per day)	\$ 25 /p/d
Rebar Locator (Pachometer).....	\$ 22 /hr
Nuclear Density Gauge Usage.....	\$ 0 /hr
Field Vehicle Usage.....	\$ 0 /hr
Direct Project Expenses.....	Cost plus 15 %
Laboratory testing, geophysical equipment, and other special equipment provided upon request.	

NOTES (Field Services)

For field and laboratory technicians and special inspectors, regular hourly rates are charged during normal weekday construction hours. Overtime rates at 1.5 times the regular rates will be charged for work performed outside normal construction hours and all day on Saturdays. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day or on Sundays and holidays. Lead time for any requested service is 24 hours. Field Technician rates are based on a 2-hour minimum. Special inspection rates are based on a 4-hour minimum for the first 4 hours and an 8-hour minimum for hours exceeding 4 hours. Field personnel are charged portal to portal.

INVOICES

Invoices will be submitted monthly and are due upon receipt. A service charge of 1.0 percent per month may be charged on accounts not paid within 30 days.

TERMS AND CONDITIONS

The terms and conditions of providing our consulting services include our limitation of liability and indemnities as presented in Ninyo & Moore's Work Authorization and Agreement.

SCHEDULE OF FEES FOR LABORATORY TESTING
Laboratory Test, Test Designation, and Price Per Test

Soils		Concrete	
Atterberg Limits, D 4318, CT 204	\$ 145	Cement Analysis Chemical and Physical, C 109.....	\$ 1,650
California Bearing Ratio (CBR), D 1883	\$ 440	Compression Tests, 6x12 Cylinder, C 39	\$ 22
Chloride and Sulfate Content, CT 417 & CT 422	\$ 135	Concrete Mix Design Review, Job Spec.....	\$ 140
Consolidation, D 2435, CT 219	\$ 275	Concrete Mix Design, per Trial Batch, 6 cylinder, ACI.....	\$ 750
Consolidation – Time Rate, D 2435, CT 219	\$ 70	Concrete Cores, Compression (excludes sampling), C 42	\$ 55
Direct Shear – Remolded, D 3080	\$ 290	Drying Shrinkage, C 157	\$ 250
Direct Shear – Undisturbed, D 3080.....	\$ 250	Flexural Test, C 78	\$ 50
Durability Index, CT 229	\$ 150	Flexural Test, C 293	\$ 55
Expansion Index, D 4829, UBC 18-2	\$ 165	Flexural Test, CT 523	\$ 60
Expansion Potential (Method A), D 4546	\$ 145	Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI.....	\$ 250
Expansive Pressure (Method C), D 4546	\$ 145	Jobsite Testing Laboratory	Quote
Geofabric Tensile and Elongation Test, D 4632.....	\$ 165	Lightweight Concrete Fill, Compression, C 495.....	\$ 40
Hydraulic Conductivity, D 5084	\$ 300	Petrographic Analysis, C 856	\$ 1,100
Hydrometer Analysis, D 422, CT 203	\$ 190	Splitting Tensile Strength, C 498.....	\$ 80
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 110		
Moisture Only, D 2216, CT 226	\$ 30	Reinforcing and Structural Steel	
Moisture and Density, D 2937	\$ 39	Fireproofing Density Test, UBC 7-6	\$ 55
Permeability, CH, D 2434, CT 220	\$ 230	Hardness Test, Rockwell, A-370.....	\$ 50
pH and Resistivity, CT 643	\$ 140	High Strength Bolt, Nut & Washer Conformance, set, A-325.....	\$ 120
Proctor Density D 1557, D 698, CT 216, &	\$ 180	Mechanically Spliced Reinforcing Tensile Test, ACI	\$ 95
AASHTO T-180 (Rock corrections add \$80)		Pre-Stress Strand (7 wire), A 416	\$ 140
R-value, D 2844, CT 301	\$ 250	Chemical Analysis, A-36, A-615.....	\$ 120
Sand Equivalent, D 2419, CT 217	\$ 90	Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 50
Sieve Analysis, D 422, CT 202.....	\$ 110	Structural Steel Tensile Test: Up to 200,000 lbs.	
Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 90	(machining extra), A 370	\$ 70
Specific Gravity, D 854.....	\$ 90	Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 55
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 800		
Triaxial Shear, C.D, D 4767, T 287	\$ 390	Asphalt Concrete	
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt..\$	\$ 330	Asphalt Mix Design, Caltrans	\$ 2,200
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt..\$	\$ 190	Asphalt Mix Design Review, Job Spec	\$ 150
Triaxial Shear, U.U., D 2850	\$ 140	Extraction, % Asphalt, including Gradation, D 2172, CT 310.....	\$ 215
Unconfined Compression, D 2166, T 208	\$ 100	Film Stripping, CT 302.....	\$ 100
Wax Density, D 1188	\$ 90	Hveem Stability and Unit Weight CTM or ASTM, CT 366.....	\$ 195
		Marshall Stability, Flow and Unit Weight, T-245	\$ 215
		Maximum Theoretical Unit Weight, D 2041	\$ 120
		Swell, CT 305.....	\$ 165
		Unit Weight sample or core, D 2726, CT 308	\$ 90
		Aggregates	
		Absorption, Coarse, C 127	\$ 35
		Absorption, Fine, C 128.....	\$ 35
		Clay Lumps and Friable Particles, C 142.....	\$ 100
		Cleaness Value, CT 227	\$ 120
		Crushed Particles, CT 205	\$ 140
		Durability, Coarse, CT 229	\$ 130
		Durability, Fine, CT 229	\$ 130
		Los Angeles Abrasion, C 131 or C 535.....	\$ 180
		Mortar making properties of fine aggregate, C 87	\$ 275
		Organic Impurities, C 40.....	\$ 55
		Potential Reactivity of Aggregate (Chemical Method), C 289	\$ 390
		Sand Equivalent, CT 217	\$ 90
		Sieve Analysis, Coarse Aggregate, C 136.....	\$ 105
		Sieve Analysis, Fine Aggregate (including wash), C 136.....	\$ 105
		Sodium Sulfate Soundness (per size fraction), C 88.....	\$ 160
		Specific Gravity, Coarse, C 127	\$ 75
		Specific Gravity, Fine, C 128.....	\$ 85

Special preparation of standard test specimens will be charged at the technician's hourly rate.

Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.

