

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

**April 13, 2015**

**PLEDGE OF ALLEGIANCE**

**CALL TO ORDER**

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

**ROLL CALL**

Directors Matheis, Reinhart, Swan, Withers and President LaMar

**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.

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**COMMUNICATIONS TO THE BOARD**

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1. A. Written:

B. Oral:

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

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

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**WORKSHOPS**

**Resolution No. 2015-9**

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3. METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
WATER SUPPLY ALLOCATION IMPACT TO IRWD

On April 14, 2015, the Board of Directors of the Metropolitan Water District of Southern California will consider the declaration of a Water Supply Allocation Plan (WSAP) Level 3 Condition, which is a 15% regional shortage. Staff will present to the Board the effects to IRWD should Metropolitan implement a WSAP Level 3 Condition.

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**WORKSHOPS (Continued)**

**Resolution No. 2015-9**

4. FISCAL YEAR 2015-16 OPERATING BUDGET AND PROPOSED RATES AND CHARGES

Recommendation: That the Board review and provide comments on the proposed FY 2014-15 operating budget and proposed rates and charges.

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**CONSENT CALENDAR**

**Items 5-10**

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the March 23, 2015 Regular Board meeting be approved as presented.

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

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

7. SERIES 1993 BOND LETTER OF CREDIT SUBSTITUTION

Recommendation: That the Board adopt a resolution approving the Remarketing Statement and certain other actions in connection with replacement of the Letter of Credit (Consolidated Series 1993).

Reso. No. 2015-

8. NOMINATION OF STEVEN LAMAR AS BOARD MEMBER OF ACWA REGION 10 BOARD

Recommendation: That the Board adopt a resolution nominating Director Steven LaMar to serve on the Association of California Water Agencies Region 10 Board for the remainder of the 2014-15 term.

Reso. No. 2015-

9. SILVERADO CANYON 12-INCH DOMESTIC WATER PIPELINE PROJECT CONTRACT CHANGE ORDER AND FINAL ACCEPTANCE

Recommendation: That the Board approve contract Change Order No. 5 with Sully-Miller Contracting Company in the credit amount of <\$99,586> for project 11743 (4919); accept construction of the Silverado Canyon 12-inch Domestic Water Pipeline, project 11743 (4919); 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.

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**CONSENT CALENDAR (Continued)**

**Items 5-10**

10. 2015 STATE LEGISLATIVE UPDATE

Recommendation: That the Board take a "SEEK AMENDMENTS" position on SB 551 (Wolk) and authorize staff to work with the author's office, legislative staff and industry stakeholders to ensure that SB 551 recognizes the many factors that influence water supply and treatment decisions; take a "SUPPORT" position on AB 585 (Melendez); take a "SUPPORT" position on AB 603 (Salas); and take a "SUPPORT AND SEEK AMENDMENTS" position on AB 606 (Levine).

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**ACTION CALENDAR**

11. WATER SUPPLY ASSESSMENTS FOR EL TORO AND WEST ALTON DEVELOPMENT PLANS

Recommendation: That the Board approve the Water Supply Assessment for the El Toro Development Plan and the Water Supply Assessment for the West Alton Development Plan.

12. GREEN ACRES PROJECT PIPELINE SEGMENT CATHODIC PROTECTION SYSTEM UPGRADES CONSTRUCTION AWARD

Recommendation: That the Board authorize a budget increase in the amount of \$231,000, from \$121,000 to \$352,000, for project 30415 (4396); and authorize the General Manager to execute a construction contract with Farwest Corrosion Control Company in the amount of \$154,275 for the Green Acres Project pipeline segment cathodic protection system upgrades, project 30415 (4396).

13. ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENT RENEWAL

Recommendation: That the Board approve renewal of the District's annual Oracle Software Maintenance and Support Agreements and additional licenses and support in the amount of \$928,572.

14. PROPOSED IRWD WATER AND ENERGY EFFICIENCY POLICY PRINCIPLES

Recommendation: That the Board adopt the proposed IRWD Water and Energy Efficiency Policy Principles paper.

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**ACTION CALENDAR (Continued)**

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15. ORANGE COUNTY SANITATION DISTRICT SERVICE AREA 7 –  
RESOLUTION FOR ANNEXATION

Recommendation: That the Board adopt a resolution making application to the Local Agency Formation Commission for the Annexation of Territory (Annexation No. 29 to Irvine Ranch Water District).

Reso. No. 2015-

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**OTHER BUSINESS**

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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.

16. A. General Manager's Report

B. Directors' Comments

C. CLOSED SESSION:

- 1) CONFERENCE with legal counsel relative to anticipated litigation pursuant to Government Code Section 54956.9(d)(4) initiation of litigation (one potential case);
- 2) CONFERENCE with Labor Negotiators - Government Code Section 54957.6:  
Agency Designated Representatives: Paul Cook and Jenny Roney  
Employees Organization: Irvine Ranch Water District Employees Association; and
- 3) CONFERENCE with legal counsel will be held relative to existing litigation - Government Code Section 54956.9(d)(1) - Successor Agency to the Tustin Community Redevelopment Agency, et al vs. Michael Cohen, Case No. 34-2015-80002046, in his capacity as Director of Finance of the State of California, et al.


D. Adjourn: President LaMar to adjourn the meeting in memory of former Board Member Frank Hughes who served on the Board from 1967 through 1973.



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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.

April 13, 2015  
Prepared by: Christopher Smithson  
Submitted by: Cheryl Clary  
Approved by: Paul Cook 

## WORKSHOP

### FISCAL YEAR 2015-16 OPERATING BUDGET AND PROPOSED RATES AND CHARGES

#### SUMMARY:

The goal of the District's budgeting process is to appropriately fund the resources required to provide excellent service to its customers as cost-efficiently as possible. Over the past few years, the District has aggressively pursued reductions in expenses to offset uncontrollable expenses such as pass-through rate increases from outside agencies on which the District depends for the purchase of water, the treatment of sewage, and electricity. With significant additional capital facilities in development in FY 2015-16, the recommended increases in the operating budget also reflect additional expenses associated with operating or planning for the operation of those facilities.

On April 1, 2015 the Governor issued an Executive Order to direct the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25% reduction in potable urban water use through February 2016. The Executive Order stipulates a 25% reduction in water use as compared to 2013 and has proposed an initial framework. SWRCB's initial proposal considers the relative residential per capita water usage (gallons per capita per day, or GPCD) of each water supplier's area based on the reporting period of September 2014 and places each supplier into a tier requiring savings of potable water usage from 2013 ranging from 10% to 35%. Based on IRWD's 92.3 GPCD, the current draft of the SWRCB's proposal requires that IRWD achieve a 20% reduction in potable usage. While this proposal is preliminary with final regulations to be issued early May, staff has taken this proposal into consideration in preparing the rate recommendations for the budget below. Staff will present a power point at the Board Workshop to discuss the possible impacts.

Based on possible further clarification by the SWRCB in late April and comments from the IRWD Board at this workshop, several of the proposed budget amounts previously presented to the Finance and Personnel Committee and details in "Exhibit A" will require revision. Staff plans to bring further changes for discussion at the April 27, 2015 Board meeting.

Prior to the issuance of the SWRCB draft restrictions, the proposed Fiscal Year (FY) 2015-16 Operating Budget for Irvine Ranch Water District was \$147.7 million, representing an increase of \$17.0 million, or 13.0%, when compared to the Operating Budget for FY 2014-15. The primary drivers for previously reviewed Committee increases include higher purchases of imported water due to increased demands associated with the on-going drought, higher pass through costs from outside agencies and increases in electricity costs. Based on the initial proposal by the SWRCB, the all-in cost of water would reduce the 2015-16 budget by approximately \$9.0 million. As discussed above, these amounts will be revised as the District receives more clarity from the SWRCB later this month.

Initial budget assumptions anticipate a fourth straight dry year. It is anticipated that the restrictions imposed by SWRCB will significantly reduce the amount of water sales in the over allocation tiers and reduce some usage in the base tiers. The initial SWRCB proposal would reduce potable usage over the 2014-15 budget by 3,285 AF. The commodity rate setting methodology continues to utilize the five tiers beginning with a low volume tier, a base rate and three over-allocation tiers.

Rate increases are necessary to fund anticipated shortfalls in the water and sewer/recycled water systems. As mentioned in the previous meeting, it is anticipated that the Orange Park rate area will be merged into the Irvine Ranch rate area effective July 1, 2015. In the Irvine Ranch rate area, the proposed adjustment to the base commodity rate is \$0.06 per hundred cubic feet (ccf), with a \$0.20 reduction per month in the fixed water service charge. The proposed increase to the fixed sewer charge is \$1.95 per month for the typical residential customer. In the Los Alisos rate area, the proposed adjustment to the base commodity rate is \$0.03 per ccf, with a \$0.20 reduction per month in the fixed water service charge. The proposed increase to the sewer fixed charge is \$1.95 per month for a typical residential customer based on the average use of 12 ccf per month.

Based on the recommended increases, the Irvine Ranch rate area will experience an increase to the average residential customer of \$2.32 or 5.3%, from \$44.18 to \$46.50 per month, and the Los Alisos rate area will experience an overall rate increase to the average residential customer of \$2.11 or 3.9%, from \$54.12 to \$56.23 per month.

Staff recommends the Board review and provide comments on the initial Operating Budget, and changes to the District's rates and charges for further review by the full Board at its workshop on April 27, 2015. Staff also intends to present Proposition 218 notices at the April 27, 2015 Board meeting. These may include a schedule for a possible step rate increase in the over allocation tiers if water purchases exceed the SWRCB mandated target.

#### BACKGROUND:

The initial proposed Operating Budget, attached as Exhibit "A", has been organized into 10 major functional areas, including separate sections for proposed general plant purchases and labor changes:

- Assumptions;
- Consolidated Operating Budget;
- Operating Sources and Uses of Funds by System;
- Non-Operating Sources and Uses of Funds;
- Projected Changes to Rates and Charges;
- Budgeted Revenue Summary by System;
- Budgeted Cost of Water by System;
- Individual tabs with Major Goals, proposed organization chart and expense budget by Department;
- General Plant; and
- Summary of labor and proposed changes.

Allocation-Based Rate Structure Cost Allocation:

In the tables below, staff has provided the detailed methodology for allocating costs to the allocation-based rates consistent with Proposition 218 and Article X requirements.

The District adopted an allocation-based rate structure in 1991 and initially established the over allocation use tiers with the rates doubling from tier to tier to incentivize water conservation. This approach immediately resulted in a decrease of water consumption that exceeded 10% and laid the groundwork for the efficient use of water by IRWD customers that is firmly established today. The rate structure continues to align excessive use with a marked increase in rates over the base rate to fund costs including recycled water conversions which helps reduce the District's need to purchase expensive imported water, the District conservation efforts, and the urban runoff (NTS) which is a byproduct of wasteful usage.

The allocation based rate structure is designed to promote conservation and the District's rate setting process utilizes approved legislation included in Chapter 3.4 (sections 370-374) of the California Water Code that provides for the ability to add a conservation charge for uses beyond the reasonable use basic allocation. The proposed FY 2015-16 Operating Budget and recommended rate increases follow these guidelines. The District's rate setting process provides for the determination of the nexus between the revenue generated from the proposed rates and the costs driving those rates, and between the rates and the estimated benefit from the additional associated costs. This has been analyzed and will be set forth in greater detail in the IRWD Cost of Service Study, which is nearing completion.

Over allocation revenue can fluctuate significantly from year to year; weather is typically the most unpredictable factor. During wet years, over allocation revenue is reduced while dry years generate more as consumption increases. Consistent with the District's practice, as weather and consumption cannot be predicted, this over allocation fund is to be considered cyclical for use over a three to five year timeframe. The drought, that is moving into its fourth year, has increased the over allocation fund. Staff is in the process of prioritizing programs and expenditures that will utilize the fund and provide a benefit to the District during drier than normal years.

On an annual basis, over allocation revenue provides for many programs that preserve the District's water conservation approach established years ago. Specifically, over allocation revenue/funds provide for annual expenses that include:

- The difference between the Base Rate and the District's lowest cost source of water;
- Conservation programs and incentives that provide a blended benefit to all over allocation users;
- Outreach from District staff through programs with local schools and through Water Smart;
- Conservation outreach efforts that includes identifying and working with Excessive and Wasteful tier users; and
- Operation, maintenance, and management of NTS sites, which are designed to treat the runoff from over-irrigation, with additional sites added annually.

*Irvine Ranch Rate Area*

The District’s rate setting methodology utilizes five tiers that include a low volume tier, a base rate and three over allocation tiers. The allocation of costs associated with the Irvine Ranch rate area tiers follow:

IRVINE RANCH RATE AREA METHODOLOGY	
Tiers	Proposed
Low Volume (LV)	Lowest cost of source water for the Irvine Ranch rate area with non-operating revenue funding the difference between the current rate and the lowest cost source
Base Rate	Melded cost of budgeted sales (local groundwater plus imported water purchases)
Inefficient	Loaded cost <sup>1</sup> of imported water + 10% x (LV differential, Conservation, NTS, and Recycled Conversions) / Inefficient usage
Excessive	Loaded cost <sup>1</sup> of imported water + 20% x (LV differential, Conservation, NTS, and Recycled Conversions) / Excessive usage
Wasteful	Loaded cost <sup>1</sup> of imported water + 70% x (LV differential, Conservation, NTS, and Recycled Conversions) / Wasteful usage

When this approach is applied to the budgeted revenues and expenses within each tier, the resulting proposed rates for the Irvine Ranch rate area for FY 2015-16 follows in the table below:

*Irvine Ranch Rate Area:*

Tiers	Current (FY 14-15) (per ccf)	Proposed (FY 15-16) (per ccf)	Diff.	Description
Low Volume	\$0.88	\$0.91	\$0.03	Lowest cost of source water for the Irvine Ranch rate area (\$1.10/ccf) with difference between low volume rate and \$1.10/ccf funded by non-operating revenue
Base Rate	\$1.34	\$1.40	\$0.06	All sources melded cost of budgeted water (\$1.40)
Inefficient	\$3.91	\$4.08	\$0.17	Loaded cost of imported water (\$2.76) + 10% x (LV differential, Conservation, NTS, and Recycled Conversions) / Inefficient usage (\$1.44)
Excessive	\$6.22	\$6.52	\$0.30	Loaded cost of imported water (\$2.76) + 20% x (LV differential, Conservation, NTS, and Recycled Conversions) / Excessive usage (\$3.88)
Wasteful	\$12.60	\$13.36	\$0.76	Loaded cost of imported water (\$2.76) + 70% x (LV differential, Conservation, NTS, and Recycled Conversions) / Wasteful usage (\$10.72)

<sup>1</sup> Assumes all costs from MWDOC and MWD (meter charge, CRC, etc.) associated with the acquisition of imported water are included in identifying the cost per ccf for the represented Rate Area.

*Los Alisos Rate Area*

The methodology used for the Los Alisos rate area is similar to the Irvine Ranch rate area. The methodology continues to utilize five tiers that include a low volume tier, a base rate and three over allocation tiers. The allocation of costs associated with the tiers follow:

LOS ALISOS RATE AREA METHODOLOGY	
Tiers	Proposed
Low Volume	Lowest cost of source water (MWDOC untreated) for the Los Alisos rate area
Base Rate	All sources melded cost of budgeted water
Inefficient	Loaded cost <sup>1</sup> of imported water + 10% x (LV differential, Conservation, NTS, and Recycled Conversions) / Inefficient usage
Excessive	Loaded cost <sup>1</sup> of imported water + 20% x (LV differential, Conservation, NTS, and Recycled Conversions) / Excessive usage
Wasteful	Loaded cost <sup>1</sup> of imported water + 70% x (LV differential, Conservation, NTS, and Recycled Conversions) / Wasteful usage

The proposed rate structure for the Los Alisos rate area follows:

*Los Alisos Rate Area:*

Tiers	Current (FY 14-15) (per ccf)	Proposed (FY 15-16) (per ccf)	Diff.	Description
Low Volume	\$1.51	\$1.54	\$0.03	Lowest cost of source water (MWDOC untreated) for the Los Alisos rate area (\$1.51/ccf)
Base Rate	\$2.31	\$2.34	\$0.03	All sources melded cost of budgeted water (\$2.34)
Inefficient	\$3.91	\$4.12	\$0.21	Loaded cost of imported water (\$2.34) + 10% x (LV differential, Conservation, NTS, and Recycled Conversions) / Inefficient usage (\$1.78)
Excessive	\$6.22	\$6.48	\$0.26	Loaded cost of imported water (\$2.34) + 20% x (LV differential, Conservation, NTS, and Recycled Conversions) / Excessive usage (\$4.14)
Wasteful	\$12.60	\$13.41	\$0.81	Loaded cost of imported water (\$2.34) + 70% x (LV differential, Conservation, NTS, and Recycled Conversions) / Wasteful usage (\$11.07)

Average usage for a typical residential customer in the Irvine Ranch and Los Alisos rate areas are approximately 12 ccf and the three lowest months usage would place them in the 5-10 ccf category for sewage demand. Based on the recommended increases, the Irvine Ranch rate area will experience an increase to the average residential customer of \$2.32 or 5.3%, from \$44.18 to \$46.50 per month, and the Los Alisos rate area will experience an overall rate increase to the average residential customer of \$2.11 or 3.9%, from \$54.12 to \$56.23 per month.

Pumping surcharges will be adjusted to capture a portion of the electricity cost increases the District has experienced over several years.

Staff will have available the District's financial rate model at the Committee meeting and be able to address the impact of any additional suggested changes.

**FISCAL IMPACTS:**

Pre proposed initial mandated SWRCP reductions, operating expenses in the FY 2015-16 Proposed Operating Budget reflect an increase of \$17.0 million from the adopted Operating Budget for FY 2014-15. Staff plans to present more refined details to the operating revenues and expenses at the April 27, 2015 Board Workshop.

**ENVIRONMENTAL COMPLIANCE:**

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

**COMMITTEE STATUS:**

This item was reviewed by the Finance and Personnel Committee on March 3, March 16, and April 6, 2015. The item was reviewed pre proposed mandated SWRCP reductions.

**RECOMMENDATION:**

THAT THE BOARD REVIEW AND PROVIDE COMMENTS ON THE PROPOSED FY 2015-16 OPERATING BUDGET AND PROPOSED RATES AND CHARGES.

**LIST OF EXHIBITS:**

Exhibit "A" – Proposed Operating Budget for Fiscal Year 2015-16

**Exhibit “A”**

***IRVINE RANCH WATER DISTRICT  
OPERATING BUDGET  
FISCAL YEAR 2015-16***



***“PROPOSED”***

***April 13, 2015***





# OPERATING BUDGET

## *Assumptions as of April 13, 2015 For Fiscal Year 2015-16*

The goal of the District's budgeting process remains to fund the resources required to provide services to the District's customers as cost-efficiently as possible. Over the past few years, the District's operating budget has aggressively pursued reductions in expenses to offset uncontrollable expenses such as pass-through rate increases from outside agencies on which the District depends for the purchase of water, the treatment of wastewater and biosolids, and electricity costs. With significant additional capital facilities in development in FY 2015-16, the recommended increases in the operating budget reflect additional expenses associated with operating or planning for the operation of those facilities.

On April 1, 2015, the Governor issued an Executive Order to direct the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25% reduction in potable urban water use through February 2016. The Executive Order stipulates a 25% reduction in water use as compared to 2013 and has proposed an initial framework. SWRCB's initial proposal considers the relative residential per capita water usage (GPCD) of each water suppliers' area based on the reporting period of Sept 2014 and places each supplier into tiers requiring savings of potable water usage from 2013 ranging between 10-35%. Based on IRWD's 92.3 GPCD, the District would be required to achieve a 20% reduction in potable usage. While the District understands the proposal is preliminary with final regulations to be issued early May, staff has taken this proposal into consideration in preparing the rates for the budget.

This document is a preliminary summary of the major assumptions driving the development of the operating budget for FY 2015-16 for input by the Finance and Personnel Committee and the Board.

### **I. REVENUES**

#### *Growth Estimates:*

Residential development growth included both apartments and single family homes for FY 2015-16. The unit estimate is based on the most current projections received from the major developers throughout the service area. Current estimates identify approximately 4,100 mixed units coming on line in FY 2015-16. As a result, the growth factor for residential development was estimated at 3.0% for FY 2015-16.

The District experienced an increase in commercial volume which is helping to meet a return of the previously lost revenue due to the economy. Current development projections for the commercial/industrial sector identify 105 acres of development occurring in FY 2015-16 as well as 32 acres developing in the current fiscal year. Staff included a 1% growth rate for commercial and industrial development for FY 2015-16. Revenue assumptions used to estimate sewer revenue match the assumptions included for potable water.

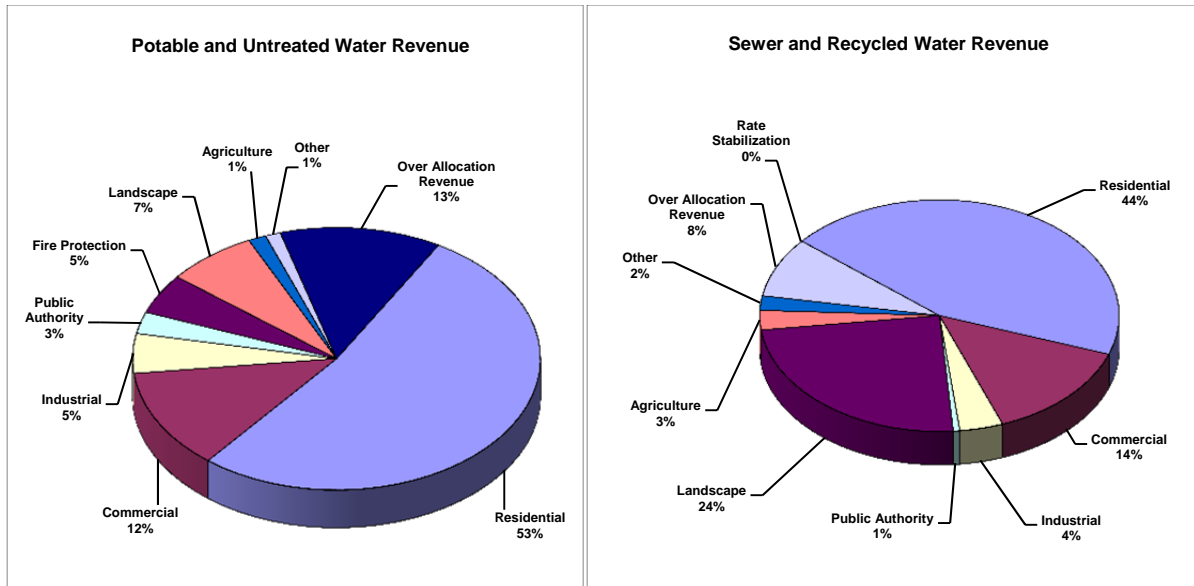


# OPERATING BUDGET

*Assumptions as of April 13, 2015  
Fiscal Year 2015-16*

*FY 2015-16 Estimate for Operating Revenue Sources, by Customer Type (in thousands):*

Customer Type	Water	Sewer/ Recycled Water	Total
Residential	\$ 41,140	\$ 32,671	\$ 73,811
Commercial	9,658	10,204	19,862
Industrial	3,831	2,879	6,710
Public Authority	2,099	439	2,538
Fire Protection	3,887	0	3,887
Landscape Irrigation	5,656	17,758	23,414
Agriculture Irrigation	1,108	2,008	3,116
Other	944	1,463	2,407
Over Allocation Revenue	10,043	6,171	16,214
Rate Stabilization	0	0	-
<b>Total</b>	<b>\$ 78,366</b>	<b>\$ 73,593</b>	<b>\$ 151,959</b>
Reduced Sales	(7,659)		(7,659)
Reduced Over Allocation	(1,405)		(1,405)
<b>Adjusted Total Revenue</b>	<b>\$ 69,302</b>	<b>\$ 73,593</b>	<b>\$ 142,895</b>



*Water revenue is pre SWRCB*

The projected revenue sources and their respective percentage of the total are presented in the graph above. Total Residential, Landscape, Commercial, and Industrial revenue constitute over approximately 80% of the total operating revenues for both water and sewer. In addition, revenues include the remaining increase for the fixed meter charges approved by the Board in FY 2014-15 budget.



# OPERATING BUDGET

## *Assumptions as of April 13, 2015* *Fiscal Year 2015-16*

The "Other" category in the chart above includes revenue from the following sources in the order of total estimated receipts:

- Construction/Temporary accounts
- United States Department of the Navy contribution for the Shallow Ground Water Unit identified as Irvine Desalter Project (IDP) Reimbursements
- Recycled water sales to the Santa Margarita Water District
- Green Acres Project (GAP) recycled water sales
- Recycled Water Conversion Loan payments

## II. OPERATING EXPENSES

Notable expected changes in operating expenses are addressed below by system and function:

### A. Treated Water

The State Water Resources Control Board (SWRCB) was directed to impose restrictions to achieve an aggregate statewide 25% reduction in potable urban water use through February 2016. The potable water assumptions have been modified at a summary level to capture the impact to setting commodity rates. As the mandatory requirements are clarified, the associated line items in the budget will be modified accordingly.

The approach the SWRCB used to reach the 25% reduction is based on each agency's GPCD. Based on IRWD's 92.3 GPCD, the District would be required to achieve a 20% reduction in potable usage from the District's 2013 total available. This is approximately a 11,500 acre feet decrease from the current initial budget assumption for FY 2015-16. To reach this target, groundwater sources were reduced by 8,900 acre feet and imported water was reduced 2,600 acre feet. The preliminary mix identified above takes into consideration maintaining groundwater usage below the BPP.

California continues to face a significant drought and District customers are receiving this messaging from a variety of sources. In addition, the District will continue to make efforts to do its part in encouraging its customers to conserve.

The District intends to continue encouraging conservation through its rate structure, which provides an incentive for customers to limit water use to their base allocation. Last year, the District took steps to change the rate structure to provide additional incentive to customers to conserve:

- The GPCD was reduced from 55 to 50 because the average residential customer currently uses less than 55 GPCD; and
- Each of the over allocation tiers for residential customers were tightened by 20% to match the messaging being promoted. Landscape allocations were not changed because they are significantly tighter. Commercial allocations remain unchanged as well.



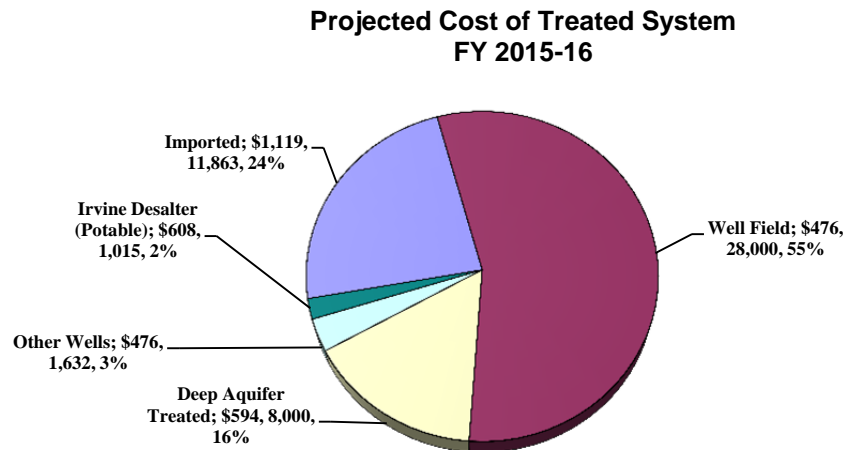
# OPERATING BUDGET

## *Assumptions as of April 13, 2015 Fiscal Year 2015-16*

Other factors that may influence demands within the District include the messaging from outside agencies and changes within rates and charges.

The FY 2014-15 budget anticipated a significant reduction in usage associated with these changes which has not yet occurred. The District is projecting the potable and untreated demands for FY 2015-16 to be 63,743 acre feet (AF), an increase of approximately 3,600 over the prior year. The state directed change will bring potentially reduce the total available to 52,883 AF.

The sources used to meet potable demands, their respective cost per AF, inclusive of labor, electricity, chemicals, etc., and their respective share of the total water purchased are identified in the graph:



### **Groundwater Production**

The major assumptions associated with the respective sources of water include the following:

- The Replenishment Assessment (RA) in FY 2014-15 was \$294 per AF and the rate used in FY 2015-16 is \$340 per AF, an increase of 16%. The District's basin production percentage (BPP) is set at a maximum of 70%, per the OCWD / IRWD Annexation Agreement executed in 2013.
- The Dyer Road Well Field (DRWF) pumping costs:
  - Actual energy usage will be factored with a rate increase of 6%.
  - Chemical expense is relatively flat.
- Primary changes in costs include a \$46 per AF estimated rate increase for RA and a 6% increase in energy for the Irvine Desalter Project (IDP), the Potable Treatment Plant (PTP), and the Deep Aquifer Treatment System (DATS).

### **Treated Water – Metropolitan Water District of Southern California (MWD)**

- MWD is expected to increase its rates again on January 1, 2016 by 2% and other components will have a small net increase for the District.



## OPERATING BUDGET

### *Assumptions as of April 13, 2015 Fiscal Year 2015-16*

Readiness-to-Serve (RTS) will increase by 3% and the capacity charge (CC) will increase by 11%.

- RTS from \$1.35 million to 1.42 million;
- CC from \$0.35 million \$0.39 million.
- Staff assumes no substantial change to the costs associated with the IRWD Reservoir Management Systems.
- Los Alisos rate area demands are met almost entirely from MWD/MWDOC imported water.

#### **Untreated Water**

The sources for untreated water for FY 2015-16 will include purchased water.

- MWDOC purchases, Native Water and Santiago Aqueduct Commission (SAC) water is expected to be used to meet all untreated demands.
- Any MWDOC increases discussed above also apply to purchases for the untreated system.

#### **B. Recycled Water**

Demands for the recycled system continue to increase. Total recycled demand is estimated at 32,810 AF, an increase of approximately 4,000 AF from the FY 2014-15 budget. Sources are as follows:

- Production and storage generated from operations at the Michelson Water Recycling Plant (MWRP) and Los Alisos Water Recycling Plant (LAWRP) are expected to provide 22,300 AF.
- The Irvine Desalter will provide 2,900 AF net of water lost through treatment.
- SAC water will provide 282 AF of water.
- The recycled water system is expected to purchase 9,404 acre-feet of supplemental water from the untreated system.

#### **C. Salaries and Benefits**

- Each year, staff prepares a labor budget based upon the total positions in the organization chart, expected merit and cost of living increases, and promotional allowances.
  - Each salary is identified and included in January and then projected forward adding merit increases that are based on prior review ratings where necessary in order to reach a starting July salary base.
  - New positions and promotions are added and all salaries are projected forward on a month by month basis.
  - In December, a COLA and promotional factor are applied to all salaries - Assumed at 2.0% and 0.9%, respectively.



# OPERATING BUDGET

## *Assumptions as of April 13, 2015* *Fiscal Year 2015-16*

- Although staffing is below the current budget, staff anticipates all positions being occupied by FY 2015-16.

<b>Regular Salaries and Wages</b>	
FY 2014-15	\$29,097
Vacancy Factor	(1,600)
New positions	896
Promotions	161
COLA	321
Merit/Other	209
FY 2015-16	\$29,084

The following table identifies the current and proposed contribution of the District toward employee benefits.

<b>Additional Contributions Provided by the District</b>		
	<b>FY 14-15</b>	<b>FY 15-16</b>
PERS Employer Contribution	17.7%	18.3%
PERS in Excess of ARC	<u>7.3%</u>	<u>6.7%</u>
Combined Total	25.0%	25.0%
District Employee Contribution	1.37%*	0.0%
District's Senior Staff Contribution	0.0%	0.0%
401A Matching Contribution of 3%	2.8%	2.4%

\* reduces to 0% effective March 16, 2015.

### **III. USE OF OTHER FUNDS**

#### **A. Over Allocation Revenue**

Over allocation revenue is used to offset the following expenses:

- The difference between the Dyer Road Wellfield (DRWF) cost of water (\$1.10/ccf) and the base rate (\$1.40/ccf). The difference between the low volume rate (\$0.91/ccf) and the cost of DRWF water is funded with non-operating revenue;
- The cost associated with additional imported water purchases (\$1,119 per AF) thereby eliminating the impact to the base rate;
- Customers who receive the \$2 low volume capacity rebate on the fixed service charge;
- Budgeted conservation expenses; and
- Urban runoff (NTS) and San Joaquin Marsh maintenance expenses.

Total conservation expense is expected to exceed over allocation revenue in FY 2015-16, thereby reducing the conservation fund balance. The



## OPERATING BUDGET

### *Assumptions as of April 13, 2015 Fiscal Year 2015-16*

conservation fund is projected to be approximately \$20.0 million at the end of FY 2015-16.

**B. Enhancement Fund User Rate Component**

The current enhancement fund contribution for both the water and sewer system for FY 2015-16 was a combined \$1.40 per month (\$0.70 for water and \$0.70 for sewer) for the average residential customer. No increase was built into these rates for FY 2015-16. It is estimated that the fund balance will be approximately \$23.0 million at the end of FY 2015-16.

**C. Replacement Fund User Rate Component**

The current replacement sewer service charge of \$6.70 per month for the average residential customer in FY 2015-16 will increase by \$0.65 to \$7.35 to provide additional funding for the biosolids project. A \$0.65 increase to \$1.45 per month was assumed for the water fixed service charge replacement component. The combined replacement contribution for FY 2015-16 will be \$8.80 per month for the average residential customer. It is estimated that the fund balance will be approximately \$160 million as of the end of FY 2015-16.

#### **IV. ALLOCATION OF COSTS BETWEEN IRWD AND LOS ALISOS RATE AREAS**

- A. Costs that are directly related to providing service or are clearly associated with the Irvine Ranch or Los Alisos rate areas for treated water are allocated to the respective system expenses of that rate area.
- B. Those costs that are attributable to system operations but that are not unique to one rate area are allocated based upon the ratio of the budgeted acre-feet.
- C. All direct labor costs are allocated General & Administrative (G&A) charges based upon the budgeted G&A factor.





Irvine Ranch Water District  
Consolidated Operating Budget for All Departments FY 2015-16 \*

Expense Category / Name		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Salaries & Benefits	Regular Labor	\$23,678,697	\$12,826,281	\$29,097,300	\$29,084,900	(\$12,400)
	Overtime Labor	1,349,558	758,499	1,444,615	1,559,500	114,885
	Contract Labor	1,749,578	959,525	1,282,190	1,483,200	201,010
	Employee Benefits	12,562,262	6,183,138	15,701,750	15,279,500	(422,250)
<b>Salaries &amp; Benefits Total</b>		<b>39,340,095</b>	<b>20,727,443</b>	<b>47,525,855</b>	<b>47,407,100</b>	<b>(118,755)</b>
Water & Utilities	Water	35,460,882	18,341,230	31,528,450	40,375,050	8,846,600
	Electricity	12,297,774	7,492,953	16,033,150	17,681,550	1,648,400
	Fuel	68,626	310,179	733,800	702,200	(31,600)
	Telecommunication	435,488	206,325	418,700	477,100	58,400
	Other Utilities	36,220	74,433	137,320	156,300	18,980
<b>Water &amp; Utilities Total</b>		<b>48,298,990</b>	<b>26,425,120</b>	<b>48,851,420</b>	<b>59,392,200</b>	<b>10,540,780</b>
Materials & Supplies	Chemicals	3,001,882	1,214,229	2,133,340	2,250,900	117,560
	Operating Supplies	924,883	628,406	1,205,660	1,390,600	184,940
	Printing	251,293	97,884	337,550	290,700	(46,850)
	Postage	548,851	246,589	515,060	517,500	2,440
	Permits, Licenses and Fees	617,144	471,859	887,075	887,650	575
	Office Supplies	79,658	26,638	85,300	112,900	27,600
	Duplicating Equipment	162,714	86,338	174,000	200,000	26,000
	Equipment Rental	85,987	56,356	118,700	131,400	12,700
<b>Materials &amp; Supplies Total</b>		<b>5,672,412</b>	<b>2,828,299</b>	<b>5,456,685</b>	<b>5,781,650</b>	<b>324,965</b>
Professional Services	Rep & Maint Other Agencies	14,260,103	5,706,440	11,419,560	14,569,000	3,149,440
	Rep & Maint IRWD	2,707,994	3,006,369	6,967,620	7,581,450	613,830
	Insurance	947,446	496,811	984,500	939,900	(44,600)
	Legal Fees	364,008	152,786	485,000	480,000	(5,000)
	Engineering Fees	401,587	207,635	539,100	669,200	130,100
	Accounting Fees	85,171	17,723	74,500	75,100	600
	Data Processing	1,260,419	1,048,684	1,625,500	2,662,900	1,037,400
	Personnel Training	820,084	287,267	968,510	1,092,960	124,450
	Personnel Physicals	26,885	12,731	43,000	43,000	0
	Other Professional Fees	1,542,916	967,801	2,361,550	3,048,940	687,390
<b>Professional Services Total</b>		<b>22,549,097</b>	<b>11,970,370</b>	<b>25,610,840</b>	<b>31,311,050</b>	<b>5,700,210</b>
Other	Mileage Reimbursement	105	49,390	117,000	132,000	15,000
	Collection Fees	14,270	4,183	20,500	20,800	300
	Election Expense	15,000	15,000	30,000	30,000	0
	Safety	74,646	32,727	96,800	96,400	(400)
	Alarm and Patrol Services	100,109	29,212	130,000	130,000	0
	Biosolids Disposals	254,851	88,418	402,300	151,400	(250,900)
	Commuter Program	97,062	53,432	142,000	142,000	0
	Computer Backup Storage	110,454	31,733	21,000	23,000	2,000
	Contract Meter Reading	1,241,101	641,312	1,272,000	1,350,000	78,000
	Other	11,519	10,191	21,600	21,600	0
<b>Other Total</b>		<b>2,774,629</b>	<b>1,133,521</b>	<b>3,195,200</b>	<b>3,791,200</b>	<b>596,000</b>
<b>Grand Total</b>		<b>\$ 118,635,223</b>	<b>\$ 63,084,753</b>	<b>\$ 130,640,000</b>	<b>\$ 147,683,200</b>	<b>\$ 17,043,200</b>

\* All amounts are pre initial SWRCB required reductions



# REVENUES AND EXPENSES BY SYSTEM

	Water	Sewer & Recycled	Consolidated
<b>Revenue:</b>			
Commodity	\$ 36,658	\$ 17,177	\$ 53,835
Service	32,153	45,672	77,825
Over Allocation Revenues	8,386	4,873	13,259
Funded by Proposed User Rate Increase	911	5,871	6,782
Non Rate Generated Revenue	258		258
<b>Total Revenues</b>	<b>\$ 78,366</b>	<b>\$ 73,593</b>	<b>\$ 151,959</b>
Contribution to Enhancement and Replacement Funds	(5,624)	(17,506)	(23,130)
<b>Net Revenues</b>	<b>\$ 72,742</b>	<b>\$ 56,087</b>	<b>\$ 128,829</b>
<b>Expenses:</b>			
Cost of Water:			
Commodity Rate	\$ 39,362	\$ 18,704	58,066
Over Allocation	3,780	2,100	5,880
Labor	5,423	3,746	9,169
Materials and Supplies	8,784	10,283	19,067
General and Admin Expense	10,195	7,043	17,238
OCSO - O & M		10,491	10,491
General Plant	592	923	1,515
Marsh/NTS/Conservation	4,606	2,797	7,403
<b>Total Expenses</b>	<b>\$ 72,742</b>	<b>\$ 56,087</b>	<b>128,829</b>
<b>Net Operating Position</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

<b>SWRCB Preliminary Estimate</b>			
Net Revenues	\$ 72,742	\$ 56,087	\$ 128,829
Less: Reduction in Comm. Sales	(9,063)	-	(9,063)
<b>Adjusted Net Revenues</b>	<b>\$ 63,679</b>	<b>\$ 56,087</b>	<b>\$ 119,766</b>
Total Expenses	\$ 72,742	\$ 56,087	\$ 128,829
Less: Reduced Cost of Water	(9,063)	-	(9,063)
<b>Adjusted Total Expenses</b>	<b>\$ 63,679</b>	<b>\$ 56,087</b>	<b>\$ 119,766</b>
<b>Net Operating Position</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>



# NON-OPERATING

## SUMMARY OF SOURCES AND USES

*in thousands*

	<u>Total</u>
<b>Non-operating Revenue:</b>	
Property Taxes	\$ 43,466
Investment Income	1,642
Connection Fees	22,000
Real Estate Income	12,556
Other Income	5,915
Total Revenue	<u>\$ 85,579</u>
<b>Non-operating Expenses:</b>	
Interest Expense	\$ 22,056
Real Estate Expense	6,303
Other Expenses	1,174
Total Expense	<u>\$ 29,533</u>
<b>Net Sources &amp; Uses</b>	<u><u>\$ 56,046</u></u>



## Current and Proposed Residential Rates

	Irvine Ranch		Los Alisos	
Current Residential Rates:	Water (1)	Sewer/ Recycled Water (2)	Water (1)	Sewer/ Recycled Water (2)
Commodity Rate	\$1.34	\$1.19	\$2.31	\$1.19
Residential Service	\$10.50	\$19.90	\$10.50	\$19.90
Operations	\$9.00	\$12.50	\$9.00	\$12.50
Replacements	\$0.80	\$6.70	\$0.80	\$6.70
Enhancements	\$0.70	\$0.70	\$0.70	\$0.70
Total Service Charge	\$10.50	\$19.90	\$10.50	\$19.90
<b>Commodity (12 ccf)</b>	\$13.78		\$23.72	
Current Monthly	\$44.18		\$54.12	
<b>Proposed Residential Rate Adjustment:</b>				
<b>Base Commodity Rate</b>	\$1.40	\$1.25	\$2.34	\$1.25
<b>Operations</b>	\$8.15	\$13.80	\$8.15	\$13.80
<b>Replacements</b>	\$1.45	\$7.35	\$1.45	\$7.35
<b>Enhancements</b>	\$0.70	\$0.70	\$0.70	\$0.70
<b>Total Service Charge</b>	\$10.30	\$21.85	\$10.30	\$21.85
<b>Commodity</b>	\$14.35		\$24.08	
<b>Proposed Monthly</b>	\$46.50		\$56.23	
Current Monthly	\$44.18		\$54.12	
Difference	\$2.32		\$2.11	
<b>Change %</b>	<b>5.3%</b>		<b>3.9%</b>	

- (1) Water - District Average usage assumes 12 ccf's per month.  
 (2) Sewer - District average usage assumes 6-10 ccf for lowest 3 months.



(in thousands)

# REVENUE

## BUDGETED REVENUE SUMMARY BY SYSTEM

	<u>FY 2014-15</u>	<u>Usage Change</u>	<u>Proposed Rate Inc.</u>	<u>FY 2015-16</u>
<b>Water</b>				
Service	\$ 23,233	\$ 4,039 <sup>(1)</sup>	\$ (2,682)	\$ 24,590
Enhancement	1,788	-	-	1,788
Replacement	2,042	-	1,794	3,836
Pumping Surcharge	762	(53)	90	800
Miscellaneous	639	(39)	-	600
Commodity	32,626	1,378	1,306	35,310
Low Volume	2,412	241	(555)	2,099
Over Allocation Fund	4,016	406	4,222	8,644
Non Rate Generated Revenue <sup>(2)</sup>	-	-	700	700
Rate Stabilization	516	(516)	-	-
	<u>\$ 68,035</u>	<u>\$ 5,456</u>	<u>\$ 4,875</u>	<u>\$ 78,366</u>
<b>AF Sales</b>	55,634			57,576
<b>User Type</b>				
Residential	\$ 35,725	\$ 4,295	\$ 1,121	41,140
Commercial	9,349	189	121	9,658
Industrial	3,583	46	202	3,831
Public Authority	2,005	(7)	101	2,099
Construction/Temp.	938	(10)	17	945
Fire Protection	3,807	79	-	3,887
Landscape Irrigation	4,872	569	216	5,656
Agriculture Irrigation	813	163	132	1,108
Over Allocation Revenue	6,428	648	2,967	10,043
Rate Stabilization	516	(516)	-	-
	<u>\$ 68,035</u>	<u>\$ 5,456</u>	<u>\$ 4,875</u>	<u>\$ 78,366</u>

### SWRCB Preliminary Estimate

<b>AF Sales</b>	55,634			50,198
Total Water Revenue	\$ 68,035	\$ 5,456	\$ 4,875	\$ 78,366
Reduced Commodity Sales		(7,306)	(353)	(7,659)
Reduced Over Allocation Sales		(1,320)	(85)	(1,405)
Adjusted Total Water Revenue	<u>\$ 68,035</u>	<u>\$ (3,169)</u>	<u>\$ 4,437</u>	<u>\$ 69,302</u>

(1) Includes \$3.6M increase from the internal cost of service study completed in FY 2014-15.

(2) The cost associated with the rate difference between the cost of DRWF \$480/AF and the LV rate \$396/AF.



# REVENUE

## BUDGETED REVENUE SUMMARY BY SYSTEM

<i>(in thousands)</i>	<b>FY 2014-15</b>	<b>Usage Change</b>	<b>Proposed Rate Inc.</b>	<b>FY 2015-16</b>
<b>Sewer and Recycled</b>				
Service	\$ 27,792	\$ 529	\$ 3,321	\$ 31,641
Enhancement	1,486	-	-	1,486
Replacement	14,330	-	1,690	16,020
Commodity	13,352	2,527	900	16,779
Low Volume	1,298	-	100	1,398
Over Allocation Fund	2,660	-	2,213	4,873
Pumping Surcharge	416	(1)	(150)	265
Miscellaneous	550	50	11	611
IDP Reimbursements	520	-	-	520
Rate Stabilization	2,522	(2,522)	-	0
	\$ 64,925	\$ 583	\$ 8,085	\$ 73,593
<b>AF Sales</b>	29,367			32,810
<b>User Type</b>				
Residential	\$ 26,844	\$ 2,074	\$ 3,753	\$ 32,671
Commercial	7,933	1,221	1,050	10,204
Industrial	3,108	(561)	332	2,879
Public Authority	1,253	(865)	51	439
Landscape Irrigation	16,058	1,160	539	17,758
Recycled Loans	1	(1)	-	-
Agriculture Irrigation	1,650	238	120	2,008
Construction/Temp.	1,078	(161)	26	943
IDP Reimbursements	520	-	-	520
Over Allocation Revenue	3,958	-	2,213	6,171
Rate Stabilization	2,522	(2,522)	-	-
	\$ 64,925	\$ 583	\$ 8,085	\$ 73,593

# COST OF WATER

## BUDGETED COST OF WATER

<i>(in thousands)</i>	FY 2014-15			FY 2015-16			Change	
	Acre Feet	Total	Cost / AF	Acre Feet	Total	Cost / AF	Acre Feet	Total
<b>Irvine Ranch Rate Area</b>								
<b><u>TREATED</u></b>								
Purchased from MWDOC	3,488	\$ 4,643	\$1,331	7,547	\$ 8,693	\$1,152	4,059	\$ 4,050
Dyer Road Well Field	28,000	11,968	\$427	28,000	13,441	\$480	-	1,472
Deep Aquifer Treatment System	8,400	4,185	\$498	8,400	5,021	\$598	-	836
Lost to Production	(168)			(168)			-	
Wells 21 & 22 Desalter	6,300	4,237	\$673	3,300	2,986	\$905	(3,000)	(1,251)
Lost to Production	(945)			(495)			450	
Irvine Desalter Project	4,365	2,654	\$608	6,240	3,819	\$612	1,875	1,165
Lost to Production	(655)			(936)			(281)	
Water Banking		646			222		-	(424)
Total Shrinkage	(2,323)			(1,530)			793	
<b><u>UNTREATED</u></b>								
Purchased from MWDOC	7,434	\$ 5,111	\$688	11,509	\$ 7,527	\$654	4,075	\$ 2,416
Native Water	0	0	\$212	400	85	\$212	400	85
Santiago Aqueduct Commission	180	111	\$618	180	111	\$617	-	(0)
Transfer to RW System	(5,355)	(3,682)	\$688	(9,404)	(6,150)	\$654	(4,049)	(2,468)
Total Shrinkage	(108)			(128)			(20)	
<b>Total Irvine Ranch</b>	<b>48,613</b>	<b>\$ 29,874</b>		<b>52,916</b>	<b>\$ 35,755</b>		<b>4,303</b>	<b>\$ 5,881</b>
<b>Los Alisos Rate Area</b>								
Purchased from MWDOC	6,939	\$ 7,018	\$1,011	7,139	\$ 7,301	\$1,023	200	\$ 283
Well Water	432	23	\$53	432	86	\$200	-	63
Total Shrinkage	(351)			(283)			68	
<b>Total Los Alisos</b>	<b>7,020</b>	<b>\$ 7,041</b>		<b>7,288</b>	<b>\$ 7,387</b>		<b>268</b>	<b>\$ 346</b>
<b>Total Potable and Untreated Water</b>	<b>55,633</b>	<b>\$ 36,916</b>		<b>60,204</b>	<b>\$ 43,142</b>		<b>4,571</b>	<b>\$ 6,227</b>
<b>Reduction Identified by SWRCB (Target Demand: 62,698 - [62,698* 20%] = 50,198)</b>				(11,857)	(\$9,063)		(11,857)	\$ (9,063)
<b>Reduced Process loss</b>				312			312	
<b>Shrinkage</b>				1,539			1,539	
<b>Adjusted Demands</b>				<b>50,198</b>	<b>\$34,079</b>		<b>(5,435)</b>	<b>(\$2,836)</b>

**Assumptions:**

OCWD - replenishment assessment estimate - \$340/acre foot.

MWDOC - Includes a 2.1% increase that will be effective January 1, 2016 from MWD.

# COST OF WATER

## BUDGETED COST OF RECYCLED WATER

<i>(in thousands)</i>	FY 2014-15			FY 2015-16			Change	
	Acre Feet	Total	Cost / AF	Acre Feet	Total	Cost / AF	Acre Feet	Total
Groundwater	0	\$ -	\$ -	-	\$ -	\$ -	-	\$ -
Irvine Desalter Project	2,900	1,005	\$347	2,900	1,900	\$655	-	895
Lost to Production	(435)			(435)			-	
SAC Water	282	174	\$617	282	174	\$617	-	0
MWRP / LAWRP Production	22,299	8,228	\$369	22,300	10,480	\$470	1	2,252
Transfer from Untreated System	5,355	3,682	\$688	9,404	0	\$0	4,049	(3,682)
<i>Total Shrinkage</i>	<u>(1,468)</u>			<u>(1,640)</u>			<u>(172)</u>	
<b>Total Recycled</b>	<u>28,933</u>	<u>\$ 13,089</u>		<u>32,810</u>	<u>\$ 12,554</u>		<u>3,877</u>	<u>\$ (535)</u>
<b>Total Cost of Water for Billed Usage based on SWRCB Initial Target</b>	<u>84,566</u>	<u>\$ 50,005</u>		<u>83,008</u>	<u>\$ 46,633</u>		<u>(1,558)</u>	<u>\$ (3,372)</u>





# GENERAL MANAGER'S OFFICE

## OPERATING BUDGET SUMMARY

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### Program Description

The General Manager's Office implements the policies established and direction provided by the Board of Directors and, in so doing, provides overall direction to staff to complete that effort.

The General Manager's office also:

- Provides direct services to and communications with the Board of Directors;
- Produces and distributes Board, Board Committee and Ad Hoc Committee meeting packets;
- Schedules all Board, Board Committee, Ad Hoc Committee and annual/special independent corporation meetings;
- Produces the minutes of all Board meetings;
- Maintains all Board resolutions;
- Schedules other meetings and functions on behalf of the Board members and makes travel arrangements, as needed;
- Maintains records of all inter-agency agreements, deeds and easements;
- Maintains records for the various independent corporations;
- Maintains necessary inter-governmental relations;
- Responds to, or directs response to, all media inquiries; and,
- Responds to all public information requests.

The General Manager's Office works with the Board of Directors and staff to establish the District's strategic vision for all departments. On January 26, 2015, staff reviewed the 2015 Goals and Target Activities with the Board. The Goals and Target Activities described below reflect the *Strategic Objectives*, as well as the *Mission, Vision and Values* of Irvine Ranch Water District as adopted by the Board. The Goals (numbered) and the Target Activities (lettered) for 2015 are summarized as follows:

### Major Goals

1. Optimize and protect local water supply utilization
  - a. Implement near-term recommendations from 2014 Groundwater Work Plan
  - b. Complete construction and commissioning of Baker Water Treatment Plant
  - c. Complete and implement the Irvine Lake Management Plan
  - d. Evaluate the need to reconstruct the Irvine Lake Outlet Tower
  - e. Update potable water supply reliability study
  - f. Coordinate with OCWD on South Basin Clean-up Project
2. Minimize discharge of recyclable water to the ocean
  - a. Complete Sewer/Recycled Water System Strategic Analysis
  - b. Complete design and construction of Irvine Lake Pipeline North Conversion



# GENERAL MANAGER'S OFFICE

## OPERATING BUDGET SUMMARY

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- c. Convert a minimum of 1,000 AF of potable water use to recycled water
  - d. Include recycled water demand in OCWD total demand calculations
  - e. Update Sewage Collections System Master Plan
  - f. Update Sewage Treatment Master Plan
  - g. Complete Salt Management Plan
  - h. Perform CEQA, alternatives analysis and preliminary design for Syphon Reservoir Expansion
  - i. Explore local aquifer storage and recovery of recycled water
3. Bank 88,000 AF of water for IRWD, develop 70 cfs of extraction and additional recharge and storage capacity as needed for IRWD and water banking partners
    - a. Certify EIR for Stockdale Integrated Banking Project
    - b. Execute long-term unbalanced exchange agreements for Stockdale
    - c. Execute long-term exchange agreements to facilitate exports of Kern River water
    - d. Investigate land fallowing and water transfer opportunities
    - e. Construct Stockdale recovery facilities
    - f. Construct Drought Relief Project recovery and conveyance facilities
    - g. Secure additional land for recharge and recovery facilities
  4. Maximize resource recovery from fully functional biosolids facility
    - a. Biosolids Facilities operational
    - b. Complete plan for beneficial use(s) of pellets
  5. Optimize energy use and enhance reliability
    - a. Maximize generation of renewable energy through Food Waste and Fats Oils and Grease (FOG)
    - b. Develop embedded energy plan
    - c. Update Energy Master Plan
    - d. Maximize participation in the Integrated Demand Side Management Program
    - e. Collaborate in the UCI/IRWD micro-grid program development
  6. Maximize urban water treatment and watershed protection
    - a. Construct Peters Canyon Channel Water Capture and Reuse Pipeline
    - b. Explore potential conversion of some NTS sites to infiltrate dry weather flows
    - c. Begin discussions with the County of Orange to identify facilities for potential stormwater capture and further expansion of IRWD's role
    - d. Explore diverting MWRP groundwater dewatering flows into MWRP
  7. Plan for and implement an asset management program
    - a. Complete the Pre-Implementation Phase of the asset management of the District's operating facilities
    - b. Complete the Implementation Phase of the asset management system of the District's operating facilities



# GENERAL MANAGER'S OFFICE

## OPERATING BUDGET SUMMARY

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- c. Resolve outstanding deed and access restrictions related to real property
8. Maintain financial and rate stability
  - a. Complete Cost of Service Study and implement approved policy changes
  - b. Develop a plan for investment revenue generated from the Lake Forest property along with establishing rate parity for IRWD's Lake Forest customers
  - c. Update the Replacement Planning Model
  - d. Complete development and leasing on remaining Sand Canyon campus and other facilities
  - e. Complete financing plan that will support the District's major capital projects
9. Enhance customer satisfaction and communication
  - a. Enhance customer satisfaction through an improved customer web access portal
  - b. Develop and implement next phase of customer drought outreach program
  - c. Develop and implement tap water outreach campaign
  - d. Expand the RightScape program for regional use and benefit
10. Maximize water use efficiency in the community
  - a. Establish the appropriate metrics and quantify conservation targets
  - b. Update Water Supply Contingency Plan
  - c. Evaluate water use efficiency programs and Water Use Efficiency Plan
  - d. Develop guide book on how to implement Budget Based Rate structures
11. Recruit, develop and retain a highly skilled and educated work force
  - a. Redesign and implement new performance evaluation process
  - b. Develop and implement formal staff mentoring program
  - c. Develop and implement District-wide cross training program
  - d. Develop a certification and training database and two-year staff training plan based on the needs of the District
  - e. Expand and formalize internship opportunities with local higher education institutions
  - f. Update June 2007 IRWD Succession Planning document
  - g. Negotiate successor MOU between IRWD & IRWDEA
  - h. Identify and evaluate opportunities to optimize health insurance benefits including Health Savings Accounts
  - i. Develop and implement District Intranet
12. Identify, assess and implement new technologies
  - a. Select and implement Operations Database Management System
  - b. Simplify and optimize financial module to incorporate new ID structure and project management
  - c. Conduct process related new technology opportunity assessment
  - d. Conduct IT related existing/new technology opportunity assessment
  - e. Implement Process Development Steering Committee to identify process improvements and explore new technologies



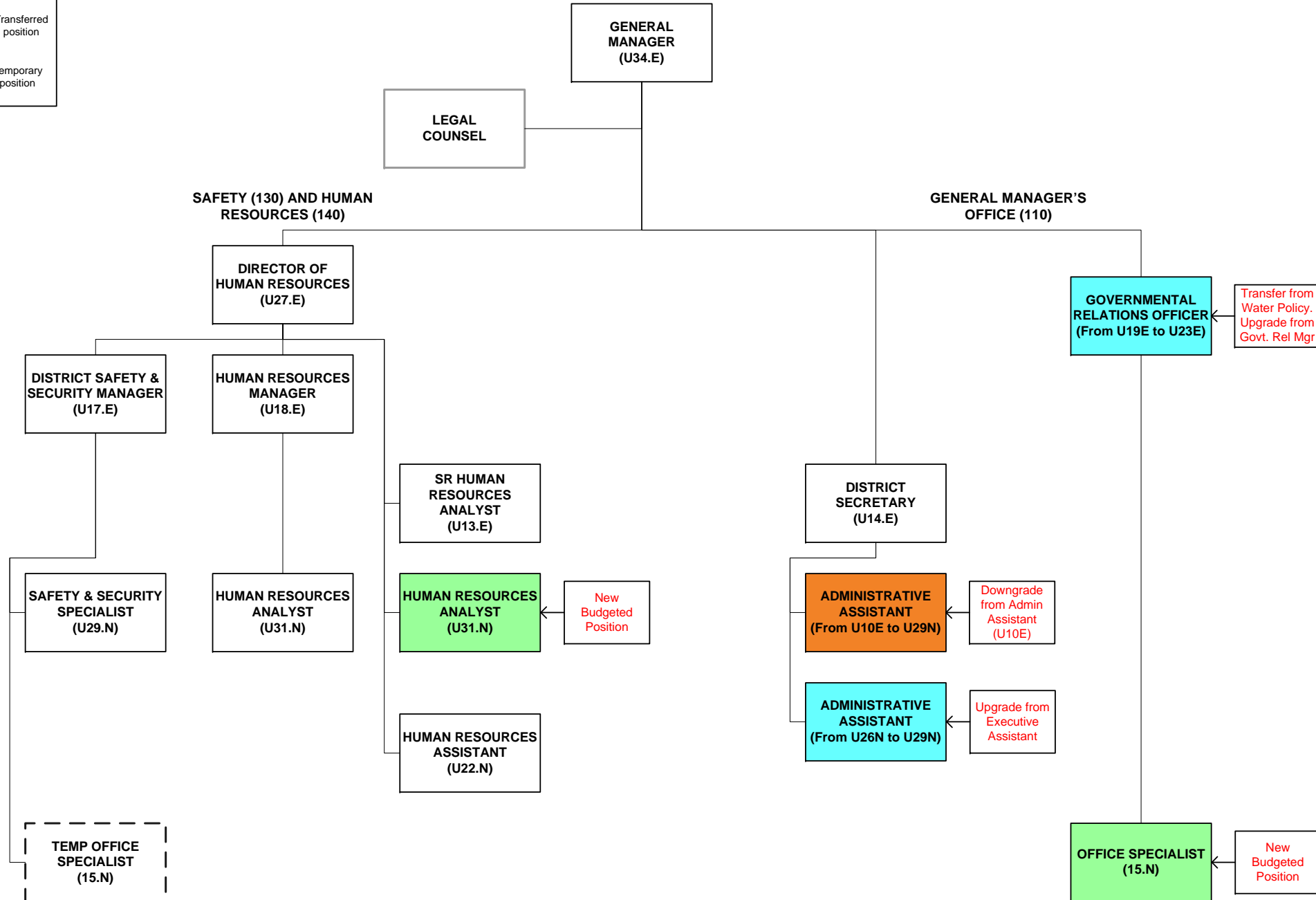
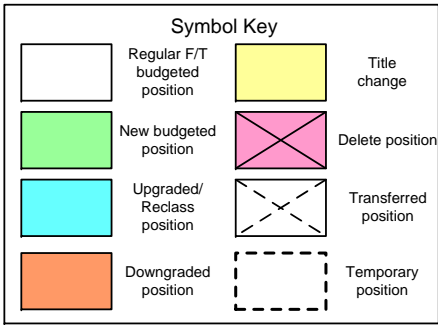
# GENERAL MANAGER'S OFFICE

## OPERATING BUDGET SUMMARY

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13. Guide and lead local, state and federal policies and legislation
  - a. Provide input to the State Water Resources Control Board to facilitate development of State-wide drought regulations
  - b. Participate in the development of Statewide surface and groundwater storage policies associated with Water Bond Funding
  - c. Seek legislative or regulatory changes promoting recycled water storage
  - d. Provide input to the legislature and administration on revisions to groundwater management related legislation
  - e. Promote policies which encourage energy reliability and efficiency in the water industry
  - f. Promote a "fit for purpose" approach to regulation of recycled water
  - g. Promote policies and regulations that will improve air quality and allow efficient operation of District facilities
  
14. Increase collaboration with other agencies and entities through leadership and innovation
  - a. Develop Orange County Basin conjunctive use and management policy
  - b. Conduct planning level evaluation of potential IRWD and South County shared reliability projects
  - c. Participate in the Orange County Water Supply Reliability Study
  - d. Lead the Groundwater Producers in the evaluation of Ocean Desalination Projects
  - e. Evaluate and promote opportunities for shared services
  - f. Propose to provide sewer services to OCSD's Service Area 7
  - g. Participate as leaders in industry associations
  
15. Evaluate opportunities that enhance safety and emergency preparedness throughout the District
  - a. Complete facility security assessment
  - b. Develop plan and design improvements to eliminate the use of chlorine gas at District facilities
  - c. Implement online interactive safety training where appropriate
  - d. Develop emergency preparation/readiness program

**IRVINE RANCH WATER DISTRICT  
ADMINISTRATION  
PROPOSED FISCAL YEAR 2015-16**



## Consolidated Operating Expense Budget for FY 2015-16

Administration		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
110	Regular Labor	549,405	260,656	542,390	568,100	25,710
110	Overtime Labor	560	113	1,000	1,000	0
110	Operating Supplies	48	62	0	0	0
110	Printing	0	0	0	25,000	25,000
110	Postage	65	0	100	100	0
110	Permits, Licenses and Fees	91,528	76,787	94,000	89,000	(5,000)
110	Office Supplies	3,464	2,144	4,000	4,000	0
110	Legal Fees	275,069	137,658	390,000	385,000	(5,000)
110	Personnel Training	210,251	146,072	195,500	255,000	59,500
110	Other Professional Fees	290,511	73,080	260,000	225,000	(35,000)
110	Directors' Fees	125,018	66,123	142,000	148,600	6,600
110	Election Expense	15,000	15,000	30,000	30,000	0
Total . . . General Managers Office		1,560,919	777,695	1,658,990	1,730,800	71,810



# **SAFETY AND SECURITY**

## **OPERATING SUMMARY**

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### **Program Description**

The Safety and Security program provides necessary resources to promote a safe work environment for employees through mandated and pro-active training and education and to ensure the security of all district property and facilities.

With a commitment to provide on-going employee training to facilitate safe job performance and effective security programs to ensure property and facility protection, the Safety and Security function continually monitors and stays abreast of current and pending changes and improvements in the industry for safe work practices and security measures. Appropriate policies are regularly developed or revised to ensure the constant pursuit and maintenance of a safe and secure operational environment, in compliance with all applicable laws and regulations.

Through the use of safety awareness programs, the Safety and Security function works to increase employee involvement at all organizational levels via All Hands Meetings, Tailgate Safety Meetings, classroom and on-site training sessions, workplace evaluations, industrial hygiene evaluations and employee Safety Committee meetings.

The Safety & Security program administers the Commuter Trip Reduction (Ridesharing) program, coordinates emergency preparedness and response operations and oversees the operation of the Emergency Operations Center.

### **Major Goals**

- Evaluate opportunities that enhance District-wide safety, security and emergency preparedness;
- Complete facility security assessment;
- Develop plan and design improvements to eliminate the use of chlorine gas at all facilities;
- Implement web-based interactive safety training programs; and,
- Revise and enhance emergency preparation/readiness program.

## Consolidated Operating Expense Budget for FY 2015-16

Administration		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
130	Regular Labor	196,631	85,659	201,180	194,700	(6,480)
130	Overtime Labor	1,784	1,465	2,500	0	(2,500)
130	Contract Labor	33,639	20,272	54,000	48,000	(6,000)
130	Operating Supplies	78,794	23,979	89,800	88,500	(1,300)
130	Printing	6,321	0	9,400	8,400	(1,000)
130	Postage	77	0	400	400	0
130	Permits, Licenses and Fees	968	13,851	40,000	40,000	0
130	Office Supplies	2,727	867	2,200	2,200	0
130	Rep & Maint IRWD	535	0	5,000	5,000	0
130	Engineering Fees	323	0	0	0	0
130	Personnel Training	61,205	7,302	87,650	79,900	(7,750)
130	Personnel Physicals	17,021	7,147	28,000	28,000	0
130	Other Professional Fees	14,959	1,550	31,000	31,000	0
130	Safety	58,159	17,122	50,000	50,000	0
130	Alarm and Patrol Services	100,109	29,212	130,000	130,000	0
130	Commuter Program	97,062	53,432	142,000	142,000	0
130	Other	11,519	6,800	9,600	9,600	0
<b>Total . . . Safety and Security</b>		681,833	268,658	882,730	857,700	(25,030)





# **HUMAN RESOURCES**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Human Resources function provides comprehensive organizational development and personnel management services to maximize the potential of the District's human resources and overall employee efficiency, effectiveness and satisfaction. The Human Resources program is responsible for attracting and recruiting a highly qualified work force and working in concert with the organization leadership to develop and sustain a motivated productive workforce.

Human Resources ensures the delivery of a competitive compensation and benefits package; continuous improvement through employee training; fair and consistent employee policies, procedures and guidelines; and an ongoing employee reward and recognition program tied to the achievement of stated goals and objectives. Human Resources is responsible for the employee relations and labor relations processes and facilitates communication and trust with staff through collaboration and the open exchange of ideas.

### **Major Goals**

- Recruit, develop and retain a highly skilled and educated workforce;
- Redesign and implement improvements to the performance evaluation process;
- Develop and implement formal staff mentoring program;
- Develop a certification and training database and two-year staff training plan;
- Expand and formalize internship opportunities with local higher education institutions;
- Update June 2007 IRWD Succession Planning document;
- Negotiate Successor MOU between IRWD and IRWDEA;
- Identify and evaluate opportunities to optimize health insurance benefit offerings; and,
- Develop and implement District intranet.

## Consolidated Operating Expense Budget for FY 2015-16

Administration		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
140	Regular Labor	533,016	262,461	565,770	627,200	61,430
140	Overtime Labor	6,637	386	5,000	5,000	0
140	Employee Benefits	12,562,262	6,183,138	15,701,750	15,279,500	(422,250)
140	Contract Labor	0	0	2,500	2,500	0
140	Printing	3,120	1,758	2,500	2,500	0
140	Postage	55	0	0	0	0
140	Office Supplies	5,687	(1,885)	2,500	2,500	0
140	Rep & Maint IRWD	0	0	100	100	0
140	Legal Fees	88,939	15,128	95,000	95,000	0
140	Personnel Training	406,668	71,688	389,700	392,700	3,000
140	Personnel Physicals	9,864	5,584	15,000	15,000	0
140	Other Professional Fees	83,401	27,309	105,500	107,500	2,000
140	Directors' Fees	7,466	0	0	0	0
Total . . . Human Resources		13,707,115	6,565,567	16,885,320	16,529,500	(355,820)
Total . . . Administration		15,949,867	7,611,920	19,427,040	19,118,000	(309,040)



# **FINANCE, TREASURY AND PROCUREMENT**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Finance Department is responsible for ensuring the financial and rate stability of the District. This includes developing rates and fees that support the long term sustainability of the District. Finance maintains the official accounting records of the Irvine Ranch Water District and provides financial management of the District's income and real estate investments, new and existing debt issues, and deferred compensation programs. The department provides a wide range of accounting and financial services including payroll, accounts payable, accounts receivable, project accounting, financial analysis, financial reporting, coordination of the District's annual operating budget and preparation of the Comprehensive Annual Financial Report(CAFR). The Finance Department also oversees risk management and insurance issues.

The mission of the Finance Department is to safeguard assets and provide financial and accounting services in a timely, reliable, and cost-effective manner that meet the requirements of the District's internal and external customers.

### **Major Goals**

#### **ACCOUNTING AND BUDGETING**

- Prepare and submit accurate financial reports and relevant tax returns to federal, state, county and district agencies within established legal deadlines and requirements;
- Prepare and submit accurate and timely financial reports to the Finance and Personnel Committee and the District's Board of Directors;
- Coordinate the District's annual financial statement audit;
- Prepare the CAFR;
- Prepare the Operating Budget for Board of Director approval including setting adequate rates to ensure long term financial strength and stability;
- Ensure user rates are proportional with costs and support the current rate structure;
- Lead customer noticing effort for Proposition 218 compliance (operating budget, rates and charges);
- Ensure all payments and payroll checks are accurate and timely;
- Simplify the District-wide Financial System, including incorporating the recent improvement district consolidations and improved project reporting capabilities; and,
- Identify and implement business intelligence capabilities.

#### **LONG-TERM FINANCIAL PLANNING**

- Continue to refine and update the cash flow strategic model to ensure sufficient funding for future capital needs; and,
- Provide analytical support and analysis to finance, other departments and outside constituents as requested.



# **FINANCE, TREASURY AND PROCUREMENT**

## **OPERATING BUDGET SUMMARY**

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### **INVESTMENTS AND CASH MANAGEMENT**

- Invest District funds in a prudent and professional manner that will provide maximum security of principal, sufficient liquidity to meet working capital requirements and an optimal rate of return;
- Prepare accurate investment reports and the annual investment policy to the Board of Directors and other interested parties within established time frames; and,
- Maintain and enhance short and long-term cash flow models and cash management practices.

### **REAL ESTATE**

- Monitor and report on the performance of all real estate assets;
- Manage leasing and related property management activities for all District commercial and residential real estate investments;
- Complete environmental and final map approval process for property located in Lake Forest; and,
- Continue development of the Sand Canyon office project in Irvine as market conditions warrant.

### **DEBT ISSUANCE AND ADMINISTRATION**

- Issue long-term debt to fund capital projects as needed;
- Prepare and submit continuing disclosure materials on debt issues to appropriate parties;
- Monitor variable interest rates set by remarketing agents on District debt and make adjustments as appropriate; and,
- Execute, monitor and report on interest rate swap transactions as appropriate.

### **INSURANCE**

- Ensure the District has adequate insurance to appropriately safeguard assets; and,
- Manage claims process and coordinate legal matters in a timely manner.

### **PENSION**

- Review additional opportunities to optimize funding of pension and other post-employment benefit obligations; and,
- Maintain and invest Pension Benefits Trust assets and report portfolio performance and recommendations to the Retirement Board.

### **PROCUREMENT**

- Purchase materials, supplies and services in a timely manner with respect to quality and best pricing;
- Process all material/service requests timely and efficiently;
- Maintain warehouse inventory fill rate at 100% and review/adjust slow moving inventory;
- Streamline business procurement processes and documentation while ensuring appropriate controls;
- Provide ongoing customer support for procurement and inventory systems; and,
- Evaluate and expand participation in cooperative purchasing agreements as appropriate.



## Consolidated Operating Expense Budget for FY 2015-16

Finance & Administrative Services		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
210	Regular Labor	2,171,227	1,076,383	2,221,290	2,184,600	(36,690)
210	Overtime Labor	19,726	6,231	30,000	18,000	(12,000)
210	Contract Labor	141,195	13,114	170,000	176,400	6,400
210	Operating Supplies	2,343	3,610	400	500	100
210	Printing	56,141	0	60,000	60,000	0
210	Postage	8,380	4,072	8,000	8,000	0
210	Permits, Licenses and Fees	0	0	10,000	3,000	(7,000)
210	Office Supplies	7,140	715	5,000	5,000	0
210	Insurance	947,274	496,811	984,500	939,900	(44,600)
210	Accounting Fees	85,171	17,723	74,500	75,100	600
210	Data Processing	47,940	23,970	48,000	48,900	900
210	Personnel Training	21,202	8,437	45,000	42,000	(3,000)
210	Other Professional Fees	252,985	80,716	315,500	317,200	1,700
210	Collection Fees	13,632	3,773	20,000	20,000	0
<b>Total . . . Finance and Treasury</b>		3,774,356	1,735,555	3,992,190	3,898,600	(93,590)

## Consolidated Operating Expense Budget for FY 2015-16

Finance & Administrative Services		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
240	Regular Labor	690,662	322,854	700,120	685,000	(15,120)
240	Overtime Labor	7,037	6,343	4,000	4,000	0
240	Contract Labor	4,706	0	4,000	53,000	49,000
240	Operating Supplies	98,093	59,988	111,500	146,500	35,000
240	Printing	6,539	4,291	10,000	11,500	1,500
240	Postage	3,353	1,803	3,500	4,500	1,000
240	Office Supplies	20,464	9,444	24,000	24,000	0
240	Duplicating Equipment	162,714	86,338	174,000	200,000	26,000
240	Equipment Rental	18,738	9,323	20,000	20,000	0
240	Personnel Training	3,198	210	6,500	6,500	0
240	Other Professional Fees	4,301	2,454	2,000	2,000	0
<b>Total . . . Purchasing</b>		1,019,805	503,048	1,059,620	1,157,000	97,380







# **ADMINISTRATIVE SERVICES**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Administrative Services group provides a wide range of support services that include Customer Service and Information Services.

The mission of the Customer Service Department is to provide the highest level of customer satisfaction by providing reliable, courteous and efficient service. The Customer Service Department provides utility billing, account support and mail distribution services.

The mission of the Information Services Department is to research, develop, integrate and support reliable, cost effective information systems that meet the current and future business requirements of customers and provide a high level of customer satisfaction. The Information Services Department provides implementation, management and support for the District's information systems, voice and data communications systems.

### **Major Goals**

#### **CUSTOMER SERVICE**

- Deliver exceptional customer service both internally and externally;
- Review and resolve billing inquiries and adjustments in a timely manner;
- Receive and process all orders for new service and discontinuation of service;
- Process new meter applications;
- Process payments for temporary construction meters, fire flow tests, and customer water bills;
- Coordinate and process all meter reads to ensure accurate billing;
- Process variance requests for additional water allocations;
- Respond to field problems (leaks, no water complaints, high/low pressure, water quality, sewer problems, line breaks, etc.) with a sense of urgency;
- Manage delinquent customer accounts and perform shut-offs as required;
- Distribute customer satisfaction surveys and maintain 90% customer satisfaction; and,
- Receive, route and deliver all District mail, and process all outgoing mail.



# **ADMINISTRATIVE SERVICES**

## **OPERATING BUDGET SUMMARY**

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### INFORMATION SERVICES

- Provide helpful, courteous and timely support to all District staff;
- Provide internal and external software training that meets the needs of District staff;
- Provide a reliable network of servers, personal computers, printers and software applications that meet the needs of District staff;
- Provide reliable voice, data and wireless communications services;
- Develop new and improved existing software applications to meet the requirements of District staff;
- Complete scheduled hardware and software upgrades to District servers, personal computers, tablets, printers, network equipment and software applications;
- Complete the migration of Webdocs document image management system from the legacy AS/400 to Windows platform;
- Complete the Technology Opportunity Assessment;
- Begin implementation of the Water Information Management System (WIMS);
- Begin implementation of the Oracle Improvement District Consolidation/Project Management module; and,
- Begin implementation of the Oracle Business Intelligence Upgrade.

## Consolidated Operating Expense Budget for FY 2015-16

Finance & Administrative Services		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
220	Regular Labor	1,510,077	717,105	1,588,230	1,773,700	185,470
220	Overtime Labor	82,202	39,538	64,500	60,000	(4,500)
220	Contract Labor	456,827	352,838	309,000	290,600	(18,400)
220	Operating Supplies	1,816	1,308	1,000	1,000	0
220	Printing	36,699	40,186	73,500	77,000	3,500
220	Postage	529,379	237,585	491,560	490,300	(1,260)
220	Office Supplies	5,276	2,337	6,400	5,500	(900)
220	Equipment Rental	40,036	31,160	40,000	40,000	0
220	Personnel Training	1,283	28	5,000	8,000	3,000
220	Other Professional Fees	1,241	314	1,900	1,500	(400)
220	Collection Fees	638	410	500	800	300
220	Contract Meter Reading	1,241,101	641,312	1,272,000	1,350,000	78,000
Total . . . Customer Service		3,906,575	2,064,121	3,853,590	4,098,400	244,810

## Consolidated Operating Expense Budget for FY 2015-16

Finance & Administrative Services		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
250	Regular Labor	1,394,776	586,336	1,440,650	1,358,900	(81,750)
250	Overtime Labor	15,982	11,319	10,000	15,000	5,000
250	Contract Labor	738,157	268,087	368,000	429,000	61,000
250	Telecommunication	377,944	176,412	360,900	421,500	60,600
250	Other Utilities	6,224	4,495	8,000	9,500	1,500
250	Operating Supplies	120	0	0	0	0
250	Printing	40,177	4,212	20,000	12,000	(8,000)
250	Postage	83	0	500	500	0
250	Office Supplies	4	0	1,000	1,000	0
250	Rep & Maint IRWD	294,902	105,655	249,700	273,800	24,100
250	Insurance	172	0	0	0	0
250	Data Processing	1,212,479	1,024,714	1,577,500	2,614,000	1,036,500
250	Personnel Training	3,630	7,460	35,800	35,800	0
250	Other Professional Fees	30,910	5,616	2,000	60,000	58,000
250	Computer Backup Storage	20,698	11,081	21,000	23,000	2,000
Total . . . Information Services		4,136,258	2,205,387	4,095,050	5,254,000	1,158,950
Total . . . Finance & Administrative Services		12,836,994	6,508,111	13,000,450	14,408,000	1,407,550



# ENGINEERING

## OPERATING BUDGET SUMMARY

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### Program Description

The Engineering Department provides planning, design and construction coordination to produce the water, sewage and recycled water facilities necessary to provide the highest level of service to the customers of the District. In addition, the Department provides technical support to all other departments.

Planning: The Planning and Technical Services group of the Department is responsible for all master planning, water, sewage and recycled water demand projections, water supply planning, preliminary facility planning studies for new facilities, and preparation of the District's annual and long-term Capital Programs. The Planning group provides GIS services to the other groups of the District, which includes the development and support of GIS based applications, facility and atlas maps, and GIS based analysis and the maintenance of the District's digital record drawings plan system. In addition the Planning group is responsible for managing District property and rights of way.

Capital Projects: The Capital Projects group designs and manages construction of major water, sewage and recycled water treatment, distribution and transmission facilities necessary to improve the quality and reliability of service to existing and future customers of the District. This group is responsible for the expansion and improvement of water and sewage treatment projects; design and construction of wells, pipelines, storage facilities, pump stations, and sewage lift stations; and design and construction of projects to integrate service areas acquired through agency consolidations.

Development Services: The Development Services group facilitates the land development process within the District by designing and bidding the water, sewage and recycle water facilities necessary to support that development. These facilities are coordinated with development schedules so that projects are not impeded by a lack of facilities. Temporary and interim facilities, when necessary, are coordinated through this group. The group also reviews developer submittals for quality and conformance with District specifications and assesses and collects appropriate fees.

Inspection Services: The Inspection Services group provides construction inspection services to other groups of the Department to insure the highest level of constructed quality. These services include constructability review, pre-construction paperwork, progress payment processing, field inspection, change order evaluation and processing, and final acceptance coordination. The group is responsible for coordinating specialized construction support services such as surveying and geotechnical testing and inspection.

Operations Support: The Operations Support group is responsible for providing technical support to the Operations and Water Quality Departments in their projects to expand and rehabilitate existing facilities. This group is also responsible for the design and construction of small to medium size water, sewage and recycled water facilities. This group also includes the process control team that conducts research, develops projects and provides process control support and



# ENGINEERING

## OPERATING BUDGET SUMMARY

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problem solving to enhance the performance of the District's domestic and recycled water supply, treatment, distribution, storage and compliance objectives. It provides similar support to the District's sewage collection/treatment, recycled water and urban runoff treatment systems.

Michelson Water Recycling Plant (MWRP) Construction: The MWRP Construction group is responsible for the construction of the MWRP Biosolids and Energy Recovery Facilities. The group ensures that sewage and biosolids treatment facilities are properly designed and constructed to meet the requirements of the Operations Department. They also work with the Water Quality Department to acquire air permits for the constructed facilities.

### Major Goals

#### Planning

- Water Resources Master Plan update;
- Sewer Collection System Master Plan update;
- Great Park Sub-Area Master Plan update;
- Provide Inter-agency technical support; and,
- Develop alternative water supplies.

#### Capital Projects

- MWRP Biosolids and Energy Recovery Facilities construction;
- Baker Water Treatment Plant and Pump Station construction;
- Peters Canyon Channel Water Capture and Reuse Pipeline construction;
- Stockdale West Wellhead and Conveyance Facilities construction;
- Irvine Lake Pipeline North Conversion to Recycled Water design and construction;
- Rattlesnake Reservoir Chlorine Gas Removal construction;
- Initial Disinfection Facility Chlorine Gas Removal design;
- Sewage Treatment Facility Master Plan update;
- Planning Area 5 Pump Stations design; and,
- Syphon Reservoir Expansion preliminary design.

#### Development Services

- Heritage Fields Infrastructure design and construction;
- Orchard Hills Infrastructure design and construction;
- Baker Ranch Infrastructure design and construction;
- Hidden Canyon Infrastructure design and construction;
- Tustin Legacy Infrastructure design and construction; and,
- Technology Drive Recycled Water Pipeline construction;



# ENGINEERING

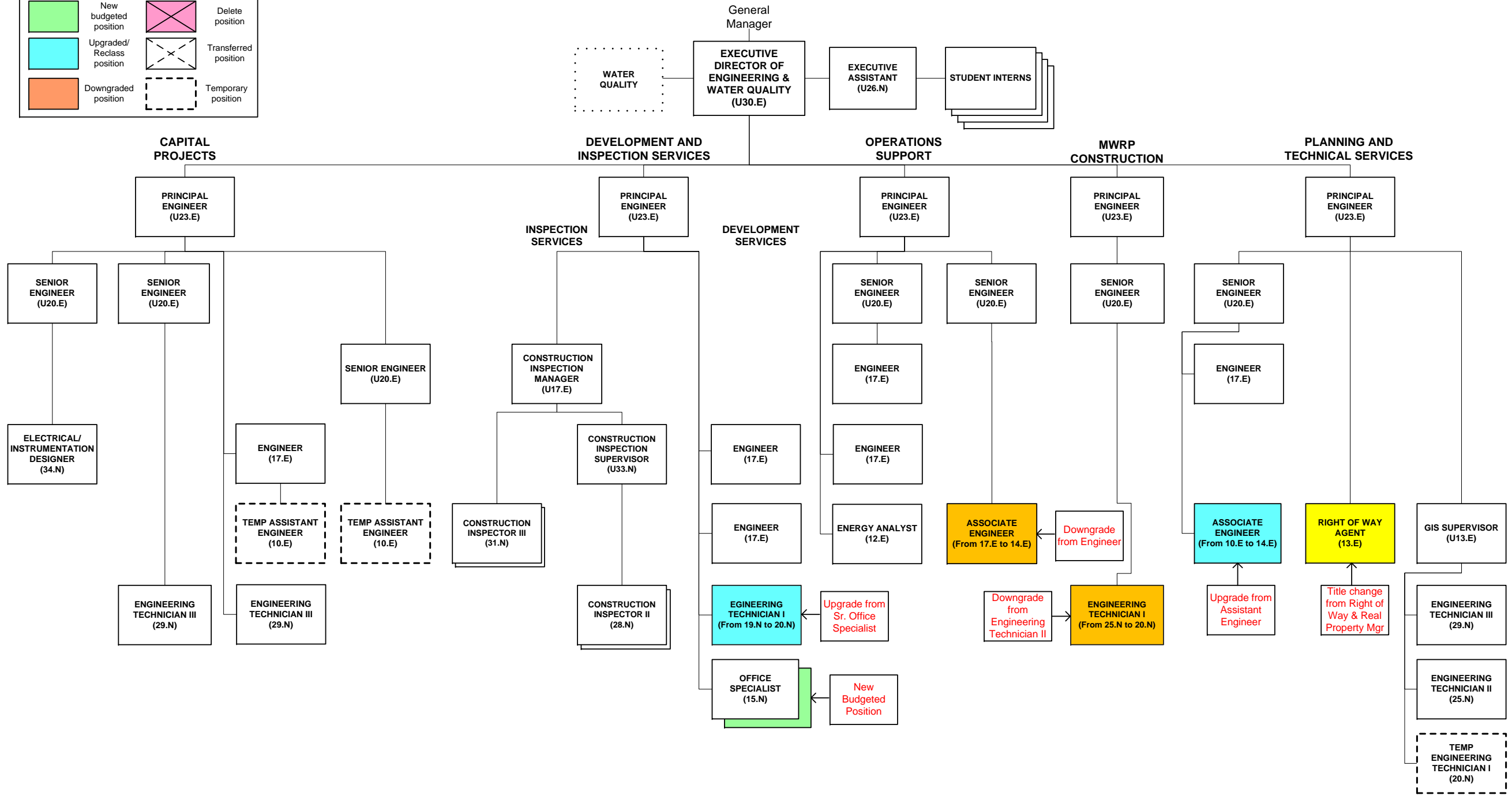
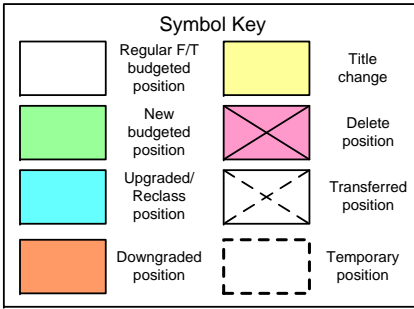
## OPERATING BUDGET SUMMARY

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### Operations Support

- Foothill Zone 6 and Portola Zone 8 Chloramine Booster Stations construction;
- Santiago Dam Outlet Tower Retrofit design;
- Well Rehabilitation design and construction;
- Dyer Road Well Field Surge Tank Replacement design and construction;
- Green Acres Pipeline Cathodic Protection construction;
- Evaluate process control and water quality monitoring data to assess, correct or recommend performance improvement of membrane treatment facilities, including IDP-SGU, IDP-PAP, IDP-PTP, DATS, CATS and the Wells 21/22 Desalter Plant;
- Develop test protocols, standard operating protocols and procedures, operate, perform sample collection and monitoring of bench, pilot and full-scale process facilities, including the Cienega demonstration subsurface filtration project and other applicable pilot and demonstration research projects;
- Actively monitor operation and perform troubleshooting of full scale and partial RMS installed at 19 IRWD domestic water reservoirs;
- Act as a liaison and administer reporting IRWD groundwater extraction and treatment operations for removal of the TCE plume from the Irvine sub-basin groundwater at the IDP Principal Aquifer wells, IDP-PAP and IDP-SGU to the Department of the Navy (DON), local and state regulatory agencies;
- Train Plant and Systems Operations staff on process control procedures, monitoring and troubleshooting in the various water treatment and monitoring applications;
- Develop and analyze alternative approaches for meeting water quality regulations; and,
- Assist in the development and coordinate district wide research, pilot and demonstration projects.

**IRVINE RANCH WATER DISTRICT  
ENGINEERING  
PROPOSED FISCAL YEAR 2015-16**





## Consolidated Operating Expense Budget for FY 2015-16

Engineering		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
300	Regular Labor	4,058,301	1,922,969	4,112,640	4,143,200	30,560
300	Overtime Labor	138,654	73,669	114,000	142,000	28,000
300	Contract Labor	96,214	105,262	152,100	263,600	111,500
300	Operating Supplies	17,843	9,706	5,840	24,900	19,060
300	Printing	11,522	9,433	34,500	28,500	(6,000)
300	Postage	1,428	843	1,000	1,600	600
300	Permits, Licenses and Fees	5,400	0	2,000	2,000	0
300	Office Supplies	10,681	3,799	14,000	14,000	0
300	Rep & Maint IRWD	13,542	(129)	0	0	0
300	Engineering Fees	0	0	6,000	76,000	70,000
300	Personnel Training	19,867	4,210	29,000	28,000	(1,000)
300	Other Professional Fees	1,463	901	4,000	26,600	22,600
Total . . . Engineering		4,374,915	2,130,663	4,475,080	4,750,400	275,320
Total . . . Engineering		4,374,915	2,130,663	4,475,080	4,750,400	275,320





# **WATER QUALITY**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Water Quality Department provides a wide range of support services that include Water Quality Analysis, Regulatory Compliance, and Water Quality Administration.

Water Quality Analysis: The Water Quality Analysis group provides our internal and external customers with high quality data in a professional and timely manner. The Water Quality Analysis group utilizes state-of-the-art, United States Environmental Protection Agency (EPA) and State Water Resources Control Board Division of Drinking Water (DDW) approved analytical methods to provide data for regulatory monitoring and reporting, process control, research projects and capital projects.

Water Quality Administration: The Water Quality Administration group assists all Water Quality and Environmental group in carrying out their missions; provides Water Quality related support to the operations and maintenance of all water and sewer collections systems; and ensures that all District operations are conducted in a safe, reliable, cost-effective, environmentally sensitive manner to achieve a high level of customer satisfaction.

### **Major Goals**

#### **WATER QUALITY ANALYSIS**

- Perform necessary analyses to determine compliance with all applicable federal, state and local environmental and water quality laws and regulations;
- Provide process control data to assist operating groups in meeting their regulatory requirements;
- Complete and submit all regulatory monitoring data by the specified due dates;
- Complete analyses within specified hold times and meet quality control specifications;
- Research and implement new testing methods where justified, specifically methods routinely sent out to contract laboratories and screening methods for system security and general water quality concerns;
- Maintain the laboratory's Environmental Laboratory Accreditation Program (ELAP) certification by submitting the renewal application by the prescribed due date and successfully completing the site audit and proficiency testing;
- Successfully complete all required water, sewage, hazardous waste and DMR proficiency testing samples and submit the data by the prescribed due date;
- Research and implement, where appropriate, improved means to communicate water quality data to internal and external customers;
- Be environmentally responsible in the selection, procurement and disposal of reagents utilized in the laboratory; and,
- Seek to improve established contacts with regulatory agencies.



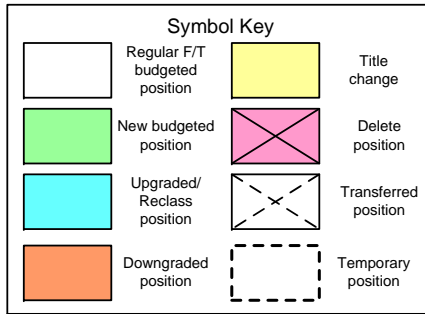
# **WATER QUALITY**

## **OPERATING BUDGET SUMMARY**

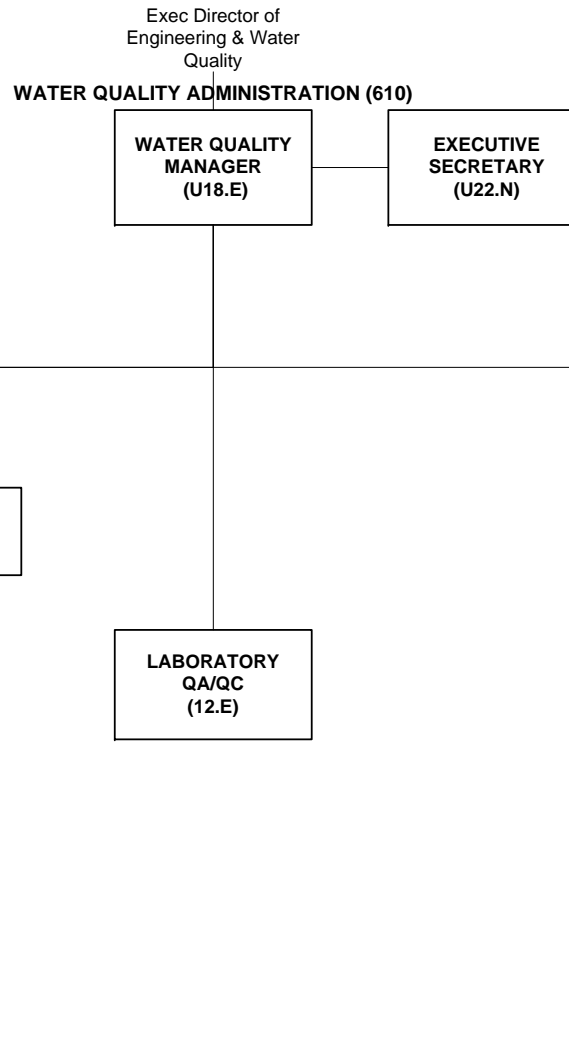
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### WATER QUALITY ADMINISTRATION

- Ensure the District operates in full compliance with all applicable federal, state and local environmental and water quality laws and regulations;
- Monitor the development of potential future regulations that may impact District activities;
- Ensure all compliance monitoring and reporting is completed and submitted by required due dates;
- Review new technologies that may be applicable to operations; and,
- Prepare water quality data for internal and external customers.



**IRVINE RANCH WATER DISTRICT  
WATER QUALITY  
PROPOSED FISCAL YEAR 2015-16**



## Consolidated Operating Expense Budget for FY 2015-16

Water Quality		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
610	Regular Labor	342,225	106,998	308,800	209,500	(99,300)
610	Operating Supplies	3,837	3,167	3,000	0	(3,000)
610	Postage	2,693	330	2,800	1,400	(1,400)
610	Permits, Licenses and Fees	(1,100)	0	0	0	0
610	Office Supplies	3,224	871	3,000	3,000	0
610	Rep & Maint IRWD	2,558	12,532	10,000	0	(10,000)
610	Engineering Fees	69,318	10,810	52,000	0	(52,000)
610	Personnel Training	12,675	3,452	25,200	25,200	0
610	Other Professional Fees	82,924	62,954	98,500	99,000	500
610	Safety	0	0	100	0	(100)
Total . . . Water Quality Administration and Proj		518,354	201,114	503,400	338,100	(165,300)

## Consolidated Operating Expense Budget for FY 2015-16

Water Quality		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
630	Regular Labor	1,250,373	609,830	1,351,520	1,398,700	47,180
630	Overtime Labor	33,297	9,782	13,940	21,800	7,860
630	Contract Labor	44,149	37,654	57,690	70,000	12,310
630	Operating Supplies	319,297	141,470	343,300	366,100	22,800
630	Postage	1,483	1,463	6,000	7,000	1,000
630	Permits, Licenses and Fees	6,427	5,975	5,975	6,500	525
630	Equipment Rental	6,004	2,948	6,400	6,400	0
630	Rep & Maint IRWD	182,540	150,561	204,180	215,250	11,070
630	Engineering Fees	111,406	59,354	152,100	164,700	12,600
630	Personnel Training	958	148	2,200	2,200	0
630	Other Professional Fees	238	82	1,200	1,200	0
630	Safety	3,991	1,307	4,000	5,400	1,400
Total . . . Water Quality Analysis		1,960,163	1,020,574	2,148,505	2,265,250	116,745







# **WATER OPERATIONS**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The mission of the Water Operations Department is to operate and maintain the District's potable water, recycled water and untreated water systems in an efficient, cost effective and environmentally safe manner that provides a high level of customer satisfaction.

The Water Operations Department provides for operation, maintenance and repair of the District's domestic water, recycled water and untreated water systems. These systems include the Dyer Road Wellfield, Deep Aquifer Treatment System, The Wells 21/22 Treatment Plant, Irvine Desalter Project (Potable Treatment Plant, Principal Aquifer Plant and Shallow Groundwater Unit) and Baker Water Treatment Plant.