Proposal Format and Requested Information
Construction Phase Geotechnical Services

Construction Phase Geotechnical Services for the Baker Water Treatment Plant Project
and Raw Water Pump Station Project
PR 11218 (1417)

Submitted by: Name of Firm **NINYO & MOORE**
Contact and Title **Jalal Vakili, Principal Engineer**
Signature and Date *Jalal Vakili* **9/17/13**

WORK DELINEATION AND FEE PROPOSAL

(State any assumptions for contractor production rates, number of days/hours, and cost for each task)

I. WATER TREATMENT PLANT (WTP)

- | | |
|---|---------------------------|
| 1. Project Management
(Specify) Coordination and Supervision | Subtotal \$ <u>15,900</u> |
| 2. Field Coordination
(Specify) Scheduling | Subtotal \$ <u>8,600</u> |
| 3. Daily Reports
(Specify) | Subtotal \$ <u>0</u> |
| 4. Observation and Field Testing | |
| Yard Piping - <u>80</u> work days at <u>6</u> hours / day. | Subtotal \$ <u>40,800</u> |
| Product Water Pipeline - <u>66</u> work days at <u>6</u> hours / day. | Subtotal \$ <u>34,000</u> |
| PWP Jack and bore pits - <u>15</u> work days at <u>8</u> hours / day. | Subtotal \$ <u>10,200</u> |
| Grading and Backfill - <u>96</u> work days at <u>6</u> hours / day. | Subtotal \$ <u>49,300</u> |
| Structure Foundations - <u>40</u> work days at <u>4</u> hours / day. | Subtotal \$ <u>13,600</u> |
| Buried Vaults - <u>33</u> work days at <u>6</u> hours / day. | Subtotal \$ <u>17,000</u> |
| Concrete Materials Testing - <u>110</u> work days at <u>4</u> hours / day. | Subtotal \$ <u>37,400</u> |
| Roads and paving - <u>20</u> work days at <u>8</u> hours / day. | Subtotal \$ <u>13,600</u> |
| Misc. appurtenances, facilities, & structures- <u>50</u> work days at <u>2</u> hours / day. | Subtotal \$ <u>6,600</u> |
| Other testing - <u>0</u> work days at <u>0</u> hours / day. | Subtotal \$ <u>0</u> |
| 5. Laboratory Testing | |
| (Total for all laboratory testing, list specific tests and quantities, as required by the specifications) | Subtotal \$ <u>19,700</u> |
| 6. Geologist / Engineer / Office Support / Administration | |
| A. Meetings (2 hours each)
(pre-construction [1], one progress meeting per month for | |

Request for Proposals for Construction Phase Geotechnical Services for the Baker Water Treatment Plant Project and Raw Water Pump Station Project
August 23, 2013

duration of project (not including start-up phase) [24], =
[25] total) Subtotal \$ 6,960

B. Technical Support
(Specify) Review of geotechnical reports and specifications. Provide supplemental written recommendations as appropriate. Subtotal \$ 6,960

7. Final Report
(5 hard copies and 1 Color PDF file on CD) Subtotal \$ 3,616

Subtotal WTP Services \$ 284,306
(WTP Tasks 1 - 7)

II. RAW WATER PUMP STATION (RWPS)

\$284,236,
summation
error

8. Project Management
(Specify) Coordination and Supervision Subtotal \$ 1,776

9. Field Coordination
(Specify) Scheduling Subtotal \$ 1,232

10. Daily Reports
(Specify) Subtotal \$ 0

11. Observation and Field Testing

Yard Piping - <u>20</u> work days at <u>4</u> hours / day.	Subtotal \$ <u>6,800</u>
Grading and Backfill - <u>20</u> work days at <u>6</u> hours / day.	Subtotal \$ <u>10,200</u>
Structure Foundations - <u>10</u> work days at <u>4</u> hours / day.	Subtotal \$ <u>3,400</u>
Buried Vaults - <u>6</u> work days at <u>4</u> hours / day.	Subtotal \$ <u>2,040</u>
Concrete Materials Testing - <u>20</u> work days at <u>4</u> hours / day.	Subtotal \$ <u>6,800</u>
Roads and paving - <u>6</u> work days at <u>4</u> hours / day.	Subtotal \$ <u>2,040</u>
Misc. appurtenances, facilities, & structures- <u>8</u> work days at <u>2</u> hours / day.	Subtotal \$ <u>1,056</u>
Other testing - <u>0</u> work days at <u>0</u> hours / day.	Subtotal \$ <u>0</u>

12. Laboratory Testing

(Total for all laboratory testing, list specific tests and quantities, as required by the specifications) Subtotal \$ 5,260

13. Geologist / Engineer / Office Support / Administration

A. Meetings (2 hours each)
(pre-construction [1], one progress meeting per month for

Request for Proposals for Construction Phase Geotechnical Services for the Baker Water Treatment Plant Project and Raw Water Pump Station Project
August 23, 2013

duration of project (not including start-up phase) [12], =
[13] total) Subtotal \$ 3,480

B. **Technical Support**
(Specify) Review geotechnical reports, plans and specifications. Provide supplemental written recommendations as appropriate. Subtotal \$ 1,776

14. **Final Report**
(5 hard copies and 1 Color PDF file on CD) Subtotal \$ 2,764

Subtotal RWPS Services \$ 48,624
(RWPS Tasks 8 – 14)

III. **MISCELLANEOUS**

15. **Special Services**
(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** – 20 working days at 8 hours per day Subtotal \$ 13,600

B. **Geologist/Engineer** – 15 working days at 8 hours per day Subtotal \$ 17,400

Subtotal Special Services \$ 31,000
(Task 15)

TOTAL PROPOSED FEE \$ 363,930
(Tasks 1 – 15)

\$363,860

EXHIBIT "M"

Baker Water Treatment Plant and Raw Water Conveyance Facilities Surveying Services During Construction Consultant Selection Matrix

	Bush & Associates	Guida Surveying *	CNC Engineering	Borchard Surveying
Fee				
I. Water Treatment Plant				
1. General				
a. Establish Survey Control	\$7,360	\$3,840	\$2,980	\$19,600
b. Stake MWD and SAC Easements	\$1,472	\$5,760	\$2,640	\$7,840
c. Check Line and Grade of PWP Jack and Bore	\$2,944	\$9,600	\$660	\$7,840
2. As-needed Survey Services	\$79,488	\$103,680	\$71,280	\$105,840
3. Office Support and Administration	\$42,136	\$26,840	\$27,390	\$27,950
Fee Subtotal - Water Treatment Plant	\$133,400	\$149,720	\$104,950	\$169,070
II. Raw Water Pump Station				
4. Establish Survey Control	\$4,416	\$3,840	\$2,320	\$1,960
5. As-needed Survey Services	\$22,080	\$28,800	\$19,800	\$29,400
6. Office Support and Administration	\$17,804	\$9,020	\$12,805	\$12,960
Fee Subtotal - Raw Water Pump Station	\$44,300	\$41,660	\$34,925	\$44,320
TOTAL FEE	\$177,700	\$191,380	\$139,875	\$213,390

* Guida Surveying incorrectly lists Raw Water Pump Station proposed fee as \$15,740. line items actually add up to \$41,660.

Proposed Hours - Field Work

I. Water Treatment Plant				
1. General				
a. Establish Survey Control	40	16	20	80
b. Stake MWD and SAC Easements	8	24	16	32
c. Check Line and Grade of PWP Jack and Bore	16	40	4	32
2. As-needed Survey Services	432	432	432	432
Proposed Hours Subtotal - Water Treatment Plant	496	512	472	576
II. Raw Water Pump Station				
4. Establish Survey Control	24	16	16	8
5. As-needed Survey Services	120	120	120	120
Proposed Hours Subtotal - Raw Water Pump Station	144	136	136	128
TOTAL HOURS	640	648	608	704

Fee per Hour (Field Work)	\$184	\$240	\$164	\$245
Fee per Hour (Total)	\$278	\$295	\$230	\$303
Percent of Total Fee (Field Work)	66.3%	81.3%	71.3%	80.8%

Hourly Billing Rates				
2-Party Survey Crew	\$184	\$240	\$165	\$245
Licensed Land Surveyor	\$122	\$140	\$85	Not Provided
Survey Technician	\$104	\$140	\$70	Not Provided

RANKINGS:	2 - Second	3 - Third	1 - First	4 - Fourth
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September 17, 2013

CNC Proposal No. P12-052

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

Subject: Proposal for Surveying Services During Construction for the IRWD Baker Water Treatment Plant Project

CNC Engineering (CNC) appreciates the opportunity to submit our proposal to provide Professional Construction Surveying services for the Baker Water Treatment Plant Project and Raw Water Pump Station Project, PR 11218.

PROJECT UNDERSTANDING

We understand the project is essentially made up of the following two primary components:

1. Construction of a 28 million gallons per day (mgd) potable water treatment facility at the site of the former Los Alisos Water District V.P. Baker Water Treatment Plant located at 21082 Wisteria in Lake Forest, California. We understand work hours on this project are limited to Monday through Friday from 7:30 am to 4 pm.
2. Construction of a 35 mgd feed water pump station for delivery of untreated water to the Baker WTP and a 4.2 mgd pump station for Trabuco Canyon Water District to deliver untreated water to another existing treatment plant. We understand work hours on this project are limited to Monday through Thursday from 7:30 am to 4 pm.

SCOPE OF SERVICES

CNC understands the selected consultant will be responsible for monitoring and verification of the contractor's survey work throughout construction.

I. WATER TREATMENT PLANT (WTP)

1. General

1.A. Site Survey Control

As shown on Drawing G006 (Sheet 6 of 719), elevations are based on benchmark (BM) OCS BM 3E-122-99. This BM is located at the corner of Lake Forest Drive and Trabuco Road, approximately one mile from the WTP site.

Bearings and distances are based on control stations OCS 6730 located at the corner of Calle Pradera and Paechwood, about 2,000 feet west and OCS 6745 located on the corner of Sharmila Lane and Majorca, about 1,700 feet east of the WTP.

This proposal assumes these control points are intact. CNC proposes to utilize GPS survey to establish secondary survey controls at the site.

1.B. Staking of MWD and SAC Easements

The MWD easement within the WTP property measures 30 feet wide and it is located directly adjacent to the SAC easement, which measures 25 feet wide. The two easements traverse the site in a southeasterly direction beginning at the intersection of Wisteria and Marin at the north end.

The MWD easement is 50 feet wide north of the property line. The demolition drawings show removal of existing curb & gutter approximately 60 feet north of the property line. Therefore, CNC proposes to stake the easements up to 60 feet north of the property line.

CNC will obtain copies of the latest available title reports, records of survey and maps pertinent to the alignment of the two easements. In accordance with item 3.02.F of Section 01100 of the Project Manual, CNC will mark limits of MWD and SAC easements at 30-foot intervals (both sides), across the entire segment of the MWD and SAC easements that reside within IRWD's property. Markers will be wooden laths in open terrain and painted marks on structures and pavements, so that they are clearly identifiable.

1.C. Line and Grade of Product Water Pipeline Casing

This work consists of monitoring the line and grade of 332.23 feet of 54-inch diameter steel casing between the jacking and receiving pits as shown on drawing C073 of the bid set. CNC proposes to independently calculate the coordinates at each end of the casing and stake the horizontal and vertical positions as well as the two pits, in accordance with the requirements of item 3.04.C of Section 01100 of the Project Manual and item 1.04 of Section 01100 of the District's Standard Specifications.

2. As Needed Survey Services

CNC is prepared to provide as-needed surveying services during the 27-month construction period for the WTP. We understand work under this task will only be performed as needed and as requested by IRWD and includes items such as verification of building and vault staking, product water pipeline alignment and appurtenances, hydraulic controls points, and miscellaneous QA/QC as directed by the Construction Manager. In accordance with the instructions in the RFP, we have allowed two (2) 8-hour days per month for the entire 27-month duration.

3. Office Support / Administration

3.A. Meetings

CNC Project Manager will be available to attend one (1) preconstruction meeting and one (1) progress meeting every other month for the duration of this project.



3.B. Technical Support

This task includes obtaining available copies of pertinent maps and drawings in electronic and hard copy formats, reviewing the information for any errors or inconsistencies, performing the necessary calculations for the field crew such as coordinates and alignments and documenting any inconsistencies between the drawings and actual field conditions.