### **Major Goals**

- Maintain 100% compliance with all regulatory permits;
- Meet the Department's adopted Operations and Maintenance budget;
- Prepare staff for the startup and Commission of the Baker Water Treatment Plant including six or more Water Operators with T-5 certification;
- Coordinate with Finance, Engineering and Planning Departments on water supply and water banking opportunities to optimize cost effective operations;
- Achieve zero lost time accidents;
- Track adopted operational Key Performance Indicators (KPI) to optimize operational efficiency and cost effectiveness;
- Maintain and develop staff competency through a combination of internal and external training;
- Operate and maintain the system to minimize energy consumption;
- Assist with the completion Supervisory Control and Data Acquisition (SCADA) upgrade implementation;
- Maintain the Dyer Road Well Field and Deep Aquifer Treatment System domestic water flows in accordance with the Ground Water Pumping Plan staying within the Basin Pumping Percentage (BPP) when possible;
- Assist the Engineering Department with the design and startup of domestic and recycled water system facilities;
- Operate the Irvine Desalter Project (Potable Treatment Plant, Principal Aquifer Plant and Shallow Groundwater Unit) in accordance with the joint agency agreement and submit required reports;
- Ensure efficient operation of all District pumping and reservoir facilities;
- Ensure safe dam operation through the monitoring and surveillance program;
- Complete all Cross-Connection Control Program annual inspections and back-flow device maintenance in accordance with the California Administrative Code, Title 17, Public Health Department Requirements;

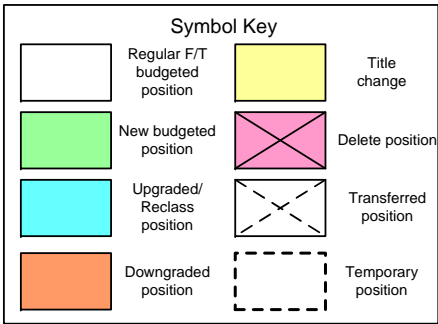


# **WATER OPERATIONS**

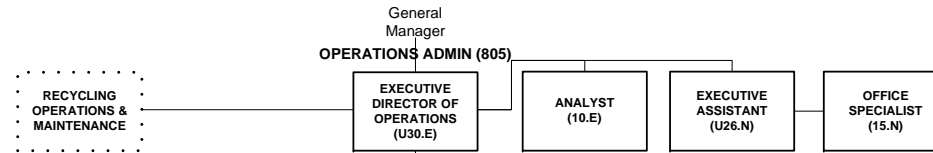
## **OPERATING BUDGET SUMMARY**

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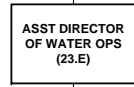
- Provide construction and repair services to internal and external customers in a prompt, safe, efficient, cost effective and environmentally sensitive manner;
- Maintain a high level of customer satisfaction by responding promptly to and repairing water leaks with minimal impact to customers;
- Continue the sewer repair project to improve sewer system reliability;
- Meet all preventive maintenance programs for the distribution system;
- Replace residential and commercial meters on the recommended cycle;
- Mark the District's underground facilities in response to Underground Service Alert (USA) tickets to prevent potential damages to the facilities from construction activities;
- Set and complete annual maintenance goals in accordance with AWWA and industry standards; and,
- Respond promptly to all customer service requests (CSR).



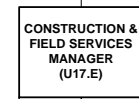
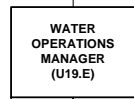
**IRVINE RANCH WATER DISTRICT  
OPERATIONS ADMINISTRATION & WATER OPERATIONS  
PROPOSED FISCAL YEAR 2015-16**



WATER OPERATIONS ADMIN (410)



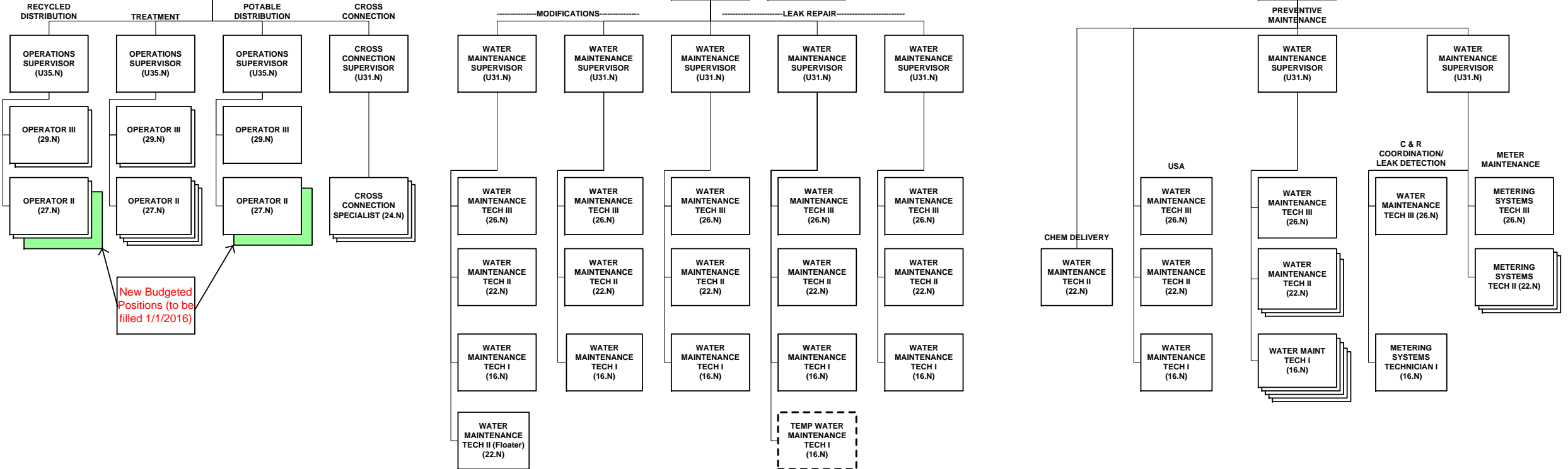
WATER OPERATIONS (420)



CONSTRUCTION SERVICES (430)



FIELD SERVICES (425)



## Consolidated Operating Expense Budget for FY 2015-16

Operations Administration		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
805	Regular Labor	0	145,429	408,640	402,600	(6,040)
805	Operating Supplies	0	3,290	0	10,000	10,000
805	Printing	0	0	0	2,500	2,500
805	Postage	0	24	0	1,000	1,000
805	Office Supplies	0	3,458	4,000	43,500	39,500
805	Personnel Training	0	2,429	5,480	159,200	153,720
805	Other Professional Fees	0	10,751	12,800	119,500	106,700
Total . . . Operations Administration		0	165,381	430,920	738,300	307,380
Total . . . Operations Administration		0	165,381	430,920	738,300	307,380

## Consolidated Operating Expense Budget for FY 2015-16

Water Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
410	Regular Labor	304,067	52,465	141,750	143,800	2,050
410	Contract Labor	10,000	4,074	0	0	0
410	Other Utilities	20,506	11,804	21,020	21,600	580
410	Operating Supplies	290	0	3,000	0	(3,000)
410	Printing	648	0	300	0	(300)
410	Postage	211	0	400	0	(400)
410	Permits, Licenses and Fees	84,395	9,657	87,560	88,600	1,040
410	Office Supplies	8,234	142	4,000	0	(4,000)
410	Equipment Rental	12,350	4,964	0	0	0
410	Rep & Maint Other Agencies	1,340,775	813,420	1,059,600	377,600	(682,000)
410	Engineering Fees	138,706	47,540	92,000	47,000	(45,000)
410	Personnel Training	12,546	7,591	19,720	0	(19,720)
410	Other Professional Fees	7,428	1,760	0	0	0
<b>Total . . . Water Operations Administration</b>		1,940,156	953,417	1,429,350	678,600	(750,750)

## Consolidated Operating Expense Budget for FY 2015-16

Water Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
420	Water Purchases	35,460,882	18,341,230	31,528,450	40,364,100	8,835,650
420	Regular Labor	1,563,994	744,077	1,683,550	1,674,500	(9,050)
420	Overtime Labor	312,106	152,276	299,000	310,300	11,300
420	Electricity	8,631,875	4,881,308	10,252,850	11,182,200	929,350
420	Fuel	16,308	9,939	24,000	24,000	0
420	Telecommunication	42,259	19,915	41,000	41,200	200
420	Other Utilities	9,490	0	9,600	10,000	400
420	Chemicals	890,938	503,976	1,059,600	1,098,100	38,500
420	Operating Supplies	57,051	24,139	61,600	47,600	(14,000)
420	Permits, Licenses and Fees	12,266	10,683	12,000	13,800	1,800
420	Office Supplies	0	752	0	0	0
420	Equipment Rental	5,568	0	9,000	9,000	0
420	Rep & Maint Other Agencies	(39,496)	(17,325)	0	752,000	752,000
420	Rep & Maint IRWD	263,735	80,959	262,000	293,000	31,000
420	Engineering Fees	0	0	0	50,000	50,000
420	Engineering Fees	17,016	0	11,000	11,000	0
420	Personnel Training	4,335	1,196	0	0	0
420	Other Professional Fees	948	1,144	0	50,500	50,500
420	Safety	721	0	3,000	3,000	0
<b>Total . . . Water Operations</b>		47,249,996	24,754,269	45,256,650	55,934,300	10,677,650

## Consolidated Operating Expense Budget for FY 2015-16

Water Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
425	Regular Labor	1,402,665	627,703	1,494,140	1,365,300	(128,840)
425	Overtime Labor	131,643	75,739	127,500	134,000	6,500
425	Contract Labor	18,462	0	0	0	0
425	Chemicals	1,593	228	4,000	500	(3,500)
425	Operating Supplies	76,127	32,747	89,200	73,000	(16,200)
425	Permits, Licenses and Fees	10,184	5,149	11,000	11,000	0
425	Equipment Rental	921	0	0	5,000	5,000
425	Rep & Maint IRWD	371,601	(22,971)	258,000	249,000	(9,000)
425	Personnel Training	425	80	0	0	0
425	Other Professional Fees	2,659	845	0	1,000	1,000
Total . . . Field Services		2,016,280	719,520	1,983,840	1,838,800	(145,040)

## Consolidated Operating Expense Budget for FY 2015-16

Water Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
430	Regular Labor	1,603,382	759,567	1,695,830	1,577,400	(118,430)
430	Overtime Labor	174,504	94,720	228,000	206,000	(22,000)
430	Contract Labor	767	16,781	0	0	0
430	Chemicals	0	0	740	500	(240)
430	Operating Supplies	126,097	52,652	144,800	162,800	18,000
430	Permits, Licenses and Fees	85,954	14,229	67,000	63,000	(4,000)
430	Equipment Rental	1,522	0	21,000	21,000	0
430	Rep & Maint IRWD	602,601	136,203	667,800	549,000	(118,800)
430	Personnel Training	336	904	0	0	0
430	Other Professional Fees	2,357	592	0	2,000	2,000
<b>Total . . . Construction Services</b>		2,597,520	1,075,648	2,825,170	2,581,700	(243,470)
<b>Total . . . Water Operations</b>		53,803,952	27,502,854	51,495,010	61,033,400	9,538,390





# **RECYCLING OPERATIONS**

## **OPERATING BUDGET SUMMARY**

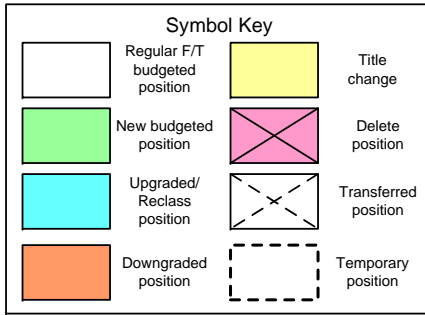
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### **Program Description**

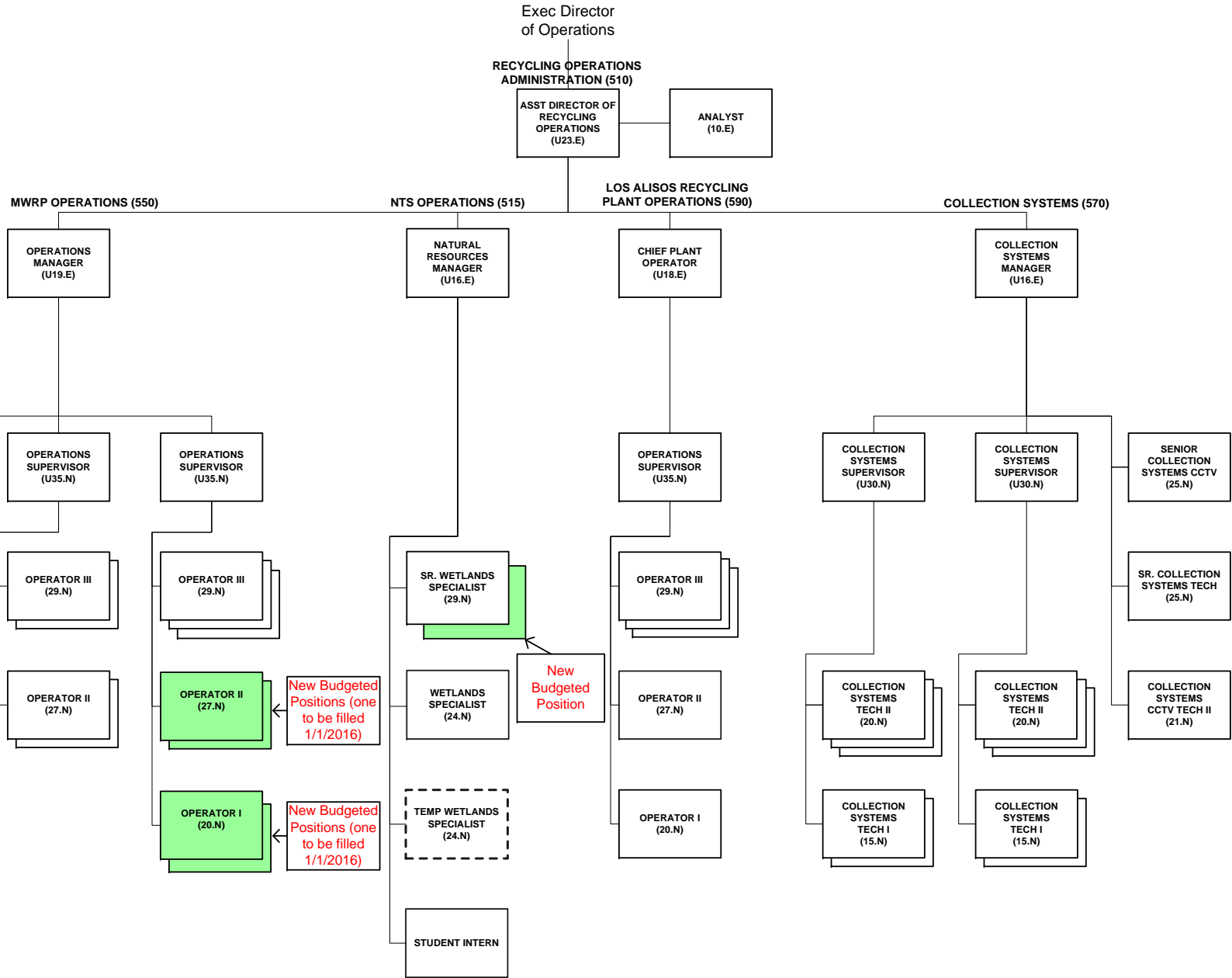
The mission of the Recycling Operations Department is to operate the District's resource recovery systems in a regulatory compliant, efficient, and environmentally safe manner that provides the highest level of customer satisfaction. The Recycling Operations Department provides cost-effective, reliable and compliant operation of the District's Collection Systems, Michelson Water Recycling Plant (MWRP), Los Alisos Water Recycling Plant (LAWRP), and Natural Treatment System (NTS).

### **Major Goals**

- Meet the Department's adopted Operations budget;
- Achieve zero lost time accidents;
- Maintain 100% compliance with all regulatory requirements;
- Refine operational key performance indicators (KPIs) to optimize efficiency and cost effectiveness;
- Transition operational responsibilities for the completed portion of the MWRP Biosolids and Energy Recovery Facilities from construction management to Recycling Operations;
- Complete the phased staffing and training plan for the MWRP Biosolids and Energy Recovery Facilities, and finalize all outsourcing options;
- Maintain and develop staff competency through a combination of internal and external training;
- Evaluate and optimize chemical usage for the collection and recycling facilities systems;
- Finalize options for the marketing and distribution of pellets from the MWRP Biosolids Project;
- Begin developing concepts and partnerships relative to implementing a food waste addition/recycling program at the MWRP once the new solids handling facilities are completed;
- Collaborate with other agencies including Encina Wastewater Authority on lessons learned, O&M, product marketing and distribution, and resource sharing opportunities;
- Discuss potential Orange County Sanitation District (OCSD) participation in MWRP Biosolids facilities on an interim basis;
- Evaluate and implement options for clean and inspect large sewer lines within the IRWD service area
- Implement a new data tracking and management system for the operations department;
- Prepare an Annual Report of NTS Operations including nutrient removal performance at each NTS facility, operational objectives, and recommendations for adaptive changes to the NTS program; and,
- Continue to work with partners in Newport Bay Executive Committee to develop and implement the elements of the Nitrogen Selenium Management Plan.



**IRVINE RANCH WATER DISTRICT  
RECYCLING OPERATIONS  
PROPOSED FISCAL YEAR 2015-16**



## Consolidated Operating Expense Budget for FY 2015-16

Recycling Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
510	Regular Labor	309,139	68,047	242,240	234,400	(7,840)
510	Contract Labor	17,827	6,601	14,700	10,000	(4,700)
510	Electricity	2,382,456	0	0	0	0
510	Fuel	15,392	89	0	0	0
510	Telecommunication	1,208	586	1,400	1,400	0
510	Operating Supplies	211	6	500	500	0
510	Printing	0	0	1,000	0	(1,000)
510	Postage	334	50	0	0	0
510	Office Supplies	3,688	141	4,000	0	(4,000)
510	Rep & Maint Other Agencies	12,735,267	3,409,323	2,786,000	4,720,000	1,934,000
510	Rep & Maint IRWD	202,226	(956)	0	0	0
510	Personnel Training	6,453	371	0	0	0
510	Other Professional Fees	1,476	68	0	50,000	50,000
Total . . . Recycling Operations Administration		15,675,677	3,484,326	3,049,840	5,016,300	1,966,460

## Consolidated Operating Expense Budget for FY 2015-16

Recycling Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
515	Regular Labor	0	124,593	250,080	323,700	73,620
515	Overtime Labor	0	989	4,000	4,000	0
515	Contract Labor	0	8,167	30,000	30,000	0
515	Electricity	0	107,719	259,300	261,200	1,900
515	Operating Supplies	0	4,296	17,500	19,000	1,500
515	Postage	0	139	0	0	0
515	Permits, Licenses and Fees	0	0	1,000	1,000	0
515	Equipment Rental	0	2,876	7,000	7,000	0
515	Rep & Maint Other Agencies	0	12,349	19,500	24,000	4,500
515	Rep & Maint IRWD	0	330,974	1,007,160	1,039,400	32,240
515	Engineering Fees	0	5,806	35,000	57,500	22,500
515	Personnel Training	0	(2,616)	1,500	2,800	1,300
515	Other Professional Fees	0	734	0	0	0
515	Safety	0	3,605	6,000	0	(6,000)
515	Other	0	3,391	12,000	12,000	0
<b>Total . . . NTS Operations</b>		0	603,022	1,650,040	1,781,600	131,560

## Consolidated Operating Expense Budget for FY 2015-16

Recycling Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
550	Regular Labor	971,121	482,257	1,207,540	1,368,000	160,460
550	Overtime Labor	139,832	46,972	108,380	108,900	520
550	Electricity	0	1,372,693	3,609,200	4,280,700	671,500
550	Fuel	35,870	2,186	51,800	20,000	(31,800)
550	Chemicals	1,435,720	327,357	489,600	452,600	(37,000)
550	Operating Supplies	19,417	8,611	18,000	18,800	800
550	Office Supplies	38	0	0	0	0
550	Equipment Rental	848	0	6,300	6,000	(300)
550	Rep & Maint Other Agencies	0	1,419,306	7,237,700	8,394,000	1,156,300
550	Rep & Maint IRWD	122,029	78,606	30,360	30,400	40
550	Personnel Training	4,524	0	12,840	800	(12,040)
550	Other Professional Fees	2,440	1,851	2,500	0	(2,500)
550	Safety	9,779	0	5,500	5,500	0
550	Rep & Maint Other Agencies	119,473	49,682	100,000	126,400	26,400
<b>Total . . . MWRP Operations</b>		2,861,091	3,789,521	12,879,720	14,812,100	1,932,380

## Consolidated Operating Expense Budget for FY 2015-16

Recycling Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
570	Regular Labor	1,144,971	530,217	1,124,480	1,096,200	(28,280)
570	Overtime Labor	129,437	54,895	112,300	116,900	4,600
570	Contract Labor	11,191	(2,185)	41,600	0	(41,600)
570	Electricity	88,928	48,954	109,000	113,000	4,000
570	Telecommunication	14,077	9,328	15,000	12,600	(2,400)
570	Chemicals	443,546	213,722	400,000	460,000	60,000
570	Operating Supplies	51,221	34,665	50,800	53,600	2,800
570	Rep & Maint IRWD	318,173	204,628	515,000	590,600	75,600
570	Personnel Training	6,308	936	7,800	0	(7,800)
570	Other Professional Fees	1,901	1,105	1,500	0	(1,500)
570	Safety	1,284	0	5,000	4,000	(1,000)
Total . . . Collections Systems		2,211,037	1,096,265	2,382,480	2,446,900	64,420

## Consolidated Operating Expense Budget for FY 2015-16

Recycling Operations		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
590	Regular Labor	593,040	285,121	598,040	589,500	(8,540)
590	Overtime Labor	65,380	31,215	49,620	61,200	11,580
590	Electricity	875,116	566,392	916,500	1,100,000	183,500
590	Fuel	1,056	155	1,000	1,000	0
590	Telecommunication	0	0	400	400	0
590	Chemicals	230,085	168,946	179,400	239,200	59,800
590	Operating Supplies	15,561	5,228	8,200	6,600	(1,600)
590	Office Supplies	496	191	0	0	0
590	Rep & Maint Other Agencies	222,958	69,367	314,760	299,200	(15,560)
590	Rep & Maint IRWD	134,467	29,295	142,000	100,000	(42,000)
590	Engineering Fees	0	0	0	33,000	33,000
590	Personnel Training	0	50	800	0	(800)
590	Other Professional Fees	958	750	1,240	0	(1,240)
590	Safety	636	520	4,600	1,700	(2,900)
590	Computer Backup Storage	89,756	20,652	0	0	0
590	Rep & Maint Other Agencies	135,378	38,736	302,300	25,000	(277,300)
<b>Total . . . LAWRP Operations</b>		2,364,887	1,216,618	2,518,860	2,456,800	(62,060)
<b>Total . . . Recycling Operations</b>		23,112,692	10,189,752	22,480,940	26,513,700	4,032,760







# **MAINTENANCE**

## **OPERATING BUDGET SUMMARY**

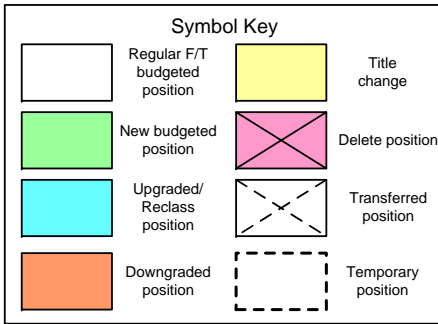
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### **Program Description**

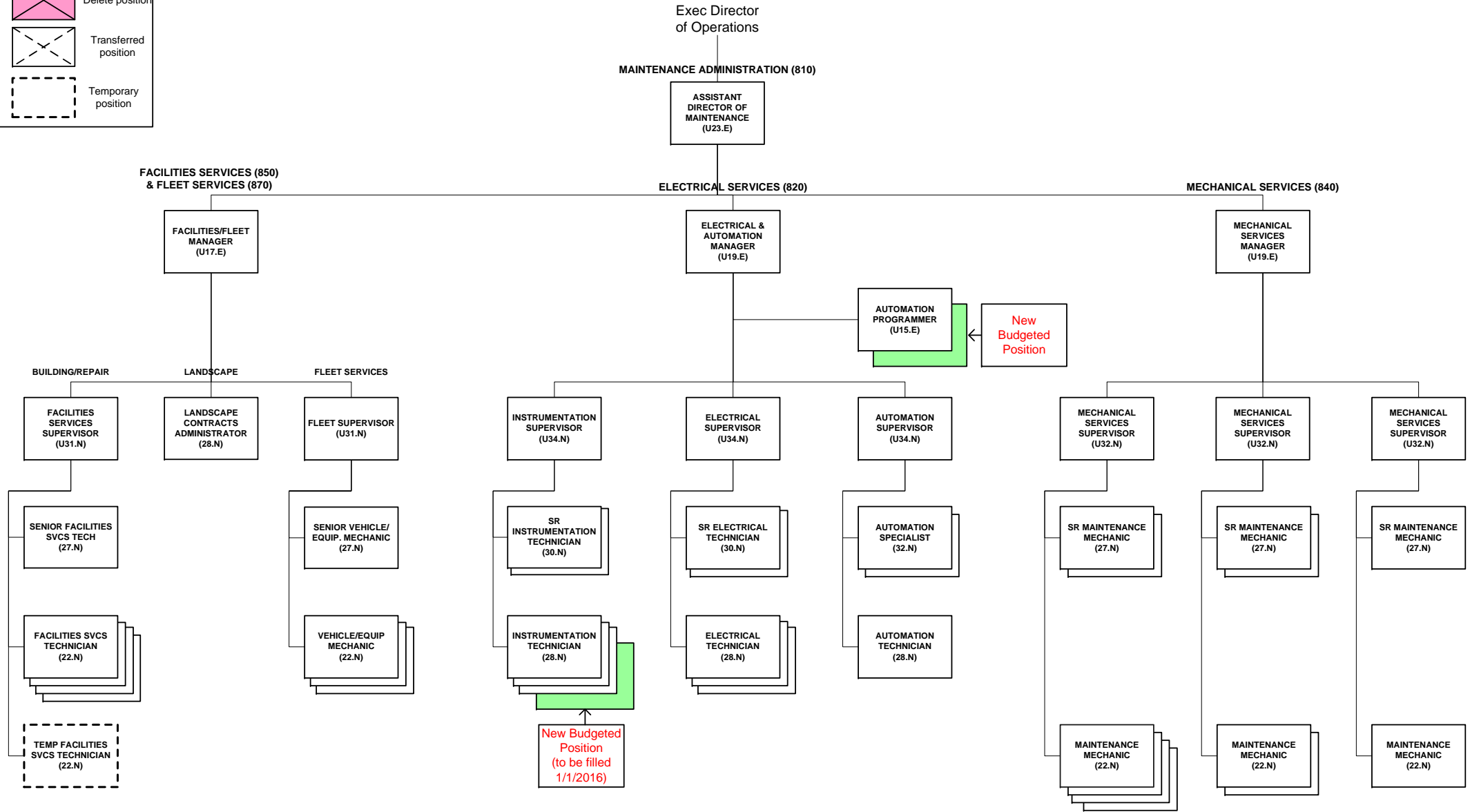
The mission of Maintenance Department is to manage the District's assets to ensure optimal life expectancy, reliability, efficiency and safety that provides the highest level of customer satisfaction. The Maintenance Department provides for asset management of the District's electrical, mechanical, instrumentation, automation, supervisory control and data acquisition (SCADA) system, fleet and facility assets to ensure safe, reliable, and cost effective operation.

### **Major Goals**

- Meet the Department's adopted Maintenance and General Plant budgets;
- Achieve zero lost time accidents;
- Maintain 100% compliance with all regulatory requirements;
- Conduct the pre-implementation activities for the Enterprise Asset Management (EAM) system including data collection, cataloging of assets, developing business processes, and identifying asset criticality protocols;
- Establish and track operational key performance indicators (KPIs) to optimize efficiency and cost effectiveness;
- Complete transition of all maintenance responsibilities for the MWRP Phase II expansion and upgrade project from construction management to maintenance;
- Complete the implementation of the phased staffing:
  - a. Implement the training plan for the MWRP Biosolids and Energy Recovery Facilities and Baker Water Treatment Plant
  - b. Evaluate all outsourcing options
- Maintain and develop staff competency through a combination of internal and external training;
- Investigate and expand the use of new technology to enhance and increase equipment reliability and staff productivity;
- Evaluate the conversion of the District light vehicle fleet to alternative fuel;
- Complete automation upgrades such as the conversion of the Lake Forest area to the District standard SCADA system;
- Provide Engineering support for projects including the Biosolids and Energy Recovery Facilities, Baker Water Treatment Facility, Michelson Lift Station relocation and Orange Park Acres Well 1;
- Optimize predictive maintenance measures through pump efficiency testing, lube oil analysis, vibration analysis, ultrasound detection, and infrared thermography program;
- Provide support regarding evaluation of a short and long term plan for LAWRP; and,
- Perform all required maintenance on schedule to ensure safe and dependable cost effective fleet operation.



**IRVINE RANCH WATER DISTRICT  
MAINTENANCE OPERATIONS  
PROPOSED FISCAL YEAR 2015-16**



## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
810	Regular Labor	0	73,485	138,720	143,000	4,280
810	Personnel Training	0	0	5,000	0	(5,000)
810	Other Professional Fees	0	301	0	0	0
Total . . . Maintenance Administration		0	73,786	143,720	143,000	(720)

## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
820	Regular Labor	0	622,610	1,477,680	1,658,100	180,420
820	Overtime Labor	0	58,127	117,000	134,900	17,900
820	Operating Supplies	0	41,238	60,400	82,950	22,550
820	Rep & Maint IRWD	0	376,129	633,400	854,300	220,900
820	Personnel Training	0	5,317	10,000	0	(10,000)
820	Other Professional Fees	0	1,171	2,400	2,800	400
820	Mileage Reimbursement	0	50	0	0	0
820	Safety	0	8,448	8,600	16,800	8,200
Total . . . Electrical Services		0	1,113,090	2,309,480	2,749,850	440,370

## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
840	Regular Labor	0	510,159	1,208,340	1,187,000	(21,340)
840	Overtime Labor	0	31,175	55,100	82,900	27,800
840	Operating Supplies	0	45,028	50,000	64,600	14,600
840	Equipment Rental	0	0	4,000	4,000	0
840	Rep & Maint IRWD	0	466,683	716,600	873,700	157,100
840	Personnel Training	0	3,828	12,400	0	(12,400)
840	Other Professional Fees	0	727	3,120	200	(2,920)
840	Safety	0	802	8,000	8,000	0
Total . . . Mechanical Services		0	1,058,402	2,057,560	2,220,400	162,840

## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
850	Regular Labor	0	156,019	621,980	600,400	(21,580)
850	Overtime Labor	0	5,768	10,400	10,900	500
850	Contract Labor	0	47,957	25,000	25,000	0
850	Telecommunication	0	84	0	0	0
850	Other Utilities	0	16,580	22,200	35,000	12,800
850	Operating Supplies	0	12,713	21,500	21,500	0
850	Rep & Maint IRWD	0	396,493	873,020	942,100	69,080
850	Personnel Training	0	148	0	0	0
850	Other Professional Fees	0	157	0	1,000	1,000
<b>Total . . . Facilities Services</b>		0	635,919	1,574,100	1,635,900	61,800

## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
855	Regular Labor	0	25,590	0	0	0
855	Overtime Labor	0	9,152	6,000	6,000	0
855	Electricity	0	93,187	172,000	190,000	18,000
855	Fuel	0	3,598	10,000	10,000	0
855	Other Utilities	0	2,653	5,000	5,000	0
855	Operating Supplies	0	9,395	20,400	20,400	0
855	Rep & Maint IRWD	0	179,915	292,600	303,100	10,500
Total . . . Headquarters Property Services		0	323,490	506,000	534,500	28,500

## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
860	Regular Labor	0	84,002	0	0	0
860	Overtime Labor	0	1,748	7,000	7,000	0
860	Electricity	0	84,776	222,900	220,000	(2,900)
860	Fuel	0	4,623	20,000	20,000	0
860	Other Utilities	0	12,903	20,000	20,000	0
860	Operating Supplies	0	15,503	40,000	40,000	0
860	Rep & Maint IRWD	0	163,659	271,500	311,500	40,000
Total . . . Operations Center Property Services		0	367,214	581,400	618,500	37,100



## Consolidated Operating Expense Budget for FY 2015-16

Maintenance		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
870	Regular Labor	0	177,701	356,900	351,800	(5,100)
870	Overtime Labor	0	2,938	7,000	9,000	2,000
870	Contract Labor	0	4,526	0	0	0
870	Fuel	0	289,589	627,000	627,200	200
870	Other Utilities	0	25,998	51,500	55,200	3,700
870	Operating Supplies	0	2,623	7,750	7,800	50
870	Permits, Licenses and Fees	0	1,240	5,340	6,300	960
870	Equipment Rental	0	5,085	5,000	13,000	8,000
870	Rep & Maint IRWD	0	224,601	459,400	479,400	20,000
870	Personnel Training	0	7	0	0	0
870	Mileage Reimbursement	0	49,218	117,000	132,000	15,000
Total . . . Fleet Services		0	783,526	1,636,890	1,681,700	44,810
Total . . . Maintenance		0	4,355,427	8,809,150	9,583,850	774,700





# **WATER POLICY AND RESOURCES**

## **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Water Policy and Resources Department is responsible for developing and implementing water resource supply and demand management programs to enhance the reliability of water supplies for District customers. The department is also responsible for managing the District's environmental compliance programs and regulatory requirements.

Water Use Efficiency: Demand management programs directly offset the need for developing additional water supplies and are critical elements in meeting the District's water resources/reliability objectives. IRWD has provided industry leadership through the development of innovative and aggressive demand management programs focusing on water use efficiency and wastewater recycling. An updated Water Use Efficiency Plan was adopted in December 2013, and staff has continued to implement efforts since then. Staff anticipates those efforts will continue to be ramped up in fiscal year 2015-16, particularly as IRWD assists its customers in responding to the Governor's call for 20% voluntary conservation in response to the statewide drought. Budget requests associated with the Plan are included in various sections of the budget. Conservation programs including the outdoor efficiency RightScape program, WaterSmart reports, tactical and participation in innovative pilots and research that maintain IRWD's leadership position are also incorporated into the fiscal year 2015-16 budget. IRWD will continue to be engaged in the development and implementation of local, regional, state-wide and national water efficiency and demand management policies.

Recycled Water: IRWD is recognized as a national leader in recycled water based in large part on the many years of experience IRWD has with recycled water and the large number of meters served. IRWD currently serves over 5,200 recycled water meters including over 60 commercial dual-plumbed buildings where recycled water is used for flushing toilets and urinals and over 600 single-family lots where recycled water is used for irrigating both the front and back yards. The Recycled Water Group continues to pursue additional uses for recycled water in the service area and is actively pursuing several additional industrial customers which represent large scale customers for IRWD as well as the conversion of several untreated water customers to recycled water. IRWD is also recognized for its support of recycled water through organizations such as WaterReuse, a national recycled water advocacy group. IRWD, in concert with WaterReuse, is active in state-wide policy, legislation, regulation and support for other agencies which face challenges as their programs are initiated or are being expanded. In fiscal year 2015-16, the Recycled Water Group will be conducting studies with key customers to determine the feasibility of using recycled water for industrial applications, expanding the use of recycled water for irrigation by retrofitting potable irrigation areas to recycled water and using recycled water to irrigate orchards that are more sensitive to some constituents found in recycled water.

Government Relations: IRWD strives to develop and advocate for policies at the federal, state and local levels that promote a reliable high quality and cost effective water supply for IRWD customers, and demonstrate the efficient use of resources. These efforts enhance IRWD services



# WATER POLICY AND RESOURCES

## OPERATING BUDGET SUMMARY

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through federal, state and local government relations and initiatives. The Government Relations staff provides policy leadership and technical expertise to the legislative process, particularly on issue of water recycling, water use efficiency, water supply reliability and governance, among others.

**Regulatory Compliance:** The Regulatory Compliance group plans and manages District-wide programs to ensure the District complies with all environmental regulations governing water, sewage and groundwater discharges. Staff collects all required samples of water, sewage and recycled water from distribution systems, treatment facilities, storage reservoirs, wetland operations and customer facilities to assure quality services and products are served to our customers. This group also responds to customer service issues and concerns regarding water quality. In addition to water-related programs, Regulatory Compliance staff manages other regulatory compliance programs such as Hazardous Waste, Underground Storage Tanks, Aboveground Petroleum Storage Tanks, Universal Waste and Industrial Waste. The Air Quality Program is also managed by Regulatory Compliance and includes all routine reporting, current and draft rule evaluation and permit application coordination and compliance. Regulatory Compliance also participates with the Orange County Sanitation District and South Orange County Wastewater Authority to address watershed and permit issues including environmental evaluation and permitting. Regulatory Compliance is also an active participant in representing IRWD at SCAP and Tri-TAC Committee meetings for Air and Water.

### **Strategic Initiatives for 2015-16**

#### RECYCLED WATER/NON-POTABLE WATER

- Convert a minimum of 1,000 AF of potable water use to recycled water;
- Apply for new *Local Resources Program* funding from MWD which provides a “per-acre foot” financial incentive to increase the use of recycled water;
- Assess the feasibility of serving recycled water to UCI for use in their cooling towers;
- Secure LRP funding for the North ILP Project;
- Assist WaterReuse California with its legislative agenda which includes allowing discharge of recycled water from impoundments during storm events;
- Fully develop the Recycled Water Use Site Inspection and Testing Program; and,
- Obtain approvals for dual-plumbing of hotels, condominiums and apartment properties.

#### WATER USE EFFICIENCY

- Assist IRWD customers in meeting a voluntary 20% conservation goal through ongoing implementation of enhanced outreach and cost-effective demand management programs;
- Develop partnerships with private and public entities to leverage the effectiveness and reach of water efficiency programs;
- Research and implement, as appropriate, new technologies and innovative programs to assist customers with improving their water use efficiency with a special emphasis on the RightScope outdoor conservation program;



# **WATER POLICY AND RESOURCES**

## **OPERATING BUDGET SUMMARY**

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- Continue to partner with commercial, industrial and institutional customers to implement cost-effective water use efficiency programs;
- Continue to support and expand enhanced customer engagement and reporting as a tool to motivate additional water use efficiency;
- Research and implement, as appropriate, the use of enhanced GIS data to improve customer allocation-setting, outreach and programs targeted toward outdoor water use;
- Actively participate in statewide policy discussions addressing the water-energy nexus;
- Actively engage in statewide policy discussions regarding implementation of SBx7-7 (20 x 2020) and implementation of Demand Management Measures required by the Urban Water Management Planning Act;
- Work with the California Urban Water Conservation Council (CUWCC) on statewide conservation issues, refinements to the Best Management Practices (BMP), including the rates BMP and potential alignment of the CUWCC with state mandated water efficiency targets;
- Continue to work with partners in Newport Bay Executive Committee to develop and implement the elements of the San Diego Creek Watershed Selenium BMP Strategic Plan;
- Establish the appropriate metrics and quantify conservation targets;
- Update Water Supply Contingency Plan;
- Evaluate water use efficiency programs and Water Use Efficiency Plan; and,
- Develop guide book on how to implement Budget Based Rate structures

### **GOVERNMENT RELATIONS**

- Implement the state legislative strategy as developed by staff and discussed with the Water Resource Policy and Communications Committee;
- Conduct advocacy activities on legislation impacting IRWD, the water industry and special district interests;
- Secure federal funding authorization under a re-authorized Water Resources Development Act (WRDA) for Army Corps of Engineering funding for the Syphon Reservoir Recycled Water Storage project;
- Continue to build relationships with federal, state and local elected and appointed officials and their staff members, as well as community leaders to support IRWD initiatives;
- Provide input to the State Water Resources Control Board to facilitate development of State-wide drought regulations;
- Participate in the development of Statewide surface and groundwater storage policies associated with Water Bond Funding;
- Seek legislative or regulatory changes promoting recycled water storage;
- Provide input to the legislature and administration on revisions to groundwater management related legislation;
- Promote policies which encourage energy reliability and efficiency in the water industry;
- Promote a "fit for purpose" approach to regulation of recycled water; and,
- Promote policies and regulations that will improve air quality and allow efficient operation of District facilities.



# **WATER POLICY AND RESOURCES**

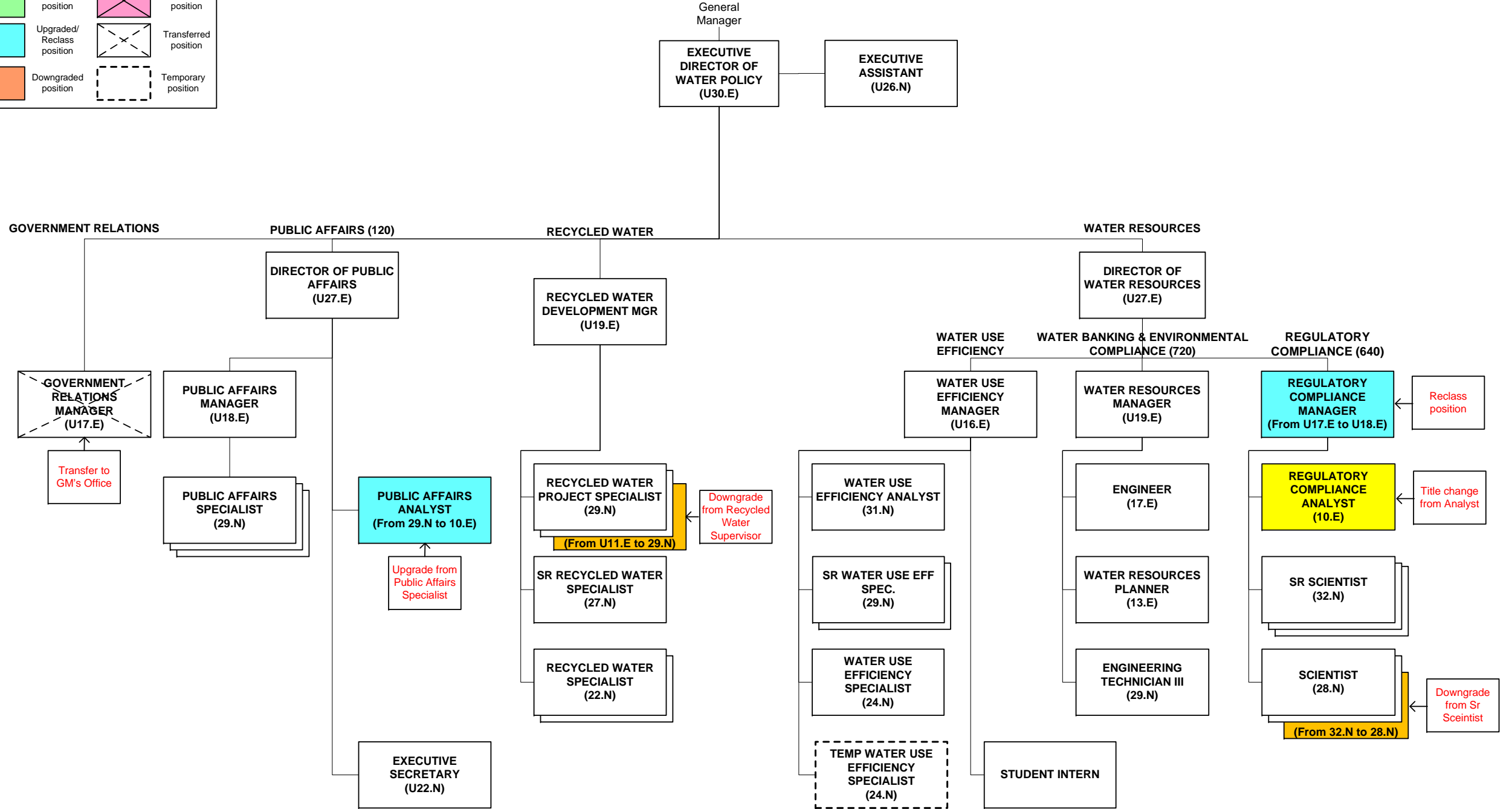
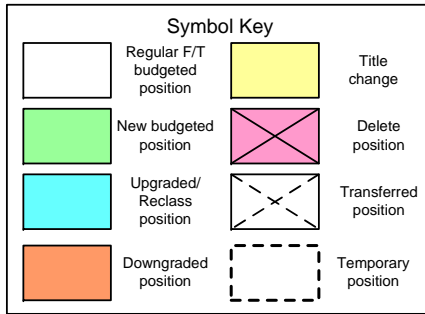
## **OPERATING BUDGET SUMMARY**

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### REGULATORY COMPLIANCE

- Ensure the District operates in full compliance with all applicable federal, state and local environmental, water and air quality laws and regulations;
- Respond to Water Quality Customer Service Requests and investigate the customer's concern;
- Determine required monitoring programs to address all regulatory requirements for potable, sewage and recycled water;
- Coordinate with other agencies with respect to Industrial Waste Programs and other projects;
- Plan, organize and supervise the work of the Compliance Monitoring Group;
- Collect potable system distribution and storage samples to comply with the DDW monitoring plan and to proactively identify any developing quality issues in the system;
- Collect MWRP and LAWRP samples to assure proper operation of the treatment facilities and compliance with each facilities' NPDES permit;
- Assist and provide resources to other departments with environmental, water and air permitting issues;
- Ensure compliance with all air permit requirements for testing and reporting;
- Participate in industry stakeholder groups for air, water and biosolids regulatory issues;
- Prepare and submit environmental permit applications for routine activities and projects;
- Administer the environmental reporting on the District's wetlands development and operations; and,
- Assist in the development of environmental quality projects and coordinate research and development activities.

IRVINE RANCH WATER DISTRICT  
WATER RESOURCES AND POLICY  
PROPOSED FISCAL YEAR 2015-16



## Consolidated Operating Expense Budget for FY 2015-16

Water Resources and Policy		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
710	Regular Labor	1,283,869	588,026	1,416,660	1,341,300	(75,360)
710	Overtime Labor	17,076	10,595	6,400	12,800	6,400
710	Contract Labor	152,446	54,961	35,600	85,100	49,500
710	Operating Supplies	2,638	75,913	3,050	81,150	78,100
710	Printing	5	0	5,500	500	(5,000)
710	Postage	1,201	266	600	2,500	1,900
710	Permits, Licenses and Fees	0	0	65,000	55,000	(10,000)
710	Office Supplies	3,339	533	5,000	1,200	(3,800)
710	Rep & Maint IRWD	25,120	(1,105)	57,900	103,700	45,800
710	Engineering Fees	40,390	60,000	120,000	60,000	(60,000)
710	Personnel Training	29,251	10,946	47,400	32,000	(15,400)
710	Other Professional Fees	403,809	412,879	845,120	1,203,450	358,330
710	Mileage Reimbursement	0	122	0	0	0
710	Conservation	855,512	177,923	942,000	1,694,000	752,000
Total . . . Water Resources and Policy		2,814,656	1,391,059	3,550,230	4,672,700	1,122,470



## Consolidated Operating Expense Budget for FY 2015-16

Water Quality		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
640	Regular Labor	623,507	246,568	721,170	645,900	(75,270)
640	Overtime Labor	44,588	18,587	51,975	57,600	5,625
640	Contract Labor	23,998	21,416	18,000	0	(18,000)
640	Operating Supplies	53,413	17,069	52,020	52,100	80
640	Postage	0	14	0	0	0
640	Permits, Licenses and Fees	237,956	272,126	388,700	388,450	(250)
640	Rep & Maint Other Agencies	599	0	2,000	2,000	0
640	Rep & Maint IRWD	48,772	16,632	86,500	86,500	0
640	Engineering Fees	24,428	24,125	71,000	170,000	99,000
640	Personnel Training	2,262	0	3,500	3,500	0
640	Other Professional Fees	597	415	1,500	1,600	100
640	Safety	76	923	2,000	2,000	0
Total . . . Regulatory Compliance		1,060,196	617,875	1,398,365	1,409,650	11,285
Total . . . Water Quality		3,538,713	1,839,563	4,050,270	4,013,000	(37,270)





## **PUBLIC AFFAIRS**

### **OPERATING BUDGET SUMMARY**

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### **Program Description**

The Public Affairs Department is responsible for communicating accurate and timely information about Irvine Ranch Water District services, projects, activities and programs. The department uses multiple media platforms, including print, personal contact, education programs, publications, tours, as well as electronic and social media outlets. The IRWD communication program serves the District and our customers by:

- Creating and maintaining credibility and public trust;
- Increasing customer awareness of the services we provide ;
- Promoting the District's value, activities and events of significance;
- Ensuring that accurate and timely information is conveyed to the public regarding incidents; and issues of a controversial and/or sensitive nature; and,
- Promoting transparency and easy to access information

### **Major Goals**

#### **WATER EFFICIENCY OUTREACH**

- Educate customers on efficient water use practices using multiple outreach platforms including resident tours of IRWD facilities, open houses, print, electronic media, and the internet;
- Educate customers about reducing outdoor water use with the Rightscape program;
- Provide students in the IRWD service area with learning opportunities regarding water supply, water reliability and water use efficiency programs. Promote water education programs to schools in the IRWD service area; and,
- Develop and implement next phase of customer drought outreach program.

#### **COMMUNITY OUTREACH AND MEDIA PROGRAMS**

- Refine, update and create effective multi-pronged social media outreach programs aimed at providing extended information channels for IRWD customers, the media, business partners, IRWD employees and other government entities;
- Develop and implement tap water outreach program;
- Enhance communications with customers through a targeted media outreach and public communications program including consistent and timely updates for construction and maintenance projects; and,
- Provide enhanced customer outreach initiatives based on customer feedback programs.

#### **BUSINESS OUTREACH PROGRAM**

- Develop strong working relationships with the business community by hosting a series of meetings for area businesses and those who are interested in working with IRWD.

## Consolidated Operating Expense Budget for FY 2015-16

Water Resources and Policy		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
120	Regular Labor	661,397	298,113	687,770	664,700	(23,070)
120	Overtime Labor	28,593	14,541	10,000	29,500	19,500
120	Operating Supplies	666	0	2,100	700	(1,400)
120	Printing	89,871	38,004	120,850	62,800	(58,050)
120	Postage	109	0	200	200	0
120	Office Supplies	5,224	2,881	6,000	6,000	0
120	Personnel Training	9,301	4,349	12,520	12,360	(160)
120	Other Professional Fees	354,288	272,413	653,550	728,090	74,540
120	Mileage Reimbursement	105	0	0	0	0
<b>Total . . . Public Affairs</b>		1,149,554	630,301	1,492,990	1,504,350	11,360



# WATER RESOURCES AND ENVIRONMENTAL COMPLIANCE

## OPERATING BUDGET SUMMARY

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### Program Description

The Water Resources and Environmental Compliance Department is responsible for the development of water supply programs and banking projects outside of the local Orange County area. These programs and projects are increasing the diversity and reliability of the District's water supplies by securing water supplies from sources outside of Orange County during wet periods and storing them for future use in groundwater banking projects in Kern County. The District's efforts in the development of these non-local programs and projects are needed in response to risks of water supply interruptions and continued pressure on water supplies from an expanding statewide population as well as legislative requirements tying water supply with new development.

This department is responsible for the design and construction of the District's water banking projects. In addition, this department is responsible for the negotiation and development of agreements with other agencies and entities throughout the State of California for water transfer and exchanges that facilitate the recharge, storage and recovery of water at the water banking projects. It is also responsible for the negotiation and the development of agreements that facilitate the delivery of water recovered from the water banking projects to IRWD's service area through facilities owned by the California Department of Water Resources, Kern County Water Agency and Metropolitan Water District of Southern California.

Other responsibilities of the Water Resources and Environmental Compliance department include the management of the District's environmental and regulatory compliance programs and managing the District's salt management, energy efficiency and renewable energy planning activities. The environmental and regulatory compliance programs focus on the operation of potable water and wastewater systems operations, facility replacements and the construction of new facilities.

### Major Goals

#### WATER RESOURCES:

- Identify, evaluate, and secure additional land to be incorporated into the District's water banking projects in Kern County for recharge and recovery facilities;
- Negotiate a MWD Policy for the delivery of MWD system water to IRWD's Strand and Stockdale Integrated Banking Projects;
- Implement long-term unbalanced exchange agreements with Carpinteria Valley Water District and/or Antelope Valley-East Kern Water Agency;
- Finalize and execute a long-term exchange agreement with Rosedale for a Joint Integrated Stockdale Water Banking and Exchange Project;
- Award a construction contract for drilling and constructing of wells for the Stockdale Integrated Banking Project;
- Initiate the design of recovery facilities pipelines and wellheads for the Stockdale Integrated Banking Project;



# **WATER RESOURCES AND ENVIRONMENTAL COMPLIANCE**

## **OPERATING BUDGET SUMMARY**

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- Develop and execute a long-term exchange agreement with Buena Vista Water Storage Agreement for pre-1914 Kern River water to be delivered to the Stockdale Integrated Banking Project;
- Develop a business plan for IRWD's water banking projects and programs;
- Execute long term exchange agreements to facilitate exports of Kern River water to IRWD service area;
- Investigate land fallowing and water transfer opportunities;
- Investigate opportunities to purchase State Water Project Table A entitlement;
- Construct Drought Relief Project recovery and conveyance facilities;
- Increase IRWD's amount of water stored in Southern California; and,
- Identify, evaluate and secure land for the additional third property under the Stockdale Integrated Banking Project for joint use with Rosedale.

### **ENVIRONMENTAL COMPLIANCE**

- Complete and certify an Environmental Impact Report for a Joint Integrated Stockdale Water Banking and Exchange Project with Rosedale; and,
- Fulfill the District's environmental and regulatory compliance requirements for capital projects, replacements and operations including the development and approval of Mitigated Negative Declarations, Environmental Impact Reports and Notices of Exemption.

### **ENERGY AND OTHER PLANNING**

- Work to implement Embedded Energy Plan;
- Update Energy Master Plan;
- Seek grant opportunities for District energy projects; and,
- Maximize participation in the Integrated Demand Side Management Program

## Consolidated Operating Expense Budget for FY 2015-16

Water Resources and Policy		2013-14 Actual	2014-15 Actual thru 12/31/15	2014-15 Orig Budget	2015-16 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
720	Water Purchases	0	0	0	11,000	11,000
720	Regular Labor	520,852	273,281	589,200	573,700	(15,500)
720	Overtime Labor	520	216	0	800	800
720	Electricity	319,399	337,924	491,400	334,500	(156,900)
720	Printing	250	0	0	0	0
720	Permits, Licenses and Fees	83,166	62,162	97,500	120,000	22,500
720	Office Supplies	(28)	248	200	1,000	800
720	Rep & Maint IRWD	125,193	78,005	225,400	281,700	56,300
720	Personnel Training	3,406	2,724	8,000	7,000	(1,000)
720	Other Professional Fees	1,122	5,162	16,220	17,800	1,580
Total . . . Water Resources and Environmental		1,053,880	759,722	1,427,920	1,347,500	(80,420)
Total . . . Water Resources and Policy		5,018,090	2,781,082	6,471,140	7,524,550	1,053,410
GRAND TOTAL . . . . .		118,635,223	63,084,753	130,640,000	147,683,200	17,043,200







# GENERAL PLANT

## SUMMARY

	Fiscal Year 2015-16	Fiscal Year 2014-15	Increase (Decrease)	% Inc/(Dec)
Information Systems	\$ 1,141,400	\$ 502,400	\$ 639,000	127.19%
Transportation Equipment	543,100	320,200	222,900	69.61%
Other General Plant Including Safety Equipment		86,500	(86,500)	-100.00%
Laboratory Equipment	280,535	385,835	(105,300)	-27.29%
Office Furniture and Equipment	8,000		8,000	
Equipment	871,700	213,433	658,267	308.42%
Structures/Improvements- Sand Canyon.MWRP	50,000	55,900	(5,900)	-10.55%
<b>Sub-Total</b>	<b>\$2,894,735</b>	<b>\$1,564,268</b>	<b>\$1,330,467</b>	<b>45.96%</b>
Less: Vehicle Salvage Value	(22,000)	(22,000)		-
<b>Total General Plant</b>	<b>\$ 2,872,735</b>	<b>\$ 1,542,268</b>	<b>\$ 1,330,467</b>	<b>46.31%</b>

### Fiscal Year 2015-16

Funded by User Charges	\$1,514,635	52.72%
Funded by Capital Funds	1,061,100	36.94%
Funded by Overalllocation Rev	297,000	10.34%
<b>Total Fiscal Year 2015-16</b>	<b>\$2,872,735</b>	<b>100.00%</b>

### Fiscal Year 2014-15

Funded by User Charges	\$ 873,327	56.63%
Funded by Capital Funds	668,941	43.37%
<b>Total Fiscal Year 2014-15</b>	<b>\$ 1,542,268</b>	<b>100.00%</b>



# GENERAL PLANT

## ANALYSIS

Description	Finance & Administrative					Water Policy	Total
	Administration	Services	Engineering & Planning	Operations	Water Policy		
Information Systems	\$ -	\$ 1,126,400	\$ -	\$ 15,000	\$ -	\$ -	\$ 1,141,400
Laboratory Equipment			280,535				280,535
Other General Plant				50,000			50,000
Office Furniture & Equipment		8,000		257,700			265,700
Work Equipment/Class IV, V, VI				629,000			629,000
Transportation Equipment				543,100			543,100
Structures/Improvements - Sand Canyon/MWRP							-
<b>Subtotal</b>	<b>\$ -</b>	<b>\$ 1,134,400</b>	<b>\$ 280,535</b>	<b>\$ 1,494,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,909,735</b>
Less Vehicle Salvage Value	-	-	-	(22,000)	-	-	(22,000)
<b>Total Fiscal Year 2015-16</b>	<b>\$ -</b>	<b>\$ 1,134,400</b>	<b>\$ 280,535</b>	<b>\$ 1,472,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,887,735</b>
Total Fiscal Year 2014-15	68,000	486,000	297,835	690,433	-	-	1,542,268
Increase/(Decrease)	\$ (68,000)	\$ 648,400	\$ (17,300)	\$ 782,367	\$ -	\$ -	\$ 1,345,467



# CONSOLIDATED

## GENERAL PLANT BUDGET

<u>TASK</u>	<u>Item Description</u>	<u>Quantity</u>	<u>Price</u>	<u>Proposed 2015-16</u>
<b>Department:</b> INFORMATION SERVICES				
250 8031.250.1	Network Disk Storage Expansion and Replacement	1	\$ 92,000	\$ 92,000
250 8031.250.2	Enterprise Server Replacement	1	200,000	200,000
250 8031.250.3	Network Equipment Replacement	1	291,500	291,500
250 8031.250.4	SCADA Internet Connection Firewall Module	1	2,500	2,500
250 8031.250.5	Tabware Work Orders System Software Upgrade	1	20,000	20,000
250 8031.250.6	Server Virtualization Software	1	24,200	24,200
250 8031.250.7	Application Virtualization, Imaging, and Patch Management	1	39,000	39,000
250 8031.250.8	Oracle Utility Analytics (OUA) Exception Analysis Software	1	36,600	36,600
250 8031.250.9	Document Image Management Software (Webdocs) Upgrade	1	45,000	45,000
250 8031.250.10	Sand Canyon Conference room Audio Visual Equipment	1	8,000	8,000
250 8031.250.11	Auto Save Server Software Upgrade	1	7,800	7,800
250 8031.250.12	Auto Save Software for Unity PLCs	1	11,000	11,000
250 8031.250.13	Wonderware Concurrent Software for Mobile SCADA Devices	5	4,000	20,000
250 8031.250.14	Redundant Alarm Dialer Hardware and Software	1	20,000	20,000
250 8031.250.15	SCADA Server Management Software	1	3,000	3,000
250 8031.250.16	SCADA Antivirus Server Software	1	10,000	10,000
250 8031.250.17	SCADA Server Virtualization Software	1	8,800	8,800
250 8031.250.18	SCADA Enterprise Historian Server Hardware and Software	1	85,000	85,000
250 8031.250.19	SCADA Enterprise Backup Server Hardware and Software	1	35,000	35,000
250 8031.250.1	PC Replacement	46	1,554	71,500
250 8031.250.2	Laptop Computer Replacement	19	1,421	27,000
250 8031.250.3	Tablet Computer Replacement	18	1,861	33,500
250 8031.250.4	GPS Data Collector Device	2	7,500	15,000
250 8031.250.5	Sewer Hydraulic Modeling Software	1	8,500	8,500
250 8031.250.6	Spatial Analysis Software	1	2,500	2,500
250 8031.250.7	Electrical Analysis Software	1	7,000	7,000
250 8031.250.8	Tablet Based Mobile SCADA Devices	5	2,000	10,000
<b>Sub-Total</b>				<b>\$ 1,134,400</b>
<b>Department:</b> WATER QUALITY ADMINISTRATION				
610 8031.610.1	Misc. Laboratory and Field Monitoring Equipment for Unplanned Projects and Regulatory Requirements	1	\$ 43,200	\$43,200
<b>Sub-Total</b>				<b>\$ 43,200</b>
<b>Department:</b> WATER QUALITY ANALYSIS				
630 8036.630.1	Laboratory Instrumentation for Future Biosolids and Energy Recovery Project.	1	\$ 25,000	\$25,000
630 8036.630.2	Existing Laboratory Equipment Replacement	1	127,000	127,000
630 8031.630.1	Laboratory Equipment for Biosolids and Energy Recovery Project.	1	40,000	40,000
<b>Sub-Total</b>				<b>\$ 192,000</b>
<b>Department:</b> REGULATORY COMPLIANCE				
640 8031.640.	Two (2) Portable discrete samplers with pH and conductivity sensor options.	2	\$ 7,668	\$15,335
640 8031.640.	Two (2) YSI Sondes with conductivity, temperature, pH, DO, cables and hand held displays.	2	15,000	30,000



# CONSOLIDATED

## GENERAL PLANT BUDGET

TASK	Item Description	Quantity	Price	Proposed 2015-16
Sub-Total				\$ 45,335
<b>Department:</b>	<b>OPERATIONS</b>			
805 8031.805.1	Mobile Tablets	5	\$ 2,000	\$10,000
Sub-Total				\$ 10,000
<b>Department:</b>				
515 8031.515.1	Flow Meters	1	\$ 60,000	\$ 60,000
515 8031.515.2	Water Monitoring Probes	1	40,000	40,000
515 8031.515.3	Solar Powered Mixer	1	24,000	24,000
515 8031.515.4	Composite Samplers	1	24,000	24,000
515 8031.515.5	Mobile Tablets	1	5,000	5,000
515 8036.515.2	Amphibious Vegetation Trimming Vehicle	1	110,000	110,000
515 8036.515.3	Spatial Analyzer	1	2,500	2,500
515 8055.515.1	4WD Light Duty Pickup Truck	1	31,500	31,500
Sub-Total				\$ 297,000
<b>Department:</b>				
820 8031.820.1	Motor/Circuit Analyzer - Tester	1	\$ 70,000	\$70,000
820 8031.820.1	Time Domain Reflectometer	1	10,000	10,000
Sub-Total				\$ 80,000
<b>Department:</b>				
425 8031.425.1	Self Contained Breathing Units	2	\$ 6,100	\$ 12,200
425 8031.425.2	Confined Space Recovery Equipment	1	15,000	15,000
Sub-Total				\$ 27,200
<b>Department:</b>				
860 8036.860.1	Fitness and Strength Training Equipment	1	\$ 50,000	\$ 50,000
Sub-Total				\$ 50,000
<b>Department:</b>				
870 8036.870.1	Medium Duty Utility Trailer	1	\$ 12,500	\$ 12,500
870 8037.870.1	Motor Fuel Inventory and Management Equipment (Gasboy).	1	44,000	44,000
870 8055.870.1	2WD Light Duty Pickup Truck	1	27,000	27,000
870 8055.870.10	2WD Medium Duty Pickup Truck With Utility Body and Ladder	1	43,200	43,200
870 8055.870.11	2WD Medium Duty Pickup Truck With Utility Body and Ladder	1	43,200	43,200
870 8055.870.12	2WD Medium Duty Pickup Truck With Utility Body, Auto Crane, and Power Pack.	1	78,000	78,000
870 8055.870.13	2WD Medium Duty Pickup Truck With Work Bed and Long Reach Valve operator	1	78,000	78,000
870 8055.870.14	CCTV Truck	1	165,000	165,000
870 8055.870.2	4WD Medium Duty Pickup Truck	1	28,000	28,000
870 8055.870.3	4WD Medium Duty Pickup Truck	1	28,000	28,000
870 8055.870.4	4WD Medium Duty Pickup Truck	1	28,000	28,000
870 8055.870.5	4WD Medium Duty Pickup Truck	1	28,000	28,000
870 8055.870.6	4WD Medium Duty Pickup Truck	1	28,000	28,000
870 8055.870.7	2WD Light Duty Pickup Truck	1	29,500	29,500
870 8055.870.8	2WD Light Duty Pickup Truck	1	29,500	29,500



# CONSOLIDATED

## GENERAL PLANT BUDGET

<u>TASK</u>	<u>Item Description</u>	<u>Quantity</u>	<u>Price</u>	<u>Proposed 2015-16</u>
870 8055.870.9	2WD Medium Duty Pickup Truck With Utility Body and Ladder	1	43,200	43,200
870 8056.870.1	Combination Sewer Jetter/Vaccum Truck	1	282,500	282,500
Sub-Total				\$ 1,015,600
Total General Plant				\$ 2,894,735
Salvage Value				(22,000)
Total General Plant				<u>\$ 2,872,735</u>

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Machinery and Equipment	8031.250.1	5	250	\$92,000	50%	50%		50%	50%	Network Disk Storage Expansion and Replacement	Additional storage is needed on the District's storage area network (SAN) system. The SAN supports the majority of the District's Enterprise applications, including Oracle, E-Mail, shared network files, Laboratory Information Management (LIMS), Tabware Work Orders, Geographical Information Systems (GIS), and Fleet Management. As the Oracle system is expanded and transactions are accumulated, additional storage is needed. Expanded E-mail and shared files also require additional storage. The storage requirement for these systems is doubled due to the High Availability system that stores a mirrored copy of the production data at a second location. This provides the District with a swift recovery from a server or storage failure. Replacement storage is needed for the Document Image Management system (Webdocs) for migration from the legacy system.
Machinery and Equipment	8031.250.2	5	250	\$200,000		100%			50%	Enterprise Server Replacement	Replacements are needed for the District's Enterprise Network Server systems purchased between 2010 and 2011 This meets the District's replacement criteria of five years for Network Server systems. These servers are used to support Virtualized Servers System, Security Management System, Password Synchronization System, Patch Management System, Tabware Work Orders, Laboratory Information Management System (LIMS), Document Image Management System (Webdocs), Geographical Information Management System (GIS), and Computer Inventory Management System. The replacement systems will utilize blade based servers, a Storage Area Network (SAN) system, and Server Virtualization that will consolidate multiple servers onto a single server blade.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Machinery and Equipment	8031.250.3	5	250	\$291,500		100%		50%	50%	Network Equipment Replacement	Replacements are needed for the District's Enterprise Network Equipment purchased between 2006 and 2007 This meets the District's replacement criteria of five years for Network Equipment. The Enterprise Network Equipment infrastructure, consisting of high speed switches and routers, is the backbone of the District's network, utilized by servers and network attached devices, such as PC work stations, security cameras, telephones, printers, and mobile devices. <b>NEW FUNDS FY ENDING 2016 = \$291,500, MATCHING AMOUNT TO BE BUDGETED IN FY ENDING 2017</b>
Machinery and Equipment	8031.250.4	5	250	\$2,500	100%			50%	50%	SCADA Internet Connection Firewall Module	An additional module is needed for the SCADA Internet Connection Firewall. The module will provide for a redundant connection to an alternate internet circuit. The firewall will automatically fail over if there is an outage on the primary SCADA internet circuit.
Machinery and Equipment	8031.250.5	5	250	\$20,000		100%		50%	50%	Tabware Work Orders System Software Upgrade	An upgrade is needed for the Tabware work orders software system. The software runs on the Microsoft Server 2003 Operating System, for which Microsoft is ending support. The Tabware software must be upgraded in order to run on the new Microsoft Server 2012 Operating system,
Machinery and Equipment	8031.250.6	5	250	\$24,200		100%		50%	50%	Server Virtualization Software	Server virtualization software is needed for server replacement. The servers being replaced are currently running on dedicated hardware, but will be replaced and run on virtualized server hardware,

**General Plant Description and Justification**  
**Proposed Operating Budget FY 2015-16**

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Machinery and Equipment	8031.250.7	5	250	\$39,000	100%			50%	50%	Application Virtualization, Imaging, and Patch Management Software	Additional software is requested to provide applications virtualization on PC's and Laptops. This will allow software that is dependent on specific versions to run without conflict. An example is Oracle software that requires a particular version of Java and Internet explorer browser. Imaging software is needed automated and manage the many PC and Laptop images required by District, Patch management software is needed to automate the distribution and installation of patched to PC's and Laptops. The patches include critical security patches.
Machinery and Equipment	8031.250.8	5	250	\$36,600	100%			50%	50%	Oracle Utility Analytics (OUA) Exception Analysis Software	Additional software is requested for Oracle Utility Analytics to manage and analyze exceptions that occur in the Oracle Customer Care and Billing System. This software will be utilized in managing the collection and billing process. An in-depth analysis of "To-Dos", generated by the system on a daily basis, is also provided.
Machinery and Equipment	8031.250.9	5	250	\$45,000		100%		50%	50%	Document Image Management Software (Webdocs) Upgrade	An upgrade is needed for the District's Document Image Management Software (Webdocs). The upgrade will move the software system and documents from the District's legacy IBM AS/400 system to a Microsoft Windows Server system. This upgrade was identified in the Applications Strategic Plan as a part of the District's strategy to consolidate technology platforms.
Machinery and Equipment	8031.250.10	5	250	\$8,000	100%			50%	50%	Sand Canyon Conference room Audio Visual Equipment	Audio visual equipment is requested for the recently converted Library conference room at the Sand Canyon Headquarters. The equipment will include a LCD Display, a media control module, and a conference phone.



## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Machinery and Equipment	8031.250.11	5	250	\$7,800		100%		50%	50%	Auto Save Server Software Upgrade	The Automation Group is requesting an upgrade to the Auto Save Server software. This software is used to perform backup of the SCADA PLC programs and configurations used at District facilities. A new version is required to support Microsoft Windows 7 and Windows Server 2008.
Machinery and Equipment	8031.250.12	5	250	\$11,000	50%	50%		50%	50%	Auto Save Software for Unity PLCs	The Automation group is requesting additional Auto Save software licenses for the PLCs using the Unity software program. The Unity program is being used for the PLC's at the Baker WTP facility and the Biosolids facility. Existing PLC's will also be converting to the Unity program. A new version of Auto Save is required to support the Unity based PLC's.
Machinery and Equipment	8031.250.13	5	250	\$20,000	100%			50%	50%	Wonderware Concurrent Software for Mobile SCADA Devices	The Automation group is requesting five additional licenses to support SCADA Mobile devices. Additional Wonderware inTouch licenses are required to allow the mobile devices access to the SCADA system.
Machinery and Equipment	8031.250.14	5	250	\$20,000	100%			50%	50%	Redundant Alarm Dialer Hardware and Software	The Automation group is requesting additional Alarm dialer hardware and software to provide redundant SCADA Alarm dialers. The SCADA systems currently rely on one alarm dialer. In the event of a failure, a second alarm dialer would provide a backup and improved reliability.
Machinery and Equipment	8031.250.15	5	250	\$3,000	100%			50%	50%	SCADA Server Management Software	The Automation group is requesting server management software. This software will provide monitoring and reporting of hardware and software problem on the District's SCADA servers. Messages will be sent to the SCADA systems administrator when problems occur, allowing for a timely and proactive response.
Machinery and Equipment	8031.250.16	5	250	\$10,000	100%			50%	50%	SCADA Antivirus Server Software	The Automation group is requesting server antivirus software for SCADA systems. This software will provide monitoring and distribute updates to selected servers and work stations on the SCADA network.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System		Asset Description	Justification	
					New	Replace	Conservation	% Water			% Sewer/ Recycle
Machinery and Equipment	8031.250.17	5	250	\$8,800	100%			50%	50%	SCADA Server Virtualization Software	The Automation group is requesting additional server virtualization software for SCADA systems. This software allows multiple systems to run on one hardware for one server.
Machinery and Equipment	8031.250.18	5	250	\$85,000	100%			50%	50%	SCADA Enterprise Historian Server Hardware and Software	The Automation group is requesting server hardware and SCADA/Tier 2 historian software to accommodate additional tags in the SCADA systems. The historian will meet the demands of additional information requirements on the SCADA network.
Machinery and Equipment	8031.250.19	5	250	\$35,000	100%			50%	50%	SCADA Enterprise Backup Server Hardware and Software	The Automation group is requesting SCADA Enterprise Backup server hardware and software. This server will be used to backup images of the sixty plus servers in the SCADA network. The current backup process is performed manually. The backup server will automate the process and ensure that backups are performed on a timely basis.
Machinery and Equipment	8031.250.1	4	250	\$71,500		100%		50%	50%	PC Replacement	Forty-six personal computers are needed to replace systems purchased between 2011-2012. This meets the District's replacement criteria of four years for personal computer systems. The systems are used for accessing District applications.
Machinery and Equipment	8031.250.2	4	250	\$27,000		100%		50%	50%	Laptop Computer Replacement	Nineteen laptop computers are needed to replace systems purchased between 2011-2012. This meets the District's replacement criteria of four years for personal computer systems. The laptop computer systems are used in the field by Administration, Water Operations, Wastewater Operations, Water Quality, and Water Resources. The systems are used in the office for accessing District applications. In the field, the systems are used to collect data and access the District's SCADA Systems.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Machinery and Equipment	8031.250.3	4	250	\$33,500		100%		50%	50%	Tablet Computer Replacement	Eighteen tablet computers are needed to replace systems purchased between 2011-2012. This meets the District's replacement criteria of four years for tablet computer systems. The tablet computers are used to support a GIS based application used by Operations staff.
Machinery and Equipment	8031.250.4	4	250	\$15,000	100%			50%	50%	GPS Data Collector Device	Two GPS data collector devices are requested by the GIS group that will be used by staff for collecting GPS coordinates for meter GPS data updates.
Machinery and Equipment	8031.250.5	4	250	\$8,500	100%				100%	Sewer Hydraulic Modeling Software	An addition to existing software is requested by the GIS group for Info-Sewer modeling. This software is used for dynamic flow modeling in the Sewer Master Plan.
Machinery and Equipment	8031.250.6	4	250	\$2,500	100%			50%	50%	Spatial Analysis Software	Spatial Analysis software is requested by the Water Resources department. This software will be used to analyze spatial data for water conservation studies.
Machinery and Equipment	8031.250.7	4	250	\$7,000	100%			50%	50%	Electrical Analysis Software	Integrated Electrical Engineering Analysis software is requested by the GIS group. This software will be used to calculate safety gear requirements at District facilities.
Machinery and Equipment	8031.250.8	4	250	\$10,000	100%			50%	50%	Tablet Based Mobile SCADA Devices	The Automation group is requesting five tablet based mobile SCADA devices. These devices will be used in support of the SCADA mobile device program, with the goal of deploying mobile devices to access, monitor, and control SCADA in a secure manner.
Machinery and Equipment	8031.610.1	5	610	\$43,200	50%	50%		33%	67%	Misc. Laboratory and Field Monitoring Equipment for Unplanned Projects and Regulatory Requirements	Laboratory planning and method development associated with new contaminants, more stringent discharge limits, developing new recycled water users, and supporting treatment and supply related projects. Field monitoring equipment for unplanned projects or regulatory requirements. Beginning fiscal year ending 2015 individual line items for Dept. 630 and 640 were consolidated into a single line item in department 610.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System		Asset Description	Justification	
					New	Replace	Conservation	% Water			% Sewer/ Recycle
Machinery and Equipment	8036.630.1	10	630	\$25,000	100%			100%	Laboratory Instrumentation for Future Biosolids and Energy Recovery Project.	A portion of the funds necessary to acquire equipment and instrumentation to implement the proposed monitoring program for the future biosolids and energy recovery facilities. Funds accrued in fiscal years ending 2013, 2014, 2015 and 2016, and carried forward to future fiscal years for expenditure prior to the beginning of facility operations so the laboratory will have method development completed in time to provide process control data when the facility is active. <b>ACCRUED FUNDS THROUGH FY ENDING 2015 = \$225,000, NEW FUNDS FY ENDING 2016 = \$25,000, TOTAL ACCRUED FUNDS FY ENDING 2016 = \$250,000</b>	
Machinery and Equipment	8036.630.2	5 to 20	630	\$127,000		100%		50%	50%	Existing Laboratory Equipment Replacement	Existing laboratory instrumentation (such as GC/MSs, LC/ICP/MS, etc.) purchased in prior years with General Plant Capital funds have certain useful life and will ultimately need replacement. The budgeted dollars accrued in this fiscal year will carry forward with funds accrued since FY ending 2013 into future fiscal years with additional funds budgeted each fiscal year to build a pool of funds to purchase replacement equipment as needed, funds to be expended on a first-in-first-out basis. The on- going accumulation of funds over multiple fiscal years will eliminate peaks and valleys in the Department 630 General Plant Capital budget. The amount requested this FY is based on the amount allocated last FY adjusted to current dollars (+1.6%). <b>ACCRUED FUNDS THROUGH FY ENDING 2015 = \$344,800, EXPENDED FUNDS THROUGH FY ENDING 2015 = \$30,141.37, NEW FUNDS FY ENDING 2016 = \$127,000, FUND BALANCE THROUGH FY ENDING 2016 = \$441,658.63</b>

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System		Asset Description	Justification	
					New	Replace	Conservation	% Water			% Sewer/ Recycle
Machinery and Equipment	8031.630.1	5	630	\$40,000	100%				100%	Laboratory Equipment for Biosolids and Energy Recovery Project.	A portion of the funds necessary to acquire equipment to implement the proposed process control monitoring program for the future biosolids and energy recovery facilities. Funds accrued in fiscal years ending 2015 and 2016 will be carried forward to purchase general plant capital equipments as needed to meet analytical needs at various project milestones. <b>ACCRUED FUNDS THROUGH FY ENDING 2015 = \$40,000, NEW FUNDS FY ENDING 2016 = \$40,000, TOTAL ACCRUED FUNDS FY ENDING 2016 = \$80,000</b>
Machinery and Equipment	8031.640.	5	640	\$15,335		100%			100%	Two (2) Portable discrete samplers with pH and conductivity sensor options.	All four (4) of the District's Portable samplers utilized for the Industrial Waste Program are more than five years old, with one being 12 years old, and the manufacturer date of the other three being unknown. Two (2) of the samplers were replaced in FY14/15, and remaining two will need to be replaced FY15/16, especially before the local limits study begins.
Machinery and Equipment	8031.640.	5	640	\$30,000		100%			100%	Two (2) YSI Sondes with conductivity, temperature, pH, DO, cables and hand held displays.	Our sondes are 10+ years old and we are currently spending money to have them repaired, and the technology is outdated. Sondes are utilized for in-situ monitoring of the recycled water reservoirs for our NPDES permit monitoring and compliance. Thus, as the readings from the sonde are a measure of our compliance that are reported to the Regional Water Quality Control Board, it's important that we replace older sondes to obtain reliable data.
Mach & Equip 5 Yrs	8031.805.1	5	805	\$10,000	100%			50%	50%	Mobile Tablets	The Operations department is requesting funds to purchase mobile tablets to equip staff members. The tablets will be used to improve staff communications and allow remote access to SCADA system data.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Mach & Equip 5 Yrs	8031.515.1	5	515	\$60,000			100%			Flow Meters	In order to more efficiently and accurately account for pollutant removals, NTS is requesting to purchase six additional flow meters. Sites to receive flow meters include Cypress Meadow B, C, D, and Orchard Meadows.
Mach & Equip 5 Yrs	8031.515.2	5	515	\$40,000			100%			Water Monitoring Probes	Staff are requesting water quality monitoring probes to deploy at various NTS sites to more accurately account for pollutant removals. Probes will be installed at the Forge Meadow NTS site
Mach & Equip 5 Yrs	8031.515.3	5	515	\$24,000			100%			Solar Powered Mixer	Staff are requesting this mixer to mitigate odor complaints and water quality issues at the Los Olivos NTS site.
Mach & Equip 5 Yrs	8031.515.4	5	515	\$24,000			100%			Composite Samplers	To provide new permanent samplers at four NTS sites (Lower Eastfoot, Forge Meadow, Orchard Meadow, and Port Culver) These samplers will replace bulky portable units, and standardize equipment across the Natural Treatment System.
Mach & Equip 5 Yrs	8031.515.5	5	515	\$5,000			100%			Mobile Tablets	The Natural Treatment Systems department is requesting funds to purchase mobile tablets to equip staff members. The tablets will be used to improve staff communications and allow remote access to SCADA systems and NTS flow data.
Mach & Equip 10 Yrs	8036.515.2	10	515	\$110,000			100%	50%	50%	Amphibious Vegetation Trimming Vehicle	Staff are requesting a floating trimmer to trim emergent aquatic vegetation in the SJM. Currently, vegetation is not being trimmed, and staff have not found an affordable replacement for a vendor that is no longer in business. Staff are proposing to reduce the operating costs for aquatic vegetation trimming by \$26k per year in order to justify this expense, with a payback time of 5.5 yrs.
Mach & Equip 10 Yrs	8036.515.3	10	515	\$2,500			100%			Spatial Analyzer	This module allows staff to analyze watershed activities through GIS

## General Plant Description and Justification Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Vehicles 10 Yrs	8055.515.1	10	515	\$31,500			100%			4WD Light Duty Pickup Truck	(New staff member) Staff are requesting funds to purchase a light duty pickup truck for use by a new Natural Treatment Systems Department Staff member. The new position is being requested in the 2015-16 operating budget. The vehicle will be used for maintenance and monitoring of Natural Treatment System field sites.
Mach & Equip 5 Yrs	8031.820.1	5	820	\$70,000	100%			50%	50%	Motor/Circuit Analyzer - Tester	The District is heavily dependent on the performance and reliability of pumping systems throughout the service area. The majority of these pumps are driven by electric motors. The Motor Circuit Analyzer will enable Staff to establish a baseline of motor health, build a performance/health history, predict potential failures, and verify repair work on externally serviced motors.
Mach & Equip 5 Yrs	8031.820.1	5	820	\$10,000	100%			50%	50%	Time Domain Reflectometer	This tool will be used by the Electrical Services Staff to troubleshoot, locate, and repair electrical cable failure. This is critical due to the District's growing, aging, and widespread underground electrical infrastructure.
Mach & Equip 5 Yrs	8031.425.1	5	425	\$12,200		100%		50%	50%	Self Contained Breathing Units	The Preventative Services department is requesting funds to replace two self contained breathing units. These two units are in need of repairs that exceed replacement cost.
Mach & Equip 5 Yrs	8031.425.2	5	425	\$15,000		100%		50%	50%	Confined Space Recovery Equipment	The Preventative Services department is requesting funds to replace an existing confined space recovery unit. The equipment is used to permit entry into confined spaces for inspection and repair. The existing equipment is more than 20 years old.



## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System		Asset Description	Justification	
					New	Replace	Conservation	% Water			% Sewer/ Recycle
Equipment	8036.860.1	10	860	\$50,000		100%		50%	50%	Fitness and Strength Training Equipment	The fitness equipment in the fitness center at both the Sand Canyon HQ and the Michelson Operations Center is approximately 20 years old. Although the equipment has been well maintained, it is dated and not up to current fitness and safety use standards. Staff recommends that this equipment be replaced over a two year period. This budget request provides funding to upgrade the Michelson Operations Center fitness room with equipment sufficient to meet the exercise and strength training needs of the staff at that location who perform physical labor and strenuous activity as part of their daily job duties. Additional funds will be requested in the 16-17 Fiscal Year budget to replace the equipment in the Sand Canyon HQ fitness center.
Mach & Equip 10 Yrs	8036.870.1	10	870	\$12,500	100%			50%	50%	Medium Duty Utility Trailer	Staff are requesting funds to purchase a new medium duty utility trailer. The new trailer will be used by the Construction and Field Services Department to provide portability for one of the small skid steer loaders.
Mach & Equip 15 Yrs	8037.870.1	15	870	\$44,000		100%		50%	50%	Motor Fuel Inventory and Management Equipment (Gasboy).	Staff are requesting funds to replace existing fuel inventory and management hardware. The existing equipment is greater than thirty years old and is no longer supported for parts and repair services.
Vehicles 10 Yrs	8055.870.1	10	870	\$27,000		100%		50%	50%	2WD Light Duty Pickup Truck	Staff are requesting funds to downsize and replace unit 2110, a 2005 medium duty pickup truck with approximately 148,000 miles. This vehicle requires replacement due to age and condition.
Vehicles 10 Yrs	8055.870.10	10	870	\$43,200	100%			50%	50%	2WD Medium Duty Pickup Truck With Utility Body and Ladder Rack	(New staff member) Staff are requesting funds to purchase a new medium duty pickup truck with utility body and ladder rack. The truck will be used for field work by the by the Sr. Electrical Technician whose position was authorized in the FY 14/15 budget year.



## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

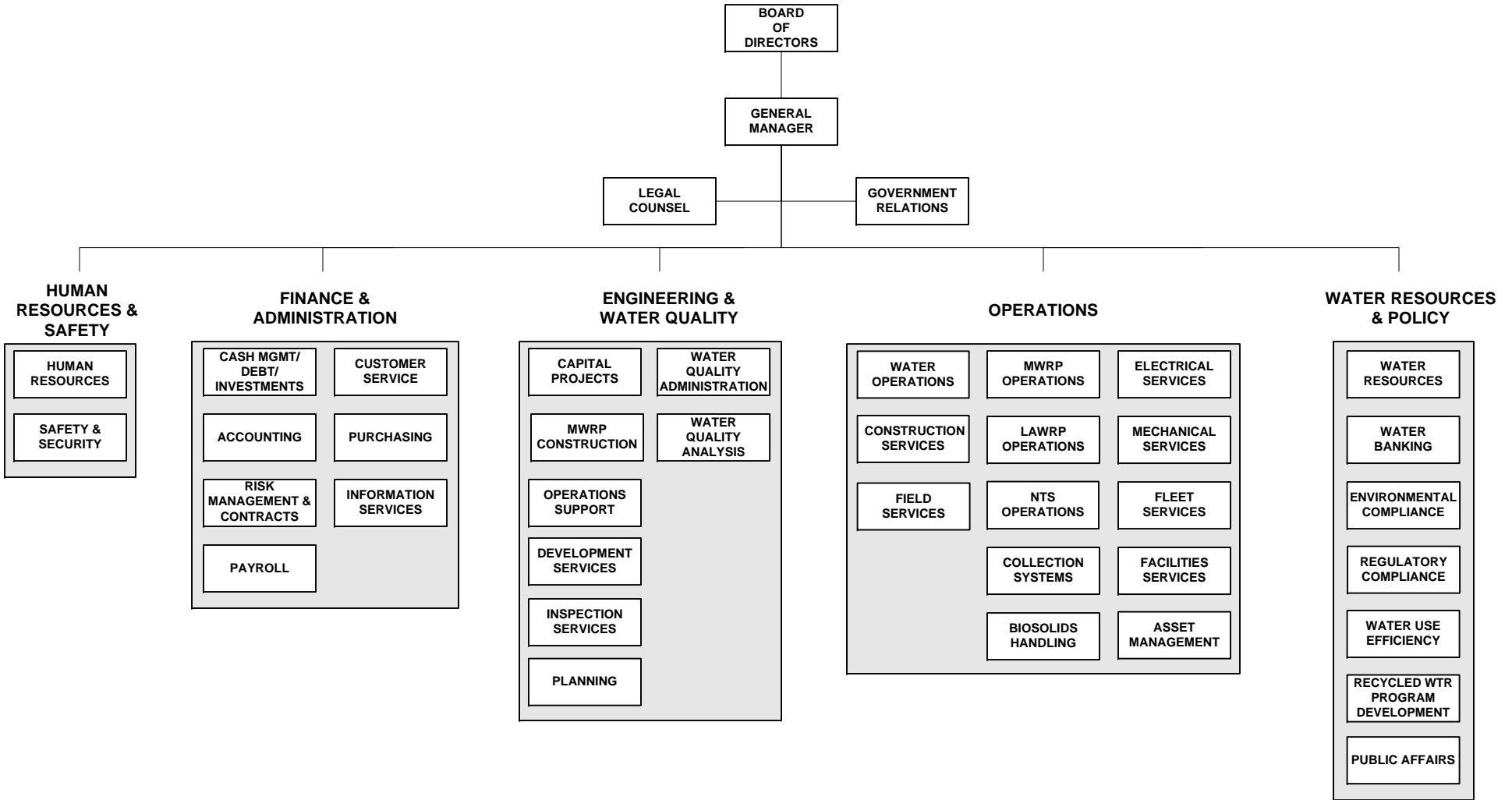
General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Vehicles 10 Yrs	8055.870.11	10	870	\$43,200	100%			50%	50%	2WD Medium Duty Pickup Truck With Utility Body and Ladder Rack	(New staff member) Staff are requesting funds to purchase a new medium duty pickup truck with utility body and ladder rack. The truck will be used for field work by the by the Sr. Instrumentation Technician whose position was authorized in the FY 14/15 budget year.
Vehicles 10 Yrs	8055.870.12	10	870	\$78,000	100%			50%	50%	2WD Medium Duty Pickup Truck With Utility Body, Auto Crane, and Power Pack.	(New staff member) Staff is requesting funds to purchase a new medium duty pickup truck with utility body and ladder rack. The truck will be used for field work by the Mechanical Maintenance Mechanic whose position was authorized in the FY 14/15 budget year.
Vehicles 10 Yrs	8055.870.13	10	870	\$78,000	100%			50%	50%	2WD Medium Duty Pickup Truck With Work Bed and Long Reach Valve operator	Staff is requesting funds to purchase a new medium duty pickup truck with work bed and hydraulically driven long reach valve operator. The truck will in the Preventative Services Department to improve productivity and efficiency.
Vehicles 10 Yrs	8055.870.14	10	870	\$165,000	100%				100%	CCTV Truck	To ensure compliance with the District's Sanitary Sewer management Plan, staff are requesting funds to purchase a new medium duty vehicle equipped with a closed circuit sewer inspection camera. The truck will be used to increase the frequency of sewer system monitoring and inspection.
Vehicles 10 Yrs	8055.870.2	10	870	\$28,000		100%		50%	50%	4WD Medium Duty Pickup Truck	Staff are requesting funds to replace unit 2008, a 2005 medium duty pickup truck with approximately 136,000 miles. This vehicle requires replacement due to age and condition.
Vehicles 10 Yrs	8055.870.3	10	870	\$28,000		100%		50%	50%	4WD Medium Duty Pickup Truck	Staff are requesting funds to replace unit 2079, a 2006 medium duty pickup truck with approximately 132,000 miles. This vehicle requires replacement due to age and condition.

## General Plant Description and Justification

### Proposed Operating Budget FY 2015-16

General Plant Asset	Updated Task	Life (Years)	Dept	Cost	Fund Source		System			Asset Description	Justification
					New	Replace	Conservation	% Water	% Sewer/ Recycle		
Vehicles 10 Yrs	8055.870.4	10	870	\$28,000		100%		50%	50%	4WD Medium Duty Pickup Truck	Staff are requesting funds to replace unit 2137, a 2007 medium duty pickup truck with approximately 131,000 miles. This vehicle requires replacement due to age and condition.
Vehicles 10 Yrs	8055.870.5	10	870	\$28,000		100%		50%	50%	4WD Medium Duty Pickup Truck	Staff are requesting funds to replace unit 2017, a 2005 medium duty pickup truck with approximately 126,000 miles. This vehicle requires replacement due to age and condition.
Vehicles 10 Yrs	8055.870.6	10	870	\$28,000		100%		50%	50%	4WD Medium Duty Pickup Truck	Staff are requesting funds to replace unit 2115, a 2006 medium duty pickup truck with approximately 125,000 miles. This vehicle requires replacement due to age and condition.
Vehicles 10 Yrs	8055.870.7	10	870	\$29,500	100%			50%	50%	2WD Light Duty Pickup Truck	Staff are requesting funds to purchase a light duty pickup truck for use by the Collections Supervisor. The vehicle will be used for supervision and direction of field crews.
Vehicles 10 Yrs	8055.870.8	10	870	\$29,500	100%			50%	50%	2WD Light Duty Pickup Truck	Staff are requesting funds to purchase a light duty pickup truck for use by the Collections Supervisor. The vehicle will be used for supervision and direction of field crews.
Vehicles 10 Yrs	8055.870.9	10	870	\$43,200	100%			50%	50%	2WD Medium Duty Pickup Truck With Utility Body and Ladder Rack	(New staff member) Staff are requesting funds to purchase a new medium duty pickup truck with utility body and ladder rack. The truck will be used for field work by the by the Automation Specialist whose position was authorized in the FY 14/15 budget year.
Vehicles 15 Yrs	8056.870.1	10	870	\$282,500		100%			100%	Combination Sewer Jetter/Vaccum Truck	To ensure continued compliance with the Sanitary Sewer Master Plan, staff is requesting funds to replace unit 3066, a 1997 heavy duty combination sewer jetter/vaccum truck with approximately 10,000 operating hours. This vehicle requires replacement due to age and condition. <b>NEW FUNDS FY ENDING 2016 \$ 282,500 MATCHING AMOUNT TO BE BUDGETED IN FY ENDING 2017.</b>

**Irvine Ranch Water District  
Organizational Chart  
(By Function)  
Fiscal Year 2015-16**





# LABOR

## THREE YEAR PERSONNEL COMPARISON

Department	Authorized Positions		
	2013-14	2014-15	2015-16
<b>Administration</b>			
Number of Positions	12.0	11.0	14.0
% change from prior year	(7.7) %	(8.3) %	27.3 %
<b>Finance and Administrative Services</b>			
Number of Positions	71.0	71.0	75.0
% change from prior year	2.9 %	0.0 %	5.6 %
<b>Engineering</b>			
Number of Positions	41.0	38.0	39.0
% change from prior year	2.5 %	(7.3) %	2.6 %
<b>Water Quality</b>			
Number of Positions	26.0	28.0	29.0
% change from prior year	0.0 %	7.7 %	3.6 %
<b>Water Policy</b>			
Number of Positions	26.0	27.0	26.0
% change from prior year	0.0 %	3.8 %	(3.7) %
<b>Water Operations</b>			
Number of Positions	69.0	70.0	71.0 **
% change from prior year	4.5 %	1.4 %	1.4 %
<b>Recycling Operations</b>			
Number of Positions	40.0	43.0	48.0
% change from prior year	2.6 %	7.5 %	11.6 %
<b>Maintenance</b>			
Number of Positions	38.0	48.0	50.0 *
% change from prior year	5.6 %	26.3 %	4.2 %
Total Number of Positions	323.0	336.0	352.0
Number of Changed Positions	<u>7.0</u>	<u>13.0</u>	<u>16.0</u>
% Change From Prior Year	<u>2.2 %</u>	<u>4.0 %</u>	<u>4.8 %</u>

\* Five positions in budget not anticipated being filled until January 2016. The budgeted labor dollars anticipates 1/2 year of salaries; the position count identifies the additional bodies.

\*\* Operations Administration is part of Water Operations



# LABOR

## SUMMARY OF SALARIES AND WAGES

(in thousands)

	Total	Administration	Finance & Administrative Services	Engineering	Water Quality	Water Policy	Water Operations	Recycling Operations	Maintenance
Current Authorized:									
Gross Pay	\$27,196	\$1,226	\$5,586	\$3,959	\$2,099	\$2,485	\$4,916	\$3,246	\$3,680
Annual Increase	917	35	172	134	66	95	178	101	136
Sub-Total Regular Salaries & Wages	28,113	1,261	5,758	4,093	2,165	2,580	5,094	3,347	3,816
New Positions:									
Gross Pay	971	129	244	50	89	0	70	265	125
Total Regular Salaries & Wages	29,084	1,390	6,002	4,143	2,254	2,580	5,164	3,612	3,940
Health Insurance and Workers Comp	6,392	300	1,292	900	500	600	1,100	800	900
Employment Tax & PERS Contributions	8,428	400	1,828	1,200	700	700	1,500	1,000	1,100
Total Regular Salaries & Wages, health Insurance and employment taxes	\$43,904	\$2,090	\$9,122	\$6,243	\$3,454	\$3,880	\$7,764	\$5,412	\$5,940
Employee Count:	352	13	75	40	28	27	71	48	50

### Regular Salaries and Wages

FY 2014-15 Labor	\$29,097
Forecasted adjustment for Vacancies	(1,600)
Additions	896
Promotions	161
COLA	321
Merit/Other	209
<b>FY 2015-16 Labor</b>	<b>\$29,084</b>



# BENEFITS AND EMPLOYMENT TAX

## HEALTH INSURANCE AND EMPLOYER CONTRIBUTIONS

	<u>FY 2014-15</u>	<u>FY 2015-16</u>	<u>Change</u>
<b>Insurance and Benefits</b>			
Health Ins Actives	\$4,574,700	\$4,447,000	(\$127,700)
Dental Premiums	440,500	406,500	(34,000)
Wrkrs Comp Premiums	564,000	645,000	81,000
Wrkrs Comp Paid Claims	291,800	400,000	108,200
Life Ins Actives	201,500	198,000	(3,500)
LT Disability Premiums	134,500	96,500	(38,000)
Medical Premiums - Retirees	121,500	111,000	(10,500)
Vision Benefit Premiums	77,500	76,000	(1,500)
Life Ins Retirees	14,000	12,200	(1,800)
	<u>\$6,420,000</u>	<u>\$6,392,200</u>	<u>(\$27,800)</u>
<b>Employment Tax and PERS</b>			
PERS Employer Portion	\$5,161,000	\$5,333,000	\$172,000
PERS In Excess Of ARC	2,113,400	1,940,200	(173,200)
401A Employer Portion	800,200	698,300	(101,900)
PERS Employee Portion	398,600	0	(398,600)
Medicare Tax	406,200	406,900	700
St Unemployment Tax	20,000	50,000	30,000
	<u>\$8,899,400</u>	<u>\$8,428,400</u>	<u>(\$471,000)</u>

**FY 2015/16 Budget  
Summary of Proposed Budgeted Personnel Changes**

<b>Proposed Changes to Existing Budgeted Positions</b>						
<b>Dept</b>	<b>Job Title</b>	<b>Current Sal Grade</b>	<b>Proposed Action</b>	<b>Proposed Job Title</b>	<b>Proposed Sal Grade</b>	<b>Salary Costs</b>
110	Executive Assistant	U26.N	Upgrade 1 Position	Administrative Assistant	U29.N	\$4,776
110	Government Relations Manager	U19.E	Upgrade 1 Position	Governmental Relations Officer	U23.E	\$9,120
120	Public Affairs Specialist	29.N	Upgrade 1 Position	Public Affairs Analyst	10.E	\$3,204
250	Applications Analyst	U15.E	Upgrade 1 Position	Senior Applications Developer	U18.E	\$10,488
250	Applications Analyst	U15.E	Upgrade 1 Position	Senior Database Administrator	U18.E	\$10,488
300	Engineering Technician II	25.N	Downgrade 1 Position	Engineering Technician I	20.N	-\$3,324
300	Senior Office Specialist	19.N	Upgrade 1 Position	Engineering Technician I	20.N	\$636
300	Engineer	17.E	Downgrade 1 Position	Associate Engineer	14.E	-\$6,720
300	Assistant Engineer	10.E	Upgrade 1 Position	Associate Engineer	14.E	\$7,356
300	Right of Way & Real Property Manager	13.E	Title Change only	Right of Way Agent	13.E	\$0
640	Regulatory Compliance Manager	U17.E	Reclass 1 Position	Regulatory Compliance Manager	U18.E	\$2,220
640	Analyst	10.E	Title Change only	Regulatory Compliance Analyst	10.E	\$0
640	Senior Scientist	31.N	Downgrade 1 Position	Scientist	26.N	-\$3,984
710	Recycled Water Supervisor	U11.E	Downgrade 1 Position	Recycled Water Project Specialist	29.N	-\$8,856
<b>Subtotal</b>						<b><u>\$25,404</u></b>

<b>Proposed Eliminated Positions</b>			
<b>Dept</b>	<b>Job Title</b>	<b>Sal Grade</b>	<b>Salary Costs</b>
430	Asst Construction Services Manager	U15.E	-\$95,256
<b>Subtotal</b>			<b><u>-\$95,256</u></b>

<b>Proposed New Positions</b>				
<b>Dept</b>	<b>Job Title</b>	<b>Sal Grade</b>	<b>Salary Costs</b>	
110	Office Specialist	15.N	\$50,208	
140	Human Resources Analyst	U31.N	\$78,516	
220	Customer Service Supervisor	U10.E	\$80,088	
220	Customer Service Specialist III	21.N	\$58,680	
220	Customer Service Specialist II	17.N	\$52,728	
220	Customer Service Specialist II	17.N	\$52,728	
300	Office Specialist	15.N	\$50,208	
420	Operator II	27.N	\$34,926	Hire 1/1/2016
420	Operator II	27.N	\$34,926	Hire 1/1/2016
515	Senior Wetlands Specialist	29.N	\$74,028	
550	Operator II	27.N	\$69,852	
550	Operator II	27.N	\$34,926	Hire 1/1/2016
550	Operator I	20.N	\$57,000	
550	Operator I	20.N	\$28,500	Hire 1/1/2016
630	Laboratory Supervisor	U13.E	\$88,836	
820	Automation Programmer	13.E	\$88,836	
820	Instrumentation Technician	28.N	\$35,958	Hire 1/1/2016
<b>Subtotal</b>			<b><u>\$970,944</u></b>	



# LABOR

## *PROPOSED LABOR CHANGES*

### **Proposed Personnel Budget Changes Reflected in the FY 2015/16 Operating Budget**

#### **Title and Salary Grade Changes for Existing Positions/Job Titles:**

##### ***General Manager's Office (110):***

Executive Assistant (Salary Grade U26.N) ➔ Administrative Assistant (Salary Grade U29.N)

This position upgrade is being requested to more properly reflect the higher level duties and responsibilities of the position.

Government Relations Manager (Salary Grade U19.E) ➔ Governmental Relations Officer (Salary Grade U23.E)

This title change, upgrade, and department transfer is being requested to more properly reflect the higher level duties and responsibilities of this position.

##### ***Public Affairs (120):***

Public Affairs Specialist (Salary Grade 29.N) ➔ Public Affairs Analyst (Salary Grade 10.E)

This position upgrade is being requested to more properly reflect the higher level duties and responsibilities of the position.

##### ***Information Services (250):***

Applications Analyst (Salary Grade U15.E) ➔ Sr. Applications Developer (Salary Grade U18.E)

This position upgrade is being requested to more properly reflect the duties and responsibilities of the position and meet the business needs of the department.

Applications Analyst (Salary Grade U15.E) ➔ Sr. Database Administrator (Salary Grade U18.E)

This position upgrade is being requested to more properly reflect the duties and responsibilities of this position and meet the business needs of the department.





# LABOR

## *PROPOSED LABOR CHANGES*

### **Engineering (300):**

Sr. Office Specialist (Salary Grade 19.N) ➔ Engineering Technician I (Salary Grade 20.N)

This position upgrade is being requested to more properly reflect the duties and responsibilities of this position and meet the staffing needs of the department.

Engineering Technician II (Salary Grade 25.N) ➔ Engineering Technician I (Salary Grade 20.N)

This position downgrade is being requested to more properly reflect the duties and responsibilities of this position and meet the staffing needs of the department.

Assistant Engineer (Salary Grade 10.E) ➔ Associate Engineer (Salary Grade 14.E)

This position upgrade is being requested to allow the position to be flexibly staffed at either the Assistant or Associate level.

Engineer (Salary Grade 17.E) ➔ Associate Engineer (Salary Grade 14.E)

This position upgrade is being requested to allow the position to be flexibly staffed at either the Assistant or Associate level.

Right of Way and Real Property Manager (Salary Grade 13.E) ➔ Right of Way Agent (Salary Grade 13.E)

This title change is being requested to more properly reflect the duties and responsibilities of this position.

### **Regulatory Compliance (640):**

Regulatory Compliance Manager (From Salary Grade U17.E to Salary Grade U18.E)

This reclassification is being requested to more properly reflect the increased duties and new responsibilities of this position.

Analyst (Salary Grade 10.E) ➔ Regulatory Compliance Analyst (Salary Grade 10.E)

This title change is being requested to more properly reflect the duties and responsibilities of this position.

Senior Scientist (Salary Grade 31.N) ➔ Scientist (Salary Grade 26.N)

This position downgrade is being requested to more properly reflect the duties and responsibilities of this position.



# LABOR

## *PROPOSED LABOR CHANGES*

### ***Recycled Water (710):***

Recycled Water Supervisor (Salary Grade U11.E) → Recycled Water Project Specialist (Salary Grade 29.N)

This position downgrade is being requested to more properly reflect the duties and responsibilities of this position and to meet the staffing needs of the department.

### **Eliminated Positions:**

#### ***Constructions Services (430):***

Assistant Construction Services Manager (Salary Grade U15.E)

This position was originally created for succession planning purposes to prepare the incumbent for a manager-level position. The incumbent was recently promoted and this position is not needed for the upcoming fiscal year.

### **New Positions:**

#### ***General Manager's Office (110):***

Office Specialist (Salary Grade 15.N) – one position

This position will be used for records retention for the GM's office, Engineering, and Finance.

#### ***Human Resources (140):***

Human Resources Analyst (Salary Grade U31.N) – one position

This position will be designated to the recruitment and employment function in the HR department.

#### ***Customer Service (220):***

Customer Service Supervisor (Salary Grade U10.E) – one position

This position will allow department to balance the number of employees per supervisor for better span of control for employee development, coaching, and mentoring.

Customer Service Specialist III (Salary Grade 21.N) – one position

This position is required to process new accounts, construction applications, billing, and adjustment in CC&B, all requiring higher level skills.

Customer Service Specialist II (Salary Grade 17.N) – two positions

These positions are required to reduce customer wait times and to handle commercial billing calls, field problems and increased customer contact due to growing customer base.



# LABOR

## *PROPOSED LABOR CHANGES*

### ***Engineering (300):***

Office Specialist (Salary Grade 15.N) – one position

This position is needed due to an increase in workload in the development services group with the implementation of CC&B and accompanying new duties.

### ***Water Operations (420):***

Operator II (Salary Grade 27.N) – two positions

These positions were originally reviewed by the E & O Committee as part of the Baker Water Treatment Plant staffing plan. These positions will not be needed until January 2016.

### ***NTS Operations (515):***

Senior Wetlands Specialist (Salary Grade 29.N) – one position

This position is required for proper operations and oversight due to the increasing numbers of NTS sites.

### ***Recycling Operations (550):***

Operator II (Salary Grade 27.N) – two positions

These positions were originally reviewed by the E & O Committee as part of the Biosolids and Energy Recovery Facilities staffing plan. One of these positions will be filled in July 2015. The other position will not be needed until January 2016.

Operator I (Salary Grade 20.N) – two positions

These positions were originally reviewed by the E & O Committee as part of the Biosolids and Energy Recovery Facilities staffing plan. One of these positions will be filled in July 2015. The other position will not be needed until January 2016.

### ***Water Quality Analysis (630):***

Laboratory Supervisor (Salary Grade U13.E) – one position

This position will allow department to balance the number of employees per supervisor for better span of control. With the addition of this position, the chemistry section will be split into inorganic and organic chemistry. This position will help handle the new analytics associated with new facilities currently being constructed.

### ***Electrical Services (820):***

Automation Programmer (Salary Grade 13.E) – one position

This position will fulfill staffing needs associated with the growing responsibilities required for planning, maintenance, administration, and implementation of the SCADA system.



# LABOR

## *PROPOSED LABOR CHANGES*

Instrumentation Technician (Salary Grade 28.N) – one position

This position was originally reviewed by the E & O Committee as part of the Baker Water Treatment Plant staffing plan. This position will not be needed until January 2016.

April 13, 2015  
Prepared and  
Submitted by: L. Bonkowski  
Approved by: P. Cook

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the March 23, 2015 Regular Board Meeting minutes for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE MARCH 23, 2015 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Minutes of March 23, 2015 Regular Board Meeting

## EXHIBIT "A"

### MINUTES OF REGULAR MEETING – MARCH 23, 2015

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President LaMar on March 23, 2015 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: None.

Also Present: General Manager Cook, Acting Executive Director of Engineering and Water Quality Mori, Executive Director of Finance and Administration Clary, Executive Director of Operations Shields, Executive Director of Water Policy Weghorst, Director of Public Affairs Beeman, Director of Human Resources Roney, Director of Treasury and Risk Management Jacobson, Assistant Director of Recycling Operations Lee, Assistant Director of Operations Roberts, Legal Counsel Arneson, Secretary Bonkowski, Ms. Christine Compton, Mr. Barkev Meserlian, Ms. Gretchen Ronin, Mr. Jim Reed, Mr. Bruce Newell, Mr. Jeff Brown, Mr. John Dayer, Mr. Ian Swift and other members of the public and staff.

### COMMUNICATIONS TO THE BOARD

Written and Oral Communications: None.

Items too Late to be Agendized: None.

### CONSENT CALENDAR

On MOTION by Reinhart, seconded and unanimously carried, CONSENT CALENDAR ITEMS 3 THROUGH 10 WERE APPROVED AS FOLLOWS:

3. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the March 9, 2015 Regular Board Meeting be approved as presented.

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

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

5. 2015 STATE LEGISLATIVE UPDATE

Recommendation: That the Board adopt a "SUPPORT" position on AB 149 (Chávez) and an "OPPOSE" position on SB 143 (Stone).

CONSENT CALENDAR (Continued)

6. FEBRUARY 2015 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for February 2015, and Disclosure Report of Reimbursements to Board members and staff; approve the February 2015 Summary of Payroll Ach payments in the total amount of \$1,460,738 and approve the February 2015 Accounts Payable Disbursement Summary of Warrants 355667 through 356619, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$26,265,154.

7. DYER ROAD WELLFIELD WELL NO. 5 REHABILITATION FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Dyer Road Wellfield Well No. 5 Rehabilitation, project 11693 (4326); 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.

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

Recommendation: That the Board authorize the General Manager to execute a Reimbursement Agreement with the City of Irvine for its annual slurry seal and pavement rehabilitation project, Bid No. 15-1003.

9. PLANNING AREA 6 (PORTOLA SPRINGS) CAPITAL IMPROVEMENTS

Recommendation: That the Board authorize a budget decrease for Enclave 3 Improvements, project 30426 (4557), in the amount of <\$451,000>, from \$766,700 to \$315,700 and authorize the addition of bridge and trail improvements, project 30508 (5763), to the FY 2014-15 capital budget in the amount of \$132,000 for the design and construction of recycled water improvements under an existing supplemental reimbursement agreement with the Irvine Community Development Company for Planning Area 6 (Portola Springs).

10. APPROVAL OF MEMORANDUM RELATIVE TO THE BOARD, COMMITTEE AND OTHER ASSIGNMENTS, AND APPROVAL OF AGENCY AND OUTSIDE ORGANIZATION BOARD REPRESENTATION AT MEETINGS/EVENTS FOR 2015

Recommendation: That the Board approve the Memorandum dated March 23, 2015 entitled Officers of the Board, Committees and Other Assignments; approve attendance for the meetings and events for the Board's assigned representatives for calendar year 2015 as delineated in the write-up; and adopt the following resolution rescinding Resolution No. 2013-19 by title:

CONSENT CALENDAR (Continued)

RESOLUTION NO. 2015-7

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA  
RESCINDING RESOLUTION NO. 2013-19 PLACING IN  
NOMINATION PEER A. SWAN AS CHAIR OF THE  
ASSOCIATION OF CALIFORNIA WATER AGENCIES, REGION 10

ACTION CALENDAR

SEWER MANHOLE REHABILITATION SERVICES CONTRACT AWARD

General Manager Cook reported that the Fiscal Year 2014-15 Sewer General System Modification Project consists of repairing and rehabilitating sewer manhole structures at various locations within IRWD's service area. Staff distributed a Request for Proposal on August 19, 2014 to multiple qualified contractors with a proposal due date of August 28, 2014. Staff received two responsive bids from Zebron and Sancon Engineering; Zebron was determined to be the lowest responsive bidder.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on March 18, 2015. On MOTION by Reinhart, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONTRACT AWARD WITH ZEBRON IN THE AMOUNT NOT TO EXCEED \$825,000 FOR THE PERIOD OF APRIL 1, 2015 THROUGH JUNE 30, 2017.**

OPERATIONS DATABASE MANAGEMENT SYSTEM

Assistant Director of Recycled Operations Lee reported that the District's Water and Recycling Operations, Water Quality, and Compliance Departments utilize and integrate operational and laboratory data from various sources such as the Supervisory Control and Data Acquisition (SCADA) system and Laboratory Information Management System (LIMS) to prepare compliance reports, monitor plant processes, and track Key Performance Indicators (KPIs) on a daily basis. Mr. Lee said that staff manually transfers data from SCADA and LIMS into Microsoft Excel files to compile, calculate, and store data to prepare reports. He said that this method of manually transferring data from multiple sources is labor intensive and can potentially lead to quality control issues with the data and related reports. In addition, data compiled in this manner cannot be easily formatted to meet the regulatory reporting requirements mandated by the State Water Resources Control Board using California Integrated Water Quality System (CIWQS).

Director Withers left the Board room at 5:10 p.m.

Mr. Lee said that as a result of these challenges, staff jointly developed a list of requirements for a single system that will provide benefits to all departments involved. Staff identified and evaluated four commercially available software programs that were developed specifically for use in the water and recycling industry including Dream Report by Invesys, WaterTrax by



WaterTrax, Intelligent Water by Element Blue, and WIMS by Hach. He said that based on the results of the scoring, staff selected the Hach WIMS program.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on March 18, 2015. On MOTION by Reinhart, seconded and carried (4-0), (LaMar, Reinhart, Matheis and Swan voting aye, and Withers absent), THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONTRACT IN THE AMOUNT OF \$208,105 WITH HACH TO PURCHASE AND IMPLEMENT THE WATER INFORMATION MANAGEMENT SYSTEM DATABASE MANAGEMENT PROGRAMS.

#### SAN JOAQUIN MARSH AND NATURAL TREATMENT SYSTEM FACILITIES THREE-YEAR MAINTENANCE SERVICES CONTRACT

General Manager Cook reported that landscape and maintenance contract services are required within the San Joaquin Marsh and Natural Treatment System (NTS) to control and remove native and non-native vegetation as well as irrigation maintenance. This contract will include several new NTS sites that the District has acquired since the last three-year contract. Mr. Cook said that 19 sites will be covered encompassing a total area of 435 acres. Five landscape maintenance companies were invited to participate in the Request for Proposal (RFP) process in September 2014 based on their experience with the District, and their experience with projects involving natural habitat restoration, especially wetlands. Of these five companies, one did not participate in the walk-through (Habitat Restoration Sciences); two did not respond to the RFP (Nature's Image and Valley Crest); and one submitted a "no bid" response (Nakae & Associates). Only one company, TruGreen Landcare, responded with a bid and formal proposal to provide landscaping services for the San Joaquin Marsh and NTS sites.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on March 18, 2015. On MOTION by Reinhart, seconded and carried, (4-0), (LaMar, Reinhart, Matheis and Swan voting aye, Withers absent), THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONTRACT WITH TRUGREEN LANDCARE IN THE AMOUNT OF \$2,003,904 FOR LANDSCAPE MAINTENANCE CONTRACT SERVICES FOR A THREE-YEAR TERM.

#### LANDSCAPE AND IRRIGATION CONTRACT THREE-YEAR AWARD

General Manager Cook reported that the landscape and irrigation contracts for the District's properties expired on October 31, 2014 and were extended on a month-to-month basis until new contracts are awarded.

Executive Director of Operations Sheilds reported that an Request for Proposal was sent to five contractors for landscape and irrigation maintenance services at 146 District-owned sites divided into seven geographical areas. Mr. Sheilds said that bids were received from four contractors including Tropical Plaza Nursery, Inc., Marina Landscape, Inc., Mariposa Landscapes, Inc., and TruGreen LandCare, Inc. The most qualified bidder has been selected for each geographical area. He said that this bidding and award process has resulted in an overall cost savings of \$114,573 by awarding the work to the most qualified bidder in each geographic area rather than to the single lowest overall bidder. Staff has selected both Tropical Plaza Nursery, Inc. and

Marina Landscape, Inc. to perform work at various sites. Tropical is currently performing satisfactory work for the District and Marina Landscape, Inc. has provided references that rendered positive reviews of its performance.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on March 18, 2015. Director Swan commented that on a few landscape maintenance sites were either overgrown or required new landscaping. Director Withers returned to the Board room at 5:20 p.m. On MOTION by Reinhart, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE THREE-YEAR LANDSCAPE AND IRRIGATION MAINTENANCE CONTRACTS WITH TROPICAL PLAZA NURSERY, INC. FOR \$916,956, AND MARINA LANDSCAPE, INC. FOR \$221,502.**

#### MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONTRACT CHANGE ORDER

Acting Director of Engineering and Water Quality Mori said that staff has negotiated with Filanc/Balfour-Beatty to resolve two items contained in Contract Change Order No. 25. Mr. Mori said that the first item on the change order is for lightning protection for the methane digesters. He said that the three methane digesters will be approximately 80 feet above ground elevation and because the digesters are among the tallest structures on the biosolids site, lightning protection is required for each of the methane digesters. Although lightning protection was specifically required for the Solids Handling Building and the Digester Control Building, the methane digesters were not specifically mentioned as requiring lightning protection. He said that since there was ambiguity in the Contract Documents, the Contractor was requested to provide lightning protection for the methane digesters.

Mr. Mori said that the second item is for two deflagration quench tubes to be installed outside of the dryer room which were not included in the bid documents. He said that for additional safety, the deflagration quench tubes ensure that any possible deflagration is suppressed.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on March 18, 2015. On MOTION by Reinhart, seconded and unanimously carried, **THE BOARD APPROVED CONTRACT CHANGE ORDER NO. 25 WITH FILANC/BALFOUR-BEATTY IN THE AMOUNT OF \$280,575.97 TO PROVIDE LIGHTNING PROTECTION FOR THE THREE METHANE DIGESTERS AND TO INSTALL TWO DEFLAGRATION QUENCH TUBES OUTSIDE OF THE DRYER ROOM OF THE SOLIDS HANDLING FACILITY FOR THE MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES, PROJECT 20847 (1617).**

#### 2015 COMPENSATION SURVEY RESULTS – SALARY SCHEDULE

Director of Human Resources Roney reported that a comprehensive compensation survey was recently conducted by the Human Resources department with the last survey performed in 2008 due to the past economic conditions. Ms. Roney said as the economy began to improve, it was anticipated that the benchmark survey process would be reinstated. In early 2013, a review of the District's compensation survey methodology was conducted by Ralph Anderson &

Associates, the results of which were presented to the Board of Directors on May 28, 2013. She said that a benchmark salary survey was conducted this year to further analyze salary market data for selected benchmark classifications. Recommendations from the 2013 Ralph Anderson & Associates study were incorporated into this year's benchmark salary survey methodology and included: 1) a reduction in the number of agencies surveyed in order to focus on most productive matches; 2) a change in the salary range control point from mid-point to maximum as industry best practice; 3) a change in market data comparison from mean to median as a more stable statistical measure; and 4) that surveys to be conducted on three-year intervals. She further said that as a result of this year's benchmark salary survey, 14 separate classifications affecting 36 incumbents are recommended for upgrade, and that minimal competitive wage adjustments are recommended for the affected classifications and incumbents.

Director Swan reported that this item was reviewed and approved by the Finance and Personnel Committee meeting on March 16, 2015. On MOTION by Swan, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO IMPLEMENT COMPETITIVE WAGE ADJUSTMENTS EFFECTIVE APRIL 1, 2015, APPROVE THE REVISED SALARY GRADE SCHEDULE EFFECTIVE APRIL 1, 2015; AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:**

RESOLUTION NO. 2015-8

**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE IRVINE RANCH WATER DISTRICT  
RESCINDING RESOLUTION NO. 2014-52  
AND ESTABLISHING REVISED SCHEDULE  
OF POSITIONS AND SALARY RATE RANGES**

DESIGN OF STOCKDALE WEST TURNOUT FACILITIES PROJECT

Executive Director of Water Policy Weghorst reported that in 2010, IRWD purchased the Stockdale West Ranch property located west of the Strand Ranch. Rosedale-Rio Bravo Water Storage District (Rosedale) owns the Stockdale East Property located to the east of the Strand Ranch. Mr. Weghorst said that the Stockdale Integrated Banking Project (Stockdale Project) is being developed by Rosedale and IRWD to allow both agencies to utilize available storage in the Kern River Fan Area by constructing and operating recharge and recovery facilities on each agency's respective Stockdale properties. He said that this project will integrate the capacities and facilities into Rosedale's Conjunctive Use Program. The purpose of IRWD's participation in the project is to provide dry year water supply reliability for IRWD's customers.

Mr. Weghorst said that the Strand Ranch exhibits large infiltration rates for the first few months of a recharge event. As a result, it can take numerous weeks before water is available to the furthest west recharge basins on the property and additional days before pond water elevations are high enough to drive water through the existing siphon to the Stockdale West Ranch recharge basins. An additional Cross Valley Canal (CVC) turn-out on the west side of the Strand Ranch is needed to expedite the delivery of water to the Stockdale West Ranch and to more quickly fill the Strand Ranch recharge basins. The CVC turn-out would increase the amount of water recharged at the Stockdale West and Strand Ranch recharge basins during the first 45 days of a

recharge event. Staff estimates the additional CVC turnout could increase the diversion and recharge of up to 9,000 acre-feet on the Stockdale West and Strand Ranch projects during the first 45 days of a single recharge event. The value of this additional water during dry periods is estimated to be about \$3.1 million.

Mr. Weghorst said that IRWD retained Dee Jaspar & Associates (DJA) to prepare a preliminary design report (PDR) that evaluated various turnout alternatives for conveying recharge water to the Stockdale West and Strand Ranch projects taking into consideration existing facilities, hydraulic capacities, construction and operations costs, as well as constructability and operational issues. Based on DJA's analysis, the preferred alternative includes constructing a 100 cubic feet per second (cfs) turnout from the CVC to a 60" pipeline that will convey water by gravity to the Stockdale West and Strand Ranch recharge basins. This alternative will allow 100 cfs to be diverted when the CVC is flowing in either forward or reverse flow conditions.

Mr. Weghorst said that construction of the CVC turnout will require extensive coordination with the Kern County Water Agency (KCWA) which will include submitting design and shop drawings for review and approval, and submitting inspection and testing records to KCWA on a regular basis. Staff recommends that DJA prepare final designs, contract documents and assist with the bidding phase for the Stockdale West Turnout Facilities Project. He said that staff has negotiated with DJA a scope of work, fee and schedule for these services.

Director Swan reported that this item was reviewed and approved by the Water Banking Committee on March 19, 2015. On MOTION by Swan, seconded and unanimously carried, **THE BOARD AUTHORIZED THE ADDITION OF THE STOCKDALE WEST TURNOUT FACILITIES, PROJECT 11875 (6145) IN THE AMOUNT OF \$2,557,500 TO THE FY 2014-15 CAPITAL BUDGET; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH DEE JASPAR & ASSOCIATES, INC. IN THE AMOUNT OF \$114,640 FOR ENGINEERING DESIGN AND BID SUPPORT SERVICES FOR THE PROJECT.**

#### GENERAL MANAGER'S REPORT

General Manager Cook provided an update on the LAFCO application for Orange County Water District's Service Area 7 that was submitted today. He said that staff will be submitting a Board resolution at the next Board meeting as part of the process, and recognized staff for all of their efforts.

Mr. Cook reported that the agricultural replenishment assessment issue with the Orange County Water District appears to have been resolved based on a recent court case.

He further reported that at the WaterReuse California Annual Conference held last week the District was awarded the Large Recycling Agency of the Year Award which Director Reinhart accepted on behalf of the District.

## DIRECTORS' COMMENTS

Director Withers reported on his speaking engagement at the City of Lake Forest's Kiwanis Club last week, a LAFCO Strategic Planning meeting, and that tomorrow he will be attending its budget meeting. He said that this Wednesday he is planning to attend OCSD's Board meeting and on Thursday will be attending the Orange County Forum.

Director Swan reported on his attendance at a recent OCWD Board meeting, a Sea and Sage annual dinner, a meeting with Ms. Jan Flory relative to OCWD issues, and a WACO Planning meeting. He said that former Supervisor Moorlach was chair of the Newport Bay Watershed Executive Committee and that Supervisor Michele Steel will be his replacement.

Director Reinhart reported his attendance at the annual WateReuse conference in Los Angeles, and the Irvine Police Department annual awards banquet.

Director Matheis reported on her attendance at a California Water Policy conference in Claremont and that she will be attending a Coastal Coalition meeting this Thursday relative to drought issues, and a *Women in Water* meeting tomorrow.

Director LaMar reported on his attendance at an NROC quarterly Board meeting.

IRWD's Consultant Mr. Jim Reed reported on various meetings he attended on the District's behalf.

## CLOSED SESSION

President LaMar reported that the following Closed Sessions would be held this evening:

CONFERENCE with Labor Negotiators - Government Code Section 54957.6: Agency Designated Representatives: Paul Cook and Jenny Roney Employees Organization: Irvine Ranch Water District Employees Association

CONFERENCE with legal counsel relative to anticipated litigation pursuant to Government Code Section 54956.9(d)(4) initiation of litigation (two potential cases); and

## OPEN SESSION

Following the Closed Session, the meeting was reconvened with all Directors present. President LaMar said that there was no action to report.

ADJOURNMENT

There being no further business, President LaMar adjourned the meeting

APPROVED and SIGNED this 13<sup>th</sup> day of April, 2015.

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President, IRVINE RANCH WATER DISTRICT


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Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson,  
Wiles & Giannone

April 13, 2015  
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

- 3/24/15 South Orange County Agencies' Meeting
- 4/06/15 Briefing City of Tustin Council Meeting relative to OCSD Service Area 7
- 4/14/15 Monthly Discussion w/General Manager Paul Cook re: District Activities
- 4/15/15 California Environmental Dialogue Long View Committee, San Francisco, CA
- 4/21/15 South Orange County Agencies' Meeting
- 4/29/15 MWDOC Board and Member Agencies' Forum

Mary Aileen Matheis

- 4/15/15 Orange County Forum

Douglas Reinhart

- 4/07/15 IRWD Briefing w/Lake Forest City Council Members Jim Gardner & Tom Cagley
- 4/21/15 South Orange County Agencies' Meeting

Peer Swan

- 4/15/15 Orange County Water Association Meeting

John Withers

- 3/20/15 Board member presentation at Lake Forest Kiwanis Club
- 4/07/15 IRWD Briefing w/Lake Forest City Council Members Jim Gardner & Tom Cagley
- 4/10/15 El Toro Water District Dedication of Water Recycling Project
- 4/15/15 Orange County Water Association Meeting
- 4/30/15 ISDOC Quarterly Meeting

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

April 13, 2015

Prepared by: Tanja Fournier

Submitted by: Cheryl Clary/Rob Jacobson

Approved by: Paul Cook 

## CONSENT CALENDAR

### SERIES 1993 BOND LETTER OF CREDIT SUBSTITUTION

#### SUMMARY:

In March 2015, the Finance and Personnel Committee (Committee) approved replacing the Bank of New York Mellon (BNYM) letter of credit (LOC) on the District's Series 1993 bonds with a new three and one-half year LOC from US Bank at 0.33% annually. Staff, underwriter Merrill Lynch and legal counsel have prepared the required Remarketing Statement. Staff recommends the Board adopt a resolution approving the Remarketing Statement and certain other actions in connection with replacement of the LOC.

#### BACKGROUND:

The District currently has an LOC on the Series 1993 Bonds with BNYM, which will expire on June 2, 2015. Staff requested that Bank of New York provide pricing options to extend the LOC; however, BNYM declined to provide a proposal due to its decision to restrict further extensions and issuance of municipal letters of credit. Accordingly, staff requested proposals from the District's other LOC providers including US Bank, Bank of America and Sumitomo Mitsui. Of the three banks, US Bank is the highest rated bank (Aa3/AA-/AA-) and provided the most competitive pricing at 0.33% per year for a three and one-half year LOC commitment.

At its March 2015 meeting, the Committee approved replacing the BNYM LOC on the District's Series 1993 bonds with a new LOC from US Bank at 0.33% annually. At its April 2015 meeting, the Committee approved the required Remarketing Statement reflecting the District's most recent financial information, updated disclosure information and other pertinent updates for the referenced bond issue, which is attached as Exhibit "A". Legal counsel has prepared a resolution for adoption by the Board approving the Remarketing Statement and certain other actions in connection with replacement of the LOC, which is attached as Exhibit "B".

#### FISCAL IMPACTS:

Based on the average principal amount of the Series 1993 Bonds outstanding between Fiscal Years 2015-2016 and 2018-2019, the US Bank LOC fee will cost an average of \$110,500 annually, and legal, rating agency, trustee, and administrative expenses are estimated to total \$83,000 for the LOC replacement. These fees are included in the Fiscal Year 2014-2015 budget.



COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on March 3, 2015 and April 6, 2015.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2015-\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE IRVINE RANCH WATER DISTRICT  
APPROVING REMARKETING STATEMENT AND  
AUTHORIZING CERTAIN ACTIONS IN CONNECTION  
WITH SUBSTITUTION OF LETTER OF CREDIT  
(CONSOLIDATED SERIES 1993)

LIST OF EXHIBITS:

Exhibit "A" – Remarketing Statement for the Series 1993 Bonds  
Exhibit "B" – Resolution Approving the Remarketing Statement

**NOT A NEW ISSUE—BOOK-ENTRY ONLY****RATINGS: See the caption "RATINGS"**

On May 20, 1993, Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone (formerly known as Bowie, Arneson, Kadi, Wiles & Giannone), Co-Bond Counsel to the District, delivered their respective opinions in connection with the issuance of the Series 1993 Bonds. Such opinions stated that, based upon an analysis of then existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 1993 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. It was further the opinion of Co-Bond Counsel, as of May 20, 1993, that interest on the Series 1993 Bonds is not a specific preference item for purposes of federal individual or corporate alternative minimum taxes, although Co-Bond Counsel observed that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Co-Bond Counsel have not taken and do not intend to take any action to update such opinions or to determine if interest on the Series 1993 Bonds is presently excluded from gross income for federal income tax purposes or exempt from State of California personal income taxes. In connection with the delivery of the Letter of Credit, Co-Bond Counsel will deliver their opinions that such delivery of the Letter of Credit will not, in and of itself, result in the inclusion of interest on the Series 1993 Bonds in gross income for purposes of federal income taxation. See the caption "TAX MATTERS."

**\$34,600,000**

**BONDS OF IRVINE RANCH WATER DISTRICT  
CONSOLIDATED SERIES 1993  
Constituting the Consolidated Several General Obligations of  
Improvement District Nos. 125, 225 and 240**

**Dated: Date of Initial Delivery****Price: 100%****Due: April 1, 2033**

*This Remarketing Statement replaces the Remarketing Statement dated June 4, 2012 in its entirety.*

The Series 1993 Bonds were issued by the District and constitute the consolidated, several general obligations of Improvement District Nos. 125, 225 and 240 (collectively, the "Improvement Districts"). The Improvement Districts, along with other improvement districts, are geographical subdivisions of the District through which the District funds capital improvements. The Series 1993 Bonds are payable from: (1) the following sources, in each case in an amount proportionate to the principal amount of Series 1993 Bonds allocated to each Improvement District: (i) annual *ad valorem* assessments on taxable land in the Improvement Districts; (ii) water or sewer charges, as applicable, collected in the Improvement Districts in the District's discretion in lieu of assessments; (iii) proceeds from the sale of property in the Improvement Districts for delinquent assessments; and (iv) certain moneys and investment earnings in certain funds and accounts created under the Indenture authorizing the Series 1993 Bonds, as more fully described herein; and (2) proceeds of 1% *ad valorem* property taxes allocated to the District and pledged to payment of the Series 1993 Bonds on a parity with certain outstanding bonds of the District. See the caption "SECURITY FOR THE SERIES 1993 BONDS—General." The proceeds of the Series 1993 Bonds were used to finance certain capital improvements of the District and to pay the costs of issuance of the Series 1993 Bonds.

The payment of principal and Purchase Price of, and interest on, the Series 1993 Bonds will be supported by an irrevocable, direct-pay letter of credit (the "Letter of Credit") issued by U.S. Bank National Association.

[U.S. BANK LOGO]

The Letter of Credit will permit The Bank of New York Mellon Trust Company, N.A., as trustee under an Indenture of Trust, dated as of May 1, 1993, by and between the Trustee and the District, as supplemented by the First Supplemental Indenture of Trust, dated as of June 1, 2014, to draw up to an amount sufficient to pay: (i) the principal of the Series 1993 Bonds when due; (ii) the Purchase Price of Series 1993 Bonds that are purchased pursuant to tenders and that are not remarketed; and (iii) up to [ ] days' interest accrued on the Series 1993 Bonds, all as described more completely in this Remarketing Statement. The Letter of Credit becomes effective on [May 7], 2015 and expires on [ ], 2018, or on the earlier occurrence of certain events described in this Remarketing Statement. See the captions "THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT" and "THE BANK." On the fifth Business Day prior to the expiration or termination of the Letter of Credit, the Series 1993 Bonds will be subject to mandatory tender for purchase.

The Series 1993 Bonds bear interest in a Daily Mode at the Daily Rate, which will be computed on the basis of a year of 365 days (366 days in leap years) and the actual days elapsed and will accrue from and including the first day of each calendar month through the last day of such month (except that the interest period for May 2015 will commence on [May 7], 2015). Such interest will be paid on the fifth Business Day of the following month, commencing June 5, 2015. While the Letter of Credit is in effect, the maximum interest rate on the Series 1993 Bonds (other than Bank-Owned Bonds) is 12% per annum.

The Series 1993 Bonds are subject to mandatory redemption, extraordinary optional redemption and optional redemption by the District before maturity, mandatory purchase under certain circumstances, and purchase on the demand of Owners under certain circumstances, as described in this Remarketing Statement. See the captions "THE SERIES 1993 BONDS—Redemption," "THE SERIES 1993 BONDS—Mandatory Tender for Purchase" and "THE SERIES 1993 BONDS—Optional Tender for Purchase Upon Election of Owner."

While in a Daily Mode, the Series 1993 Bonds are issuable in Authorized Denominations of \$100,000 and any integral multiple thereof. The Series 1993 Bonds are in fully registered form and registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York. Purchasers of the Series 1993 Bonds will not receive physical certificates representing their beneficial ownership in the Series 1993 Bonds purchased. The principal and Purchase Price of and interest and premium, if any, on the Series 1993 Bonds are payable by the Trustee to DTC. DTC is required to remit such payments to its Participants for subsequent disbursement to the beneficial owners of the Series 1993 Bonds. Beneficial owners' rights will be governed as to such payments, the receipt of notices (including any notice of redemption and mandatory tender for purchase) and other communications and various other matters by the rules and operating procedures applicable to the DTC book-entry system, as described herein.

**This Remarketing Statement describes the Series 1993 Bonds only while bearing interest in the Daily Mode. Investors should not rely upon the information in this Remarketing Statement in the event that the method of determining the interest rate on the Series 1993 Bonds is changed to a Mode other than the Daily Mode. Rather, investors should rely upon the offering document used in connection with any such Change in Mode.**

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*This cover page contains certain information for general reference only. It is not intended to be a summary of the security or terms of the Series 1993 Bonds. Investors are advised to read the entire Remarketing Statement to obtain information essential to making an informed investment decision.*

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*Certain legal matters in connection with the delivery of the Letter of Credit will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Co-Bond Counsel to the District, and by Bowie, Arneson, Wiles & Giannone, as Co-Bond Counsel to the District and as general counsel to the District. Certain legal matters in connection with the reoffering of the Series 1993 Bonds secured by the Letter of Credit will be passed upon for the Remarketing Agent by Stradling Yocca Carlson & Rauth, a Professional Corporation, and for the Bank by its counsel, McGuire Woods LLP. The Series 1993 Bonds are available for delivery through the facilities of the DTC book-entry system.*



**No dealer, broker, salesperson or other person has been authorized by the District or the Remarketing Agent to give any information or to make any representation other than as set forth herein and, if given or made, such other information or representation must not be relied upon as having been authorized by the District or the Remarketing Agent. This Remarketing Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 1993 Bonds by a person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale.**

**This Remarketing Statement is not to be construed as a contract with the purchasers of the Series 1993 Bonds. Statements contained in this Remarketing Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of facts.**

The Remarketing Agent has provided the following sentence for inclusion in this Remarketing Statement:

The Remarketing Agent has reviewed the information in this Remarketing Statement in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Remarketing Agent does not guarantee the accuracy or completeness of such information.

The information set forth in this Remarketing Statement has been obtained from official sources and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Remarketing Agent. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Remarketing Statement nor any sale made hereunder shall under any circumstances create any implication that there has been no change in the affairs of the District since the date hereof.

IN CONNECTION WITH THE OFFERING, THE REMARKETING AGENT MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 1993 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

**CERTAIN STATEMENTS CONTAINED IN THIS REMARKETING STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND “FORWARD-LOOKING STATEMENTS.” NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS “ESTIMATE,” “PROJECT,” “ANTICIPATE,” “EXPECT,” “INTEND,” “BELIEVE” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS REMARKETING STATEMENT.**

THE SERIES 1993 BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON AN EXEMPTION CONTAINED IN SUCH ACT. THE SERIES 1993 BONDS HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES LAWS OF ANY STATE.

The District maintains a website. However, the information presented on the website is neither part of this Remarketing Statement nor incorporated herein by reference and should not be relied upon in making an investment decision with respect to the Series 1993 Bonds.

**IRVINE RANCH WATER DISTRICT**  
Orange County, California

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**Board of Directors**

Steven E. LaMar, *President*  
Mary Aileen Matheis, *Vice President*  
Douglas J. Reinhart  
Peer A. Swan  
John B. Withers

**Management**

Paul A. Cook, *General Manager*  
Cheryl Clary, *Executive Director of Finance and Administration*  
Robert Jacobson, *Treasurer*  
Leslie Bonkowski, *Secretary*

**District General Counsel**

Bowie, Arneson, Wiles & Giannone  
Newport Beach, California

**Co-Bond Counsel**

Orrick, Herrington & Sutcliffe LLP  
Los Angeles, California

Bowie, Arneson, Wiles & Giannone  
Newport Beach, California

**Trustee, Tender Agent and Paying Agent**

The Bank of New York Mellon Trust Company, N.A.  
Los Angeles, California

**Remarketing Agent**

Merrill Lynch, Pierce, Fenner & Smith Incorporated  
New York, New York

[MAPS]

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**\$34,600,000**  
**BONDS OF IRVINE RANCH WATER DISTRICT**  
**CONSOLIDATED SERIES 1993**  
**Constituting the Consolidated Several General Obligations of**  
**Improvement District Nos. 125, 225 and 240**

**INTRODUCTION**

*This Remarketing Statement replaces the Remarketing Statement dated June 4, 2012 with respect to the Bonds of Irvine Ranch Water District Consolidated Series 1993 (the “Series 1993 Bonds”).*

*The Series 1993 Bonds were originally issued on May 20, 1993 in the original principal amount of \$38,300,000, of which \$34,600,000 remains outstanding.*

*This Introduction is subject in all respects to the more complete information contained and referenced elsewhere in this Remarketing Statement. The offering of the Series 1993 Bonds to potential investors is made only by means of the entire Remarketing Statement.*

**Purpose**

The purpose of this Remarketing Statement, which includes the cover page and appendices hereto, is to set forth certain information concerning the Irvine Ranch Water District (the “District”) and Improvement District Nos. 125, 225 and 240 (collectively, the “Improvement Districts,” or each individually, an “Improvement District”), in connection with the remarketing of \$34,600,000 aggregate principal amount of Series 1993 Bonds, which constitute the consolidated several general obligations of the Improvement Districts. The Improvement Districts, along with other improvement districts, are geographical subdivisions of the District through which the District funds capital improvements. The Series 1993 Bonds were issued for the purposes of financing certain capital improvements of the District and paying the costs of issuance of the Series 1993 Bonds. Capitalized terms used herein and not otherwise defined have the meanings ascribed to them in Appendix C—“SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

**Irvine Ranch Water District**

The District is a California water district, formed in 1961 under the authority of the California Water District Law, constituting Division 13 of the Water Code of the State (the “Act”). Currently there are seven water improvement districts and ten sewer improvement districts formed pursuant to the Act, which are geographical subdivisions of the District through which the District funds capital improvements. See Appendix A—“IRVINE RANCH WATER DISTRICT.”

**Improvement Districts**

Set forth below are brief descriptions of each of the Improvement Districts. For more complete information with respect to the Improvement Districts, see Appendix A—“IRVINE RANCH WATER DISTRICT—The Improvement Districts.”

***Improvement District Nos. 125 and 225.*** At the time of their initial issuance on May 20, 1993, the Series 1993 Bonds constituted the consolidated, several general obligations of Improvement District Nos. 105, 140, 240 and 250. Pursuant to the Indenture of Trust, dated as of May 1, 1993 (as supplemented by the First Supplemental Indenture of Trust, dated as of June 1, 2014, the “Indenture”), by and between the District and The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “Trustee”), under which the Series 1993 Bonds were issued, the District covenanted to fix and collect *ad valorem* assessments on taxable

land within such improvement districts in amounts sufficient to pay principal of and interest on the Series 1993 Bonds. See the caption “—Security for the Series 1993 Bonds.”

Beginning in 2011, the District undertook a long-term review of its capital funding plan. As a result of such review, the Board of Directors of the District determined that it was in the District’s best interest to consolidate certain improvement districts to support differing capital infrastructure needs within developed and undeveloped areas of the District. Accordingly, by resolutions adopted on October 14, 2013, October 28, 2013 and November 11, 2013, the Board of Directors of the District undertook the following actions:

- Certain lands were annexed into Improvement District Nos. 105, 140 and 250 in accordance with Section 36428 *et seq.* of the Act. The annexed lands were declared to be liable for debt service on the outstanding bonds of Improvement District Nos. 105, 140 and 250, including each such Improvement District’s Included Amount (as such term is defined under the caption “—Security for the Series 1993 Bonds”) of the Series 1993 Bonds.

- Certain lands generally constituting large permanent open space parcels were detached from Improvement District Nos. 105, 140 and 250 in accordance with Section 36442 *et seq.* of the Act. The detached lands were declared to be relieved of liability for debt service on the outstanding bonds of Improvement District Nos. 105, 140 and 250, including each such Improvement District’s Included Amount of the Series 1993 Bonds to the extent permitted by law.

- Improvement District Nos. 105, 140 and nine other water improvement districts were consolidated into a new improvement district, Improvement District No. 125, in accordance with Section 36454 *et seq.* of the Act. Pursuant to Section 36454.1 of the Act, Improvement District No. 105’s Included Amount of the Series 1993 Bonds and Improvement District No. 140’s Included Amount of the Series 1993 Bonds were each assumed by and became the liability of Improvement District No. 125.

- Improvement District No. 250 and nine other sewer improvement districts were consolidated into a new improvement district, Improvement District No. 225, in accordance with Section 36454 *et seq.* of the Act. Pursuant to Section 36454.1 of the Act, Improvement District No. 250’s Included Amount of the Series 1993 Bonds was assumed by and became the liability of Improvement District No. 225.

As a result of the foregoing actions:

- The Series 1993 Bonds currently constitute the consolidated, several general obligations of Improvement District Nos. 125, 225 and 240. Pursuant to the Act, Improvement District Nos. 125 and 225 are authorized to levy and collect the assessments and charges necessary to satisfy the obligations of their predecessor improvement districts, including the assessments and charges necessary to satisfy payment of the Series 1993 Bonds for Improvement District Nos. 105 and 140 and for Improvement District No. 250, respectively.

- As of December 31, 2014: (i) Improvement District No. 125 had \$322,089,600 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$188,789,150 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds; and (ii) Improvement District No. 225 had \$406,895,000 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$237,018,171 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” in Appendix A.

Improvement District No. 125 (water) covers approximately 35,438 acres of the District, including several contiguous and non-contiguous areas in the central and coastal parts of the District. Improvement District No. 225 (sewer) covers approximately 32,862 acres of the District, including several contiguous and non-contiguous areas in the central part of the District. Currently, the majority of the land within Improvement

District Nos. 125 and 225 consists of developed residential property. However, the District expects certain areas within Improvement District Nos. 125 and 225 to be subject to infill development and redevelopment in the future. The District expects such additional development in Improvement District Nos. 125 and 225 to continue through at least 2020. The Fiscal Year 2015 assessed value of the land in Improvement District No. 125 is \$29,578,638,615. The Fiscal Year 2015 assessed value of the land in Improvement District No. 225 is \$24,757,488,949.

**Improvement District No. 240.** Improvement District No. 240 (sewer) covers approximately 4,141 acres in the western portion of the District. The boundaries of Improvement District No. 240 are Crystal Cove State Park to the southeast, Pacific Coast Highway and the Pacific Ocean to the southwest, the City of Newport Beach to the northwest and the San Joaquin Hills Transportation Corridor to the northeast. Currently, Improvement District No. 240 consists of approximately 5,300 residential units, several apartment buildings and timeshare developments and 36 acres of commercial development and recreational areas. Future development is expected mainly in the Crystal Cove area and includes low density residential development. The Fiscal Year 2015 assessed value of the land in Improvement District No. 240 is \$5,609,174,229.

As of December 31, 2014, Improvement District No. 240 had \$68,796,500 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$23,928,179 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” in Appendix A.

### **The Series 1993 Bonds**

The Series 1993 Bonds bear interest at a rate (the “Daily Rate”), which will be computed on the basis of a year of 365 days (366 days in leap years) and the actual days elapsed and will accrue from and including the first day of each calendar month through the last day of such month (except that the interest period for May 2015 will commence on [May 7], 2015). Such interest will be paid on the fifth Business Day of the following month, commencing June 5, 2015. While the Series 1993 Bonds bear interest at a Daily Rate, interest will be determined as described under the caption “THE SERIES 1993 BONDS—Interest.”

The interest rate Mode for the Series 1993 Bonds may be changed at the option of the District in accordance with the terms of the Indenture, upon notice to the Owners of the Series 1993 Bonds, to a Weekly Mode, a Term Rate Mode, a Fixed Rate Mode or a Unit Pricing Mode. The Series 1993 Bonds are subject to mandatory tender for purchase upon any such Change in Mode. See the caption “THE SERIES 1993 BONDS—Change in Mode.”

**This Remarketing Statement describes the Series 1993 Bonds only while bearing interest in the Daily Mode. Investors should not rely upon the information in this Remarketing Statement in the event that the method of determining the interest rate on the Series 1993 Bonds is changed to a Mode other than the Daily Mode. Rather, investors should rely upon the offering document used in connection with any such Change in Mode.**

### **Security for the Series 1993 Bonds**

The Series 1993 Bonds constitute the several general obligations of the Improvement Districts payable from Bond Assessments and Charges (as such term is defined below) as provided in the Indenture, in Included Amounts (as further described herein) proportionate to each Improvement District’s Included Percentage (as further described herein). *Ad valorem* assessments or charges in lieu of *ad valorem* assessments collected in any improvement district of the District other than the Improvement Districts will not be available to make debt service payments on the Series 1993 Bonds. The Series 1993 Bonds are additionally secured by a pledge of proceeds of the Orange County 1% *ad valorem* property taxes allocated to the District as described herein.

As among the Improvement Districts, Bond Assessments and Charges collected in a particular Improvement District will not be available to pay any other Improvement District's share of debt service of the Series 1993 Bonds. Each Improvement District's Included Amount and Included Percentage is as set forth below.

<i>Improvement District No.</i>	<i>Included Amount</i>	<i>Included Percentage</i>
125	\$10,334,850	29.87%
225	9,134,910	26.40
240	<u>15,130,240</u>	<u>43.73</u>
Total	<u>\$34,600,000</u>	100.00%

See the caption "SECURITY FOR THE SERIES 1993 BONDS—General—Several General Obligations."

The Included Amounts and Included Percentages for any Improvement District may be adjusted as a result of the redemption of Series 1993 Bonds allocated to one or more Improvement Districts, pursuant to calculations made by the District pursuant to the Indenture and delivered to the Trustee, without need for any amendment of or supplement to the Indenture. See the caption "THE SERIES 1993 BONDS—Redemption."

The District has covenanted in the Indenture that to the extent necessary to pay principal of and interest on the Included Amount for each respective Improvement District, the District will: (i) impose and collect or cause the imposition and collection of *ad valorem* assessments on land in each respective Improvement District; (ii) pursue any remedy available to collect, or cause the collection of, delinquent *ad valorem* assessments and apply amounts realized from the sale of any property for delinquent *ad valorem* assessments for such purpose; or (iii) in its discretion, impose and collect, or cause the imposition and collection of, charges for water or sewer service, as applicable, in each respective Improvement District in lieu of *ad valorem* assessments (collectively, the "Bond Assessments and Charges"). The Bond Assessments and Charges levied upon and collected within any Improvement District may not exceed the amount required to pay such Improvement District's Included Amount of Outstanding Series 1993 Bonds, premium, if any, and interest thereon. See the caption "SECURITY FOR THE SERIES 1993 BONDS—General—Covenant to Collect Bond Assessments and Charges."

Pursuant to Resolution No. 2002-10 of the District adopted April 8, 2002 (the "2002 Resolution"), the Series 1993 Bonds are additionally secured by a pledge of proceeds of the Orange County 1% *ad valorem* property taxes allocated to the District on a parity with certain outstanding bonds of the District. See the caption "SECURITY FOR THE SERIES 1993 BONDS—General—Pledge of 1% *Ad Valorem* Property Taxes."

**Letter of Credit**

On [May 7], 2015, an irrevocable direct-pay letter of credit, dated [May 7], 2015 (the "Letter of Credit"), provided by U.S. Bank National Association (the "Bank"), is expected to replace the existing irrevocable, direct-pay letter of credit issued by The Bank of New York Mellon to support the payment of the principal and Purchase Price of, and interest on, the Series 1993 Bonds. The Letter of Credit will be issued pursuant to a Reimbursement Agreement, dated as of [May 1], 2015 (the "Reimbursement Agreement"), to be entered into by and between the District and the Bank. The Letter of Credit is scheduled to expire on [\_\_\_\_], 2018 (unless extended by the Bank), or on the earlier occurrence of certain events as described herein. The Letter of Credit may be replaced with another credit facility as described under the caption "SECURITY FOR THE SERIES 1993 BONDS—Alternate Letter of Credit."

The Letter of Credit will be issued in the total amount of \$[\_\_\_\_], which is equal to: (i) the outstanding aggregate principal amount of the Series 1993 Bonds (\$34,600,000); plus (ii) [\_\_] days' interest thereon at an annual rate of 12% (\$[\_\_\_\_]).

## Summaries Not Definitive

The summaries and references to all documents, statutes, reports and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary or reference is qualified in its entirety by reference to each such document, statute, report or instrument. The capitalization of any word not conventionally capitalized or otherwise defined herein, indicates that such word is defined in the Indenture and, as used herein, has the meaning given to it in the Indenture. Unless otherwise indicated, all financial and statistical information herein has been provided by the District.

All references to and summaries of the Indenture, and all documents, statutes, reports and other instruments referred to herein are qualified in their entirety by reference to the full Indenture, and each such document, statute, report or instrument, respectively. Forward looking statements in this Remarketing Statement are subject to risks and uncertainties. Actual results may vary from forecasts or projections contained herein because events and circumstances do not occur as expected, and such variances may be material.

## No Continuing Disclosure

The Series 1993 Bonds are exempt from the rules of the Securities and Exchange Commission relating to continuing disclosure of annual financial information and certain material events.

## Additional Information

Copies of the Indenture, the Reimbursement Agreement and audited financial statements of the District are available for inspection at the offices of the District in Irvine, California, and will be available from the Trustee upon request and payment of duplication costs. Additional information regarding this Remarketing Statement may be obtained by contacting the District or the Trustee, at the following addresses:

Treasurer  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, California 92618  
(949) 453-5300

The Bank of New York Mellon Trust Company, N.A.  
400 South Hope Street, Suite 400  
Los Angeles, California 90071  
(213) 630-6228

## THE SERIES 1993 BONDS

### General

**This Remarketing Statement describes the Series 1993 Bonds only while bearing interest in the Daily Mode. Investors should not rely upon the information in this Remarketing Statement in the event that the method of determining the interest rate on the Series 1993 Bonds is changed to a Mode other than the Daily Mode. Rather, investors should rely upon the offering document used in connection with any such Change in Mode.**

The Series 1993 Bonds were initially issued in the aggregate principal amount of \$38,300,000, of which \$34,600,000 remains outstanding. The Series 1993 Bonds bear interest at a Daily Rate, until converted to another interest rate Mode as described herein. The Series 1993 Bonds will mature, subject to prior redemption, on April 1, 2033. Interest on the Series 1993 Bonds bearing interest at the Daily Rate will be determined as described herein.

Interest will be determined as described herein. While bearing interest at the Daily Rate, the Series 1993 Bonds are issuable in Authorized Denominations of \$100,000 and any integral multiple thereof.

The term “Business Day” is defined in the Indenture to mean a day on which the Trustee, the Paying Agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated (the “Remarketing Agent”), the Bank or banks or trust companies in New York, New York, or in Los Angeles, California, are not authorized or required to remain closed and on which the New York Stock Exchange is not closed. If the date for making any payment on the Series 1993 Bonds is not a Business Day, the payment will be made on the next Business Day with the same effect as if made on the nominal date and no interest will accrue between the nominal date and the actual payment date.

The Series 1993 Bonds are registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York (“DTC”). So long as DTC, or its nominee Cede & Co., is the registered owner of all the Series 1993 Bonds, all payments of principal of and interest on the Series 1993 Bonds and the Purchase Price of the Series 1993 Bonds will be made directly to DTC. Disbursement of such payments to the DTC Participants (as defined below) will be the responsibility of DTC. Disbursement of such payments to the Beneficial Owners (as defined below) of the Series 1993 Bonds will be the responsibility of the DTC Participants as more fully described herein. See the caption “—Book-Entry Only System” below and Appendix D—“BOOK-ENTRY ONLY SYSTEM.”

*There are a number of provisions in the Indenture relating to the terms of Bank-Owned Bonds (i.e., Series 1993 Bonds purchased by the Bank pursuant to the Reimbursement Agreement) that are not described in this Remarketing Statement. All references to the terms of the Series 1993 Bonds in this Remarketing Statement describe only Series 1993 Bonds that are not owned by the Bank unless expressly indicated herein.*

## **Interest**

**General.** The Series 1993 Bonds bear interest at the Daily Rate, which will be computed on the basis of a year of 365 days (366 days in leap years) and the actual days elapsed and will accrue from and including the first day of each calendar month through the last day of such month (except that the interest period for May 2015 will commence on [May 7], 2015). Such interest will be paid on the fifth Business Day of the following month, commencing June 5, 2015. Interest on the Series 1993 Bonds is also payable on each Mandatory Purchase Date.

The Daily Rate for the Series 1993 Bonds will be a rate determined by 10:00 a.m., New York City time, on each Business Day (each, a “Rate Determination Date”) by the Remarketing Agent to be the minimum rate of interest that, in the opinion of the Remarketing Agent, would, under then existing market conditions, result in the sale of the Series 1993 Bonds on such day at a price equal to the principal amount thereof, plus accrued interest, if any. The rate of interest for any day during the Daily Mode that is not a Business Day will be the Daily Rate established on the immediately preceding Rate Determination Date.

In the event that: (i) the Remarketing Agent fails to determine the Daily Rate; or (ii) the method of determining the Daily Rate is held to be unenforceable by a court of law of competent jurisdiction, the Series 1993 Bonds will thereupon, until such time as the Remarketing Agent again makes such determination or until there is delivered an Opinion of Counsel to the effect that the method of determining such rate is enforceable, bear interest from the last date on which interest was legally paid, at the Alternate Rate for the Daily Mode.

The “Alternate Rate” for the Daily Mode is, on any Business Day, the rate per annum specified in the SIFMA Index published by the Indexing Agent (as such terms are defined below) and in effect on such Business Day.

“Indexing Agent” means the Securities Industry and Financial Markets Association, its successors and assigns.

“SIFMA Index” means the “SIFMA Municipal Swap Index” (such index previously known as the “BMA Municipal Swap Index”) announced by Municipal Market Data from time to time and based upon the

weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meets specified criteria established by SIFMA. The SIFMA Index will be based upon current yields of high-quality weekly adjustable variable rate demand bonds which are subject to tender upon seven days notice, the interest on which is tax-exempt and not subject to any personal “alternative minimum tax” or similar tax under the Internal Revenue Code of 1986, as amended (the “Code”) unless all tax-exempt securities are subject to such tax.

**Maximum Interest Rate.** While the Letter of Credit is in effect, the maximum interest rate on the Series 1993 Bonds (other than Bank-Owned Bonds) is 12% per annum.

### **Change in Mode**

Subject to the provisions of the Indenture, the District may effect a Change in Mode with respect to the Series 1993 Bonds by delivering to the Trustee, with copies to the Remarketing Agent, the Paying Agent and the Bank, not less than 45 days prior to the proposed Change in Mode (or such shorter time as may be agreed to be the District, the Trustee, the Paying Agent and the Remarketing Agent), a Mode Change Notice stating: (i) the election to change the Mode to which the Series 1993 Bonds are then subject (the “Current Mode”) to a different Mode (the “New Mode”), the type of which will be specified; (ii) the date as of which the New Mode takes effect; (iii) the date on which Series 1993 Bonds are required to be purchased pursuant to the Indenture, which will be the date as of which the New Mode takes effect; and (iv) a form of notice of mandatory purchase satisfying the requirements of the Indenture. When the New Mode is the Fixed Rate Mode, the Term Mode or the Unit Pricing Mode with an Interest Period greater than one year as determined by the Remarketing Agent (each, a “Long-Term Mode”), such notice will be accompanied by a letter of Bond Counsel that it expects to be able to give a Favorable Opinion of Bond Counsel with respect to the Change in Mode on the Mode Change Date.

Not less than 30 days prior to a proposed Change in Mode, and in reliance upon a Mode Change Notice, the Trustee will give written notice, the form of which will be prepared by the District and approved by the Trustee, to the Owners and the Bank of the Change in Mode and the mandatory purchase of all Series 1993 Bonds as provided in the Indenture. In addition to the information required to be included therein pursuant to the Indenture, such notice will state: (i) the New Mode to which the Series 1993 Bonds are to be subject; (ii) the Mode Change Date; (iii) the rights of the Owners to tender Series 1993 Bonds for purchase prior to the effectiveness of the New Mode; and (iv) the procedures for such a tender.

The New Mode will take effect only if the following conditions are satisfied on the date of the proposed Change in Mode: (i) if the Change in Mode is to a Long-Term Mode, the Trustee has received a Favorable Opinion of Bond Counsel, dated the Mode Change Date; (ii) if the Letter of Credit or an Alternate Letter of Credit is to be in effect during the New Mode, the interest portion of the Letter of Credit or Alternate Letter of Credit, as applicable, is in an amount equal to or greater than the Letter of Credit Interest Amount for the applicable Mode; (iii) if the New Mode is the Unit Pricing Mode, the Interest Reserve Fund has been funded with Seasoned Funds in an amount equal to or greater than the Interest Reserve Fund Requirement; (iv) each rating agency then rating the Series 1993 Bonds issues a Rating Confirmation Notice; and (v) if the New Mode is the Fixed Rate Mode, the Trustee and the Remarketing Agent have received a Fixed Rate Terms Certificate that specifies the Fixed Rate Reserve Requirement and the Fixed Rate Reserve Account has been funded in an amount equal to the Fixed Rate Reserve Requirement. If such conditions are satisfied, then the New Mode will take effect on the Mode Change Date and, if the New Mode is the Fixed Rate Mode, the Fixed Rate Reserve Requirement will be as specified in the Fixed Rate Terms Certificate.

If such conditions are not satisfied on the Mode Change Date, then: (a) all Outstanding Series 1993 Bonds will be purchased on such date in accordance with the Indenture; (b) all Outstanding Series 1993 Bonds will be changed to the Unit Pricing Mode and the initial Interest Period for all Outstanding Series 1993 Bonds will extend from and include the date on which the New Mode was to have taken effect to but not including the next succeeding Business Day; and (c) the Trustee will, within five Business Days after the date of the

proposed Change in Mode, send notice to the District, the Remarketing Agent, the Paying Agent and the Bank stating that the conditions to the Change in Mode have not all been satisfied and informing them of the consequences thereof, as described in the Indenture.

Upon conversion of all Outstanding Series 1993 Bonds to the Fixed Rate Mode, all or a portion of such Series 1993 Bonds will become Serial Bonds as set forth in the Indenture. If the Mode Change Date is after April 1, 2023, all of the Series 1993 Bonds will become Serial Bonds and the Serial Maturity Dates will be April 1 in each year commencing with the April 1 next succeeding the Mode Change Date and continuing to the Maturity Date. If the Mode Change Date is before April 1, 2023, a portion of the Series 1993 Bonds, as to which a notice of redemption of Series 1993 Bonds pursuant to the Indenture has not been given, will become Serial Bonds and the Serial Maturity Dates will be April 1 in each year commencing with the April 1 next succeeding the Mode Change Date, and continuing for the number of years determined by the District so as to achieve the lowest net interest cost. The Series 1993 Bonds to become Serial Bonds on the Mode Change Date will be selected by lot from all Outstanding Series 1993 Bonds, or determined in such other manner as the Trustee deems fair. The aggregate principal amount of Serial Bonds for each Serial Maturity Date will be the amount specified under the caption “—Redemption—Mandatory Sinking Fund Redemption” for the year which corresponds to such Serial Maturity Date, as such amount has been adjusted pursuant to the Indenture. Upon conversion to the Fixed Rate Mode, new forms of Series 1993 Bonds will be prepared pursuant to the Indenture, which Series 1993 Bonds will indicate the Serial Maturity Dates, if any.

Notwithstanding any other provision of the Indenture, no Change in Mode will be permitted at any time if the Adjustment Period then applicable to the Series 1993 Bonds extends through the day preceding the Maturity Date.

#### **Mandatory Tender for Purchase**

The Series 1993 Bonds are subject to mandatory tender for purchase at the applicable Purchase Price under certain circumstances described below.

***Mandatory Purchase on Change in Mode.*** The Series 1993 Bonds will be subject to mandatory purchase on the effective date of any Change in Mode.

***Mandatory Purchase on Substitution of Letter of Credit.*** The Series 1993 Bonds will be subject to mandatory purchase on the effective date of any substitution of an Alternate Letter of Credit for the Letter of Credit.

***Mandatory Purchase on Expiration or Termination of Letter of Credit.*** The Series 1993 Bonds will be subject to mandatory purchase on the fifth Business Day before the date of the expiration, termination or cancellation of the Letter of Credit.

***Notice.*** Notice of any such mandatory purchase is to be given by the Trustee by first-class mail, postage prepaid, to the Owners not less than 30 days prior to the Mandatory Purchase Date (with copies thereof to be given to the District, the Remarketing Agent, the Paying Agent and the Bank). Each such notice will state: (i) the Mandatory Purchase Date; (ii) unless otherwise provided in a Representation Letter with DTC, that each Series 1993 Bond will be tendered for purchase by delivery of such Series 1993 Bond to the Trustee at its principal corporate trust office on or prior to the Mandatory Purchase Date and that any Series 1993 Bond not so tendered for purchase as required will be deemed to have been so tendered and, upon provision for payment of the Purchase Price therefor from the funds specified in the Indenture, will be deemed to have been purchased on the Mandatory Purchase Date, after which no interest will accrue for the benefit of the Owner required to so tender such Series 1993 Bond, and such Owner will have no rights under the Indenture as the Owner of such Series 1993 Bond except the right to receive the Purchase Price thereof; and (iii) that all Series 1993 Bonds subject to such mandatory purchase will be purchased on the applicable Mandatory Purchase date at the applicable Purchase Price.



Any Series 1993 Bond subject to mandatory purchase in accordance with the Indenture that is not tendered for purchase as required by the Indenture will nonetheless be deemed to have been so tendered and, upon provision for payment of the Purchase Price therefor from the funds specified in the Indenture, will be deemed to have been purchased on the Mandatory Purchase Date after which no interest will accrue on such Series 1993 Bond for the benefit of the Owner required to tender such Series 1993 Bond from and after such Mandatory Purchase Date, and such Owner will have no rights under the Indenture as the Owner of such Series 1993 Bond except the right to receive the Purchase Price thereof.

### **Optional Tender for Purchase Upon Election of Owner**

The Indenture provides that Series 1993 Bonds will be purchased at the option of the Owners at the applicable Purchase Price under certain circumstances described below, but solely from moneys made available for that purpose under the Indenture. Payment will be made in immediately available funds by the close of business on the date specified by the Owner for purchase, if the conditions described below, which are applicable to Series 1993 Bonds held by DTC or another Bond Depository, have been strictly observed.

**Daily Mode Tender.** During the Daily Mode, any Owner of a Series 1993 Bond may demand that such Series 1993 Bond, or any portion thereof (so long as the principal amount purchased, and the principal amount not purchased, are each in an Authorized Denomination), be purchased on any Business Day (a "Purchase Date") at a price equal to the principal amount thereof plus accrued interest, if any, to the Purchase Date. Unless otherwise provided in a Representation Letter with DTC, such demand for purchase will be made as follows: (i) irrevocable telephonic notice, promptly confirmed in writing to the Remarketing Agent at its principal office in New York, New York, and to the Paying Agent at its office, no later than 10:30 a.m. on any Business Day, which notice: (a) states the bond number; (b) states the principal amount of such Series 1993 Bond and the principal amount of such Series 1993 Bond to be purchased; (c) states the Purchase Date on which such Series 1993 Bond is to be purchased; and (d) irrevocably demands such purchase; and (ii) delivery of such Series 1993 Bond duly endorsed in blank for transfer at the principal corporate trust office of the Trustee at or prior to 12:00 Noon on the Purchase Date specified in the Tender Notice.

**Tender Notice Irrevocable.** Any Tender Notice by any Owner is irrevocable. If such Owner fails to deliver the Series 1993 Bond referred to in its Tender Notice to the Trustee, such Series 1993 Bond will nonetheless be deemed to have been tendered and, upon provision for payment of the Purchase Price therefor from the funds specified in the Indenture, no interest will accrue on such Series 1993 Bond for the benefit of such Owner from and after such Purchase Date and such Owner will have no rights under the Indenture as the Owner of such Series 1993 Bond except the right to receive the Purchase Price thereof.

Notices in respect of optional tenders must be delivered as follows:

To the Paying Agent:

First Class/Registered/Certified

The Bank of New York Mellon Trust Company, N.A.  
Global Corporate Trust  
P.O. Box 396  
East Syracuse, NY 13057  
Telephone: (800) 254-2826

To the Remarketing Agent:

Bank of America Merrill Lynch  
Merrill Lynch, Pierce, Fenner & Smith Incorporated  
One Bryant Park, 9th Floor  
New York, NY 10036  
Attn: Municipal Money Markets Desk  
Telephone: (212) 449-5101  
Fax: (646) 736-6960

Express Delivery Only

The Bank of New York Mellon Trust Company, N.A.  
Global Corporate Trust  
111 Sanders Creek Parkway  
East Syracuse, NY 13057  
Telephone: (800) 254-2826

***Tenders of the Series 1993 Bonds Are Subject to DTC Procedures.*** As long as the book-entry system is in effect with respect to the Series 1993 Bonds, all tenders for purchase and deliveries of Series 1993 Bonds optionally tendered for purchase upon election of the Owner or subject to mandatory tender under the provisions of the Indenture will be made pursuant to DTC’s procedures as in effect from time to time, and none of the District, the Trustee or the Remarketing Agent have any responsibility for or liability with respect to the implementation of such procedures. For a description of the tender procedures through DTC, see Appendix D—“BOOK-ENTRY ONLY SYSTEM.”

**Redemption**

***Mandatory Sinking Fund Redemption.*** The Series 1993 Bonds are subject to mandatory redemption on April 1, 2016 and each April 1 thereafter, at a redemption price equal to 100% of the principal amount of the Series 1993 Bonds to be redeemed, plus accrued and unpaid interest thereon to the date of redemption, without premium, from mandatory sinking fund payments in the years and principal amounts as follows:

<i>Mandatory Redemption Dates (April 1)</i>	<i>Mandatory Sinking Fund Payments</i>
2016	\$1,500,000
2017	1,600,000
2018	1,600,000
2019	1,600,000
2020	1,700,000
2021	1,800,000
2022	1,800,000
2023	1,800,000
2024	2,000,000
2025	1,900,000
2026	2,100,000
2027	2,100,000
2028	2,100,000
2029	2,200,000
2030	2,300,000
2031	2,400,000
2032	2,400,000
2033 <sup>†</sup>	1,700,000

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<sup>†</sup> Final Maturity.

The principal amount of any Series 1993 Bonds purchased or optionally redeemed by the District will be credited toward a part or all of any one or more yearly mandatory redemptions as directed in writing by the District, provided that such direction is received at least 75 days before the date of such mandatory redemption. Any such direction must state the years in which and the amounts by which such mandatory redemptions are to be reduced. The portion of any such mandatory redemption remaining after the deduction of any such amounts credited toward the same (or the original amount of any such mandatory redemption if no such amounts have been credited toward the same) will constitute the unsatisfied balance of such mandatory redemption for the purpose of the calculation of principal payments due on any future Principal Payment Date.

The principal amount of any Series 1993 Bonds that are redeemed due to extraordinary optional redemption to delete any Improvement District will be credited proportionally to all remaining yearly mandatory redemption amounts that are scheduled to occur at least 75 days after the date of such redemption.

**Optional Redemption.** While in the Daily Mode, the Series 1993 Bonds are subject to optional redemption by the District, with the prior consent of the Bank, in whole, or in part in Authorized Denominations, on the fifth Business Day of any calendar month, at a redemption price equal to 100% of the principal amount thereof to be redeemed, without premium. If such redemption is in part, Series 1993 Bonds owned by the Bank will be redeemed first and all other Series 1993 Bonds will be redeemed by lot as determined by the Trustee.

Except as otherwise provided in the Indenture, the principal amount of Series 1993 Bonds optionally redeemed will be credited proportionally to all Improvement Districts and the Included Amount for each Improvement District will be reduced by such Improvement District's Included Percentage (calculated immediately before such redemption) of the redeemed Series 1993 Bonds.

Subject to the Indenture, whenever less than all Outstanding Series 1993 Bonds are to be optionally redeemed and sufficient moneys are available for such purpose from or for the account of any Improvement District a portion of the Included Amount of which is to be so redeemed, the District may elect to redeem all or any portion of any such Improvement District's Included Amount. The Included Percentages for all Improvement Districts will be recomputed for all purposes relative to the Outstanding Series 1993 Bonds after such redemption as follows:

$$\frac{\text{Improvement District's Included Amount after redemption}}{\text{Total Amount of Outstanding Series 1993 Bonds after redemption}} = \text{Included Percentage, as adjusted}$$

In the event that following such a redemption, the Included Amount of the Outstanding Series 1993 Bonds for an Improvement District has been redeemed in its entirety, the amounts attributable to such Improvement District in the Funds and accounts established under the Indenture will be withdrawn as directed in writing by the District and applied by the District as permitted by law; provided, however, that the Trustee has no responsibility for determining whether such application is permitted by law. The District will deliver a certificate to the Trustee (the "Included Amount Certificate") specifying: (i) the Improvement District for which all or any portion of the Included Amount is to be redeemed; (ii) the portion of the Included Amount to be redeemed for such Improvement District; (iii) the adjusted Included Amounts and Included Percentages of all Improvement Districts; and (iv) in the event of a complete redemption of the Included Amount of an Improvement District, the amounts attributable to such Improvement District in the Funds and accounts established under the Indenture which are to be withdrawn and paid to the District.

**Extraordinary Optional Redemption of Series 1993 Bonds to Delete Improvement District.** In the event that the District determines that based on the rate of collection of assessments and charges, and on the amounts held in any Fund or account for the account of any Improvement District, the District will be unable to pay the principal of and interest on the Included Amount of the Outstanding Series 1993 Bonds for such Improvement District, the District may, at its option and from Seasoned Funds, redeem on any Business Day the Included Amount of such Improvement District plus any additional amount necessary to cause the amount redeemed to equal an Authorized Denomination, at a price equal to the principal amount thereof to be redeemed plus accrued interest to such redemption date, if any, without premium. The Included Percentages of all other Improvement Districts as specified in the Indenture will be recomputed for all purposes relative to the Outstanding Series 1993 Bonds after such redemption according to the same formula set forth under the caption "—Optional Redemption," and the District will deliver a certificate as to the Included Amount and Included Percentages of the Improvement Districts.

Upon such a redemption, the amounts in the Funds and accounts established under the Indenture and attributable to the Improvement District whose Included Amount of Outstanding Series 1993 Bonds have been redeemed will be withdrawn as directed in writing by the District and applied by the District as permitted by law; provided, however, that the Trustee has no responsibility for determining if such application is as permitted by law.

***Notice of Redemption.*** Notice of redemption of the Series 1993 Bonds will be given by mail by the Trustee to the Remarketing Agent, the Paying Agent, the Bank, the Owners of any Series 1993 Bonds designated for redemption in whole or in part and to the Information Services and to the Securities Depositories no less than 30 nor more than 60 days prior to the Redemption Date. Each notice of redemption will state the Redemption Date, the redemption place and the redemption price, the maturity dates of the Series 1993 Bonds to be redeemed and will designate the numbers of the Series 1993 Bonds to be redeemed if less than all of the Outstanding Series 1993 Bonds of a maturity are to be redeemed, will (in the case of any Series 1993 Bond called for redemption in part only) state the portion of the principal amount thereof which is to be redeemed, and will state that the interest thereon or portions thereof designated for redemption will cease to accrue from and after such Redemption Date and that on such Redemption Date there will become due and payable on each of the Series 1993 Bonds or portions thereof designated for redemption the redemption price thereof. The failure of any Owner to receive such notice will not affect the validity of the redemption of any Series 1993 Bonds.

Any notice mailed as provided above will be conclusively presumed to have been given, whether or not actually received by any Owner. Failure by the Trustee to give notice pursuant to the Indenture to any one or more of the Remarketing Agent, the Paying Agent, the Bank, the Information Services or the Securities Depositories, or the insufficiency of any such notice, will not affect the sufficiency of the proceedings for redemption.

### **Book-Entry Only System**

The Series 1993 Bonds have been issued in fully registered form in the name of Cede & Co., as nominee of DTC. Purchasers of the Series 1993 Bonds will not receive physical certificates representing their beneficial ownership in the Series 1993 Bonds purchased. The principal of and interest and premium, if any, on the Series 1993 Bonds are payable by the Trustee to DTC. DTC is required to remit such payments to its Participants for subsequent disbursement to the beneficial owners of the Series 1993 Bonds. Beneficial owners' rights will be governed as to such payments, the receipt of notices (including any notice of redemption) and other communications and various other matters by the rules and operating procedures applicable to the DTC book-entry system. See Appendix D hereto for additional information concerning DTC and its rules and operating procedures.

The District cannot and does not give any assurances that DTC participants or others will distribute payments with respect to the Series 1993 Bonds received by DTC or its nominee as the registered Owner, or any redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or that DTC will service and act in the manner described in this Remarketing Statement.

The District may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, the Series 1993 Bonds will be printed and delivered and will be governed by the provisions of the Indenture with respect to payment of principal and interest and rights of exchange and transfer. See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" under the caption "CONDITIONS AND TERMS OF BONDS."

## **SPECIAL CONSIDERATIONS RELATING TO THE SERIES 1993 BONDS SUBJECT TO OPTIONAL TENDER AND REMARKETING**

### **The Remarketing Agent Is Paid by the District**

The Remarketing Agent's responsibilities include determining the interest rate from time to time and remarketing Series 1993 Bonds that are optionally or mandatorily tendered by the owners thereof (subject, in each case, to the terms of the Remarketing Agreement (as such term is defined under the caption "REMARKETING AGENT")), as further described in this Remarketing Statement. The Remarketing Agent is appointed by the District and is paid by the District for its services. As a result, the interests of the Remarketing Agent may differ from those of existing holders and potential purchasers of Series 1993 Bonds.

### **The Remarketing Agent Routinely Purchases Series 1993 Bonds for Its Own Account**

The Remarketing Agent acts as remarketing agent for a variety of variable rate demand obligations and, in its sole discretion, routinely purchases such obligations for its own account. The Remarketing Agent is permitted, but not obligated, to purchase tendered Series 1993 Bonds for its own account and, in its sole discretion, routinely acquires such tendered Series 1993 Bonds in order to achieve a successful remarketing of the Series 1993 Bonds (i.e., because there otherwise are not enough buyers to purchase the Series 1993 Bonds) or for other reasons. However, the Remarketing Agent is not obligated to purchase Series 1993 Bonds, and may cease doing so at any time without notice. The Remarketing Agent may also make a market in the Series 1993 Bonds by routinely purchasing and selling Series 1993 Bonds other than in connection with an optional or mandatory tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agent is not required to make a market in the Series 1993 Bonds. The Remarketing Agent may also sell any Series 1993 Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the Series 1993 Bonds. The purchase of Series 1993 Bonds by the Remarketing Agent may create the appearance that there is greater third party demand for the Series 1993 Bonds in the market than is actually the case. The practices described above also may result in fewer Series 1993 Bonds being tendered for remarketing.

### **Series 1993 Bonds May Be Offered at Different Prices on Any Date Including a Rate Determination Date**

Pursuant to the Remarketing Agreement, the Remarketing Agent is required to determine the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of the Series 1993 Bonds bearing interest at the applicable interest rate at par plus accrued interest, if any, on and as of the applicable Rate Determination Date. The interest rate will reflect, among other factors, the level of market demand for the Series 1993 Bonds (including whether the Remarketing Agent is willing to purchase Series 1993 Bonds for its own account). There may or may not be Series 1993 Bonds tendered and remarketed on a Rate Determination Date, the Remarketing Agent may or may not be able to remarket any Series 1993 Bonds tendered for purchase on such date at par and the Remarketing Agent may sell Series 1993 Bonds at varying prices to different investors on such date or any other date, the Remarketing Agent is not obligated to advise purchasers in a remarketing if it does not have third party buyers for all of the Series 1993 Bonds at the remarketing price. In the event that the Remarketing Agent owns any Series 1993 Bonds for its own account, it may, in its sole discretion in a secondary market transaction outside the tender process, offer such Series 1993 Bonds on any date, including the Rate Determination Date, at a discount to par to some investors.

### **The Ability to Sell the Series 1993 Bonds Other Than through Tender Process May Be Limited**

The Remarketing Agent may buy and sell Series 1993 Bonds other than through the tender process. However, it is not obligated to do so and may cease doing so at any time without notice and may require holders that wish to tender their Series 1993 Bonds to do so through the Paying Agent with appropriate notice. Thus, investors who purchase the Series 1993 Bonds, whether in a remarketing or otherwise, should not

assume that they will be able to sell their Series 1993 Bonds other than by tendering the Series 1993 Bonds in accordance with the tender process.

**Under Certain Circumstances, the Remarketing Agent May be Removed, Resign or Cease Remarketing the Series 1993 Bonds, Without a Successor Being Named**

Under certain circumstances the Remarketing Agent may be removed or have the ability to resign or cease its remarketing efforts, without a successor having been named, subject to the terms of the Remarketing Agreement. In the event that there is no Remarketing Agent, the Trustee may assume such duties as described in the Indenture.

**SECURITY FOR THE SERIES 1993 BONDS**

**General**

*Authority for Issuance.* Pursuant to Resolution Nos. 1978-62 adopted April 17, 1978 and 1978-69 adopted April 17, 1978, special elections were conducted in Improvement District Nos. 105 and 250 on June 19, 1978, and pursuant to Resolution Nos. 1989-59 adopted August 28, 1989 and 1989-67 adopted October 23, 1989, special elections were conducted in Improvement District Nos. 140 and 240 on November 28, 1989, at each of which the qualified voters within each Improvement District authorized the District to incur an indebtedness and issue general obligation bonds for each respective Improvement District. See Appendix A—“IRVINE RANCH WATER DISTRICT” for a discussion of the bond authorization, amount of outstanding Series 1993 Bonds and remaining bond authorization for each of the Improvement Districts. The Series 1993 Bonds are authorized for issuance pursuant to the Act and Section 53541 of the Government Code of the State and all laws of the State amendatory thereof or supplemental thereto.

See the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District Nos. 105 and 140 into Improvement District No. 125 and the consolidation of Improvement District No. 250 into Improvement District No. 225.

*Several General Obligations.* The Series 1993 Bonds constitute the several, general obligations of the Improvement Districts payable from Bond Assessments and Charges (as such term is defined above under the caption “INTRODUCTION—Security for the Series 1993 Bonds”) as provided in the Indenture, in amounts proportionate to each Improvement District’s Included Percentage, as defined below. *Ad valorem* assessments or charges in lieu of *ad valorem* assessments collected in any improvement district of the District other than the Improvement Districts will not be available to make debt service payments on the Series 1993 Bonds.

Under the Indenture, each Improvement District’s “Included Percentage” is defined as a fraction: (i) the numerator of which is equal to the Included Amount for such Improvement District; and (ii) the denominator of which is equal to the par value of all Outstanding Series 1993 Bonds, calculated to the second decimal place; provided, however, that on any date, the total of the Included Percentages for all Improvement Districts having Included Amounts of Outstanding Series 1993 Bonds on such date will equal 100%. The Indenture defines “Included Amount” for an Improvement District as the principal amount of Outstanding Series 1993 Bonds allocable to such Improvement District.

As among the Improvement Districts, Bond Assessments and Charges collected in a particular Improvement District will not be available to pay any other Improvement District’s share of debt service of the Series 1993 Bonds. Each Improvement District’s Included Amount and Included Percentage will be as set forth below.

<i>Improvement District No.</i>	<i>Included Amount</i>	<i>Included Percentage</i>
125	\$10,334,850	29.87%
225	9,134,910	26.40
240	<u>15,130,240</u>	<u>43.73</u>
Total	<u>\$34,600,000</u>	100.00%

The Included Amounts and Included Percentages for any Improvement District may be adjusted as a result of the redemption of Series 1993 Bonds allocated to one or more Improvement Districts or otherwise, pursuant to calculations made by the District pursuant to the Indenture and delivered to the Trustee, without need for any amendment of or supplement to the Indenture. See the caption “THE SERIES 1993 BONDS—Redemption.”

**Covenant to Collect Bond Assessments and Charges.** The District has covenanted in the Indenture that to the extent necessary to pay principal of and interest on the Included Amount for each respective Improvement District, the District will: (i) impose and collect or cause the imposition and collection of *ad valorem* assessments on land in each respective Improvement District; (ii) pursue any remedy available to collect, or cause the collection of, delinquent *ad valorem* assessments and apply amounts realized from the sale of any property for delinquent *ad valorem* assessments for such purpose; or (iii) in its discretion, impose and collect, or cause the imposition and collection of, charges for water or sewer service, as applicable, in each respective Improvement District in lieu of *ad valorem* assessments. The Bond Assessments and Charges levied upon and collected within any Improvement District may not exceed the amount required to pay such Improvement District’s Included Amount of Outstanding Series 1993 Bonds, premium, if any, and interest thereon. See Appendix C—“SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE” under the caption “COVENANTS.”

Pursuant to Section 35975 of the Act and as reflected in clause (iii) of the covenant described above, the District may levy certain charges in lieu of *ad valorem* assessments to pay the Series 1993 Bonds; however, the District does not currently levy any such in-lieu charges for outstanding *ad valorem* assessment bonds.

The Bond Assessments and Charges collected by the District, along with bond assessments and charges collected by the District and allocable to other outstanding (or authorized, but not yet issued) *ad valorem* assessment bonds of the District issued on behalf of the Improvement Districts are (or, with respect to such bonds to be issued in the future, will be) parity obligations of such Improvement Districts, secured by *ad valorem* assessments on land (including the Bond Assessments and Charges) within such Improvement Districts. For information regarding the current debt structures of the Improvement Districts, see Appendix A—“IRVINE RANCH WATER DISTRICT” under the caption “The Improvement Districts.” See also the caption “—Several General Obligations” above.

Although the Series 1993 Bonds are secured by the Bond Assessments and Charges, the District may elect, and from time to time has elected in the past in connection with other outstanding *ad valorem* assessment bonds, also to apply other available sources to the payment of such debt service. As a result of the District’s discretionary election to use other sources of payment for debt service on *ad valorem* assessment bonds, the annual tax rates set by the District will vary from year to year and generally will not result in revenues from Bond Assessments and Charges that correspond with debt service requirements on the Series 1993 Bonds. There is no assurance that such alternate sources for debt service payments will be available or continue to be available in succeeding years, or that if they are available, the District will elect to use them for debt service payments. See Appendix A—“IRVINE RANCH WATER DISTRICT.”

**Pledge of 1% Ad Valorem Property Taxes.** Pursuant to the 2002 Resolution, the Series 1993 Bonds are additionally secured by a pledge of the District’s allocated share of 1% *ad valorem* property taxes collected by the County of Orange (the “1% Property Tax Revenues”). Such pledge is on a parity with the pledge of 1%

Property Tax Revenues pursuant to the 2002 Resolution for the benefit of the Bonds of Irvine Ranch Water District, Consolidated Series 1995, currently outstanding in the aggregate principal amount of \$14,200,000.

See Appendix A—“IRVINE RANCH WATER DISTRICT” under the caption “THE IRVINE RANCH WATER DISTRICT—1% Property Tax Revenues” for further information with respect to 1% *ad valorem* property taxes allocated to the District.

### **Allocation of Bond Assessments and Charges Under the Indenture**

In accordance with the Indenture, all Bond Assessments and Charges and certain 1% Property Tax Revenues, when and as received by the District, will be deposited into a fund to be established and maintained by the Trustee designated as the “Bond Payment Fund.” There is to be established in the Bond Payment Fund an Interest Account, a Principal Account, a Redemption Account and a Letter of Credit Account and within each such Account is to be established a subaccount for each Improvement District. The Trustee will transfer money contained in the Bond Payment Fund to the accounts and subaccounts described below at the respective times set forth below.

***Interest Account.*** When a Letter of Credit is in effect, the Trustee, on each Interest Payment Date, will withdraw and apply moneys in the Interest Account, if any, to reimburse the Bank for draws on the Letter of Credit pursuant to the Indenture. When no Letter of Credit is in effect, the Trustee, on each Interest Payment Date, will deposit in the Interest Account from money in the Bond Payment Fund an amount which, together with amounts already on deposit in the Interest Account, will be sufficient to pay interest payable on the Outstanding Series 1993 Bonds on such Interest Payment Date. Money in the Interest Account will be used and withdrawn by the Trustee on each Interest Payment Date for the payment of interest on the Outstanding Series 1993 Bonds or reimbursement of the Bank for such payment.

***Principal Account.*** When a Letter of Credit is in effect, the Trustee, on each Principal Payment Date, will withdraw and apply moneys in the Principal Account, if any, to reimburse the Bank for draws on the Letter of Credit pursuant to the Indenture. When no Letter of Credit is in effect, the Trustee, on each Principal Payment Date, will deposit in the Principal Account from money in the Bond Payment Fund an amount which will be sufficient to pay principal payable on the Outstanding Series 1993 Bonds on such Principal Payment Date. Money in the Principal Account will be used and withdrawn by the Trustee on each Principal Payment Date for the payment of the principal of Outstanding Series 1993 Bonds or reimbursement of the Bank for such payment.

***Redemption Account.*** When a Letter of Credit is in effect, the Trustee will deposit in the Redemption Account amounts received from the District to pay the premium on the Series 1993 Bonds to be redeemed pursuant to the Indenture. The Trustee will apply amounts received from the District, which amounts will not be commingled with other amounts in the Redemption Account, to pay the premium on Series 1993 Bonds to be redeemed only if and to the extent that such amounts constitute Seasoned Funds on the date of application. When no Letter of Credit is in effect, the Trustee will deposit in the Redemption Account amounts received from the District to pay the principal of and premium on Series 1993 Bonds to be redeemed pursuant to the Indenture. When no Letter of Credit is in effect, money in the Redemption Account will be used and withdrawn by the Trustee on each Redemption Date solely for the payment of the principal of and premium, if any, on Outstanding Series 1993 Bonds upon the redemption thereof pursuant to the Indenture. See Appendix C—“SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE” under the caption “FUNDS AND ACCOUNTS.”

### **Letter of Credit**

On [May 7], 2015, the Letter of Credit is expected to replace the existing irrevocable, direct-pay letter of credit dated issued by The Bank of New York Mellon. The Letter of Credit is issued for the benefit of the Series 1993 Bonds to provide the payment of principal and Purchase Price of, and interest on, the Series 1993



Bonds as described under the caption “THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT.” Prior to the expiration date of the Letter of Credit, the Series 1993 Bonds will be subject to mandatory purchase. See the caption “THE SERIES 1993 BONDS—Mandatory Tender for Purchase—Mandatory Purchase on Expiration or Termination of Letter of Credit.”

### **Alternate Letter of Credit**

The Indenture provides that if at any time there has been delivered to the Trustee: (i) an Alternate Letter of Credit in substitution for the Letter of Credit then in effect; (ii) a Favorable Opinion of Bond Counsel; and (iii) written evidence satisfactory to the Bank of the provision for purchase from the Bank of all Bank-Owned Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due it under the Reimbursement Agreement on or before the effective date of such Alternate Letter of Credit, then the Trustee will accept such Alternate Letter of Credit on the Substitution Tender Date and surrender the Letter of Credit then in effect to the Bank on the fifth Business Day after the Substitution Date. The District will give the Trustee and the Bank written notice of the proposed substitution of an Alternate Letter of Credit for the Letter of Credit then in effect no less than 40 days prior to the proposed Substitution Date. The Series 1993 Bonds will be subject to mandatory tender for purchase on the Substitution Date. See the caption “THE SERIES 1993 BONDS—Mandatory Tender for Purchase—Mandatory Purchase on Substitution of Letter of Credit.”

### **THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT**

*The following information has been provided by the Bank for use in this Remarketing Statement. Such information has not been confirmed or verified by the District or the Remarketing Agent. Neither the District nor the Remarketing Agent make any representation as to the accuracy or adequacy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof. Further, no representation is made herein that the information contained or incorporated herein by reference is correct as of any time subsequent to the date hereof.*

[TO COME FROM BANK COUNSEL]

### **THE BANK**

*The following information has been provided by the Bank for use in this Remarketing Statement. Such information has not been confirmed or verified by the District or the Remarketing Agent. Neither the District nor the Remarketing Agent make any representation as to the accuracy or adequacy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof. Further, no representation is made herein that the information contained or incorporated herein by reference is correct as of any time subsequent to the date hereof.*

[TO COME FROM BANK]

### **LITIGATION**

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining the District in the execution or delivery of, or in any way contesting or affecting the validity of, the Series 1993 Bonds. There is no litigation known to be pending, or to the knowledge of the District, threatened, questioning the existence of the District or the title of the officers of the District to their respective offices.

There exist lawsuits and claims against the District, which are incidental to the ordinary course of operations of the District’s water and sewer systems and related activities. In the view of the District’s management and of the General Counsel to the District, there is no litigation, present or pending, which will

individually or in the aggregate materially impair the District's ability to service its indebtedness or which will have a material adverse effect on the business operations of the District.

## **RATINGS**

In connection with the substitution of the Letter of Credit, the District expects that Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business, will assign the Series 1993 Bonds a short term rating of "\_\_\_" and a long term rating of "\_\_\_", with the understanding that the Letter of Credit will be issued by the Bank on [May 7], 2015.

In connection with the substitution of the Letter of Credit, the District expects that Moody's Investor's Service, Inc. will assign the Series 1993 Bonds a short term rating of "\_\_\_" and a long term rating of "\_\_\_", with the understanding that the Letter of Credit will be issued by the Bank on [May 7], 2015.

Each such rating should be evaluated independently of any other rating. No application has been made to any other rating agency in order to obtain additional ratings on the Series 1993 Bonds. The credit enhanced ratings on the Series 1993 Bonds reflect the respective rating agency's current assessment of the creditworthiness of the Bank and its ability to pay draws under the Letter of Credit. Any further explanation as to the significance of the above ratings may be obtained from the applicable rating agency.

The above described ratings are not recommendations to buy, sell or hold the Series 1993 Bonds, and such ratings may be subject to revision or withdrawal at any time by one or both of the rating agencies. The Remarketing Agent undertakes no responsibility either to bring to the attention of the owners of the Series 1993 Bonds the downward revision or withdrawal of any rating obtained or to oppose any such revision or withdrawal. Any downward revision or withdrawal of any of the ratings may have an adverse effect on the market price of the Series 1993 Bonds.

## **TAX MATTERS**

### **Original Opinions**

On May 20, 1993, Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone (formerly known as Bowie, Arneson, Kadi, Wiles & Giannone), Co-Bond Counsel to the District in connection with the issuance of the Series 1993 Bonds, delivered their respective opinions to the effect that, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 1993 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Code and is exempt from State of California personal income taxes. It was further the opinion of Co-Bond Counsel, as of May 20, 1993, that such interest is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Co-Bond Counsel observed that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Complete copies of the opinions of Co-Bond Counsel delivered at the original issuance of the Series 1993 Bonds are set forth in Appendix E hereto.

### **No Updated Co-Bond Counsel Opinions**

Co-Bond Counsel have not taken, and do not intend to take, any action to update their respective original opinions or to determine if interest on the Series 1993 Bonds is presently excluded from gross income for federal income tax purposes or exempt from State of California personal income taxes or that such interest is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes.

## General Considerations

Notwithstanding the foregoing, investors should be aware of the following information.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 1993 Bonds. The District has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the Series 1993 Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the Series 1993 Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Series 1993 Bonds. The opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 1993 Bonds assumed the accuracy of these representations and compliance with these covenants. Co-Bond Counsel have not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Co-Bond Counsel's attention after the date of issuance of the Series 1993 Bonds may adversely affect the value of, or the tax status of interest on, the Series 1993 Bonds. Accordingly, the opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 1993 Bonds are not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Co-Bond Counsel have rendered opinions that interest on the Series 1993 Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of interest on, the Series 1993 Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Co-Bond Counsel express no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Series 1993 Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. For example, the Obama Administration's budget proposals in recent years have proposed legislation that would limit the exclusion from gross income of interest on obligations like the Series 1993 Bonds to some extent for high-income individuals. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the Series 1993 Bonds. Prospective purchasers of the remarketed Series 1993 Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Co-Bond Counsel express no opinion.

The opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 1993 Bonds were based on current legal authority existing as of May 20, 1993, covered certain matters not directly addressed by such authorities, and represented Co-Bond Counsel's judgment as to the proper treatment of the Series 1993 Bonds for federal income tax purposes. They are not binding on the Internal Revenue Service (the "IRS") or the courts. Furthermore, Co-Bond Counsel cannot give and have not given any opinion or assurance about the future activities of the District, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The District has covenanted, however, to comply with the requirements of the Code.

Co-Bond Counsel's engagement with respect to the Series 1993 Bonds ended on May 20, 1993 with the original issuance of the Series 1993 Bonds. Unless separately engaged, Co-Bond Counsel are not obligated to defend the District or the Beneficial Owners regarding the tax-exempt status of the Series 1993 Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the District and their appointed counsel, including the Beneficial Owners, would have little, if any, right to participate in the audit

examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the District legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the Series 1993 Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the Series 1993 Bonds and may cause the District or the Beneficial Owners to incur significant expense.

### **REMARKETING AGENT**

Merrill Lynch, Pierce, Fenner & Smith Incorporated has been appointed to serve as Remarketing Agent for the Series 1993 Bonds. The Remarketing Agent will carry out the duties and obligations provided for the Remarketing Agent under and in accordance with the provisions of the Indenture and the Remarketing Agreement, dated as of February 1, 2009 (the "Remarketing Agreement"), by and between the District and the Remarketing Agent, executed in connection with the Series 1993 Bonds. The principal office of the Remarketing Agent (for purposes of its responsibilities as Remarketing Agent) is located in New York, New York.

### **RELATED PARTIES**

Merrill Lynch, Pierce, Fenner & Smith Incorporated, the Remarketing Agent, is an affiliate of Bank of America, N.A., a letter of credit provider with respect to certain outstanding obligations of the District, and an affiliate of Merrill Lynch Capital Services, Inc., an interest rate swap counterparty of the District. All of Merrill Lynch, Pierce, Fenner & Smith Incorporated, Bank of America, N.A. and Merrill Lynch Capital Services, Inc. are subsidiaries of Bank of America Corporation.