3.C. Project Management and Administration

The following is a list of the primary responsibilities of CNC's Project Manager and administrative staff:

- Ensure staff and survey crew's availability for as-needed services based on the contractor's look-ahead schedule and advance communication with the Construction Manager.
- Communicating problems and issues discovered by the survey crew and the project surveyor to the District.
- Preparation of invoices and status reports to show the estimated percentage of completion for each task, a summary of activities and accomplishments during the reporting period, a list of planned activities for the next reporting period and a list of issues and/or concerns that may affect the project progress.

II. RAW WATER PUMP STATION (RWPS)

4. General

4.A. Site Survey Control

As shown on Drawing G003 (Sheet 3 of 82), elevations are based on benchmark (BM) OEOC. This is a continuous GPS Station (CGPS) and is part of the California Spatial Reference Network (CSRN). This BM is located along the Loma Ridge Jeep Trail approximately ½ mile off of SR-241 and about 1 ½ mile southeasterly of the project site.

Bearings and distances are based on CGPS control stations OEOC and WHYT. WHYT is located on a hill top north of Glenn Ranch Road near the intersection with Definition in the City of Lake Forest. This station is approximately 11 miles southeast of the project site.

This proposal assumes these control points are intact. CNC proposes to utilize GPS survey to establish secondary survey controls at the site.

5. As Needed Survey Services

CNC is prepared to provide as-needed surveying services during the 15-month construction period for the RWPS. We understand work under this task will only be performed as needed and as requested by IRWD. In accordance with the instructions in the RFP, we have allowed one (1) 8-hour day per month for the entire 15-month duration.



6. Office Support / Administration

6.A. Meetings

CNC Project Manager will be available to attend one (1) preconstruction meeting and one (1) progress meeting every other month for the duration of this project.

6.B. Technical Support

This task includes obtaining available copies of pertinent maps and drawings in electronic and hard copy formats, reviewing the information for any errors or inconsistencies, performing the necessary calculations for the field crew such as coordinates and alignments and documenting any inconsistencies between the drawings and actual field conditions.

6.C. Project Management and Administration

The following is a list of the primary responsibilities of CNC's Project Manager and administrative staff:

- Ensure staff and survey crew's availability for as-needed services based on the contractor's look-ahead schedule and advance communication with the Construction Manager.
- Communicating problems and issues discovered by the survey crew and the project surveyor to the District.
- Preparation of invoices and status reports to show the estimated percentage of completion for each task, a summary of activities and accomplishments during the reporting period, a list of planned activities for the next reporting period and a list of issues and/or concerns that may affect the project progress.

SCHEDULE

The following table is a summary of the firm's current and planned workload during the WTP construction period:

Project	Percent Complete	Remaining No. of Hours	Estimated Completion Date
Barranca Parkway Domestic and Recycled Water Improvements, IRWD	0	16	October 2013
Valley View Grade Separation, City of Santa Fe Springs	90	60	December 2013
Los Alamos Overcrossing Structure, City of Murrieta	60	80	January 2014
Industrial Zone Street Rehabilitation, City of La Mirada	0	180	February 2014
Street Rehabilitation CIP No. 245, City of Laguna Beach	0	48	November 2013

As shown in this table, CNC will complete our current and planned survey projects before construction of the WTP/RWPS kicks off. Therefore, our team will be able to completely focus on the District's Project.



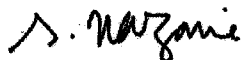
CNC is also able to offer the resources of two offices and should the need arise, provide the District with up to three (3) survey crews who have all been with the firm for over a decade and bring years of experience in public works construction. Also, as the Director of Engineering at the firm for the past 13 years, I can ensure the Project will receive the necessary resources to meet the District's timeline requirements.

BUDGET

Please refer to the budget proposal submitted in a separate sealed envelope. The fee is broken down by task and project team members.

We trust our proposal meets with your requirements and expectations for this important project. If you have any questions or comments on this proposal, please contact me directly at (949) 863-0588 x 8103.

Respectfully Submitted,
CNC Engineering



Sean Nazarie, P.E.
Director of Engineering



September 17, 2013

CNC Proposal No. P12-052

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

Subject: Fee Proposal for Surveying Services During Construction for the IRWD Baker Water Treatment Plant Project

CNC Engineering (CNC) appreciates the opportunity to submit our fee proposal to provide Professional Construction Surveying services for the Baker Water Treatment Plant Project and Raw Water Pump Station Project, PR 11218. Enclosed please find a summary of the proposed budget for each major activity for the WTP and RWPS, along with a spreadsheet for each project, showing the breakdown of the fee by task and team members.

Should CNC have the good fortune of being selected by the District as the most qualified team for this project, we'll be available to meet with you to discuss any portion of our scope/schedule/fee. If you have any questions or comments on this proposal, please contact me directly at (949) 863-0588 x 8103.

Respectfully Submitted,
CNC Engineering

Sean Nazarie, P.E.
Director of Engineering

II. RAW WATER PUMP STATION (RWPS)

4. General

Site survey control 2 work days at 8 hours/day. Subtotal \$ 2,320

5. As Needed Survey Services

A. Field Crew – 15 working days at 8 hours a day Subtotal \$ 19,800

6. Office Support / Administration

D. Meetings (2 hours each)
(pre-construction [1], one progress meeting every other
month for duration of project [7] = [8] total) Subtotal \$ 2,200

E. Technical Support (Per Section 6.B of the proposal) Subtotal \$ 8,425

F. Project Management and Administration
(Per Section 6.C of the proposal) Subtotal \$ 2,180

Subtotal RWPS Services \$ 34,925
(Tasks 4 – 6)

TOTAL PROPOSED FEE \$ 139,875
(Tasks 1 – 6)

ATTACHMENT B

VERIFICATION SURVEY FOR BAKER WATER TREATMENT PLANT

PREPARED FOR IRVINE RANCH WATER DISTRICT

PREPARED BY: CNC ENGINEERING

DATE: SEPTEMBER 17, 2013

TASK	DESCRIPTION	PROJ	PROJ	CAD	SURV	ADMIN	EST	EST
		MGR	SURVEYOR	TECH	CREW	ASS'T		
		\$150	\$125	\$90	\$165	\$60	HRS	COST
1	General							
1.A	Site Survey Control		8		12		20	\$2,980
1.B	Staking of MWD and SAC Easements				16		16	\$2,640
1.C	Line & Grade of PW Pipeline Casing				4		4	\$660
2	As Needed Survey Services				432		432	\$71,280
3	Office Support/Administration							
3.A	Meetings	12	14				26	\$3,550
3.B	Technical Support		80	108			188	\$19,720
3.C	Project Management & Administration	16	8			12	36	\$4,120
ESTIMATED LABOR HOURS		0	8	0	32	0	722	
ESTIMATED TOTAL LABOR COSTS								\$104,950

M - 10

ATTACHMENT C

VERIFICATION SURVEY FOR RAW WATER PUMP STATION

PREPARED FOR IRVINE RANCH WATER DISTRICT

PREPARED BY: CNC ENGINEERING

DATE: SEPTEMBER 17, 2013

TASK	DESCRIPTION	PROJ	PROJ	CAD	SURV	ADMIN	EST	EST
		MGR	SURVEYOR	TECH	CREW	ASS'T		
		\$150	\$125	\$90	\$165	\$60	HRS	COST
4	Site Survey Control		8		8		16	\$2,320
5	As Needed Survey Services				120		120	\$19,800
6	Office Support/Adminstration							
6.D	Meetings	8	8				16	\$2,200
6.E	Technical Support		35	45			80	\$8,425
6.F	Project Management & Administration	8	4			8	20	\$2,180
ESTIMATED LABOR HOURS		0	8	0	8	0	252	
ESTIMATED TOTAL LABOR COSTS								\$34,925

ATTACHMENT D

CNC ENGINEERING STANDARD HOURLY FEE SCHEDULE FOR PROFESSIONAL SERVICES Effective May 1, 2009

Professional Engineering Services

\$175.00	Principal-in-Charge
\$150.00	Senior Project Manager
\$125.00	Project Manager
\$110.00	Project Engineer
\$ 90.00	Design Engineer
\$ 75.00	AutoCAD Designer
\$ 60.00	Administration
\$ 50.00	Technician

Professional Field Survey and Construction Inspection Services

\$125.00	Survey Manager
\$ 85.00	Project Surveyor
\$110.00	One (1) Man Crew
\$165.00	Two (2) Man Crew
\$220.00	Three (3) Man Crew
\$300.00	Four (4) Man Crew
\$ 70.00	Survey Technician
\$ 95.00	Senior Construction Inspector
\$ 85.00	Construction Inspector

Direct Project Expenses

Photo Copies – Color	\$2.75 per page
Photo Copies – Black & White/Fax	\$0.25/1.70 per page
Plan Sheet Printing – In house bond/Mylar	\$1.75/5.00 per square foot
Subconsultant Services	Actual cost + 15%
Subcontracted Services/Reproduction	Actual cost + 15%
Federal Express, etc. Deliveries	Actual cost
Communications (fax, telecommunications, etc..)	Actual cost
Project Communication Fee	\$5.00/hour

An overtime premium multiplier of 1.5 will be applied to the billing rate of hourly personnel who work overtime in order to meet a deadline, which cannot be met during normal hours. This will be agreed to by both parties prior to implementation of this multiplier.



EXHIBIT "N"

Baker Water Treatment Plant and Raw Water Conveyance Facilities Bio/Archeo/Paleo Services During Construction Consultant Selection Matrix

		Dudek	ESA	VCS	Harmsworth
Proposal					
I. Technical Approach 50%					
1. Project Understanding	40%	4	1	2	3
2. Content	20%	4	1	2	3
3. Scope of Work	40%	4	2	1	3
Weighted Score - Technical Approach	100%	4.0	1.4	1.6	3.0
II. Experience 30%					
1. Biological Monitoring & Reporting	50%	4	3	2	1
2. Paleontological Monitoring & Reporting	15%	3	1	2	4
3. Archaeological Monitoring & Reporting	35%	3	1	2	4
Weighted Score - Experience	100%	3.5	2.0	2.0	2.5
III. Qualifications 20%					
1. Firm/Team	15%	4	2	1	3
2. Project Manager		Rachel Struglia	Monica Strauss	Peter Carlson	Paul Galvin
	30%	4	2	1	3
3. Biologist		Vipul Joshi +2 Biologists	Joe Henry, Robbie Sweet, Matthew South	Erin Hayes, Amanda Beck	Paul Galvin, Jacob Aragon
	25%	4	3	2	1
4. Paleontologist		Rachel Struglia	Mike Vader	Steve Conkling (Duke CRM)	N/A
	10%	3	1	2	4
5. Archaeologist		Martin Sherman		Curt Duke (Duke CRM)	N/A
	10%	3	2	1	4
6. Sub-Consultant		N/A	Geraldine Aron (Paleo Solutions)	Curt Duke, Steve Conkling (Duke CRM)	N/A
	10%	1	3	2	4
Weighted Score - Qualifications	100%	3.5	2.3	1.5	2.8
COMBINED WEIGHTED SCORE		3.8	1.8	1.7	2.8

Fee					
1. Biological Monitoring		\$59,190	\$21,975	\$26,285	\$23,850
2. Cultural Monitoring (Palaeotology & Archaeology)		\$39,572	\$11,390	\$7,256	\$0
3. Reimbursable Expenses		\$0	\$2,239	\$0	\$0
4. Reporting		\$0	\$4,340	\$0	\$10,325
TOTAL FEE		\$98,762	\$39,944	\$33,541	\$34,175

Hourly Billing Rates					
Project Manager		\$225	\$140	\$175	\$80
Biologist		\$80	\$95	\$175	\$140

RANKINGS:	4 - Fourth	2 - Second	1 - First	3 - Third
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VCS Environmental

EXPERT SOLUTIONS CEQA-NEPA . Biology . Regulatory

September 25, 2013

Jo Ann Corey, MPA
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

Subject: Revised proposal for Baker Water Treatment Facility & Raw Water Pump Station near Peters Canyon Reservoir, Biological and Cultural Resources Monitoring

Dear Jo Ann:

Please consider this letter a Scope of Work for Vandermost Consulting Services, Inc. doing business as VCS Environmental to assist the Irvine Ranch Water District (IRWD) with biological and cultural monitoring during construction of the new Baker Water Treatment Facility and new Raw Water Pump Station near Peters Canyon Reservoir.