The District's financings, including the remarketing of the Series 1993 Bonds, have been made possible, in part, by hiring underwriters, remarketing agents, bond insurers, reserve surety providers, liquidity providers, letter of credit providers, trustees and interest rate swap counterparties to assist the District. Certain of these entities or their affiliates have and continue to participate in more than one capacity in financings for, and contractual relationships with, the District.

### **APPROVAL OF LEGAL PROCEEDINGS**

Certain legal matters in connection with the delivery of the Letter of Credit will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Co-Bond Counsel to the District, and by Bowie, Arneson, Wiles & Giannone, as Co-Bond Counsel to the District and as general counsel to the District. Certain legal matters in connection with the reoffering of the Series 1993 Bonds secured by the Letter of Credit will be passed upon for the Remarketing Agent by Stradling Yocca Carlson & Rauth, a Professional Corporation, and for the Bank by its counsel, McGuire Woods LLP.

### **INDEPENDENT ACCOUNTANTS**

The financial statements of the District as of and for the fiscal year ended June 30, 2014 included in Appendix B to this Remarketing Statement have been audited by Mayer Hoffman McCann P.C., independent accountants (the "Auditor"), as set forth in their report dated December 1, 2014, which also appears in Appendix B. The District has not requested, nor has the Auditor given, the Auditor's consent to the inclusion in Appendix B of its report on such financial statements. The Auditor's review in connection with the audited financial statements included in Appendix B included events only as of June 30, 2014, and no review or investigation with respect to subsequent events has been undertaken in connection with such financial statements by the Auditor.

**MISCELLANEOUS**

References made herein to certain documents and reports are brief summaries thereof and do not purport to be complete or definitive and reference is hereby made to such documents and reports for a full and complete statement of the contents thereof.

Any statements in this Remarketing Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Remarketing Statement is not to be construed as a contract or agreement between the District and the purchasers or registered owners of any of the Series 1993 Bonds. The delivery and distribution of this Remarketing Statement have been duly authorized by the District.

**IRVINE RANCH WATER DISTRICT**

By \_\_\_\_\_ /s/Robert Jacobson  
Treasurer

**APPENDIX A**  
**IRVINE RANCH WATER DISTRICT**

**APPENDIX B**  
**AUDITED FINANCIAL STATEMENTS**

## APPENDIX C

### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

*The following is a summary of certain provisions of the Indenture not described elsewhere in the Remarketing Statement. This summary does not purport to be comprehensive, and reference should be made to the Indenture for a full and complete statement of its provisions. The headings or the titles used herein are solely for convenience of reference.*

*Capitalized terms used in this summary and not defined herein will have the meanings given such terms elsewhere in the Remarketing Statement or the Indenture.*

#### DEFINITIONS

“Act” means the California Water District Law, Division 13 of the Water Code, as amended from time to time.

“Alternate Letter of Credit” means a letter of credit or other security or liquidity device issued in accordance with the Indenture which will have a term of not less than one year and will have the same material terms as the Letter of Credit.

“Authorized Denominations” means (i) with respect to the Unit Pricing Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof, (ii) with respect to the Term Rate Mode and the Fixed Rate Mode, \$5,000 and any integral multiple thereof, and (iii) with respect to the Daily Mode or the Weekly Mode, \$100,000 and any integral multiple thereof.

“Bank” means Bank of America National Trust and Savings Association, a national banking association and its successors and assigns or the issuer of an Alternate Letter of Credit.

“Bank Interest Rate” means the interest rate payable on Bank-Owned Bonds computed in accordance with the Reimbursement Agreement but not in excess of the rate determined pursuant to clause (i) of the definition of “Maximum Rate.”

“Bank-Owned Bonds” means any Bonds registered in the name of the Bank pursuant to the Indenture.

“Bond Counsel” means any firm of nationally recognized municipal bond attorneys selected by IRWD and experienced in the issuance of municipal bonds and the exclusion of the interest thereon from gross income for federal income tax purposes.

“Bond Depository” means a trust company or other financial institution which is registered as a “clearing agency” pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended, or is otherwise qualified under applicable law to act as securities custodian for Bonds on behalf of the Participants and the beneficial owners of interests in such Bonds.

“Bond Payment Fund” means the fund so defined and created in the Indenture.

“Bond Register” means books for the registration of the ownership, transfer or exchange of the Bonds required to be kept by the Paying Agent at its principal corporate trust office pursuant to the provisions of the Indenture.

“Bonds” means the \$38,300,000, principal amount of bonds issued pursuant to the Indenture that are authenticated and delivered by the Trustee or the Paying Agent under and pursuant to the Indenture, including any bonds issued in exchange or in lieu thereof.



“Business Day” means a day on which the Trustee, the Paying Agent, the Remarketing Agent, the Bank or banks or trust companies in New York, New York, or in Los Angeles, California, are not authorized or required to remain closed and on which the New York Stock Exchange is not closed.

“Cede & Co.” means Cede & Co., the nominee of DTC as Bond Depository for any Bonds, and any successor nominee of DTC as such Bond Depository.

“Change in Mode” means any change pursuant to the Indenture from one Mode to another Mode.

“Code” means the Internal Revenue Code of 1986, as amended.

“Construction Fund” means the fund so defined and created in the Indenture.

“Costs of the Project” means, with respect to each Improvement District, the costs of the acquisition and construction of the works and facilities for which the bonds of such Improvement District were authorized and the reimbursement of such costs paid by IRWD in anticipation of the issuance of the Bonds, such Improvement District’s Included Percentage of the costs of the issuance of the Bonds and costs incurred during the acquisition and construction of such works and facilities in connection with the Bonds and related costs.

“Daily Mode” means the Mode in which the duration of each Interest Period is determined in accordance with clause (a) of the definition of Interest Period.

“DTC” means The Depository Trust Company, a limited-purpose trust company organized under the laws of the State of New York, and its successors and assigns. References herein to DTC will include any nominee of DTC in whose name any Bonds are then registered.

“Event of Default” means any occurrence or event specified in and defined by the Indenture.

“Expiration Date” means the stated expiration date of the Letter of Credit, as it may be extended from time to time as provided in the Letter of Credit, or any earlier date on which the Letter of Credit will terminate, expire or be cancelled.

“Expiration Tender Date” means the day five Business Days prior to the Expiration Date.

“Favorable Opinion of Bond Counsel” means, with respect to any action the occurrence of which requires such an opinion, an unqualified Opinion of Counsel to the effect that such action is permitted under the Act and the Indenture, complies with the Indenture and will not impair the exclusion of interest on the Bonds from gross income for purposes of federal income taxation or the exemption of interest on the Bonds from personal income taxation under the laws of the State (subject to the inclusion of any exceptions contained in the opinion delivered upon original issuance of the Bonds).

“Fixed Interest Rate” means, with respect to a Bond, the rate to be borne by such Bond on and after the Mode Change Date, which rate will be determined in accordance with the Indenture.

“Fixed Rate Bonds” means the Bonds during the Fixed Rate Mode.

“Fixed Rate Mode” means the Mode in which the duration of the Interest Period is determined in accordance with clause (e) of the definition of Interest Period.

“Fixed Rate Reserve Account” means the account so defined and created in the Indenture.

“Fixed Rate Reserve Requirement” means the amount, if any, to be maintained in the Fixed Rate Reserve Account from and after the Mode Change Date, as specified in the Fixed Rate Terms Certificate.

“Fixed Rate Terms Certificate” means the certificate delivered by IRWD to the Trustee in connection with a conversion of the Bonds to the Fixed Rate Mode in accordance with the Indenture.

“Funds” mean, collectively, the Purchase Fund, the General Obligation Bond Fund, the Bond Payment Fund, the Interest Reserve Fund, the Construction Fund and the Rebate Fund created pursuant to the Indenture.

“General Obligation Bond Fund” means the fund so defined and created in the Indenture.

“Government Obligations” means and includes any of the following securities, if and to the extent the same are non-callable and not subject to redemption at the option of the issuer and at the time legal for investment of IRWD’s funds, as determined by IRWD: direct obligations of, or obligations the full and timely payment of principal of and interest on which are unconditionally guaranteed by, the United States of America, including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States of America and including a receipt, certificate or any other evidence of a direct ownership interest of future payments in an obligation of, or unconditionally guaranteed by, the United States of America, or in specified portions thereof held by a custodian in safekeeping for the holders of such receipt, certificate or any other evidence of ownership (which may consist of specified portions of interest thereon) which is rated or assessed in the highest rating category of Moody’s and S&P to the extent each such rating agency is then rating the Bonds, but excluding any share or interest in any unitary investment trust or mutual fund unless such unitary investment trust or mutual fund is rated or assessed in the highest rating category of Moody’s and S&P to the extent each such rating agency is then rating the Bonds.

“Improvement Districts” means Improvement District No. 105, Improvement District No. 140, Improvement District No. 240 and Improvement District No. 250 of IRWD.

“Included Amount” for an Improvement District means the principal amount of Outstanding Bonds allocable to such Improvement District. The Included Amounts are initially as set forth in the Indenture and may be adjusted according to the terms of the Indenture.

“Included Percentage” means, with respect to an Improvement District, a fraction (i) the numerator of which is equal to the Included Amount for such Improvement District and (ii) the denominator of which is equal to the par value of all Outstanding Bonds, calculated to the second decimal place; provided, however, that on any date, the total of the Included Percentages for all Improvement Districts having Included Amounts of Outstanding Bonds on such date will equal 100%. The Included Percentages are initially as set forth in the Indenture and may be adjusted according to the terms of the Indenture.

“Indenture” means the Indenture of Trust, dated as of May 1, 1993, by and between IRWD and the Trustee, as it may from time to time be supplemented or amended pursuant to the provisions of the Indenture.

“Information Services” means any of the following services which has been designated in a certificate of IRWD delivered to the Trustee: Financial Information, Inc.’s “Daily Called Bond Service,” 30 Montgomery Street, 10th Floor, Jersey City, New Jersey 07302, Attention: Editor; Kenny Information Services “Called Bond Service,” 55 Broad Street, 28th Floor, New York, New York 10004; Moody’s “Municipal and Government,” 99 Church Street, 8th Floor, New York, New York 10007, Attention: Municipal News Reports; and Standard and Poor’s “Called Bond Record,” 25 Broadway, 3rd Floor, New York, New York 10004; or such other services providing information with respect to called bonds as IRWD may designate in a certificate of IRWD delivered to the Trustee.

“Interest Account” means the account so defined and created in the Indenture.

“Interest Payment Date” means (i) with respect to each Bond in the Unit Pricing Mode (a) with an Interest Period of 180 days or less, the Purchase Date, and (b) with an Interest Period of 181 days or more, each April 1 and October 1 during the applicable Interest Period for such Bond and the Purchase Date, (ii) with respect to the Daily Mode, the fifth Business Day of each calendar month, (iii) with respect to the Weekly Mode, the first Wednesday of each month, (iv) with respect to the Term Rate Mode, the first Business Day of each April and October and the

Purchase Date, and (v) with respect to the Fixed Rate Mode, each April 1 and October 1. “Interest Payment Date” will also mean any Mandatory Purchase Date and the Maturity Date.

“Interest Period” means the period of time that any interest rate remains in effect, which period

(a) with respect to the Daily Mode, will be the period consisting of one day;

(b) with respect to a Unit Pricing Bond, will be the period from and including the Rate Determination Date for such Bond with respect to such Interest Period to and including the day preceding the following Rate Determination Date for such Bond as established by IRWD pursuant to Section 2.05 hereof; provided, however, that the day after the last day of any such Interest Period will be a Business Day and each such Interest Period will be at least one day;

(c) with respect to the Weekly Mode, initially will be the period from and including the Mode Change Date to and including the following Tuesday and thereafter commencing on each Wednesday to and including Tuesday of the following week;

(d) with respect to the Term Rate Mode, initially will be the period from and including the Mode Change Date to but not including the next April 1 or October 1, whichever last occurs and thereafter will be the period from and including such April 1 or October 1, as applicable, to but not including the next succeeding April 1 or October 1, whichever last occurs;

(e) with respect to the Fixed Rate Mode, will be the period from and including the Mode Change Date to but not including the Maturity Date.

No Interest Period will extend beyond the day preceding the Maturity Date.

“Interest Reserve Fund” means the fund so defined and created in the Indenture.

“Interest Reserve Fund Requirement” means, on any date, an amount equal to the interest that would have accrued at the Maximum Rate during a period of 36 days ending on such date on the aggregate principal amount of Bonds then in the Unit Pricing Mode.

“IRWD” means Irvine Ranch Water District, a California water district.

“IRWD Representative” means a person at the time designated to act on behalf of IRWD for purposes of the Indenture by a certificate furnished to the Trustee containing the specimen signature of such person and signed on behalf of IRWD by any of its officers. The certificate may designate an alternate or alternates.

“Letter of Credit” means the irrevocable, direct pay letter of credit issued by the Bank contemporaneously with the original delivery of the Bonds, except that upon the issuance of an Alternate Letter of Credit in accordance with the Indenture such term will mean such Alternate Letter of Credit.

“Letter of Credit Account” means the account so defined and created in the Indenture.

“Letter of Credit Interest Amount” means the amount of the Letter of Credit which may be drawn upon to pay interest on the Bonds, which (i) during the Unit Pricing Mode with an Interest Period of one year or less, the Daily Mode and the Weekly Mode will be an amount equal to the interest to accrue on the Outstanding Bonds over a 39-day period in such Modes calculated at the Maximum Rate on the basis of a 365-day year for the actual number of days elapsed, and (ii) during the Unit Pricing Mode with an Interest Period greater than one year and the Term Rate Mode will be an amount equal to the interest on the Outstanding Bonds over a 196-day period in such Modes calculated at the Maximum Rate on the basis of a 360-day year composed of twelve 30-day months.

“Letter of Credit Purchase Account” means the account so defined and created in the Indenture.

“Long-Term Mode” means the Fixed Rate Mode, the Term Mode and the Unit Pricing Mode with an Interest Period greater than one year as determined by the Remarketing Agent.

“Mandatory Purchase Date” means: (i) with respect to Unit Pricing Bonds or Term Rate Bonds, the Purchase Date, (ii) any Mode Change Date, (iii) any Substitution Tender Date and (iv) the Expiration Tender Date.

“Maturity Date” means April 1, 2033.

“Maximum Rate” means, on any day, the lesser of (i) the maximum rate permitted on that day by Section 53541 of the Government Code or other applicable provisions of law, except as permitted by Section 36447 *et seq.* of the Water Code, or (ii) the actual rate used to calculate the size of the portion of the Letter of Credit which is available to be drawn for the payment of interest on the Bonds on such date, which will initially be 12%; provided, however, that, if no Letter of Credit is then in effect, the Maximum Rate will be the rate determined pursuant to clause (i) of this definition.

“Mode” means the Unit Pricing Mode, the Daily Mode, the Weekly Mode, the Term Rate Mode or the Fixed Rate Mode, as the context may require.

“Mode Change Date” means with respect to any Bond, the day following the last day of one Mode, on which another Mode begins.

“Mode Change Notice” means the notice required to be delivered by IRWD to the other Notice Parties prior to any Change in Mode pursuant to the Indenture.

“Moody’s” means Moody’s Investors Service, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, and its successors and assigns, except that if such corporation will be dissolved or liquidated or will no longer perform the functions of a securities rating agency, then the term “Moody’s” will be deemed to refer to any other nationally recognized securities rating agency selected by IRWD and approved by the Bank (which will not be under any liability by reason of such approval).

“Notice Parties” means IRWD, the Trustee, the Remarketing Agent, the Paying Agent and the Bank.

“Opinion of Counsel” means a written legal opinion of Bond Counsel.

“Outstanding,” when used as of a particular time with reference to Bonds, means (subject to the provisions of the Indenture) all Bonds delivered under the Indenture except –

- (i) Bonds cancelled by the Trustee or the Paying Agent or surrendered to the Trustee or the Paying Agent for cancellation;
- (ii) Bonds paid or deemed to have been paid within the meaning of the Indenture; and
- (iii) Bonds in lieu of or in substitution for which replacement Bonds will have been executed by IRWD and delivered by the Trustee or the Paying Agent under the Indenture.

Notwithstanding the foregoing, Bonds registered in the name of the Bank or its nominee pursuant to the Indenture will remain Outstanding in the hands of the Bank until the Bank is paid all amounts due on such Bonds. Furthermore, Bonds, the principal of which was paid with a draw on the Letter of Credit, which draw has not been reimbursed, will remain Outstanding until the Bank is reimbursed in full for such draw.

“Owner” means the registered owner of a Bond, including the Bond Depository for the Bonds, if any, or its nominee.

“Participant” means an entity which is recognized as a participant in the book-entry system of maintaining records with respect to the Bonds by the Bond Depository.

“Paying Agent” means The Bank of New York, a banking corporation duly incorporated and existing under and by virtue of the laws of the State of New York, and having its principal office in New York, New York, or any other commercial bank or trust company having an office in New York, New York, which may be substituted in its place as provided in the Indenture.

“Permitted Investments” means and includes any of the following securities, if and to the extent the same are at the time legal for investment of IRWD’s funds, as determined by IRWD:

- (i) Government Obligations;
- (ii) Bonds, debentures, notes, participation certificates or other evidences of indebtedness issued, or the principal of and interest on which are unconditionally guaranteed, by the Federal National Mortgage Association, the Bank for Cooperatives, or the Federal Intermediate Credit Bank, the Federal Home Loan Bank System, the Federal Land Banks, the Government National Mortgage Association or any other agency or instrumentality of or corporation wholly owned by the United States of America when such obligations are backed by the full faith and credit of the United States of America;
- (iii) Obligations of any state of the United States of America or any political subdivision thereof, which at the time of investment are rated “A1/P-1” or higher by Moody’s and “A+” or higher by S&P; or which are rated by Moody’s “VMIG 1” or better and by S&P “A-1” or better with respect to commercial paper, or “MIG 1” and “SP-1+”, respectively, with respect to municipal notes;
- (iv) Bank time deposits evidenced by certificates of deposit, and bankers’ acceptances, issued by any bank, trust company or national banking association insured by the Federal Deposit Insurance Corporation or the Securities Investors Protection Corp.; provided that (a) such bank, trust company, or national banking association is rated “A1/P-1” or better by Moody’s and “A+” or better by S&P, or else that all of the securities acquired pursuant to this subsection (iv) are for amounts of \$100,000 or less, and with maturities of no longer than 365 days; and, (b) provided that (x) the aggregate of such bank time deposits and bankers’ acceptances issued by any bank, trust company or banking association does not exceed at any one time 10% of the aggregate of the capital stock, surplus and undivided profits of such bank, trust company or banking association and that such capital stock, surplus and undivided profits will not be less than \$25,000,000, or else that (y) such deposits are fully and continuously secured by a valid and perfected prior security interest in obligations described in paragraph (i) or (ii) of this definition;
- (v) Repurchase agreements with any bank, trust company or national banking association insured by the Federal Deposit Insurance Corporation or the Securities Investors Protection Corp., provided that such bank, trust company or national banking association is rated “A1” or better by Moody’s and “A+” or better by S&P, or with any government bond dealer recognized as a primary dealer by the Federal Reserve Bank of New York, which agreements are fully and continuously secured by a valid and perfected priority security interest in obligations described in paragraph (i) or (ii) of this definition;
- (vi) Investment agreements with any corporation, including banking or financial institutions, the long-term corporate debt of which is rated, at the time of investment, “A1” or better by Moody’s and “A+” or better by S&P;
- (vii) Guaranteed investment contracts or similar funding agreements issued by insurance companies, the long term corporate debt of which, at the time of investment, is rated “A1” or better by Moody’s and “A+” or better by S&P;
- (viii) Corporate commercial paper rated “MIG 1” or better by Moody’s and “A-1” or better by S&P at the time of investment;
- (ix) Shares or interests in taxable government money market portfolios restricted to obligations with maturities of one year or less issued by, or the payment of principal and interest with respect to

which is guaranteed by, the United States of America, and which are rated “Aa” or better by Moody’s and “AAM” or better by S&P at the time of investment;

(x) Interests in money market portfolios exempt from federal income taxation and having assets in excess of \$1,000,000,000;

(xi) An interest or participation in a pool of investments established by the County of Orange, California, for the investment of monies of local government agencies located in such County;

(xii) Investments in the Local Agency Investment Fund created pursuant to Section 16429.1 of the Government Code; and

(xiii) Any other investment that is legal for the investment of IRWD’s funds or, to the extent that any moneys under the Indenture are held by the Trustee or a fiscal agent and pledged to the payment or security of the Bonds, any other investments which IRWD deems to be prudent investments and in which IRWD directs the Trustee or fiscal agent to invest, provided that such investments are either: (i) rated “A”/”A” or better, by S&P and Moody’s at the time of such investment; or (ii) are issued by an entity the corporate debt of which is rated “A”/”A” or better, by S&P and Moody’s; or (iii) are issued by an insurance company with a claims paying rating of “Aa” or better by Moody’s.

“Principal Account” means the account so defined and created in the Indenture.

“Principal Payment Date” means, prior to and on the Mode Change Date on which the Bonds are converted to the Fixed Rate Mode, April 1 of each of the years specified in the Indenture and, after the Mode Change Date on which the Bonds are converted to the Fixed Rate Mode, April 1 of each year from the year next succeeding the year containing the last Serial Maturity Date, as determined in accordance with the Indenture through the Maturity Date, inclusive.

“Purchase Date” means (i) during the Daily Mode and the Weekly Mode, any Business Day, and (ii) during the Unit Pricing Mode and the Term Rate Mode, the date determined by the Remarketing Agent on the most recent Rate Determination Date as the date on which Bonds shall be subject to purchase.

“Purchase Fund” means the fund so defined and created in the Indenture.

“Purchase Price” means (i) with respect to any Bonds to be purchased on any Purchase Date, an amount equal to 100% of the principal amount of any Bonds purchased on such Purchase Date, plus, in the case of any purchase of Bonds in the Daily Mode or the Weekly Mode, accrued interest, if any, to such Purchase Date, and (ii) with respect to any Bonds purchased on a Mandatory Purchase Date, an amount equal to 100% of the principal amount of any Bonds purchased on such Mandatory Purchase Date.

“Rate Determination Date” means the date on which interest rates on the Bonds will be determined, which, (i) in the case of the Unit Pricing Mode, will be the first day of such Interest Period, (ii) in the case of the Daily Mode will be each Business Day, (iii) in the case of the Weekly Mode, will be each Tuesday or, if Tuesday is not a Business Day, the next succeeding day, or if such day is not a Business Day, then the Business Day next preceding such Tuesday, (iv) in the case of the Term Rate Mode, will be a Business Day not later than the Business Day prior to the first day of such Interest Period and (v) in the case of the Fixed Rate Mode, will be a date determined by the Remarketing Agent which will be at least one Business Day prior to the first day of such Interest Period.

“Rating Confirmation Notice” means a notice from each rating agency then rating the Bonds confirming that the rating on the Bonds will not be lowered or withdrawn (other than the withdrawal of a short-term rating upon a change to a Long-Term Mode) as a result of the action being taken.

“Rebate Fund” means the fund so defined and created in the Indenture.

“Rebate Requirement” means the Rebate Requirement as defined in the Tax Certificate.

“Record Date” means (i) with respect to Bonds in the Unit Pricing Mode and the Weekly Mode, the day (whether or not a Business Day) next preceding each Interest Payment Date, (ii) with respect to Bonds in the Daily Mode, the last day (whether or not a Business Day) of the calendar month, and (iii) with respect to Bonds in the Term Rate Mode or the Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) of the month preceding each Interest Payment Date.

“Redemption Date” means the date fixed for redemption of Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Indenture.

“Reimbursement Agreement” means that certain Reimbursement Agreement, dated as of May 1 1993, by and between the Bank and IRWD or, if an Alternate Letter of Credit has been issued, the reimbursement agreement, or corresponding agreement, if any, in connection with such Alternate Letter of Credit.

“Remarketing Agent” means Merrill Lynch, Pierce, Fenner & Smith Incorporated, or any other investment banking firm which may at any time be substituted in its place as provided in the Indenture.

“Remarketing Agreement” means that certain Remarketing Agreement relating to the Bonds, dated as of May 1, 1993, by and between IRWD and the initial Remarketing Agent or any similar agreement between IRWD and any successor Remarketing Agent.

“Remarketing Proceeds Account” means the account so defined and created in the Indenture.

“Representation Letter” means the letter from IRWD and the Trustee to, or other instrument or agreement among IRWD and the Trustee with, the then current Bond Depository-for the Bonds in which IRWD and the Trustee, among other things, make certain representations to, and agreements with, such Bond Depository with respect to the Bonds, the purchase and payment thereof, and delivery of notices with respect thereto.

“Reserve Account” means the account so defined and created in the Indenture.

“Reserve Account Terms Certificate” means the certificate delivered by IRWD to the Trustee in connection with IRWD’s election to fund the Reserve Account.

“Reserve Requirement” means the amount, if any, to be maintained in the Reserve Account upon the election of IRWD to fund the Reserve Account, as specified in the Reserve Account Terms Certificate.

“Resolution” means Resolution No. 1993-13 of the Board of Directors of IRWD, adopted on April 12, 1993.

“Seasoned Funds” means (i) monies derived from drawings under the Letter of Credit, (ii) monies received by the Trustee and held in Funds and accounts created under the Indenture for a period of at least 124 days and not commingled with any monies so held for less than said period and during and prior to which period no petition in bankruptcy was filed by or against IRWD under the United States Bankruptcy Code, (iii) monies with respect to which the Trustee will have received an opinion of counsel experienced in matters pertaining to the United States Bankruptcy Code acceptable to Moody’s and S&P to the extent each such rating agency is then rating the Bonds, that the contemplated use of such monies would not constitute a transfer of property voidable under Section 544 or 547 of the United States Bankruptcy Code, should IRWD become a debtor under such Code or (iv) investment income derived from the investment of monies described in clause (i), (ii) or (iii).

“Securities Depositories” means any of the following registered securities depositories which has been designated in a certificate of IRWD delivered to the Trustee: (i) The Depository Trust Company, 711 Stewart Avenue, Garden City, New York 11530, Fax - 516/227-4039 or 4190; (ii) Midwest Securities Trust Company, Capital Structures-Call Notification, 440 South LaSalle Street, Chicago, Illinois 60605, Fax - 312/663-2343; (iii) Philadelphia Depository Trust Company, Reorganization Division, 1900 Market Street, Philadelphia, Pennsylvania 19103, Attention: Bond Department, Fax - 215/496-5058; (iv) Pacific Securities Depository Trust Company, P.O.

Box 4071, San Francisco, California 94102, Fax - 415/393-4128; or (v) such other securities depositories as IRWD may designate in a certificate of IRWD delivered to the Trustee.

“Serial Bonds” will be the Bonds maturing on the Serial Maturity Dates, as determined pursuant to the Indenture.

“Serial Maturity Dates” means the dates on which the Serial Bonds mature, as determined pursuant to the Indenture.

“Serial Payments” mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

“Short-Term Mode” means the Daily Mode, the Weekly Mode or the Unit Pricing Mode with an Interest Period of one year or less as determined by the Remarketing Agent.

“S&P” means Standard & Poor’s Corporation, a corporation duly organized and existing under and by virtue of the laws of the State of New York, and its successors and assigns, except that if such corporation will be dissolved or liquidated or will no longer perform the functions of a securities rating agency, then the term “S&P” will be deemed to refer to any other nationally recognized securities rating agency selected by IRWD and approved by the Bank (which will not be under any liability by reason of such approval).

“State” means the State of California.

“Substitution Date” means the date upon which an Alternate Letter of Credit is substituted for the Letter of Credit then in effect.

“Substitution Tender Date” means the date five Business Days prior to the Substitution Date.

“Tax Certificate” means that certificate signed by IRWD on the date of the initial issuance of the Bonds relating to the requirements of Section 148 of the Code.

“Tender Deadline” means (i) during the Daily Mode, 10:30 A.M. on any Business Day, and (ii) during the Weekly Mode, at 4:00 P.M. on the Business Day seven days prior to the Purchase Date stated in the Tender Notice.

“Tender Notice” means when the Bonds are in the Weekly Mode, an irrevocable written notice or an irrevocable telephonic notice of tender to the Remarketing Agent promptly confirmed in writing to the Paying Agent, and, when the Bonds are in the Daily Mode, an irrevocable telephonic notice, (i) that states the bond number, the principal amount of such Bond and the principal amount of such Bond to be purchased pursuant to the Indenture, (ii) that states the Purchase Date on which such Bond is to be purchased, and (iii) that demands such purchase.

“Term Rate Bonds” means any Bond while in the Term Rate Mode.

“Term Rate Mode” means the Mode in which the duration of the Interest Period is determined in accordance with clause (d) of the definition of Interest Period.

“Trustee” means The Bank of New York, a banking corporation duly incorporated and existing under and by virtue of the laws of the State of New York, and having its principal office in New York, New York, or any other bank or trust company duly incorporated and existing under and by virtue of the laws of any state or of the United States of America, which may be substituted in its place as provided in the Indenture.

“Unit Pricing Bond” means any Bond while in the Unit Pricing Mode.

“Unit Pricing Mode” means the Mode in which the duration of each Interest Period is determined in accordance with clause (b) of the definition of Interest Period.



“Unit Pricing Rate” means the interest rate for a Unit Pricing Bond for the applicable Interest Period determined pursuant to the Indenture.

“Water Code” means the California Water Code, as amended.

“Weekly Mode” means the Mode in which the duration of each Interest Period is determined in accordance with clause (c) of the definition of Interest Period.

## **CERTAIN CONDITIONS AND TERMS OF BONDS**

**Denominations, Medium, Method and Place of Payment.** The Bonds will be issued in the form of fully registered Bonds in Authorized Denominations. The principal of, premium, if any, and interest on the Bonds will be payable in lawful money of the United States of America. Except as otherwise provided in the Representation Letter, the interest on the Bonds will be payable on the Interest Payment Dates in the case of Bonds in the Daily Mode, Weekly Mode or Unit Pricing Mode by wire transfer of immediately available funds to an account specified by the owner in writing to the Paying Agent and in the case of Bonds in the Term Rate Mode or Fixed Rate Mode by check mailed by the Paying Agent to the respective Owners thereof at their addresses as they appear on the applicable Record Date in the Bond Register, except that in the case of an Owner of \$1,000,000 or more in aggregate principal amount of Bonds, upon the written request of such Owner to the Paying Agent, specifying the account or accounts to which such payment will be made, payment of interest will be made by wire transfer of immediately available funds on the following Interest Payment Date. Any such request will remain in effect until revoked or revised by such Owner by an instrument in writing delivered to the Paying Agent.

The Paying Agent, the Trustee and IRWD may treat the Owner of a Bond as the sole, exclusive and absolute owner thereof for all purposes, whether or not such Bond will be overdue, and the Paying Agent, the Trustee and IRWD will not be affected by any knowledge or notice to the contrary; and payment of the principal of, premium, if any, purchase price of, and interest on such Bond will be made only to such Owner, which payments will be valid and effectual to satisfy and discharge the liability on such Bond to the extent of the sum or sums so paid. All Bonds paid pursuant to the provisions of the Indenture summarized in this caption will be cancelled by the Paying Agent and will not be redelivered.

**Interest on Bank-Owned Bonds.** Notwithstanding anything to the contrary contained in the Indenture, each Bank-Owned Bond will bear interest on the outstanding principal amount thereof at the Bank Interest Rate for each day from and including the date such Bond becomes a Bank-Owned Bond to, but not including, the date such Bond is paid in full or is remarketed. Interest on Bank-Owned Bonds at the Bank Interest Rate will be payable only to the Bank and not to any other Owner.

Interest on Bank-Owned Bonds will be payable as provided in the Reimbursement Agreement. Bank-Owned Bonds will not bear interest at the Bank Interest Rate after such Bonds have been remarketed unless such Bonds will again become Bank-Owned Bonds. Interest on Bank-Owned Bonds will be calculated based upon a 360-day year and actual days elapsed.

**Execution and Authentication of Bonds.** The Bonds will be signed by manual or facsimile signature by the President of the Board of Directors of IRWD, and the Secretary of IRWD will affix the seal of IRWD or a facsimile thereof to the Bonds and attest said seal by her manual or facsimile signature. The Bonds will be authenticated by the Trustee or the Paying Agent by the manual signature of an authorized signatory of the Trustee or the Paying Agent as the case may be, except that only the Trustee will authenticate Bonds upon original issuance and pursuant to the Indenture.

If any of the officers who will have signed or sealed any of the Bonds or whose facsimile signature will be upon the Bonds will cease to be such officer of IRWD before the Bond so signed and sealed will have been actually authenticated by the Trustee or the Paying Agent or delivered, such Bonds nevertheless may be authenticated, issued and delivered with the same force and effect as though the person or persons who signed or sealed such Bonds or whose facsimile signature will be upon the Bonds had not ceased to be such officer of IRWD; and any such Bond may be signed and sealed on behalf of IRWD by those persons who, at the actual date of the execution of such

Bonds, will be the proper officers of IRWD, although at the date of such Bond any such person will not have been such officer of IRWD.

**Transfer and Exchange of Bonds.** All Bonds are transferable or exchangeable by the Owner thereof, in person or by the Owner's attorney duly authorized in writing, at the principal corporate trust office of the Paying Agent in the Bond Register, upon surrender of such Bonds accompanied by delivery of a duly executed written instrument of transfer or exchange in a form approved by the Paying Agent. Whenever any Bond or Bonds will be surrendered for transfer or exchange, the Paying Agent will execute and deliver a new Bond or Bonds of Authorized Denominations of the same aggregate principal amount and terms, except that the Paying Agent may require the payment by any Owner requesting such transfer or exchange of any tax or other governmental charge required to be paid with respect to such transfer or exchange. All Bonds surrendered pursuant to the provisions of this caption will be cancelled by the Paying Agent, will not be redelivered and will be disposed of as directed in writing by IRWD. All Bonds issued in exchange for Bonds pursuant to this caption will be in the same Mode as the Bonds in exchange for which such Bonds were issued.

During the Term Rate Mode, the Fixed Rate Mode and the Unit Pricing Mode with an Interest Period greater than one year, the Paying Agent will not be required to transfer or exchange (i) any Bonds during the period commencing on the date 10 days prior to the date of selection of Bonds for redemption and ending on such date of selection, or (ii) any Bond selected for redemption in whole or in part.

**Bond Register.** The Paying Agent will keep at its principal corporate trust office the Bond Register for the registration of the ownership, transfer or exchange of the Bonds, which Bond Register will be available for inspection by IRWD and the Trustee at reasonable hours and under reasonable conditions; and upon presentation for such purpose the Paying Agent will, under such reasonable regulations as it may prescribe, register the ownership, transfer or exchange of the Bonds in the Bond Register as provided in the Indenture. The ownership of any Bonds may be proved by the Bond Register required to be kept by the Paying Agent pursuant to the provisions of this paragraph.

**Temporary Bonds.** The Bonds may be initially delivered in temporary form exchangeable for definitive Bonds when ready for delivery, which temporary Bonds will be printed, lithographed or typewritten, will be of such denominations as may be determined by the Trustee, will be in fully registered form and will contain such reference to any of the provisions of the Indenture as may be appropriate. Every temporary Bond will be authenticated and delivered by the Trustee upon the same conditions and terms and in substantially the same manner as definitive Bonds. If the Trustee authenticates and delivers temporary Bonds, IRWD will prepare and execute and the Trustee will authenticate definitive Bonds without delay, and in that case upon demand of the Owner of any temporary Bonds such definitive Bonds will be exchanged without cost to such Owner for temporary Bonds at the office of the Trustee upon surrender of such temporary Bonds, and until so exchanged such temporary Bonds will be entitled to the same benefit, protection and security under the Indenture as the definitive Bonds executed and delivered under the Indenture. All temporary Bonds surrendered pursuant to the provisions of this paragraph will be cancelled by the Trustee, will not be redelivered and will be disposed of as directed in writing by IRWD.

**Bond Mutilated, Destroyed, Lost or Stolen.** If any Bond will become mutilated, the Trustee will authenticate and deliver a new Bond of like tenor and number in lieu of the mutilated Bond, but only upon surrender to the Trustee of the mutilated Bond, and every mutilated Bond surrendered to the Trustee will be cancelled by it and will not be redelivered and will be disposed of as directed in writing by IRWD. If any Bond will be destroyed, lost or stolen, evidence of such destruction, loss or theft may be submitted to the Trustee and if such evidence is satisfactory to the Trustee, and the Trustee and IRWD receive indemnity satisfactory to them, the Trustee will authenticate and deliver a new Bond of like tenor and number in substitution for the destroyed, lost or stolen Bond. The Trustee may require payment of a sum not exceeding the actual cost of preparing each new Bond authenticated and delivered by it under this paragraph and of the expenses which may be incurred by it under this paragraph. Any replacement Bond authenticated and delivered under the provisions of this paragraph in lieu of or in substitution for any mutilated, destroyed, lost or stolen Bond will be equally and proportionately entitled to the benefit, protection and security of the Indenture with all other Bonds executed and delivered under the Indenture; and the Trustee will not be required to treat both the original Bond and any replacement Bond as being Outstanding for the purpose of determining the principal amount of Bonds which may be authenticated and delivered under the Indenture or for the purpose of determining any percentage of Bonds Outstanding under the Indenture, but both the original and the

replacement Bond will be treated as one and the same. Notwithstanding any other provision of this paragraph, rather than authenticating and delivering a new Bond for a mutilated, destroyed, lost or stolen Bond which has matured or has been called for redemption, the Trustee may make payment of the principal of such mutilated, destroyed, lost or stolen Bond on such date of maturity or redemption directly to the Owner thereof under such regulations as the Trustee may prescribe.

## FUNDS AND ACCOUNTS

**Bond Payment Fund.** There is established and created a fund with the Trustee to be designated the “Bonds of Irvine Ranch Water District, Consolidated Series 1993, Bond Payment Fund” (the “Bond Payment Fund”). The Trustee will transfer money contained in the Bond Payment Fund to the accounts described below at the following respective times in the manner hereinafter provided, which accounts the Trustee agrees to establish and maintain so long as the Indenture is not discharged in accordance with the defeasance provisions of the Indenture and each such account will constitute a trust fund for the benefit of the Owners of the Bonds and the Bank, and the money in each such account will be disbursed only for the purposes and uses authorized in the Indenture as summarized in this caption.

(a) ***Interest Account.*** When a Letter of Credit is in effect, the Trustee, on each Interest Payment Date, will withdraw and apply monies in the Interest Account, if any, to reimburse the Bank for draws on the Letter of Credit pursuant to the Indenture. When no Letter of Credit is in effect, the Trustee, on each Interest Payment Date, will deposit in the Interest Account from money in the Bond Payment Fund an amount which, together with amounts already on deposit in the Interest Account and (when the Bonds are in the Fixed Rate Mode) any required transfer from the Fixed Rate Reserve Account, will be sufficient to pay interest payable on the Outstanding Bonds on such Interest Payment Date. Money in the Interest Account will be used and withdrawn by the Trustee on each Interest Payment Date solely for the payment of interest on the Outstanding Bonds.

(b) ***Principal Account.*** When a Letter of Credit is in effect, the Trustee, on each Principal Payment Date and each Serial Maturity Date, will withdraw and apply monies in the Principal Account, if any, to reimburse the Bank for draws on the Letter of Credit pursuant to the Indenture. When no Letter of Credit is in effect, the Trustee, on each Principal Payment Date and each Serial Maturity Date, will deposit in the Principal Account from money in the Bond Payment Fund an amount which, together with (when the Bonds are in the Fixed Rate Mode) any required transfer from the Fixed Rate Reserve Account, will be sufficient to pay the principal becoming due on each Principal Payment Date or Serial Maturity Date, as applicable. Money in the Principal Account will be used and withdrawn by the Trustee on each Principal Payment Date or Serial Maturity Date, as applicable, solely for the payment of the principal of Outstanding Bonds.

(c) ***Redemption Account.*** When the Letter of Credit is in effect, the Trustee will deposit in the Redemption Account amounts transferred from the Construction Fund by IRWD pursuant to the Indenture and amounts received from IRWD to pay the premium on Bonds to be redeemed pursuant to the provisions of the Indenture governing optional redemption in the Unit Pricing Mode. The Trustee will apply amounts transferred from the Construction Fund by IRWD pursuant to the Indenture to reimburse the Bank for a draw on the Letter of Credit, pursuant to the Indenture, the proceeds of which were used to redeem Bonds pursuant to the provisions of the Indenture governing mandatory redemption. The Trustee will apply amounts received from IRWD, which amounts will not be commingled with other amounts in the Redemption Account, to pay the premium on Bonds to be redeemed pursuant to the Indenture only if and to the extent that such amounts constitute Seasoned Funds on the date of application.

When no Letter of Credit is in effect, the Trustee will deposit in the Redemption Account (i) amounts transferred from the Construction Fund pursuant to the Indenture and (ii) amounts received from IRWD to pay the principal of and premium on Bonds to be redeemed pursuant to the provisions of the Indenture governing optional redemption in the Fixed Rate Mode. When no Letter of Credit is in effect, money in the Redemption Account will be used and withdrawn by the Trustee on each Redemption Date solely for the payment of the principal of and premium, if any, on Outstanding Bonds upon the redemption thereof pursuant to the provisions of the Indenture governing mandatory redemption and optional redemption in the Fix Rate Mode.

(d) **Letter of Credit Account.** The Trustee will deposit the proceeds of draws on the Letter of Credit made during the Daily Mode, the Weekly Mode and the Term Rate Mode preceding each Redemption Date and Maturity Date, and on each Purchase Date and Mandatory Purchase Date pursuant to the Indenture in the Letter of Credit Account. When the Letter of Credit is in effect, money in the Letter of Credit Account will be used and withdrawn by the Trustee on each Interest Payment Date (except during the Unit Pricing Mode with an Interest Period of one year or less), each Principal Payment Date and each Redemption Date and used to pay the interest on and principal of the Bonds (whether at maturity, redemption, purchase or acceleration).

**Interest Reserve Fund.** The Trustee agrees to establish and maintain, so long as any Bonds are Outstanding, the “Bonds of Irvine Ranch Water District, Consolidated Series 1993, Interest Reserve Fund” (the “Interest Reserve Fund”). The Trustee will deposit in the Interest Reserve Fund amounts received from IRWD which, on a Mode Change Date on which the Unit Pricing Mode commences will constitute Seasoned Funds in an amount equal to the Interest Reserve Fund Requirement. Additionally, the Trustee will deposit in the Interest Reserve Fund the proceeds of all draws made on the Letter of Credit during the Unit Pricing Mode pursuant to the Indenture. When the Bonds are in the Unit Pricing Mode, the Trustee will apply amounts on deposit in the Interest Reserve Fund on each Interest Payment Date to the payment of interest due and payable on Unit Pricing Bonds.

Amounts on deposit in the Interest Reserve Fund will be reduced on the first Business Day of each calendar month following the redemption of Bonds in the Unit Pricing Mode, so that the amount on deposit in the Interest Reserve Fund will always be equal to the Interest Reserve Fund Requirement; provided, however, that such calculation will not take into account monies on deposit in the Interest Reserve Fund which represent interest actually accrued but not yet payable to Owners of Bonds in the Unit Pricing Mode and such monies will not be transferred out upon such redemptions.

Upon a Change of Mode out of the Unit Pricing Mode, monies on deposit in the Interest Reserve Fund will be transferred from the Interest Reserve Fund to the Interest Account; provided, however, that there will not be transferred monies on deposit in the Interest Reserve Fund which represent interest actually accrued but not yet payable to Owners of Bonds in the Unit Pricing Mode with an Interest Period of one year or less.

Any monies held by the Trustee in the Interest Reserve Fund will be held in such fund for the benefit of the Owners and IRWD will have no right, title or interest in the Interest Reserve Fund. Any monies held by the Trustee in the Interest Reserve Fund will be held uninvested unless instructed telephonically, confirmed in writing to be invested by an IRWD Representative in Government Obligations with maturity periods not exceeding one (1) day.

**Construction Fund.** There is established and created a fund in the treasury of IRWD to be designated “Bonds of Irvine Ranch Water District, Consolidated Series 1993, Construction Fund” (the “Construction Fund”). The proceeds placed in said Construction Fund will be apportioned by IRWD among the respective Improvement Districts according to each Improvement District’s Included Percentage. IRWD may at any time transfer the Construction Fund and all amounts on deposit therein to the Trustee and the Trustee agrees to hold and maintain the Construction Fund in accordance with the provisions of Indenture summarized under this caption. The Trustee will transfer amounts in the Construction Fund to IRWD upon the receipt of a written request of an IRWD Representative for the payment of the Costs of the Project.

All monies on deposit in the Construction Fund will be applied by IRWD exclusively for the payment of Costs of the Project; provided, however, that an amount up to \$968,098.70 together with any investment earnings on such amount, may be used to pay capitalized interest on a portion of the Bonds attributable to the acquisition and construction of the works and facilities until such time as such acquisition and construction of the works and facilities have been completed for the Improvement Districts or, if a Letter of Credit is in effect during such period, to reimburse the Bank for draws on the Letter of Credit to pay interest on the Bonds.

When the construction of the works and facilities have been completed with respect to an Improvement District, or upon the decision of IRWD to terminate such construction, IRWD will deliver to the Trustee and the Bank a certificate of IRWD stating: (a) that the construction of the works and facilities have been completed or terminated with respect to an Improvement District, (b) the date of such completion or termination of such construction, (c) that all of the Costs of the Project for such Improvement District which are to be paid have been paid (or that all such Costs of the Project for such Improvement District have been paid less specified claims which

are subject to dispute and for which a retention in the Construction Fund is to be maintained in the full amount of such claims until such dispute is resolved) and (d) the remaining balance of money in the Construction Fund allocable to such Improvement District. In addition, IRWD will transfer an amount equal to any remaining balance of money in the Construction Fund allocable to such Improvement District as identified in such certificate (but less the amount of any such retention) (i) to the Fixed Rate Reserve Account to the extent of any deficiency therein, and (ii) thereafter to the Trustee for deposit in the Redemption Account to be applied by the Trustee for the redemption of a portion of such Improvement District's Included Amount of Outstanding Bonds pursuant to the Indenture.

**Investments.** So long as the Bonds are Outstanding and there is no default under the Indenture, monies on deposit to the credit of the Bond Payment Fund, except for monies on deposit in the Letter of Credit Account, will, at the telephonic instructions of an IRWD Representative, confirmed in writing within two Business Days, specifying and directing that such investment of such funds be made, be invested by the Trustee in Permitted Investments. Monies on deposit in the Letter of Credit Account will be held uninvested. Subject to the limitations contained in Government Code Section 53601, monies held by IRWD in the Funds and accounts established under the Indenture will be invested by IRWD in Permitted Investments; provided, however, that any monies in the Interest Reserve Fund and Seasoned Funds which are required to pay the redemption price of any Bonds for which notice of redemption has been given pursuant to the Indenture may be invested only in direct obligations of the United States of America which mature not later than 30 days from the date of purchase or on the applicable Redemption Date, whichever first occurs. Any monies in the Construction Fund held by the Trustee will, at the telephonic instructions of an IRWD Representative, confirmed in writing within two Business Days, specifying and directing that such investment of such funds be made, be invested by the Trustee in Permitted Investments. The Trustee is entitled to rely on said instructions for purposes of this caption. Such investments will have maturity dates, or will be subject to redemption by the holder, at the option of the holder, on or prior to the dates the monies invested therein will be needed for the purposes of such Funds and Accounts.

The Trustee may commingle any of the money held by it under the Indenture, except money derived from draws under the Letter of Credit or Seasoned Funds, which will not be commingled with any other funds under any circumstances. The Trustee may present for redemption or sell any such deposit or investment whenever it will be necessary in order to provide money to meet any payment of the money so deposited or invested. The Trustee will not be liable or responsible for any losses resulting from any such deposit or investment presented for redemption or sold.

Any interest or profits on deposits and investments in the Bond Payment Fund received by the Trustee will be deposited in the Interest Account as a credit against interest to come due on the Outstanding Bonds. Any interest or profits on deposits and investments in the Construction Fund will be retained therein. Any interest or profits in the Fixed Rate Reserve Account will be retained therein and applied as provided in the Indenture, except as provided in the provisions of the Indenture governing the Bond Payment Fund and the Fixed Rate Reserve Account, or will be transferred to the Rebate Fund. Any interest or profits in the Reserve Account will be retained therein except as provided in the provisions of the Indenture governing the Reserve Account.

**Reserve Account.** There is established and created an account in the treasury of IRWD to be designated "Bonds of Irvine Ranch Water District, Consolidated Series 1993, Reserve Account" (the "Reserve Account"). The Reserve Account will not be initially funded and will only be funded and applied in the absolute discretion of IRWD in accordance with the Reserve Account Terms Certificate. In the event IRWD funds the Reserve Account, it will be maintained, used, transferred, reimbursed and liquidated as follows:

(a) In the event there are insufficient funds in the General Obligation Bond Fund with respect to an Improvement District to fully reimburse the Bank on such date in respect of such Improvement District's Included Percentage of the amount drawn on the Letter of Credit, IRWD will immediately transfer from the Reserve Account and pay to the Bank, to the extent amounts are available in the Reserve Account for the account of such Improvement District for such purpose, an amount necessary to fully reimburse the Bank for the draw on the Letter of Credit in respect of such Improvement District.

(b) If on April 1 of any year, the amount in the Reserve Account is less than an amount equal to the Reserve Requirement, the Reserve Account will be restored by the inclusion in the next annual assessment of an amount sufficient to replenish the Reserve Account pursuant to Section 35911 of the Water Code and, when

received, such amount will be deposited by IRWD in the Reserve Account. Provided, however, that to the extent that the amount in the Reserve Account has been restored to the Reserve Requirement prior to the time of fixing the next annual assessment, said inclusion need not be made.

(c) If on the first Business Day of any month, the amount on deposit in the Reserve Account with respect to an Improvement District exceeds such Improvement District's Included Percentage of the Reserve Requirement, such excess will be withdrawn by IRWD and deposited in the General Obligation Bond Fund for the account of such Improvement District and used to pay interest to become due with respect to such Improvement District or to reimburse the Bank for the draw on the Letter of Credit in respect of such Improvement District.

(d) If at any time the amount on deposit in the Reserve Account with respect to an Improvement District is sufficient to pay, whether by redemption or at maturity, such Improvement District's Included Amount of Outstanding Bonds, premium, if any, and interest thereon that will accrue to the Redemption Date or Maturity Date, all amounts on deposit in the Reserve Account with respect to such Improvement District will be withdrawn by IRWD and used to pay the principal of and premium, if any, and interest on such Improvement District's Included Amount of Outstanding Bonds, or transferred to the Trustee for deposit in the Redemption Account, at the times and in the amounts required for the payment of such Improvement District's Included Amount of Outstanding Bonds, premium, if any, and interest thereon.

**Fixed Rate Reserve Account.** There is established and created an account in the treasury of IRWD to be designated "Bonds of Irvine Ranch Water District, Consolidated Series 1993, Fixed Rate Reserve Account" (the "Fixed Rate Reserve Account"). The Fixed Rate Reserve Account will not be initially funded and will be funded and applied in accordance with the Fixed Rate Terms Certificate in the event IRWD, in its absolute discretion, effects a Change in Mode of the Outstanding Bonds to the Fixed Rate Mode. In the event IRWD funds the Fixed Rate Reserve Account, it will be maintained, used, transferred, reimbursed, and liquidated as follows:

(a) Whenever, during the Fixed Rate Mode, there are insufficient funds with respect to an Improvement District in the Interest Account or Principal Account to pay such Improvement District's Included Percentage of the next maturing installment of the principal of or interest on its Included Amount of the Fixed Rate Bonds, an amount necessary to pay such deficiency will be transferred from the Fixed Rate Reserve Account in respect of such Improvement District to such accounts. If on April 1 of any year after the Mode Change Date, the amount in the Fixed Rate Reserve Account is less than an amount equal to the Fixed Rate Reserve Requirement, the Fixed Rate Reserve Account will be restored by the inclusion in the next annual assessment of an amount sufficient to replenish the Fixed Rate Reserve Account pursuant to Section 35911 of the Water Code which amount will be deposited in the Fixed Rate Reserve Account. Provided, however, that to the extent that the amount in the Fixed Rate Reserve Account has been restored to the Fixed Rate Reserve Requirement prior to the time of fixing the next annual assessment, said inclusion need not be made.

(b) If on the first Business Day of any month after the Mode Change Date, the amount on deposit in the Fixed Rate Reserve Account with respect to an Improvement District exceeds such Improvement District's Included Percentage of the Fixed Rate Reserve Requirement, such excess will be transferred by IRWD to the Trustee for deposit to the Interest Account as a credit against interest to become due with respect to such Improvement District.

(c) If at any time the amount on deposit in the Fixed Rate Reserve Account with respect to an Improvement District is sufficient to pay, whether by redemption or at maturity, such Improvement District's Included Amount of Outstanding Bonds, premium, if any, and interest thereon that will accrue to the Redemption Date or Maturity Date, all amounts on deposit in the Fixed Rate Reserve Account with respect to such Improvement District will be transferred to the Principal Account and Interest Account, or Redemption Account, at the times and in the amounts required for the payment of such Improvement District's Included Amount of Outstanding Bonds, premium, if any, and interest thereon.

## **CERTAIN COVENANTS**

**Payment of Bonds.** IRWD will promptly pay the principal of, premium, if any, and interest on the Bonds on the dates and in the manner provided in the Bonds, but only from the sources available therefor under the

Indenture. IRWD will provide the Trustee sufficient monies to enable the Trustee to make all payments of principal of, premium, if any, and interest on the Bonds as provided in the Indenture and the Bonds, except that IRWD will pay directly to the Bank all amounts payable in respect of Bank-Owned Bonds.

**Collection of Assessments and Charges, General Obligation Bond Fund.** To the extent necessary to pay principal of and interest on the Included Amount of Outstanding Bonds for each respective Improvement District, IRWD will (a) impose and collect or cause the imposition and collection of ad valorem assessments on land in the Improvement Districts, (b) pursue any remedy available to collect, or cause the collection of, delinquent ad valorem assessments and apply amounts realized from the sale of any property for delinquent ad valorem assessments for such purpose, or (c) in its discretion, impose and collect, or cause the imposition and collection of, charges for water or sewer service, as applicable, in the Improvement Districts in lieu of ad valorem assessments.

There is established and created a fund in the treasury of IRWD to be designated “Bonds of Irvine Ranch Water District, Consolidated Series 1993, General Obligation Bond Fund” (the “General Obligation Bond Fund”), together with an account within such Fund for each Improvement District, which IRWD agrees to maintain as long, as the Indenture is not discharged in accordance with the defeasance provisions of the Indenture. Additionally, IRWD may deposit other available monies in such Fund and such monies will be apportioned to each Improvement District within the Fund according to each Improvement District’s Included Percentage. The assessments and charges levied upon and collected within any Improvement District will not exceed the amount required to pay such Improvement District’s Included Amount of Outstanding Bonds, premium, if any, and interest thereon. Monies raised by each Improvement District for this purpose will be deposited to the Improvement District’s account within the General Obligation Bond Fund and will be used solely for the purpose of paying such Improvement District’s Included Amount of Outstanding Bonds, premium, if any, and interest thereon. Except as provided below, IRWD will transfer from the General Obligation Bond Fund (i) while the Letter of Credit is in effect, to the Bank monies at such times and in such amounts as are sufficient to reimburse the Bank, in accordance with the terms of the Reimbursement Agreement, for draws made on the Letter of Credit pursuant to the Indenture; provided, however, that to the extent monies are available in the Principal Account or the Interest Account to pay the principal of or interest on the Bonds, the Trustee will withdraw and apply monies in the Principal Account or the Interest Account, as appropriate, as directed in writing by IRWD to reimburse the Bank for draws made on the Letter of Credit pursuant to the Indenture, and (ii) while no Letter of Credit is in effect, to the Trustee for deposit in the Bond Payment Fund monies at such times and in such amounts as are sufficient for the Trustee to make the transfers from the Bond Payment Fund as provided in the Indenture.

**Further Assurances.** IRWD will execute and deliver such supplemental indentures and such further instruments, and do such further acts, as the Trustee may reasonably require for the better assuring and confirming to the Trustee the amounts from the sources available under the Indenture for the payment of the Bonds.

**Tax Covenants; Rebate Fund.** (a) In addition to the other Funds and accounts created pursuant to the Indenture, IRWD will establish and maintain a Fund separate from any other Fund or account established and maintained under the Indenture designated the “Bonds of Irvine Ranch Water District, Consolidated Series 1993, Rebate Fund” (the “Rebate Fund”). There will be deposited in the Rebate Fund such amounts as are required to be deposited therein pursuant to the Tax Certificate. All money at any time deposited in the Rebate Fund will be held by IRWD in trust, to the extent required to satisfy the Rebate Requirement, for payment to the United States of America. Notwithstanding defeasance of the Bonds pursuant to the Indenture or anything to the contrary contained in the Indenture, all amounts required to be deposited into or on deposit in the Rebate Fund will be governed exclusively by the provisions of the Indenture as summarized in this caption and by the Tax Certificate (which is incorporated in the Indenture by reference).

(b) Any funds remaining in the Rebate Fund after payment in full of all of the Bonds and after payment of any amounts described in paragraph (2) of this paragraph (b), will be withdrawn and retained by IRWD.

IRWD will pay to the United States of America out of amounts in the Rebate Fund,

(1) not later than 30 days after the end of the fifth Bond Year (as defined in the Tax Certificate) and not less frequently than once each five years thereafter, an amount equal to at least 90% of the Rebate Requirement; and

(2) not later than 60 days after the retirement of all of the Bonds, an amount equal to 100% of the Rebate Requirement (determined as of the date of the retirement of all Bonds).

In the event that, prior to the time of any required payment out of the Rebate Fund, the amount in the Rebate Fund is not sufficient to make such payment when such payment is due, IRWD will deposit an amount equal to such deficiency into the Rebate Fund prior to the time such payment is due. Each payment required to be made pursuant to this paragraph (b) will be made to the United States of America on or before the date such payment is due, and will be accompanied by a statement summarizing the determination of the amount required to be paid pursuant to this paragraph (b) and by a copy of the Internal Revenue Service Form 8038 prepared by IRWD and filed with respect to the Bonds.

Notwithstanding anything to the contrary in the Indenture, any amount received with respect to a Nonpurpose Investment (as defined in the Tax Certificate) credited to the Rebate Fund will be credited and retained in the Rebate Fund upon the receipt thereof.

In the event that on the first day of any Bond Year the amount credited to the Rebate Fund exceeds the Rebate Requirement, IRWD will withdraw the excess from the Rebate Fund and when a Letter of Credit is in effect apply such excess to reimburse the Bank for the draw on the Letter of Credit for the payment of interest on the Bonds, or when no Letter of Credit is in effect, transfer such excess to the Trustee for credit to the Interest Account of the Bond Payment Fund.

For purposes of crediting amounts to the Rebate Fund or withdrawing amounts from the Rebate Fund, Nonpurpose Investments will be valued in the manner provided in the Tax Certificate.

(c) On or before the first day of each Bond Year, an amount will be deposited to the Rebate Fund by IRWD, if and to the extent required, so that the balance of the Rebate Fund will equal the Rebate Requirement for the Bond Year commencing on such first day.

(d) IRWD will not use or permit the use of any proceeds of Bonds or any funds of IRWD, directly or indirectly, to acquire any securities or obligations, and will not take or permit to be taken any other action or actions, which would cause any Bonds to be “arbitrage bonds” within the meaning of Section 148 of the Code or “federally guaranteed” within the meaning of Section 149(b) of the Code and any such applicable requirements promulgated from time to time thereunder and under Section 103(c) of the Internal Revenue Code of 1954, as amended. IRWD will observe and not violate the requirements of Section 148 of the Code and any such applicable regulations. IRWD will comply with all requirements of Sections 148 and 149(d) of the Code to the extent applicable to the Bonds. In the event that at any time IRWD is of the opinion that for purposes of this caption it is necessary to restrict or to limit the yield on the investment of any monies held by the Trustee or held by IRWD under the Indenture, IRWD will so restrict or limit the yield on such investment or will so instruct the Trustee in a detailed certificate, and the Trustee will take such action as may be necessary in accordance with such instructions.

(e) IRWD specifically covenants to comply with the provisions and procedures of the Tax Certificate.

(f) IRWD will not use or permit the use of any proceeds of the Bonds or any funds of IRWD, directly or indirectly, in any manner, and will not take or omit to take any action that would cause any of the Bonds to be treated as an obligation not described in Section 103(a) of the Code.

(g) Notwithstanding any provisions of this caption, if IRWD will provide to the Trustee an Opinion of Counsel that any specified action required under this caption is no longer required or that some further or different action is required to maintain the exclusion of interest on the Bonds from gross income for purposes of federal income taxation, the Trustee and IRWD may conclusively rely on such opinion in complying with the



requirements of this caption, and, notwithstanding the provisions of the Indenture governing amendments of and supplements to the Indenture, the covenants under the Indenture will be deemed to be modified to that extent.

**Segregation of Proceeds.** IRWD specifically covenants to segregate the proceeds from the sale of the Bonds and any investment earnings thereon from other monies of IRWD, whether such proceeds are held in the treasury of IRWD or with the Trustee.

## **DEFAULT AND LIMITATIONS OF LIABILITY**

**Events of Default.** If any of the following events occur, it constitutes an “Event of Default”:

(a) Default in the due and punctual payment of interest on any Bond, whether at the stated Interest Payment Date thereof, or upon proceedings for redemption thereof or upon purchase thereof pursuant to the Indenture;

(b) Default in the due and punctual payment of the principal of or premium, if any, on any Bond, whether at the stated maturity thereof, or upon proceedings for redemption thereof, or upon purchase pursuant to the Indenture;

(c) IRWD will fail to observe or perform in any material way any covenant, condition, agreement or provision contained in the Bonds or in the Indenture on the part of IRWD to be performed other than those set forth in paragraphs (a) and (b) above, and such failure will continue for 30 days after written notice specifying such failure and requiring the same to be remedied will have been given to IRWD by the Trustee, which notice may be given by the Trustee in its discretion and will be given by the Trustee at the written request of the Owners of not less than 25% in aggregate principal amount of all Bonds then Outstanding; provided, however, that, when a Letter of Credit is in effect, no such notice will be given without the consent of the Bank and provided, further, that if said default be such that it cannot be corrected within the applicable period, it will not constitute an Event of Default if corrective action is instituted by IRWD within the applicable period and diligently pursued until the default is corrected; or

(d) The Trustee receives written notice from the Bank that IRWD has not reimbursed the Bank for a drawing under the Letter of Credit to pay interest or that any other event of default has occurred and is continuing under the Reimbursement Agreement.

If an Event of Default occurs and is continuing, the Trustee will mail notice of the Event of Default to the Owners and the Bank as promptly as practicable after it occurs.

**Acceleration.** If, when a Letter of Credit is not in effect or the Bank has dishonored a valid and properly submitted drawing under the Letter of Credit, an Event of Default occurs under paragraph (a) or (b) of the preceding caption (a “payment default”) and is continuing, or an Event of Default occurs under paragraph (c) or (d) of the preceding caption, the Trustee by notice to IRWD, or the Owners of at least 25% in aggregate principal amount of the Bonds then Outstanding by notice to IRWD and the Trustee, may declare the principal of and accrued interest on the Outstanding Bonds to be due and payable immediately. If, when a Letter of Credit is in effect, so long as the Bank has not dishonored a valid and properly submitted drawing under the Letter of Credit, an Event of Default occurs and is continuing, the Trustee, upon the written direction of the Bank, by notice to IRWD will immediately declare the principal and accrued interest on the Outstanding Bonds to be due and payable. Upon any such declaration the principal of and accrued interest on the Outstanding Bonds will be due and payable immediately. When a Letter of Credit is in effect, the Trustee will, immediately upon a declaration of acceleration, draw upon the Letter of Credit to pay the principal of and interest on the Outstanding Bonds other than Bank-Owned Bonds. Upon the receipt by the Trustee pursuant to such declaration of sufficient funds to pay the principal of and accrued interest on such Bonds, interest on such Bonds will cease to accrue; except that interest on Bank-Owned Bonds will continue to accrue until provision for the payment thereof is made in accordance with the Reimbursement Agreement. The Trustee will upon the request of the Bank rescind an acceleration and its consequences if (1) no payment default has occurred and is continuing, (2) the Owners have not been notified of the acceleration, and (3) the amount available to be drawn under the Letter of Credit has been reinstated so as to be available in an amount equal to the principal

amount of the Bonds Outstanding, plus the applicable Letter of Credit Interest Amount. Except as provided in this paragraph, neither the Trustee nor the Owners will declare the Bonds to be due and payable. The Trustee will be entitled to treat any dishonor of a drawing under the Letter of Credit as proper unless and until a court of competent jurisdiction makes a final determination that such dishonor was not proper.

**Other Remedies.** If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy by proceeding at law or in equity to collect the principal of or interest on the Bonds or to enforce the performance of any provision of the Bonds, the Indenture or the Reimbursement Agreement. However, when a Letter of Credit is in effect and so long as the Bank has not dishonored a valid and properly submitted drawing under the Letter of Credit, the Trustee will pursue any remedy only at the written direction of the Bank.

The Trustee may maintain a proceeding even if it does not possess any of the Bonds or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Owner in exercising any right or remedy accruing upon an Event of Default will not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. No remedy is exclusive of any other remedy. All available remedies are -cumulative.

**Waiver of Past Defaults.** When a Letter of Credit is in effect and so long as the Bank has not dishonored a valid and properly submitted drawing under the Letter of Credit, the Bank, and at all other times the Owners of a majority in principal amount of Outstanding Bonds, by notice to the Trustee may waive an existing Event of Default and its consequences; provided, however, that, when a Letter of Credit is in effect, no such waiver will be effective unless and until the Letter of Credit has been reinstated so as to be available in an amount equal to the principal amount of the Bonds Outstanding, plus the applicable Letter of Credit Interest Amount. When an Event of Default is waived, it is cured and stops continuing, but no such waiver will extend to any subsequent or other Event of Default or impair any right consequent to it.

**Control by Bank or Majority of Owners.** The Bank, when there is a Letter of Credit in effect and so long as the Bank has not dishonored a valid and properly submitted drawing under the Letter of Credit, may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on it. When there is no Letter of Credit in effect, the Owners of a majority in aggregate principal amount of Bonds Outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on it. However, regardless of whether the Bank or the Owners of a majority in aggregate principal amount of Bonds Outstanding are in control, the Trustee may refuse to follow any direction that conflicts with law or the Indenture or would involve the Trustee in personal liability or, except with respect to remedies being pursued at the direction of the Bank pursuant to the provisions of Indenture, that the Trustee determines is unduly prejudicial to the rights of other Owners.

**Limitation on Suits.** The Bank, when a Letter of Credit is in effect and so long as the Bank has not dishonored a validly and properly submitted drawing under the Letter of Credit, may pursue any remedy available under the Indenture without the necessity of any action by the Trustee. An Owner may not pursue any remedy pursuant to the provisions of the Indenture as summarized in the caption “– Other Remedies” or pursuant to the Bonds unless (a) the Owner gives the Trustee notice stating that an Event of Default is continuing, (b) the Owners of at least 25% in principal amount of the Outstanding Bonds make a written request to the Trustee to pursue the remedy, (c) such Owner or Owners offer to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense, (d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity, and (e) either no Letter of Credit is in effect or the Bank has dishonored a valid and properly submitted drawing under the Letter of Credit.

An Owner may not use the Indenture to prejudice the rights of another Owner or to obtain a preference or priority over any other Owner.

**Rights of Owners to Receive Payment.** Notwithstanding any other provision of the Indenture, the right of any Owner to receive payment of principal of and interest on a Bond, on or after the due dates expressed in the Bond, or the purchase price of a Bond on or after the date for its purchase as provided in the Bond, or to bring suit for the enforcement of any such payment on or after such dates, will not be impaired or affected without the consent of the Owner.

**Collection Suit by Trustee.** If an Event of Default under paragraph (a) or (b) in the caption “– Events of Default” occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against IRWD or the Bank for the whole amount remaining unpaid.

**Trustee May File Proofs of Claim.** The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee and the Owners allowed in any judicial proceedings relative to IRWD or the Bank, its creditors or its property and, unless prohibited by law or applicable regulations, may vote on behalf of the Owners in any election of a trustee in bankruptcy or other person performing similar functions.

**Priorities.** Except as provided in this paragraph, funds drawn under the Letter of Credit will be used only for the payment of principal of and interest on, and the purchase price of, the Bonds, as provided in the Letter of Credit. If the Trustee collects any money pursuant to the default provisions of the Indenture, it will pay out the money in the following order: first to the Trustee for amounts to which it is entitled under the compensation and indemnification provisions of the Indenture, (provided, that if such money constitutes proceeds of a draw under the Letter of Credit, the Trustee will pay the Owners first and itself second); second to Owners for amounts due and unpaid on the Bonds for principal and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Bonds for principal and interest, respectively; third to the Bank to the extent it certifies that IRWD is indebted to it on account of draws under the Letter of Credit or otherwise under the Reimbursement Agreement; and fourth to IRWD. The Trustee may fix a payment date for any payment to the Owners.

**Undertaking for Costs.** In any suit for the enforcement of any right or remedy under the Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys’ fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This paragraph does not apply to a suit by the Trustee, a suit by an Owner pursuant to the provisions of the Indenture summarized in the caption “– Rights of Owners to Receive Payment” or a suit by Owners of more than 25% in aggregate principal amount of Bonds Outstanding.

## **THE TRUSTEE, THE REMARKETING AGENT AND THE PAYING AGENT**

**Removal and Resignation of the Trustee.** The Trustee may resign by notifying IRWD. The Owners of a majority in principal amount of the Outstanding Bonds may remove the Trustee by notifying the Trustee and may appoint a successor Trustee with the consent of IRWD and, when a Letter of Credit is in effect and so long as the Bank has not dishonored a validly and properly submitted drawing under the Letter of Credit, the consent of the Bank (which will be under no liability by reason of giving or withholding such consent). IRWD will remove the Trustee by notifying the Trustee if (a) the Trustee fails to comply with the penultimate sentence of this paragraph, (b) the Trustee is adjudged a bankrupt or an insolvent, (c) a receiver or other public officer takes charge of the Trustee or its property or (d) the Trustee otherwise becomes incapable of acting. Upon any such removal or resignation, IRWD, with the consent of the Bank, when a Letter of Credit is in effect and so long as the Bank has not dishonored a validly and properly submitted drawing under the Letter of Credit (which consent will not be unreasonably withheld, provided that the Bank will be under no liability by reason of giving or withholding such consent), will promptly appoint a successor Trustee by an instrument in writing, which successor Trustee will give notice of such appointment to all Owners as soon as practicable; provided that in the event IRWD does not appoint a successor Trustee within 60 days following the giving of any such notice of removal or the receipt of any such notice of resignation, the removed or resigning Trustee may petition any appropriate court having jurisdiction to appoint a successor Trustee. Any successor Trustee will be a bank, national banking association or trust company doing business and having a principal corporate trust office in either New York, New York or Los Angeles or San Francisco, California, having a combined capital (exclusive of borrowed capital) and surplus of at least \$50,000,000 and subject to supervision or examination by state or national authorities. If such bank, national banking association or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purposes of this paragraph the combined capital and surplus of such bank, national banking association or trust company will be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Any removal or resignation of a Trustee and appointment of a successor Trustee will become effective only upon the acceptance of the appointment by the successor Trustee and the transfer by the retiring Trustee to the successor Trustee of all property held by it under the Indenture as Trustee.

**Compensation and Indemnification of the Trustee.** IRWD will from time to time, subject to any agreement then in effect with the Trustee, pay the Trustee compensation for its services and reimburse the Trustee for all its advances and expenditures under the Indenture, including but not limited to advances to and fees and expenses of accountants, agents, appraisers, consultants, counsels or other experts employed by it in the observance and performance of its rights and obligations under the Indenture; provided that the Trustee will not have any lien for such compensation or reimbursement against any money held by it in any of the funds established under the Indenture, although the Trustee may take whatever legal actions are available to it directly against IRWD to recover such compensation or reimbursement.

To the extent permitted by law, IRWD assumes liability for, and agrees to indemnify and hold harmless the Trustee from and against any and all claims, damages and losses (including legal fees and expenses) arising out of (i) the condition, management, maintenance or use of or from any work done in connection with the works of improvement within the Improvement Districts, (ii) any act of negligence of IRWD or of any of its agents, contractors, employees, invitees, licensees, officers or supervisors in connection with the works of improvement within the Improvement Districts, or (iii) the payment of any costs or expenses of the acquisition and construction of the works of improvement within the Improvement Districts; provided, that no indemnification will be made for willful misconduct or negligence under the Indenture by the Trustee.

IRWD also agrees to indemnify the Trustee for, and to hold it harmless against, any loss, liability or expense incurred without negligence or willful misconduct on the part of the Trustee, arising out of or in connection with the acceptance or administration of the trust or trusts under the Indenture, as well as the costs and expenses of defending itself against any claim or liability in accordance with the exercise or performance of any of its powers or duties under the Indenture.

**Protection of the Trustee.** The Trustee will be protected and will incur no liability in acting or proceeding in good faith upon any affidavit, bond, certificate, consent, notice, request, requisition, resolution, statement, telegram, voucher, waiver or other paper or document which it will in good faith believe to be genuine and to have been adopted, executed or delivered by the proper party or pursuant to any of the provisions of the Indenture, and the Trustee will be under no duty to make any investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements. The Trustee may consult with counsel, who may be counsel to IRWD, with regard to legal questions arising under the Indenture, and the opinion of such counsel will be full and complete authorization and protection in respect to any action taken or suffered by it under the Indenture in good faith in accordance with the Indenture.

Whenever in the observance or performance of its rights and obligations under the Indenture, the Trustee will deem it necessary or desirable that a matter be proved or established prior to taking or suffering any action under the Indenture, such matter (unless other evidence in respect thereof be in the Indenture specifically prescribed) may be deemed to be conclusively proved and established by a certificate of an IRWD Representative, and such certificate will be full warranty to the Trustee for any action taken or suffered under the provisions of the Indenture upon the faith thereof, but in its discretion the Trustee may, in lieu thereof, accept other evidence of such matter or may require such additional evidence as it may deem reasonable.

The Trustee may buy, sell, own, hold and deal in any of the Bonds and may join in any action which any Owner may be entitled to take with like effect as if it were not a party to the Indenture. The Trustee, either as principal or agent, may also engage in or be interested in any financial or other transaction with IRWD and may act as agent, depository or trustee for any committee or body of Owners or of owners of obligations of IRWD as freely as if it were not the Trustee under the Indenture.

The Trustee may act through agents or co-trustees (which co-trustees, if any, will be approved by IRWD) and will not be responsible for the misconduct or negligence of any agent -or co-trustee appointed with due care.

The Trustee will not be liable for any action it takes or omits to take in good faith without negligence which it believes to be authorized or within its rights or powers.

The Trustee makes no representation as to the validity or adequacy of the Indenture or the Bonds, will not be accountable for IRWD's covenants and representations contained in the Indenture or the recitals made in the Indenture which are made by IRWD solely, and will not be responsible for any statement in the Bonds other than its certificate of authentication.

**Duties of Trustee.** (a) If an Event of Default has occurred and is continuing, the Trustee will exercise its rights and powers and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) Except during the continuance of an Event of Default,

(1) The Trustee need perform only those duties that are specifically set forth in the Indenture and no others, and

(2) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed, upon certificates or opinions furnished to the Trustee and conforming to the requirements of the Indenture. However, the Trustee will examine these certificates and opinions to determine whether they conform to the requirements of the Indenture.

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that

(1) This paragraph (c) does not limit the effect of the immediately preceding paragraph (b),

(2) The Trustee will not be liable for any error of judgment made in good faith by a responsible officer of the Trustee, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts,

(3) The Trustee will not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to the provisions of the Indenture summarized in the caption "– Control by Bank or Majority of Owners," and

(4) No provision of the Indenture will require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties under the Indenture or in the exercise of any of its rights or powers, if it will have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(d) Every provision of the Indenture that in any way relates to the Trustee is subject to all the foregoing paragraphs in this caption.

(e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity satisfactory to it against any loss, liability or expense, but the Trustee will not require indemnity as a condition to declaring the principal of and interest on the Bonds to be due immediately under the acceleration provisions of the Indenture, to drawing on the Letter of Credit, mailing the notice of mandatory purchase pursuant to the Indenture or making payment on the Bonds.

(f) The Trustee will not be liable for interest on any cash held by it.

**Notice of Defaults.** If an event occurs which, with the giving of notice or lapse of time, or both, would be an Event of Default, and if the event is continuing and if it is known to the Trustee, the Trustee will mail to each Owner and the Bank notice of the event within 90 days after it occurs. Except in the case of a payment default, the

Trustee may withhold the notice if and so long as a committee of its officers in good faith determines that withholding the notice is in the interest of the Owners.

**Appointment of Remarketing Agent.** IRWD appoints the Remarketing Agent to remarket Bonds pursuant to the Indenture, and to keep such books and records as will be consistent with prudent industry practice and to make such books and records available for inspection by the Bank, IRWD, the Paying Agent and the Trustee at all reasonable times, and to give telegraphic or telephonic notice, promptly confirmed by a written notice, to the Trustee (who will then promptly notify the Bank and the Paying Agent), specifying (i) the principal amount of such Bonds, if any, remarketed by it as provided in the Indenture, and (ii) the interest rates on the remarketed Bonds as determined pursuant to and in accordance with the Indenture.

The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by the Indenture by giving at least 30 days' notice to the Bank, IRWD, the Paying Agent and the Trustee. The Remarketing Agent may be removed at any time, upon 30 days' notice, at the direction of IRWD, by an instrument filed with the Remarketing Agent and the Paying Agent. Any successor Remarketing Agent will be selected by IRWD and will be a member of the National Association of Securities Dealers, Inc., will have a capitalization of at least \$15,000,000 or have a line of credit with a commercial bank in the amount of at least \$15,000,000, and will be authorized by law to perform all the duties set forth in the Indenture. When a Letter of Credit is in effect and so long as the Bank has not dishonored a validly and properly submitted draw under the Letter of Credit, IRWD will obtain the Bank's consent to the appointment of such successor Remarketing Agent, which consent may be withheld only for reasons related to the successor's credit and which will not be unreasonably withheld (provided that the Bank will be under no liability by reason of giving or withholding such consent). IRWD's delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor will be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of the Indenture and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of the Indenture.

**Appointment of Paying Agent.** IRWD appoints the Paying Agent to authenticate and deliver the Bonds as provided in the Indenture and to hold all Bonds delivered to it pursuant to the Indenture in trust for the benefit of the respective Owners who will have so delivered such Bonds until monies representing the purchase price of such Bonds will have been delivered to or for the account of or to the order of such Owners, to hold all money delivered to it for the purchase of Bonds in trust for the benefit of the person or entity which will have so delivered such money until the Bonds purchased with such money will have been delivered to or for the account of such person or entity.

The Paying Agent may at any time resign and be discharged of the duties and obligations set forth in the Indenture by giving at least 60 days' notice to the Bank, IRWD, the Remarketing Agent and the Trustee. The Paying Agent may be removed at any time, at the direction of IRWD, by an instrument filed with the Paying Agent and the Trustee. The resignation or removal of the Paying Agent will become effective only upon the acceptance of the appointment by the successor Paying Agent or the assumption of all duties and responsibilities of the Paying Agent by the Trustee. Any successor Paying Agent will be a commercial bank, national banking association or trust company, in each case and with trust powers, doing business and having an office in New York, New York, and will be appointed by IRWD, with the consent of the Trustee and, when a Letter of Credit is in effect and so long as the Bank has not dishonored a validly and properly submitted draw under the Letter of Credit, the consent of the Bank (provided that the Bank will be under no liability by reason of giving or withholding such consent), in the same manner provided in the Indenture for appointment of a successor Trustee.

## **AMENDMENT OF OR SUPPLEMENT TO THE INDENTURE**

**Amendment or Supplement by Consent of Owners.** (a) The Indenture, the Bonds and the rights and obligations of IRWD, the Trustee, the Paying Agent, the Remarketing Agent, the Bank and the Owners under the Indenture may be amended or supplemented at any time by an amendment of the Indenture or supplement to the Indenture which will become binding when the written consents of the Owners of a majority in aggregate principal amount of the Bonds then Outstanding, exclusive of Bonds disqualified as provided in the immediately following caption “–Disqualified Bonds,” and the written consent of the Bank when a Letter of Credit is in effect and so long as the Bank is not in default on the Letter of Credit (provided that the Bank will be under no liability by reason of

giving or withholding such consent), are filed with the Trustee. No such amendment or supplement will (1) reduce the rate of interest on any Bond or extend the time of payment thereof or reduce the amount of principal or redemption premiums, if any, on any Bond or extend the Serial Maturity Date or Principal Payment Date thereof without the prior written consent of the Owner of the Bond so affected, or (2) reduce the percentage of Owners whose consent is required for the execution of any amendment of the Indenture or supplement to the Indenture, or (3) modify any of the rights or obligations of the Trustee, the Paying Agent, the Bank or the Remarketing Agent without its prior written consent thereto.

(b) The Indenture, the Bonds and the rights and obligations of IRWD, the Trustee, the Paying Agent, the Remarketing Agent, the Bank and the Owners under the Indenture may also be amended or supplemented at any time by an amendment of the Indenture or supplement to the Indenture which will become binding upon execution without the written consent of any Owners, but with the written consent of the Bank when a Letter of Credit is in effect and so long as the Bank is not in default on the Letter of Credit (provided that the Bank will be under no liability by reason of giving or withholding such consent), and (if the amendment or supplement modifies any of the rights or obligations of the Paying Agent or the Remarketing Agent under the Indenture) with the written consent of the Paying Agent or the Remarketing Agent, as applicable, only after receipt of a Favorable Opinion of Bond Counsel and only for any one or more of the following purposes –

(i) to add to the conditions, covenants and terms contained in the Indenture required to be observed or performed by IRWD, other conditions, covenants and terms thereafter to be observed or performed by IRWD, or to surrender any right reserved in the Indenture to or conferred in the Indenture on IRWD, and which in either case will not adversely affect the interests of the Owners;

(ii) to make such provisions for the purpose of curing any ambiguity or of correcting, curing or supplementing any defective provision contained in the Indenture or in regard to questions arising under the Indenture which IRWD may deem desirable or necessary, and which will not adversely affect the interests of the Owners;

(iii) to comply with the requirements of Moody's or S&P for the initial rating of the Bonds of Aa2/VMIG1 and AA-/A-1+, respectively;

(iv) to transfer any Fund or account created in the Indenture held by IRWD as well as any money on deposit in any such Fund or account to the Trustee and to make such provisions for the purpose of correcting or supplementing any provision contained in the Indenture to reflect the transfer of such Fund or account;

(v) to make such provisions for the purpose of correcting or supplementing any provision contained in the Indenture relating to the use of the Reserve Account and any monies deposited therein which will not adversely affect the interests of the Owners;

(vi) to modify, amend or supplement the Indenture in any other respect which does not adversely affect the interests of the Owners; or

(vii) to provide for (or subsequently modify) an additional Mode for the Bonds and the provisions relating thereto. Such amendment will be accompanied by a Favorable Opinion of Bond Counsel and will specify the period for payment of the interest, the intervals and dates at which the rate will be set by the Remarketing Agent and the intervals and procedures by which the Bonds may be tendered for purchase. These changes will be noted on the Bonds in accordance with the Indenture, or an amended Bond form will be provided for in the amendment in order to reflect them.

A change to an additional Mode from another interest rate determination method will cause a mandatory purchase of the Bonds. The notice requirements of the Indenture will apply to any such change. The effective date of a change to an additional Mode cannot be after the Fixed Rate Mode Change Date.

Each additional Mode interest rate will be set at the minimum rate necessary for the Remarketing Agent to sell the Bonds on the day the rate is to take effect at their principal amount plus accrued interest, if any.

The amendment will establish an index and/or method by which the rate will be set, to be used in the event that for any reason the Remarketing Agent does not set an additional Mode interest rate or a court holds that the rate set is invalid or unenforceable.

**Disqualified Bonds.** Bonds held for the account of IRWD will not be deemed Outstanding for the purpose of any consent or other action or any calculation of Outstanding Bonds provided in the Indenture, and will not be entitled to consent to or take any other action provided in the Indenture (provided, however, that only Bonds that the Trustee knows to be so held will be disregarded), and the Trustee may adopt appropriate regulations to require each Owner, before such Owner's consent provided for in the Indenture will be deemed effective, to reveal if the Bonds as to which such consent is given are disqualified as provided in this paragraph.

**Endorsement or Replacement of Bonds After Amendment or Supplement.** After the effective date of any action taken as provided in the Indenture, the Trustee may determine that the Bonds may bear a notation by endorsement in form approved by the Trustee as to such action, and in that case upon demand of the Owner of any Outstanding Bond and presentation of such Owner's Bond for such action such notation will be made on such Bond. If the Trustee will so determine, new Bonds so modified as in the opinion of the Trustee will be necessary to conform to such action will be prepared, and in that case upon demand of the Owner of any Outstanding Bonds, such new Bonds will be exchanged without cost to each Owner for Bonds then Outstanding at the office of the Paying Agent upon surrender of such Outstanding Bonds. All Bonds surrendered to the Paying Agent pursuant to the provisions of this paragraph will be cancelled by the Trustee and will not be redelivered.

**Signing by Trustee of Amendments and Supplements.** The Trustee will sign any amendment or supplement to the Indenture or the Bonds authorized by the Indenture if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee. If it does, the Trustee may, but need not, sign it. In signing an amendment or supplement, the Trustee will be entitled to receive and (subject to the Indenture) will be fully protected in relying on an Opinion of Counsel stating that such amendment or supplement is authorized by the Indenture.

## **DEFEASANCE**

**Defeasance.** If and when the Bonds secured by the Indenture will become due and payable in accordance with their terms or through redemption proceedings as provided in the Indenture, or otherwise, and the whole amount of the principal, Purchase Price or redemption price and the interest so due and payable upon all of the Bonds will be paid, or provision will have been made for the payment of the same in accordance with the Indenture, together with all other sums payable under the Indenture by IRWD, including all fees and expenses of the Trustee, then and in that case, the Indenture and the lien created by the Indenture will be discharged and satisfied and IRWD will be released from the covenants, agreements and obligations of IRWD contained in the Indenture, and the Trustee will assign and transfer to or upon the order of IRWD all property (in excess of the amounts required for the foregoing) then held by the Trustee free and clear of any encumbrances and will execute such documents as may be reasonably required by IRWD in this regard.

Subject to the provisions of the above paragraph, when any of the Bonds will have been paid and if, at the time of such payment, IRWD will have kept, performed and observed all the covenants and promises in such Bonds and in the Indenture required or contemplated to be kept, performed and observed by IRWD or on its part on or prior to that time, then the Indenture will be considered to have been discharged in respect of such Bonds and such Bonds will cease to be entitled to the lien of the Indenture and such lien and all covenants, agreements and other obligations of IRWD under the Indenture will cease, terminate, become void and be completely discharged as to such Bonds.

Notwithstanding the satisfaction and discharge of the Indenture or the discharge of the Indenture in respect of any Bonds, those provisions of the Indenture relating to the maturity of the Bonds, interest payments and dates thereof, tender and exchange provisions, exchange and transfer of Bonds, replacement of mutilated, destroyed, lost or stolen Bonds, the safekeeping and cancellation of Bonds, nonpresentment of Bonds, compliance by IRWD of the tax-related covenants contained in the Indenture and the duties of the Trustee in connection with all of the foregoing, will remain in effect and will be binding upon IRWD, the Trustee and the Owners and the Trustee will continue to be obligated to hold in trust any monies or investments then held by the Trustee for the payment of the principal of, Purchase Price or redemption price and interest on the Bonds and to pay to the Owners the funds so held by the



Trustee as and when such payment becomes due. Notwithstanding the satisfaction and discharge of the Indenture or the discharge of the Indenture in respect of any Bonds, those provisions of the Indenture contained in the Indenture relating to the compensation and indemnification of the Trustee will remain in effect and will be binding upon the Trustee and IRWD.

**Bonds Deemed to Have Been Paid.** Any Outstanding Bond or Bonds, other than Bank-Owned Bonds and bonds in the Daily Mode and the Weekly Mode, will, prior to the maturity, acceleration or Redemption Date thereof, be deemed to have been paid within the meaning and with the effect expressed in the provisions of the Indenture summarized in the caption “– Defeasance” if (a) in case said Bonds are to be redeemed on any date prior to their maturity, IRWD will have given to the Trustee in form satisfactory to the Trustee irrevocable instructions to mail, in accordance with the provisions of the Indenture, notice of redemption of such Bonds on said Redemption Date, (b) there will have been deposited with the Trustee either monies (which monies, if a Letter of Credit is then in effect, will constitute Seasoned Funds), in an amount which will be sufficient, or Government Obligations (which Government Obligations, if a Letter of Credit is then in effect, will have been purchased with Seasoned Funds), the principal of and the interest on which when due, and without any reinvestment thereof, will provide monies which, together with the monies (which monies, if a Letter of Credit is then in effect, will constitute Seasoned Funds), if any, deposited with or held by the Trustee at the same time, will be sufficient (as verified by a report of an independent certified public accountant), to pay when due the principal, or redemption price, as applicable of, and interest due and to become due on, said Bonds on and prior to the Redemption Date or maturity date thereof, as the case may be, and the Purchase Price of any Bonds which may be tendered for purchase pursuant to the Indenture prior to such maturity date or Redemption Date, and (c) in the event any of said Bonds are not to be redeemed within the next succeeding 60 days, IRWD will have given the Trustee in form satisfactory to the Trustee irrevocable instructions to mail, as soon as practicable in the same manner as a notice of redemption is mailed pursuant to the Indenture, a notice to the Owners of such Bonds and to the Securities Depositories and an Information Service that the deposit required by (b) above has been made with the Trustee and that said Bonds are deemed to have been paid in accordance with this paragraph and stating such maturity or Redemption Dates upon which monies are to be available for the payment of the principal or redemption price, as applicable, of said Bonds. Neither the securities nor monies deposited with the Trustee pursuant to this paragraph nor principal or interest payments on any such securities will be withdrawn or used for any purpose other than, and will be held in trust for, the payment of the principal, Purchase Price or redemption price (if applicable) of, and interest on said Bonds; provided that any cash received from such principal or interest payments on such obligations deposited with the Trustee, if not then needed for such purpose, will, to the extent practicable, and at the direction of IRWD, be reinvested in Government Obligations maturing at times and in amounts, together with the other monies and payments with respect to Government Obligations then held by the Trustee pursuant to this paragraph, sufficient (as verified by a report of an independent certified public accountant) to pay when due the principal, Purchase Price or redemption price (if applicable) of, and interest to become due on said Bonds on and prior to such Redemption Date or maturity date thereof, as the case may be, and interest earned from such reinvestments will, upon receipt by the Trustee of a written direction of an IRWD Representative, be paid over to IRWD, as received by the Trustee, free and clear of any trust, lien or pledge.

**Monies Held for Particular Bonds.** Except as otherwise provided in the immediately preceding paragraph, the amounts held by the Trustee or the Paying Agent for the payment of the interest, principal, Purchase Price or redemption price due on any date with respect to particular Bonds will, on and after such date and pending such payment, be set aside on its books and held in trust by it for the Owners entitled thereto.

**Unclaimed Money.** Anything contained in the Indenture to the contrary notwithstanding, any money held by the Trustee or the Paying Agent in trust for the payment and discharge of the interest, principal or Purchase Price or redemption premiums, if any, of any Bonds which remains unclaimed for two years after the date when the payments on such Bonds have become payable, if such money was held by the Trustee or the Paying Agent on such date, or for two years after the date of deposit of such money if deposited with the Trustee or the Paying Agent after the date when such payments on the Bonds have become payable, will upon written notice from IRWD be repaid by the Trustee or the Paying Agent, as applicable, to IRWD as its absolute property free from trust, and the Trustee or the Paying Agent, as applicable, will thereupon be released and discharged with respect thereto and the Owners will look only to IRWD for the payment of the interest, principal or Purchase Price or redemption premiums, if any, on such Bonds; provided that before being required to make any such payment to IRWD, the Trustee will, at the expense of IRWD, give notice by mail to the Owners of such Bonds that such money remains unclaimed and that

after a date named in such notice, which date will not be less than 60 days after the date of giving such notice, the Trustee or the Paying Agent, as applicable, will promptly pay to the Bank so much of such money as the Bank certifies to the Trustee that IRWD owes to the Bank with respect to any Bond or under the Reimbursement Agreement, and the balance of such money then unclaimed will be returned to IRWD.

## MISCELLANEOUS

**Benefits of the Indenture Limited.** Nothing contained in the Indenture, expressed or implied, is intended to give to any person other than the Bank, IRWD, the Paying Agent, the Remarketing Agent, the Trustee and the Owners any claim, remedy or right under or pursuant to the Indenture, and any agreement, condition, covenant or term contained in the Indenture required to be observed or performed by or on behalf of IRWD will be for the sole and exclusive benefit of the Bank, the Paying Agent, the Remarketing Agent and the Trustee and the Owners.

**Successor Deemed Included in All References to Predecessor.** Whenever either the Bank, IRWD, the Paying Agent, the Remarketing Agent, the Trustee or any officer thereof is named or referred to in the Indenture, such reference will be deemed to include the successor to the powers, duties and functions that are presently vested in the Bank, IRWD, the Paying Agent, the Remarketing Agent or the Trustee or such officer, and all agreements, conditions, covenants and terms contained in the Indenture required to be observed or performed by or on behalf of the Bank, IRWD, the Paying Agent, the Remarketing Agent or the Trustee or any officer thereof will bind and inure to the benefit of the respective successors thereof whether so expressed or not.

**Execution of Documents by Owners.** Any declaration, request or other instrument which is permitted or required in the Indenture to be executed by Owners may be in one or more instruments of similar tenor and may be executed by Owners in person or by their attorneys appointed in writing. The fact and date of the execution by any Owner or such Owner's attorney of any declaration, request or other instrument or of any writing appointing such attorney may be proved by the certificate of any notary public or other officer authorized to take acknowledgments of deeds to be recorded in the state or territory in which such notary public or other officer purports to act that the person signing such declaration, request or other instrument or writing acknowledged to such notary public or other officer the execution thereof, or by an affidavit of a witness of such execution duly sworn to before such notary public or other officer, or by such other proof as the Trustee may accept which it may deem sufficient. Any declaration, request or other instrument in writing of the Owner of any Bond will bind all future Owners of such Bond with respect to anything done or suffered to be done by IRWD or the Trustee in good faith and in accordance therewith.

**Waiver of Personal Liability.** No supervisor, officer or employee of IRWD will be individually or personally liable for the payment of the interest or Purchase Price or principal or redemption premiums, if any, on the Bonds, but nothing contained in the Indenture will relieve any supervisor, officer or employee of IRWD from the performance of any official duty provided by any applicable provision of law or the Indenture.

**Acquisition of the Bonds by IRWD.** All Bonds acquired by IRWD, whether by purchase or gift or otherwise, will be surrendered to the Trustee for cancellation.

**Notice by Mail.** Any notice required to be given under the Indenture by mail to Owners will be given by mailing a copy of such notice, first class postage prepaid, to such Owners at their addresses appearing in the Bond Register.

**Funds.** Any Fund required to be established and maintained in the Indenture by the Trustee may be established and maintained in the account records of the Trustee either as an account or a fund, and may, for the purpose of such accounting records, any audits thereof and any reports or statements with respect thereto, be treated either as an account or a fund; but all such records with respect to all such Funds will at all times be maintained in accordance with sound industry practice and with due regard for the protection of the security of the Bonds and the rights of the Owners.

**Reference to Bank.** Notwithstanding any provisions contained in the Indenture to the contrary, after the expiration or termination of the Letter of Credit and after all obligations owed to the Bank pursuant to the

Reimbursement Agreement have been paid in full or discharged, all references to the Bank contained in the Indenture will be null and void and of no further force and effect.

**California Law.** The Indenture will be construed and governed in accordance with the laws of the State.

**New York Time.** Unless otherwise expressly stated, all times referred to in the Indenture will be New York City time.

## APPENDIX D

### BOOK-ENTRY ONLY SYSTEM

*The information in this section concerning DTC and DTC's book-entry only system has been obtained from sources that the District believes to be reliable, but the District takes no responsibility for the completeness or accuracy thereof. The following description of the procedures and record keeping with respect to beneficial ownership interests in the Series 1993 Bonds, payment of principal, premium, if any, accreted value, if any, and interest with respect to on the Series 1993 Bonds to DTC Participants or Beneficial Owners, confirmation and transfers of beneficial ownership interests in the Series 1993 Bonds and other related transactions by and between DTC, the DTC Participants and the Beneficial Owners is based solely on information provided by DTC.*

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Series 1993 Bonds. The Series 1993 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered bond will be issued for each maturity of the Series 1993 Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com).

Purchases of Series 1993 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 1993 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 1993 Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 1993 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive bonds representing their ownership interests in Series 1993 Bonds, except in the event that use of the book-entry system for the Series 1993 Bonds is discontinued.

To facilitate subsequent transfers, all Series 1993 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 1993 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 1993 Bonds; DTC's records reflect only the identity of the Direct

Participants to whose accounts such Series 1993 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holding on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 1993 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 1993 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Series 1993 Bond documents. For example, Beneficial Owners of Series 1993 Bonds may wish to ascertain that the nominee holding the Series 1993 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 1993 Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 1993 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the District as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 1993 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments with respect to the Series 1993 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the District or the Trustee, on a payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or the District, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the District or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its Series 1993 Bonds purchased or tendered, through its participant, to the Tender Agent, and shall effect delivery of such securities by causing the Direct Participant to transfer the Participant's interest in the Series 1993 Bonds, on DTC's records, to the Tender Agent. The requirement for physical delivery of Series 1993 Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Series 1993 Bonds are transferred by Direct Participants or DTC's records and followed by book-entry credit of tendered Series 1993 Bonds to the Tender Agent's DTC account.

DTC may discontinue providing its services as depository with respect to the Series 1993 Bonds at any time by giving reasonable notice to the District or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Series 1993 Bonds are required to be printed and delivered.

The District may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Series 1993 Bonds will be printed and delivered.

## APPENDIX E

### CO-BOND COUNSEL OPINIONS

*Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Kadi, Wiles & Giannone (now known as Bowie, Arneson, Wiles & Giannone), Co-Bond Counsel, rendered final approving opinions dated May 20, 1993 (the “1993 Opinions”) in connection with the initial issuance of the Series 1993 Bonds. Co-Bond Counsel have made no attempt to update or reaffirm the 1993 Opinions in connection with this Remarketing Statement or the delivery of the Letter of Credit.*

[SEE ATTACHED]

[INSERT ORIGINAL 1993 OPINIONS]

*Upon delivery of the Letter of Credit, Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone, Co-Bond Counsel, propose to render their opinions with respect thereto in substantially the following form:*

[TO COME FROM CO-BOND COUNSEL]



**APPENDIX A**  
**IRVINE RANCH WATER DISTRICT**

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## **INTRODUCTION**

The following sets forth certain information relating to the Irvine Ranch Water District (the “District”) and certain of its improvement districts.

The District’s projections in Tables 12, 15, 17, 19, 23, 25, 27, 30 and 32 of this Appendix A (the “Projections”) are derived from historic trends and experience and an internal financial model known as the “District Enterprise Model.” The District Enterprise Model is a capital planning and budgeting tool used by the District to identify future infrastructure funding requirements, and to aid in setting water and sewer rates, charges and connection fees. Key inputs utilized in the District Enterprise Model include assumptions based on historical experience and other factors regarding the District’s cost of borrowing, the rate of return on District investments, inflation, project costs, property tax receipts and the timing and amount of future bond sales, but the primary input is the pace and scope of real estate development activity within the District’s service area. The District is in regular contact with major Orange County (the “County”) real estate development companies to assess and update this information for use in the District Enterprise Model.

The Projections constitute forward-looking statements. No assurance can be given that the future results reflected in the Projections and otherwise discussed herein will be achieved, and actual results may differ materially from the Projections. As noted above, the Projections rely heavily on certain assumptions regarding the pace and scope of real estate development activity within the District’s service area. Such activity may be affected by a variety of factors, such as tighter lending standards for real estate loans generally. Real estate development activity also may be affected by general economic conditions, which currently reflect higher energy and commodity costs and volatile financial markets. The District has attempted to reflect such conditions in the Projections, but is unable to predict with certainty the level of future real estate development activity or the other factors affecting the Projections.

In addition to the specific limitations on remedies contained in the applicable documents themselves, the rights and obligations with respect to the Indenture are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance and other similar laws affecting creditors’ rights, to the application of equitable principles if equitable remedies are sought, and to the exercise of judicial discretion in appropriate cases and to limitations on legal remedies against public agencies in the State of California (the “State”). The various opinions of counsel that were delivered with respect to such documents, including the opinions of Co-Bond Counsel (the forms of which are attached to the Remarketing Statement as Appendix E), were similarly qualified.

Unless the context otherwise requires, all defined terms used herein shall have the same meanings set forth in the Remarketing Statement, except that the term “Improvement Districts” as used in this Appendix A refers to all seven water improvement districts and ten sewer improvement districts of the District.

## **THE IRVINE RANCH WATER DISTRICT**

### **General**

The District was established in 1961 as a California Water District under the provisions of Section 34000 *et seq.* of the California Water Code (the “Act”). As a special district, the District focuses on four primary services – providing potable water, collecting and treating wastewater, producing and distributing recycled and other non-potable water, and implementing urban runoff treatment programs.

The District serves a 181-square-mile area, which includes all of the City of Irvine and portions of the cities of Tustin, Newport Beach, Costa Mesa, Orange and Lake Forest, as well as certain unincorporated areas of the County. Extending from the Pacific Coast to the foothills, the District’s region is semi-arid with a mild climate and an average annual rainfall of approximately 12 inches. The District serves a total estimated population of approximately 370,000 through approximately 102,990 water and approximately 97,482 sewer

service and recycled water connections. The number of service connections has increased by approximately 16% over the last decade.

The District builds and maintains significant capital infrastructure in order to serve its customers and is organized into Improvement Districts in order to allocate funding responsibility for capital facilities to the area which will benefit from such capital facilities and to separate areas on the basis of projected timing of development. This allows capital facilities construction to be matched to the development approval decisions of the respective local agencies that make them. Some of the Improvement Districts share in the funding of the District's regional facilities which such Improvement Districts use or will use in common, such as major water importation facilities and water and wastewater treatment plants. The District recently undertook a process to review its current capital funding plan, resulting in a master consolidation and combination of several Improvement Districts in November 2013. As a result of such consolidation, the District now has a total of seven water Improvement Districts and ten sewer Improvement Districts which cover specific areas within the District's boundaries, each of which is governed in accordance with the Act. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the effect on the Series 1993 Bonds of the consolidation and combination of such Improvement Districts.

As of December 31, 2014: (i) Improvement District No. 125 had \$322,089,600 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$188,789,150 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds; (ii) Improvement District No. 225 had \$406,895,000 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$237,018,171 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds; and (iii) Improvement District No. 240 had \$68,796,500 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$23,928,179 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 1993 Bonds. See Table 3 under the caption "—Outstanding Indebtedness—Improvement District Indebtedness."

The principal office of the District is located at 15600 Sand Canyon Avenue, Irvine, California 92618.

### **Board of Directors and General Manager**

Pursuant to legislation chaptered in 1980, the District's Board of Directors consists of five Directors elected by resident voters for staggered four-year terms. The policies of the Board of Directors are administered by the General Manager of the District.

***Board of Directors.*** The present Directors are:

Steven E. LaMar. Steven E. LaMar was appointed to the District's Board of Directors in February 2009 to fill a board vacancy and was subsequently elected to a four-year term in 2010. He is currently serving as Board President through 2015. Previously, he served as Board President in 2011 and 2014 and as Board Vice President in 2013. Mr. LaMar currently serves on the Finance and Personnel Committee and the Water Resources and Policy Committee as well as various Ad Hoc Committees. Mr. LaMar is a water policy and planning expert with over 20 years of experience on statewide business and industry committees and has directly participated in many major water policy forums. He has served on statewide task forces and advisory committees on drought planning, desalination, the California Bay-Delta, the California Water Plan and on water reliability and conservation issues. Mr. LaMar is president and owner of LegiSight, LLC, located in Tustin, CA, and is also a principal for Spinner LaMar Associates since 1993. He has served as a water policy leader in the California Building Industry Association for 20 years. Mr. LaMar has extensive water policy service. He was a member of the California Water Plan 2009 Advisory Committee and a member of the Delta Vision Stakeholders Coordination Group. He was Chair of the Economic Work Group for the 2006 California Landscape Task Force. In addition, he served as member of the 2005 State Water Desalination Task Force, the 2000 Governor's Advisory Drought Planning Panel and Chair of the California Building Industry

Association's statewide Water Resources Subcommittee and Task Force. Mr. LaMar was the recipient of the 2001 Ernest Hahn Achievement Award from the California Business Properties Association and the Building Industry Association of Southern California's Gary Anderson Memorial Award. Mr. LaMar holds a bachelor's degree in political science from Pittsburg State University and a certificate from the Environmental Management Institute, the U.S. Environmental Protection Agency environmental training program administered by the University of Southern California. He is past President of the Orange County Chapter of the Alzheimer's Association and is an avid hiker in regional parks. Mr. LaMar's current term ends in November 2018.

Mary Aileen Matheis. Mary Aileen Matheis was appointed to the District's Board of Directors in 1988 to fill a board vacancy and was successfully elected in subsequent years. She was most recently elected to a four-year term in 2012 and is currently serving as Board Vice President. She served as Board President in 2012 and 2001 and as Board Vice President in 2005 and 2011. Ms. Matheis currently serves on the Water Resources Policy and Communications Committee as well as various Ad Hoc Committees. Ms. Matheis has represented the District on the Southern California Water Committee and on the Board of the Urban Water Institute. She also currently serves on the Association of California Water Agencies ("ACWA") Legal Affairs Committee. She is a member of the Board of the San Joaquin Wildlife Sanctuary, Inc. and President of Shadetree Partnership, an environmental non-profit corporation dedicated to distributing and planting native trees and shrubs throughout Orange County. A practicing lawyer, Ms. Matheis is a member of the Orange County Bar Association and a member of the Orange County Association of Realtors. Ms. Matheis serves on the Assessment Appeals Board of Orange County. She has a bachelor's degree from Russell Sage College, and a master's degree in communication from the State University of New York. Ms. Matheis earned a Juris Doctorate at Western State University College of Law. Ms. Matheis has been admitted to practice in the United States Supreme Court and the United States Tax Court. She was honored by the California Real Estate Association as Distinguished Realtor of the Year, and has received the Realtor of the Year award by the Orange County Association. She was chosen as Woman of the Year by Senator Ross Johnson and as Volunteer of the Year for Orange County by the Clerk of the Board of Supervisors. Her civic associations include The Exchange Club of Irvine, the Irvine Valley College Foundation Board of Governor and the Lincoln Club of Orange County. She was recently appointed to the Board of Catholic Charities of Orange County. Ms. Matheis' current term ends in November 2016.

Douglas J. Reinhart. Douglas J. Reinhart was appointed to the District's Board of Directors in 2004 to fill a board vacancy and was subsequently elected to four-year terms in 2006 and 2010. He served as Board President in 2013, 2010, 2009 and 2007, having also served as Board Vice President in 2006. Mr. Reinhart currently serves on the Engineering and Operations Committee and the Water Banking Committee as well as various Ad Hoc Committees. He is a registered civil engineer with over 30 years of experience in the private sector, directing projects in water, wastewater and other infrastructure. Mr. Reinhart was the president and an owner of ASL Consulting Engineers before its acquisition by Tetra Tech in 1999. He then served as the Divisional Executive Vice President for Tetra Tech for the western United States before starting a consulting business in 2004. Mr. Reinhart is familiar with special district functions, having served as a Director on the board of El Toro Water District from 1998 to 2000. During that time, he served as Vice President of the board and was the special district representative to the Local Agency Formation Commission of Orange County ("LAFCO"). Mr. Reinhart resigned from both El Toro Water District's board and the LAFCO board in 2000 when he relocated his residence to the city of Irvine. He holds a bachelor's degree in civil engineering from the Missouri School of Mines and Metallurgy. He is a registered civil engineer in both California and Arizona and a registered control systems engineer in California. Mr. Reinhart has a variety of water industry service and has served on the Board of Trustees of the Southern California Water Committee, the American Water Works Association Desalination Committee, the ACWA Groundwater Committee and as a past member of the Board of Directors for the National WaterReuse Association. In addition, Mr. Reinhart is a member of the American Society of Civil Engineers and the American Public Works Association. Mr. Reinhart's current term ends in November 2018.

Peer Swan. Peer Swan was elected to the District's Board of Directors in 1979. After a term as Board Vice President, the Directors elected him Board President, a position that he held from December 1981 until December 1995 and again during 2006. Mr. Swan also served as Board Vice President in 2014. Mr. Swan currently serves as chairman of the Finance and Personnel Committee and the Water Banking Committee and serves on other standing and ad hoc committees. His current list of community and professional involvement includes membership on the Water Advisory Committee of Orange County, where he is a past Chairman; President of the Board of the San Joaquin Wildlife Sanctuary and member of the Steering Committee of the Southern California Water Dialog Committee. He has been active in ACWA, where he served on the Board of Directors and on the Executive Committee. Mr. Swan has also been active in the California Association of Sanitation Agencies, where he served as Chair of the Directors Committee; and the Newport Chamber of Commerce. He was the Treasurer of the Pacific Scientific Company prior to its acquisition in early 1998 and a member of the Board of Directors of the Southern California Bank and its parent SC Bancorp until its acquisition in 1997. He has also served as a board member of the YMCA of Orange County and the Orange Coast College Foundation, where he was the founding Treasurer of the Board. Mr. Swan has served as a Director to the Orange County Sanitation District, where he was Vice Chairman for six years. He served as a member of the Board of the Metropolitan Water District of Southern California. He was also a Founding Director of the Board of the National Water Research Institute, where he was Chairman for four years. He is a long-time member of the National Audubon Society and its local chapter (Sea & Sage). Mr. Swan's current term ends in November 2018.

John B. Withers. John B. Withers was appointed to the District's Board of Directors in 1989 to fill a board vacancy and has been subsequently elected to serve on the Board in four elections. He was most recently was elected to a four-year term in 2012. He served as Board Vice President in 2012 and as Board President in 2004. Mr. Withers currently serves on the Engineering and Operations Committee and Asset Management Committees as well as various Ad Hoc Committees. Mr. Withers is a Partner with California Strategies, LLC in Irvine, a statewide, strategic government relations firm. In past positions, Withers has served as a Vice President of Community Development for Lewis Operating Corp. and as Director of Water Resources for Psomas & Associates, a civil engineering and planning firm based in Costa Mesa. He was also the Director of Governmental Affairs for the Orange County Region of the Building Industry Association of Southern California, and a legislative advocate for Crocker Bank and a major trade association in Sacramento at the state capital. Since 1995, Mr. Withers has served as Commissioner to LAFCO, an agency which addresses local government organization and efficiency matters. Mr. Withers is also on the Board of Directors of the Orange County Sanitation District and is knowledgeable in current wastewater operational and policy issues. He has also served as Chairman of the Santa Ana Regional Water Quality Control Board, having been appointed by the Governor in 1992, where he has developed extensive water quality expertise. Mr. Withers also participates on the Board of the National Water Research Institute. A native Southern Californian, Mr. Withers received his bachelor of arts degree from the University of California at Los Angeles in economics with a specialization in urban studies in 1979. He was then selected as a CORO Foundation Fellow and received a master's degree in urban studies from Occidental College in 1988. Community activities include membership in the University of California at Los Angeles Alumni Association, youth sports and Mariners Church. Mr. Withers' current term ends in November 2016.

**General Manager.** Paul A. Cook, the General Manager of the District, heads a staff of approximately 335 employees. Mr. Cook was appointed General Manager in October 2011. Mr. Cook previously served as Interim General Manager from July to October 2011 and held the position of Assistant General Manager from 2004 to July 2011. Mr. Cook is a registered civil engineer with more than 22 years of experience with water and wastewater systems in the public and private sectors. Prior to joining the District, he served as the Manager of Engineering for Central and West Basin Municipal Water Districts in Carson, California. He also served as the District Engineer for Los Alisos Water District in Lake Forest. In the private sector, Mr. Cook held engineering and project management positions with BFI Constructors and Turner Construction Company. He was elected to the Orange County Water District Board of Directors in 2002 and served for three years, representing communities in Irvine, Tustin and Newport Beach. Mr. Cook received his bachelor of science degree in Civil Engineering from the University of the Pacific, his master's of science degree in Civil

Engineering from California State University of Long Beach and his master's in business administration from the University of California, Irvine.

## **Employees**

The District currently employs approximately 335 persons, including full-time, part-time and temporary employees. On February 24, 2014, a Memorandum of Understanding (the "2014 MOU") between the District and the Irvine Ranch Water District Employee Association (the "Association") was adopted, signed and approved. The 2014 MOU expired on March 31, 2015. The District and the Association have begun negotiations with respect to the execution of a new Memorandum of Understanding. The terms of the 2014 MOU will continue to govern relations between the District and the Association while such negotiations are ongoing until a new Memorandum of Understanding is executed. The Association currently represents 225 general employees of the District, of which 75 are voting members; supervisors and managers are unrepresented. The District has not experienced any strike or other labor actions.

## **Pension Benefits**

*This caption contains certain information relating to the California Public Employees Retirement System ("CalPERS"). The information is primarily derived from information produced by CalPERS, its independent accountants and actuaries. The District has not independently verified the information provided by CalPERS and makes no representations nor expresses any opinion as to the accuracy of the information provided by CalPERS.*

*The comprehensive annual financial reports of CalPERS are available on its Internet website at [www.calpers.ca.gov](http://www.calpers.ca.gov). The CalPERS website also contains CalPERS' most recent actuarial valuation reports and other information concerning benefits and other matters. Such information is not incorporated by reference herein. The District cannot guarantee the accuracy of such information. Actuarial assessments are "forward-looking" statements that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may not materialize or be changed in the future.*

**CalPERS Plan.** The District contributes to CalPERS, an agent multiple-employer public employee defined benefit pension plan for all of the District's full-time and certain of its temporary employees that have worked for the District for a total of over 1,000 hours. CalPERS provides retirement, disability and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including the District. Copies of CalPERS' annual financial report may be obtained from its Internet website at [www.calpers.ca.gov](http://www.calpers.ca.gov). The textual reference to such Internet website is provided for convenience only. None of the information on such Internet website is incorporated by reference herein.

CalPERS plan benefit provisions and all other requirements are established by State statute and the District's Board of Directors. Starting July 1, 2008, participants in the District's CalPERS plan have been required to contribute up to 8% of their annual covered salary. In the fiscal year of the District ended June 30 ("Fiscal Year"), 2014, the District made up to 1.37% of the contributions required of District employees, while the District employees made up to 6.63% of such contribution. Beginning in Fiscal Year 2015, employees will contribute the entire 8% of their CalPERS plan contributions.

In addition to paying a percentage of the contributions required of District employees on their behalf, the District is required to contribute at an actuarially determined rate applied to annual covered payroll. The District's contribution rates for Fiscal Year 2014 and 2015 were 16.795% and 17.737%, respectively. The District's contribution rate for Fiscal Year 2016 has been established at 18.331%.

For Fiscal Years 2014 and 2013, the District's annual pension cost, as determined by an actuarial valuation of the plan as of June 30, 2011 and 2010, was \$4,785,000 and \$4,297,000, respectively. The District



currently expects its annual required contribution in Fiscal Years 2015 and 2016 to be approximately \$4,500,000 and \$4,900,000, respectively (assuming that the District elects the lump sum payment option in each of the respective years).

Under Governmental Accounting Standards Board (“GASB”) Statement 27, an employer reports an annual pension cost (the “APC”) equal to the annual required contribution (the “ARC”) plus an adjustment for the cumulative difference between the APC and the employer’s actual plan contributions for the year. The cumulative difference is called the net pension obligation (if negative) or net pension asset (if positive). The ARC for Fiscal Year 2014 has been determined by an actuarial valuation of the plan as of June 30, 2011.

A summary of principal assumptions and methods used to determine the ARC is shown below.

Valuation Date	June 30, 2011
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization Method	Level Percent of Payroll
Average Remaining Period	19 Years as of the Valuation Date
Asset Valuation Method	15 Year Smoothed Market
<u>Actuarial Assumptions:</u>	
Investment Rate of Return	7.50% (net of administrative expenses)
Projected Salary Increases	3.30% to 14.20% depending on age, service, and type of employment
Inflation	2.75%
Payroll Growth	3.00%
Individual Salary Growth	A merit scale varying by duration of employment coupled with an assumed annual inflation component of 2.75% and an annual production growth of 0.25%.

Initial unfunded liabilities are amortized over a closed period that depends on the plan’s date of entry into CalPERS. Subsequent plan amendments are amortized as a level percentage of pay over a closed 20-year period. Gains and losses that occur in the operation of the plan are amortized over a 30-year rolling period, which results in an amortization of 6% of unamortized gains and losses each year. If the plan’s accrued liability exceeds the actuarial value of plan assets, the amortization period may not be lower than the payment calculated over a 30 year amortization period.

**Pension Benefits Trust.** The District recognizes that defined benefit plans and the related future pension obligations pose significant issues for many government agencies. The District has taken a proactive approach to address the issue by establishing a Pension Benefits Trust in Fiscal Year 2013 to fund its CalPERS unfunded liability, providing the District with an alternative to CalPERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions from the District pending future remittance to the CalPERS pension trust fund, which will pay all retiree benefit payments to employees associated with the District’s plan. Future contributions will be transferred to CalPERS at the District’s discretion. The funds held in the Pension Benefits Trust are legally protected from the claims of the general creditors of the District. Contributions to the Pension Benefits Trust and earnings on those contributions are irrevocable.

In Fiscal Year 2013, the District made a \$35.0 million contribution to the Pension Benefits Trust, bringing the District (as shown in the table below) to a 94.6% funded ratio (including the amounts in the Pension Benefits Trust and the District’s CalPERS plan) as of June 30, 2013. In Fiscal Year 2014, the District made an additional contribution of \$2.2 million to the Pension Benefits Trust. As of June 30, 2014, the fair market value of the assets in the Pension Benefits Trust was approximately \$42.6 million, further reducing the unfunded liability by an additional \$7.6 million. The moneys in the Pension Benefits Trust were invested in the Vanguard Institutional Index Fund, Fidelity Concord Spartan International Fund, Metropolitan West Total Return Bond Fund and Federated Government Obligations Money Market Fund. In Fiscal Year 2015, the

District expects to make an additional contribution of \$2.1 million to the Pension Benefits Trust. Additional information on the Pension Benefits Trust's investments can be found in Note 2 to the District's audited financial statements for Fiscal Year 2014 attached to the Remarketing Statement as Appendix B.

**Funding of CalPERS Plan.** The Schedule of Funding Progress (in thousands) below shows the recent history of the actuarial value of assets, actuarial accrued liability, their relationship, and the relationship of the unfunded accrued liability to payroll.

**TABLE 1**  
**IRVINE RANCH WATER DISTRICT**  
**Schedule of Funding**

<i>Valuation Date</i>	<i>Entry Age Normal Accrued Liability</i>	<i>Actuarial Value of Assets</i>	<i>Unfunded Actuarial Liability</i>	<i>Market Value of Assets</i>	<i>Funded Ratio</i>	<i>Annual Covered Payroll</i>
06/30/09	\$149,825	\$110,923	\$38,902	\$ 81,355	54.3%	\$24,307
06/30/10	158,904	124,553	34,351	100,110	63.0	24,929
06/30/11	170,392	140,176	29,676	128,816	75.6	24,379
06/30/12	183,096	151,193	31,902	129,953	71.0	24,203
06/30/13 <sup>(1)</sup>	197,685	186,955 <sup>(2)</sup>	10,730	186,955 <sup>(2)</sup>	94.6	25,499

<sup>(1)</sup> The Pension Benefits Trust was established in Fiscal Year 2013. Fiscal Year 2013 amount includes Pension Benefits Trust assets of \$35.0 million, significantly reducing the District's unfunded liability to \$10.7 million as of June 30, 2013. In Fiscal Year 2014, the District made an additional contribution of \$2.2 million to the Pension Benefits Trust. As of June 30, 2014, the fair market value of the assets in the Pension Benefits Trust was approximately \$42.6 million, further reducing the District's unfunded liability by an additional \$7.6 million. See the caption "—Pension Benefits Trust."

<sup>(2)</sup> Beginning with the June 30, 2013, valuation, the Actuarial Value of Assets is equivalent to the Market Value of Assets.

Source: Irvine Ranch Water District Fiscal Year 2014 Comprehensive Annual Financial Report.

In the Statement of Net Position as of June 30, 2014, the District has a net pension asset of \$51.9 million, consisting of \$52.5 million in contributions in excess of the ARC and \$0.6 million of amortization. The District's APC and net pension asset, computed in accordance with GASB 27, for the year ended June 30, 2014, were as follows (in thousands):

ARC	\$ 4,337
Interest on Beginning Pension Asset	(3,761)
Adjustment to ARC	<u>4,209</u>
APC	4,785
Contribution Made	<u>6,574</u>
Increase (Decrease) in Pension Asset	1,789
Net Pension Asset (Beginning of Year)	<u>50,148</u>
Net Pension Asset (End of Year) <sup>(1)</sup>	\$51,937

<sup>(1)</sup> Includes Pension Benefits Trust contributions of \$37.2 million. See the caption "—Pension Benefits Trust."

Source: The District.

The following table summarizes the District's APC, the percentage of APC contributed to the District's CalPERS plan, and the net pension asset (in thousands) for Fiscal Years 2010 through 2014:

**TABLE 2**  
**IRVINE RANCH WATER DISTRICT**  
**Annual Pension Cost (Employer Contributions)**

<i>Fiscal Year</i>	<i>Employer Contribution</i>	<i>District-Funded Employee Contribution</i> <sup>(1)</sup>	<i>Employee Contribution</i>	<i>Annual Pension Cost</i>	<i>Percentage of Annual Pension Cost Contributed</i>	<i>Net Pension Asset</i>
2010	\$4,797	\$1,709	\$ 243	\$2,982	160.9%	\$ 4,815
2011	9,480	1,728	249	3,012	314.7	11,283
2012	4,643	1,025	916	4,321	107.5	11,605
2013 <sup>(2)</sup>	42,840	609	1,365	4,297	997.0	50,148
2014 <sup>(2)</sup>	6,574	394	1,679	4,785	137.4	51,937

<sup>(1)</sup> Beginning in Fiscal Year 2015, the District will no longer fund any portion of the employee contribution. See the caption “—CalPERS Plan.”

<sup>(2)</sup> These figures include contributions of \$35,000,000 and \$2,200,000 to the Pension Benefits Trust in Fiscal Years 2013 and 2014, respectively. See the caption “—Pension Benefits Trust.”

Source: Irvine Ranch Water District Fiscal Year 2014 Comprehensive Annual Financial Report.

In June 2012, GASB approved new standards with respect to pension accounting and financial reporting for state and local governments and pension plans. The changes will impact the accounting treatment of pension plans in which state and local governments participate. Major changes include: (i) the inclusion of unfunded pension liabilities on the government’s balance sheet (currently, such unfunded liabilities are typically included as notes to the government’s financial statements); (ii) more components of full pension costs will be shown as expenses regardless of actual contribution levels; (iii) lower actuarial discount rates will be required to be used for underfunded plans in certain cases for purposes of the financial statements; (iv) closed amortization periods for unfunded liabilities will be required to be used for certain purposes of the financial statements; and (v) the difference between expected and actual investment returns will be recognized over a closed five-year smoothing period. The reporting requirements for pension plans for government employers will take effect for Fiscal Year 2015. Based on the adoption of the new accounting standard, beginning with the Fiscal Year 2015, the ARC and the annual pension expense will be different. For additional information relating to the District’s plan, see Note 13 to the District’s audited financial statements for Fiscal Year 2014 attached to the Remarketing Statement as Appendix B.

**Other Pension Benefits.** The District enables all of its part-time and certain temporary employees to participate in a defined contribution plan. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment earnings. For Fiscal Year 2014, the District’s payroll covered by the plan was \$483,248. The eligible employees contributed \$36,244 (the required 7.5% of current covered payroll). The District made no contributions to the defined contribution plan during such Fiscal Year.

All regular, full-time District employees are eligible to participate in the District’s deferred compensation program pursuant to Section 457 of the Internal Revenue Code whereby they can voluntarily contribute a portion of their earnings into a tax-deferred fund administered by the District and invested through a third party provider. Pursuant to the Economic Growth and Tax Relief Reconciliation Act of 2001, effective January 1, 2002, employees may contribute the lesser of 100% of includible compensation or the maximum dollar amount allowable under Internal Revenue Code Section 457 in effect for the year. The dollar amount currently in effect for calendar year 2015 is \$18,000. Since 2008, the limit has been indexed to inflation in \$500 increments.

Effective January 1, 2008, for employees with one year or more of service, the District provides 100% matching of employee Section 457 plan contributions up to an annual maximum of 3% of the employee’s base salary. Such employer contribution amounts are deposited into a money purchase plan pursuant to

Section 401(a) of the Internal Revenue Code. During Fiscal Year 2014, the District contributed \$598,834 to employee accounts under the 401(a) plan.

The assets in both plans are held in trust for the exclusive benefit of the participants and their beneficiaries, and are therefore not reported in the financial statements of the District.

### **Other Post-Employment Benefits**

GASB has issued two related pronouncements, known as GASB 43 and GASB 45, related to funding and accounting for Other Post-Employment Benefits (“OPEB”) liabilities. OPEB liabilities consist of health care, insurance and all other retiree benefits that are not part of a pension plan. Under GASB 45, costs of OPEB must be matched to the current period in which employees are performing services for the District. In effect, there is an exchange between the employee and the District in which the employee renders services to the District and in exchange receives certain salaries and benefits, part of which are OPEB which they will not actually use until some point in the future. The accounting standards require the District to recognize the cost of the benefits in the periods when the employees’ services are received by the District. GASB 45 also requires the District to provide information about the accrued actuarial liabilities for the promised benefits for past services, to what extent those have been funded, and to what extent there will be demands from OPEB on the District’s future cash flows.

The District currently has three OPEB programs: the California Public Employees Medical and Hospital Care Act (“PEMHCA”) premiums, a retiree health costs reimbursement plan, and a retiree death benefit life insurance program. Under the first program, the District pays the required healthcare coverage under PEMHCA, commonly referred to as “PERS Health.” To qualify, employees must retire from the District and begin drawing CalPERS retirement benefits. Participation in PEMHCA is financed in part by the District through a contribution of \$112.00 per employee per month (at current rates). The contribution rate is scheduled to be indexed with medical inflation in future years, although contributions could increase in greater amounts at the direction of CalPERS Board. In addition, the District pays 0.37% of the PEMHCA premium to cover administrative fees. In Fiscal Year 2014, the District contributed \$99,157 on behalf of retirees participating in the PEMHCA program.

As part of its retiree health costs reimbursement plan, the District provides retirees who have attained age 55 and have completed at least 10 years of service with the District with reimbursement of eligible healthcare costs of \$300 per month for retirees with at least ten years of service up to a maximum of \$600 per month for retirees with at least 25 years of service, in each case for up to five years. In Fiscal Year 2014, the District contributed \$330,620 on behalf of retirees participating in the Retiree Health Costs Reimbursement Plan.

Finally, the retiree death benefit life insurance program provides retirees who were hired on or before December 31, 2008 with term life insurance benefits with a face amount equal to 100% of their annual salary in effect at the time of retirement. Insured group-term life benefits end for all participants at age 70. Thereafter, the District provides a self-insured \$10,000 death benefit for all participants already retired as of December 31, 2008 and for currently active Board members. To qualify, a retiree must have retired from the District, be at least 55 years old, have completed at least ten continuous years of service with the District, and must be drawing retirement benefits from CalPERS. In Fiscal Year 2014, the District contributed \$12,070 on behalf of retirees participating in this program.

OPEB costs have traditionally been accounted for and financed from the District’s annual operating budget as part of its benefits expense on a pay-as-you-go basis. During Fiscal Year 2014, the District contributed \$441,847 on behalf of retirees participating in the OPEB programs. The budgeted amount for the District’s OPEB in Fiscal Year 2015 is approximately \$453,000.

The District has been required to comply with the accounting and reporting requirements of GASB 45 since Fiscal Year 2008. According to an actuarial valuation prepared for the District by Demsey, Filliger & Associates, the unfunded liability for the District's OPEB as of July 1, 2012 was approximately \$6.7 million. The Annual Required Contribution (the "OPEB ARC") was \$666,835 in Fiscal Year 2014, of which the District contributed \$441,847. The OPEB ARC is calculated assuming that the accrued, unfunded liability will be amortized over the next 30 years, benefits will remain constant, and funding in excess of actual benefit costs will be invested at a 4.00% annual return, and with other assumptions regarding medical cost inflation.

For additional information relating to the District's OPEB obligations, see Note 14 to the District's audited financial statements for Fiscal Year 2014 attached to the Remarketing Statement as Appendix B.

### **Budget Process**

Prior to July 1 of each year, the General Manager prepares a budget for the Fiscal Year commencing July 1 and ending on the succeeding June 30. Following the adoption of the operating budget, the Board of Directors approves a schedule of water, sewer and recycled water rates for such Fiscal Year based on the budget approved by the Board of Directors. See the caption "CONSTITUTIONAL LIMITS AND APPROPRIATIONS AND CHARGES—Proposition 218." The budget for Fiscal Year 2015 was approved on April 28, 2014.

### **Water and Sewer System Insurance**

The District is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets, errors and omissions and natural disasters. The District utilizes a combination of self-insurance and third-party liability insurance to minimize loss exposures from property, third-party liability claims and workers compensation claims. The District self-insures the first \$25,000 per occurrence for property losses, \$100,000 per occurrence for third-party liability claims and \$125,000 per occurrence for workers compensation claims.

Property, boiler and machinery insurance is provided through participation in the California State Association of Counties Excess Insurance Authority ("CSAC-EIA"). Property insurance includes flood insurance but does not include earthquake insurance. General and excess liability coverage of \$35,000,000 and workers compensation insurance is provided through participation in CSAC-EIA. Pollution and legal liability coverage for the Irvine Desalter Project is provided by a policy with Indian Harbor Insurance Company. Settlements have not exceeded coverage for each of the past three Fiscal Years.

### **Collection Procedures**

All charges for water and recycled water service and almost all charges for sewer service are billed monthly. If payment is not received 25 days after presentation, a one-time late charge of 10% of the unpaid balance plus 1.5% interest will be assessed for each month until the unpaid balance has been paid in full. A shut-off notice is mailed out in conjunction with an automated courtesy phone call when the unpaid balance exceeds \$150. If payment is not received within 15 days of the mailed shut-off notice, service is shut off as of the date specified on the notice. Service is not restored until all charges, including a restoration charge, have been paid in full. The District sends closed accounts to outside collection agencies and does not currently transfer such accounts to the County tax roll. A small number of accounts located in Newport Beach for which the District provides sewer service only are billed on the County tax rolls.

### **Outstanding Indebtedness**

***Improvement District Indebtedness.*** As of December 31, 2014, the District had \$507,300,000 aggregate principal amount of outstanding *ad valorem* assessment bonds (the "Ad Valorem Assessment Bonds") on behalf of the Improvement Districts. The Ad Valorem Assessment Bonds are secured by *ad*

*valorem* assessments on property within the respective Improvement District, and are not by their terms payable from revenues of the District’s water and sewer system (“Revenues”), except for the Bonds of Irvine Ranch Water District, Refunding Series 2011A-1 and 2011A-2 Bonds (collectively, the “Series 2011A Bonds”) and the Bonds of the Irvine Ranch Water District, Series 2010B (the “Series 2010B Bonds”), each of which is described below under the caption “—Parity Obligations.” The District’s practice has been to apply Revenues remaining after the payment of operation and maintenance costs of the District’s water and sewer system (“Net Revenues”) and after the payment of debt service on Parity Obligations and subordinate obligations to the principal and interest on the Ad Valorem Assessment Bonds. Pursuant to Section 35975 of the Act, the District also may levy certain rates and charges in lieu of *ad valorem* assessments to pay the Ad Valorem Assessment Bonds. The District does not currently levy in-lieu rates and charges. Any such in lieu rates and charges levied by the District in the future would not constitute Revenues. The following table illustrates a breakdown of outstanding Ad Valorem Assessment Bonds by Improvement District as of December 31, 2014.

**TABLE 3**  
**IRVINE RANCH WATER DISTRICT**  
**Outstanding Ad Valorem Assessment Bonds By Improvement District**

<i>Improvement District</i>	<i>Amount Authorized</i>	<i>Amount Issued</i>	<i>Remaining Unissued Bonds Authorized</i>	<i>Amount Outstanding as of December 31, 2014</i>
<b>Waterworks Bonds</b>				
112	\$ 28,512,300	\$ 5,740,000	\$ 22,772,300	\$ 5,470,500
113	25,769,500	14,800,000	10,969,500	13,900,000
<b>125<sup>(1)(2)</sup></b>	<b>735,246,000</b>	<b>413,156,400</b>	<b>322,089,600</b>	<b>188,789,150</b>
153	237,300,000	0	237,300,000	0
154	4,839,000	0	4,839,000	0
185 <sup>(3)</sup>	13,500,000	0	13,500,000	0
188	8,174,000	4,437,000	3,737,000	1,462,000
<b>Total Waterworks Bonds</b>	<b><u>\$ 1,053,340,800</u></b>	<b><u>\$ 438,133,400</u></b>	<b><u>\$ 615,207,400</u></b>	<b><u>\$ 209,621,650</u></b>
<b>Sewer Bonds</b>				
1 <sup>(4)</sup>	\$ 2,000,000	\$ 2,000,000	\$ 0	\$ 0
212	108,712,000	15,700,000	93,012,000	14,974,500
213	87,648,000	23,800,000	63,848,000	21,487,500
<b>225<sup>(1)(5)</sup></b>	<b>856,643,000</b>	<b>449,748,000</b>	<b>406,895,000</b>	<b>237,018,171</b>
<b>240<sup>(1)</sup></b>	<b>117,273,000</b>	<b>48,476,500</b>	<b>68,796,500</b>	<b>23,928,179</b>
252	0	0	0	0
253	122,283,000	0	122,283,000	0
256	0	0	0	0
285 <sup>(6)</sup>	21,300,000	0	21,300,000	0
288	8,977,000	300,000	8,677,000	270,000
<b>Total Sewer Bonds</b>	<b><u>\$ 1,324,836,000</u></b>	<b><u>\$ 540,024,500</u></b>	<b><u>\$ 784,811,500</u></b>	<b><u>\$ 297,678,350</u></b>
<b>Total District</b>	<b><u>\$ 2,378,176,800</u></b>	<b><u>\$ 978,157,900</u></b>	<b><u>\$ 1,400,018,900</u></b>	<b><u>\$ 507,300,000</u></b>

<sup>(1)</sup> The Series 1993 Bonds represent the consolidated, several general obligations of these Improvement Districts. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 1993 BONDS—General.”

<sup>(2)</sup> Improvement District No. 125 was created on November 11, 2013. Reflects the consolidation of portions of former Improvement District Nos. 105, 106, 120, 121, 130, 135, 140, 161, 182, 184 and 186.

<sup>(3)</sup> On March 4, 2014, *ad valorem* assessment bonds for Improvement District No. 185 in the maximum authorized principal amount of \$13,500,000 were approved at a special election.

<sup>(4)</sup> Also referred to as Improvement District No. 210.

<sup>(5)</sup> Improvement District No. 225 was created on November 11, 2013. Reflects the consolidation of portions of former Improvement District Nos. 2(202), 206, 221, 230, 235, 250, 261, 282, 284 and 286.

<sup>(6)</sup> On March 4, 2014, *ad valorem* assessment bonds for Improvement District No. 285 in the maximum authorized principal amount of \$21,300,000 were approved at a special election.

Source: The District.

**Parity Obligations.** The below-listed obligations (“Parity Obligations”) are payable from Net Revenues, including 1% *ad valorem* property tax revenues available after payment of the Series 1993 Bonds and the Bonds of Irvine Ranch Water District, Consolidated Series 1995, currently outstanding in the aggregate principal amount of \$14,200,000:

- 1997 State Loan #3. In 1997, the District entered into a loan contract with the State of California (the “1997 State Loan”) to fund recycled water projects. The 1997 State Loan was outstanding as of December 31, 2014 in an aggregate principal amount of \$970,726 and matures in 2019. Pursuant to the terms of the 1997 State Loan, the District’s obligation to pay debt service on the 1997 State Loan is payable from Net Revenues on a parity with the other Parity Obligations.
- Prior Reimbursement Agreements. In connection with the District’s prior issuances of *ad valorem* assessment bonds, the District has entered into several reimbursement agreements (the “Prior Reimbursement Agreements”) with various letter of credit banks (the “Prior Banks”). Pursuant to the terms of the Prior Reimbursement Agreements, the District’s obligations to reimburse the Prior Banks will be payable from Net Revenues on a parity with the other Parity Obligations. There are currently no reimbursement obligations outstanding, although the District may incur reimbursement obligations under such Prior Reimbursement Agreements as provided therein. The following table summarizes the stated amount of each letter of credit associated with the Prior Reimbursement Agreements.

**TABLE 4**  
**IRVINE RANCH WATER DISTRICT**  
**Summary of Prior Reimbursement Agreements**  
**As of December 31, 2014**

<i>General Obligation Bonds</i>	<i>Outstanding Principal</i>	<i>Letter of Credit Bank</i>	<i>Expiration Date</i>	<i>LOC Stated Amount</i>	<i>Reimbursement Obligations Outstanding</i>
Series 1993 <sup>(1)</sup>	\$ 36,100,000	Bank of New York Mellon	06/02/15	\$ 36,593,367	\$ 0
Series 1995	16,200,000	Sumitomo Mitsui Banking Corp.	07/14/17	16,439,671	0
Series 2008A	54,600,000	Sumitomo Mitsui Banking Corp.	07/14/17	54,798,904	0
Series 2009A	67,500,000	U.S. Bank National Association	07/15/16	68,254,521	0
Series 2009B	<u>67,500,000</u>	Bank of America, N.A.	07/15/16	<u>68,254,521</u>	<u>0</u>
<b>TOTAL</b>	<u>\$ 241,900,000</u>			<u>\$ 244,340,984</u>	<u>\$ 0</u>

<sup>(1)</sup> This credit facility is being replaced with the Letter of Credit issued by U.S. Bank National Association on [May 7], 2015. See the Remarketing Statement under the caption “INTRODUCTION—Letter of Credit.”  
Source: The District.

- 2010 Installment Sale Agreement. In 2010, the District entered into an Installment Sale Agreement (the “2010 Installment Sale Agreement”) in connection with the execution and delivery of the District’s \$85,145,000 aggregate principal amount of Certificates of Participation Irvine Ranch Water District Refunding Series 2010. The 2010 Installment Sale Agreement was outstanding as of December 31, 2014 in the aggregate principal amount of \$67,190,000 and matures in 2032. The District’s obligation to make installment payments pursuant to the 2010 Installment Sale Agreement is on a parity with the other Parity Obligations.
- Series 2010B Bonds. In 2010, the District issued \$175,000,000 aggregate principal amount of Series 2010B Bonds. The Series 2010B Bonds were outstanding as of December 31, 2014 in the aggregate principal amount of \$175,000,000 and mature in 2040. The Series 2010B Bonds are

payable from Net Revenues on a parity with the other Parity Obligations. In addition, the Series 2010B Bonds are payable from *ad valorem* assessments on taxable land in certain Improvement Districts, including Bond Assessments and Charges (as such term is defined in the Remarketing Statement under the caption “INTRODUCTION—Security for the Series 1993 Bonds”) with respect to Improvement District Nos. 125 and 225. The obligation of the District to pay the Series 2010B Bonds from Bond Assessments and Charges with respect to Improvement District Nos. 125 and 225 is payable on a parity with the obligation of the District to pay the Series 1993 Bonds from Bond Assessments and Charges with respect to Improvement District Nos. 125 and 225. See the caption “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Reduction in BAB Credits” for a discussion of the effect of the federal sequester on the receipt of interest subsidy payments relating to the Series 2010B Bonds.

- Series 2011A Bonds. In 2011, the District issued \$100,915,000 aggregate principal amount of Series 2011A Bonds. The Series 2011A Bonds were outstanding as of December 31, 2014 in the aggregate principal amount of \$91,000,000 and mature in 2037. The Series 2011A Bonds are payable from Net Revenues on a parity with the other Parity Obligations. In addition, the Series 2011A Bonds are payable from *ad valorem* assessments on taxable land in certain Improvement Districts, including Bond Assessments and Charges with respect to Improvement District Nos. 125 and 225. The obligation of the District to pay the Series 2011A Bonds from Bond Assessments and Charges with respect to Improvement District Nos. 125 and 225 is payable on a parity with the obligation of the District to pay the Series 1993 Bonds from Bond Assessments and Charges with respect to Improvement District Nos. 125 and 225.

#### ***Subordinate Debt.***

- Interest Rate Swap Transactions. As of December 31, 2014, the District was also obligated under five interest rate swap transactions with a total notional amount of \$130 million and termination dates ranging from June 2019 to March 2029, pursuant to which the District is entitled to receive variable rate payments based on a floating rate index in return for the District’s obligation to make payments at a fixed interest rate (the “Swaps”).

The Swaps generally are evenly distributed, as to notional amount on a particular transaction date, between two swap counterparties – Merrill Lynch Capital Services, Inc. (“Merrill”) and Citibank, N.A. (“Citibank”) – except with respect to one Swap with a notional amount of \$30 million and a termination date of June 17, 2019, which was entered into only with Citibank. For additional information with respect to the payment terms and other information relating to the Swaps, see Note 3 to the District’s financial statements attached as Appendix B to the Remarketing Statement. Regularly-scheduled and early termination payments with respect to the Swaps constitute unsecured general obligations of the District payable from legally-available funds. The Swaps are payable from certain Revenues, but are subordinate to the District’s obligation to pay debt service on the Parity Obligations. Any amounts received by the District pursuant to the Swaps also constitute Revenues and, as such, are pledged for the payment of the Parity Obligations. As of December 31, 2014, the mark-to-market value of the total interest rate swaps with Citibank and Merrill exceeded the threshold amount (\$15,000,000) for each counterparty, requiring the District to post collateral in the amount of \$10,692,768. The funds are held in a separate trust account and earn interest at the Federal Funds Effective Rate.

All of the above-described interest rate swap transactions entail risk to the District. For example, the swap counterparties may fail or be unable to perform, interest rates may vary from assumptions, the District may be required to post collateral in certain circumstances, or the District may be required to make significant payments in the event of an early termination of one or more Swaps. The early termination of a Swap may not affect the obligations of the counterparties with respect to the other Swaps. The District cannot predict if any such event will



occur with respect to one or more of the District’s existing or future interest rate swap agreements. However, the District does not anticipate that any such event would have a material adverse effect on the District’s ability to pay the debt service on the Series 1993 Bonds.

- **Santiago County Water District Consolidation.** The District and Santiago County Water District (“SCWD”) consolidated effective July 1, 2006. As successor to SCWD, the District is obligated to satisfy the following additional obligations: (i) a fiscal services agreement with the State of California Department of Water Resources, with a loan balance of approximately \$788,325 as of December 31, 2014 and final payment due in 2025; and (ii) a promissory note payable to Foothill/Eastern Transportation Corridor Agency for \$565,000, with no stated maturity or final payment date.

### Variable Rate Debt Management

The Board of Directors of the District has adopted a policy to maintain a target amount of investment assets equal to 75% or more of the District’s outstanding unhedged variable rate indebtedness. No assurance can be made that the Board of Directors of the District will not modify such policy in the future.

### Current Investments

As of December 31, 2014, the District had investments of approximately \$294.2 million and real property investments as follows:

**TABLE 5**  
**IRVINE RANCH WATER DISTRICT**  
**Summary of Investments**

<i>Investment Type</i>	<i>Approximate Investment Amount in Millions<sup>(1)</sup></i>	<i>Percentage of Total Investments<sup>(1)</sup></i>
Federal Agency Securities	\$232.9	79.16%
Local Agency Investment Fund	47.3	16.08
Treasury Equivalents <sup>(2)</sup>	10.7	3.64
Municipal Bonds – Installment Sale Agreement	<u>3.3</u>	<u>1.12</u>
<b>Total</b>	<b>\$ 294.2</b>	<b>100.00%</b>

<sup>(1)</sup> As of December 31, 2014. Rounded.

<sup>(2)</sup> Includes collateral held with Citibank and Merrill pursuant to the Swaps. Although not held by the District, such collateral constitutes District moneys. See the caption “—Outstanding Indebtedness—Subordinate Debt—Interest Rate Swap Transactions.”

Source: The District.

In addition to the moneys invested in local agency municipal bonds and the Local Agency Investment Fund, the District has invested approximately \$72.6 million of its capital facilities replacement fund in real property. The District’s real property investments include a limited partnership interest in a 230-unit apartment complex (the “Wood Canyon Villas Apartments”), ownership of a 450-unit apartment complex (the “Sycamore Canyon Apartments”) and ownership of three commercial office buildings (the “Irvine Market Place,” the “Waterworks Business Park” and the “Sand Canyon Professional Center”), with market values well in excess of the original investment. Wood Canyon Villas Apartments, Sycamore Canyon Apartments, the Irvine Market Place, the Waterworks Business Park and the Sand Canyon Professional Center are all income-producing properties, the earnings and projected earnings from which are reflected in Tables 6 and 7 below.

In February 2014, the District and El Toro Water District (“ETWD”) entered into an Installment Sale Agreement (the “ISA”) pursuant to which the District agreed to fund ETWD’s share of the costs of construction of, and the acquisition of capacity rights in, the Baker Water Treatment Plant project (the “Baker WTP”) in exchange for quarterly installment payments from ETWD. See the caption “THE WATER SYSTEM—General” for a description of the Baker WTP. ETWD’s obligation to repay the District under the ISA is payable from net revenues of ETWD’s water system over a period of twenty years. The principal amount of ETWD’s obligations under the ISA will not exceed \$12,500,000. The amount outstanding under the ISA as of December 31, 2014 was \$3,300,000 and the applicable interest rate is 4.57%.

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**Historic Net Real Estate Income**

The following table shows the net real estate income after expenses of the District for the five most recent Fiscal Years.

**TABLE 6**  
**IRVINE RANCH WATER DISTRICT**  
**Historic Net Real Estate Income**  
**(in Thousands)**

<i>Fiscal Year</i>	<i>Net Income</i>
2010	\$5,624
2011	5,649
2012	6,736
2013	6,566
2014	7,760

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Source: The District.

**Projected Net Real Estate Income**

The following table projects the net real estate income after expenses of the District for the current and next four Fiscal Years.

**TABLE 7**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Net Real Estate Income**  
**(in Thousands)**

<i>Fiscal Year</i>	<i>Net Income</i> <sup>(1)</sup>
2015	\$8,406
2016	8,588
2017	8,749
2018	8,913
2019	9,081

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<sup>(1)</sup> Based on existing and expected leases. See the caption “—Current Investments.”  
Source: The District.

## 1% Property Tax Revenues

Pursuant to the Act, the Board of Supervisors of the County is required to levy a “general assessment” on assessable property within the boundaries of the District sufficient to raise the amounts determined each year by the District’s Board of Directors to be necessary for the authorized purposes of the District. These provisions, however, have largely been superseded by the passage by the California electorate in June of 1978 of Article XIII A of the California Constitution (commonly known as “Proposition 13”), and by the legislation subsequently enacted by the California Legislature to implement Article XIII A. As a result of Article XIII A and its implementing legislation, the District receives as proceeds of the “general assessment” a share of the one percent *ad valorem* property tax collected by the County from assessable property within the boundaries of the District (the “1% Property Tax Revenues”).

From time to time legislation has been considered as part of the State budget to shift 1% Property Tax Revenues collected by each county from local agencies, including special districts such as the District, to school districts or other governmental entities. However, Proposition 1A (“Proposition 1A”), proposed by the California Legislature in connection with the 2004-05 State Budget Act and approved by the voters in November 2004, restricted State authority to reduce major local tax revenues such as the tax shifts permitted to take place in legislation enacted in connection with the 2004-05 and 2005-06 State budgets, which shifted approximately 35% of many special districts’ shares of the countywide one percent *ad valorem* tax.

Proposition 1A generally prohibits the State from shifting to schools or community colleges any share of 1% Property Tax Revenues allocated to local governments for any fiscal year, as set forth under the laws in effect as of November 3, 2004. Any change in the allocation of property tax revenues among local governments within a county must be approved by two-thirds of both houses of the Legislature. Proposition 1A provides, however, that, beginning in fiscal year 2008-09, the State may shift to schools and community colleges up to 8% of local government property tax revenues, which amount must be repaid, with interest, within three years, if the Governor proclaims that the shift is needed due to a severe State financial hardship, the shift is approved by two-thirds of both houses and certain other conditions are met. The State may also approve voluntary exchanges of local sales tax and property tax revenues among local governments within a county.

The Amended 2009-10 Budget Act provided for the borrowing of 8% of property taxes from local jurisdictions, including the District, under Proposition 1A. Pursuant to this act, the State borrowed approximately \$2.1 million of the District’s 1% Property Tax Revenues for Fiscal Year 2010. As noted above, under Proposition 1A, the State was required to repay the property taxes with a 2% rate of interest within three years. The District received repayment of the shifted amount, plus interest, in August 2012.

There can be no assurance that the 1% Property Tax Revenues that the District currently expects to receive will not be temporarily shifted from the District pursuant to Proposition 1A in future fiscal years or reduced pursuant to State legislation enacted in the future. If the property tax formula is permanently changed in the future, it could have a material adverse effect on the receipt of 1% Property Tax Revenues by the District. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 1993 BONDS—General—Pledge of 1% Ad Valorem Property Taxes” for a discussion of the extent to which 1% Property Tax Revenues are available to pay Debt Service on the Series 1993 Bonds.

The table below sets forth the amount of 1% Property Tax Revenues received by the District for the five most recent Fiscal Years.

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**TABLE 8**  
**IRVINE RANCH WATER DISTRICT**  
**1% Property Tax Revenues**  
**(in Thousands)**

<i>Fiscal Year</i>	<i>1% Property Tax Revenues</i>
2010 <sup>(1)</sup>	\$27,150
2011	26,989
2012	26,478
2013 <sup>(1)</sup>	29,265
2014	29,445

<sup>(1)</sup> Reflects shift of property tax revenues of approximately \$2.1 million to Educational Revenue Augmentation Fund in Fiscal Year 2010 as described above. Such moneys were received, with interest, in Fiscal Year 2013.  
Source: The District.

**Alternative Method of Tax Apportionment – “Teeter Plan”**

The Board of Supervisors of the County has approved the implementation of the Alternative Method of Distribution of Tax Levies and Collections and of Tax Sale Proceeds (the “Teeter Plan”), as provided for in Section 4701 *et seq.* of the California Revenue and Taxation Code. Under the Teeter Plan, the County apportions secured property assessments on an accrual basis when due (irrespective of actual collections) to its local political subdivisions, including the District, for which the County acts as the assessment-levying or assessment-collecting agency.

The Teeter Plan for the County is applicable to all assessment levies for which the County acts as the assessment-levying or assessment-collecting agency, or for which the treasury of the County is the legal depository of assessment collections.

The *ad valorem* property assessments to be levied to pay the interest on and principal of the Series 1993 Bonds will be subject to the Teeter Plan. The District will receive 100% of the *ad valorem* property assessment levied on secured property to pay the Series 1993 Bonds irrespective of actual delinquencies in the collection of the assessment by the County so long as the Teeter Plan remains in effect. The District’s share of 1% Property Tax Revenues is also subject to the Teeter Plan.

The Teeter Plan is to remain in effect for the County unless the Board of Supervisors of the County orders its discontinuance or unless, prior to the commencement of any fiscal year of the County (which commences on July 1), the Board of Supervisors of the County receives a petition for its discontinuance joined in by a resolution adopted by at least two-thirds of the participating revenue districts in the County. In the event that the Board of Supervisors of the County discontinues the Teeter Plan for the County, only those secured property assessments that are actually collected would be allocated to political subdivisions (including the District) for which the County acts as the assessment-levying or assessment-collecting agency.

**Governmental Regulations**

The District’s operations are subject to numerous environmental regulations enforced by multiple governmental entities. Programs are in place for compliance with drinking water regulations, water discharge regulations, underground and aboveground fuel storage tank regulations, hazardous materials management plans, hazardous waste regulations, air quality permitting requirements, wastewater discharge limitations, and employee safety issues relating to hazardous materials and other conditions. Also, the District aggressively pursues the investigation and, when appropriate, the implementation of alternative methods and technologies for meeting increasingly strict environmental regulations.

The District expects environmental regulation to increase, resulting in higher capital and operating costs in the future, which may have a material adverse effect on the finances of the District.

Although the District's Board of Directors establishes the schedules of water, sewer and reclaimed water rates for each Fiscal Year, such rates are subject to the requirements of Proposition 218, which are described further under the caption "CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218."

## **WATER SUPPLY**

The District was formed in 1961, with the purpose of obtaining a water supply for municipal and irrigation purposes. For the twelve month period ended June 30, 2014, of the water supplied by the District, approximately 23% was imported water, approximately 56% was groundwater and native stream flows and approximately 21% was recycled water.

The District operates a number of wells and reservoirs that produce or store local water for both potable and non-potable uses. Surface storage includes Irvine Lake, a 25,000 acre feet reservoir that is jointly owned by the District and Serrano Water District. Irvine Lake receives stream flow (native water) coming from the Santiago Creek watershed. The District's share of such water is used by the District primarily for agricultural and other irrigation purposes, and supplements the recycled water system during peak demand periods. In addition, the District has approximately 5,200 acre feet of recycled water storage capacity in its Sand Canyon, Rattlesnake, San Joaquin and Syphon Reservoirs and is currently evaluating additional recycled water storage projects.

### **Imported Water**

In Fiscal Year 2014, the District purchased 20,485 acre feet of water imported from the Colorado River and northern California by The Metropolitan Water District of Southern California ("MWD"). MWD supplies water through its member agencies, including the member agency in which the District is situated, Municipal Water District of Orange County ("MWDOC"). The current cost of treated imported water from MWDOC is \$850.25 per acre foot. In addition, the District currently pays a fixed charge to MWDOC in the form of readiness to serve, capacity reservation and service connection charges. The readiness to serve and capacity reservation charges are paid monthly and currently total \$111,309, while the service connection charge is paid annually and is currently \$800,050.

MWD faces various challenges in the continued supply of imported water to MWDOC. A description of these challenges as well as a variety of other operating information with respect to MWD is included in certain disclosure documents prepared by MWD. MWD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. MWD has also entered into certain continuing disclosure agreements pursuant to which MWD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12 promulgated under the Securities Exchange Act of 1934, as amended ("Rule 15c2-12"). Such official statements, other disclosure documents, annual reports and notices (collectively, the "MWD Information") are filed with the Municipal Securities Rulemaking Board's Electronic Municipal Market Access system ("EMMA") at <http://emma.msrb.org>. The MWD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. **MWD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 1993 BONDS TO PROVIDE MWD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS.**

**MWD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR**

**COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO MWD. MWD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS UNDER RULE 15c2-12.**

## **Groundwater**

*General.* The District's Water Resources Master Plan calls for a reliable water supply mix and includes developing sufficient groundwater production capacity to pump up to the District's basin production percentage (the "BPP") set by the Orange County Water District ("OCWD"), the agency responsible for managing the Orange County groundwater basin. District groundwater pumping is affected by policies of OCWD, including the setting of replenishment assessments, basin production percentages of total water demand by agencies pumping basin groundwater and basin equity assessments.

OCWD establishes and collects replenishment assessments as a means of purchasing water and funding projects for the purpose of replenishing the Orange County groundwater basin. The replenishment assessment is established annually by OCWD and applies to every acre foot of groundwater produced from the basin.

In addition, each year, OCWD sets the BPP for water to be extracted from the Orange County groundwater basin. The BPP is the amount of groundwater, as a percentage of the total water demands, that can be pumped from the Orange County groundwater basin during the year by a groundwater pumping agency without incurring the additional assessment described in the following paragraph. The amount of groundwater that an agency can pump without incurring the additional assessment is calculated by multiplying the total water use of such agency by the BPP (the "BPP formula"). Between Fiscal Years 2011 and 2015, the BPP has varied from 62% to 72%. In connection with the annexation of certain land by OCWD (as discussed in detail below), the District has agreed to a maximum BPP of 70% through 2023.

The additional assessment incurred by an agency that pumps non-exempt groundwater above the limit established by the BPP formula is called the basin equity assessment (the "BEA"). The BEA is established annually by OCWD for every acre foot of groundwater produced from the Orange County groundwater basin above the BPP formula (with exemptions described further below for pumping determined by OCWD to benefit water quality and other purposes) and is intended to discourage pumping of amounts above the BPP formula by raising the cost of producing groundwater so that it equals the cost of importing water, thereby encouraging groundwater pumping agencies to supplement their groundwater production with imported water for the portion of their water use that exceeds the BPP. The BEA is a surcharge to discourage, yet still allow for, the production of groundwater in excess of the BPP formula. One of the District's operating objectives is to produce the maximum amount of groundwater within the BPP formula and to avoid producing groundwater in excess of such maximum in order to avoid paying the BEA. In Fiscal Year 2014, the amount of groundwater that the District pumped from the Orange County groundwater basin was below its BPP or exempt from the BPP (as described below) and, accordingly, the District did not pay a BEA to OCWD.

OCWD has sought to enable groundwater producers to derive a larger percentage of their water supplies from local sources in times of Statewide drought so that such producers can reduce purchases of imported water at increased rates. For these reasons, OCWD has gradually increased the BPP in recent years. For Fiscal Years 2010, 2011, 2012 and 2013 the BPP was 62%, 62%, 65% and 68%, respectively. As a result of continued recharge of the Orange County groundwater basin, the BPP for Fiscal Year 2014 was raised to 70%, which allowed the District to pump approximately 54,000 acre feet from the Orange County groundwater basin without incurring any BEA. The BPP for Fiscal Year 2015 is 72%, although the District has agreed not to utilize water from the Orange County groundwater basin for more than 70% of its water supply in any year through 2023. The District pays OCWD a replenishment assessment of \$266 per acre foot for all groundwater

pumped and a BEA equal to an additional \$524 per acre foot for groundwater pumped in excess of the BPP formula.

For certain portions of the District's groundwater production, the application of OCWD's BPP and BEA varies from the above general description. The District's Dyer Road Well Field has a production amount established by contract with OCWD as described in the below paragraph. The District also has several projects through which groundwater is produced that are, by contract with OCWD, completely or partially exempt from the BEA. While this "BEA-exempt" groundwater typically requires treatment, the District's cost to produce and treat this groundwater is effectively capped at the cost for imported water. Additionally, as portions of the District currently lie outside of OCWD's jurisdictional boundary, water demands in those areas are not included by OCWD in the accounting of the basin production percentage for the District. In 2014, the Orange County Local Agency Formation Commission approved the annexation of approximately 6,482 acres of land within the District into OCWD. The majority of such land is open space and is not expected to be subject to additional water demand at this time. Currently, approximately 32% of the District's water demand is from outside the OCWD jurisdictional boundary.

The BPP formula for the District's Dyer Road Well Field is not adjusted annually by OCWD but is fixed by contract with OCWD at 28,000 acre feet per year of clear groundwater, subject to the requirement that the amount over 20,000 acre feet is matched by an equal amount of groundwater pumped from the District's Deep Aquifer Treatment System (the "DATS"), which treats water from a deep aquifer requiring treatment for removal of organic color. Like OCWD's general BPP, the Dyer Road Well Field's contractually fixed BPP formula discourages, but does not prohibit, production over such amount through the application of the BEA to any excess amount.

As discussed above, effective October 2, 2013, the District entered into an agreement with OCWD pursuant to which approximately 6,482 acres of the District's territory was annexed to OCWD upon the Orange County Local Agency Formation Commission's approval in July 2014. Under the annexation agreement, the District agreed to a specified termination date for its BEA exemption on the DATS, represented that the DATS wells would be used to supply the groundwater used in the annexed territory, and agreed that for a period of ten years from the effective date of the annexation agreement, the District will be deemed subject to a BPP equal to the lesser of OCWD's actual BPP or 70%.

The District also produces groundwater from its Irvine Desalter Project, which is described in greater detail under the caption "—Irvine Desalter Project." The Irvine Desalter Project removes salts and nitrates, for a combined total potable and non-potable production of an additional 7,300 acre feet per year that is exempt from the BPP. A combined additional 2,100 acre feet per year of production is available from three other wells, the Orange Park Acres well, Well 2 in Lake Forest and Well 115 in Irvine. Water from Well 115 is pumped and treated at the Irvine Desalter Project. However, such water is not accounted for as Irvine Desalter Project water because it was not part of the original Irvine Desalter Project. The Orange Park Acres well was taken out of service in Fiscal Year 2011 and is expected to return to service in or about April 2015. Well 115 was taken out of service in Fiscal Year 2011 and was returned to service in October 2014. Production from the Orange Park Acres well and Well 115 is subject to the BPP and the BEA, while production from Well 2 is exempt from the BPP and the BEA.

In addition, in April 2013, the District completed construction of the Wells 21 and 22 project, which is expected to add an additional 6,300 acre feet per year of groundwater. In Fiscal Year 2014, the Wells 21 and 22 facility produced approximately 6,935 acre feet of groundwater. These wells are exempt from the BPP and the BEA. The District plans to expand its groundwater production facilities further, and is currently evaluating potential well sites. The District also has rights to native water impounded in Irvine Lake and at the Harding Canyon Dam in the Santiago Canyon area. Such native water does not produce firm annual yields.

***Irvine Desalter Potable Water and El Toro Groundwater Remediation Projects.*** The Irvine Desalter Potable Water and El Toro Groundwater Remediation Projects are groundwater development projects that

were constructed by the District in cooperation with OCWD, United States Departments of the Navy and Justice, MWD and MWDOC. The two projects commenced operations in early 2007.

The Irvine Desalter Potable Water Project consists of a potable water wellfield, pipelines and a purification plant. This project treats local groundwater to remove salts and nitrates caused by the natural geology and past agricultural use. The water is treated to drinking water standards through reverse osmosis and disinfection. The Irvine Desalter Potable Water Project was originally anticipated to pump approximately 5,100 acre feet of groundwater per year. However actual pumping may vary each year based on operational conditions. In Fiscal Years 2013 and 2014, the Irvine Desalter Potable Water Project produced 3,384 and 5,459 acre feet of groundwater, respectively. Reduced production in Fiscal Year 2013 was due to well rehabilitation activities.

The El Toro Groundwater Remediation Project is treating a plume of contaminated groundwater from the main aquifer of the Irvine sub-basin of the Orange County groundwater basin. The plume originated from the now-closed El Toro Marine Corps Air Station (“MCAS”). The El Toro Groundwater Remediation Project consists of a treatment system that removes volatile organic compounds in the groundwater from solvent degreasers previously used on the MCAS. The treatment plant removes contaminants from the groundwater using an air stripper and granular activated carbon absorption units. The treated water is used in the District’s recycled water system and is designed to supply a minimum of 3,400 acre feet of recycled water per year. In Fiscal Year 2014, the El Toro Groundwater Remediation Project produced 3,885 acre feet from non-potable wells. The United States Department of the Navy is compensating the District for this component of the project as part of the Settlement Agreement for Groundwater Remediation of the MCAS. The District expects that such compensation will cover the project costs until the plume of contaminated groundwater is cleaned up.

In addition to the two components described above, the Department of the Navy operates a number of wells on the former MCAS property. These wells pump contaminated groundwater from shallow basins located below the former base. Such water is treated by a treatment plant owned and operated by the District using an air stripper and granular activated carbon absorption units. These wells and the treatment plant, which are referred to as the Shallow Groundwater Unit (the “SGU”), are designed to treat approximately 640 acre feet per year of contaminated groundwater. The treated SGU water is disposed of via an existing ocean outfall. In Fiscal Year 2014, the SGU treated approximately 630 acre feet of water.

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**Historic Groundwater Supply.** Set forth below is a summary of the District’s sources of groundwater supply in acre feet per year for the last five Fiscal Years.

**TABLE 9  
IRVINE RANCH WATER DISTRICT  
Historic Groundwater Supply In Acre Feet Per Year**

<i>Fiscal Year</i>	<i>Dyer Road Well Field</i>	<i>Deep Aquifer Treatment System</i>	<i>Irvine Desalter Project<sup>(2)</sup></i>	<i>Irvine Sub-basin</i>	<i>Other<sup>(6)</sup></i>	<i>Total</i>
2010	27,744	8,696	7,009	1,064	715	45,228
2011	22,488 <sup>(1)</sup>	8,756	5,837 <sup>(3)</sup>	611 <sup>(4)</sup>	352	38,044
2012	19,917 <sup>(1)</sup>	8,916	5,796 <sup>(3)</sup>	627 <sup>(4)</sup>	0	35,256
2013	27,763	8,858	7,123	2,866 <sup>(5)</sup>	281	46,891
2014	27,774	8,707	9,343	7,957	376	54,157

<sup>(1)</sup> Excludes 5,512 acre feet of water and 8,083 acre feet of water purchased at OCWD’s request in Fiscal Years 2011 and 2012, respectively, in lieu of pumping groundwater. In-lieu water was not purchased in Fiscal Years 2010, 2013 or 2014.

<sup>(2)</sup> Excludes water pumped from the SGU, but includes non-potable water used in the District’s recycled water system.

<sup>(3)</sup> Decrease from Fiscal Year 2010 amount reflects the fact that a groundwater well was taken out of service in Fiscal Year 2011. Such well was returned to service in October 2012. See the caption “—Irvine Desalter Project.”

<sup>(4)</sup> Decrease from Fiscal Year 2010 amount reflects the fact that Well 115 was taken out of service in Fiscal Year 2011. Well 115 was returned to service in October 2014. See the caption “—General.”

<sup>(5)</sup> Increase from Fiscal Year 2012 amount reflects completion of Wells 21 and 22. See the caption “—General.”

<sup>(6)</sup> Includes Well 2 in Lake Forest. Also includes the Orange Park Acres well, which was taken out of service in 2011. The Orange Park Acres well is expected to return to service in or about April 2015. See the caption “—General.”

Source: The District.

**OCWD.** OCWD faces various challenges in managing its groundwater basin. A description of these challenges as well as a variety of other operating information with respect to OCWD is included in certain disclosure documents prepared by OCWD. OCWD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. OCWD has also entered into certain continuing disclosure agreements pursuant to which OCWD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12. Such official statements, other disclosure documents, annual reports and notices (collectively, the “OCWD Information”) are filed with EMMA at <http://emma.msrb.org>. The OCWD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. OCWD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 1993 BONDS TO PROVIDE OCWD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS.

**OCWD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO OCWD. OCWD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS UNDER RULE 15c2-12.**

**Sustainable Groundwater Management Act.** On September 16, 2014, the California Governor signed Assembly Bill No. 1739 and Senate Bill Nos. 1168 and 1319 (collectively, the Sustainable Groundwater Management Act, or “SGMA”) into law. The SGMA constitutes a legislative effort to regulate groundwater

on a Statewide basis. Pursuant to the SGMA, the California Department of Water Resources (“DWR”) has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. By January 31, 2017, local groundwater producers must establish or designate an entity (referred to as a groundwater sustainability agency, or “GSA”), subject to DWR’s approval, to manage each high and medium priority groundwater basin. Each GSA is tasked with submitting a groundwater sustainability plan for DWR’s approval by January 31, 2020. Alternatively, groundwater producers can submit a groundwater management plan under Part 2.75 of the California Water Code or an analysis for DWR’s review demonstrating that a groundwater basin has operated within its sustainable yield for at least 10 years. Such alternative plan must be submitted by January 31, 2017 and updated every five years thereafter.

If local groundwater producers do not create or nominate an entity to serve as a GSA, the SGMA authorizes DWR to assume management of a groundwater basin until such time as a GSA can perform such functions.

GSA’s must consider the interests of all groundwater users in the basin and may require registration of groundwater users, the installation of flow meters to measure groundwater extractions and annual reporting of extractions. In addition, GSA’s are authorized to impose spacing requirements on new wells, monitor, regulate and limit or condition groundwater production and establish production allocations among groundwater producers, among other powers. GSA’s are authorized to impose fees to fund such activities and to fine or issue cease and desist orders against producers that violate the GSA’s regulations. A local agency that manages groundwater pursuant to its principal act (such as OCWD) may not exercise such authority in a manner that is inconsistent with any prohibitions or limitations in its principal act unless the governing board of such local agency makes a finding that such local agency is unable to sustainably manage the groundwater basin without the prohibited authority. Groundwater sustainability plans must include sustainability goals and a plan to implement such goals within 20 years.

The District’s wells in the Orange County groundwater basin are presently metered. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the GSA for such basin. See the caption “—General.” The District is studying the provisions of the SGMA, but does not currently expect its groundwater extraction rights or costs in the Orange County groundwater basin to change significantly as a result of the enactment of the SGMA, nor does the District currently expect the enactment of the SGMA to have a material adverse effect on the District’s ability to make payments of principal of and interest on the Series 1993 Bonds from Net Revenues. The District notes that *ad valorem* property assessments constitute an additional source of moneys available to pay the interest on and principal of the Series 1993 Bonds. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 1993 BONDS.”

### **Drought Declaration**

Precipitation in the Santa Ana River Watershed and the State as a whole has been below average in recent years. On January 17, 2014, the California Governor declared a Statewide drought state of emergency (the “Declaration”) with immediate effect. The Declaration includes the following orders, among others: (a) local urban water suppliers, including the District, are encouraged to implement their local water shortage contingency plans; the District’s plan is discussed below; (b) local urban water suppliers, including the District, are encouraged to update their urban water management plans to prepare for extended drought conditions; (c) DWR and the State Water Resources Control Board (the “SWRCB”) are directed to expedite the processing of water transfers; (d) the SWRCB is directed to put water rights holders on notice that they may be required to cease or reduce water diversions in the future; (e) the SWRCB is directed to consider modifying requirements for reservoir releases or diversion limitations; and (f) DWR is directed to take necessary actions to protect water quality and supply in the Sacramento-San Joaquin River Delta/San Francisco Bay Estuary, including the installation of temporary barriers or temporary water supply connections, while minimizing impacts to aquatic species.

In addition, on July 15, 2014, the SWRCB adopted emergency measures requiring water suppliers to implement mandatory Statewide water conservation actions, which are to remain in effect for 270 days. On March 17, 2015, the SWRCB adopted additional emergency regulations limiting outdoor irrigation to two days per week, extending certain measures set forth in the July 15, 2014 action for an additional 270 days, prohibiting outdoor irrigation for 48 hours following rain and prohibiting restaurants from serving water to customers unless requested. MWD is also considering implementation of its Water Supply Allocation Plan (the “WSAP”) in response to the March 17, 2015 regulations. The WSAP provides for the equitable distribution of available water supplies in case of extreme water shortage within MWD’s service area. See the caption “—Imported Water.”

Under the District’s water shortage contingency plan (the “WSCP”), the District responds to a drought in stages based upon four levels of supply cutbacks: Level One (supply reductions of up to 10%), Level Two (supply reductions of between 10% and 25%), Level Three (supply reductions of between 25% and 40%) and Level Four (supply reductions of over 40%). Each shortage level triggers a District response that is intended to reduce demand to the amount of available supply. Responses include public outreach, education and awareness of water waste and water leaks, the implementation of an allocation-based tiered rate structure and mandatory restrictions on water use (beginning with irrigation and other outdoor uses), together with enforcement actions.

In response to the Declaration and the SWRCB’s emergency measures, the District has taken the following actions pursuant to the implementation of Level One of the WSCP: (i) the Board has adopted a resolution asking all District customers to voluntarily reduce their water use by 20%; and (ii) runoff of potable water from outdoor landscapes, the use of hoses without shut-off nozzles, watering of paved areas and decorative water features are prohibited. In addition, in 2014, the District adjusted its existing allocation-based tiered rate structure to encourage greater water conservation. Under the District’s allocation-based tiered rate structure, customers are assigned a water allocation based on five residential tiers and four non-residential tiers. The water allocation for each customer is designed to allow a reasonable amount of water use for the customer’s needs and provide an economic incentive not to exceed such allocation. Customers that exceed the water allocation within their tier are subject to progressively higher water rates. See the caption “THE WATER SYSTEM—Water System Rates and Charges.” The District’s allocation-based tiered rate structure constitutes an alternative plan to the mandatory actions adopted by the SWRCB on July 15, 2014. The District’s alternative plan was approved by the SWRCB on August 29, 2014, making the District one of only two water agencies in the State that is permitted to deviate from the SWRCB-mandated emergency conservation measures.

In some cases, actions taken pursuant to the Declaration could result in additional water being made available to the District, while in other cases, actions taken pursuant to the Declaration could reduce water supplies. The District does not believe that the Declaration will have a material adverse effect on its ability to make payments of principal of and interest on the Series 1993 Bonds from Net Revenues. The District notes that *ad valorem* property assessments constitute an additional source of moneys available to pay the interest on and principal of the Series 1993 Bonds. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 1993 BONDS.”

### **Water Banking**

In addition to developing its local groundwater and recycled water systems, the District is diversifying its water supply portfolio by developing water banking projects in Kern County, California. These projects are known as the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project (collectively, the “Water Bank”). The District’s Strand Ranch and Stockdale West Ranch properties are situated on groundwater recharge lands that overlie the regional Kern County groundwater basin. The purpose of developing the Water Bank is to improve the District’s water supply reliability by capturing lower cost water available during wet hydrologic periods for use during dry periods. The Water Bank will enhance the

District's ability to respond to drought conditions and potential water supply interruptions and will enable the District to reduce the cost of water delivered under such conditions.

In 2009, the District entered into a 30-year water banking partnership with the Rosedale-Rio Bravo Water Storage District ("Rosedale") in Kern County. This agreement provides for Rosedale to operate the Strand Ranch portion of the Water Bank on behalf of the District and permits the District: (i) to store up to 50,000 acre feet of water in the aquifer; (ii) to recharge up to 17,500 acre feet of water in the aquifer; and (iii) to recover up to 17,500 acre feet of water per year from the aquifer. The District has priority rights to use the recharge ponds when Rosedale is not recharging Kern River floodwaters. All other uses of the recharge ponds by Rosedale are on a second priority basis to the District's use. The water that Rosedale stores on its own behalf does not count against the District's 50,000 acre feet storage rights.

The Strand Ranch property has a major canal running through it that allows the movement of water onto and off of the property. The District has completed construction of 502 acres of groundwater recharge ponds and the facilities necessary to divert water from the canal and into ponds on the property. The recharge ponds allow available surface water to be infiltrated into the groundwater basin for later use. Seven groundwater wells that provide the ability to recover water have been constructed. Associated wellheads and pipelines have also been completed and the recovery facilities are available to recover banked water as necessary during drought conditions and potential water supply interruptions. The Strand Ranch Integrated Banking Project is now fully operational.

The District entered into an agreement dated March 9, 2015 with Rosedale and Castaic Lake Water Agency ("CLWA") that will provide for cost-sharing among the participants in the construction of wells and conveyance capacity. The District's participation will consist of 50% of the recovery capacity of six wells and associated conveyance facilities constructed on Rosedale property adjacent to Strand Ranch for joint use by the District and CLWA. The 50% District share of the recovery capacity in the six offsite wells will fulfill the District's right under the 2009 agreement with Rosedale (discussed above) to construct up to three offsite recovery wells, supplementing the onsite Strand Ranch recovery wells. The additional recovery capacity will not increase the District's storage or annual recovery amounts under the 2009 agreement, but is expected by the District to allow increased peaking in its recoveries, thereby increasing flexibility in its delivery of recovered water.

Currently, the District is expanding the Water Bank onto the Stockdale West Ranch, which is adjacent to the Strand Ranch. The Stockdale West Ranch was purchased by the District in late 2010. These additional lands will allow the District to increase the District's water banking recharge, storage and recovery capabilities by approximately 50%. The expansion of the Water Bank to the Stockdale West Ranch property will further increase the District's dry year water supply reliability.

In 2011, the District implemented a pilot project on the Stockdale West Ranch and constructed 238 acres of recharge basins on the property. In addition, the District constructed water conveyance facilities to deliver water to the property.

In 2012, the District executed a development agreement with Rosedale that provides for sharing the costs of preparation of an environmental impact report for a joint banking project involving the District's Stockdale West Ranch and Rosedale's Stockdale East Ranch, both of which are adjacent to the Strand Ranch. This development agreement also outlines the terms and conditions of a long-term agreement for the operation of the joint project facilities which will comprise the Stockdale Integrated Banking Project. The development agreement commits the District and Rosedale to the preparation of a long-term agreement that can be executed concurrently with the certification of the environmental impact report. A draft of the environmental impact report is expected to be released for public review in spring 2015, and the District currently expects that a final environmental impact report will be available for certification and execution in or about summer 2015, immediately followed by the execution of the long-term agreement.

The District has secured water from a number of sources for recharge at the Water Bank. Pursuant to the District's agreement with Rosedale, Rosedale will divert a portion of its entitlement to floodwater flows on the Kern River to District-owned storage ponds for recovery in dry years. The District is entitled, at no cost, to 20% of all Kern River floodwaters recharged by the Water Bank recharge ponds.

The District has also secured access to State Water Project water that is stored in the Water Bank. Such water is available as a result of the District's acquisition of approximately 883 acres (the "Jackson Ranch") located within the Dudley Ridge Water District ("Dudley Ridge"), together with rights to use approximately 1,738 acre feet of Table A State Water Project water allocated to Dudley Ridge. The District will store up to 8,700 acre feet of such water in the Water Bank between 2014 and 2017. The District's ability to extract such water at any given time is dependent on annual State Water Project allocation decisions made by the State. Additionally, the Jackson Ranch land acquisition included certain participation rights in the Kern Water Bank to store approximately 9,495 acre feet of water.

In 2011, the District entered into a 28-year exchange program (the "Exchange Program") with Buena Vista Water Storage District ("BVWSD") that allows BVWSD to store a portion of its high-flow Kern River water at the Strand Ranch Integrated Banking Project in exchange for allocating to the District 50% of such stored water. BVWSD holds both State Water Project Table A water rights and pre-1914 rights to Kern River water. The pre-1914 water rights give BVWSD an average annual entitlement of 158,000 acre feet of Kern River water. Pursuant to the Exchange Program, BVWSD is entitled to deliver up to 17,500 acre feet of water to the Water Bank in any given year with a maximum cumulative capacity of 40,000 acre feet. The District and BVWSD are working together to expand the scope of the Exchange Program to provide for additional deliveries to the Stockdale West Ranch.

According to the schedule set forth in the Exchange Program, the District is entitled to keep an additional 10% of the water stored by BVWSD each calendar year after the fourth calendar year following the year of the recharge event, which amount increases by 10% each calendar year until nine calendar years after the year of the recharge event, at which time the District is entitled to keep all water transferred by BVWSD to the Water Bank. Pursuant to the terms of the Exchange Program, the District and BVWSD share equally in any water losses resulting from the exchange. BVWSD is responsible for all costs of delivering water to the Water Bank and the District is responsible for all costs of returning the water to BVWSD. The District is required to return water that BVWSD determines it will recover from the Water Bank at a maximum rate of 6,667 acre feet per year. The District is obligated to pay BVWSD for any water kept by the District in excess of 50% of the water transferred by BVWSD to the Water Bank at BVWSD's then current State Water Project Table A Variable Operations, Maintenance, Power and Replacement unit cost rate for water. The 28-year term of the Exchange Program coincides with the District's agreement with Rosedale relating to the Water Bank.

In 2012, the District entered into separate Pilot Exchange Agreements with the Central Coast Water Authority and the Antelope Valley-East Kern Water Agency (the "Pilot Exchange Agreements") that provided for such agencies to store portions of their 2012 allocation of State Water Project water at the Water Bank in exchange for the District's receipt of half of such water for its own use. At the end of calendar year 2014, a total of 6,400 acre feet of water was stored at the Water Bank through the Pilot Exchange Agreements.

The District has entered into a Coordinated Operating, Water Storage, Exchange and Delivery Agreement with MWD which allows the District to cause State Water Project water that is recovered from the Water Bank to be delivered to the District's service area. Through this agreement, the District can cause the delivery of State Water Project water from the Water Bank to the District's service area at any time. The District has also developed an additional agreement with MWD to have other waters recovered and delivered into the District's service area. Such additional agreement is expected to be used on an on-call basis when the District desires to move non-State Water Project water into southern California for use in the District's service area. The District recovered and delivered approximately 1,000 acre feet of water from the Strand Ranch Integrated Banking Project in 2014 pursuant to this additional agreement.

Since 2010, the District has delivered a total of approximately 37,000 acre feet of water to the Water Bank, including the Stockdale West Ranch. The District returned 2,500 acre feet of water to BVWSD in 2012 from BVWSD's share of the water stored in the Water Bank pursuant to the Exchange Program. In 2013, the District returned 281 acre feet of water to the Central Coast Water Authority in accordance with the applicable Pilot Exchange Agreement and 6,667 acre feet of water and to BVWSD in accordance with the Exchange Program. In 2014, the District returned 208 acre feet of water to the Central Coast Water Authority and 2,229 acre-feet of water to the Antelope Valley-East Kern Water Agency in accordance with the Pilot Exchange Agreements. In 2014, the District also returned 1,000 acre feet of water to a local farming entity to which the District had an obligation arising from the purchase of the Stockdale West Ranch.

The cost of the Strand Ranch water banking facilities (including the land acquisition costs) was approximately \$21,820,000. Such facilities are now fully operational. The cost of expansion of the water banking facilities onto the Stockdale West Ranch (including the costs of acquisition of these lands) is expected to be approximately \$13,000,000, of which the District has spent approximately \$10,260,000 as of December 2014.

The District is currently pursuing additional opportunities for water banking and contractual rights to other surface waters for diversion into the Water Bank for later use by the District. These other sources include long-term programs for State Water Project water from MWD, the Central Coast Water Authority, the Antelope Valley-East Kern Water Agency and CLWA.

A summary of water held in storage pursuant to the District's water banking program as of December 1, 2014 (after water losses) is set forth below.

**TABLE 10**  
**IRVINE RANCH WATER DISTRICT**  
**Summary of Water Banking Programs**  
**As of December 31, 2014 (Acre Feet)**

<i>Facility</i>	<i>Total Capacity</i>	<i>Total Water in Storage</i>	<i>District Share of Total Water in Storage</i>
Strand Ranch Integrated Banking <sup>(1)</sup>	50,000	19,151	16,334
Stockdale West Ranch <sup>(2)</sup>	26,000 <sup>(3)</sup>	2,876	1,401
Kern Water Bank	<u>9,495</u>	<u>4,036</u>	<u>4,036</u>
<b>Total</b>	<b>85,495</b>	<b>26,063</b>	<b>21,771</b>

<sup>(1)</sup> The District's ability to extract water is subject to certain contractual and operational constraints as described above and is currently limited to approximately 17,500 acre feet.

<sup>(2)</sup> Upon certification of the environmental impact report for the Stockdale West Ranch, which is expected to occur in or about May 2015, the District expects to be able to increase its groundwater extraction capacity by drilling new wells on the Stockdale West Ranch.

<sup>(3)</sup> Estimate. Final storage capacity to be determined subject to further California Environmental Quality Act proceedings and execution of long-term agreement expected to be entered into with Rosedale.

Source: The District.

### **Recycled Water**

During Fiscal Year 2014, the District produced 21,038 acre feet of recycled water and supplied an additional 11,554 acre feet of non-potable water to District customers via the recycled water system. The District processes and treats secondary effluent from its customers to produce recycled water for sale to customers for non-potable utilization. Recycled water is currently sold to approximately 5,400 customers within the District. As of December 31, 2014, the District had approximately 503 miles of recycled water

mains and recycled water storage capacity of approximately 5,200 acre feet. Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

**Historic and Projected Water Supply**

Set forth below is a summary of the District’s sources of total water supply in acre feet per year for the last five Fiscal Years.

**TABLE 11  
IRVINE RANCH WATER DISTRICT  
Historic Water Supply In Acre Feet Per Year**

<i>Fiscal Year</i>	<i>Local Water</i> <sup>(1)</sup>	<i>Imported Water</i>	<i>Recycled Water</i>	<i>Total</i>
2010	45,358	24,744	20,848	90,950
2011	39,563	30,549 <sup>(2)(3)</sup>	20,284	90,396
2012	39,409	26,155 <sup>(3)</sup>	20,602	86,166
2013 <sup>(4)</sup>	49,967	20,151	22,983	93,101
2014 <sup>(5)</sup>	55,015	22,508	21,038	98,561

- <sup>(1)</sup> Includes groundwater, native water in Irvine Lake and non-potable Irvine Desalter Project water used in the District’s recycled water system. See the caption “—Groundwater—Irvine Desalter Project.” Excludes water pumped from the SGU, which is disposed of via an existing ocean outfall following treatment.
- <sup>(2)</sup> Imported water supply for Fiscal Year 2011 included approximately 5,900 acre feet of stored imported water spilled from Irvine Lake during a December 2010 rain event. Such water was replaced with new native water (storm flows) stored at Irvine Lake.
- <sup>(3)</sup> Includes 5,512 acre feet of water and 8,083 acre feet of water purchased at OCWD’s request in Fiscal Years 2011 and 2012, respectively, in lieu of pumping groundwater. In-lieu water was not purchased in Fiscal Years 2010, 2013 or 2014.
- <sup>(4)</sup> Increase from Fiscal Year 2012 reflects growth and the economic recovery within the District’s service area as well as increased irrigation requirements. OCWD did not request that the District purchase in-lieu water in Fiscal Year 2013.
- <sup>(5)</sup> Reflects completion of Wells 21 and 22. See the caption “—Groundwater—General.” Also reflects expansion of Michelson Water Reclamation Plant (“MWRP”), increasing total recycled water production capacity from 18 million gallons per day (“mgd”) to 28 mgd in Fiscal Year 2014. See the captions “THE SEWER SYSTEM—General” and “FUTURE CAPITAL IMPROVEMENTS—MWRP and Solids Handling.”

Source: The District.

Set forth below is a summary of the District’s projection of total water sources for the current and next four Fiscal Years.

**TABLE 12**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Water Supply In Acre Feet Per Year**

<i>Fiscal Year</i>	<i>Local Water<sup>(1)</sup></i>	<i>Imported Water</i>	<i>Recycled Water<sup>(2)</sup></i>	<i>Total</i>	<i>Percentage Change</i>
2015	56,800	16,236	21,143	94,179	(4.45)% <sup>(3)</sup>
2016	56,200	18,028	21,566	95,794	1.71
2017	56,481	18,904	21,997	97,382	1.66
2018	56,763	19,775	22,437	98,975	1.64
2019	58,048	19,635	22,886	100,569	1.61

<sup>(1)</sup> Includes groundwater, native water in Irvine Lake and non-potable Irvine Desalter Project water used in the District’s recycled water system. See the caption “—Groundwater—Irvine Desalter Project.” Excludes water pumped from the SGU, which is disposed of via an existing ocean outfall following treatment. Reflects completion of Wells 21 and 22. See the caption “—Groundwater—General.”

<sup>(2)</sup> Recycled water production projected to increase approximately 2% per annum.

<sup>(3)</sup> Decrease from Fiscal Year 2014 reflects effects of drought. See the caption “—Drought Declaration.”

Source: The District.

Set forth below is a comparison of the District’s sources of supply for Fiscal Year 2014 as compared to other neighboring agencies supplying water for Fiscal Year 2013.

**TABLE 13**  
**IRVINE RANCH WATER DISTRICT**  
**Water Supply Comparison by Source**

	<i>Imported Water</i>	<i>Groundwater</i>	<i>Surface Water</i>	<i>Recycled Water</i>
<b>Irvine Ranch Water District<sup>(1)</sup></b>	<b>23%</b>	<b>56%</b>	<b>0%</b>	<b>21%</b>
City of Anaheim	46	54	0	0
South Coast Water District <sup>(2)</sup>	77	13	0	10
City of Orange	50	45	5	0
Santa Margarita Water District <sup>(2)</sup>	83	0	0	17
City of Tustin <sup>(3)</sup>	37	63	0	0

<sup>(1)</sup> Approximately 32% of the District’s water demand is from areas outside of OCWD’s jurisdictional boundaries.

<sup>(2)</sup> These agencies are not located within OCWD’s jurisdictional boundaries.

<sup>(3)</sup> The City of Tustin owns several groundwater projects that are exempt from the BEA.

Source: Municipal Water District of Orange County Water System Operations and Financial Information (August 2013); the District.

## THE WATER SYSTEM

### General

Through the issuance of general obligation waterworks bonds and other indebtedness, the District has constructed, purchased or acquired capacity in, or connections to, various transmission, pumping, storage and distribution facilities to convey water into the District, including several major facilities built in cooperation with other water districts and cities.



The development of water supplies and the construction and acquisition of facilities are being carried out under a master plan formulated by the District in 1972 and most recently updated in 2009. Existing uses and planned development within the District will necessitate a projected combined total annual water supply of approximately 124,800 acre feet by 2035.

The District anticipates meeting all of its water supply needs using the above-mentioned water importation and storage facilities, groundwater production facilities and recycled water facilities. The combination of the District's facilities and sources of supply is expected to provide the District with a reliable water supply sufficient to permit the ultimate development as presently planned. Reliability of water supply is further enhanced by the District's storage facilities, which currently provide more than a seven-day supply.

At June 30, 2014, the District had approximately 2,100 miles of water mains in its potable and recycled water systems and storage capacity of approximately 30,200 acre feet, including the District's share of Irvine Lake, a 25,000 acre feet untreated water reservoir, and the District's Sand Canyon, Rattlesnake Canyon, Syphon and San Joaquin Reservoirs, which are recycled water reservoirs with capacities of 750 acre feet, 1,100 acre feet, 450 acre feet and 2,900 acre feet respectively. See the caption "WATER SUPPLY."

See the caption "WATER SUPPLY—Water Banking" for information with respect to the District's water banking programs, which constitute additional sources of water that are not reflected in the discussion of the District's storage facilities above.

In Fiscal Year 2009, the District commenced the engineering design for the Baker WTP. Construction began in January 2014 and is anticipated to be completed in July 2016.

When constructed, the Baker WTP is expected to treat to drinking water standards approximately 28 mgd of raw imported water purchased from MWD. During emergencies and planned raw imported water outages, water from Irvine Lake is expected to be supplied to the Baker WTP for treatment to drinking water standards. The Baker WTP will utilize microfiltration and ultraviolet disinfection as the primary treatment processes. Although the plant will be owned and operated by the District, approximately 76% of capacity in the Baker WTP is expected to be held by other participating water agencies located in southern Orange County. The facility will provide an operational source of supply to the District and participating agencies and, in the event of a short-term water shortage emergency, provide regional water reliability to other neighboring water agencies. The project construction cost is estimated at approximately \$107.2 million, which is to be borne by the District and the other participating water agencies in proportion to their participation in the project. The District will finance its 24% share of the costs from the proceeds of bonds.

See the caption "THE IRVINE RANCH WATER DISTRICT—Current Investments" for a description of an investment made by the District relating to the Baker WTP.

### Historic Water Connections

The following table shows the number of water connections in the District for the five most recent Fiscal Years.

**TABLE 14**  
**IRVINE RANCH WATER DISTRICT**  
**Historic Water Connections<sup>(1)</sup>**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2010	97,023	0.74%
2011	98,637	1.66
2012	99,465	0.84
2013	101,020	1.56
2014	102,990	1.95

<sup>(1)</sup> Excludes recycled water connections.  
Source: The District.

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### Projected Water Connections

The following table shows the number of water connections projected by the District for the current and next four Fiscal Years.

**TABLE 15**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Water Connections<sup>(1)</sup>**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2015	105,320	2.26%
2016	108,871	3.37
2017	112,099	2.96
2018	115,582	3.11
2019	118,402	2.44

<sup>(1)</sup> Excludes recycled water connections. Increases in connections reflect District estimates of increased development activity.  
Source: The District.

### Connection Fees

The District collects a water connection fee for each new connection to finance District facilities. Connection fees vary by Improvement District and range from \$1,330 to \$3,557 for each residential unit and \$5,608 to \$30,062 for each acre of commercial or industrial property. The connection fee is designed to recover the cost of each additional connection and allocate among all Improvement Districts the costs of master planned facilities such as water sources and production facilities, transmission mains, pumping stations, reservoirs and appurtenances and capacity necessary for each Improvement District.

**Historic Water Deliveries**

The following table presents a summary of historic water deliveries for the District in acre feet per year for the five most recent Fiscal Years. Historic water deliveries vary from historic water supply as a result of losses in the water system and the timing of billing. Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

**TABLE 16  
IRVINE RANCH WATER DISTRICT  
Historic Water Deliveries in Acre Feet Per Year**

<i>Fiscal Year</i>	<i>Potable and Untreated</i>	<i>Recycled</i>	<i>Total</i>	<i>Percentage Change</i>
2010 <sup>(1)</sup>	70,102	20,848	90,950	(12.35)%
2011 <sup>(1)</sup>	70,112	20,284	90,396	(0.61)
2012 <sup>(1)</sup>	65,564	20,602	86,166	(4.68)
2013 <sup>(2)</sup>	70,118	22,983	93,101	8.05
2014	77,523	21,038	98,561	5.86

<sup>(1)</sup> Reduced deliveries resulted from the District’s conservation efforts in response to drought conditions and economic factors affecting the District’s service area.

<sup>(2)</sup> Increase in water deliveries reflects new development and the economic recovery within the District’s service area.

Source: The District.

**Projected Water Deliveries**

The District estimates that water system deliveries for the current and next four Fiscal Years will be as set forth in the following table. The District currently projects that water deliveries will increase as a result of an increase in connections, as set forth in the table under the caption “—Projected Water Connections,” and improved economic conditions in the District’s service area. Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

**TABLE 17  
IRVINE RANCH WATER DISTRICT  
Projected Water Deliveries in Acre Feet Per Year**

<i>Fiscal Year</i>	<i>Potable and Untreated</i>	<i>Recycled</i>	<i>Total</i>	<i>Percentage Change</i>
2015	73,036	21,143	94,179	(4.45)%
2016	74,228	21,566	95,794	1.71
2017	75,385	21,997	97,382	1.66
2018	76,538	22,437	98,975	1.64
2019	77,683	22,886	100,569	1.61

Source: The District.

**Historic Water Sales and Service Charge Revenues**

The following table shows annual water sales and service charge revenues for the five most recent Fiscal Years. The following table does not include revenues from the sale of recycled water, which is accounted for as part of the District’s sewer system.

**TABLE 18**  
**IRVINE RANCH WATER DISTRICT**  
**Historic Water Sales and Service Charge Revenues**  
**(Dollars in Thousands)**

<i>Fiscal Year</i>	<i>Sales and Service Charge Revenues<sup>(1)</sup></i>	<i>Percentage Change</i>
2010	\$51,268	0.64%
2011	54,796	6.88
2012	57,558	5.04
2013	62,565	8.70
2014	66,321	6.00

<sup>(1)</sup> Includes late payment charges and other penalty revenues.  
 Source: The District.

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**Projected Water Sales and Service Charge Revenues**

The following table projects annual water sales and service charge revenues for the current and next four Fiscal Years.

**TABLE 19**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Water Sales and Service Charge Revenues**  
**(Dollars in Thousands)**

<i>Fiscal Year</i>	<i>Sales and Service Charge Revenues<sup>(1)</sup></i>	<i>Percentage Change</i>
2015	\$68,035	2.58%
2016	73,478	8.00
2017	78,621	7.00
2018	84,125	7.00
2019	90,013	7.00

<sup>(1)</sup> Reflects projected increases in water connections and deliveries described under the captions “—Projected Water Connections” and “—Projected Water Deliveries,” respectively, as well as projected increases in rates described under the caption “—Water System Rates and Charges.” Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 and there can be no assurance that the Board of Directors will adopt such rate increases as currently projected. See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.”