As directed, we have assumed a construction start date of February 1, 2014, and an end date of March 1, 2016, with a two-week cultural monitoring period based on a daily rate. We have also assumed that all regulatory permits have been obtained and these permits will not add any new measures not identified in this scope. We are bidding the project as one project, with the understanding that 5-10% of the effort will be related to the Pump Station and the bulk of our time would be spent at the Baker Water Treatment Facility. We also understand that Option 1 was not chosen and therefore the mitigation requirements that solely reference Option 1 are not included in this Scope.

Our Scope of Work references the Summary of Impacts and Mitigation Measures for the IRWD Baker Water Treatment Plant Project for biology as well as cultural. We will subcontract the cultural work to Duke CRM. VCS has worked extensively with Duke CRM on projects throughout Southern California.

Our proposal includes the following tasks and budget.

BIOLOGICAL MONITORING

Task 1. BIO 3

Pre-construction Nesting Bird Surveys for construction and/or ground disturbing activities between February 15 and August 15. A qualified biologist will conduct \$2,100

breeding bird surveys in potential nesting habitat within and adjacent to all project sites. Survey areas will be identified by the biologist and surveys must be completed at least 5 days prior to ground disturbing activities. We assume that one pre-construction nesting bird survey is required for each project site:

- Raw Water Pump Station SCE Corridor
- OC 33 Meter Exchange
- Baker Emergency Over Flow Facility

Surveys are estimated to take 2 hours for the Raw Water Pump Station, 4 hours for the OC 33 Meter Exchange, and 6 hours for the Baker Emergency Over Flow Facility for a total of 12 hours. Survey results will be conveyed by email. No formal report will be prepared.

Optional Task: If construction ceases for five days or more after completion of pre-construction surveys, additional surveys are required prior to re-starting work. As an optional task, VCS assumes three additional surveys will be required in case work stops and re-starts. A budget of 12 additional hours for three surveys is proposed. \$2,100

Task 2. BIO 4

Optional Task: Should nesting birds be found, the biologist shall coordinate with the resource agencies (as necessary) to determine whether construction can continue and whether avoidance measures are necessary. Often a nest can be monitored, which would require a full-time biologist as well as a report summarizing the monitoring. Therefore, as an optional task, VCS assumes 6 hours coordination with the CDFW if necessary and 12 hours to prepare a summary report. \$3,170

Daily monitoring would assume 8 hours per day to monitor occupied nests near construction activity (*This estimate would vary depending on presence of nest(s) and construction schedule. Therefore, it is not included in totals below). \$1,400*
per day

Task 3. BIO 5

Even though mitigation measure BIO 5 pertains to Option 1 of the treated water pipeline, which is no longer part of the project, it is our understanding that installation of the raw water pump station and associated SCE conduit will necessitate revegetation of disturbed areas. Measure BIO 5 requires the preparation of a restoration plan for the 1:1 replacement of coastal sage scrub and coastal prickly pear succulent scrub communities impacted during construction. \$12,680

According to the Measure, the restoration plan must identify the location of restoration, quantity and type of species to be planted, a maintenance and monitoring schedule, list of performance criteria, and measures to exclude unauthorized entry.

Since this area is not associated with regulatory permits, we propose to prepare a more abbreviated restoration plan instead of the typical Habitat Mitigation and Monitoring Plan required by the resource agencies. Similarly, typical mitigation sites require five years of maintenance and monitoring in order to meet performance criteria established by the resource agencies. The monitoring schedule tends to be monthly in the beginning and tapering to quarterly near the end of the five year period. Since no permits are associated with this portion of the project, we propose two years of monitoring on a quarterly basis and no annual report, unless regulated by the District as an optional task. We assume that District staff will perform any necessary maintenance, therefore after each monitoring visit VCS will prepare a short memo on any necessary corrective actions. We assume 16 hours to write the restoration plan, 32 hours for 8 monitoring visits over two years, and 24 hours for 8 monitoring memos.

Task 4. BIO 6

The biological monitor will confirm compliance with the mitigation measures in Bio 6 through visual inspection during breeding season monitoring and discuss these measures at a pre-construction meeting (assumes 8 hours to prepare a handout and attend a pre-construction meeting and 6 hours to conduct periodic site visits to confirm implementation of BMPs). \$2,510

Task 5. BIO 7

The biological monitor will oversee flagging/fencing of sensitive riparian habitat surrounding Serrano Creek and the restoration of native habitat in the disturbed area. We have assumed time to oversee fence installation and coordination with the contractor (assumes 4 hours) and time to work with the contractor on the restoration of the impacted area including selection of the plant palette, planting densities, irrigation, and installation of the plant material (assumes 20 hours). \$4,320

Task 6. BIO 10

The City of Lake Forest will only allow the removal of eucalyptus trees outside of April 1 through October 31 for emergency situations, which occurs when trees may present a hazard to property. Therefore, we assume that eucalyptus tree removal no cost

will be accomplished outside of this restricted time frame and a permit is not necessary.

Task 7. ACOE Permitting Support

Optional Task: VCS proposes to provide consulting support associated with U.S. Army Corps of Engineer (ACOE) permitting and project implementation. This proposal assumes a time and materials budget depending need as determined by the District. We assume 24 hours to provide the support services. \$4,680

Task 8. General Coordination

Peter Carlson and biologist Amanda Beck will be available to meet with the project team, provide interim updates, conduct general coordination as needed and supervise Duke CRM. We have assumed 25 staff hours, to be billed on a time and materials basis. \$4,675

Biological Total **\$26,285**

Biological Total with Optional Tasks **\$36,235**

CULTURAL MONITORING

Task 1. Pre-Grade Meeting

A qualified archaeologist will attend the project pre-grading construction meeting and will be prepared to discuss the potential to discover archaeological and paleontological resources in relation to the project mitigation measures (assumes 2 hours). \$210

Task 2. CUL 1

An archaeological monitor will monitor ground disturbing activities associated with the construction of the treated water pipelines and the Serrano Creek sewer pipeline, including but not limited to grading, excavation, brush clearance and grubbing. The monitor will be, or will work under the supervision of, a qualified archaeologist (Secretary of the Interior Professional Qualification Standards for professional archaeology). The duration and timing of monitoring will be determined by the qualified archaeologist in consultation with the IRWD at a later date, based on the grading plans and schedule. Initially, all ground disturbing activities will be monitored. However, the qualified archaeologist, based on observations of soil stratigraphy or other factors, and in consultation with IRWD, \$2,463

may reduce the level of monitoring as warranted. In the event that cultural resources are unearthed during ground disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground disturbing activities away from the vicinity of the find so that the find can be evaluated, per Mitigation Measure CUL-2.