Source: The District.

**Largest Water Customers**

The following table sets forth the ten largest water customers of the District for Fiscal Year 2014, as determined by annual payments.

**TABLE 20  
IRVINE RANCH WATER DISTRICT  
Ten Largest Water Customers  
Fiscal Year 2014**

<i>Customer</i>	<i>Fiscal Year 2014 Payment</i>	<i>Percentage of Total Water Sales Revenues</i>
1. The Irvine Company	\$ 2,695,226	4.06%
2. University of California, Irvine	1,243,724	1.88
3. Jazz Semiconductor	765,756	1.15
4. B. Braun Medical Inc.	603,321	0.91
5. Woodbridge Village Association	422,656	0.64
6. City of Irvine	360,461	0.54
7. Heritage Fields, LLC	296,884	0.45
8. Allergan Sales, LLC	275,341	0.42
9. ERP Operating LP	238,963	0.36
10. City of Lake Forest	<u>236,595</u>	<u>0.36</u>
TOTAL	<u>\$7,138,927</u>	<u>10.77%</u>

Source: The District.

These ten largest customers accounted for approximately 10.77% of water sales revenues in Fiscal Year 2014.

**Water System Rates and Charges**

Water system rates and charges (other than connection fees) are generally uniform throughout the District. Pumping surcharges apply in higher elevations, and different rates and charges apply in certain areas added to the District by consolidation and annexation since 1998. The average monthly service charge for residential water meters is \$10.50. The monthly service charges for commercial and industrial water meters range from \$10.50 to \$2,992.50 based on meter size. Quantity charges are set according to a water conservation oriented allocation-based ascending block rate structure with rates ranging from \$0.88 to \$12.60 per 100 cubic feet (“ccf”). Recycled water rates for irrigation are set at 90% of the potable rate. Set forth below is a comparison of the District’s water bill for a typical residential customer as compared to neighboring communities. Since Fiscal Year 2006, the District has increased its water system rates and charges by an average of approximately 6.5% each year for an average residential customer using approximately 18 ccf of water per month.

The projected water system revenues set forth under the captions “—Projected Water Sales and Service Charge Revenues” and “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results and Debt Service Coverage” reflect projected water rate increases of between 4% and 6% in Fiscal Years 2015 through 2019, including a projected rate increase of 2% beginning July 1, 2015 that is expected to be brought before the Board of Directors in spring 2015. Such water rate increases are subject to the notice, hearing and protest provisions of Proposition 218 described under the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.” There can be no assurance that the Board of Directors will adopt such rate increases as currently projected.

**TABLE 21**  
**IRVINE RANCH WATER DISTRICT**  
**Typical Residential Customer Water Bills<sup>(1)</sup>**

<i>Water Service Provider</i>	<i>Charge<sup>(2)</sup></i>
City of Newport Beach	\$72.71
City of Costa Mesa	67.33
City of Santa Ana	55.25
City of Huntington Beach	43.76
City of Tustin	43.76
City of Anaheim	44.62
City of Orange	40.71
<b>District</b>	<b>30.94</b>

<sup>(1)</sup> Based on 18 ccf (for the District first 8 ccf at low volume rate of \$0.91 and next 10 ccf at \$1.34).

<sup>(2)</sup> As of July 1, 2014. Excludes *ad valorem* assessments levied by the District.

Source: The District.

## THE SEWER SYSTEM

### General

The District, following voter approval in 1965, is authorized by law to acquire, construct, operate and furnish facilities and services for the collection, treatment, reclamation and disposal of wastewater and may contract with others for such purposes. The District has an extensive network of gravity sewers, force mains, wastewater lift stations and siphons that convey wastewater to two District-owned treatment plants. At June 30, 2014, the District had approximately 1,009 miles of sewer mains and treatment plant capacity of approximately 35.5 mgd at the MWRP and the Los Alisos Water Reclamation Plant (“LAWRP”). More than 8.6 billion gallons of sewage were treated by the District during Fiscal Year 2014.

During Fiscal Year 1986, the District cooperated with Orange County Sanitation District (“OCSD”) to form Sanitation District 14 (functionally replaced by “Revenue Area 14” of OCSD, upon the consolidation of the several sanitation districts comprising OCSD’s predecessor, the County Sanitation Districts of Orange County, in 1998), which overlays a substantial portion of the District’s territory. Under an agreement entered into between the District and OCSD in connection with such formation, the District paid approximately \$34 million for an approximately 6% interest in OCSD’s sewage processing facilities (such percentage of interest will vary over time pursuant to a formula set forth in the agreement between OCSD and the District). This agreement currently provides treatment capacity (in addition to the capacity at District-owned facilities, such as the MWRP and the LAWRP) of up to 15 mgd. The agreement also provides for the purchase by the District of certain additional capacity in OCSD sewage processing facilities determined from annual flows. In Fiscal Year 2014, the District utilized approximately 1.3 billion gallons of capacity pursuant to its agreement with OCSD. Currently, approximately 87% of the District’s wastewater is treated by the MWRP and LAWRP operated by the District, and approximately 13% is treated by OCSD. A small portion of the wastewater (less than 1%) from the District’s service area that is adjacent to the Santa Margarita Water District is treated by the Santa Margarita Water District pursuant to contract.

Currently, approximately 71% of all wastewater collected by the District is treated as described above and recycled or stored in seasonal storage reservoirs for later treatment and recycling. The remainder of the wastewater collected by the District is diverted to OCSD for treatment and ultimate disposal into the Pacific Ocean through OCSD’s two ocean outfall pipelines or recharge into the Orange County groundwater basin through OCWD’s Groundwater Replenishment System.

Ultimately, the District plans to expand capacity for its treatment facilities to approximately 40.5 mgd in order to: (i) increase recycled water production and utilization; (ii) decrease exposure to external treatment costs and operational constraints; and (iii) decrease dependencies on imported water supplies. See the caption “FUTURE CAPITAL IMPROVEMENTS.”

The District has evaluated alternative approaches to handling its wastewater solids. In May 2013, the District began construction of a facility for handling MWRP solids, which are currently conveyed to OCSD, as well as solids from the District’s LAWRP and other potential participating agencies. New capital facilities constructed at the MWRP to dewater and dispose of solids from this facility are estimated to cost \$210 million. Construction of the solids handling facility at the MWRP is anticipated to be completed in Fiscal Year 2017.

OCSD faces various challenges in the continued treatment of sewage. A description of these challenges as well as a variety of other operating information with respect to OCSD is included in certain disclosure documents prepared by OCSD. OCSD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. OCSD has also entered into certain continuing disclosure agreements pursuant to which OCSD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12. Such official statements, other disclosure documents, annual reports and notices (collectively, the “OCSD Information”) are filed with EMMA at <http://emma.msrb.org>. The OCSD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. OCSD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 1993 BONDS TO PROVIDE OCSD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS.

**OCSD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO OCSD. OCSD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 1993 BONDS UNDER RULE 15c2-12.**

**Historic Sewer System and Recycled Water Connections**

The following table shows the number of sewer and recycled water connections in the District for the five most recent Fiscal Years.

**TABLE 22  
IRVINE RANCH WATER DISTRICT  
Historic Sewer and Recycled Water Connections**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2010	92,407	0.77%
2011	93,992	1.72
2012	94,983	1.05
2013	96,643	1.75
2014	97,482	0.87

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Source: The District.

**Projected Sewer and Recycled Water Connections**

The following table shows the projected number of sewer and recycled water connections for the current and next four Fiscal Years.

**TABLE 23  
IRVINE RANCH WATER DISTRICT  
Projected Sewer and Recycled Water Connections**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2015	100,967	3.58%
2016	104,518	3.52
2017	107,746	3.09
2018	111,229	3.23
2019	114,712	3.13

<sup>(1)</sup> Increases in connections beginning in Fiscal Year 2015 reflect District estimates of increased development activity.  
Source: The District.

**Connection Fees**

The District collects a sewer connection fee for each new connection to finance District sewer facilities. Connection fees vary by Improvement District and range from \$2,166 to \$24,868 for each residential unit and \$9,616 to \$61,757 for each acre of commercial or industrial property. The connection fee is designed to recover the cost of each additional connection and allocate among all Improvement Districts the costs of master planned facilities such as transmission mains, pumping stations, treatment facilities and appurtenances and capacity necessary to serve each Improvement District.

**Historic Sewer Daily Average Flow**

The following table shows the daily average sewer flow in millions of gallons per day for the five most recent Fiscal Years.

**TABLE 24  
IRVINE RANCH WATER DISTRICT  
Historic Sewer Daily Average Flow**

<i>Fiscal Year</i>	<i>Daily Average Flow (mgd)<sup>(1)</sup></i>	<i>Percentage Change</i>
2010	27.7	4.90%
2011	27.8	0.36
2012	28.3	1.80
2013	28.1	(0.71) <sup>(2)</sup>
2014	27.3	(2.85) <sup>(2)</sup>

<sup>(1)</sup> Includes District flow treated by OCSD.

<sup>(2)</sup> Reduction in flows reflects reduced water use, including as a result of conservation efforts.

Source: The District.



**Projected Sewer Daily Average Flow**

The following table shows the projected daily average sewer flow in millions of gallons per day for the current and next four Fiscal Years.

**TABLE 25  
IRVINE RANCH WATER DISTRICT  
Projected Sewer Daily Average Flow**

<i>Fiscal Year</i>	<i>Daily Average Flow (mgd)<sup>(1)</sup></i>	<i>Percentage Change</i>
2015	27.8	1.83%
2016	28.4	2.16
2017	29.0	2.11
2018	29.6	2.07
2019	30.1	1.69

<sup>(1)</sup> Includes flow treated by OCSD.  
Source: The District.

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**Historic Recycled Water Sales and Sewer Service Charge Revenues**

The following table shows the recycled water sales and sewer service charge revenues for the five most recent Fiscal Years.

**TABLE 26  
IRVINE RANCH WATER DISTRICT  
Historic Recycled Water Sales and Sewer Service Charge Revenues  
(Dollars in Thousands)**

<i>Fiscal Year</i>	<i>Recycled Water Sales and Sewer Service Charge Revenues</i>	<i>Percentage Change</i>
2010	\$45,343	10.17%
2011	45,375	0.07
2012	49,234	8.50 <sup>(1)</sup>
2013	53,085	7.82 <sup>(2)</sup>
2014	58,109	9.46 <sup>(3)</sup>

<sup>(1)</sup> Reflects 2.37% increase in fixed service charge in Fiscal Year 2012 to cover increased operating costs, replacements, and capital enhancements and 1.83% increase in commodity rate in Fiscal Year 2012.

<sup>(2)</sup> Reflects increase in sewer daily average flow described under the caption “—Historic Sewer Daily Average Flow” as well as increase in recycled water and sewer rates described under caption “—Sewer System Rates and Charges.”

<sup>(3)</sup> Reflects increase of approximately 7% in fixed monthly service charge in Fiscal Year 2014 to cover increased operating costs, replacements and capital enhancements. See the caption “—Sewer System Rates and Charges.” Also reflects increased recycled water sales.

Source: The District.

**Projected Recycled Water Sales and Sewer Service Charge Revenues**

The following table shows the projected recycled water sales and sewer service charge revenues for the current and next four Fiscal Years.

**TABLE 27**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Recycled Water Sales and Sewer Service Charge Revenues**  
**(Dollars in Thousands)**

<i>Fiscal Year</i>	<i>Recycled Water Sales and Sewer Service Charge Revenues<sup>(1)</sup></i>	<i>Percentage Change</i>
2015	\$64,925	11.73%
2016	70,119	8.00
2017	74,326	6.00
2018	78,786	6.00
2019	83,513	6.00

<sup>(1)</sup> Reflects increases in projected sewer connections and daily average sewer flow described under the captions “—Projected Sewer and Recycled Water Connections” and “—Projected Sewer Daily Average Flow,” respectively, as well as projected increases in recycled water and sewer rates described under the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges.” Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 and there can be no assurance that the Board of Directors will adopt such rate increases as currently projected. See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.”

Source: The District.

**Largest Sewer Service Customers**

The following table sets forth the ten largest sewer service customers of the District for Fiscal Year 2014, as determined by annual payments.

**TABLE 28  
IRVINE RANCH WATER DISTRICT  
Ten Largest Sewer Service Customers  
Fiscal Year 2014**

<i>Customer</i>	<i>Fiscal Year 2014 Payment</i>	<i>Percentage of Total Recycled Water and Sewer Service Revenues</i>
1. The Irvine Company	\$3,096,888	5.33%
2. City of Irvine	2,135,707	3.68
3. University of California, Irvine	1,684,231	2.90
4. California Department of Transportation, District 12	918,254	1.58
5. B. Braun Medical Inc.	543,502	0.94
6. Irvine Unified School District	535,744	0.92
7. Heritage Fields, LLC	373,192	0.64
8. Los Olivos Apartments	278,100	0.48
9. Royalty Carpet Mills	316,847	0.55
10. Allergan Sales, LLC	<u>312,114</u>	<u>0.54</u>
TOTAL	<u>\$10,194,579</u>	<u>17.54%</u>

Source: The District.

These ten largest customers accounted for approximately 17.54% of total sewer revenues for Fiscal Year 2014.

**Sewer System Rates and Charges**

Residential users pay a fixed monthly service charge which ranges from \$15.40 to \$20.50. Commercial and industrial users pay \$20.50 for the first ten ccf of water use and from \$2.35 to \$2.465 per ccf thereafter. Set forth below is a comparison of the District’s sewer bills for a typical residential customer as compared to other neighboring communities. Since Fiscal Year 2006, the District has increased its fixed monthly service charge by an average of approximately 10.0% each year.

The projected sewer system and recycled water sales revenues set forth under the captions “—Projected Recycled Water Sales and Sewer Service Charge Revenues” and “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results and Debt Service Coverage” reflect projected sewer rate increases of between 3.5% to 6% in Fiscal Years 2015 through 2019 and projected recycled water rate increases of between 2% and 5% in Fiscal Years 2015 through 2019, including projected increases in sewer rates and recycled water rates effective July 1, 2015 that are expected to be brought before the Board of Directors in spring 2015. Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 described under the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.” There can be no assurance that the Board of Directors will adopt such rate increases as currently projected.

**TABLE 29**  
**IRVINE RANCH WATER DISTRICT**  
**Typical Residential Customer Sewer Bill**

<i>Sewer Service Provider</i>	<i>Charge</i> <sup>(1)</sup>
City of Tustin	\$44.29
City of Santa Ana	40.36
City of Newport Beach	37.49
City of Huntington Beach	37.38
City of Orange	26.69
City of Costa Mesa	26.69
City of Anaheim	26.69
<b>District</b>	<b>15.40 – 20.50</b>

<sup>(1)</sup> As of July 1, 2014. Excludes *ad valorem* assessments levied by District.  
Source: The District.

**FUTURE CAPITAL IMPROVEMENTS**

The District anticipates spending approximately \$408,628,141 on future water, recycled water and sewer system improvements during the current and the next four Fiscal Years. The District anticipates financing such improvements through a combination of bonds, District revenues and fund balances in Fiscal Years 2015 through 2019. The District anticipates that approximately \$300,000,000 of such improvements will be financed from proceeds of bonds, some of which have already been issued, and that approximately \$108,628,141 of such improvements will be financed from funds on hand and District revenues. The following table sets forth the District's projected capital improvement projects for the current and next four Fiscal Years:

**TABLE 30**  
**IRVINE RANCH WATER DISTRICT**  
**Projected Water, Recycled Water and Sewer Systems Capital Improvements**  
**For Fiscal Years 2015 through 2019**

<i>Project</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>Total</i>
MWRP and Solids Handling	\$100,789,454	\$23,355,403	\$15,901,767	\$ 4,957,331	\$ 527,044	\$145,530,999
OCSD / CORF	2,527,922	3,138,031	3,592,675	5,098,258	5,441,963	19,798,849
Water Supply Reliability	15,496,096	16,030,802	6,768,486	5,008,402	14,788,735	58,092,521
Development-Related Expansion	17,172,862	7,673,755	22,957,039	33,072,215	25,655,764	106,531,635
Replacement and Refurbishment	20,552,552	19,362,241	9,057,916	1,944,897	3,156,153	54,073,759
Operational Improvements	<u>6,953,832</u>	<u>13,159,537</u>	<u>3,461,781</u>	<u>926,308</u>	<u>98,920</u>	<u>24,600,378</u>
<b>Total</b>	<b>\$163,492,718</b>	<b>\$82,719,769</b>	<b>\$61,739,664</b>	<b>\$51,007,411</b>	<b>\$49,668,579</b>	<b>\$408,628,141</b>

**MWRP and Solids Handling**

The Phase 2 expansion of the MWRP, which was substantially completed in 2014, increases treatment capacity from 18 to 28 mgd. Primary components of the expansion include new influent sewers; influent flow metering facilities; centralized headworks facilities; primary clarification facilities; primary effluent pumping station; flow equalization basin modifications; nitrification/denitrification membrane bioreactor facilities; high rate clarification facilities; ultraviolet disinfection facilities; rehabilitation of existing chlorine contact chambers; effluent pumping station modifications; chemical storage and feed facilities; associated electrical, instrumentation and controls and telemetry improvements; demolition work; site work and driven pile foundations; yard piping and grading modifications; and site paving and restoration work.

The solids handling capital project includes the design and construction of facilities for thickening, acid-phase anaerobic digestion, dewatering, drying and pelletization, energy generation, and use of pellets as a fertilizer or e-fuel. It also includes a solids receiving station to allow processing of dewatered sludge from the Los Alisos Water Recycled Water Plant for drying and pelletization. In addition, facilities for the receipt and transfer of fats, oil and grease to the digesters is being designed and will be constructed to increase methane and energy production capabilities. The solids handling capital project is anticipated to be completed in Fiscal Year 2018.

## **OCSD CORF**

OCSD's Capital Outlay Revolving Fund ("CORF") funds OCSD projects such as plant upgrades for secondary treatment and the Groundwater Replenishment System. The District funds its share of the CORF based on the District's percentage share of OCSD's total wastewater flow. Wastewater flows from the District presently comprise approximately 2% – 3% of OCSD flows and are expected to comprise approximately 4% – 5% in future years. See the caption "THE SEWER SYSTEM—General—OCSD" above.

## **Water Supply Reliability**

Water supply reliability projects include the acquisition and construction of water banking facilities in Kern County and the Baker WTP, expansion of Syphon Reservoir and other projects, including, but not limited to, booster pump stations and interagency pipeline construction. See the captions "WATER SUPPLY" and "THE WATER SYSTEM—General."

## **Development-Related Expansion**

Development-related expansion improvements include construction of new water, recycled water and sewer improvements to serve new developments.

## **Replacement and Refurbishment**

Replacement and refurbishment improvements consist of repairs and restoration to existing water, recycled water and sewer system facilities.

## **Operational Improvements**

Operational improvements consist of optimizing District facilities and include improvements to the District's water and wastewater Operations Center, adding water quality mixing systems to existing reservoirs, expanding the reliability of the Supervisory Control and Data Acquisition system, and relocating District facilities as required by interagency projects.

## **WATER AND SEWER SYSTEM FINANCIAL INFORMATION**

The following discussion sets forth information related to the District's historic and projected operating results and resulting debt service coverage on Parity Obligations. Other than the *ad valorem* assessments and 1% Property Tax Revenues, none of the Revenues shown in Tables 31 and 32 are pledged to the payment of debt service on the Series 1993 Bonds. The District does, however, routinely apply such Revenues to the payment of debt service on its *Ad Valorem* Assessment Bonds, including the Series 1993 Bonds. There is no assurance that such alternate sources for debt service payments will be available or continue to be available in succeeding years, or that if they are available, that the District will elect to use them for debt service payments.

## **Financial Statements**

A copy of the most recent financial statements of the District audited by Mayer Hoffman McCann P.C., Certified Public Accountants (the “Auditor”), are included as Appendix B (the “Financial Statements”) and should be read in their entirety. The Auditor’s letter concludes that the Financial Statements present fairly, in all material respects, the respective financial position of each major fund and the aggregate remaining fund information of the District, as of June 30, 2014, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America. The Auditor has not reviewed the contents of this Remarketing Statement, and the District has not sought the Auditor’s consent to the inclusion of the Auditor’s report in the Financial Statements in this Remarketing Statement.

## **Reduction in BAB Credits**

On March 1, 2013, the federal government announced the implementation of certain automatic budget cuts known as the sequester, including reductions in Build America Bond (“BAB”) interest subsidy payments (“BAB Credits”). The originally scheduled BAB Credit was reduced by 8.7% in federal fiscal year 2013 (which ended September 30, 2013), by 7.2% in federal fiscal year 2014 and by 7.3% in federal fiscal year 2015. Under a federal budget bill enacted in December 2013, the reduction of BAB Credits will continue through federal fiscal year 2023.

As set forth under the captions “—Historic Operating Results and Debt Service Coverage” and “—Projected Operating Results and Debt Service Coverage,” the District’s Series 2010B Bonds are BABs and the operating results for Fiscal Year 2014 and projected operating results for Fiscal Years 2015 through 2019 shown therein reflect the announced reduction in BAB Credits. While the District continues to monitor the effects of the reduction in BAB Credits on District finances, the District does not currently expect such reduction to have a material adverse effect on the ability of the District to make payments of principal of and interest on the Series 2010B Bonds or the Series 1993 Bonds (if the District so elects) from Net Revenues.

## **Historic Operating Results and Debt Service Coverage**

The following summary of operating results of the District for the last five Fiscal Years is derived from the Financial Statements and audited financial statements of the District for prior Fiscal Years and excludes certain non-cash items and includes certain other adjustments. Such summary operating results are qualified in their entirety by reference to such statements, including the notes thereto.

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**TABLE 31**  
**IRVINE RANCH WATER DISTRICT**  
**Historic Operating Results and Debt Service Coverage**  
**Fiscal Years 2010 through 2014**  
**(in Thousands)**

	2010	2011	2012	2013	2014
<b>REVENUES</b>					
Water sales and service charges	\$ 51,268	\$ 54,796	\$ 57,558	\$ 62,565	\$ 66,321
Recycled water sales and sewer service charges	45,344	45,375	49,234	53,085	58,109
Connection fees	5,818	10,572	9,030	17,314	22,429
Net real estate income	5,624	5,649	6,736	6,566	7,760
Interest income	2,191	2,599	1,738	1,549	1,671
Net earnings on JPA <sup>(1)</sup>	4,196	12,444 <sup>(11)</sup>	11,927	20,294 <sup>(12)</sup>	12,356
Available 1% Property Tax Revenues <sup>(2)</sup>	19,346	22,396	25,858	25,719	26,432
Other <sup>(3)</sup>	10,706	7,987	6,141	8,323	10,974
<b>Total Revenues</b>	<b>\$ 144,493</b>	<b>\$ 161,818</b>	<b>\$ 168,222</b>	<b>\$ 195,415</b>	<b>\$ 206,052</b>
<b>OPERATION AND MAINTENANCE EXPENSES</b>					
Water services	\$ 40,103	\$ 42,383	\$ 40,593	\$ 48,911	\$ 57,624
Sewer services	27,804	30,787	26,817	36,688 <sup>(16)</sup>	37,715
Administrative and general	22,904	21,332	27,182 <sup>(14)</sup>	22,667 <sup>(16)</sup>	22,272
Customer accounts <sup>(4)</sup>	3,772	3,737	3,737	3,753	0
Other	1,286	989	10,713 <sup>(15)</sup>	6,110 <sup>(17)</sup>	7,163
<b>Total Operation &amp; Maintenance Expenses</b>	<b>\$ 95,869</b>	<b>\$ 99,228</b>	<b>\$ 109,042</b>	<b>\$ 118,129</b>	<b>\$ 124,774</b>
<b>NET REVENUES</b>	<b>\$ 48,624</b>	<b>\$ 62,590</b>	<b>\$ 59,180</b>	<b>\$ 77,286</b>	<b>\$ 81,278</b>
<b>ASSESSMENT PROCEEDS<sup>(11)</sup></b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 5,816</b>	<b>\$ 5,877</b>	<b>\$ 8,509</b>
<b>TOTAL NET REVENUES AND ASSESSMENT PROCEEDS</b>	<b>\$ 48,624</b>	<b>\$ 62,590</b>	<b>\$ 64,996</b>	<b>\$ 83,163</b>	<b>\$ 89,787</b>
<b>PARITY OBLIGATIONS</b>					
Series 2011A Bonds	\$ 0	\$ 35	\$ 2,284	\$ 2,306	\$ 2,360
Series 2010B Bonds <sup>(5)</sup>	0	4,080	7,533	7,519	7,825
2010 Installment Sale Agreement <sup>(6)</sup>	3,119	7,680	7,977	8,300	8,665
Certificates of Participation <sup>(7)</sup>	2,827	0	0	0	0
1997 State Loan #3	0	226	226	226	227
Prior Reimbursement Agreements	0	0	0	0	0
<b>Total Parity Debt Service</b>	<b>\$ 5,946</b>	<b>\$ 12,021</b>	<b>\$ 18,020</b>	<b>\$ 18,351</b>	<b>\$ 19,077</b>
<b>PARITY OBLIGATION COVERAGE<sup>(8)</sup></b>	<b>8.2x</b>	<b>5.2x<sup>(13)</sup></b>	<b>3.6x</b>	<b>4.5x</b>	<b>4.7x</b>
Revenues Available For Subordinate Debt Service	\$ 42,678	\$ 50,569	\$ 46,976	\$ 64,812	\$ 70,710
<b>SUBORDINATE OBLIGATIONS</b>					
Swap Payments <sup>(9)</sup>	\$ 7,391	\$ 7,734	\$ 7,734	\$ 7,452	\$ 7,555
State Loans and SCWD Debt <sup>(10)</sup>	381	308	308	308	308
1986 Certificates of Participation <sup>(7)</sup>	2,605	0	0	0	0
<b>Total Subordinate Debt Service</b>	<b>\$ 10,377</b>	<b>\$ 8,042</b>	<b>\$ 8,042</b>	<b>\$ 7,760</b>	<b>\$ 7,863</b>
<b>Sources of Payment for Ad Valorem Assessment Bonds:</b>					
Remaining Revenues	\$ 32,301	\$ 42,527	\$ 38,934	\$ 57,052	\$ 62,847
1% Pledged Property Tax Revenues <sup>(11)</sup>	7,804	4,593	3,292	3,546	3,013
Ad valorem Assessments	11,244	11,875	6,060	5,940	4,797
Total Funds Available for Ad Valorem Assessment Bonds	\$ 51,349	\$ 58,995	\$ 48,286	\$ 66,538	\$ 70,657
Ad Valorem Assessment Bond Debt Service	(21,179)	(16,899)	(16,899)	(17,129)	(10,501)
<b>NET REVENUES AVAILABLE FOR OTHER PURPOSES</b>	<b>\$ 30,170</b>	<b>\$ 42,096</b>	<b>\$ 31,387</b>	<b>\$ 49,409</b>	<b>\$ 60,156</b>

(FOOTNOTES ON FOLLOWING PAGE)

- (1) Reflects earnings from investment of proceeds of taxable bonds issued by Irvine Ranch Water District Joint Powers Agency in excess of payments of principal of and interest on such obligations. Such obligations matured in Fiscal Year 2014 and the Irvine Ranch Water District Joint Powers Agency was thereupon terminated in accordance with its joint powers agreement.
- (2) Represents 1% Property Tax Revenues available to pay debt service on Parity Obligations after payment of debt service on the Series 1993 Bonds and other bonds of the District secured by a pledge of the District's share of the Orange County 1% general *ad valorem* property tax pursuant to Resolution No. 1992-48, adopted by the Board of Directors of the District on November 23, 1992, or Resolution 2002-10, adopted by the Board of Directors of the District on April 8, 2002 (collectively, the "Secured Bonds") from 1% Property Tax Revenues and *ad valorem* assessments.
- (3) Other Revenues includes golf course lease, cell site leases, conservation revenue, penalty revenue, grants and Allen-McColloch pipeline income.
- (4) In Fiscal Year 2014, the District began recording Customer Accounts expenses in the Water Services and Sewer Services line items.
- (5) Debt Service net of BAB Credit on Series 2010B Bonds. Fiscal Year 2013 amount reflects announced reductions in BAB Credits. See the caption "—Reduction in BAB Credits."
- (6) Entered into in February 2010 in connection with the prepayment of the 2008 Certificates of Participation and the 1986 Certificates of Participation.
- (7) Prepaid in February 2010.
- (8) Total Net Revenues and Assessment Proceeds divided by Total Parity Debt Service.
- (9) Net swap payments made.
- (10) Santiago County Water District was consolidated into the District as of July 1, 2006.
- (11) Represents District's share of 1% Property Tax Revenues which, together with the *ad valorem* assessments, is sufficient to pay debt service on the Series 1993 Bonds and the other Secured Bonds. Decreases reflect scheduled mandatory sinking fund payments and redemption of approximately \$3.1 million in Secured Bonds.
- (12) Refunding of Irvine Ranch Water District Joint Powers Agency bonds described in Footnote 1 in Fiscal Year 2010 resulted in a savings of approximately \$32.0 million, of which a portion was realized in each of Fiscal Years 2011, 2013 and 2014.
- (13) Reduced Parity Obligation coverage beginning in Fiscal Year 2011 reflects scheduled increases in Parity Obligation debt service.
- (14) Increase from Fiscal Year 2011 reflects expenses related to increased solids handling capacity at OCSD, which is expected to continue until December 2016, when the District expects to complete construction of its own facility to treat and dispose of solids. See the caption "THE SEWER SYSTEM—General."
- (15) Increase from Fiscal Year 2011 reflects capital improvement project writeoffs in accordance with GASB Statement 51 (Accounting and Financial Reporting for Intangible Assets) in the total amount of approximately \$10.3 million.
- (16) Increase from Fiscal Year 2012 amount in Fiscal Year 2013 reflects recording of OCSD expenses, which were previously treated as an administrative and general line item, in the sewer services line item. See the caption "THE SEWER SYSTEM—General."
- (17) Decrease from Fiscal Year 2012 amount in Fiscal Year 2013 reflects significant reduction in capital improvement project reclassifications and writeoffs. See Footnote 15.

Source: The District.

## Projected Operating Results and Debt Service Coverage

The District's estimated projected operating results for the current and next four Fiscal Years are set forth below, reflecting certain significant assumptions concerning future events and circumstances. The financial forecast represents the District's estimate of projected financial results based on the District's assumptions, including the assumptions in the footnotes to the chart set forth below. Such assumptions are material in the development of the District's financial projections, and variations in the assumptions may produce substantially different financial results. Actual operating results achieved during the projection period may vary from those presented in the forecast and such variations may be material.

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**TABLE 32**  
**IRVINE RANCH WATER DISTRICT**  
**Five-Year Debt Service Coverage Forecast**  
**Fiscal Years 2015 through 2019**  
**(in Thousands)**

	2015	2016	2017	2018	2019
<b>REVENUES</b>					
Water sales and service charges <sup>(1)</sup>	\$ 68,035	\$ 73,478	\$ 78,621	\$ 84,125	\$ 90,013
Recycled water sales and sewer service charges <sup>(2)</sup>	64,925	70,119	74,326	78,786	83,513
Connection fees <sup>(3)</sup>	17,000	22,000	22,000	23,000	22,000
Net real estate income <sup>(4)</sup>	8,406	8,588	8,749	8,913	9,081
Interest income <sup>(5)</sup>	1,366	2,603	3,477	3,610	5,361
Available 1% Property Tax Revenues <sup>(6)</sup>	25,611	27,206	28,071	29,051	30,527
Other <sup>(7)</sup>	11,523	12,099	12,704	13,339	14,006
<b>Total Revenues</b>	<u>\$ 196,866</u>	<u>\$ 216,092</u>	<u>\$ 227,948</u>	<u>\$ 240,824</u>	<u>\$ 254,501</u>
<b>OPERATION AND MAINTENANCE EXPENSES</b>					
Water services <sup>(8)</sup>	\$ 62,234	\$ 67,213	\$ 71,245	\$ 75,520	\$ 80,051
Sewer services <sup>(9)</sup>	39,978	42,377	44,919	47,614	50,471
Administrative and general <sup>(9)</sup>	23,608	25,025	26,526	28,118	29,805
Other <sup>(10)</sup>	5,000	5,100	5,202	5,306	5,412
<b>Total Operation &amp; Maintenance Expenses</b>	<u>\$ 130,820</u>	<u>\$ 139,714</u>	<u>\$ 147,893</u>	<u>\$ 156,558</u>	<u>\$ 165,740</u>
<b>NET REVENUES</b>	\$ 66,046	\$ 76,378	\$ 80,055	\$ 84,265	\$ 88,761
<b>ASSESSMENT PROCEEDS<sup>(11)</sup></b>	\$ 5,723	\$ 4,719	\$ 4,972	\$ 5,274	\$ 4,285
<b>TOTAL NET REVENUES AND ASSESSMENT PROCEEDS</b>	<u>\$ 71,769</u>	<u>\$ 81,097</u>	<u>\$ 85,027</u>	<u>\$ 89,540</u>	<u>\$ 93,047</u>
<b>PARITY OBLIGATIONS<sup>(12)</sup></b>					
Series 2011A Bonds <sup>(13)</sup>	\$ 3,213	\$ 3,682	\$ 4,168	\$ 4,219	\$ 4,098
Series 2010B Bonds <sup>(14)</sup>	7,829	7,829	7,829	7,829	7,829
2010 Installment Sale Agreement <sup>(15)</sup>	9,098	9,487	9,812	3,995	4,094
1997 State Loan #3 <sup>(15)</sup>	227	227	227	227	227
Prior Reimbursement Agreements	0	0	0	0	0
<b>Total Parity Debt Service</b>	<u>\$ 20,367</u>	<u>\$ 21,224</u>	<u>\$ 22,035</u>	<u>\$ 16,270</u>	<u>\$ 16,248</u>
<b>PARITY OBLIGATION COVERAGE<sup>(16)</sup></b>	3.5x	3.8x	3.9x	5.5x	5.7x
Revenues Available For Subordinate Debt Service	\$ 51,402	\$ 59,874	\$ 62,993	\$ 73,269	\$ 76,799
<b>SUBORDINATE OBLIGATIONS<sup>(12)</sup></b>					
Swap Payments <sup>(17)</sup>	\$ 7,475	\$ 7,085	\$ 6,435	\$ 5,915	\$ 5,294
State Loans and SCWD Debt <sup>(15)</sup>	308	308	308	308	308
<b>Total Subordinate Debt Service</b>	<u>\$ 7,783</u>	<u>\$ 7,393</u>	<u>\$ 6,743</u>	<u>\$ 6,223</u>	<u>\$ 5,602</u>
<b>Sources of Payment for Ad Valorem Assessment Bonds:</b>					
Remaining Revenues	\$ 43,619	\$ 52,481	\$ 56,250	\$ 67,046	\$ 71,197
1% Pledged Property Tax Revenues <sup>(18)</sup>	2,889	2,194	2,129	2,049	1,573
Ad valorem Assessments <sup>(19)</sup>	5,277	6,881	7,128	7,426	8,415
Total Funds Available for Ad Valorem Assessment Bonds	\$ 51,786	\$ 61,556	\$ 65,506	\$ 76,522	\$ 81,185
Ad Valorem Assessment Bond Debt Service <sup>(20)</sup>	(10,940)	(13,391)	(14,619)	(16,226)	(21,531)
<b>NET REVENUES AVAILABLE FOR OTHER PURPOSES</b>	<u>\$ 40,846</u>	<u>\$ 48,164</u>	<u>\$ 50,887</u>	<u>\$ 60,296</u>	<u>\$ 59,654</u>

(FOOTNOTES ON FOLLOWING PAGE)

- (1) Projected to increase approximately 2.6% from Fiscal Year 2014 amount in Fiscal Year 2015, 8% from Fiscal Year 2015 amount in Fiscal Year 2016 and 7% per annum thereafter. See the caption “THE WATER SYSTEM—Projected Water Sales and Service Charge Revenues.”
- (2) Projected to increase approximately 11.7% from Fiscal Year 2014 amount in Fiscal Year 2015, 8% from Fiscal Year 2015 amount in Fiscal Year 2016 and 6% per annum thereafter. See the caption “THE SEWER SYSTEM—Projected Recycled Water Sales and Sewer Service Charge Revenues.”
- (3) Based on District projections of development.
- (4) Based on existing and expected leases. See the captions “THE IRVINE RANCH WATER DISTRICT—Current Investments” and “THE IRVINE RANCH WATER DISTRICT—Projected Net Real Estate Income.”
- (5) Assumes interest rates increasing from 0.45% in Fiscal Year 2015 to 2.00% in Fiscal Year 2019.
- (6) Represents 1% Property Tax Revenues available to pay Debt Service on Parity Obligations after payment of debt service on the Series 1993 Bonds and the other Secured Bonds from 1% Property Tax Revenues and applicable *ad valorem* assessments. Projected fluctuation in 1% Property Tax Revenues is a result of uneven debt service on Secured Bonds. See the caption “THE IRVINE RANCH WATER DISTRICT—1% Property Tax Revenues.”
- (7) Includes, golf course lease, cell site leases, conservation revenue, penalty revenue, grants and Allen-McColloch pipeline income. Projected to increase 5% per annum from Fiscal Year 2014 amount.
- (8) Projected to increase 8% per annum from Fiscal Year 2014 amount in Fiscal Year 2015 and 2016 and 6% per annum thereafter.
- (9) Projected to increase 6% per annum from Fiscal Year 2014 amount.
- (10) Projected to increase 2% from Fiscal Year 2015 budgeted amount.
- (11) Pro rata share of *ad valorem* assessments based on outstanding par amount of all *Ad Valorem* Assessment Bonds. Assessment Proceeds are only available to pay debt service on Series 2010B Bonds and Series 2011A Bonds and are not available to pay other Parity Obligations which are not general obligation bonds secured by *ad valorem* assessments.
- (12) Does not reflect the issuance of additional debt to finance future capital improvements. See the caption “FUTURE CAPITAL IMPROVEMENTS.”
- (13) Projected at SIFMA rates increasing from 0.15% in Fiscal Year 2015 to 2.00% in Fiscal Year 2019. Assumes that the purchase price of Series 2011A Bonds is paid from remarketing proceeds.
- (14) Debt Service net of BAB Credit on Series 2010B Bonds. Reflects announced reductions in BAB Credits. See the caption “—Reduction in BAB Credits.”
- (15) Reflects scheduled Debt Service, including scheduled reductions in principal payments on 2010 Installment Sale Agreement beginning in Fiscal Year 2018.
- (16) Total Net Revenues and Assessment Proceeds divided by Total Parity Debt Service.
- (17) Net swap payments. Assumes 5-year average of LIBOR rate with respect to swaps of 0.97%, increasing from 0.20% in Fiscal Year 2015 to 1.90% in Fiscal Year 2019. See the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Subordinate Debt—Interest Rate Swap Transactions.”
- (18) Represents District’s share of 1% Property Tax Revenues which, together with the applicable *ad valorem* assessments, is sufficient to pay debt service on the Series 1993 Bonds and the other Secured Bonds.
- (19) Pro rata share of *ad valorem* assessments based on outstanding par amount of all *ad valorem* assessment bonds and Series 2010B Bonds and Series 2011A Bonds.
- (20) *Ad Valorem* Assessment Bonds debt projection assumes annual sinking fund payments, SIFMA rates ranging from 0.15% in Fiscal Year 2015 to 2.00% in Fiscal Year 2019 and letter of credit fees equal to 0.35% of principal. Does not include Series 2010B Bonds or Series 2011A Bonds, which are Parity Obligations. Assumes \$150 million of new variable rate *ad valorem* assessment bonds issued in Fiscal Years 2016 and 2019.

Source: The District.

## THE IMPROVEMENT DISTRICTS

### General

The District contains seven water Improvement Districts and ten sewer Improvement Districts covering specific areas within the District’s boundaries, some of them overlapping and each of which is governed by the Act. The District formed the Improvement Districts in order to allocate funding responsibility for capital facilities to the area which will benefit from such capital facilities and to separate areas on the basis of projected timing of development so that capital facilities construction can be matched to the development approval decisions of the respective local agency that makes them. Some of the Improvement Districts share in the funding of the District’s regional facilities which the Improvement Districts will use in common, such as major water importation facilities or sewer treatment plants.

Each Improvement District has a respective plan of works and a certain amount of authorized general obligation bonded indebtedness. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness.” The *Ad Valorem* Assessment Bonds issued pursuant to such authorization are sold in each instance by the District on the respective

Improvement District's behalf. The obligation for repayment of bonds issued on behalf of an Improvement District is secured in each instance by the power of the District to levy and collect within such Improvement District *ad valorem* assessments without limitation as to rate or amount on land only (enforceable by customary rights to foreclose and sell property for delinquent assessments) or, in lieu of assessments, in the District's discretion, charges for water or sewer service, as applicable, all within the subject Improvement District. These powers and functions are exercised for each Improvement District by the Board of Directors of the District. Although the respective funding obligations of each Improvement District are separate and independent, the Improvement Districts are not operated as separate or independent governmental entities, nor do they have governing boards or any staff. The Improvement Districts are geographical subdivisions of the District through which the District funds capital improvements.

As a result of the District's discretionary election to use other sources of payment for debt service on *ad valorem* assessment bonds, the annual tax rates set by the District vary from year to year and generally do not result in revenues that correspond with debt service requirements on the *Ad Valorem* Assessment Bonds. The annual tax rates set by the District may vary from year to year for other reasons as well. The District has covenanted under the Indenture that, to the extent necessary to pay debt service on the Series 1993 Bonds, it will impose and collect Bond Assessments and Charges. See the caption "SECURITY FOR THE SERIES 1993 BONDS—General—Covenant to Collect Bond Assessments and Charges" in the forepart of this Remarketing Statement.

The California Water Code allows the Board of Directors, in a noticed hearing process, to reorganize its improvement district boundaries and to consolidate coterminous improvement districts. As development progresses to completion in improvement districts and the need for having separate improvement districts to match capital facilities construction timing for different geographic areas diminishes, consolidation of various improvement districts can produce efficiencies for the District. Under the California Water Code provisions, certain improvement districts of the District are the consolidated successors to previously separate water improvement districts or previously separate sewer improvement districts, respectively. In 2013, following studies carried out by the District to identify further opportunities to implement such consolidations and reorganizations of its improvement districts, the District implemented improvement district consolidation that reduced the number of its improvement districts from 33 to 17. The statutory provisions for the consolidation of improvement districts specify that a consolidated improvement district may levy and collect the assessments and charges necessary to satisfy the obligations of its predecessor improvement districts, and that the authorized and unissued bonds of the predecessor improvement districts may be issued and sold as the bonds of the consolidated improvement district. The District believes that its actions to reorganize and/or consolidate improvement districts will not impair the District's obligation to pay debt service on the outstanding bonds of such improvement districts or the security therefor. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District Nos. 105 and 140 into Improvement District No. 125 and the consolidation of Improvement District No. 250 into Improvement District No. 225.

The following is a general description of each of the Improvement Districts as to which the Series 1993 Bonds constitute consolidated, several general obligations:

#### **Improvement District Nos. 125 and 225**

**General.** At the time of their initial issuance on May 20, 1993, the Series 1993 Bonds constituted the consolidated, several general obligations of Improvement District Nos. 105, 140, 240 and 250. Improvement District Nos. 125 and 225 are the legal successors to Improvement District Nos. 105 and 140 and Improvement District No. 250, respectively. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District Nos. 105 and 140 into Improvement District No. 125 and the consolidation of Improvement District No. 250 into Improvement District No. 225.

Improvement District No. 125 (water) covers approximately 35,438 acres of the District, including several contiguous and non-contiguous areas in the central and coastal parts of the District. Improvement District No. 225 (sewer) covers approximately 32,862 acres of the District, including several contiguous and non-contiguous areas in the central part of the District. Currently, the majority of the land within Improvement District Nos. 125 and 225 consists of developed residential and commercial properties. The District expects certain areas within Improvement District Nos. 125 and 225 to be subject to infill development and redevelopment in the future. The District expects such additional development in Improvement District Nos. 125 and 225 to continue through at least 2020. The Fiscal Year 2015 assessed value of the land in Improvement District No. 125 is \$29,578,638,615, while the Fiscal Year 2014 assessed value of the land in Improvement District No. 105 before its consolidation into Improvement District No. 125 was \$7,099,866,552 and the Fiscal Year 2014 assessed value of the land in Improvement District No. 140 before its consolidation into Improvement District No. 125 was \$5,343,804,951. The Fiscal Year 2015 assessed value of the land in Improvement District No. 225 is \$24,757,488,949, while the Fiscal Year 2014 assessed value of the land in Improvement District No. 250 before its consolidation into Improvement District No. 225 was \$6,776,400,622.

Set forth below is information with respect to Improvement District Nos. 125 and 225 for Fiscal Years 2014 and 2015 and their respective predecessor Improvement Districts for prior Fiscal Years.

The *ad valorem* assessments levied by the District in Improvement District Nos. 125 and 225 to pay such Improvement Districts' respective Included Amounts of debt service on the Series 1993 Bonds will be levied on land only. See Table 3 under the caption "THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness" for a description of the authorized, issued, authorized and unissued, and the amount of outstanding Improvement District Nos. 125 and 225 Ad Valorem Assessment Bonds.

The following table presents the assessed valuations of land in Improvement District No. 105 for the Fiscal Years ended June 30, 2011 through June 30, 2013 and the assessed valuations of land in Improvement District No. 125 for the Fiscal Year ended June 30, 2014 and the Fiscal Year ending June 30, 2015. Assessed valuations of land in Improvement District No. 125 are not available for Fiscal Years prior to Fiscal Year 2014 because Improvement District No. 125 did not exist prior to November 11, 2013.

**TABLE 33**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 105/125**  
**Assessed Valuations (Land Only)**

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Unsecured<sup>(1)</sup></i>	<i>Total</i>
2011 <sup>(2)</sup>	\$ 5,753,773,845	\$26,979,470	\$ 5,780,753,315
2012 <sup>(2)</sup>	6,309,579,342	6,491,171	6,316,070,513
2013 <sup>(2)</sup>	6,602,927,949	5,728,927	6,608,656,876
2014 <sup>(3)</sup>	27,277,013,090	404,065 <sup>(4)</sup>	27,277,417,155
2015 <sup>(3)</sup>	29,578,234,550	404,065 <sup>(4)</sup>	29,578,638,615

(1) Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.  
(2) Reflects assessed valuations for Improvement District No. 105. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District No. 105 into Improvement District No. 125.  
(3) Reflects assessed valuations for Improvement District No. 125. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District No. 105 into Improvement District No. 125.  
(4) Certain secured values that were omitted from the secured tax roll and allocated to the unsecured tax roll by the County Assessor in Fiscal Years 2014 and 2015 have been omitted from the table.

Source: California Municipal Statistics, Inc.

The following table presents the assessed valuations of land in Improvement District No. 140 for the Fiscal Years ended June 30, 2011 through June 30, 2013 and the assessed valuations of land in Improvement District No. 125 for the Fiscal Year ended June 30, 2014 and the Fiscal Year ending June 30, 2015. Assessed valuations of land in Improvement District No. 125 are not available for Fiscal Years prior to Fiscal Year 2014 because Improvement District No. 125 did not exist prior to November 11, 2013.

**TABLE 34**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 140/125**  
**Assessed Valuations (Land Only)**

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Unsecured</i> <sup>(1)</sup>	<i>Total</i>
2011 <sup>(2)</sup>	\$ 4,867,808,050	\$3,417,477	\$ 4,871,225,527
2012 <sup>(2)</sup>	4,900,980,200	2,761,543	4,903,741,743
2013 <sup>(2)</sup>	<sup>(4)</sup>	<sup>(4)</sup>	4,973,007,663
2014 <sup>(3)</sup>	27,277,013,090	404,065 <sup>(5)</sup>	27,277,417,155
2015 <sup>(3)</sup>	29,578,234,550	404,065 <sup>(5)</sup>	29,578,638,615

<sup>(1)</sup> Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.  
<sup>(2)</sup> Reflects assessed valuations for Improvement District No. 140. See the Remarketing Statement under the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District No. 140 into Improvement District No. 125.  
<sup>(3)</sup> Reflects assessed valuations for Improvement District No. 125. See the Remarketing Statement under the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District No. 140 into Improvement District No. 125.  
<sup>(4)</sup> This information is not available.  
<sup>(5)</sup> Certain secured values that were omitted from the secured tax roll and allocated to the unsecured tax roll by the County Assessor in Fiscal Years 2014 and 2015 have been omitted from the table.  
Source: California Municipal Statistics, Inc.

The following table presents the assessed valuations of land in Improvement District No. 250 for the Fiscal Years ended June 30, 2011 through June 30, 2013 and the assessed valuations of land in Improvement District No. 225 for the Fiscal Year ended June 30, 2014 and the Fiscal Year ending June 30, 2015. Assessed valuations of land in Improvement District No. 225 are not available for Fiscal Years prior to Fiscal Year 2014 because Improvement District No. 225 did not exist prior to November 11, 2013.

**TABLE 35**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 250/225**  
**Assessed Valuations (Land Only)**

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Unsecured</i> <sup>(1)</sup>	<i>Total</i>
2011 <sup>(2)</sup>	\$ 5,432,737,954	\$26,636,942	\$ 5,459,374,896
2012 <sup>(2)</sup>	5,997,217,214	6,210,415	6,003,427,629
2013 <sup>(2)</sup>	6,288,670,201	5,529,610	6,294,199,811
2014 <sup>(3)</sup>	22,829,136,845	404,065 <sup>(4)</sup>	22,829,540,910
2015 <sup>(3)</sup>	24,757,084,884	404,065 <sup>(4)</sup>	24,757,488,949

- <sup>(1)</sup> Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.
- <sup>(2)</sup> Reflects assessed valuations for Improvement District No. 250. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District No. 250 into Improvement District No. 225.
- <sup>(3)</sup> Reflects assessed valuations for Improvement District No. 225. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the consolidation of Improvement District No. 250 into Improvement District No. 225.
- <sup>(4)</sup> Certain secured values that were omitted from the secured tax roll and allocated to the unsecured tax roll by the County Assessor in Fiscal Years 2014 and 2015 have been omitted from the table.

Source: California Municipal Statistics, Inc.

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The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 125 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2015:

**TABLE 36**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 125**  
**Assessed Valuation and Parcels by Land Use**

	<i>Fiscal Year 2015 Assessed Valuation<sup>(1)</sup></i>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
<b>Non-Residential:</b>				
Rural/Undeveloped	\$ 213,641,323	0.72%	210	0.20%
Commercial/Office	2,767,280,638	9.36	1,416	1.37
Industrial	1,503,414,737	5.08	1,106	1.07
Government/Social/Institutional	290,790	0.00	124	0.12
Miscellaneous	<u>42,758,286</u>	<u>0.14</u>	<u>12</u>	<u>0.01</u>
Subtotal Non-Residential	\$ 4,527,385,774	15.31%	2,868	2.77%
<b>Residential:</b>				
Single Family Residence	\$17,063,649,198	57.69%	34,644	33.42%
Condominium	7,417,246,018	25.08	28,086	27.09
2+ Residential Units/Apartments	494,206,077	1.67	220	0.21
Timeshare Interests	<u>75,747,483</u>	<u>0.26</u>	<u>37,847</u>	<u>36.51</u>
Subtotal Residential	\$25,050,848,776	84.69%	100,797	97.23%
<b>Total</b>	<u>\$29,578,234,550</u>	<u>100.00%</u>	<u>103,665</u>	<u>100.00%</u>

<sup>(1)</sup> Land Only Local Secured Assessed Valuation; excludes tax exempt utility property and gas and oil leases.  
Source: California Municipal Statistics, Inc.

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The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 225 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2015:

**TABLE 37**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 225**  
**Assessed Valuation and Parcels by Land Use**

	<i>Fiscal Year 2015 Assessed Valuation<sup>(1)</sup></i>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
<b>Non-Residential:</b>				
Rural/Undeveloped	\$ 192,808,794	0.78%	188	0.29%
Commercial/Office	2,694,003,749	10.88	1,368	2.11
Industrial	1,492,087,704	6.03	1,083	1.67
Government/Social/Institutional	268,687	0.00	120	0.19
Miscellaneous	<u>42,163,128</u>	<u>0.17</u>	<u>11</u>	<u>0.02</u>
Subtotal Non-Residential	\$ 4,421,332,062	17.86%	2,770	4.42%
<b>Residential:</b>				
Single Family Residence	\$12,777,123,640	51.61%	33,895	52.36%
Condominium	7,029,333,371	28.39	27,841	43.01
2+ Residential Units/Apartments	<u>529,295,811</u>	<u>2.14</u>	<u>227</u>	<u>0.35</u>
Subtotal Residential	\$20,335,752,822	82.14%	61,963	95.72%
<b>Total</b>	<u>\$24,757,084,884</u>	<u>100.00%</u>	<u>64,733</u>	<u>100.00%</u>

<sup>(1)</sup> Land Only Local Secured Assessed Valuation; excludes tax exempt utility property and gas and oil leases.  
Source: California Municipal Statistics, Inc.

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**Principal Taxpayers.** The following table lists the major taxpayers in Improvement District No. 125 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2015:

**TABLE 38  
IRVINE RANCH WATER DISTRICT  
Improvement District No. 125  
Largest Local Secured Taxpayers**

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2015 Assessed Valuation</i>	<i>% of Total<sup>(1)</sup></i>
1.	The Irvine Company	Commercial	\$ 929,089,958	3.14%
2.	Irvine Apartment Communities LP	Apartments	117,419,366	0.40
3.	Heritage Fields El Toro LLC	Commercial	100,721,156	0.34
4.	Shea/Baker Ranch Associates LLC	Residential Properties	57,412,460	0.19
5.	ABS CA-O DCI LLC	Commercial	51,549,777	0.17
6.	PPC Irvine Center Investment LLC	Commercial	32,921,388	0.11
7.	Kia Motors America Inc.	Commercial	32,857,794	0.11
8.	Avalon Baker Ranch LP	Undeveloped	31,643,009	0.11
9.	Oakley Inc.	Industrial	31,241,813	0.11
10.	Ryland Homes of California Inc.	Residential Properties	<u>29,560,397</u>	<u>0.10</u>
	<b>TOTAL</b>		<b><u>\$1,414,417,118</u></b>	<b><u>4.78%</u></b>

<sup>(1)</sup> Fiscal Year 2015 Local Secured Assessed Valuation (Land Only): \$29,578,234,550.  
Source: California Municipal Statistics, Inc.

The following table lists the major taxpayers in Improvement District No. 225 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2015:

**TABLE 39  
IRVINE RANCH WATER DISTRICT  
Improvement District No. 225  
Largest Local Secured Taxpayers**

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2015 Assessed Valuation</i>	<i>% of Total<sup>(1)</sup></i>
1.	The Irvine Company	Commercial	\$ 860,942,208	3.48%
2.	Irvine Apartment Communities LP	Apartments	117,419,366	0.47
3.	Heritage Fields El Toro LLC	Commercial	100,721,156	0.41
4.	Shea/Baker Ranch Associates LLC	Residential Properties	57,412,460	0.23
5.	ABS CA-O DCI LLC	Commercial	51,549,777	0.21
6.	PPC Irvine Center Investment LLC	Commercial	32,921,388	0.13
7.	Kia Motors America Inc.	Commercial	32,857,794	0.13
8.	Avalon Baker Ranch LP	Undeveloped	31,643,009	0.13
9.	Oakley Inc.	Industrial	31,241,813	0.13
10.	Ryland Homes of California Inc.	Residential Properties	<u>29,560,397</u>	<u>0.12</u>
	<b>TOTAL</b>		<b><u>\$1,346,269,368</u></b>	<b><u>5.44%</u></b>

<sup>(1)</sup> Fiscal Year 2014 Local Secured Assessed Valuation (Land Only): \$24,757,084,884.  
Source: California Municipal Statistics, Inc.

**Statement of Direct and Overlapping Debt.** Set forth in the table below is a direct and overlapping debt report (the “Debt Reports–I.D. 125/225”) for Improvement District Nos. 125 and 225, respectively, prepared by California Municipal Statistics, Inc. and effective December 31, 2014. The Debt Reports–I.D.

125/225 were prepared by California Municipal Statistics, Inc., and the District expresses no opinion on the completeness or accuracy of such reports and makes no representation in connection therewith.

California Municipal Statistics, Inc. reports that the Debt Reports–I.D. 125/225 generally include long-term obligations sold in the public credit markets by public agencies whose boundaries overlap the boundaries of Improvement District No. 125 and No. 225 in whole or in part. Such long-term obligations generally are not payable from revenues of the District or Improvement District No. 125 and No. 225 (except as indicated) nor are they necessarily obligations secured by land within Improvement District No. 125 and No. 225. In many cases long-term obligations issued by a public agency are payable only from the general fund or other revenues of such public agency.

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**TABLE 40**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 125**  
**Direct and Overlapping Debt Statement**

Fiscal Year 2015 Land Only Assessed Valuation: \$29,578,638,615

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable<sup>(1)</sup></u>	<u>Debt 12/31/14<sup>(2)</sup></u>
Metropolitan Water District	2.472%	\$ 3,269,838
Coast Community College District	5.095	31,059,054
Rancho Santiago Community College District	0.975	2,703,582
Laguna Beach Unified School District	14.764	4,034,263
Newport Mesa Unified School District	14.263	32,982,353
Saddleback Valley Unified School District	32.615	39,868,576
Tustin Unified School District School Facilities Improvement District No. 2002-1	4.023	2,128,743
Tustin Unified School District School Facilities Improvement District No. 2008-1	4.116	2,901,574
Tustin Unified School District School Facilities Improvement District No. 2012-1	32.883	10,698,484
<b>Irvine Ranch Water District Improvement District No. 125</b>	<b>100.000</b>	<b>188,789,150<sup>(3)</sup></b>
Irvine Ranch Water District Improvement District No. 225	94.479	223,932,398
Irvine Ranch Water District Improvement District No. 240	99.993	23,926,504
Community Facilities Districts	0.737-100.000	867,238,424
County 1915 Act Bonds	100.000	78,315,000
City 1915 Act Bonds	Various	<u>775,850,944</u>
<b>TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT</b>		<b>\$2,287,698,887</b>
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	12.147%	\$ 15,146,823
Orange County Pension Obligations	12.147	31,294,878
Orange County Board of Education Certificates of Participation	12.147	1,882,785
Orange Unified School District Certificates of Participation and Benefit Obligations	2.040	2,418,790
City of Lake Forest Certificates of Participation	80.255	7,439,639
City of Newport Beach Certificates of Participation	23.175	27,020,891
Municipal Water District of Orange County Water Facilities Corporation	14.534	<u>779,022</u>
<b>TOTAL GROSS OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 85,982,828</b>
Less: MWDOC Water Facilities Corporation (100% supported)		<u>779,022</u>
<b>TOTAL NET OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 85,203,806</b>
 <b>OVERLAPPING TAX INCREMENT DEBT (Successor Agencies)</b>		<b>\$ 6,218,282</b>
 <b>GROSS COMBINED TOTAL DEBT</b>		<b>\$2,379,899,997<sup>(4)</sup></b>
<b>NET COMBINED TOTAL DEBT</b>		<b>\$2,379,120,975</b>

Ratios to Fiscal Year 2015 Land Only Assessed Valuation:

**Direct Debt (\$186,246,070) .....0.64%**  
 Total Direct and Overlapping Tax and Assessment Debt.....7.73%

Ratios to Adjusted All Property Assessed Valuation:

Gross Combined Total Debt.....4.16%  
 Net Combined Total Debt .....4.16%

Ratios to Redevelopment Incremental Valuation \$(342,589,524):

Total Overlapping Tax Increment Debt.....1.82%

(1) Based on all property assessed valuation of \$57,232,813,776.

(2) Reflects latest information available.

(3) Improvement District No. 125 was formed by consolidating former Improvement District Nos. 105, 106, 120, 121, 130, 135, 140, 161, 182, 184 and 186.

(4) Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

**TABLE 41**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 225**  
**Direct and Overlapping Debt Statement**

Fiscal Year 2015 Land Only Assessed Valuation: \$24,757,488,949

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable<sup>(1)</sup></u>	<u>Debt 12/31/14<sup>(2)</sup></u>
Metropolitan Water District	2.133%	\$ 2,821,426
Coast Community College District	0.318	1,938,524
Rancho Santiago Community College District	0.022	61,004
Newport Mesa Unified School District	3.247	7,508,498
Saddleback Valley Unified School District	31.933	39,034,899
Tustin Unified School District School Facilities Improvement District No. 2002-1	5.793	3,065,327
Tustin Unified School District School Facilities Improvement District No. 2008-1	5.933	4,182,468
Tustin Unified School District School Facilities Improvement District No. 2012-1	34.100	11,094,435
Irvine Ranch Water District Improvement District No. 125	79.087	149,307,675
<b>Irvine Ranch Water District Improvement District No. 225</b>	<b>100.000</b>	<b>237,018,171<sup>(3)</sup></b>
Community Facilities Districts	0.737-100.000	834,512,683
County 1915 Act Bonds	2.729	171,518
City 1915 Act Bonds	Various	<u>773,124,729</u>
<b>TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT</b>		<b>\$2,063,841,357</b>
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	10.483%	\$ 13,071,882
Orange County Pension Obligations	10.483	27,007,838
Orange County Board of Education Certificates of Participation	10.483	1,624,865
Orange Unified School District Certificates of Participation and Benefit Obligations	0.045	53,355
City of Lake Forest Certificates of Participation	78.375	7,265,363
City of Newport Beach Certificates of Participation	4.054	4,726,761
Municipal Water District of Orange County Water Facilities Corporation	12.542	<u>672,251</u>
<b>TOTAL GROSS OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 54,422,315</b>
Less: MWDOC Water Facilities Corporation (100% supported)		<u>672,251</u>
<b>TOTAL NET OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 53,750,064</b>
 <b>OVERLAPPING TAX INCREMENT DEBT (Successor Agencies)</b>		 <b>\$ 6,218,282</b>
 <b>GROSS COMBINED TOTAL DEBT</b>		 <b>\$2,124,481,954<sup>(4)</sup></b>
<b>NET COMBINED TOTAL DEBT</b>		<b>\$2,123,809,703</b>

Ratios to Fiscal Year 2015 Land Only Assessed Valuation:

**Direct Debt (\$237,018,171) .....0.96%**  
Total Direct and Overlapping Tax and Assessment Debt.....8.34%

Ratios to Adjusted All Property Assessed Valuation:

Gross Combined Total Debt.....4.30%  
Net Combined Total Debt .....4.30%

Ratios to Redevelopment Incremental Valuation \$(342,589,524):

Total Overlapping Tax Increment Debt.....1.82%

<sup>(1)</sup> Based on all property assessed valuation of \$49,389,510,321.

<sup>(2)</sup> Reflects latest information available.

<sup>(3)</sup> Improvement District No. 225 was formed by consolidating former Improvement District Nos. 2(202), 206, 221, 230, 235, 250, 261, 282, 284 and 286.

<sup>(4)</sup> Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

**Improvement District No. 240**

*General.* Improvement District No. 240 (sewer) covers approximately 4,141 acres in the western portion of the District. The boundaries of Improvement District No. 240 are Crystal Cove State Park to the southeast, Pacific Coast Highway and the Pacific Ocean to the southwest, the City of Newport Beach to the northwest and the San Joaquin Hills Transportation Corridor to the northeast. Currently, Improvement District No. 240 consists of approximately 5,300 residential units, several apartment buildings and timeshare developments and 36 acres of commercial development and recreational areas. Future development is expected mainly in the Crystal Cove area and includes low density residential development.

Set forth below is information with respect to Improvement District No. 240.

The *ad valorem* assessments levied by the District in Improvement District No. 240 to pay such Improvement District’s Included Amount of debt service on the Series 1993 Bonds will be levied on land only. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” for a description of the authorized, issued, authorized and unissued, and the amount of outstanding Improvement District No. 240 Ad Valorem Assessment Bonds.

The following table presents the assessed valuations of land in Improvement District No. 240 for the Fiscal Years ended June 30, 2011 through June 30, 2015.

**TABLE 42**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 240**  
**Assessed Valuations (Land Only)**

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Unsecured</i> <sup>(1)</sup>	<i>Total</i>
2011	\$4,867,808,050	\$3,417,477	\$4,871,225,527
2012	4,900,980,200	2,761,543	4,903,741,743
2013	4,970,102,593	2,905,070	4,973,007,663
2014	5,342,503,150	1,301,801	5,343,804,951
2015	5,607,040,065	2,134,164	5,609,174,229

<sup>(1)</sup> Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.  
 Source: California Municipal Statistics, Inc.

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The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 240 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2015:

**TABLE 43**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 240**  
**Assessed Valuation and Parcels by Land Use**

	<i>Fiscal Year 2015 Assessed Valuation</i> <sup>(1)</sup>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
<b>Non-Residential:</b>				
Commercial	\$ 44,210,148	0.79%	28	0.07%
Subtotal Non-Residential	\$ 44,210,148	0.79%	28	0.07%
<b>Residential:</b>				
Single Family Residence	\$ 4,859,857,006	86.67%	2,716	6.52%
Timeshare	75,747,483	1.35	37,848	90.93
Condominium/Townhouse	595,705,242	10.62	1,014	2.44
2+ Residential Units/Apartments	13,069,824	0.23	9	0.02
Vacant Residential	<u>18,450,362</u>	<u>0.33</u>	<u>10</u>	<u>0.02</u>
Subtotal Residential	\$ 5,562,829,917	99.21%	41,597	99.93%
<b>Total</b>	<u>\$ 5,607,040,065</u>	<u>100.00%</u>	<u>41,625</u>	<u>100.00%</u>

<sup>(1)</sup> Land Only Local Secured Assessed Valuation; excludes tax-exempt utility property and gas and oil leases.  
Source: California Municipal Statistics, Inc.

The following table lists the major taxpayers in Improvement District No. 240 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2015:

**TABLE 44**  
**IRVINE RANCH WATER DISTRICT**  
**Improvement District No. 240**  
**Largest Local Secured Taxpayers**

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2015 Assessed Valuation</i>	<i>% of Total</i> <sup>(1)</sup>
1.	The Irvine Company	Residential/Commercial	\$ 94,082,661	1.68%
2.	Jihong Tian	Residential	21,432,641	0.38
3.	DNCM Ventures LLC	Residential	17,880,812	0.32
4.	Paul P. Merage Trust	Residential	16,874,965	0.30
5.	Thomas L. Phillips Trust	Residential	16,517,566	0.29
6.	Captain-Opus LLC	Residential	16,161,369	0.29
7.	Golden Orange LLC	Residential	15,369,461	0.27
8.	Canyon Rim Holdings LLC	Residential	14,592,655	0.26
9.	Sugira Ltd. LLC	Residential	14,575,966	0.26
10.	First American Trust	Residential Timeshare	<u>14,259,163</u>	<u>0.25</u>
	<b>TOTAL</b>		<u>\$ 241,747,260</u>	<u>4.30%</u>

<sup>(1)</sup> Fiscal Year 2015 Local Secured Assessed Valuation (Land Only): \$5,607,040,065.  
Source: California Municipal Statistics, Inc.

***Statement of Direct and Overlapping Debt.*** Set forth in the table below is a direct and overlapping debt report (the “Debt Report–I.D. 240”) for Improvement District No. 240 prepared by California Municipal Statistics, Inc. and effective December 31, 2014. The Debt Report–I.D. 240 was prepared by California Municipal Statistics, Inc., and the District expresses no opinion on the completeness or accuracy of such reports and makes no representation in connection therewith.

California Municipal Statistics, Inc. reports that the Debt Report–I.D. 240 generally includes long-term obligations sold in the public credit markets by public agencies whose boundaries overlap the boundaries of Improvement District No. 240 in whole or in part. Such long-term obligations generally are not payable from revenues of the District or Improvement District No. 240 (except as indicated) nor are they necessarily obligations secured by land within Improvement District No. 240. In many cases long-term obligations issued by a public agency are payable only from the general fund or other revenues of such public agency.

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**TABLE 45  
IRVINE RANCH WATER DISTRICT  
Improvement District No. 240  
Direct and Overlapping Debt Statement**

Fiscal Year 2015 Land Only Assessed Valuation: \$5,609,174,229

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable<sup>(1)</sup></u>	<u>Debt 3/1/15</u>
Metropolitan Water District	0.384%	\$ 424,013
Coast Community College District	4.815	29,352,177
Laguna Beach Unified School District	14.764	4,034,263
Newport Mesa Unified School District	11.607	26,840,508
<b>Irvine Ranch Water District Improvement District No. 240</b>	<b>100.000</b>	<b>23,451,920</b>
Irvine Ranch Water District Improvement District No. 125	18.947	35,147,115
Laguna Beach Unified School District Community Facilities District No. 98-1	100.000	8,970,000
Newport Mesa Unified School District Community Facilities District No. 90-1	82.041	6,407,402
Orange County 1915 Act Bonds	97.271-100.000	<u>78,143,482</u>
<b>TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT</b>		<b>\$212,770,880</b>
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	1.886%	\$ 2,351,767
Orange County Pension Obligation Bonds	1.886	9,661,216
Orange County Board of Education Certificates of Participation	1.886	292,330
City of Newport Beach Certificates of Participation	19.859	23,154,601
Municipal Water District of Orange County Water Facilities Corporation	2.257	<u>120,975</u>
<b>TOTAL GROSS OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 35,580,889</b>
Less: MWDOC Water Facilities Corporation (100% supported)		<u>120,975</u>
<b>TOTAL NET OVERLAPPING GENERAL FUND DEBT</b>		<b>\$ 35,459,914</b>
 <b>GROSS COMBINED TOTAL DEBT</b>		<b>\$248,351,769<sup>(2)</sup></b>
<b>NET COMBINED TOTAL DEBT</b>		<b>\$248,230,794</b>

Ratios to Fiscal Year 2015 Land Only Assessed Valuation:

**Direct Debt (\$23,451,920).....0.42%**  
Total Direct and Overlapping Tax and Assessment Debt.....4.43%

Ratios to Fiscal Year 2015 Adjusted All Property Assessed Valuation:

Gross Combined Total Debt .....2.79%  
Net Combined Total Debt.....2.79%

<sup>(1)</sup> Based on Fiscal Year 2015 all property assessed valuation of \$8,887,266,870.

<sup>(2)</sup> Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

**CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES**

**Proposition 218**

*General.* An initiative measure entitled the “Right to Vote on Taxes Act” (the “Initiative”) was approved by the voters of the State of California at the November 5, 1996 general election. The Initiative added Article XIII C and Article XIII D to the California Constitution. According to the “Title and Summary” of the Initiative prepared by the California Attorney General, the Initiative limits “the authority of local governments to impose taxes and property-related assessments, fees and charges.”



**Article XIID.** Article XIID defines the terms “fee” and “charge” to mean “any levy other than an *ad valorem* tax, a special tax or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, including user fees or charges for a property-related service.” A “property-related service” is defined as “a public service having a direct relationship to property ownership.” Article XIID further provides that reliance by an agency on any parcel map (including an assessor’s parcel map) may be considered a significant factor in determining whether a fee or charge is imposed as an incident of property ownership.

Article XIID requires that any agency imposing or increasing any property-related fee or charge must provide written notice thereof to the record owner of each identified parcel upon which such fee or charge is to be imposed and must conduct a public hearing with respect thereto. The proposed fee or charge may not be imposed or increased if a majority of owners of the identified parcels file written protests against it.

In July 2006, the California Supreme Court held, in *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal. 4th 205 (2006) (“*Bighorn*”), that the initiative power described in Article XIIC applies to any local taxes, assessments, fees and charges as defined in Articles XIIC and XIID. Article XIID defines “fee” or “charge” to mean a levy (other than *ad valorem* or special taxes or assessments) imposed by a local government “upon a parcel or upon a person as an incident of property ownership,” including a user fee for a “property related service.” The Court also found that charges for water delivery are charges for a property-related service and, therefore, constitute “fees” or “charges” within the meaning of both Article XIID and section 3 of Article XIIC. In accordance with Article XIID and the decision in *Bighorn*, the District has conducted notice and hearing proceedings to comply with requirements of Article XIID with respect to proposed increases of rates and charges and commenced since Fiscal Year 2007. See the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges.”

**Article XIIC.** Article XIIC provides that the initiative power shall not be prohibited or otherwise limited in matters of reducing or repealing any local tax, assessment, fee or charge and that the power of initiative to affect local taxes, assessments, fees and charges shall be applicable to all local governments. Article XIIC does not define the terms “local tax,” “assessment,” “fee” or “charge.” In light of *Bighorn* and as discussed above under “Article XIID,” the terms “fee” and “charge” as used in Article XIIC include, at a minimum, all of the fees and charges within the “property related” qualification set forth in Article XIID. Moreover, the provisions of Article XIIC are not expressly limited to local taxes, assessments, fees and charges imposed after November 6, 1996. Therefore, in the absence of other limitations, provisions of Article XIIC could be applicable to the water and sewer rates charged by the District. The District and its general counsel do not believe that Article XIIC grants to the voters within the District the power to repeal or reduce rates and charges in a manner which would be inconsistent with the contractual obligations of the District. However, there can be no assurance of the availability of particular remedies adequate to protect the beneficial owners of the Series 1993 Bonds. Remedies available to beneficial owners of the Series 1993 Bonds in the event of a default by the District are dependent upon judicial actions which are often subject to discretion and delay and could prove both expensive and time-consuming to obtain.

## **Proposition 26**

On November 2, 2010, voters in the State approved Proposition 26. Proposition 26 amends Article XIIC of the State Constitution to expand the definition of “tax” to include “any levy, charge, or exaction of any kind imposed by a local government” except the following: (1) a charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege; (2) a charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product; (3) a charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing

agricultural marketing orders, and the administrative enforcement and adjudication thereof; (4) a charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property; (5) a fine, penalty, or other monetary charge imposed by the judicial branch of government or a local government, as a result of a violation of law; (6) a charge imposed as a condition of property development; and (7) assessments and property-related fees imposed in accordance with the provisions of Article XIII D. Proposition 26 provides that the local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity. The District does not believe that the enactment of Proposition 26 will affect its ability to levy rates and charges for water, recycled water or sewer service.

### **Article XIII A**

**General.** On June 6, 1978, California voters approved Proposition 13, which added Article XIII A to the California Constitution ("Article XIII A"). Article XIII A limits the amount of any *ad valorem* tax on real property to one percent of the full cash value thereof, except that additional *ad valorem* taxes may be levied to pay debt service on indebtedness approved by the voters prior to July 1, 1978 and (as a result of an amendment to Article XIII A approved by California voters on June 3, 1986) on bonded indebtedness for the acquisition or improvement of real property that has been approved on or after July 1, 1978 by the voters voting on such indebtedness. Article XIII A defines full cash value to mean "the county assessor's valuation of real property as shown on the 1975/76 tax bill under 'full cash value' or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment." This full cash value may be increased at a rate not to exceed two percent per year to account for inflation.

Article XIII A has subsequently been amended to permit reduction of the "full cash value" base in the event of declining property values caused by damage, destruction or other factors to provide that there would be no increase in the "full cash value" base in the event of reconstruction of property damaged or destroyed in a disaster and in other minor or technical ways.

**Legislation Implementing Article XIII A.** Legislation has been enacted and amended a number of times since 1978 to implement Article XIII A. Under current law, local agencies are no longer permitted to levy directly any property tax (except to pay voter-approved indebtedness). The 1% property tax is automatically levied by each California county and distributed according to a formula among taxing agencies. The formula apportions the tax roughly in proportion to the relative shares of taxes levied prior to 1979.

Increases of assessed valuation resulting from reappraisals of property due to new construction, change in ownership or from the 2% annual adjustment are allocated among the various jurisdictions in the "taxing area" based upon the location of reappraised property and the value of property within each taxing agency. Any such allocation made to a local agency continues as part of its allocation in future years.

### **Article XIII B**

An initiative to amend the California Constitution entitled "Limitation of Government Appropriations" was approved on November 6, 1979 thereby adding Article XIII B to the California Constitution ("Article XIII B"). Under Article XIII B state and local governmental entities have an annual "appropriations limit" and are not permitted to spend certain moneys that are called "appropriations subject to limitation" (consisting of tax revenues, state subventions and certain other funds) in an amount higher than the "appropriations limit." Article XIII B does not affect the appropriations of moneys that are excluded from the definition of "appropriations subject to limitation," including debt service on indebtedness existing or authorized as of January 1, 1979, or bonded indebtedness subsequently approved by the voters. In general terms, the "appropriations limit" is to be based on certain 1978-79 expenditures and is to be adjusted annually to reflect changes in consumer prices, populations, and services provided by these entities. Among other

provisions of Article XIII B, if these entities' revenues in any year exceed the amounts permitted to be spent, the excess would have to be returned by revising tax rates or fee schedules over the subsequent two years.

The District is of the opinion that its rates and charges for water, sewer and recycled water services do not exceed the costs it reasonably bears in providing such services and therefore are not subject to the limits of Article XIII B, and that tax revenues and other revenues received by the District which may constitute the "proceeds of taxes" are appropriated for debt service or qualified capital outlay projects and are not subject to the limits of Article XIII B.

### **Proposition 1A**

Proposition 1A, which was approved by the voters in November 2004, restricts State authority to reduce major local tax revenues such as the tax shifts permitted to take place in fiscal years 2004-05 and 2005-06. Proposition 1A provides, however, that beginning in fiscal year 2008-09, the State may shift to schools and community colleges up to 8% of local government property tax revenues, which amount must be repaid, with interest, within three years, if the Governor proclaims that the shift is needed due to a severe State financial hardship, the shift is approved by two thirds of both houses and certain other conditions are met. See the caption "THE IRVINE RANCH WATER DISTRICT—1% Property Tax Revenues" above.

### **Future Initiatives**

Article XIII A, Article XIII B, Proposition 218, Proposition 1A and Proposition 26 were each adopted as measures that qualified for the ballot pursuant to California's initiative process. From time to time other initiative measures could be adopted, further affecting ability of the District to collect or expend Revenues.

## Exhibit "B"

RESOLUTION NO. 2015-\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE IRVINE RANCH WATER DISTRICT  
APPROVING REMARKETING STATEMENT AND  
AUTHORIZING CERTAIN ACTIONS IN CONNECTION  
WITH SUBSTITUTION OF LETTER OF CREDIT  
(CONSOLIDATED SERIES 1993)

WHEREAS, the irrevocable letter of credit of The Bank of New York Mellon (the "Existing Letter of Credit") has been issued relating to the Bonds of Irvine Ranch Water District, Consolidated Series 1993 (the "Bonds"), and is scheduled to expire on June 2, 2015; and

WHEREAS, the Bonds were issued pursuant to an Indenture of Trust, dated as of May 1, 1993, by and between the District and The Bank of New York Mellon Trust Company, N.A., as successor trustee (the "Trustee"), as supplemented by the First Supplemental Indenture of Trust dated as of June 1, 2014, by and between the District and the Trustee (collectively, the "Indenture"), initially constituting the several general obligations of Improvement District Nos. 105, 140, 240 and 250, and, following certain improvement district consolidations ordered by the Board of Directors (the "Board") of the District on November 11, 2013, constituting the several general obligations of Improvement District Nos. 125, 225 and 240, as reflected in such First Supplemental Indenture of Trust; and

WHEREAS, after evaluating proposed terms and conditions for replacing the Existing Letter of Credit, the Board of Directors believes it is in the interest of Irvine Ranch Water District to authorize the substitution of a new letter of credit to be provided by U.S. Bank National Association relating to the Bonds (the "Alternate Letter of Credit") for the Existing Letter of Credit, pursuant to the Indenture and as provided herein.

NOW THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. The Treasurer of IRWD (the "Treasurer") is hereby authorized and directed to cause the substitution of the Alternate Letter of Credit for the Existing Letter of Credit, pursuant to the Indenture.

Section 2. The reimbursement agreement (inclusive of the form of the Alternate Letter of Credit) and fee letter to be entered into with U.S. Bank National Association and the custodian agreement to be entered into with U.S. Bank National Association and The Bank of New York Mellon Trust Company, N.A., as custodian, are hereby approved in substantially the forms presented to the Board with this resolution, and the President and Secretary are authorized and directed to execute such agreement, fee letter and custodian agreement in the forms so presented with such changes therein as are approved by, and on the date for delivery established by, the Treasurer with the concurrence of the President, which approval will be conclusively evidenced by execution and delivery thereof.

Section 3. The Board hereby approves the remarketing statement relating to the Bonds (the "Remarketing Statement"), such Remarketing Statement to be dated the date determined by the Treasurer and in substantially the form presented to the Board at this meeting, with such

changes thereto as the Treasurer with the concurrence of the President shall approve (such approval and concurrence to be conclusively evidenced by execution and delivery thereof). The Board hereby approves the use of the Remarketing Statement by the remarketing agent for the Bonds, including delivery of the Remarketing Statement in electronic form, and the Board hereby further approves the use by the remarketing agent of any supplements or amendments to the Remarketing Statement, including delivery of any such supplements or amendments to the Remarketing Statement in electronic form, which the Treasurer shall determine are necessary so that such Remarketing Statement does not include any untrue statement of a material fact and does not omit to state a material fact necessary to make the statements therein not misleading. The Treasurer of IRWD is hereby authorized and directed to execute the Remarketing Statement and any amendments or supplements thereto, in the name and on behalf of IRWD and thereupon to cause the Remarketing Statement and any such amendments or supplements to be delivered to the remarketing agent.

Section 4. The distribution of the Remarketing Statement, inclusive of the above-authorized changes, is hereby authorized in connection with the remarketing of the Bonds.

Section 5. The foregoing authorization to cause the substitution of the Alternate Letter of Credit for the Existing Letter of Credit shall include the approval of the terms of any amendments to agreements and instruments to be delivered to the remarketing agent. The President and Secretary of IRWD are authorized and directed to execute any amendment so approved. The foregoing authorization to cause the substitution of the Alternate Letter of Credit for the Existing Letter of Credit shall further include any and all of the following: preparation and/or approval, execution and delivery of any notices, instruments, or other documents to be delivered or distributed in conjunction with the authorized actions and any other actions to implement such substitution of the Alternate Letter of Credit for the Existing Letter of Credit.

Section 6. The President, Secretary and each other officer of IRWD hereby is authorized and directed to execute and deliver any and all documents and instruments and to do and cause to be done any and all acts and things necessary or proper for carrying out the transactions contemplated by this resolution.

ADOPTED, SIGNED AND APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
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 \_\_\_\_\_

00174515/032715

April 13, 2015  
Prepared and  
Approved by: Paul Cook 

CONSENT CALENDAR

NOMINATION OF STEVEN LAMAR TO  
ACWA REGION 10 BOARD

SUMMARY:

The Association of California Water Agencies (ACWA) Region 10 Board is seeking candidates to serve on its Board for the remainder of the 2014-15 term. The deadline for submittal of candidate nominations is May 1, 2015. Staff recommends the Board adopt a resolution nominating Director Steven LaMar to serve on the ACWA Region 10 Board for the remainder of the 2014-15 term.

BACKGROUND:

The ACWA Region 10 Board is seeking candidates who are ACWA members from Orange County to serve on its Board for the remainder of the 2014-15 term. Members of the Region 10 Board determine the direction and focus of Region 10 issues and activities as well as support the fulfillment of ACWA's goals. Director LaMar has expressed interest in serving as a member of the ACWA Region 10 Board. Attached as Exhibit "A" is a Board resolution nominating Director LaMar for this position. It is anticipated that the Region 10 Board will make its appointment by mid-May 2015.

FISCAL IMPACTS:

Travel expenses and director fees will be incurred by Director LaMar to attend bimonthly ACWA Region 10 Board meetings and other ACWA Region 10 meetings typically held in Sacramento.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE NOMINATING DIRECTOR STEVEN LAMAR TO SERVE ON THE ASSOCIATION OF CALIFORNIA WATER AGENCIES REGION 10 BOARD FOR THE REMAINDER OF THE 2014-15 TERM.

RESOLUTION NO. 2015-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY,  
CALIFORNIA PLACING IN NOMINATION OF STEVEN LAMAR  
AS BOARD MEMBER OF THE ASSOCIATION OF  
CALIFORNIA WATER AGENCIES, REGION 10

LIST OF EXHIBITS:

Exhibit “A” – Resolution for Nomination of Director LaMar to ACWA Region 10 Board



EXHIBIT "A"

RESOLUTION NO. 2015-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY,  
CALIFORNIA PLACING IN NOMINATION OF STEVEN LAMAR  
AS BOARD MEMBER OF THE ASSOCIATION OF CALIFORNIA  
WATER AGENCIES (ACWA), REGION 10

WHEREAS, the Board of Directors of the Irvine Ranch Water District does encourage and support the participation of its members in the affairs of the Association of California Water Agencies; and

WHEREAS, Steven LaMar has indicated a desire to serve as Board Member of ACWA Region 10.

NOW, THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. Does place its full and unreserved support in the nomination of Steven LaMar for Board Member ACWA Region 10, and the Secretary is hereby directed to forward a certified copy of this resolution to the Association of California Water Agencies; and

Section 2. Does hereby determine that the expenses attendant with the service of Steven LaMar in ACWA Region 10 shall be borne by the Irvine Ranch Water District.

ADOPTED, SIGNED AND APPROVED this 13<sup>th</sup> day of April, 2015.

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


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

APPROVED AS TO FORM:  
BOWIE, ARNESON, WILES & GIANNONE

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Legal Counsel

April 13, 2015  
Prepared by: J. Smyth/M. Cortez  
Submitted by: K. Burton  
Approved by: Paul Cook 

## CONSENT CALENDAR

### SILVERADO CANYON 12-INCH DOMESTIC WATER PIPELINE PROJECT CONTRACT CHANGE ORDER AND FINAL ACCEPTANCE

#### SUMMARY:

The Silverado Canyon 12-Inch Domestic Water Pipeline project is complete. The contractor, Sully-Miller Contracting Company, completed the required work and all punch list items. The project has received final inspection and acceptance of construction is recommended. A final change order, in the credit amount of <\$99,586>, is required to adjust for final project quantities. Staff recommends that the Board approve Contract Change Order No. 5 with Sully-Miller Contracting Company in the credit amount of <\$99,586> for project 11743 (4919); accept construction of the Silverado Canyon 12-inch Domestic Water Pipeline, project 11743 (4919); 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.

#### BACKGROUND:

The Silverado Canyon 12-inch Domestic Water Pipeline Project constructed 7,100 linear feet of 12-inch pipeline and appurtenances in Silverado Canyon Road and abandoned the existing 8-inch pipeline. The design was completed in May 2014. Sully-Miller was awarded the construction contract on June 24, 2014 and completed construction in March 2015. Contract Change Order No. 5, in the credit amount of <\$99,586>, accounts for the final project quantities and provides a non-compensable 55-day time extension. The absolute value of the change order is \$115,948. Pursuant to the District's procurement policy, a Contract Change Order greater than \$100,000 (absolute value of change) requires the approval of the Board of Directors. Contract Change Order No. 5 is attached as Exhibit "A".

Project Title:	Silverado Canyon 12-inch Domestic Water Pipeline
Project No.:	11743 (4919)
Design Engineer:	CivilSource
Construction Management by:	IRWD Staff
Contractor:	Sully-Miller Contracting Company
Original Contract Cost:	\$1,742,143
Final Contract Cost:	\$1,729,275
Original Contract Days:	210
Final Contract Days:	276
Final Change Order Approved on:	April 13, 2015

FISCAL IMPACTS:

Project 11743 (4919) is included in the FY 2014-15 capital budget. The existing budget is sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) and in conformance with California Code of Regulation, Title 14, Chapter 3, Sections 15301 and 15303, a Notice of Exemption was filed with the County of Orange on February 13, 2014. Section 15303 provides exemption for construction and location of limited numbers of new, small facilities or structures, installation of small new equipment and facilities in small structures and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. Examples of this exemption include water main, sewage, electrical and other utility extensions including street improvements of reasonable length to serve such construction.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD APPROVE CONTRACT CHANGE ORDER NO. 5 WITH SULLY-MILLER CONTRACTING COMPANY IN THE CREDIT AMOUNT OF <\$99,586> FOR PROJECT 11743 (4919); ACCEPT CONSTRUCTION OF THE SILVERADO CANYON 12-INCH DOMESTIC WATER PIPELINE, PROJECT 11743 (4919); 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:

Exhibit "A" – Contract Change Order No. 5

# EXHIBIT "A"

## CONTRACT CHANGE ORDER

**IRVINE RANCH WATER DISTRICT**  
 15600 Sand Canyon Avenue  
 P. O. Box 57000  
 Irvine, California 92619-7000  
 (949) 453-5300



C.O. No. 5  
 Final  
 Project No. 11743 (4919)

Silverado Canyon 12-Inch Domestic Water Pipeline Project

Project Title

Date: 3/27/2015

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Delete Alternate Bid Item A-1 Backfill Trench Zone With One-Sack Slurry. Native soil was approved by the County of Orange for backfill.		\$ (83,000)	
2. Quantity adjustment to Bid Item #5 12-inch PVC AWWA C900. Increase quantity by 47 LF from 7,043 to 7,090 to reflect actual quantity installed. 47 LF * \$158/LF = \$7,426	\$ 7,426		
3. Quantity adjustment to Bid Item #6 8-inch PVC AWWA C900. Increase quantity by 5 feet from 58 to 63 to reflect actual quantity installed. 5 LF * \$140/LF = \$700	\$ 700		
4. Quantity adjustment to Bid Item #16 Cold Mill (Grind) and Overlay (2" Thick). Decrease quantity by 8,083 SF from 88,916 to 80,833 to reflect actual quantity installed. \$8,083 SF * \$1.80/SF = (\$14,549)		\$ (14,549)	
5. Quantity adjustment to Bid Item #17 Replace Existing Striping. Scope of work included one stripe at edge of pavement, one stripe at centerline, and reflective pavement markers. The stripe at centerline and the centerline reflective pavement markers were not required to be installed by the County of Orange. Decrease lump sum quantity by 50% to reflect actual quantity installed. 50% * \$20000 = (\$10,000)		\$ (10,000)	
6. Quantity adjustment to Bid Item #26 Locator Wire. Increase quantity by 55 LF from 7,100 to 7,155 to reflect actual quantity installed. 55LF * \$1/LF = \$55	\$ 55		
7. Residential pressure regulator installation for 27311 Silverado Canyon Rd.		\$ (218)	
8. Non-compensatory 55-day time extension.			55
Revised Contract completion date from January 31 to March 27, 2015.			
<b>SUB-TOTAL</b>	<b>\$ 8,181</b>	<b>\$ (107,767)</b>	<b>55</b>

## CONTRACT CHANGE ORDER

**IRVINE RANCH WATER DISTRICT**

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



C.O. No. 5

Final

Project No. 11743 (4919)

Silverado Canyon 12-Inch Domestic Water Pipeline Project

Project Title

Date: 3/27/2015

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
SUB-TOTAL FROM PAGE 1	\$ 8,181	\$ (107,767)	55
TOTAL	\$ 8,181	\$ (107,767)	55

			DAYS ±
1. NET AMOUNT THIS CHANGE ORDER	= \$	(99,586.00)	55
2. ORIGINAL CONTRACT AMOUNT	= \$	1,742,143.00	210
3. TOTAL PREVIOUS CHANGE ORDER(S)	= \$	86,718.00	11
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	= \$	1,828,861.00	221
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	= \$	1,729,275.00	276

We hereby agree to make the above change subject to the terms of this change order for the **credit** sum of: \_\_\_\_\_

Ninety nine thousand five hundred eighty six and 00/100 ----- Dollars

3/27/15  
Date

SULLY-MILLER CONTR. CO.  
Contractor

By: [Signature] B.R.P.M.  
GARY DOWNIE


SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<u>[Signature]</u> IRWD Engineer or Consulting Engineer	<u>3/30/15</u> Date	Department Director Approval Required <input type="checkbox"/>
<u>Malcolm Cortez</u> Principal Engineer	<u>3/30/15</u> Date	Executive Director Approval Required <input type="checkbox"/>
<u>[Signature]</u> <i>Acting</i> Executive Director of Engineering & Water Quality	<u>03/30/15</u> Date	General Manager Approval Required <input type="checkbox"/>
General Manager	Date	Board Approval Required <input checked="" type="checkbox"/>
		Purchase Order No. <u>520999</u>


NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Change Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Change Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

April 13, 2015

Prepared by: C. Compton

Submitted by: P. Weghorst 

Approved by: Paul Cook 

## CONSENT CALENDAR

### 2015 STATE LEGISLATIVE UPDATE

#### SUMMARY:

This report provides an update on the 2015-2016 legislative session and IRWD priorities. As legislation develops, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee and the Board, as appropriate.

Staff recommends that the Board consider the following positions:

- SB 551 (Wolk, D-Vacaville) – State Water Policy: Water and Energy Efficiency— “SEEK AMENDMENTS” and authorize staff to work with the author’s office, legislative staff and industry stakeholders to ensure that SB 551 recognizes the many factors that influence water supply and treatment decisions;
- AB 585 (Melendez, D-Murrieta) – Outdoor Water Efficiency Act of 2015— “SUPPORT”;
- AB 603 (Salas, D-Bakersfield) – Income Taxes: Turf Removal Tax Credit— “SUPPORT”; and
- AB 606 (Levine, D-San Rafael) – Water Conservation— “SUPPORT AND SEEK AMENDMENTS”.

#### BACKGROUND:

Over the last few weeks, the bills introduced this year have met the “30-days in print” requirement, and may now be amended or heard in committee. As expected, many of the spot bills which were introduced have been or are in the process of being amended as their authors seek to have the bills referred to and heard in the appropriate policy committee. This year, the last day for policy committees to hear fiscal bills is May 1, while May 15 is the policy committee deadline for non-fiscal bills.

As authors move their bills forward, they will need to keep in mind the Legislative Spring Recess. This year, the Legislature recessed for the spring break on March 26. It will reconvene on April 6.

A copy of the 2015 State Legislative Matrix is attached as Exhibit “A”.

State Budget Update:

*February's Revenue Numbers:*

On March 10, 2015, State Controller Betty Yee released her monthly report on the State's finances. She announced that the State took in \$6.6 billion during the month of February. This amount was \$1 billion, or 18.3 percent, above budget estimates.

The increased revenues were due in large part to personal income tax receipts coming in 26.3 percent higher than estimated in the Governor's January budget proposal. Additionally, sales taxes came in 15.8 percent higher than projected. According to the State Controller's report, "The new boost puts General Fund receipts for the fiscal year at \$68.1 billion, 1.4 percent higher than the Governor expected in his budget proposal." ("*CA Controller's Latest Cash Report Shows Revenues \$1 Billion Over Project*", [http://www.sco.ca.gov/eo\\_pressrel\\_16103.html](http://www.sco.ca.gov/eo_pressrel_16103.html)).

The State ended the month with a General Fund cash deficit of \$11.9 billion, which was 5.3 percent lower than projected. The cash deficit was covered by internal and external borrowing.

Drought Relief Legislation:

On March 19, 2015, Governor Brown, Senate President pro Tempore Kevin de León, Assembly Speaker Toni Atkins, Senate Minority Leader Bob Huff and Assembly Minority Leader Kristin Olsen announced a \$1 billion drought relief package. The legislative package seeks to fund local drought relief and infrastructure projects, which will make the state's water infrastructure more resilient to weather events.

On March 23 and March 24, the Legislature put the drought relief package into two bills in the Assembly and into two bills in the Senate so that each house could hear the proposal concurrently and enact the drought relief legislation quickly. The vehicles for the package were AB 91 (Committee on Budget), AB 92 (Committee on Budget), SB 75 (Committee on Budget and Fiscal Review), and SB 76 (Committee on Budget and Fiscal Review). Each bill was drafted as an urgency measure to appropriate the \$1 billion quickly.

The legislative package appropriates funding for the following:

<b>Proposition 1 Funding</b>	
Water Recycling	\$131.7
Drinking Water Quality	\$135.5
<b>Subtotal</b>	<b>\$267.2</b>
<b>Proposition 1E Funding</b>	
Urban Capital Outlay	\$320.0
Rural Capital Outlay	\$118.0
Local Assistance	\$222.0
<b>Subtotal</b>	<b>\$660.0</b>
<b>Accelerated Drought Funding</b>	
Department of Fish and Wildlife - <i>Fish and wildlife protection</i>	\$14.6
Department of Water Resources - <i>Emergency water supply and education</i>	\$19.0

State Water Resources Control Board - <i>Emergency regulations and enforcement</i>	\$6.7
State Water Resources Control Board - <i>Emergency drinking water</i>	\$4.0
Office of Emergency Services - <i>Drought response coordination and guidance</i>	\$4.4
Department of Water Resources – <i>Water-use efficiency programs</i>	\$20.0
Department of Food and Agriculture – <i>Agriculture water efficiency projects</i>	\$10.0
Department of Social Services - <i>Food Assistance</i>	\$24.0
CAL FIRE - <i>Water Shortages at Fire Stations</i>	\$3.0
Department of Fish and Wildlife - <i>Water delivery to key endangered species habitat</i>	\$2.0
Department of Parks and Recreation - <i>Invasive aquatic plants control</i>	\$4.0
Department of Food and Agriculture - <i>Drought Study</i>	\$0.2
State Water Resources Control Board - <i>Instream Flows</i>	\$2.4
Department of Fish and Wildlife - <i>Instream Flows</i>	\$1.6
<b>Subtotal</b>	<b>\$115.9</b>

The legislative package also included a number of policy provisions. These policy provisions included, among other things, the following:

- Department of Fish and Wildlife (DFW) civil penalty authority for persons obstructing fish passage and separate civil penalty authority for obstructions associated with marijuana cultivation;
- Authority allowing DFW to initiate a complaint before the State Water Resources Control Board (SWRCB) for a violation or trespass in connection with an unauthorized diversion or use of water that harms fish and wildlife resources;
- Establishment of the Office of Sustainable Water Solutions within the SWRCB to promote permanent and sustainable drinking water and wastewater treatment solutions within in small communities; and
- Creation of the CalConserve Revolving Fund Water Efficiency Pilot Project and transfer of \$10 million in Proposition 1 proceeds to the fund for two water conservation and water use efficiency pilot programs, which will provide loans at below market rates or zero interest to urban water suppliers to provide no upfront cost water efficiency upgrades for eligible residents and to provide low- interest loans to customers to finance leak repairs.