For the purpose of a cost estimate we are using the estimate of two weeks for monitoring requested by IRWD. Fifty percent of the cost is included here under CUL-1 and the other 50 percent is included under CUL-4 (assumes 43 hours).

Full-Time Monitoring Daily Rate = \$495
Part-Time/Spot Check Daily Rate = \$275

Task 3. CUL 2

Optional Task: In the event that a cultural resource is encountered, the qualified archaeologist will quickly identify and assess the nature of the find. If the find is determined to be potentially significant, the archaeologist, in consultation with the IRWD and appropriate Native American group(s) (if the find is a prehistoric or Native American resource), will develop an archaeological treatment plan. Upon approval of the treatment plan the qualified archaeologist will implement the plan will likely include archaeological excavation, laboratory analysis, research, curation of materials, and a technical report. A cost cannot be provided at this time because we are unable to predict what level of effort will be necessary if resources are found on-site.

\$Tbd

Task 4. CUL 3

Prior to the start of any earth-moving activity, an Orange County Certified Paleontologist will prepare a Paleontological Mitigation and Monitoring Plan that provides for the treatment of paleontological resources in accordance with the mitigation guidelines for areas of high potential outlined by the SVP. The mitigation and monitoring plan will address pre-construction salvage and reporting; pre-construction contractor sensitivity training; procedures for paleontological resources monitoring; microscopic examination of samples where applicable; the evaluation, recovery, identification, and curation of fossils, and the preparation of a final mitigation report (assumes 12 hours).

\$1,260

Task 5. CUL 4

All earth-moving activities in the Oso Sand Member of the Capistrano Formation will be monitored full-time, *unless the paleontologist determines that the*

\$2,463

sediments are previously disturbed or there is no reason to continue monitoring in a particular area due to other depositional factors, which would make fossil preservation unlikely or deemed scientifically insignificant. If it becomes apparent to the paleontologist that bedrock will not be impacted in an area, monitoring may be suspended temporarily until bedrock is impacted again. The paleontologist will spot check to determine if bedrock is being impacted. If impacts to bedrock resume, full-time monitoring will resume. In the event fossils are exposed during earth moving, the paleontologist, in consultation with IRWD, will implement the procedures outlined in the Paleontological Mitigation and Monitoring Plan.

For the purpose of a cost estimate we are using the estimate of two weeks for monitoring requested by IRWD. Fifty percent of the cost is included here under CUL-4 and the other 50 percent is included under CUL-1 (assumes 43 hours).

Full-Time Monitoring Daily Rate = \$495
Part-Time/Spot Check Daily Rate = \$275

Task 6. Compliance Report

Upon completion of archaeological and paleontological monitoring, DUKE CRM will prepare a compliance report. This report will be a brief statement of the days of monitoring soils observed and methods used. In the event that archaeological and/or paleontological resources are discovered, the archaeological treatment plan stipulated in CUL-2 and the Paleontological Mitigation and Monitoring Plan in CUL-3 will allow for a more detailed report of findings (assumes 12 hours). \$860

Cultural Total \$7,256

The following estimates show the combined totals for all proposed work, one with *no optional tasks* and one *with all optional tasks*.

Biological and Cultural Total \$33,541

Biological and Cultural Total with Optional Tasks \$43,491

Thank you for the opportunity to provide this Scope of Work. Staff resumes are attached along with the VCS Statement of Qualifications. Please do not hesitate to contact me or Peter Carlson with any questions or clarification.

Sincerely,



Julie Vandermost
President

Cc: Peter Carlson, VCS Environmental
Curt Duke, DUKE CRM

Authorized _____ Date _____

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Fee Schedule



VCS Environmental

EXPERT SOLUTIONS CEQA-NEPA . Biology . Regulatory

**VCS Environmental
2013 Fee Schedule**

President	\$200/hour
Vice President	\$195/hour
Senior Biologist	\$185/hour
Biologist	\$175/hour
Field Biologist	\$145/hour
Senior Project Manager	\$185/hour
Project Manager	\$175/hour
Assistant Project Manager	\$165/hour
Project Coordinator	\$145/hour
Field Assistant	\$75/hour
Office Assistant/Word Processing	\$65/hour

REIMBURSABLE EXPENSES. Expenses incurred directly for the Client's project will be billed at the actual cost and are not included in the original contract amount. Expenses include, but are not limited to, reprographics, Federal Express, necessary transportation costs including mileage by automobile at the IRS reimbursement rate, toll road fees, meals and lodging, computer services and photocopying.

PAYMENT DUE. Invoices are due upon presentation and shall be considered past due if not paid within 15 (fifteen) calendar days of the due date. Finance charges, computed by a "Periodic Rate" of 1-1/2% per month, will be charged on all past due amounts.

CHANGE ORDERS. Change Orders may be subject to future fee schedule increases.

DUKE CULTURAL RESOURCES MANAGEMENT

2013 STANDARD BILLING RATES

HOURLY BILLING RATES

Staff Level	Hourly Billing Rate
Principal Investigator / Project Manager	\$105
Archaeologist	\$105
Historian / Architectural Historian	\$105
Paleontologist	\$105
GIS Specialist	\$75
Field Monitor	\$55
Research Assistant	\$50
Administrative	\$75

IN-HOUSE DIRECT EXPENSES

Item	Unit Cost
Reproduction (8.5 x 11) B/W	\$0.10 per page
Reproduction (8.5 x 11) Color	\$0.40 per page
Reproduction (11x17) B/W	\$0.15 per page
Reproduction (11x17) Color	\$0.75 per page
CD Production	\$5.00 per CD
Mileage On Road	\$0.55 per mile
Mileage Off-Road	\$0.72 per mile
GPS Unit	\$75.00 per day

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

EXHIBIT "O"

Project Name: BAKER WTP
EPMS Project No: 11218 **EA No:** 3
Oracle Project No: 1417
Project Manager: MORI, RICHARD
Project Engineer: TOLAND, SCOTT
Request Date: December 11, 2013

ID Split: Regional Water Split with LAWD (11/08)
Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	3.6	BONDS YET TO BE SOLD**
113	4.4	BONDS YET TO BE SOLD**
115	6.2	CAPITAL FUND
121	12.8	BONDS YET TO BE SOLD**
130	10.0	BONDS YET TO BE SOLD**
135	16.2	PREVIOUSLY SOLD BONDS
140	3.5	BONDS YET TO BE SOLD**
150	26.1	BONDS YET TO BE SOLD**
153	2.9	BONDS YET TO BE SOLD**
154	1.2	BONDS YET TO BE SOLD**
161	6.7	BONDS YET TO BE SOLD**
182	2.5	BONDS YET TO BE SOLD**
184	2.3	BONDS YET TO BE SOLD**
186	.8	BONDS YET TO BE SOLD**
188	.8	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$13,860,000
This Request:	(\$6,751,500)
Total EA Requests:	\$7,108,500
Previously Approved Budget:	\$80,010,000
Budget Adjustment Requested this EA:	(\$72,901,500)
Updated Budget:	\$7,108,500
Budget Remaining After This EA	\$0

Comments: IRWD's share estimated at 24.138%

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	500,000	500,000	0	500,000	500,000	7/08	6/13
ENGINEERING DESIGN - OUTSIDE	1,735,000	4,200,000	5,935,000	235,000	5,700,000	5,935,000	7/08	6/13
DESIGN STAFF FIELD SUPPORT	91,400	0	91,400	(8,600)	100,000	91,400	7/08	6/13
ENGINEERING - CA&I IRWD	0	0	0	(400,000)	400,000	0	7/13	3/16
ENGINEERING - CA&I OUTSIDE	0	0	0	(2,800,000)	2,800,000	0	10/13	3/16
CONSTRUCTION FIELD SUPPORT	0	0	0	(200,000)	200,000	0	10/13	3/16
CONSTRUCTION	(8,356,500)	8,500,000	143,500	(65,856,500)	66,000,000	143,500	1/14	3/16
LEGAL	100,000	0	100,000	(400,000)	500,000	100,000	10/10	3/16
Contingency - 5.00% Subtotal	(\$321,400)	\$660,000	\$338,600	(\$3,471,400)	\$3,810,000	\$338,600		
Subtotal (Direct Costs)	(\$6,751,500)	\$13,860,000	\$7,108,500	(\$72,901,500)	\$80,010,000	\$7,108,500		
Estimated G/A - 170.00% of direct labor*	\$80,400	\$925,000	\$1,005,400	(\$1,034,600)	\$2,040,000	\$1,005,400		
Total	(\$6,671,100)	\$14,785,000	\$8,113,900	(\$73,936,100)	\$82,050,000	\$8,113,900		
Direct Labor	\$91,400	\$500,000	\$591,400	(\$608,600)	\$1,200,000	\$591,400		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: _____

Department Director: _____

Finance: _____

Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$8,277,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: BAKER WATER TREATMENT PLANT
EPMS Project No: 11747 **EA No:** 1
Oracle Project No: 5027
Project Manager: MORI, RICHARD
Project Engineer: TOLAND, SCOTT
Request Date: December 11, 2013

ID Split: Regional Water Split with LAWD (11/08)

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	3.6	BONDS YET TO BE SOLD**
113	4.4	BONDS YET TO BE SOLD**
115	6.2	CAPITAL FUND
121	12.8	BONDS YET TO BE SOLD**
130	10.0	BONDS YET TO BE SOLD**
135	16.2	PREVIOUSLY SOLD BONDS
140	3.5	BONDS YET TO BE SOLD**
150	26.1	BONDS YET TO BE SOLD**
153	2.9	BONDS YET TO BE SOLD**
154	1.2	BONDS YET TO BE SOLD**
161	6.7	BONDS YET TO BE SOLD**
182	2.5	BONDS YET TO BE SOLD**
184	2.3	BONDS YET TO BE SOLD**
186	.8	BONDS YET TO BE SOLD**
188	.8	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$96,852,000
Total EA Requests:	\$96,852,000
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$96,852,000
Updated Budget:	\$96,852,000
Budget Remaining After This EA	\$0

Comments: IRWD's share estimated at 24.138%

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - CA&I IRWD	1,100,000	0	1,100,000	1,100,000	0	1,100,000	1/14	6/16
ENGINEERING - CA&I OUTSIDE	8,200,000	0	8,200,000	8,200,000	0	8,200,000	1/14	6/16
CONSTRUCTION FIELD SUPPORT	240,000	0	240,000	240,000	0	240,000	1/14	6/16
CONSTRUCTION	82,600,000	0	82,600,000	82,600,000	0	82,600,000	1/14	6/16
LEGAL	100,000	0	100,000	100,000	0	100,000	1/14	6/16
Contingency - 5.00% Subtotal	\$4,612,000	\$0	\$4,612,000	\$4,612,000	\$0	\$4,612,000		
Subtotal (Direct Costs)	\$96,852,000	\$0	\$96,852,000	\$96,852,000	\$0	\$96,852,000		
Estimated G/A - 170.00% of direct labor*	\$2,278,000	\$0	\$2,278,000	\$2,278,000	\$0	\$2,278,000		
Total	\$99,130,000	\$0	\$99,130,000	\$99,130,000	\$0	\$99,130,000		
Direct Labor	\$1,340,000	\$0	\$1,340,000	\$1,340,000	\$0	\$1,340,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: _____

Department Director: _____

Finance: _____

Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$101,113,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby ir
 aration of official intent to reimburse costs of the above-captioned

December 16, 2013

Prepared and

Submitted by: L. Bonkowski

Approved by: Paul Cook

ACTION CALENDAR

ELECTION OF OFFICERS FOR 2014

SUMMARY:

The Bylaws of the District provide that the President and Vice President shall be elected by the Board from among its members. The term of office of the President and Vice President is one year, or until the election and qualification of their successors. On December 10, 2012, Director Douglas Reinhart was elected to the office of President and Director Steve LaMar was elected to the office of Vice President.

While there are no formal election procedures set forth in the Bylaws, it is suggested that the General Manager be appointed temporary Chairman to conduct the election of President. The temporary Chairman would open nominations, accept nominations which need not be seconded, accept a motion to close the nominations, and conduct the balloting by voice vote. The President would then conduct the election of the Vice President in a similar manner.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT AN ELECTION BE CONDUCTED OF THE PRESIDENT AND VICE PRESIDENT OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT.

LIST OF EXHIBITS:

None.