The Legislature passed the drought relief package before leaving for Spring Recess. Governor Brown signed AB 91 and AB 92, which took effect immediately.

IRWD 2015 Legislative Priorities:

*Proposition 1 Recycled Water Program Implementation:*

On March 13, the SWRCB released the Draft Water Recycling Funding Program Guidelines for Chapter 9 of Proposition 1. The guidelines, once approved by the SWRCB, will guide the



Board's awarding of Proposition 1's recycled water funding including distribution of the \$131.5 million in Proposition 1 recycled water funding included in the drought relief package.

The draft guidelines are substantially similar to the Proposition 13 recycled water funding guidelines currently used by the SWRCB, although the grant and loan per project limits have been increased. A summary of the proposed grant and loan limits, and funding priorities is attached as Exhibit "B".

With Proposition 1 recycled water funding having been appropriated in the drought relief package, \$131.5 million is now available for the SWRCB to award to eligible projects. While the SWRCB will not finalize the draft guidelines until after the close of the comment period on April 24, 2015, the SWRCB has invited agencies with shovel-ready projects interested in obtaining Proposition 1 funding to submit those projects for consideration now.

Staff is in the process of reviewing the draft guidelines in order to develop comments on the proposed changes. Staff is also working to identify IRWD recycled water projects, which may be eligible for Proposition 1 funding. Staff will provide an update on any new developments.

*SB 551 (Wolk, D-Vacaville) — State Water Policy: Water and Energy Efficiency:*

Senator Lois Wolk has introduced SB 551. SB 551 would establish as a policy of the state that "water use and water treatment shall be as energy efficient as is feasible and energy use and generation shall be as water efficient as is feasible." The bill would also require state agencies to consider this policy when "revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water and energy." Additionally, the bill provides that the implementation of these provisions "shall not infringe on the rights or responsibilities of any public water system or public utility."

At this time, staff recommends that the Board adopt a "SEEK AMENDMENTS" position on the bill and authorize staff to work with the author's office, legislative staff and industry stakeholders to ensure that SB 551 is beneficial for the District. The recommended amendments sought by IRWD would seek recognition that a number of factors influence water supply and water treatment decisions, including energy use, and would seek the addition of a definition of the term "feasible" that recognizes that these factors should be considered when determining feasibility.

A copy of SB 551 is attached as Exhibit "C".

IRWD's Proposed Recycled Water Storage Legislation:

Over the past month, staff has continued to work with WaterReuse California and SWRCB staff to find a solution to mitigate the impact of storm-induced overflow restrictions on recycled water impoundments. After several discussions with IRWD staff, SWRCB staff is working to identify possible solutions to address the impact of storm-induced overflow restrictions on recycled water impoundments within the IRWD service area. Later this month, IRWD and SWRCB staff will be reviewing the results of the SWRCB's work. In the meantime, IRWD has continued to work

with Assemblymember Don Wagner's (R-Irvine) office on AB 725, the spot bill the Assemblymember introduced on IRWD's behalf.

On March 26, 2015, AB 725 was amended so that the bill could be referred to a policy committee. On April 6, 2015, the bill was referred to the Assembly Water, Parks and Wildlife Committee. Staff will provide an oral update on any new developments related to AB 725 and the storm-induced overflow restrictions.

Other 2015 Legislation:

*2015 Water-Use Efficiency Legislation:*

With the state entering the fourth year of the drought, members of the California Legislature have introduced a number of bills related to water-use efficiency and conservation. Below is a summary of water-use efficiency and water conservation bills of interest to IRWD.

*AB 349 (Gonzalez, D-San Diego) — Common Interest Developments: Property Use and Maintenance*

The Davis-Stirling Common Interest Development Act provides for the creation and regulation of common interest developments (HOA). That act provides that any provision of an HOA's governing documents is void and unenforceable if it prohibits, or has the effect of prohibiting, the use of low water-using plants as a group or compliance with a local water-efficient landscape ordinance or water conservation measure. AB 349 would declare any provision of an HOA's government documents, or architectural or landscaping guidelines void and unenforceable if it "Prohibits, or includes conditions that have the effect of prohibiting, the use of low water-using landscapes that require an amount of water that is not more than the amount of water required by low water-using plants."

AB 349 is being sponsored by the San Diego County Water Authority to prevent HOAs from prohibiting the installation of synthetic turf. The bill is an extension of AB 1061 (2009), AB 2104 (2014) and SB 992 (2014). AB 1061 (2009) limited an HOA's ability to prevent the installation of low water-using plants as a group. IRWD supported the enactment of AB 1061 because it clarified the law surrounding an HOA's governing documents and the installation of water-wise landscaping. IRWD also supported the enactment of AB 2014 (2014), which declared any provision of a HOA's government documents, or architectural or landscaping guidelines void and unenforceable if it prohibits, or includes conditions that have the effect of prohibiting, the use of low water-using plants as a replacement of existing turf.

IRWD did not take a position on SB 992 (2014), which dealt with an HOA's ability to fine homeowners who reduce or eliminate watering of vegetation or lawns during a declared drought emergency and provided that an HOA that uses recycled water for landscape irrigation may fine homeowners for failure to water their landscapes. It also provided that provisions of an HOA's governing documents are void and unenforceable if it requires pressure washing of the exterior of a homeowner's separate interest or exclusive use common area during a drought emergency.

At this time, staff is not recommending action on AB 349 (Gonzalez). Given IRWD's interest in the code section being modified by AB 349, staff will continue to monitor AB 349. A copy of AB 349 is attached as Exhibit "D".

*AB 585 (Melendez, D-Murrieta) — Outdoor Water Efficiency Act of 2015*

AB 585, as amended on March 16, 2015, would create a personal income tax credit of up to \$2,500 for water-efficiency improvements made to outdoor landscapes between 2015 through 2021, or until the drought emergency has ended. The water-efficiency improvements that would qualify for the tax credit are those that meet the requirements of a local water-efficient landscape ordinance, a local landscape regulation or restriction on the use of water adopted due to a water shortage, or a water-efficient landscape program that is developed and implemented by a regional or local water agency for the specific purpose of reducing water use. AB 585 has been referred to the Assembly Committee on Revenue and Taxation.

Given that nearly half of a home's water use is outdoors, IRWD has encouraged turf replacement and the installation of California appropriate drought-resistant plants through the RightScape program. AB 585 would create a tax credit for some outdoor water-efficiency improvements, thereby incentivizing a greater investment by property owners in those improvements. Staff recommends that the Board consider taking a "SUPPORT" position on AB 585. A copy of AB 585 is attached as Exhibit "E".

*AB 603 (Salas, D-Bakersfield) — Income Taxes: Turf Removal Tax Credit*

AB 603, as introduced, would create a personal income tax credit for taxpayers participating in lawn replacement programs in an amount equal to \$2.00 per square foot of conventional lawn removed from the taxpayer's property. IRWD has offered a turf removal rebate for some time. If AB 603 were passed, it would provide an even greater incentive to IRWD customers to replace their lawns. Staff recommends that the Board consider taking a "SUPPORT" position on AB 603.

AB 603 has been referred to the Assembly Committee on Revenue and Taxation. A copy of AB 603 is attached as Exhibit "F".

*AB 606 (Levine, D-San Rafael) — Water Conservation*

AB 606, as introduced by Assembly Water, Parks and Wildlife Committee Chairman Marc Levine, would require the Department of General Services to identify each public property added to the State's property inventory after January 1, 2016, where it is feasible for water consumption to be reduced and water efficiencies to be achieved through the replacement of landscaping with drought tolerant plants, the replacement of irrigation timers to permit efficient watering schedules, and the replacement of spray sprinkler heads with bubblers, drip irrigation and soaker hoses. AB 606 has been referred to the Assembly Accountability and Administrative Review Committee.

Over the years, IRWD has partnered with various State agencies to increase water-use efficiency and the use of recycled water at State properties within the District's service area. While AB 606

encourages greater water-use efficiency at State properties by addressing outdoor water use, AB 606, as introduced, does not address or encourage State property use of recycled water. Switching outdoor landscape irrigation from potable water to recycled water reduces demands on surface and groundwater water sources, and should be encouraged by the State. Staff recommends that the Board adopt a “SUPPORT AND SEEK AMENDMENTS” position on AB 606, and authorize staff to advocate for amendments to AB 606, which would direct State properties to use recycled water in order to meet outdoor landscape water needs where feasible.

A copy of AB 606 is attached as Exhibit “G”.

*SB 553 (Wolk) — Water Conservation*

SB 553 (Wolk), as introduced, is similar to AB 606. It would require the Department of General Services to identify each public property in the state property inventory where it is feasible for water consumption to be reduced and water efficiencies to be achieved through the implementation of the relevant recommendations made in the model water efficient landscape ordinance and would require the department to implement the relevant recommendations where feasible. Staff is not recommending that the Board take a position on SB 553 at this time because SB 553 may be substantially amended to address a different topic given its similarity with AB 606.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on April 2, 2015.

RECOMMENDATION:

THAT THE BOARD TAKE A “SEEK AMENDMENTS” POSITION ON SB 551 (WOLK) AND AUTHORIZE STAFF TO WORK WITH THE AUTHOR’S OFFICE, LEGISLATIVE STAFF AND INDUSTRY STAKEHOLDERS TO ENSURE THAT SB 551 RECOGNIZES THE MANY FACTORS THAT INFLUENCE WATER SUPPLY AND TREATMENT DECISIONS; TAKE A “SUPPORT” POSITION ON AB 585 (MELENDEZ); TAKE A “SUPPORT” POSITION ON AB 603 (SALAS); AND TAKE A “SUPPORT AND SEEK AMENDMENTS” POSITION ON AB 606 (LEVINE).

LIST OF EXHIBITS:

Exhibit "A" – 2015 IRWD Legislative Matrix

Exhibit "B" – Draft SWRCB Water Recycling Funding Program Guidelines: Grant and Loan  
Limits & Funding Priorities

Exhibit "C" – Copy of SB 551 (Wolk), as introduced

Exhibit "D" – Copy of AB 349 (Gonzalez), as introduced

Exhibit "E" – Copy of AB 585 (Melendez), as amended

Exhibit "F" – Copy of AB 603 (Salas), as introduced

Exhibit "G" – Copy of AB 606 (Levine), as introduced

**EXHIBIT "A"**  
**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
<b><u>AB 1</u></b> Brown (D)	Drought: Local Governments: Fines		Prohibits a city, county, or city and county from imposing a fine under any local maintenance ordinance or other relevant ordinance for a failure to water a lawn or having a brown lawn during a period for which the Governor has issued a proclamation of a state of emergency based on drought conditions.	01/16/2015 - To ASSEMBLY Committee on LOCAL GOVERNMENT.
<b><u>AB 2</u></b> Alejo (D)	Community Revitalization Authority		Authorizes certain local agencies to form a community revitalization authority with a community revitalization and investment area to carry out provisions of the Community Redevelopment Law in that area for infrastructure, affordable housing, and economic revitalization and to provide for the issuance of bonds serviced by tax increment revenues.	12/01/2014 - INTRODUCED.
<b><u>AB 10</u></b> Gatto (D)	Political Reform Act of 1974.		Increases the thresholds at which a public official has a disqualifying financial interest in sources of income in investments in business entities and in interests in real property. Revises the dollar amounts associated with the value ranges for reporting the value of economic interests. Requires certain public officials to disclose information relating to governmental decisions for which the public official had a disqualifying financial interest.	01/16/2015 - To ASSEMBLY Committee on ELECTIONS AND REDISTRICTING.
<b><u>AB 12</u></b> Cooley (D)	State Government: Administrative Regulations: Review		Requires each state agency after a noticed public hearing, to review and revise that agency's regulations to eliminate any inconsistencies, overlaps, or outdated provisions in the regulations, to adopt the revisions as emergency regulations, and report the Legislature and Governor.	01/16/2015 - To ASSEMBLY Committee on ACCOUNTABILITY AND ADMINISTRATIVE REVIEW.
<b><u>AB 14</u></b> Waldron (R)	Unmanned Aircraft Systems: Task Force		Creates the Unmanned Aircraft Systems Task Force to research, develop, and formulate a comprehensive policy for unmanned aircraft systems.	02/12/2015 - From ASSEMBLY Committee on TRANSPORTATION with author's amendments.;02/12/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on TRANSPORTATION.
<b><u>AB 21</u></b> Perea (D)	Global Warming Solutions Act of 2006: Emissions Limit		Requires the State Air Resources Board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions.	01/16/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
<b><u>AB 23</u></b> Patterson (R)	Global Warming Solutions Act of 2006: Compliance		Exempts categories of persons or entities that did not have a compliance obligation under a market-based compliance mechanism from being subject to that market-based compliance mechanism.	03/23/2015 - In ASSEMBLY Committee on NATURAL RESOURCES: Failed passage.;03/23/2015 - In ASSEMBLY Committee on NATURAL RESOURCES: Reconsideration granted.
<b><u>AB 33</u></b> Quirk (D)	Global Warming Solutions Act: Scoping Plan		Requires, for purposes of advising the update of the next scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, the State Air Resources Board to develop specified information and to submit a report to the appropriate committees of the Legislature.	01/22/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b><u>AB 45</u></b> Mullin (D)	Household Hazardous Waste		Requires each jurisdiction providing for the residential collection and disposal of solid waste to increase the collection and diversion of household hazardous waste in its service area. Provides the increase is to be determined in accordance with Department of Resources Recycling and Recovery regulations. Authorizes the adoption of a model ordinance for a door-to-door collection and diversion program. Requires an annual report to the Department on progress in achieving compliance.	03/19/2015 - To ASSEMBLY Committees on LOCAL GOVERNMENT and ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.;03/19/2015 - From ASSEMBLY Committee on LOCAL GOVERNMENT with author's amendments.;03/19/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on LOCAL GOVERNMENT.
<b><u>AB 56</u></b> Quirk (D)	Unmanned Aircraft Systems		Prohibits the use of unmanned aircraft systems by public agencies or the contracting therefor. Exempts law enforcement agencies. Requires public notice by agencies when intending to deploy such system. Provides the time frame for destruction of images and data collected. Prohibits public dissemination of images and data. Prohibits arming such system. Relates to surveillance restrictions. Applies to private entities contracting with public agencies. Makes providing data and images subject to disclosure.	01/22/2015 - To ASSEMBLY Committees on PUBLIC SAFETY and PRIVACY AND CONSUMER PROTECTION.
<b><u>AB 78</u></b> Mathis (R)	Groundwater Basins		Makes technical nonsubstantive changes to existing law that requires the Department of Water Resources to categorize each basin or subbasin as high-, medium-, low-, or very low priority and to establish ground water the initial priority for each basin.	01/05/2015 - INTRODUCED.
<b><u>AB 88</u></b>	Sales and Use Taxes:		Exempts from the sales and use tax laws the gross receipts from	01/26/2015 - To ASSEMBLY Committee

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
Gomez (D)	Exemption: Home Appliances		the sale of, and the storage, use, or other consumption in this state of, an energy or water efficient home appliance purchased by a public utility that is provided at no cost to a low-income participant in a federal, state, or ratepayer-funded energy efficiency program for use by that low-income participant in the energy efficiency program.	on REVENUE AND TAXATION.
<b>AB 149</b> Chavez (R)	Urban Water Management Plans	Support	Requires an urban water supplier to update its water management plan at least once every 5 years on or before December 31 in years ending in 6 and one. Requires the Department of Water Resources to submit its report to the Legislature, on or before December 31, in years ending in 7 and two.	02/02/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b>AB 156</b> Perea (D)	Global Warming Solutions Act of 2006: Investment Plan		Requires the Department of Finance to include in the 3-year investment plan for moneys deposited in the Greenhouse Gas Reduction Fund an allocation to provide technical assistance to disadvantaged communities to assist them in proposing specified projects for inclusion in the investment plan.	02/02/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b>AB 219</b> Daly (D)	Public Works: Concrete Delivery		Expands the definition of public works for purposes of requirements regarding the payment of prevailing wages for public works projects to include the delivery of ready-mixed concrete with respect to contracts involving any state agency or any political subdivision of the state.	02/09/2015 - To ASSEMBLY Committee on LABOR AND EMPLOYMENT.
<b>AB 243</b> Wood (D)	Medical Marijuana Cultivation		Requires indoor and outdoor medical marijuana cultivation to be conducted in accordance with state and local laws and best practices related to land conversion, grading, electricity usage, water usage, agricultural discharges, and similar matters. Requires each regional water quality control board to address discharges of waste resulting from medical marijuana cultivation and associated activities.	03/09/2015 - To ASSEMBLY Committees on AGRICULTURE and ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<b>AB 259</b> Dababneh (D)	Personal Information Privacy		Requires an agency, if the agency was the source of the breach and the breach compromised a person's social security number, driver's license number, or California identification card number, to offer to provide the person with identity theft prevention and mitigation services at no cost for not less than 12 months.	03/17/2015 - From ASSEMBLY Committee on PRIVACY AND CONSUMER PROTECTION: Do pass to Assembly Committee on APPROPRIATIONS.
<b>AB 291</b>	Environmental Quality Act:		Authorizes a local agency, for certain water projects, to file the	02/23/2015 - To ASSEMBLY Committee



**IRWD 2015 LEGISLATIVE MATRIX**  
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Medina (D)	Local Agencies: Water		notice with the county clerk of the county in which the local agency's principal office is located in lieu of the county clerk of each county in which the project is located and would, if the local agency exercises this authorization, require the local agency to file the notice with the Office of Planning and Research.	on NATURAL RESOURCES.
<b>AB 307</b> Mathis (R)	Graywater: Groundwater Recharge		States the intent of the Legislature to enact legislation to explicitly permit the usage of residential, commercial, and industrial graywater for the recharge of a groundwater basin or aquifer.	02/12/2015 - INTRODUCED.
<b>AB 308</b> Mathis (R)	Graywater: Agricultural Use		States the intent of the Legislature to enact legislation to explicitly permit incorporated and unincorporated communities to sell graywater for agricultural purposes and agriculture to use graywater for agricultural purposes.	02/12/2015 - INTRODUCED.
<b>AB 311</b> Gallagher (R)	Environmental Quality: Water Quality and Supply		Requires the public agency, in certifying the environmental impact report and in granting approvals for specified water storage projects funded, in whole or in part, by Proposition 1, to comply with specified procedures. Requires the Judicial Council to adopt a rule of court to establish procedures applicable to actions or proceedings seeking judicial review of an agency's action in certifying the environmental impact report and in granting project approval. Relates to court staying of the projects.	03/23/2015 - In ASSEMBLY Committee on NATURAL RESOURCES: Failed passage.;03/23/2015 - In ASSEMBLY Committee on NATURAL RESOURCES: Reconsideration granted.
<b>AB 327</b> Gordon (D)	Public Works: Volunteers		Deletes that repeal date provision of existing law that governing public works does not apply to specified work performed by a volunteer, a volunteer coordinator, or a member of the California Conservation corps or a community conservation corps.	02/23/2015 - To ASSEMBLY Committee on LABOR AND EMPLOYMENT.
<b>AB 335</b> Patterson (R)	Air Quality: Minor Violations		Requires the State Air Resources Board and air pollution control and air quality management districts to adopt regulations classifying minor violations. Requires a representative of those agencies to issue a notice to comply. Requires the State Air Resources Board to report to the Legislature regarding implementation of the bill.	02/23/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b>AB 341</b> Achadjian (R)	Financial Affairs: Reports		Amends existing law that requires the officer of each local agency, who has charge of the financial records of the local agency, to furnish to the Controller a report of all the financial	02/23/2015 - To ASSEMBLY Committee on LOCAL GOVERNMENT.

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			transactions of the local agency during the preceding fiscal year. Requires the report to contain underlying data from audited financial statements if this data is available.	
<b><u>AB 349</u></b> Gonzalez (D)	Common Interest Developments: Property Use		Amends the Davis-Stirling Common Interest Development Act. Makes void and unenforceable any provision of the governing documents or architectural or landscaping guidelines or policies that prohibits the use of low water-using landscapes that require not more than a specified amount of water.	03/02/2015 - To ASSEMBLY Committee on HOUSING AND COMMUNITY DEVELOPMENT.
<b><u>AB 356</u></b> Williams (D)	Oil and Gas: Groundwater Monitoring		Authorizes the State Oil and Gas Supervisor to require a well operator to implement a monitoring program for below ground oil production tanks and facilities, and disposal and injection wells. Requires the annual review of underground injection or disposal projects that use Class II wells. Requires the submission of a related groundwater monitoring plan. Requires submission of certain data for inclusion in the State's geotracker database. Provides procedures for an aquifer exemption.	03/17/2015 - From ASSEMBLY Committee on NATURAL RESOURCES with author's amendments.;03/17/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on NATURAL RESOURCES.
<b><u>AB 401</u></b> Dodd (D)	Low-Income Water Rate Assistance Program		Requires the Department of Community Services and Development to develop a plan for the funding and implementation of the Low-Income Water Rate Assistance Program, which would include specified elements. Requires the department to report to the Legislature on its findings regarding the feasibility and desired structure of the program.	03/23/2015 - From ASSEMBLY Committee on UTILITIES AND COMMERCE: Do pass to Committee on APPROPRIATIONS.
<b><u>AB 402</u></b> Dodd (D)	Local Agency Services: Contracts		Allows a local agency formation commission to authorize a city or district to provide new or extended services outside its jurisdictional boundaries to support existing or planned uses involving public or private properties, subject to approval at a publicly noticed hearing where the commission makes specified determinations. Authorizes the commission to delegate to its executive officer review and approval of requests to provide new or extended services outside a city or district's boundary.	03/02/2015 - To ASSEMBLY Committee on LOCAL GOVERNMENT.
<b><u>AB 434</u></b> Garcia E (D)	Drinking Water: Point-of-Entry: Point-of-Use Treatment		Requires the State Water Resources Control Board to adopt regulations governing the use of point-of-entry and point-of-use treatment by public water systems in lieu of centralized treatment where it can be demonstrated that centralized treatment is not	03/19/2015 - From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS with author's amendments.;03/19/2015 - In

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			immediately economically feasible. Provides limitations.	ASSEMBLY. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<b><u>AB 452</u></b> Bigelow (R)	Water Rights Fund: Groundwater Regulation Subaccount.		Establishes the Groundwater regulation Subaccount in the Water Rights Fund. Relates to an existing law which provides that the making of any willful misstatement in connection with groundwater reporting requirements is a misdemeanor. Provides for certain civil liability. Provides for the deposit of certain funds into the subaccount.	03/05/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 453</u></b> Bigelow (R)	Groundwater Management		Authorizes, until a groundwater sustainability plan is adopted, a local agency to amend an existing groundwater management plan in furtherance of, and consistent with, the groundwater management plan's objectives.	03/05/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 454</u></b> Bigelow (R)	Sustainable Groundwater Management		Relates to groundwater basins. Requires a high- or medium-priority basin that is not subject to critical conditions of overdraft to be managed under a groundwater sustainability plan or coordinated groundwater sustainability plan. Provides for the designation of basins as probationary basins.	03/05/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 455</u></b> Bigelow (R)	Groundwater Sustainability Plans		Amends the California Environmental Quality Act. Requires the Judicial Council to adopt a rule of court to establish procedures applicable to actions or proceedings brought to attack, review, set aside, void, or annul the certification of an environmental impact report for certain projects covered by a groundwater sustainability plan. Prohibits the court from staying or enjoying the construction or operation of the project unless the court makes a certain finding.	03/05/2015 - To ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and NATURAL RESOURCES.
<b><u>AB 472</u></b> Harper (R)	Public Works: Prevailing Wage: Volunteers		Makes a nonsubstantive, technical change by deleting an obsolete provision in existing law that generally requires the payment of not less than the prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed by workers employed on public works projects, except work performed by a volunteer, a volunteer coordinator, or member of the State Conservation Corps, or a community	02/23/2015 - INTRODUCED.

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			conservation corps.	
<b><u>AB 478</u></b> Harper (R)	Desalination		Makes a nonsubstantive change to the Cobey-Porter Saline Water Conversion Law that states the policy of this state that desalination projects developed by or for public water entities be given the same opportunities for state assistance and funding as other water supply and reliability projects, and that desalination be consistent with all applicable environmental protection policies in the state.	02/23/2015 - INTRODUCED.
<b><u>AB 501</u></b> Levine (D)	Resources: Delta Research		Relates to the Sacramento-San Joaquin Delta Reform Act of 2009. Requires a person conducting Delta Research, funded by the State, to take specified actions with regard to the sharing of the primary data, samples, physical collections, and other supporting materials created or gathered in the course of that research. Authorizes the Delta Independent Science Board to adopt guidelines. Suspends State funding for improper reporting. Provides research property legal rights remain with the researcher.	03/05/2015 - To ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and JUDICIARY.
<b><u>AB 537</u></b> Allen T (R)	Public Employees' Benefits		Prohibits a public agency, state employer, employee organization, or public employee from entering into a memorandum of understanding that provides postemployment health care benefits without a strategy for permanently prefunding members' postemployment healthcare benefits.	03/05/2015 - To ASSEMBLY Committee on PUBLIC EMPLOYEES, RETIREMENT AND SOCIAL SECURITY.
<b><u>AB 577</u></b> Bonilla (D)	Public Utilities: Biogas		Amends the Public Utilities Act that requires the Public Utilities Commission to encourage electrical and gas corporations to develop and offer programs and services to facilitate development of in-state biogas for a broad range of purposes. Limits that range of related purposes.	03/09/2015 - To ASSEMBLY Committee on UTILITIES AND COMMERCE.
<b><u>AB 585</u></b> Melendez (R)	Outdoor Water Efficiency: Personal Income Tax Credits		Relates to the Outdoor Water Efficiency Act. Allows a credit, under the Personal Income Tax Law, for a specified percentage of the amount paid or incurred by a qualified taxpayer for water-efficiency improvements made to outdoor landscapes on real property in the State.	03/16/2015 - From ASSEMBLY Committee on REVENUE AND TAXATION with author's amendments.;03/16/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on REVENUE AND TAXATION.

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<b><u>AB 590</u></b> Dahle (R)	Greenhouse Gas Reduction Fund		Creates the Biomass State Cost Share Account within the Greenhouse Gas Reduction Fund. Provides that moneys in the account would be available for expenditure by the State Energy Resources Conservation and Development Commission for the purposes of maintaining the current level of biomass power generation in the State and revitalizing currently idle facilities in strategically located regions.	03/09/2015 - To ASSEMBLY Committees on NATURAL RESOURCES and UTILITIES AND COMMERCE.
<b><u>AB 603</u></b> Salas (D)	Income Taxes: Turf Removal Tax Credit		Allows a credit under the Personal Income Tax and the Corporation Tax Laws to a taxpayer participating in a lawn replacement program.	03/09/2015 - To ASSEMBLY Committee on REVENUE AND TAXATION.
<b><u>AB 606</u></b> Levine (D)	Water Conservation		Requires the Department of General Services to identify each public property added to the department's state property inventory where it is feasible for water consumption to be reduced and water efficiencies to be achieved through replacement of landscaping, irrigation timers, or spray sprinkler heads, or any combination thereof, and requires the appropriate replacements where feasible.	03/09/2015 - To ASSEMBLY Committee on ACCOUNTABILITY AND ADMINISTRATIVE REVIEW.
<b><u>AB 639</u></b> Dahle (R)	Water Quality: Membership of Regional Boards		Makes nonsubstantive changes to provisions of existing law which requires the State Water Resources Control Board and the regional water quality control boards to prescribe waste discharge requirements in accordance with the federal national pollutant discharge elimination system permit program established by the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.	02/24/2015 - INTRODUCED.
<b><u>AB 647</u></b> Eggman (D)	Beneficial Use: Diversion of Water Underground		Declares that the diversion of water underground constitutes a beneficial use of water for which an appropriation may be made if the diverted water is stored and thereafter applied to beneficial use or if beneficial use of the water, including, but not limited to, protection of water quality or recovery of groundwater levels, is made while the water is underground.	03/09/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 697</u></b> Chu (D)	Water-Conserving Plumbing Fixtures		Makes technical nonsubstantive changes to existing law that requires the replacement of plumbing fixtures that are not water conserving, as defined as noncompliant plumbing fixtures, in residential and commercial real property built and available for	02/25/2015 - INTRODUCED.

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			use on or before January 1, 1994, as specified.	
<b><u>AB 723</u></b> Rendon (D)	Plumbing Fixtures: WaterSense Standards		Prohibits manufacturers selling water closets, urinals, bathroom faucets, and shower heads from installing or selling any of the aforementioned plumbing fixtures that do not meet WaterSense standards set by the federal Environmental Protection Agency.	03/12/2015 - To ASSEMBLY Committee on HOUSING AND COMMUNITY DEVELOPMENT.
<b><u>AB 725</u></b> Wagner (R)	Porter-Cologne Water Quality Control Act	Sponsor	Makes various nonsubstantive changes to definitions in existing law that state the State Water Resources Control Board and the regional water quality control boards prescribe waste discharge requirements in accordance with the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.	02/25/2015 - INTRODUCED.
<b><u>AB 824</u></b> Gatto (D)	Recycled Water: Recycling Criteria		Makes technical nonsubstantive changes to the Porter-Cologne Water Quality Control Act that requires the State Department of Public Health to establish uniform statewide recycling criteria for each varying type of use of recycled water if the use involves the protection of public health.	02/26/2015 - INTRODUCED.
<b><u>AB 852</u></b> Burke (D)	Public Works: Prevailing Wages		Expands the definition of public works for the purposes of provisions relating to the prevailing rate of per diem wages, to also include any construction, alteration, demolition, installation, or repair work done under private contract on a hospital or health care facility project when the project is paid for, in whole or in part, with the proceeds of conduit revenue bonds.	03/16/2015 - To ASSEMBLY Committee on LABOR AND EMPLOYMENT.
<b><u>AB 856</u></b> Calderon I (D)	Invasion of Privacy		Expands liability for physical invasion of privacy to additionally include a person knowingly entering into the airspace of another person without permission.	03/16/2015 - To ASSEMBLY Committees on JUDICIARY and PRIVACY AND CONSUMER PROTECTION.
<b><u>AB 876</u></b> McCarty (D)	Compostable Organics		Relates to the California Integrated Waste Management Act of 1989. Requires the Department of Resources Recycling and Recovery, in coordination with the State Air Resources Board, to promote the use of compostable organics for critically needed alternatives to agricultural amendments and for low-carbon fuel manufacturing to reduce fugitive methane emissions associated with landfill and other waste operations.	03/16/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b><u>AB 888</u></b> Bloom (D)	Waste Management: Plastic Microbeads		Prohibits a person from selling or offering for promotional purposes in this state a personal care product containing intentionally added plastic microbeads. Makes a violator liable	03/16/2015 - To ASSEMBLY Committees on NATURAL RESOURCES and ENVIRONMENTAL SAFETY AND

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			for a civil penalty to be assessed and recovered in a civil action brought in any court of competent jurisdiction by the Attorney General or local officials, or by an person in the public interest.	TOXIC MATERIALS.
<b>AB 935</b> Salas (D)	Integrated Regional Water Management Plans		Relates to the Integrated Regional Water Management Planning Act. States the intent of the Legislature to enact legislation that would require grants and expenditures for the planning, design, and construction of certain regional conveyance projects.	02/26/2015 - INTRODUCED.
<b>AB 936</b> Salas (D)	Groundwater Monitoring		Amends existing law which provides that certain entities with authority to assume groundwater monitoring functions with regard to a basin or subbasin for which the Department of Water Resources has assumed those functions are not eligible for a water grant or loan awarded or administered by the state. Creates an exception from this eligibility restriction if the entity submits documentation demonstrating the water grant or loan project includes actions needed to comply with groundwater monitoring functions.	03/16/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b>AB 937</b> Salas (D)	Groundwater Recharge		States the intent of the Legislature to enact legislation relating to groundwater recharge.	02/26/2015 - INTRODUCED.
<b>AB 938</b> Salas (D)	Groundwater: Basin Reprioritization		Imposes the requirement to establish a groundwater sustainability agency on a local agency or combination of local agencies overlying a groundwater basin.	03/16/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b>AB 939</b> Salas (D)	Groundwater Sustainability Agency: Financial Authority		Requires a groundwater sustainability agency to make the data upon which a proposed fee is based available prior to a public meeting to impose or increase a fee.	03/16/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b>AB 952</b> Garcia (D)	Local Government: Cities: Special District: Vacancies		Relates to a school district or community college district governing board vacancies. Requires the provisional appointee to serve on the board until the next regularly scheduled election. Eliminates the requirement that an election be held 130 or more days after the effective date of the vacancy.	03/16/2015 - To ASSEMBLY Committees on LOCAL GOVERNMENT and ELECTIONS AND REAPPORTIONMENT.
<b>AB 954</b> Mathis (R)	Water Quality, Supply, Infrastructure Improvement		States the intent of the Legislature to enact legislation to implement the Water Quality, Supply, and Infrastructure Improvement Act of 2014.	02/26/2015 - INTRODUCED.
<b>AB 957</b> Mathis (R)	Water Quality, Supply, Infrastructure Improvement		Makes nonsubstantive changes in provisions of the Water Quality, Supply, and Infrastructure Improvement Act of 2014.	02/26/2015 - INTRODUCED.

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<b>AB 977</b> Mayes (R)	State Water Pollution Control Revolving Fund		Makes nonsubstantive changes to the requirement that moneys in the Pollution Control Revolving Fund be used only for permissible purposes allowed by the Clean Water Act or a federal capitalization grant deposited in the fund.	02/26/2015 - INTRODUCED.
<b>AB 1019</b> Garcia E (D)	Metal Theft and Related Recycling Crimes		Requires the Department of Justice to establish a Metal Theft Task Force Program designed to enhance the capacity of the department to serve as the lead law enforcement agency in the investigation and prosecution of illegal recycling operations, and metal theft and related recycling crimes. Authorizes the department to enter into partnerships with local law enforcement agencies.	03/19/2015 - To ASSEMBLY Committee on PUBLIC SAFETY.
<b>AB 1030</b> Ridley-Thomas S (D)	Global Warming Solutions Act of 2006: Greenhouse Gas		Amends existing law that relates to the Greenhouse Gas Reduction Fund. Requires a State agency that allocates moneys from the fund to prioritize projects that include project labor agreements with targeted hire goals, community workforce agreements, or partnerships with the training entities that have a proven track record of placing disadvantaged workers in career-track jobs.	03/19/2015 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b>AB 1068</b> Allen T (R)	California Environmental Quality Act: Priority Projects		Authorizes each Member of the Legislature to nominate one project within his or her respective district each year, and the Governor to designate those projects as priority projects if the projects meet specified requirements. Requires the Governor to provide a notice of the designation to the appropriate lead agency and to the Office of Planning and Research. Requires an environmental impact report for each project. Authorizes tiering from previously prepared reports. Relates to court stays of projects.	03/19/2015 - To ASSEMBLY Committees on NATURAL RESOURCES and JUDICIARY.
<b>AB 1095</b> Garcia E (D)	Restoration Funding: Salton Sea		Appropriates an unspecified sum from funds of the Water Quality, Supply, and Infrastructure Improvement Act of 2014, to the Natural Resources Agency to be used for restoration projects that fulfill obligations of the State in complying with a related intrastate or multiparty water quantification settlement agreement provisions relating to the Salton Sea.	03/19/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b>AB 1128</b>	Water Conservation		Makes nonsubstantive changes to existing law that declares the	02/27/2015 - INTRODUCED.



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Jones-Sawyer (D)			intent of the Legislature to, among other things, promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and specified requirements for demand management.	
<b><u>AB 1139</u></b> Campos (D)	California Water District Law		Makes nonsubstantive changes to the provision naming the California Water District Law.	02/27/2015 - INTRODUCED.
<b><u>AB 1144</u></b> Rendon (D)	Renewables Portfolio Standard Program: Credits		Provides that unbundled renewable energy credits may be used to meet the first category of the portfolio content requirements if the credits are earned by electricity that is generated by an entity that, if it were a person or corporation, would be excluded from the definition of an electrical corporation by operation of the exclusions for a corporation or person employing landfill gas technology or digester gas technology, and the entity has specified first points of interconnection.	03/19/2015 - To ASSEMBLY Committees on UTILITIES AND COMMERCE and NATURAL RESOURCES.
<b><u>AB 1192</u></b> Quirk (D)	Landscape Irrigation Equipment		Makes nonsubstantive changes to landscape irrigation equipment provisions. Adopts by regulation performance standards and labeling requirements for landscape irrigation equipment, including, but not limited to, irrigation controllers, moisture sensors, emission devices, and valves, for the purpose of reducing the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.	02/27/2015 - INTRODUCED.
<b><u>AB 1242</u></b> Gray (D)	Water Quality: Impacts on Groundwater Basins		Requires the State Water Resources Control Board to take into consideration any applicable groundwater sustainability plan or alternative in formulating state policy for water quality control and adopting or approving a water quality control plan that affects a groundwater basin. Requires the board to evaluate impacts on groundwater basins.	03/23/2015 - To ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and NATURAL RESOURCES.
<b><u>AB 1243</u></b> Gray (D)	Groundwater Recharge: Grants		Establishes the Groundwater Recharge Grant Fund. Provides that moneys in the fund are available to the State Water Resources Control Board to provide grants to local governments and water districts for groundwater recharge infrastructure projects.	03/23/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 1315</u></b> Alejo (D)	Public Contracts Water Pollution Prevention Plans		Prohibits a public entity, charter city, or charter county from delegating to a contractor the development of a plan, as defined,	03/23/2015 - To ASSEMBLY Committee on LOCAL GOVERNMENT.

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			used to prevent or reduce water pollution or runoff on a public works contract, except as provided.	
<b><u>AB 1325</u></b> Salas (D)	Delta Smelt		Enacts the Delta Smelt Preservation and Restoration Act of 2016. Requires the development of a deltas smelt hatchery program to preserve and restore the delta smelt. Requires entering into mitigation banking agreements with banking partners of the Department of Fish and Wildlife for the purpose of providing take authorizations to those partners and to obtain funding from banking agreements. Appropriates an unspecified amount of money from an unspecified source to implement these provisions.	03/23/2015 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<b><u>AB 1362</u></b> Gordon (D)	Local Government Assessments Fees and Charges		Defines stormwater for purposes of the Proposition 218 Omnibus Implementation Act to mean any system of public improvements or service intended to provide for the quality, conservation, control, or conveyance of waters that land on or drain across the natural or man-made landscape.	03/23/2015 - To ASSEMBLY Committee on LOCAL GOVERNMENT.
<b><u>AB 1390</u></b> Alejo (D)	Groundwater: Adjudication		Relates to the State Water Resources Control Board. Develops procedures to provide a more streamlined and expeditious groundwater adjudication process by which courts may conduct comprehensive determinations of all rights to groundwater in a basin, while fully respecting established principles of water rights law and providing participants appropriate due process.	02/27/2015 - INTRODUCED.
<b><u>AB 1454</u></b> Linder (R)	State Policy for Water Quality Control		Makes technical, nonsubstantive changes to the Porter-Cologne Water Control Act that provides the policy for water quality control is required to consist of water quality principles and guidelines for long-range resource planning, water quality objectives.	02/27/2015 - INTRODUCED.
<b><u>AB 1463</u></b> Gatto (D)	Onsite Recycled Water		Requires the State Water Resources Control Board to establish water quality standards and distribution, monitoring, and reporting requirements for onsite water recycling systems prior to authorizing the use of onsite recycled water in internal plumbing of residential and commercial buildings.	02/27/2015 - INTRODUCED.
<b><u>SB 7</u></b> Wolk (D)	Housing: Water Meters: Multi-unit Structures		Encourages the conservation of water in multifamily residential rental buildings through means within the landlord's or the tenant's control, and to ensure that the practices involving the	01/15/2015 - To SENATE Committee on TRANSPORTATION AND HOUSING.

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			submetering of dwelling units for water service are just and reasonable, and including appropriate safeguards for both tenants and landlords. Authorizes building standards that require the installation of water submeters in multiunit residential buildings. Defines the term submeter for the Water Measurement Law.	
<b>SB 13</b> Pavley (D)	Groundwater		Authorizes the State Water Resource Control Board to designate a basin as a probationary basin and to develop an interim plan. Relates deficiency remedies by a local agency or groundwater sustainability agency. Relates to the designation of a basin as probationary. Relates to the determination criteria for establishing a groundwater sustainability plan. Eliminates provisions regarding the submission of intent by a local agency to be a groundwater sustainability agency and for related Internet posting.	03/24/2015 - From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on APPROPRIATIONS.
<b>SB 20</b> Pavley (D)	Wells: Reports: Public Availability		Amends an existing law which requires a person who digs, bores, or drills a water well, cathodic protection well, or a monitoring well to file a report of completion with the Department of Water Resources. Requires the Department to make reports available to the public. Requires the Department to redact from the report specified information pertaining to the well owner.	03/24/2015 - From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on ENVIRONMENTAL QUALITY.
<b>SB 32</b> Pavley (D)	Global Warning Solutions Act of 2006: Emissions Limit		Requires the State Air Resources Board to approve a specified statewide greenhouse gas emission limit that is equivalent to a specified percentage below the 1990 level to be achieved by 2050. Authorizes the Board to adopt interim emissions level targets to be achieve by specified years.	03/16/2015 - From SENATE Committee on ENVIRONMENTAL QUALITY with author's amendments.;03/16/2015 - In SENATE. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.
<b>SB 47</b> Hill (D)	Environmental Health: Synthetic Turf		Requires the Office of Environmental Health Hazard Assessment, in consultation with the Department of Resources Recycling and Recovery, the State Department of Public Health, and the Department of Toxic Substances Control, to prepare and provide to the Legislature and post on the office's Internet Web site a study analyzing synthetic turf, for potential adverse health impacts.	03/18/2015 - From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass as amended to Committee on APPROPRIATIONS.
<b>SB 113</b>	Disaster Preparedness and		Specifies that the Disaster Preparedness and Flood Prevention	03/24/2015 - In SENATE Committee on

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<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
Galgiani (D)	Flood Prevention Bond Act		Bond Act of 2006 funds provided by the act are only available for appropriation until a specified date and at that time the amount of indebtedness authorized by the act is reduced by the amount of funds that have not been appropriated. Removes the restriction that the funds are available for appropriation only until that specified date.	NATURAL RESOURCES AND WATER: Not heard.
<b><u>SB 119</u></b> Hill (D)	Protection of Subsurface Installations		Requires the Contractors' State License Board to adopt a program to enforce violations of provisions relating to excavation. Authorizes the Board to require a contractor to undergo training, levy a fine, and suspend a contractor's license for a violation. Defines and redefines terms relating to a regional notification center. Requires certain actions prior to a planned excavation. Exempts an excavator from damages due to an inaccurate field mark. Exempts a land owner who only uses certain tools.	02/05/2015 - To SENATE Committees on BUSINESS, PROFESSIONS AND ECONOMIC DEVELOPMENT, GOVERNMENTAL ORGANIZATION and JUDICIARY.
<b><u>SB 122</u></b> Jackson (D)	California Environmental Quality Act: Records		Amends the California Environmental Quality Act. Requires the lead agency, at the request of a project applicant and consent of the lead agency, to prepare a record of proceedings concurrently with the preparation of a negative declaration, mitigated negative declaration, environmental impact report, or other environmental document for projects.	03/12/2015 - From SENATE Committee on ENVIRONMENTAL QUALITY with author's amendments.;03/12/2015 - In SENATE. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.
<b><u>SB 127</u></b> Vidak (R)	Water Quality, Supply, and Infrastructure Improvement		Relates to the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Requires the public agency, in certifying the environmental impact report and in granting approvals for projects funded, in whole or in part, by Proposition 1, including the concurrent preparation of the record of proceedings and the certification of the record of proceeding within 5 days of the filing of a specified notice, to comply with specified procedures.	02/05/2015 - To SENATE Committees on ENVIRONMENTAL QUALITY and JUDICIARY.
<b><u>SB 142</u></b> Jackson (D)	Civil law: Unmanned Aerial Vehicles		Extends liability for wrongful occupation of real property and damages to a person who without permission operates an unmanned aerial vehicle below the navigable airspace overlaying the real property.	02/05/2015 - To SENATE Committee on JUDICIARY.
<b><u>SB 143</u></b> Stone (R)	Diamond Valley Reservoir: Recreational Use	Oppose	Amends existing law that prohibits recreational use in which there is bodily contact with water, in a reservoir in which water is	02/05/2015 - To SENATE Committee on ENVIRONMENTAL QUALITY.

**IRWD 2015 LEGISLATIVE MATRIX**  
Updated March 25, 2015

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
			stored for domestic use.	
<b>SB 173</b> Nielsen (R)	Groundwater: De Minimis Extractors		Amends existing law that generally excepts a de minimis extractor from the requirement that a person who extracts groundwater from a probational basin or extracts groundwater on or after July 1, 2017, in an area within a basin that is not within the management area of a groundwater sustainability agency and where the county does not assume responsibility to be the groundwater sustainability agency has to file a report of groundwater extraction. Defines a de minimis extractor.	03/24/2015 - In SENATE Committee on NATURAL RESOURCES AND WATER: Failed passage.;03/24/2015 - In SENATE Committee on NATURAL RESOURCES AND WATER: Reconsideration granted.
<b>SB 179</b> Berryhill (R)	Secondhand Goods: Junk Dealers		Makes nonsubstantive changes to existing law that prohibits a junk dealer or recycler from possessing a reasonably recognizable, disassembled, or inoperative fire hydrant or fire department connection, a manhole cover or lid, or a backflow device, that was owned by an agency, without a written certification on the agency's letterhead that the agency either has sold the material described or is offering the material for sale.	02/19/2015 - To SENATE Committee on RULES.
<b>SB 184</b> Hertzberg (D)	Local Government: Omnibus Bill		Clarifies that provisions in existing law relating to the authority of the duties of the auditor apply only to the county auditor.	02/19/2015 - To SENATE Committee on RULES.
<b>SB 185</b> De Leon (D)	Public Retirement Systems: Divestiture of Thermal Coal		Creates the Public Divestiture of Thermal Coal Companies Act and requires the boards of the Public Employees' Retirement System and the State Teachers' Retirement System to divest the public employee retirement funds of any investments in a thermal coal company, and prohibits additional or new investments or the renewal of existing investments in a thermal coal company.	02/19/2015 - To SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT.
<b>SB 208</b> Lara (D)	Integrated Regional Water Management Plans: Grants		Requires a regional water management group to provide the state entity administering the regional water management grant with a list of projects to be funded by the grant funds where the project proponent is a nonprofit organization or a disadvantaged community, or the project benefits a disadvantaged community.	03/24/2015 - From SENATE Committee on NATURAL RESOURCES AND WATER: Do pass to Committee on ENVIRONMENTAL QUALITY.
<b>SB 216</b> Pan (D)	Public Employees Retirement System		Amends the Public Employees Retirement System. Repeals the provisions regarding investing in residential realty on the system's investment portfolio. Changes the frequency of a specified report to eliminate the requirement to report on the investments on a cost basis. Makes other changes to the content	02/26/2015 - To SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT.

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
			of the report.	
<b>SB 223</b> Galgiani (D)	Division of Boating and Waterways: Oversight Committee		Requires the Division of Boating and Waterways to establish an advisory and oversight committee to monitor the activities of the division relating to the management and control or eradication of invasive aquatic plants.	02/26/2015 - To SENATE Committee on NATURAL RESOURCES AND WATER.
<b>SB 226</b> Pavley (D)	Sustainable Groundwater Management Act		Provides that it establishes a timely method for determining rights to groundwater in furtherance of the objectives of the Sustainable Groundwater Management Act. Requires the process to be available to any court of competent jurisdiction.	02/26/2015 - To SENATE Committees on NATURAL RESOURCES AND WATER and JUDICIARY.
<b>SB 228</b> Cannella (R)	Groundwater Storage: Beneficial Use		Declares that the recharging of a groundwater basin by a local groundwater management agency or a local groundwater sustainability agency for the purposes of repelling saline intrusion and recovering basin groundwater levels constitutes a beneficial use of water if the recharge is consistent with the local agency's groundwater management plan or groundwater sustainability plan.	02/26/2015 - To SENATE Committee on NATURAL RESOURCES AND WATER.
<b>SB 248</b> Pavley (D)	Oil and Gas: Well History		Requires all operations on or in the gas or oil well of any form to be systematically, completely, and accurately described and recorded in the well history.	02/26/2015 - To SENATE Committee on NATURAL RESOURCES AND WATER.
<b>SB 258</b> Bates (R)	Local Government		States the intent of the Legislature to enact legislation that would protect the right of the public to participate in open deliberations of the legislative bodies of local agencies by clarifying the appropriate use of special meetings.	02/26/2015 - To SENATE Committee on RULES.
<b>SB 272</b> Hertzberg (D)	State Public Records Act: Local Agencies: Inventory		Requires each local agency, in implementing the State Public Records Act, to conduct an inventory of data gathered by the agency that discloses what data is maintained by the agency, by whom, and with what frequency it is collected. Requires the inventory to be available to the public.	03/05/2015 - To SENATE Committees on GOVERNANCE AND FINANCE and JUDICIARY.
<b>SB 317</b> De Leon (D)	Safe Neighborhood Parks, Rivers, and Coastal Protection		Enacts the Safe Neighborhood Parks, Rivers, and Coastal Protection Bond Act of 2016, which, if adopted by the voters would authorize the issuance of bonds in an unspecified amount pursuant to the State General Obligation Bond Law to finance a safe neighborhood parks, rivers, and coastal protection program.	03/05/2015 - To SENATE Committees on NATURAL RESOURCES AND WATER and GOVERNANCE AND FINANCE.
<b>SB 350</b>	Clean Energy and Pollution		Establishes the quantity of electricity products from eligible	03/05/2015 - To SENATE Committees on

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
De Leon (D)	Reduction Act of 2015		renewable energy resources be procured by each retail seller for specified periods. Requires the boards of local publicly owned electric utilities to ensure that specified quantities of such products be procured to achieve a specified percentage by a specified date. Excludes combustion from municipal waste as eligible renewable energy sources. Requires submission of renewable energy procurement plans. Relates to reducing motor vehicle emissions.	ENERGY, UTILITIES AND COMMUNICATIONS and ENVIRONMENTAL QUALITY.
<b>SB 360</b> Cannella (R)	Biomethane		Authorizes the Public Utilities Commission to consider providing the option to all corporations to engage in competitive bidding and direct investment in ratepayer financed biomethane collection equipment.	03/05/2015 - To SENATE Committee on ENERGY, UTILITIES AND COMMUNICATIONS.
<b>SB 385</b> Hueso (D)	Primary Drinking Water Standards: Hexavalent Chromium		Authorizes the State Water Resources Control Board to grant a variance from the primary drinking water standard for hexavalent chromium if the public water system prepares and submits a compliance plan. Requires the plan to describe the actions the public water system is taking and will take to comply with the primary drinking water standard for hexavalent chromium by the earliest feasible date, to include the public water system's best estimate of the funding required for compliance.	03/12/2015 - To SENATE Committees on ENVIRONMENTAL QUALITY and JUDICIARY.
<b>SB 454</b> Allen (D)	Water Quality: Minor Violations		Makes nonsubstantive changes to the Porter-Cologne Water Quality Control Act that authorizes the State Water Resources Control Board and the regional water quality control boards to conduct inspections for violations of specified law.	03/05/2015 - To SENATE Committee on RULES.
<b>SB 471</b> Pavley (D)	Water, Energy, Reduction of Greenhouse Gas		Requires the Strategic Growth Council to give special consideration to awarding funds to eligible projects that, in addition to existing objectives and goals, would also result in reduced energy use by a water supplier, and end user of water, or both. Includes projects or programs that reduce energy used to acquire, transport, treat, or distribute water as a regional project or program.	03/12/2015 - To SENATE Committees on NATURAL RESOURCES AND WATER and ENVIRONMENTAL QUALITY.
<b>SB 485</b> Hernandez (D)	County of Los Angeles: Sanitation Districts		Authorizes specified sanitation districts in the County of Los Angeles, to acquire, construct, operate, maintain, and furnish facilities for the diversion, management, and treatment of	03/12/2015 - To SENATE Committee on RULES.

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
			stormwater and dry weather runoff, the discharge of the water to the stormwater drainage system, and the beneficial use of the water. Makes legislative findings and declarations as to the necessity of a special statute for the County of Los Angeles.	
<b><u>SB 487</u></b> Nielsen (R)	Sustainable Groundwater Management Act: Exemptions		Relates to the California Environmental Act (CEQA). Exempts from the requirements of CEQA the formation of a groundwater sustainability agency, the amendment of a groundwater sustainability plan or coordinated groundwater sustainability plan, and the implementation of those plans, except to the extent that the implementation requires the construction or installation of a new facility.	03/12/2015 - To SENATE Committee on ENVIRONMENTAL QUALITY.
<b><u>SB 551</u></b> Wolk (D)	State Water Policy: Water and Energy Efficiency		Declares the policy of the state that water use and water treatment shall be as energy efficient as is feasible and energy use and generation shall be as water efficient as is feasible. Requires all relevant state agencies to consider this state policy when revising, or establishing policies, regulations, and grant criteria when pertinent to these uses of water and energy.	03/12/2015 - To SENATE Committee on RULES.
<b><u>SB 552</u></b> Wolk (D)	Disadvantaged Communities Drinking Water Standards		Requires the State Water Resources Control to develop a plan, including enforcement mechanisms, to ensure that disadvantaged communities have water systems that are in compliance with state and federal drinking water standards. Requires the plan to identify strategies to help bring disadvantaged communities into compliance with safe drinking water standards.	03/12/2015 - To SENATE Committee on ENVIRONMENTAL QUALITY.
<b><u>SB 553</u></b> Wolk (D)	Water Conservation		Requires the Department of General Services to identify each public property in the department's state property inventory where it is feasible for water consumption to be reduced and water efficiencies to be achieved through implementation of the relevant recommendations made in the model water efficient landscape ordinance and would require the department to implement the relevant recommendation where feasible.	03/12/2015 - To SENATE Committee on GOVERNMENTAL ORGANIZATION.
<b><u>SB 554</u></b> Wolk (D)	Water Commission Disqualifying Financial Interest		Removes a member of the California Water Commission from office if after trial a court finds that the commission member has knowingly participated in any commission decision in which the member has a disqualifying financial interest in the decision.	03/12/2015 - To SENATE Committee on ELECTIONS AND CONSTITUTIONAL AMENDMENTS.



**IRWD 2015 LEGISLATIVE MATRIX**  
Updated March 25, 2015

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
<b>SB 555</b> Wolk (D)	Water Suppliers		Require each urban retail water supplier to conduct a water loss audit as prescribed by rules adopted by the Department of Water Resources. Requires an urban retail water supplier to submit a validated audit report to the department, and post the report on its website in a timely manner after receipt.	03/12/2015 - To SENATE Committee on NATURAL RESOURCES AND WATER.
<b>SB 556</b> De Leon (D)	Claims Against Public Entities		Relates to a claim for personal injury against a public entity, including the state, the Regents of the University of California, a county, city, district, public authority, public agency, political subdivision or against an employee of a public entity. Requires the governing body of the local public entity, the Victim Compensation and Government Claims Board, the Judicial Council, or the Trustees of the California State University to grant leave to present the claim within a specified time period.	03/12/2015 - To SENATE Committee on RULES.
<b>SB 568</b> Fuller (R)	Groundwater Management		Relates to the Sustainable Groundwater Management Act. Authorizes the State Water Resources Control Board to designate a basin as a probationary basin if the state board makes a certain determination and authorizes the state board to develop an interim plan for the probationary basin.	03/12/2015 - To SENATE Committee on RULES.
<b>SB 615</b> Berryhill (R)	Groundwater Basin Adjudication		States the intent of the Legislature to enact legislation to streamline the process for the adjudication of groundwater rights.	03/12/2015 - To SENATE Committee on RULES.
<b>SB 625</b> Galgiani (D)	Water Pollution: Synthetic Plastic Microbeads		States the intent of the Legislature to enact legislation that would prevent water pollution from synthetic plastic microbeads.	03/12/2015 - To SENATE Committee on RULES.
<b>SB 687</b> Allen (D)	Renewable Gas Standard		Requires the State Air Resources Board to adopt a carbon-based renewable gas standard that requires all gas sellers to provide specified percentages of renewable gas meeting certain deliverability requirements, to retail end-use customers for use in the state that increases over specified compliance periods, and to issue an analysis of the lifecycle emissions of greenhouse gases and reductions for different biogas types and end uses.	03/19/2015 - To SENATE Committees on ENERGY, UTILITIES AND COMMUNICATIONS and ENVIRONMENTAL QUALITY.
<b>SB 704</b> Bates (R)	Public Officers and Employees		Amends the Political Reform Act of 1974. Establishes an additional situation in which an official is not financially interested in a contract as applied to an owner or partner of a firm serving on an advisory board or commission to the contracting agency if the owner or partner recuses himself or herself from all	03/19/2015 - To SENATE Committees on GOVERNANCE AND FINANCE and ELECTIONS AND CONSTITUTIONAL AMENDMENTS.

**IRWD 2015 LEGISLATIVE MATRIX**  
**Updated March 25, 2015**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
			participation in reviewing a project that results from a contract between the firm and the contracting agency.	
<b><u>SB 758</u></b> Block (D)	Atmospheric Rivers Research and Mitigation Fund		Establishes the Atmospheric Rivers Research and Mitigation Fund for the purposes of funding research, demonstration, and development of an atmospheric rivers program to mitigate the effects of climate change associated with atmospheric rivers.	03/19/2015 - To SENATE Committee on ENVIRONMENTAL QUALITY.
<b><u>SB 768</u></b> Wieckowski (D)	Water-Conserving Plumbing Fixtures		Makes technical, nonsubstantive changes to existing law that requires the replacement of plumbing fixtures that are not water conserving in residential and commercial real property built and available for use on or before a specified date.	03/19/2015 - To SENATE Committee on RULES.
<b><u>SB 772</u></b> Stone (R)	Bay Delta Conservation Plan: Judicial Review		States the intent of the Legislature to enact legislation establishing judicial review procedures for the Bay Delta Conservation Plan.	03/19/2015 - To SENATE Committee on RULES.
<b><u>SJR 1</u></b> Beall (D)	Social Security: Retirement Benefits: Public Employees		Requests the President and the Congress of the United States to pass legislation repealing the Government Pension Offset and the Windfall Elimination Provisions from the Social Security Act.	01/15/2015 - Re-referred to SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT.

**EXHIBIT “B”**

***Draft SWRCB Water Recycling Funding Program Guidelines  
Grant and Loan Limits & Funding Priorities***

<b>Planning Grants</b>	<i>Maximum Grant:</i> \$75,000 per planning study  <i>State Share:</i> 75%
<b>Construction Grant</b>	<i>Maximum Grant:</i> \$15,000,000 per project  <i>State Share:</i> 35%
<b>Construction Financing</b>	<i>Maximum Loan:</i> 100% of eligible construction costs (State Revolving Fund financing may be used for the local match).  <i>Rate:</i> 1/2 General Obligation Bond Rate  <i>Term:</i> 30 years
<b>Funding Distribution</b>	40% to projects in Los Angeles, Orange, Riverside, San Bernadino, San Diego and Ventura Counties  40% to projects in the remaining counties  20% to any county
<b>Eligibility Start Date</b>	Development of the Initial Funding Agreement
<b>Funding Priorities</b>	Projects that provide benefit to and/or are submitted by a disadvantaged community and/or abide by the State of California policy that every human being has the right to safe, clean, affordable, and accessible water.  Projects based on project type (in order of funding priority) <ol style="list-style-type: none"> <li>1) Direct Potable Reuse (when authorized by the State Water Board)</li> <li>2) Indirect Potable Reuse</li> <li>3) Recycled Water Distribution System <ol style="list-style-type: none"> <li>a. Component of a Regional Distribution System</li> <li>b. Local Distribution System</li> </ol> </li> <li>4) Groundwater Recharge Facilities (when associated with protection of groundwater quality)</li> <li>5) Recycled Water Treatment Facilities</li> </ol>

EXHIBIT "C"

SENATE BILL

No. 551

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Introduced by Senator Wolk

February 26, 2015

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An act to add Section 110 to the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

SB 551, as introduced, Wolk. State water policy: water and energy efficiency.

The California Constitution requires the reasonable and beneficial use of water. Existing law establishes various state water policies, including the policy that the water resources of the state be put to beneficial use to the fullest extent of which they are capable.

Existing law, the Warren-Alquist State Energy Resources Conservation Development Act, declares, among other things, that electrical and natural gas utilities should have as a principal goal of their resource planning and investment to minimize the cost to society of reliable energy services, improve the environment, and encourage the diversity of energy sources. The act also declares that those utilities should seek to exploit all practicable and cost-effective conservation and improvements in the efficiency of energy use and distribution that offer equivalent or better system of reliability.

This bill would declare the policy of the state that water use and water treatment shall be as energy efficient as is feasible and energy use and generation shall be as water efficient as is feasible. This bill would require all relevant state agencies to consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when pertinent to these uses of water and energy.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. The Legislature finds and declares all of the
- 2 following:
- 3 (a) Water and energy are vital to California’s economy.
- 4 (b) Water and energy resources in California are inextricably
- 5 connected.
- 6 (c) Energy generation can be water intensive.
- 7 (d) Transportation and treatment of water, treatment and disposal
- 8 of wastewater, and the energy used to heat and consume water
- 9 account for nearly 20 percent of the total electricity and 30 percent
- 10 of the nonpowerplant-related natural gas consumed in California.
- 11 (e) Targeted water efficiency measures, therefore, are likely to
- 12 result in significant energy savings and targeted energy efficiency
- 13 measures may result in water savings.
- 14 SEC. 2. Section 110 is added to the Water Code, to read:
- 15 110. (a) It is hereby declared to be the established policy of
- 16 the state that water use and water treatment shall be as energy
- 17 efficient as is feasible and energy use and generation shall be as
- 18 water efficient as is feasible.
- 19 (b) All relevant state agencies shall consider this state policy
- 20 when revising, adopting, or establishing policies, regulations, and
- 21 grant criteria when those policies, regulations, and criteria are
- 22 pertinent to the uses of water and energy described in this section.
- 23 (c) The implementation of this section shall not infringe on the
- 24 rights or responsibilities of any public water system or public
- 25 utility.

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# EXHIBIT "D"

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

**ASSEMBLY BILL**

**No. 349**

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**Introduced by Assembly Member Gonzalez**

February 17, 2015

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An act to amend Section 4735 of the Civil Code, relating to common interest developments.

LEGISLATIVE COUNSEL'S DIGEST

AB 349, as introduced, Gonzalez. Common interest developments: property use and maintenance.

The Davis-Stirling Common Interest Development Act governs the management and operation of common interest developments. Existing law provides that, unless otherwise provided in the common interest development declaration, the association is responsible for repairing, replacing, or maintaining the common area, other than exclusive use common area, and the owner of each separate interest is responsible for maintaining that separate interest and any exclusive use common area appurtenant to that interest. Existing law makes void and unenforceable any provision of the governing documents or architectural or landscaping guidelines or policies that prohibits use of low water-using plants, or prohibits or restricts compliance with water-efficient landscape ordinances or regulations on the use of water, as specified.

Existing law also prohibits an association, except an association that uses recycled water for landscape irrigation, from imposing a fine or assessment on separate interest owners for reducing or eliminating watering of vegetation or lawns during any period for which the Governor has declared a state of emergency or the local government has declared a local emergency due to drought.

This bill would also make void and unenforceable any provision of the governing documents or architectural or landscaping guidelines or policies that prohibits use of low water-using landscapes that require not more than a specified amount of water.

Vote: majority. Appropriation: no. Fiscal committee: no.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 4735 of the Civil Code is amended to  
2 read:  
3 4735. (a) Notwithstanding any other law, a provision of the  
4 governing documents or architectural or landscaping guidelines  
5 or policies shall be void and unenforceable if it does any of the  
6 following:  
7 (1) Prohibits, or includes conditions that have the effect of  
8 prohibiting, the use of low water-using plants as a group or as a  
9 replacement of existing turf.  
10 (2) *Prohibits, or includes conditions that have the effect of*  
11 *prohibiting, the use of low water-using landscapes that require*  
12 *an amount of water that is not more than the amount of water*  
13 *required by low water-using plants.*  
14 ~~(2)~~(3) Has the effect of prohibiting or restricting compliance  
15 with either of the following:  
16 (A) A water-efficient landscape ordinance adopted or in effect  
17 pursuant to subdivision (c) of Section 65595 of the Government  
18 Code.  
19 (B) Any regulation or restriction on the use of water adopted  
20 pursuant to Section 353 or 375 of the Water Code.  
21 (b) This section shall not prohibit an association from applying  
22 landscaping rules established in the governing documents, to the  
23 extent the rules fully conform with subdivision (a).  
24 (c) Notwithstanding any other provision of this part, an  
25 association, except an association that uses recycled water, as  
26 defined in Section 13050 of the Water Code, for landscaping  
27 irrigation, shall not impose a fine or assessment against an owner  
28 of a separate interest for reducing or eliminating the watering of  
29 vegetation or lawns during any period for which either of the  
30 following have occurred:

1 (1) The Governor has declared a state of emergency due to  
2 drought pursuant to subdivision (b) of Section 8558 of the  
3 Government Code.

4 (2) A local government has declared a local emergency due to  
5 drought pursuant to subdivision (c) of Section 8558 of the  
6 Government Code.

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EXHIBIT "E"

AMENDED IN ASSEMBLY MARCH 16, 2015

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

**ASSEMBLY BILL**

**No. 585**

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**Introduced by Assembly Member Melendez**

February 24, 2015

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An act to add and repeal Section 17053.37 of the Revenue and Taxation Code, relating to taxation, to take effect immediately, tax levy.

LEGISLATIVE COUNSEL'S DIGEST

AB 585, as amended, Melendez. Outdoor Water Efficiency Act of 2015: *personal* income tax credits: outdoor water efficiency.

The Personal Income Tax Law allows various credits against the taxes imposed by that law.

This bill, for taxable years beginning on or after January 1, 2015, and before January 1, 2021, or an earlier specified date, would allow a credit equal to 25% of the amount paid or incurred by a qualified taxpayer for *water-efficiency* improvements made to outdoor landscapes on *qualified* real property in this state, not to exceed \$2,500 per taxable year, as specified.

This bill would take effect immediately as a tax levy.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. The Legislature finds and declares all of the
- 2 following:
- 3 (a) The 2014 water year, ending on September 30, was the third
- 4 driest based on the 119-year long statewide precipitation record.

1 (b) Temperatures in the first nine months of 2014 were record  
2 breaking—4.1 degrees above the 20th century average across the  
3 state.

4 (c) Responding to these unprecedented dry and hot conditions,  
5 the United States Drought Monitor classified more than 80 percent  
6 of California in an “extreme” drought condition, with 58% of  
7 California in an “exceptional” drought, the highest condition.

8 (d) On January 17, 2014, the Governor called upon retail water  
9 providers throughout California to reduce residential per capita  
10 water use by 20% as compared to 2013 levels.

11 (e) Outdoor water use accounts for the highest percentage of  
12 regional water use.

13 (f) Landscape design, installation, maintenance, and  
14 management can and should be water efficient. The use of  
15 water-efficient landscapes contributes to the state’s efforts to  
16 increase the reliability of its water supplies.

17 (g) Municipalities and local water agencies are tasked with  
18 enforcing water conservation ordinances to eliminate water waste  
19 and restrict outdoor water use.

20 (h) It is the intent of the Legislature to provide an income tax  
21 credit for the purchase of outdoor water use efficiency  
22 improvements during the exceptional drought that California is  
23 facing.

24 SEC. 2. Section 17053.37 is added to the Revenue and Taxation  
25 Code, to read:

26 17053.37. (a) For each taxable year beginning on or after  
27 January 1, 2015, and before January 1, 2021, there shall be allowed  
28 as a credit against the “net tax,” as defined in Section 17039, an  
29 amount equal to 25 percent of the amount paid or incurred during  
30 the taxable year by a qualified taxpayer for water-efficiency  
31 improvements for outdoor landscapes on qualified real property  
32 in this state, not exceed two thousand five hundred dollars (\$2,500)  
33 per taxable year.

34 (b) For the purposes of this section, the following definitions  
35 shall apply:

36 (1) “Multifamily residential real property” means any real  
37 property that is improved with, or consisting of, a building  
38 containing more than one unit that is intended for human habitation,  
39 or any mixed residential-commercial buildings or portions thereof  
40 that are intended for human habitation. Multifamily residential

1 real property includes residential hotels but does not include hotels  
2 and motels that are not residential hotels.

3 (2) “Qualified real property” means either multifamily  
4 residential real property or single-family real property.

5 (3) “Qualified taxpayer” means the owner of any qualified real  
6 property.

7 (4) “Single-family residential real property” means any real  
8 property that is improved with, or consisting of, a building  
9 containing not more than one unit that is intended for human  
10 habitation.

11 ~~(5) “Water efficiency improvements” means any expenditure~~  
12 ~~paid or incurred by the qualified taxpayer to meet a locally adopted,~~  
13 ~~water-efficient landscape ordinance, regulation, or established~~  
14 ~~outdoor landscape efficiency program.~~

15 (5) “Water efficiency improvements” means expenditures paid  
16 or incurred by the qualified taxpayer to meet the requirements of  
17 any of the following:

18 (A) A local water-efficient landscape ordinance adopted or in  
19 effect pursuant to subdivision (c) of Section 65595 of the  
20 Government Code.

21 (B) A local landscape regulation or restriction on the use of  
22 water adopted pursuant to Section 353 or Section 375 of the Water  
23 Code.

24 (C) A water-efficient landscape program that is developed and  
25 implemented by a regional or local water agency for the specific  
26 purpose of reducing water use.

27 ~~(c) Section 42 41 does not apply to the credit allowed by this~~  
28 ~~section.~~

29 (d) This section shall remain in effect until December 1, 2021,  
30 ~~and as of that date is repealed,~~ unless the drought state of  
31 emergency declared by the Governor on January 17, 2014, is  
32 terminated before that date, in accordance with Section 8629 of  
33 the Government Code. In that event, this section shall remain  
34 operative *in effect* only until midnight on the first day of the first  
35 calendar quarter commencing more than 60 days after the date of  
36 the termination of the state of emergency, *or until December 1,*  
37 *2021, whichever is earlier;* and credits shall be allowed only for  
38 taxable years ~~beginning on or that portion of the taxable year~~  
39 ~~before the date this section becomes inoperative, and as of~~  
40 ~~December 1, 2021, is repealed.~~

- 1     *(e) This section is repealed on December 1, 2021.*
- 2     SEC. 3. This act provides for a tax levy within the meaning of
- 3     Article IV of the Constitution and shall go into immediate effect.

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EXHIBIT "F"

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

ASSEMBLY BILL

No. 603

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Introduced by Assembly Member Salas

February 24, 2015

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An act to add Sections 17053.98 and 23698 to the Revenue and Taxation Code, relating to taxation, to take effect immediately, tax levy.

LEGISLATIVE COUNSEL'S DIGEST

AB 603, as introduced, Salas. Income taxes: turf removal tax credit.

The Personal Income Tax Law and the Corporation Tax Law authorize various credits against the taxes imposed by those laws, including a credit for an increase in qualified full-time employees of a qualified employer.

This bill would, under both laws, for taxable years beginning on and after January 1, 2015, allow a credit to a taxpayer participating in a lawn replacement program, as defined, in an amount equal to \$2 per square foot of conventional lawn removed from the taxpayer's property. The bill would make findings and declarations in this regard.

This bill would take effect immediately as a tax levy.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. The Legislature finds and declares all of the
- 2 following:
- 3 (a) California has been experiencing more frequent and severe
- 4 droughts and is currently enduring its worst drought in 200 years.

1 (b) It is estimated that landscaping accounts for 60 percent of  
2 all water consumed by residential customers. California lawns  
3 cover more than 300,000 acres and consume more than 1.5 million  
4 acre-feet of water per year.

5 (c) Californians have already begun to minimize lawn watering  
6 by replacing conventional lawns with water-saving and  
7 drought-resistant plants or artificial grass. These landscaping  
8 alternatives are dependable tools for water conservation.

9 (d) In light of severe drought, California has an interest in  
10 encouraging consumers to decrease water usage. Establishing a  
11 state tax credit for the removal and replacement of conventional  
12 grass landscapes will incentivize water conservation.

13 SEC. 2. Section 17053.98 is added to the Revenue and Taxation  
14 Code, to read:

15 17053.98. (a) For each taxable year beginning on or after  
16 January 1, 2015, there shall be allowed a credit against the “net  
17 tax,” as defined by Section 17039, to a qualified taxpayer in an  
18 amount equal to two dollars (\$2) per square foot of conventional  
19 lawn removed from the qualified taxpayer’s property.

20 (b) For the purposes of this section, the following definitions  
21 shall apply:

22 (1) “Lawn replacement program” means a local water agency  
23 program that offers incentives to customers encouraging the  
24 replacement of conventional lawns with artificial lawns,  
25 drought-resistant plants, or other water-efficient landscaping.

26 (2) “Qualified taxpayer” means a person participating in a lawn  
27 replacement program offered by a local water agency.

28 (c) The credit is allowed by this section notwithstanding Section  
29 41.

30 SEC. 3. Section 23698 is added to the Revenue and Taxation  
31 Code, to read:

32 23698. (a) For each taxable year beginning on or after January  
33 1, 2015, there shall be allowed a credit against the “tax,” as defined  
34 by Section 23036, to a qualified taxpayer in an amount equal to  
35 two dollars (\$2) per square foot of conventional lawn removed  
36 from the qualified taxpayer’s property.

37 (b) For the purposes of this section, the following definitions  
38 shall apply:

39 (1) “Lawn replacement program” means a local water agency  
40 program that offers incentives to customers encouraging the

1 replacement of conventional lawns with artificial lawns,  
2 drought-resistant plants, or other water-efficient landscaping.

3 (2) "Qualified taxpayer" means a person participating in a lawn  
4 replacement program offered by a local water agency.

5 (c) The credit is allowed by this section notwithstanding Section  
6 41.

7 SEC. 4. This act provides for a tax levy within the meaning of  
8 Article IV of the Constitution and shall go into immediate effect.

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# EXHIBIT "G"

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

**ASSEMBLY BILL**

**No. 606**

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**Introduced by Assembly Member Levine**

February 24, 2015

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An act to add Article 6.5 (commencing with Section 14714) to Chapter 2 of Part 5.5 of Division 3 of Title 2 of the Government Code, relating to state property.

#### LEGISLATIVE COUNSEL'S DIGEST

AB 606, as introduced, Levine. Water conservation.

Existing law requires the Department of General Services to provide planning, acquisition, construction, and maintenance of state buildings and property. Existing law requires the department, in consultation with the State Energy Resources Conservation and Development Commission, and with the concurrence of the Department of Finance, to identify each public building in the department's state property inventory where it is feasible for that building to reduce energy consumption and achieve energy efficiencies, as specified, and make retrofits, as specified.

This bill would require the Department of General Services to identify each public property added to the department's state property inventory beginning January 1, 2015, where it is feasible for water consumption to be reduced and water efficiencies to be achieved through replacement of landscaping, irrigation timers, or spray sprinkler heads, or any combination thereof, and would require the appropriate replacements where feasible, except as specified.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.



*The people of the State of California do enact as follows:*

1 SECTION 1. Article 6.5 (commencing with Section 14714) is  
2 added to Chapter 2 of Part 5.5 of Division 3 of Title 2 of the  
3 Government Code, to read:

4  
5  
6

Article 6.5. State Property Water Use

7 14714. (a) The department shall identify each public property  
8 that is added to the department’s state property inventory beginning  
9 January 1, 2016, including, but not limited to, property managed  
10 by the Department of Transportation, where it is feasible for water  
11 consumption to be reduced and water efficiencies to be achieved  
12 through any or all of the following:

13 (1) Replacement of landscaping with drought tolerant plants  
14 with an emphasis on native plant species.

15 (2) Replacement of irrigation timers to permit efficient watering  
16 schedules.

17 (3) Replacement of spray sprinkler heads with bubblers, drip  
18 irrigation, and soaker hoses.

19 (b) The department shall make the appropriate replacements for  
20 each public property identified pursuant to subdivision (a) to reduce  
21 overall water consumption where feasible, except that work on  
22 public property of the California State University shall be subject  
23 to the consent of the California State University.

24 (c) For purposes of this section, “feasible” means capable of  
25 being accomplished in a successful manner within a reasonable  
26 period of time, taking into account life-cycle cost analyses, and  
27 environmental, social, and technological factors.

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April 13, 2015

Prepared by: K. Welch/M. Hoolihan

Submitted by: F. Sanchez/P. Weghorst

Approved by: Paul Cook

## ACTION CALENDAR

### WATER SUPPLY ASSESSMENTS FOR EL TORO AND WEST ALTON DEVELOPMENT PLANS

#### SUMMARY:

In February 2015, staff received two requests from the County of Orange to complete Water Supply Assessments (WSAs) for the El Toro and West Alton Development Plans located within the former Marine Corps Air Station (MCAS) El Toro Base. Staff has completed the WSAs for each of the proposed projects and recommends Board approval of the assessments.

#### BACKGROUND:

The County of Orange's proposed El Toro Development Plan (El Toro) and West Alton Development Plan (West Alton) projects are both located within the City of Irvine's Planning Area 51 on the former MCAS El Toro Base just outside of the City's Orange County Great Park (Great Park) boundary. In February 2015, staff received requests to prepare WSAs for each of the projects. A location map of the El Toro Development Plan and the West Alton Development Plan is attached as Exhibit "A".

A WSA for the Great Park was completed in June 2012 for the City of Irvine, but it did not include the El Toro or West Alton proposed projects. The El Toro project is comprised of 107 acres located on the south west edge of the former MCAS El Toro Base and includes 2,103 dwelling units and 2.1 million square feet of commercial use including one hotel. The West Alton project is comprised of 32 acres located northwest of the Great Park and includes 970 dwelling units.

Separate WSAs have been completed for the El Toro and West Alton proposed projects and are provided as Exhibit "B" and Exhibit "C" respectively. Project location maps are included on page 38 of each WSA. The WSAs for the proposed projects are based on information from the IRWD Water Resources Master Plan and the Sub Area Master Plan for Planning Area 51. Estimates show an increase in IRWD potable water demands for the El Toro project of 550 acre-feet per year (AFY) and 77AFY of non-potable demand. The West Alton project includes an estimated increase of 155 AFY of potable demand and 34 AFY of non-potable demand. Each WSA concludes that the total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water 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.

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 April 2, 2015.

RECOMMENDATION:

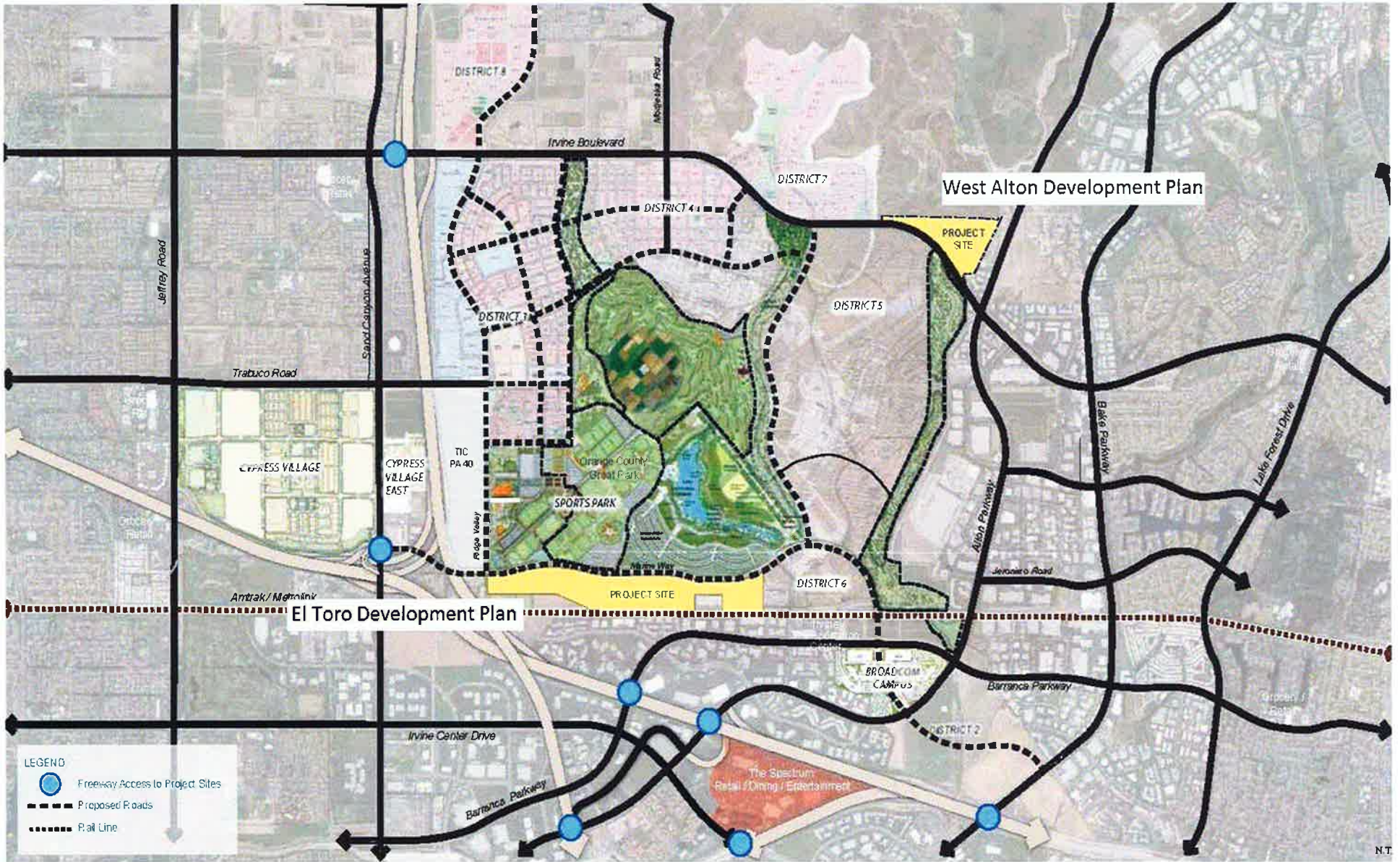
THAT THE BOARD APPROVE THE WATER SUPPLY ASSESSMENT FOR THE EL TORO DEVELOPMENT PLAN AND THE WATER SUPPLY ASSESSMENT FOR THE WEST ALTON DEVELOPMENT PLAN.

LIST OF EXHIBITS:

- Exhibit "A" – Location Map
- Exhibit "B" – Water Supply Assessment for El Toro Development Plan
- Exhibit "C" – Water Supply Assessment for West Alton Development Plan



# EXHIBIT "A"



**LEGEND**

- Freeway Access to Project Sites
- Proposed Roads
- Rail Line



el toro and west alton | local context



Prepared by:

August 2014

EXHIBIT "B"

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)  
County of Orange  
333 W. Santa Ana Blvd., Third Floor  
Santa Ana, CA 92701-4062

Project Information

Project Title: El Toro Development Plan (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 \_\_\_\_\_ the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within assessment and made the following determination regarding the above-described Project:

- The projected water demand for the Project  was  was not included in IRWD's most recently adopted urban water management plan.
- A sufficient water supply is available for the Project.  
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- A sufficient water supply is not available for the Project. [Plan for acquiring and developing sufficient supply attached. Water Code § 10911(a)]

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

## **Water Supply Assessment Information**

### **Purpose of Assessment**

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

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

### **Prior Water Supply Assessments**

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

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

### **Supporting Documentation**

IRWD prepares two planning documents to guide water supply decision-making. IRWD’s principal planning document is IRWD’s “Water Resources Master Plan” (“WRMP”). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan (“UWMP”), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. Therefore, IRWD primarily relies on its most recent WRMP. The UWMP is required to be updated in years ending with “five” and “zero,” and IRWD’s most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 6 of this assessment.



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

### Assessment Methodology

**Water use factors; dry-year increases.** IRWD employs water use factors to enable it to assign water demands to the various land use types and aggregate the demands. The water use factors are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other water conservation programs. The factors are derived from historical usage (billing data) and a detailed review of water use factors within the IRWD service areas conducted as a part of the WRMP. System losses at a rate of approximately 5% are built into the water use factors. Water demands also reflect normal hydrologic conditions (precipitation). Lower levels of precipitation and higher temperatures will result in higher water demands, due primarily to the need for additional water for irrigation. To reflect this, base (normal) WRMP water demands have been increased 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with IRWD's 2010 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, the assessment reviews demands and supplies through the year 2035, which is considered to represent build-out or "ultimate development".

**Assessment of demands.** Water demands are reviewed in this assessment for three development projections (to 2035):

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

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

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

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

IRWD is also evaluating the development of additional supplies that are not included in either *currently available* or *under-development* supplies for purposes of this assessment. As outlined in the WRMP, prudent water supply and financial planning dictates that development of supplies be phased 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.*** The three demand projections noted above (baseline, with-project and full build-out) are compared with supplies in the following ways:

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

#### Summary of Results of Demand-Supply Comparisons

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

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

It can be observed in the Figures that IRWD's *supplies* remain essentially constant between normal, single-dry and multiple-dry years. This result is due to the fact that groundwater and MWD imported water account for 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'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. (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 adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under the normal and both dry-year conditions through the year 2025. (Figures 1, 2 and 3.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of *under-development* supplies. (Figures 2 and 3.)
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2035. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under both dry-year conditions through the year 2035. (Figures 5, 6, 7 and 8). IRWD is proceeding with the implementation of *under-development* nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions.

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

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

- "Reserve" water supplies (excess of supplies over demands) will be available to serve as a buffer against inaccuracies in demand projections, future changes in land use, or alterations in supply availability.
- Conservative estimates of annual potable and nonpotable *imported* supplies have been made based on connected delivery capacity (by application of peaking factors as described below in Section 2, footnote 1); additional supplies are expected to be available from these sources, based on legal entitlements, historical uses and information provided by MWD. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of reserves in its regional supply assessments. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Although groundwater supply amounts shown in this assessment assume production levels within applicable basin production percentages described herein, production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies.

**Recent Actions on Delta Pumping.** The Sacramento/San Joaquin Delta (Delta) is a vulnerable component in both the State and Federal systems to convey water from northern portions of California to areas south of the Delta. Issues associated with the Delta have generally been known for years; however, most recently, the continuing decline in the number of endangered Delta smelt resulted in the filing of litigation challenging permits for the operation of the Delta pumping facilities. On August 31, 2007, a Federal court ordered interim protective measures for the endangered Delta smelt, including operational limits on Delta pumping, which 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.<sup>1</sup> 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 base 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 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.

<sup>1</sup> 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.

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.<sup>2</sup> In addition, IRWD has developed water banking projects in Kern County, California which may be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.<sup>3</sup> 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 2035 and shows the effect of current allocation scenarios in all of the five-year increments but MWD reports that it has made significant progress in other water resource categories such as transfers, groundwater storage and developing other local resources, and supplies will be available from these resources over the long-term.

**Climate Change.** The California Department of Water Resources ("DWR") released a report "Progress on Incorporating Climate Change into Management of California's Water Resources" (July 2006), considering the impacts of climate change on the State's water supply. DWR emphasizes that "the report represents an example of an impacts assessment based on four scenarios defining an expected range of potential climate change impacts." DWR's major goal is to extend the analysis for long-term water resource planning from "assessing impacts" to "assessing risk." The report presents directions for further work in incorporating climate change into the management of California's water resources. Emphasis is placed on associating probability estimates with potential climate change scenarios in order to provide policymakers with both ranges of impacts and the likelihoods associated with those impacts. DWR's report acknowledges "that all results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

<sup>2</sup> 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 "2010-2011 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 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.

<sup>3</sup> 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.

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, 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.

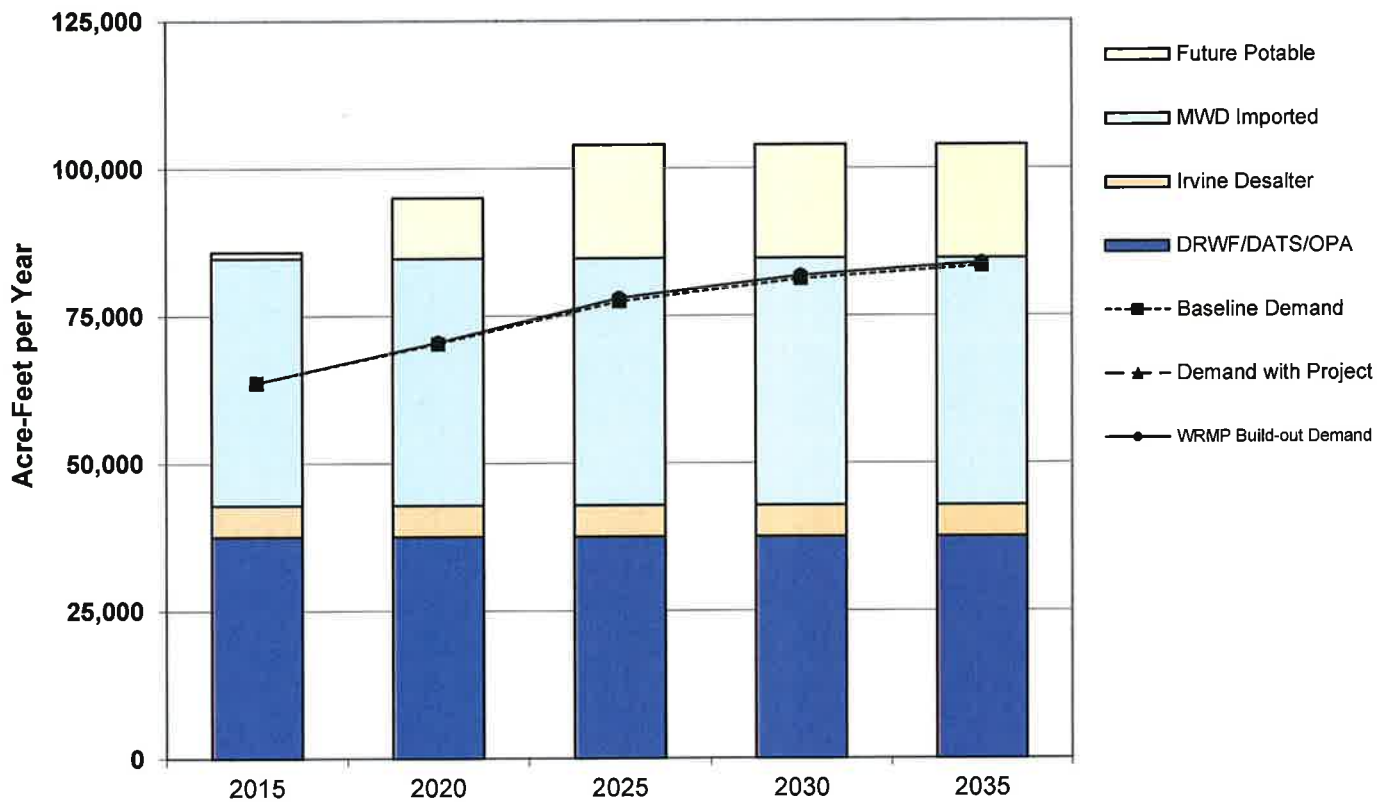
***Catastrophic Supply Interruption Planning.*** MWD has developed Emergency Storage Requirements (2010 RUWMP) to safeguard the region from catastrophic loss of water supply. MWD has made substantial investments in emergency storage and has based its planning on a 100% reduction in its supplies for a 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**

#### **1. Supply and demand comparison**

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

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

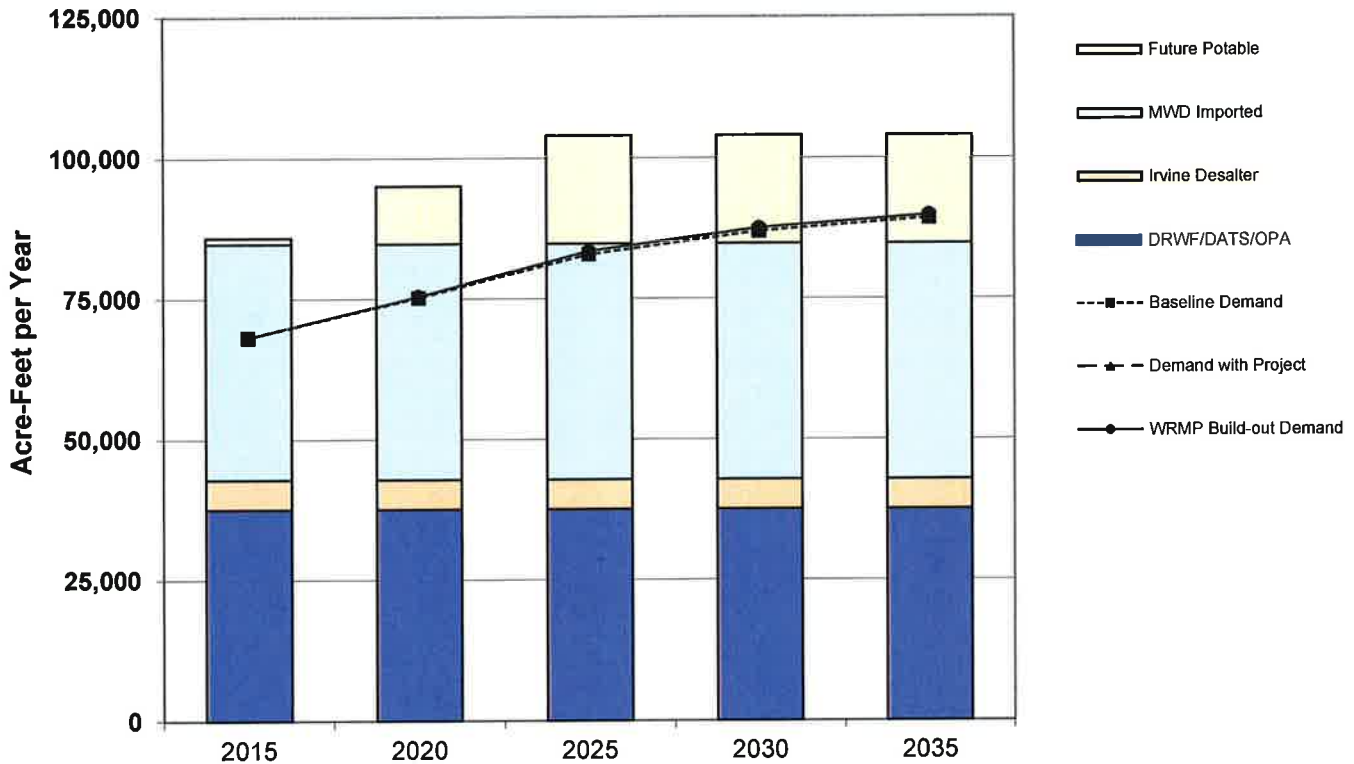


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	63,671	70,307	77,451	81,254	83,433
Demand with Project	63,671	70,527	78,001	81,804	83,983
WRMP Build-out Demand	63,671	70,527	78,001	81,804	83,983
Reserve Supply with Project	28,547	30,900	32,310	28,506	26,327

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**

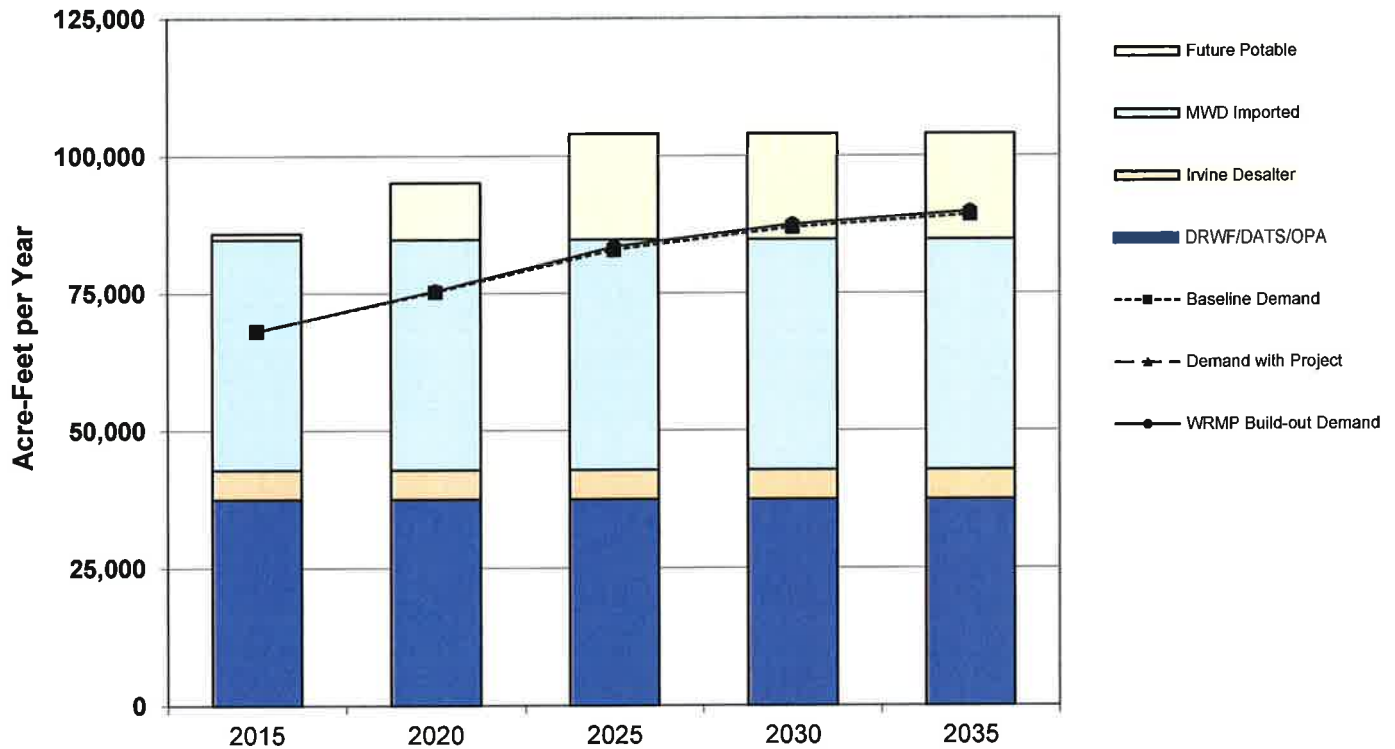


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	24,090	25,963	26,850	22,780	20,448

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**



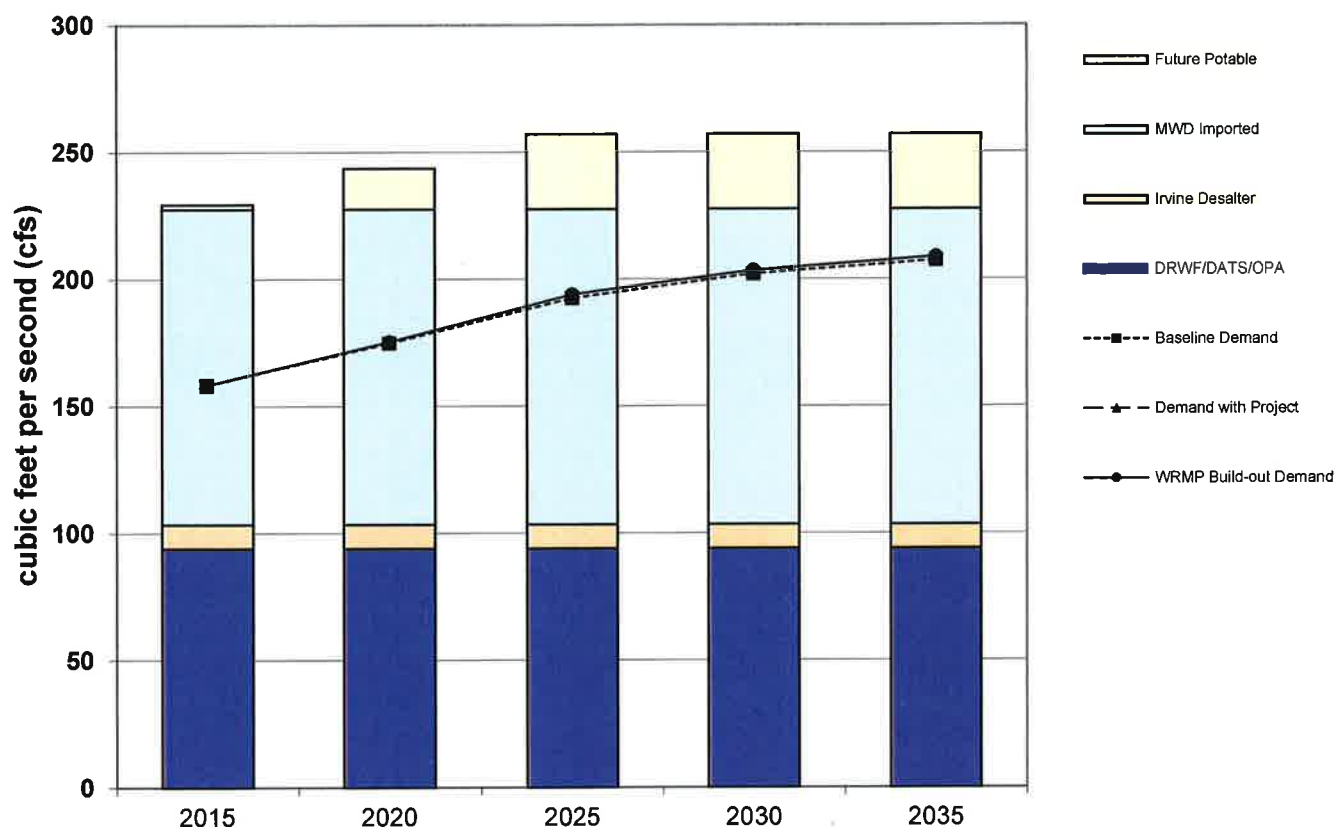
(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	24,090	25,963	26,850	22,780	20,448

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.

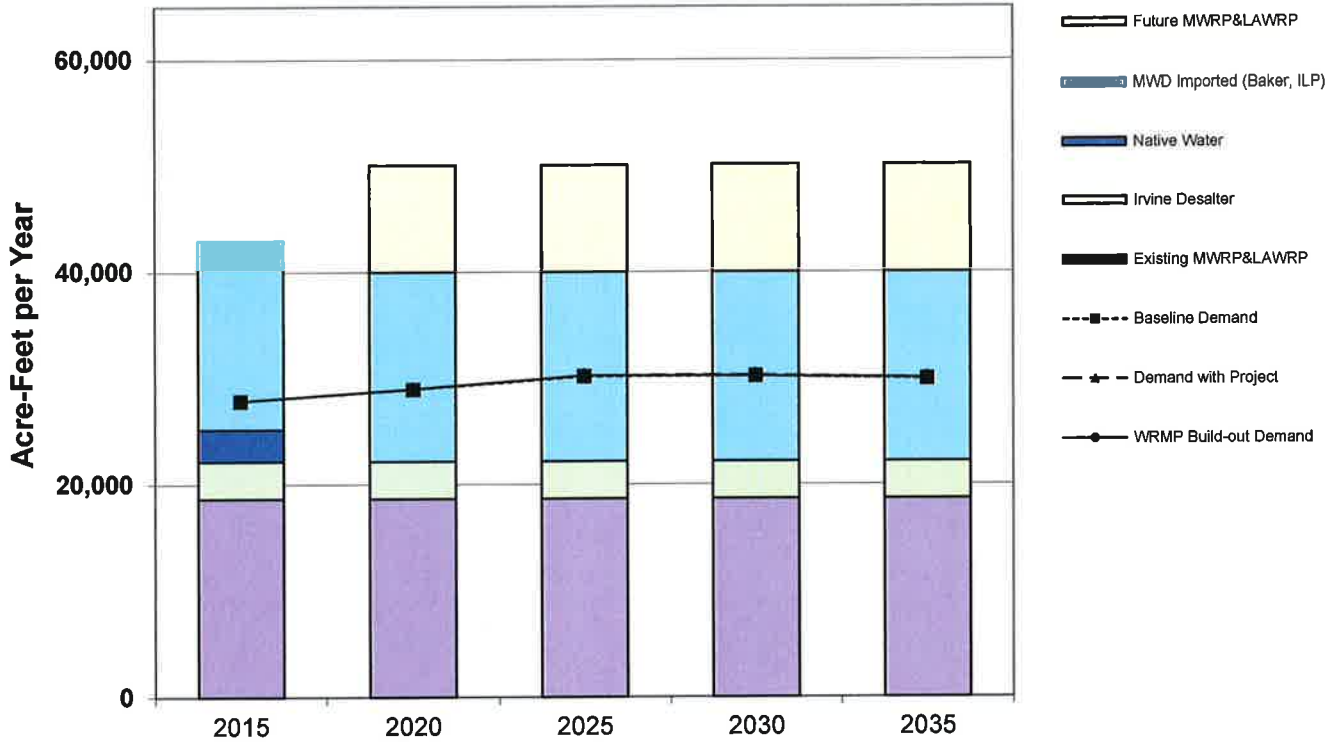


**Figure 4  
IRWD Maximum-Day Supply & Demand - Potable Water**



(in cfs)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
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
<b>Supplies Under Development</b>					
Future Potable	2.0	16.1	29.7	29.7	29.7
Maximum Supply Capability	240.4	254.5	268.1	268.1	268.1
Baseline Demand	158.3	174.8	192.6	202.0	207.4
Demand with Project	158.3	175.3	193.9	203.4	208.8
WRMP Build-out Demand	158.3	175.3	193.9	203.4	208.8
Reserve Supply with Project	82.1	79.2	74.2	64.7	59.3

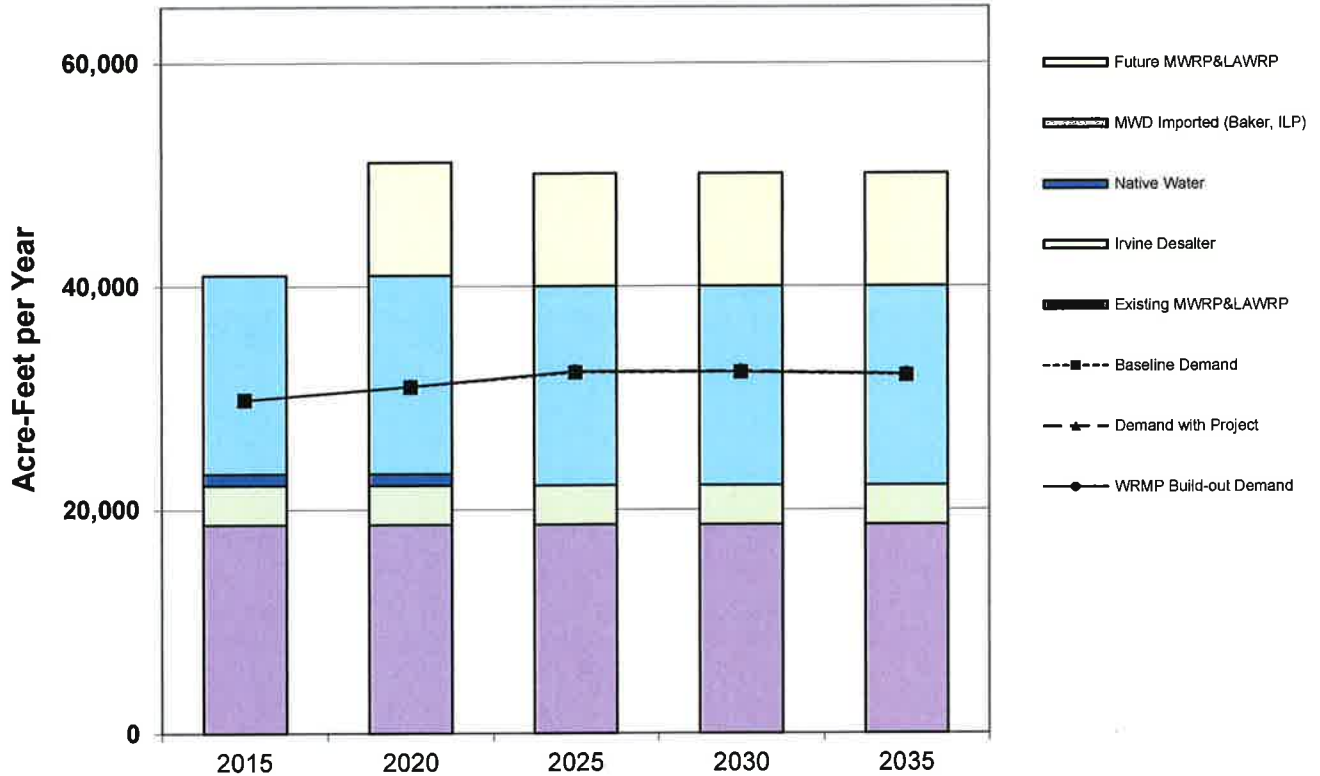
**Figure 5  
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-	-
<b>Supplies Under Development</b>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	50,097	50,097	50,097	50,097
Baseline Demand	27,859	28,958	30,152	30,189	29,928
Demand with Project	27,859	28,989	30,229	30,267	30,005
WRMP Build-out Demand	27,859	28,989	30,229	30,189	30,005
Reserve Supply with Project	15,138	21,108	19,868	19,907	20,092

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

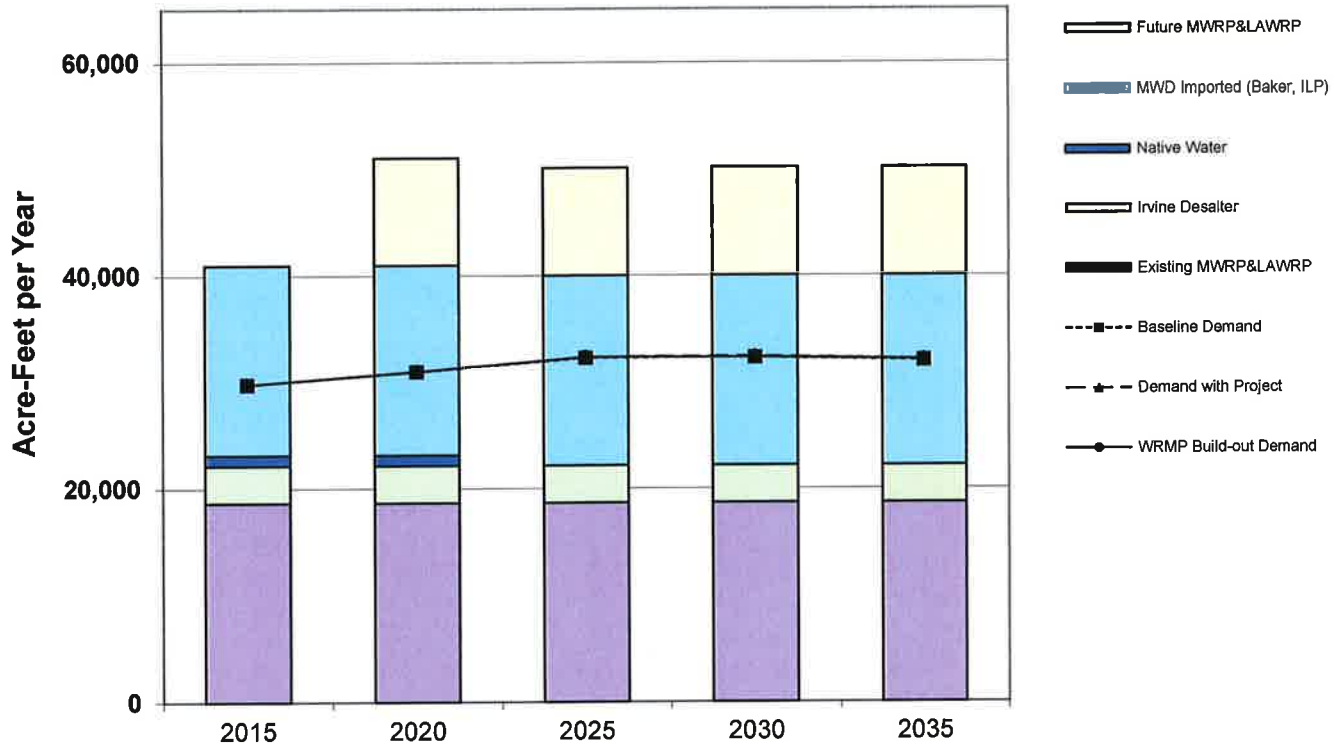
**Figure 6**  
**IRWD Single Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-
<b>Supplies Under Development</b>					
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	29,809	30,985	32,262	32,303	32,023
Demand with Project	29,809	31,018	32,345	32,386	32,106
WRMP Build-out Demand	29,809	31,018	32,345	32,303	32,106
Reserve Supply with Project	11,187	20,079	17,752	17,711	17,991

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

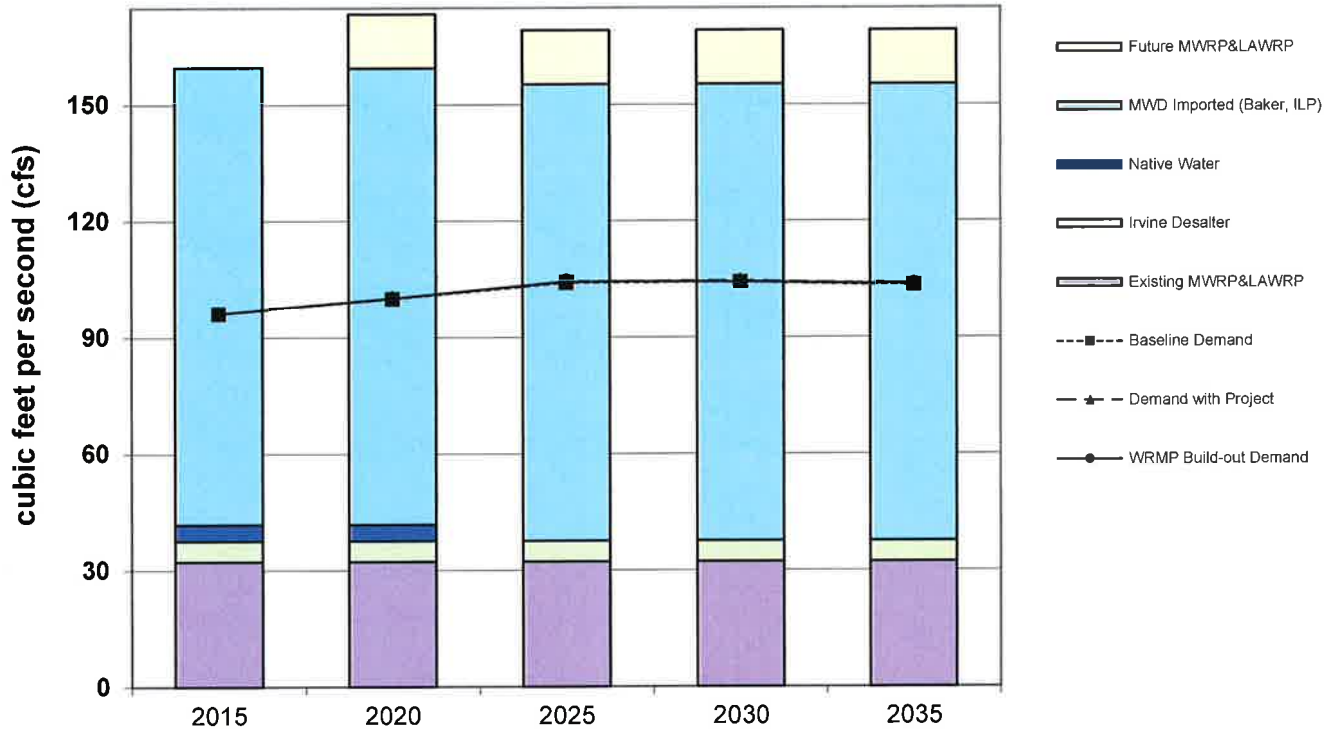
**Figure 7  
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-
<b>Supplies Under Development</b>					
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	29,809	30,985	32,262	32,303	32,023
Demand with Project	29,809	31,018	32,345	32,386	32,106
WRMP Build-out Demand	29,809	31,018	32,345	32,303	32,106
Reserve Supply with Project	11,187	20,079	17,752	17,711	17,991

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

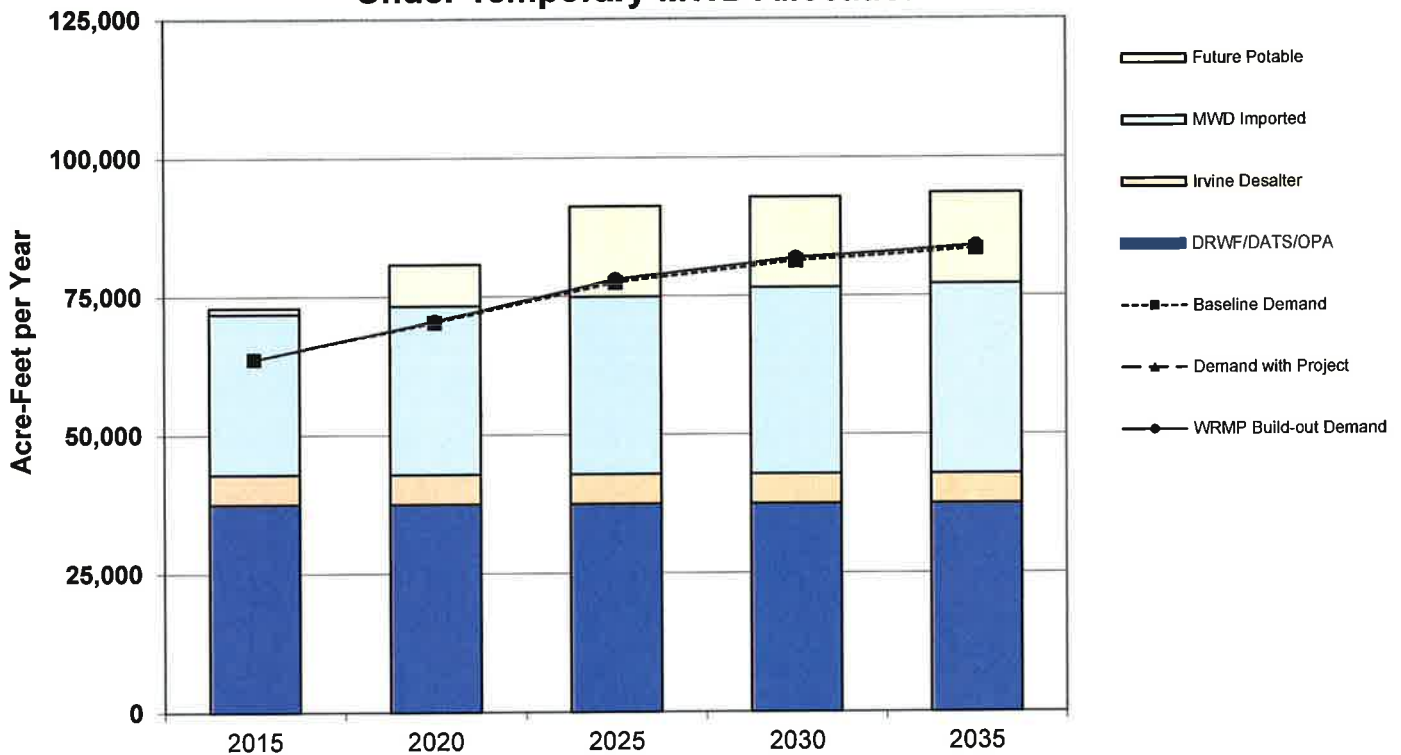
**Figure 8  
IRWD Maximum-Dry Supply & Demand - Nonpotable Water**



(in cfs)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-
<b>Supplies Under Development</b>					
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	96.2	100.0	104.1	104.2	103.3
Demand with Project	96.2	100.1	104.4	104.5	103.6
WRMP Build-out Demand	96.2	100.1	104.4	104.2	103.6
Reserve Supply with Project	63.3	73.3	64.8	65.0	65.6

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

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

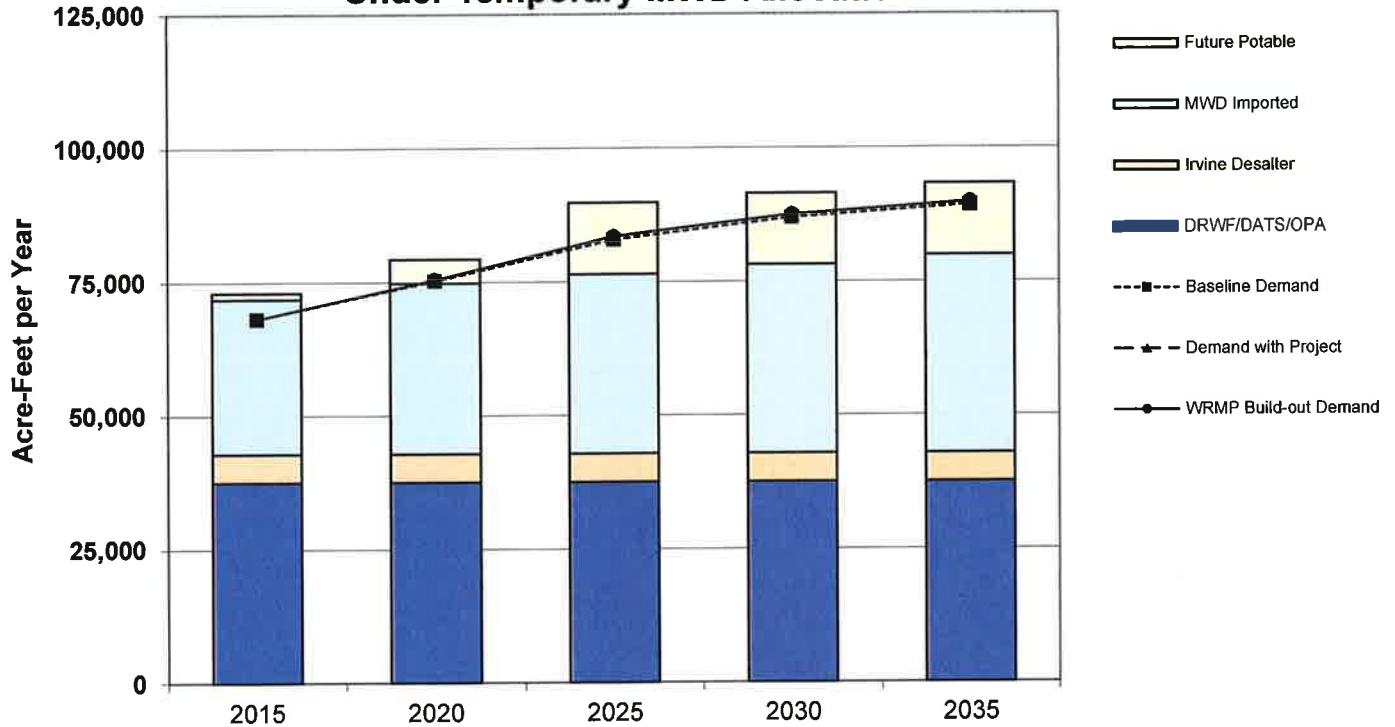


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	7,469	16,352	16,352	16,352
Maximum Supply Capability	79,288	87,119	97,557	99,191	99,868
Baseline Demand	63,671	70,307	77,451	81,254	83,433
Demand with Project	63,671	70,527	78,001	81,804	83,983
WRMP Build-out Demand	63,671	70,527	78,001	81,804	83,983
Reserve Supply with Project	15,617	16,592	19,556	17,387	15,884

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\***



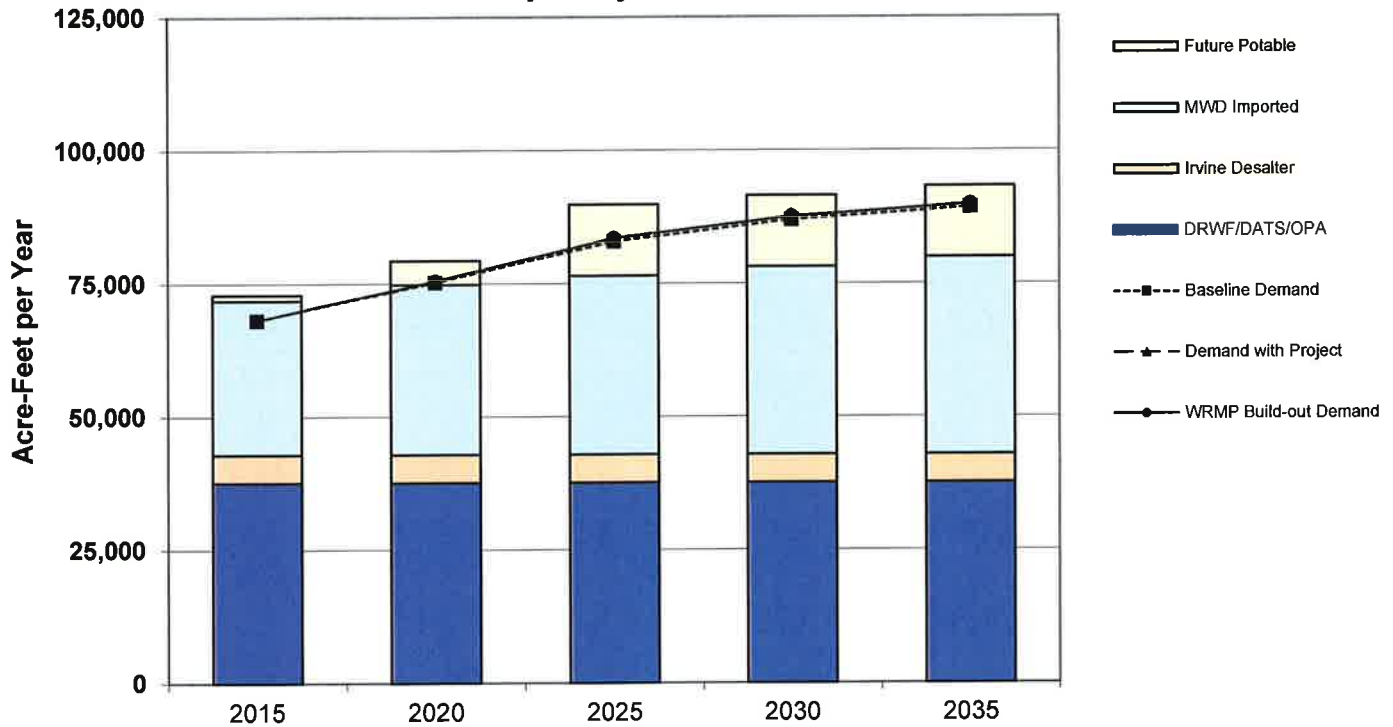
(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	11,161	10,179	12,665	10,276	9,708

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)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
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
<b>Supplies Under Development</b>					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
<b>Demands</b>					
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	11,161	10,179	12,665	10,276	9,708

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)
<b>Current Supplies</b>			
<b>Potable - Imported</b>			
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
<b>Potable - Groundwater</b>			
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
<b>Nonpotable - Reclaimed Water</b>			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
			23,315
<b>Nonpotable - Imported</b>			
Baker Aqueduct	52.7	12,221	5
Irvine Lake Pipeline	65.0	9,000	6
			21,221
<b>Nonpotable - Groundwater</b>			
Irvine Desalter-Nonpotable	5.4	3,514	7
			3,514
<b>Nonpotable Native</b>			
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
<b>Supplies Under Development</b>			
<b>Potable Supplies</b>			
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
<b>Nonpotable Supplies: MWRP&amp;LAWRP Reclaimed</b>			
	20.0	14,450	9
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 4, 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 LAW RP 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 8, page 25).

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 & LAW RP 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))

**(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.<sup>4 5</sup>

• **POTABLE SUPPLY - IMPORTED**<sup>6</sup>

***Potable imported water service connections (currently available).***

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

***Allen-McColloch Pipeline ("AMP") (currently available).***

(ii) Agreement For Sale and Purchase of Allen-McColloch Pipeline, dated as of July 1, 1994 (Metropolitan Water District Agreement No. 4623) ("AMP Sale Agreement"). Under the AMP Sale Agreement, MWD purchased the Allen-McColloch Pipeline (formerly known as the "Diemer Intertie") from MWDOC, the MWDOC Water Facilities Corporation and certain agencies, including IRWD and Los Alisos Water District ("LAWD"),<sup>7</sup> 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

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

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

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

<sup>7</sup> 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.

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 from a portion of the proceeds IRWD received from the sale of the AMP.

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

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

(v) Agreement For Joint Exercise of Powers For Construction, Operation and Maintenance of East Orange County Feeder No. 2, dated July 11, 1961, as amended on July 25, 1962 and April 26, 1965; Agreement Re Capacity Rights In Proposed Water Line, dated September 11, 1961 ("IRWD MWDOC Assignment Agreement"); Agreement Regarding Capacity Rights In the East Orange County Feeder No. 2, dated August 28, 2000 ("IRWD Coastal Assignment Agreement"). East Orange County Feeder No. 2 ("EOCF#2"), a feeder linking Orange County

with MWD's feeder system, was constructed pursuant to a joint powers agreement among MWDOC (then called Orange County Municipal Water District), MWD, Coastal Municipal Water District ("Coastal"), Anaheim and Santa Ana. A portion of IRWD's territory is within MWDOC and the remainder is within the former Coastal (which was consolidated with MWDOC in 2001). Under the IRWD MWDOC Assignment Agreement, MWDOC assigned 41 cfs of capacity to IRWD in the reaches of EOCF#2 upstream of the point known as Coastal Junction (reaches 1 through 3), and 27 cfs in reach 4, downstream of Coastal Junction. Similarly, under the IRWD Coastal Assignment Agreement, prior to Coastal's consolidation with MWDOC, Coastal assigned to IRWD 0.4 cfs of capacity in reaches 1 through 3 and 0.6 cfs in reach 4 of EOCF#2. Delivery of water through EOCF#2 is subject to the rules and regulations of MWD and MWDOC, and is further subject to application and agreement of IRWD respecting turnouts.

***Orange County Feeder (currently available)***

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

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

***Baker Water Treatment Plant (under development)***

IRWD has begun construction of the Baker Water Treatment Plant project (the Baker WTP) in partnership with El Toro Water District, Moulton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP 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.<sup>8</sup>

• 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. OCWD’s analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006).

(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 (DRWF) / 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

<sup>8</sup> The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD’s existing Baker Pipeline capacity (see 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.

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

***Irvine Subbasin / Irvine Desalter (currently available)***

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

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

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

***Orange Park Acres (currently available)***

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin.

***Wells 21 and 22 (currently available)***

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

***Irvine Wells (under development)***

(vi) IRWD is pursuing the installation of production facilities in the west Irvine, Tustin Legacy and Tustin Ranch portions of the Basin. These groundwater supplies are considered to be under development; however, four wells have been drilled and have previously produced groundwater, three wells have been drilled but have not been used as production wells to date, 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. Appropriate environmental review would be conducted for each facility. 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 (current available)***

IRWD is completing construction of the Michelson Water Reclamation Plant Phase 2 Capacity Expansion Project later in 2015. With this expansion, IRWD will increase its capacity on the existing MWRP site to produce sufficient reclaimed water to meet the projected demand in the year 2035. Additional

reclamation capacity will augment local nonpotable supplies and improve reliability.

• NONPOTABLE SUPPLY - IMPORTED<sup>9</sup>

***Baker Pipeline (currently available)***

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 (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. 9005 and Permit No. 5202. The foregoing permit and licenses, jointly held by IRWD (as successor to The Irvine Company (TIC) and Carpenter Irrigation District (CID)) and Serrano Water District (SWD), secure appropriative rights to the flows of Santiago Creek. Under Licenses 2347 and 2348, IRWD and SWD have the right to diversion by storage at Santiago Dam (Irvine Lake) and a submerged dam, of a total of 25,000 AFY. Under Permit No. 19306, IRWD and SWD have the right to diversion by storage of an additional 3,000 AFY by flashboards at Santiago Dam (Irvine Lake). (Rights under Permit No. 19306 may be junior to an OCWD permit to divert up to 35,000 AFY of Santiago Creek flows to spreading pits downstream of Santiago Dam.) The combined total of native water that may be diverted to storage under these licenses and permit is 28,000 AFY. A 1996 amendment to

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



License Nos. 2347, 2348 and 2349 [replaced by Permit No. 19306 in 1984] limits the withdrawal of water from the Lake to 15,483 AFY under the licenses. This limitation specifically references the licenses and doesn't reference water stored pursuant to other legal entitlements. The use and allocation of the native water is governed by the agreements described in the next paragraph.

**(ii)** Agreement, dated February 6, 1928 ("1928 Agreement"); Agreement, dated May 15, 1956, as amended November 12, 1973 ("1956 Agreement"); Agreement, dated as of December 21, 1970 ("1970 Agreement"); Agreement Between Irvine Ranch Water District and The Irvine Company Relative to Irvine Lake and the Acquisition of Water Rights In and To Santiago Creek, As Well As Additional Storage Capacity in Irvine Lake, dated as of May 31, 1974 ("1974 Agreement"). The 1928 Agreement was entered into among SWD, CID and TIC, providing for the use and allocation of native water in Irvine Lake. Through the 1970 Agreement and the 1974 Agreement, IRWD acquired the interests of CID and TIC, leaving IRWD and SWD as the two co-owners. TIC retains certain reserved rights. The 1928 Agreement divides the stored native water by a formula which allocates to IRWD one-half of the first 1,000 AF, plus increments that generally yield three-fourths of the amount over 1,000 AF.<sup>10</sup> 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 (4,000 AFY in normal years and 1,000 AFY in single and multiple-dry years) is shown in currently available supplies, based on averaging of historical data. However, IRWD's ability to supplement Irvine Lake storage with its imported untreated water supplies, described herein, offsets the uncertainty associated with the native water supply.

#### •NONPOTABLE SUPPLY - GROUNDWATER

##### ***Irvine Subbasin / Irvine Desalter (currently available)***

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

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

<sup>10</sup> 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. 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.

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

All necessary delivery facilities currently exist for the use of the *currently available and under-development* supplies assessed herein, with the exception of future groundwater wells, 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 sub-regional and local distribution systems.

With respect to future groundwater wells (PR Nos. 11405, 11473), the MWRP Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No. 11218), IRWD adopted its fiscal year 2014-15 capital budget on June 9, 2014 (Resolution No. 2014-29), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) For these facilities, as well as unbuilt IRWD sub-regional conveyance facilities, the sources of funding are previously authorized general obligation bonds, revenue-supported certificates of participation and/or capital funds held by IRWD Improvement Districts. IRWD has maintained a successful program for the issuance of general obligation bonds and certificates of participation on favorable borrowing terms, and IRWD has received AAA public bond ratings. IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. Certificates of participation do not require voter approval. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development.

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

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

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

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

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

See response to preceding item (3).

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

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

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

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

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

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

See Irvine Ranch Water District 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 6-33<sup>11</sup>. 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 332,000 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.

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.

<sup>11</sup> OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

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

OCWD's efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD's management of overdraft to maximize 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 shows the amounts pumped, by groundwater source:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD <sup>12</sup>
2014	42,424	10,995	0	376
2013	38,617	8,629	0	282
2012	37,059	7,059	0	0
2011	34,275	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16

<sup>12</sup> 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.

2007	37,864	5,407	0	6
2006	37,046	2,825	0	268
2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598
2002	25,855	2,533	5,075	744

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

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

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

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

(In AFY)

Year (ending 6/30)	DRWF <sup>13</sup>	Future GW <sup>14</sup>	IDP (Potable)	IDP (Nonpotable)
2015	43,300	0	5,640	3,898
2020	43,300	3,469	5,640	3,898
2025	43,300	12,352	5,640	3,898
2035	43,300	12,352	5,640	3,898

(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:

<sup>13</sup> 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 for the OPA well and 6,300 for Wells 21&22.

<sup>14</sup> Under development.

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

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. With the implementation of OCWD's preferred projects, the Basin yield in the year 2025 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage ("BPP") that OCWD sets based on these factors.<sup>15</sup> 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 has completed its replenishment supply project, 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 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.

***Sustainable Groundwater Management Act.*** Pursuant to the Sustainable Groundwater Management Act (SGMA), the DWR has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. By January 31, 2017, local groundwater producers must establish or designate an entity (referred to as a groundwater sustainability agency, or "GSA"), subject to DWR's approval, to manage each high and medium priority groundwater basin. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the GSA for such basin.

<sup>15</sup> OCWD has adopted a basin production percentage of 72% for 2014-15. 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.

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

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

**6. References**

*Water Resources Master Plan*, Irvine Ranch Water District, March, 2002 (supplemented January, 2004)

*2010 Urban Water Management Plan*, Irvine Ranch Water District, June, 2011

*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

*2008-2009 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*2009-2010 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*2012-2013 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*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*

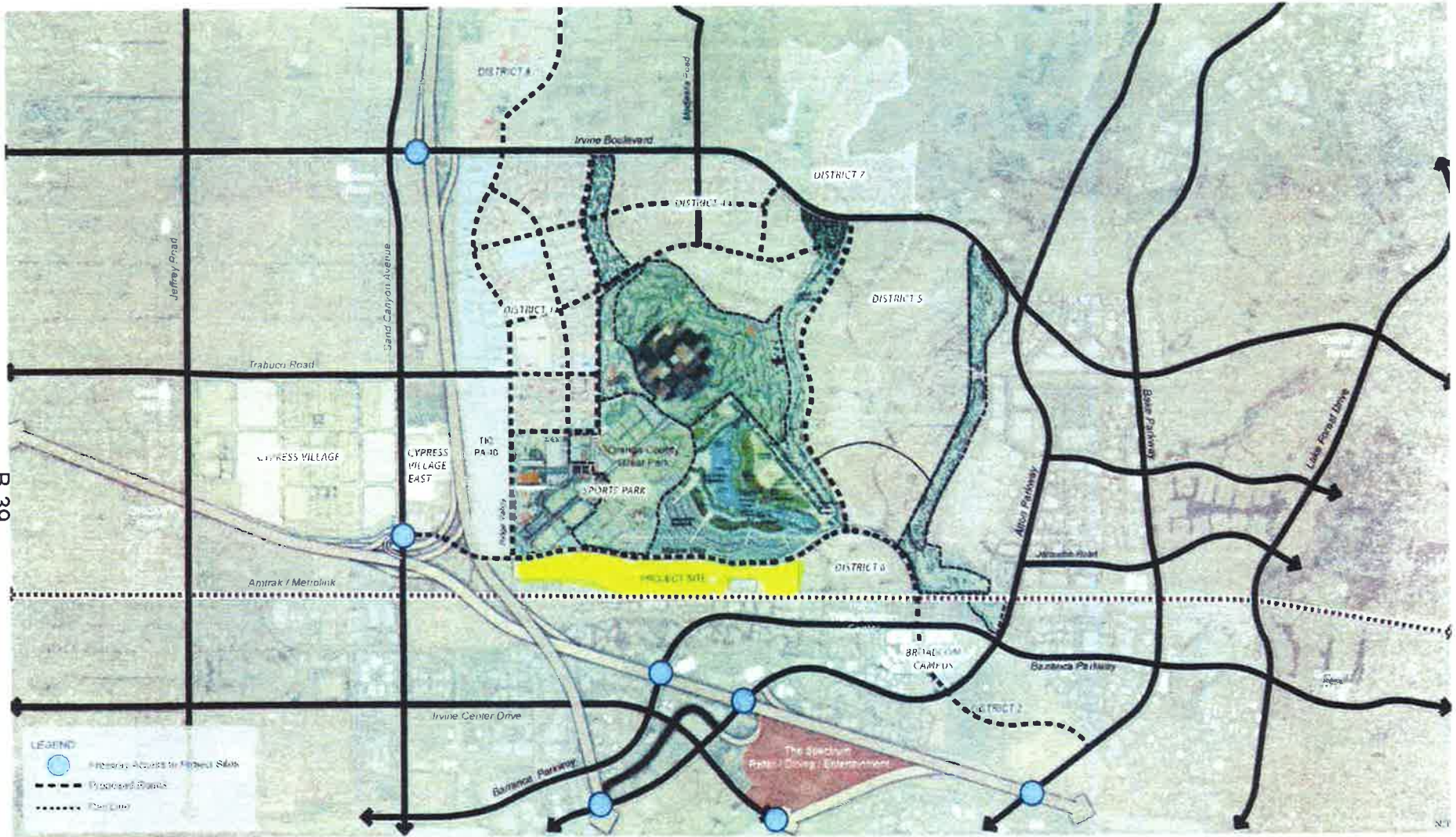
*2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010*

*Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010*

**Exhibit A**

Depiction of Project Area

B-39



**Exhibit B**  
Uses Included in Project



County of Orange  
California

James Campbell  
Land Development Manager

January 22, 2015

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

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

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

**Proposed Project Information**

Project Title: El Toro Development Plan

Location of project: On the former USMC El Toro Marine Base located southeast of the intersection of Marine Way and future Ridge Valley Drive, northeast of the SCRRA railroad right of way and southwest of the future extension of Marine Way and in the City of Irvine General Plan Planning Area 51.

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

Type of Development:

- Residential: No. of dwelling units: 2103
- Shopping center or business: No. of employees TBD Sq. ft. of floor space 220,000
- Commercial office: No. of employees TBD Sq. ft. of floor space 1,876,000
- Hotel or motel: No. of rooms 242
- 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: 107.2 Acres

Acreage devoted to landscape:

Greenbelt 7.0 acres golf course None parks 4.0 Acres  
Agriculture None other landscaped areas 26.0 Acres

Number of schools None Number of public facilities None

County Executive Office  
333 W. Santa Ana Blvd.  
Third Floor  
Santa Ana, California  
92701-4062

Tel: (714) 227-1011  
Web: www.ocgov.com



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

Low flow fixtures and a water efficient landscape irrigation system with drought tolerant landscape design

What is the current land use of the area subject to a land use change under the project?

Institutional

Is the project included in the existing General Plan? No If no, describe the existing General Plan Designation Institutional

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

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

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

Date: Jan. 24, 2015

By: Kellie Wilson  
Irvine Ranch Water District

REQUEST COMPLETE:

Date: Jan. 28, 2015

By: Kellie Wilson  
Irvine Ranch Water District

EXHIBIT "C"

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)  
County of Orange  
333 W. Santa Ana Blvd., Third Floor  
Santa Ana, CA 92701-4062

Project Information

Project Title: West Alton Development Plan (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 \_\_\_\_\_ the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within assessment and made the following determination regarding the above-described Project:

- The projected water demand for the Project  was  was not included in IRWD's most recently adopted urban water management plan.
- A sufficient water supply is available for the Project.  
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- A sufficient water supply is not available for the Project. [Plan for acquiring and developing sufficient supply attached. Water Code § 10911(a)]

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

Signature

Date

Title

## **Water Supply Assessment Information**

### Purpose of Assessment

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

Water Code Section 10910 (the "Assessment Law") contains the requirements for the information to be set forth in the assessment.

### Prior Water Supply Assessments

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

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

### Supporting Documentation

IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. Therefore, IRWD primarily relies on its most recent WRMP. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 6 of this assessment.



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

### Assessment Methodology

**Water use factors; dry-year increases.** IRWD employs water use factors to enable it to assign water demands to the various land use types and aggregate the demands. The water use factors are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other water conservation programs. The factors are derived from historical usage (billing data) and a detailed review of water use factors within the IRWD service areas conducted as a part of the WRMP. System losses at a rate of approximately 5% are built into the water use factors. Water demands also reflect normal hydrologic conditions (precipitation). Lower levels of precipitation and higher temperatures will result in higher water demands, due primarily to the need for additional water for irrigation. To reflect this, base (normal) WRMP water demands have been increased 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with IRWD's 2010 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, the assessment reviews demands and supplies through the year 2035, which is considered to represent build-out or "ultimate development".

**Assessment of demands.** Water demands are reviewed in this assessment for three development projections (to 2035):

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

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

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

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

IRWD is also evaluating the development of additional supplies that are not included in either *currently available* or *under-development* supplies for purposes of this assessment. As outlined in the WRMP, prudent water supply and financial planning dictates that development of supplies be phased 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.** The three demand projections noted above (baseline, with-project and full build-out) are compared with supplies in the following ways:

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

#### Summary of Results of Demand-Supply Comparisons

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

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

It can be observed in the Figures that IRWD's *supplies* remain essentially constant between normal, single-dry and multiple-dry years. This result is due to the fact that groundwater and MWD imported water account for 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'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. (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 adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under the normal and both dry-year conditions through the year 2025. (Figures 1, 2 and 3.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of *under-development* supplies. (Figures 2 and 3.)
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2035. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under both dry-year conditions through the year 2035. (Figures 5, 6, 7 and 8). IRWD is proceeding with the implementation of *under-development* nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions.

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

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

- "Reserve" water supplies (excess of supplies over demands) will be available to serve as a buffer against inaccuracies in demand projections, future changes in land use, or alterations in supply availability.
- Conservative estimates of annual potable and nonpotable *imported* supplies have been made based on connected delivery capacity (by application of peaking factors as described below in Section 2, footnote 1); additional supplies are expected to be available from these sources, based on legal entitlements, historical uses and information provided by MWD. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of reserves in its regional supply assessments. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Although groundwater supply amounts shown in this assessment assume production levels within applicable basin production percentages described herein, production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies.

**Recent Actions on Delta Pumping.** The Sacramento/San Joaquin Delta (Delta) is a vulnerable component in both the State and Federal systems to convey water from northern portions of California to areas south of the Delta. Issues associated with the Delta have generally been known for years; however, most recently, the continuing decline in the number of endangered Delta smelt resulted in the filing of litigation challenging permits for the operation of the Delta pumping facilities. On August 31, 2007, a Federal court ordered interim protective measures for the endangered Delta smelt, including operational limits on Delta pumping, which 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.<sup>1</sup> 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 base 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 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.

<sup>1</sup> 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.

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.<sup>2</sup> In addition, IRWD has developed water banking projects in Kern County, California which may be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.<sup>3</sup> 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 2035 and shows the effect of current allocation scenarios in all of the five-year increments but MWD reports that it has made significant progress in other water resource categories such as transfers, groundwater storage and developing other local resources, and supplies will be available from these resources over the long-term.

**Climate Change.** The California Department of Water Resources ("DWR") released a report "Progress on Incorporating Climate Change into Management of California's Water Resources" (July 2006), considering the impacts of climate change on the State's water supply. DWR emphasizes that "the report represents an example of an impacts assessment based on four scenarios defining an expected range of potential climate change impacts." DWR's major goal is to extend the analysis for long-term water resource planning from "assessing impacts" to "assessing risk." The report presents directions for further work in incorporating climate change into the management of California's water resources. Emphasis is placed on associating probability estimates with potential climate change scenarios in order to provide policymakers with both ranges of impacts and the likelihoods associated with those impacts. DWR's report acknowledges "that all results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

<sup>2</sup> 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 "2010-2011 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 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.

<sup>3</sup> 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.

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, 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.

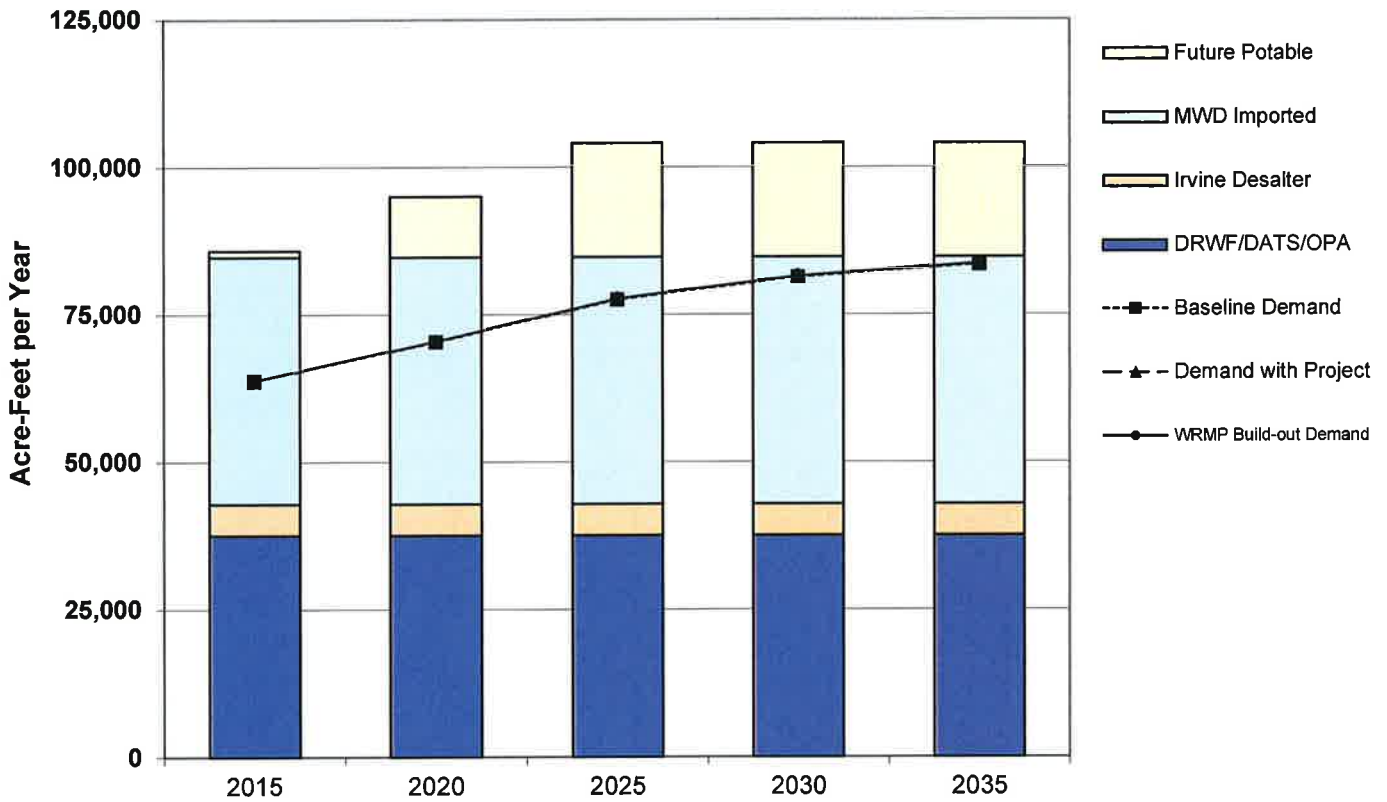
**Catastrophic Supply Interruption Planning.** MWD has developed Emergency Storage Requirements (2010 RUWMP) to safeguard the region from catastrophic loss of water supply. MWD has made substantial investments in emergency storage and has based its planning on a 100% reduction in its supplies for a period 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**

#### **1. Supply and demand comparison**

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

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



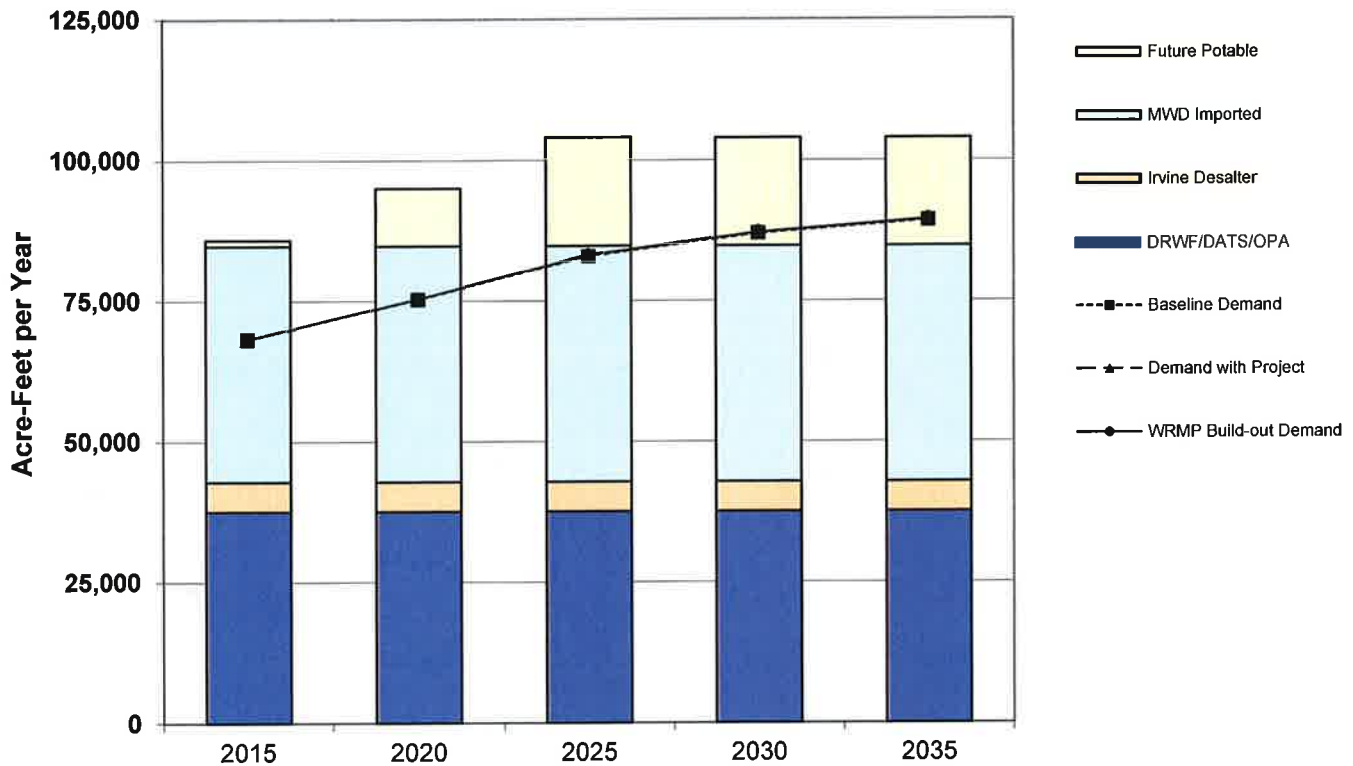
(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
<b>Maximum Supply Capability</b>	<b>92,217</b>	<b>101,427</b>	<b>110,311</b>	<b>110,311</b>	<b>110,311</b>
Baseline Demand	63,693	70,384	77,528	81,331	83,510
Demand with Project	63,693	70,446	77,683	81,486	83,665
WRMP Build-out Demand	63,693	70,446	77,683	81,486	83,665
<b>Reserve Supply with Project</b>	<b>28,525</b>	<b>30,981</b>	<b>32,628</b>	<b>28,825</b>	<b>26,645</b>

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**

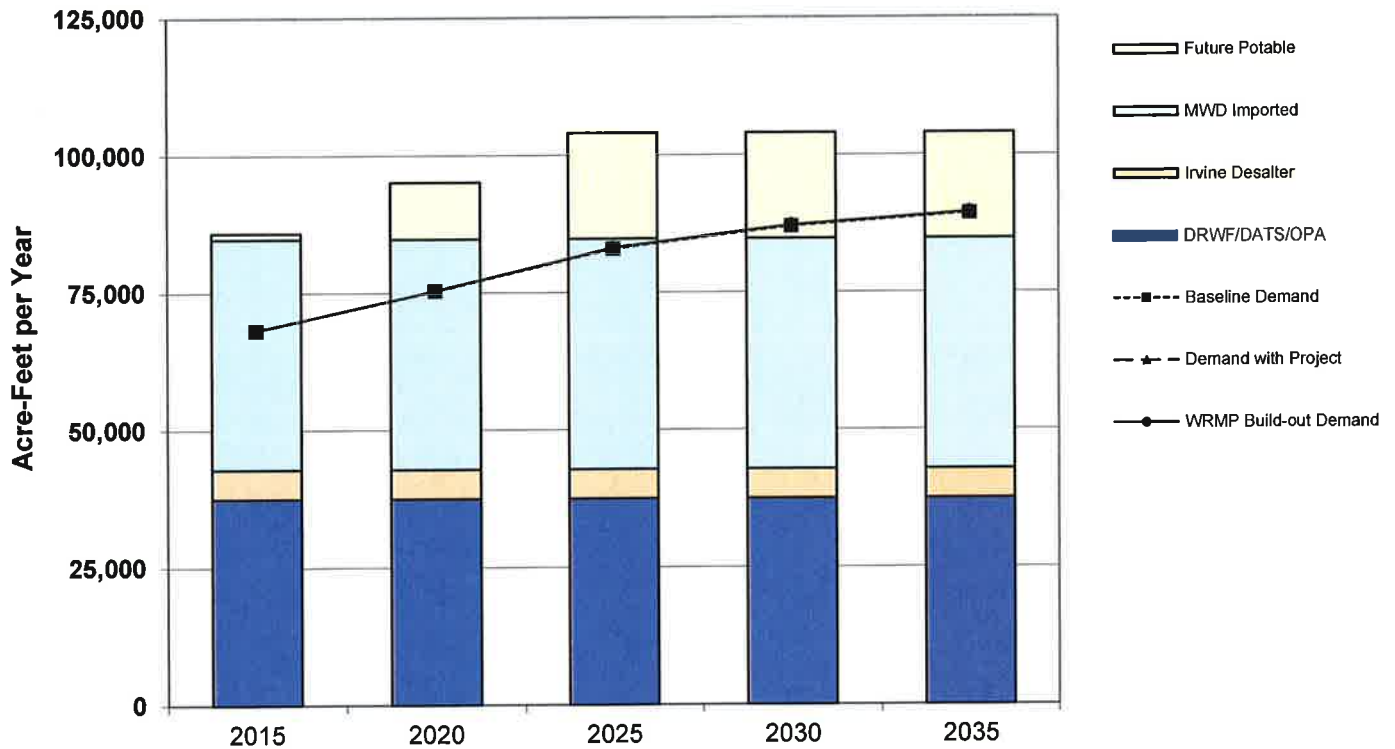


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	24,066	26,050	27,190	23,121	20,789

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**

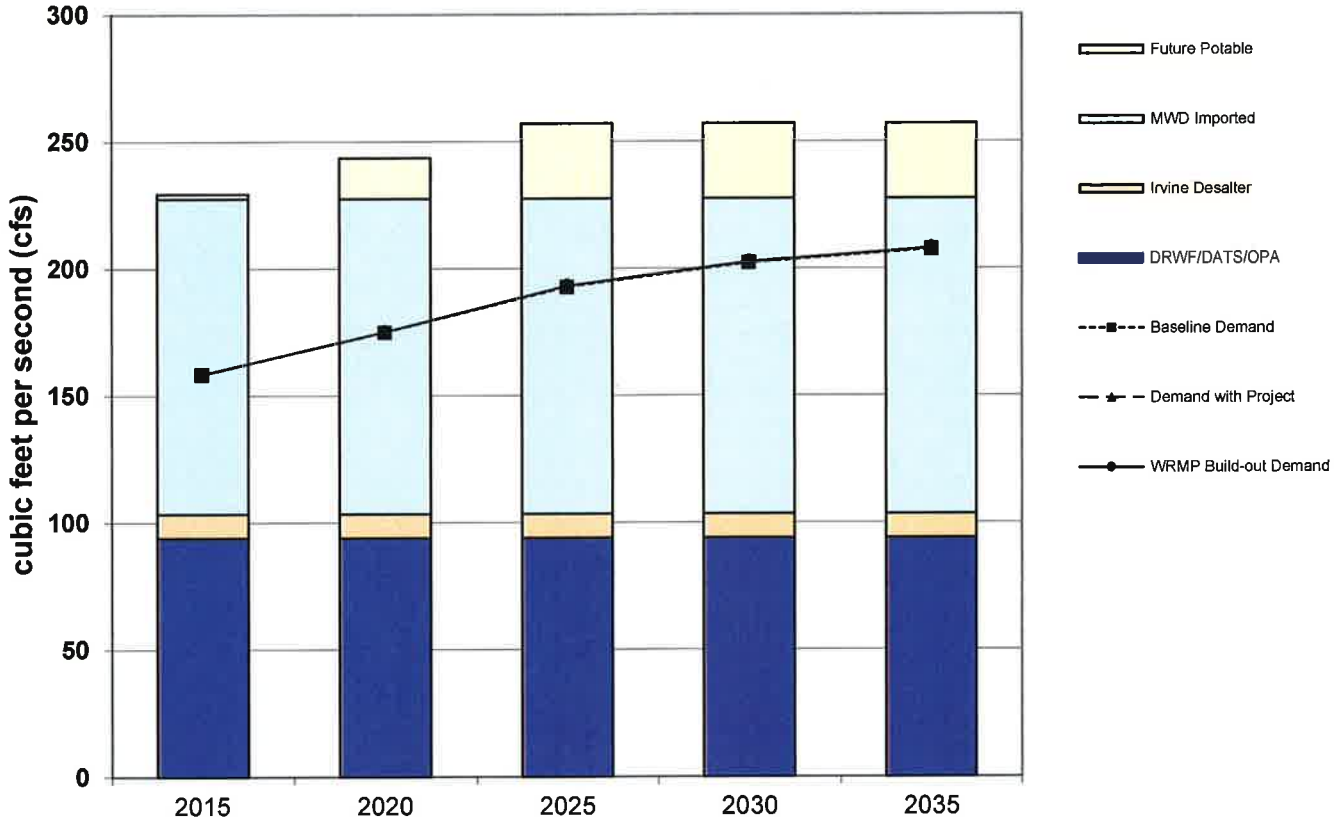


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	24,066	26,050	27,190	23,121	20,789

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).

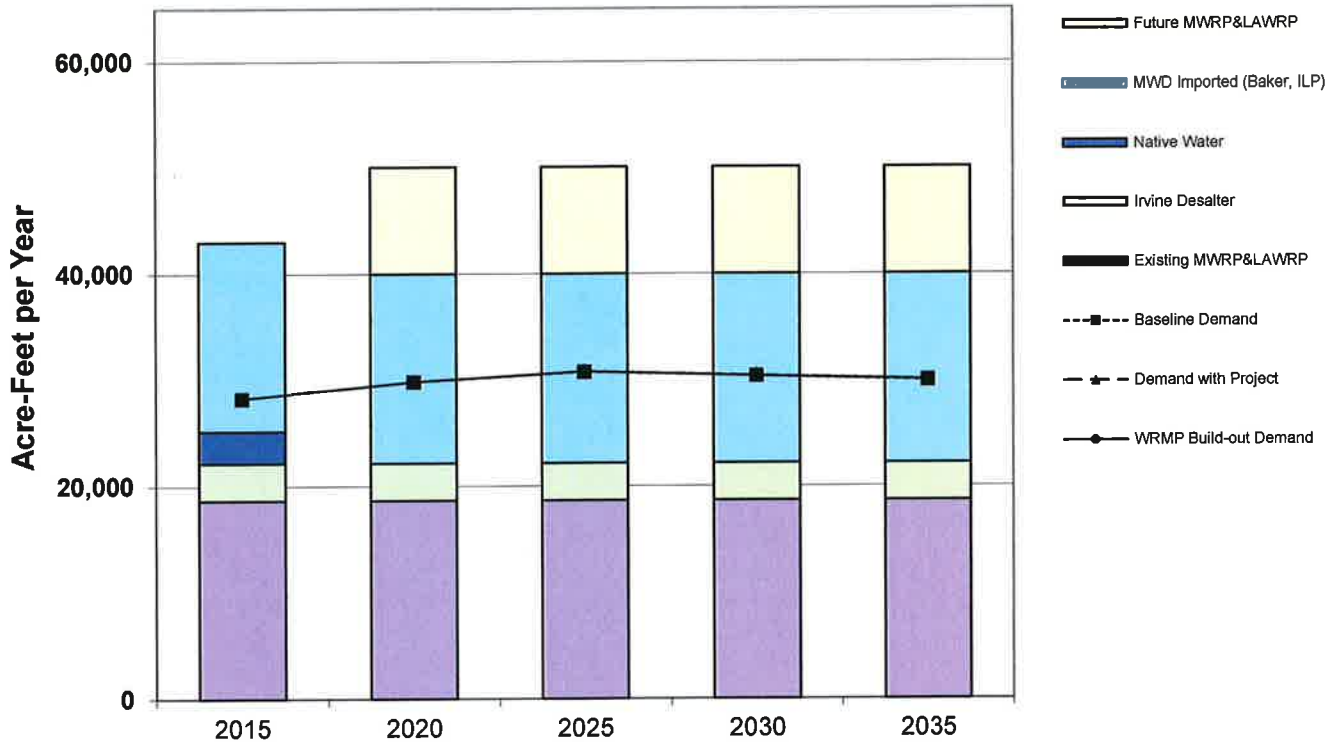
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

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



(in cfs)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
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
<b>Supplies Under Development</b>					
Future Potable	2.0	16.1	29.7	29.7	29.7
Maximum Supply Capability	240.4	254.5	268.1	268.1	268.1
Baseline Demand	158.4	175.0	192.7	202.2	207.6
Demand with Project	158.4	175.1	193.1	202.6	208.0
WRMP Build-out Demand	158.4	175.1	193.1	202.6	208.0
Reserve Supply with Project	82.0	79.4	75.0	65.5	60.1

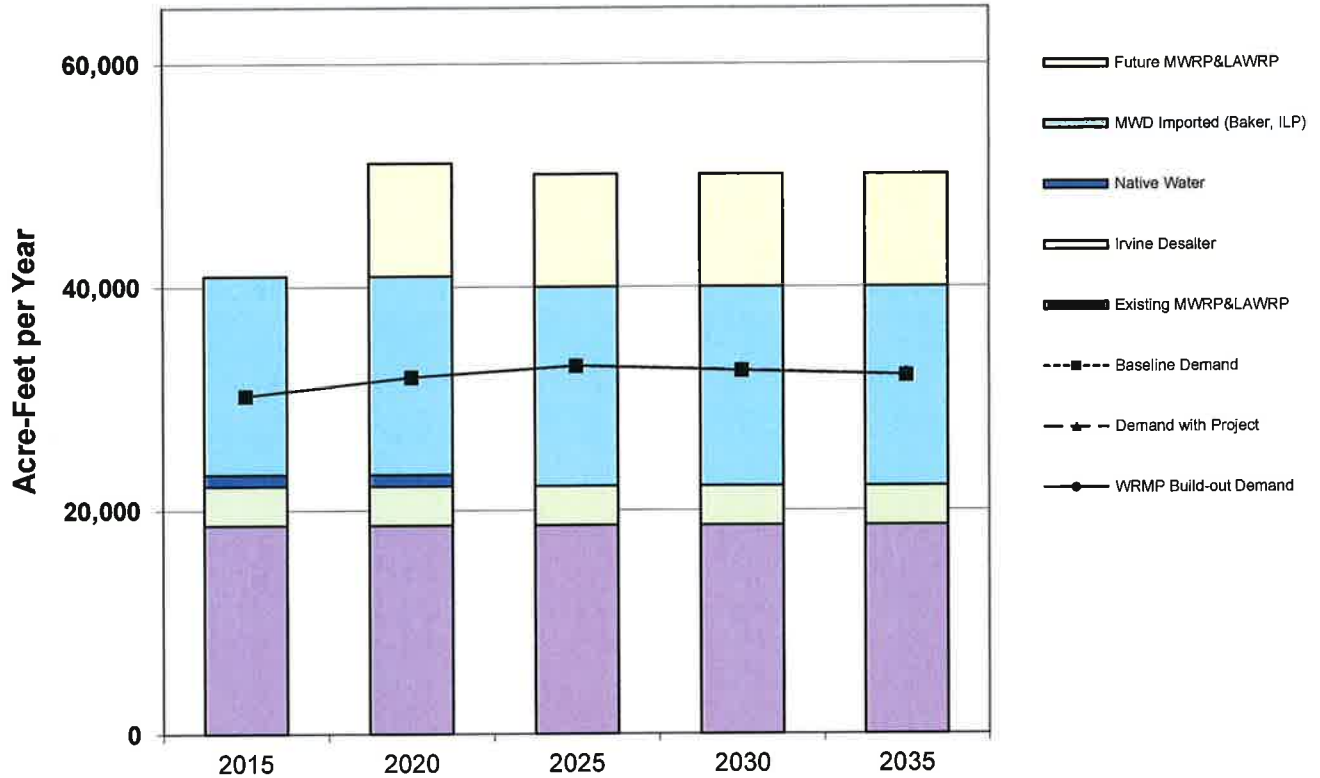
**Figure 5  
IRWD Normal-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-	-
<b>Supplies Under Development</b>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	50,097	50,097	50,097	50,097
Baseline Demand	28,265	29,829	30,744	30,353	29,959
Demand with Project	28,265	29,842	30,778	30,387	29,993
WRMP Build-out Demand	28,265	29,842	30,778	30,353	29,993
Reserve Supply with Project	14,731	20,255	19,319	19,744	20,104

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

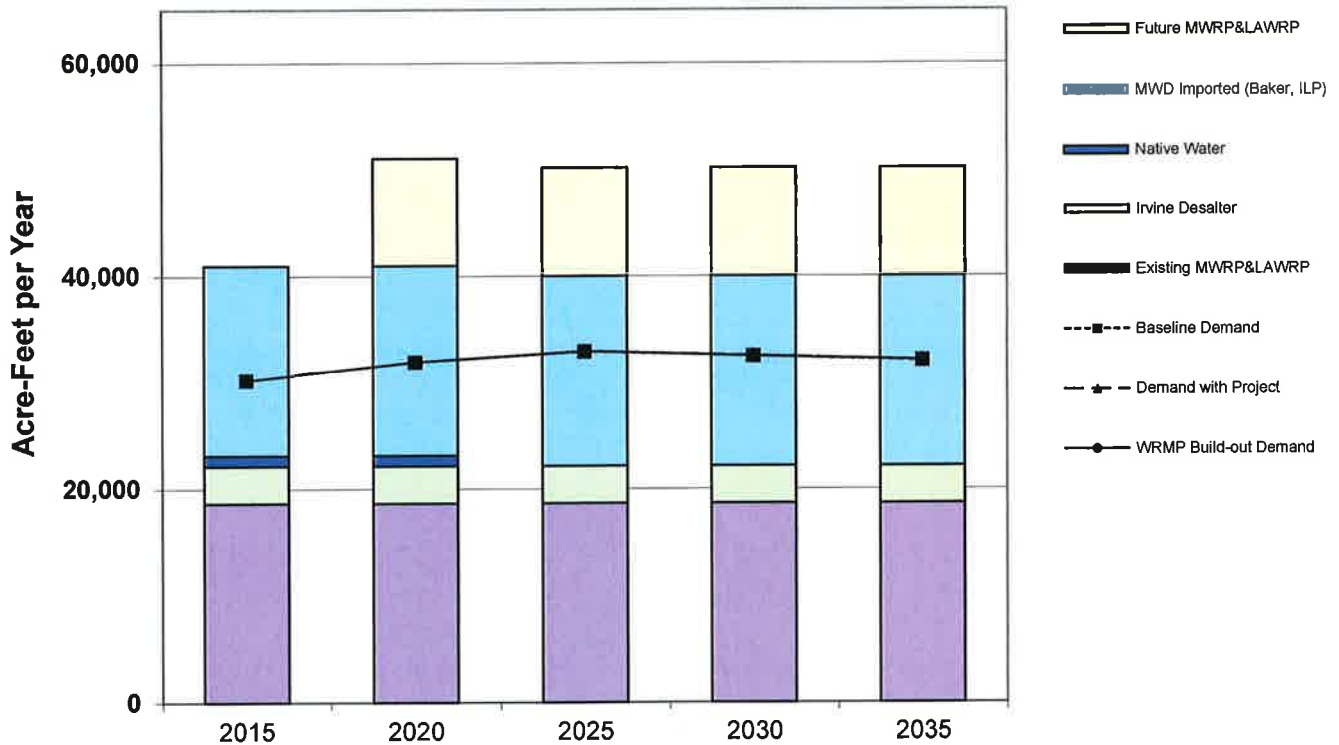
**Figure 6  
IRWD Single Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-
<b>Supplies Under Development</b>					
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	30,244	31,917	32,897	32,478	32,056
Demand with Project	30,244	31,931	32,933	32,514	32,092
WRMP Build-out Demand	30,244	31,931	32,933	32,478	32,092
Reserve Supply with Project	10,753	19,166	17,164	17,583	18,004

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

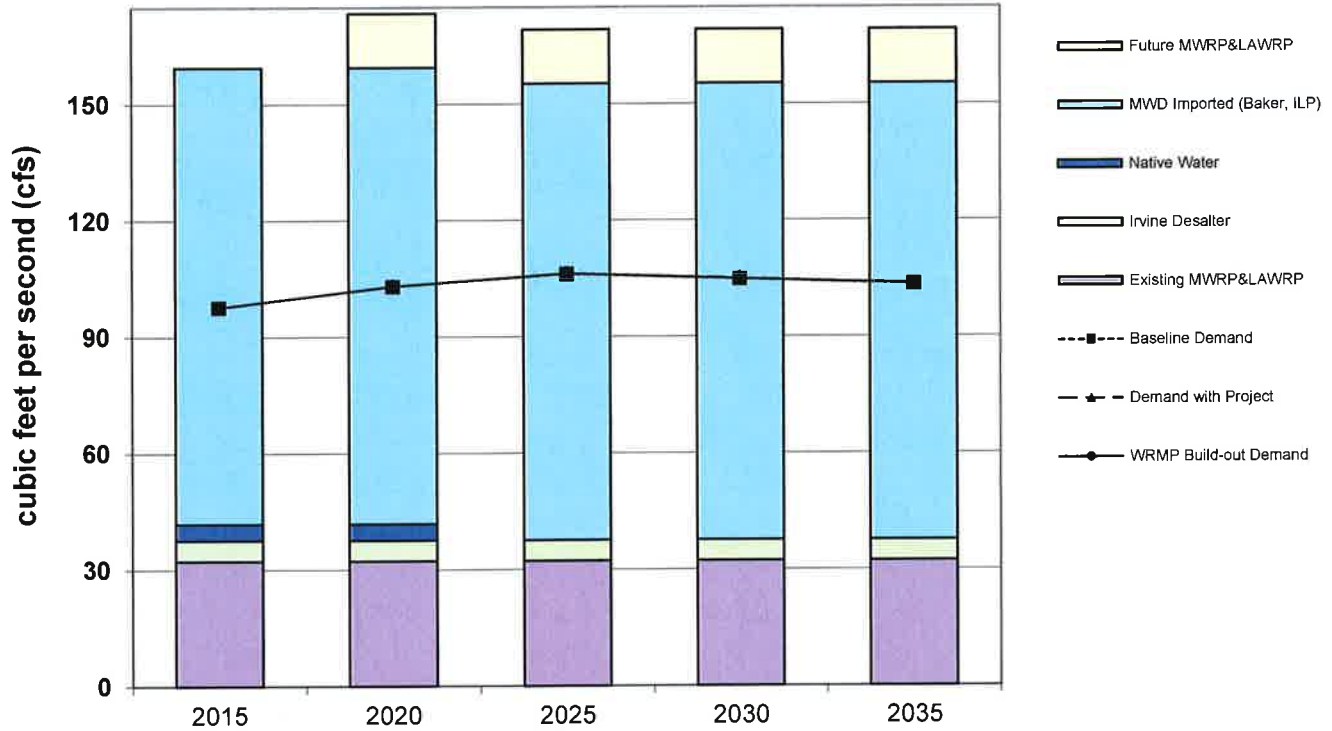
**Figure 7  
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water**



(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
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	-	-	-
<b>Supplies Under Development</b>					
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	30,244	31,917	32,897	32,478	32,056
Demand with Project	30,244	31,931	32,933	32,514	32,092
WRMP Build-out Demand	30,244	31,931	32,933	32,478	32,092
Reserve Supply with Project	10,753	19,166	17,164	17,583	18,004

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

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

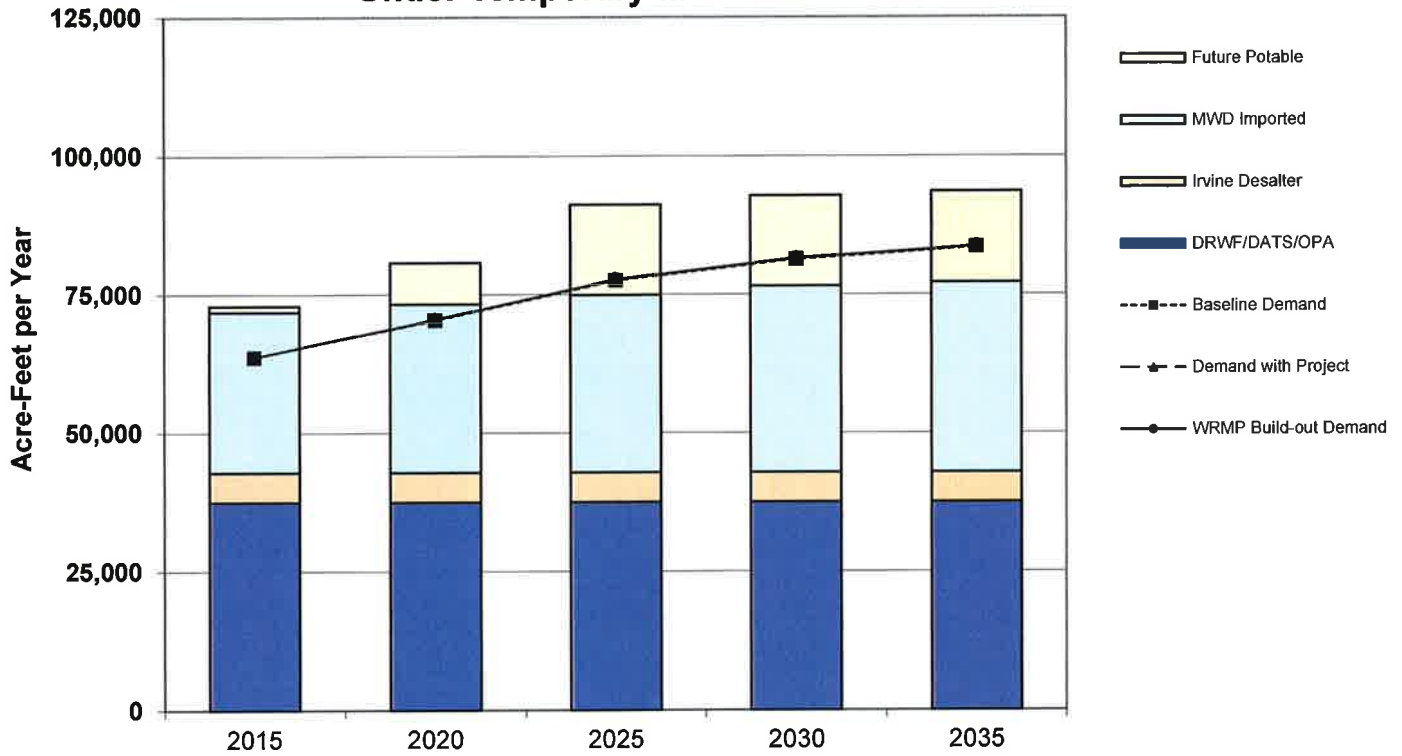


(in cfs)	2015	2020	2025	2030	2035
<b>Current Nonpotable Supplies</b>					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
MWD Imported (Baker, ILP)	117.7	117.7	117.7	117.7	117.7
Irvine Desalter	5.4	5.4	5.4	5.4	5.4
Native Water	4.2	4.2	-	-	-
<b>Supplies Under Development</b>					
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
Maximum Supply Capability	159.5	173.4	169.2	169.2	169.2
Baseline Demand	97.6	103.0	106.2	104.8	103.4
Demand with Project	97.6	103.0	106.3	104.9	103.6
WRMP Build-out Demand	97.6	103.0	106.3	104.8	103.6
Reserve Supply with Project	61.9	70.4	63.0	64.4	65.7

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



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



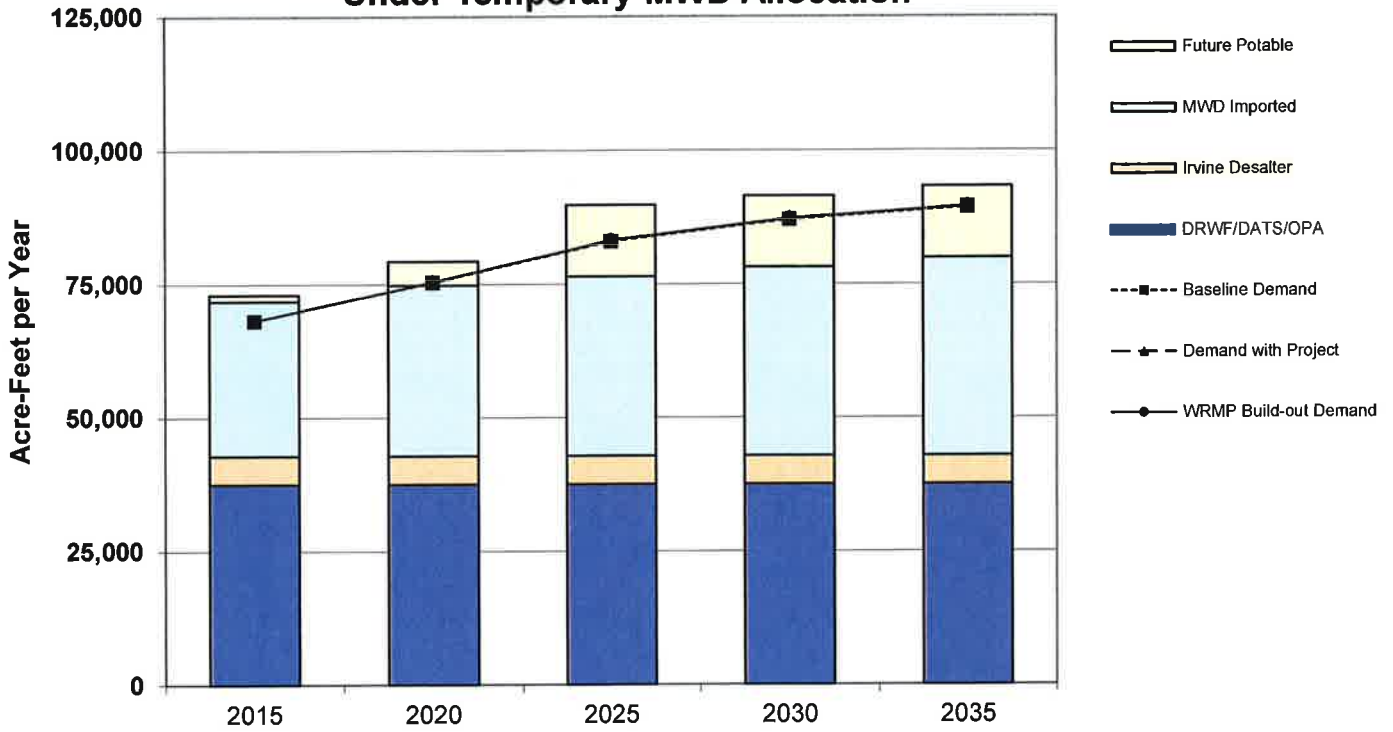
(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	7,469	16,352	16,352	16,352
Maximum Supply Capability	79,288	87,119	97,557	99,191	99,868
Baseline Demand	63,693	70,384	77,528	81,331	83,510
Demand with Project	63,693	70,446	77,683	81,486	83,665
WRMP Build-out Demand	63,693	70,446	77,683	81,486	83,665
Reserve Supply with Project	15,595	16,672	19,874	17,705	16,202

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\***

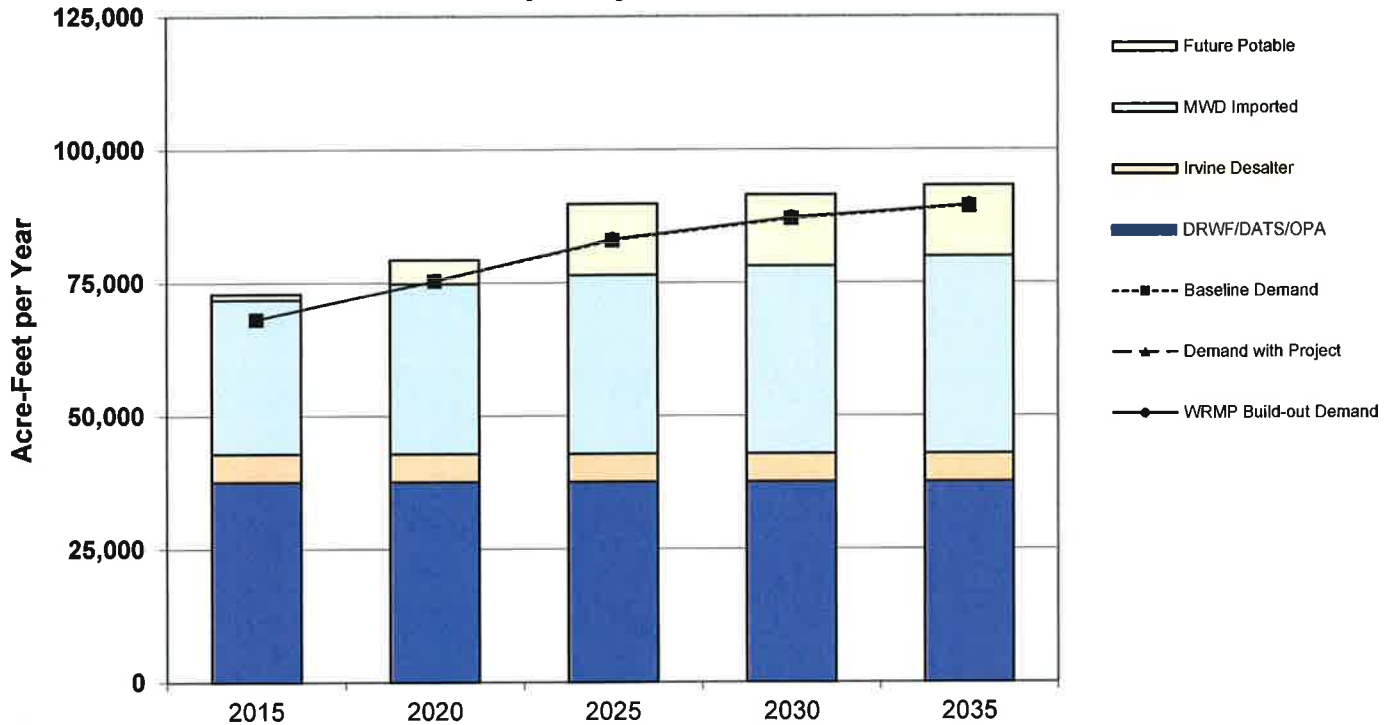


(in acre-feet per year)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<b>Supplies Under Development</b>					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
<b>Demand</b>					
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	11,137	10,265	13,006	10,616	10,049

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)	2015	2020	2025	2030	2035
<b>Current Potable Supplies</b>					
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
<b>Supplies Under Development</b>					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
<b>Demand</b>					
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	11,137	10,265	13,006	10,616	10,049

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)
<b>Current Supplies</b>			
<b>Potable - Imported</b>			
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
<b>Potable - Groundwater</b>			
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
Total Potable Current Supplies	238.4		99,086
<b>Nonpotable - Reclaimed Water</b>			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
			23,315
<b>Nonpotable - Imported</b>			
Baker Aqueduct	52.7	12,221	5
Irvine Lake Pipeline	65.0	9,000	6
			21,221
<b>Nonpotable - Groundwater</b>			
Irvine Desalter-Nonpotable	5.4	3,514	7
			3,514
<b>Nonpotable Native</b>			
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
<b>Supplies Under Development</b>			
<b>Potable Supplies</b>			
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
<b>Nonpotable Supplies: MWRP&amp;LAWRP Reclaimed</b>	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 4, 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 LAW RP 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 8, page 25).

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 & LAW RP 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))

**(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.<sup>4 5</sup>**

**•POTABLE SUPPLY - IMPORTED<sup>6</sup>**

***Potable imported water service connections (currently available).***

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

***Allen-McColloch Pipeline ("AMP") (currently available).***

*(ii)* Agreement For Sale and Purchase of Allen-McColloch Pipeline, dated as of July 1, 1994 (Metropolitan Water District Agreement No. 4623) ("AMP Sale Agreement"). Under the AMP Sale Agreement, MWD purchased the Allen-McColloch Pipeline (formerly known as the "Diemer Intertie") from MWDOC, the MWDOC Water Facilities Corporation and certain agencies, including IRWD and Los Alisos Water District ("LAWD"),<sup>7</sup> 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

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

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

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

<sup>7</sup> 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.

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 from a portion of the proceeds IRWD received from the sale of the AMP.

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

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

*(v)* Agreement For Joint Exercise of Powers For Construction, Operation and Maintenance of East Orange County Feeder No. 2, dated July 11, 1961, as amended on July 25, 1962 and April 26, 1965; Agreement Re Capacity Rights In Proposed Water Line, dated September 11, 1961 ("IRWD MWDOC Assignment Agreement"); Agreement Regarding Capacity Rights In the East Orange County Feeder No. 2, dated August 28, 2000 ("IRWD Coastal Assignment Agreement"). East Orange County Feeder No. 2 ("EOCF#2"), a feeder linking Orange County

with MWD's feeder system, was constructed pursuant to a joint powers agreement among MWDOC (then called Orange County Municipal Water District), MWD, Coastal Municipal Water District ("Coastal"), Anaheim and Santa Ana. A portion of IRWD's territory is within MWDOC and the remainder is within the former Coastal (which was consolidated with MWDOC in 2001). Under the IRWD MWDOC Assignment Agreement, MWDOC assigned 41 cfs of capacity to IRWD in the reaches of EOCF#2 upstream of the point known as Coastal Junction (reaches 1 through 3), and 27 cfs in reach 4, downstream of Coastal Junction. Similarly, under the IRWD Coastal Assignment Agreement, prior to Coastal's consolidation with MWDOC, Coastal assigned to IRWD 0.4 cfs of capacity in reaches 1 through 3 and 0.6 cfs in reach 4 of EOCF#2. Delivery of water through EOCF#2 is subject to the rules and regulations of MWD and MWDOC, and is further subject to application and agreement of IRWD respecting turnouts.

***Orange County Feeder (currently available)***

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

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

***Baker Water Treatment Plant (under development)***

IRWD has begun construction of the Baker Water Treatment Plant project (the Baker WTP) in partnership with El Toro Water District, Moulton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP 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.<sup>8</sup>

• 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. OCWD's analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006).

(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 (DRWF) / 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

<sup>8</sup> The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (see 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.

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

***Irvine Subbasin / Irvine Desalter (currently available)***

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

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

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



***Orange Park Acres (currently available)***

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin.

***Wells 21 and 22 (currently available)***

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

***Irvine Wells (under development)***

(vi) IRWD is pursuing the installation of production facilities in the west Irvine, Tustin Legacy and Tustin Ranch portions of the Basin. These groundwater supplies are considered to be under development; however, four wells have been drilled and have previously produced groundwater, three wells have been drilled but have not been used as production wells to date, 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. Appropriate environmental review would be conducted for each facility. 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 (current available)***

IRWD is completing construction of the Michelson Water Reclamation Plant Phase 2 Capacity Expansion Project later in 2015. With this expansion, IRWD will increase its capacity on the existing MWRP site to produce sufficient reclaimed water to meet the projected demand in the year 2035. Additional

reclamation capacity will augment local nonpotable supplies and improve reliability.

•NONPOTABLE SUPPLY - IMPORTED<sup>9</sup>

***Baker Pipeline (currently available)***

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 (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. 9005 and Permit No. 5202. The foregoing permit and licenses, jointly held by IRWD (as successor to The Irvine Company (TIC) and Carpenter Irrigation District (CID)) and Serrano Water District (SWD), secure appropriative rights to the flows of Santiago Creek. Under Licenses 2347 and 2348, IRWD and SWD have the right to diversion by storage at Santiago Dam (Irvine Lake) and a submerged dam, of a total of 25,000 AFY. Under Permit No. 19306, IRWD and SWD have the right to diversion by storage of an additional 3,000 AFY by flashboards at Santiago Dam (Irvine Lake). (Rights under Permit No. 19306 may be junior to an OCWD permit to divert up to 35,000 AFY of Santiago Creek flows to spreading pits downstream of Santiago Dam.) The combined total of native water that may be diverted to storage under these licenses and permit is 28,000 AFY. A 1996 amendment to

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

License Nos. 2347, 2348 and 2349 [replaced by Permit No. 19306 in 1984] limits the withdrawal of water from the Lake to 15,483 AFY under the licenses. This limitation specifically references the licenses and doesn't reference water stored pursuant to other legal entitlements. The use and allocation of the native water is governed by the agreements described in the next paragraph.

(ii) Agreement, dated February 6, 1928 ("1928 Agreement"); Agreement, dated May 15, 1956, as amended November 12, 1973 ("1956 Agreement"); Agreement, dated as of December 21, 1970 ("1970 Agreement"); Agreement Between Irvine Ranch Water District and The Irvine Company Relative to Irvine Lake and the Acquisition of Water Rights In and To Santiago Creek, As Well As Additional Storage Capacity in Irvine Lake, dated as of May 31, 1974 ("1974 Agreement"). The 1928 Agreement was entered into among SWD, CID and TIC, providing for the use and allocation of native water in Irvine Lake. Through the 1970 Agreement and the 1974 Agreement, IRWD acquired the interests of CID and TIC, leaving IRWD and SWD as the two co-owners. TIC retains certain reserved rights. The 1928 Agreement divides the stored native water by a formula which allocates to IRWD one-half of the first 1,000 AF, plus increments that generally yield three-fourths of the amount over 1,000 AF.<sup>10</sup> 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 (4,000 AFY in normal years and 1,000 AFY in single and multiple-dry years) is shown in currently available supplies, based on averaging of historical data. However, IRWD's ability to supplement Irvine Lake storage with its imported untreated water supplies, described herein, offsets the uncertainty associated with the native water supply.

• NONPOTABLE SUPPLY - GROUNDWATER

***Irvine Subbasin / Irvine Desalter (currently available)***

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

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

• IMPORTED SUPPLY - ADDITIONAL INFORMATION

As described above, the imported supply from MWD is contractually subject to

<sup>10</sup> 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.

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.

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

All necessary delivery facilities currently exist for the use of the *currently available* and *under-development* supplies assessed herein, with the exception of future groundwater wells, 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 sub-regional and local distribution systems.

With respect to future groundwater wells (PR Nos. 11405, 11473), the MWRP Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No.

11218), IRWD adopted its fiscal year 2014-15 capital budget on June 9, 2014 (Resolution No. 2014-29), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) For these facilities, as well as unbuilt IRWD sub-regional conveyance facilities, the sources of funding are previously authorized general obligation bonds, revenue-supported certificates of participation and/or capital funds held by IRWD Improvement Districts. IRWD has maintained a successful program for the issuance of general obligation bonds and certificates of participation on favorable borrowing terms, and IRWD has received AAA public bond ratings. IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. Certificates of participation do not require voter approval. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development.

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

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

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

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

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

See response to preceding item (3).

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

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

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

Water has been received from all listed sources. A small quantity of Subbasin water is used by Woodbridge Village Association for the purpose of supplying its North and South Lakes. There are no other public water systems or water

service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, the Irvine Subbasin.

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

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

See Irvine Ranch Water District 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 6-33<sup>11</sup>. 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 332,000 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.

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

<sup>11</sup> OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

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

OCWD’s efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD’s management of overdraft to maximize 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 shows the amounts pumped, by groundwater source:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD <sup>12</sup>
2014	42,424	10,995	0	376
2013	38,617	8,629	0	282
2012	37,059	7,059	0	0
2011	34,275	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16
2007	37,864	5,407	0	6
2006	37,046	2,825	0	268

<sup>12</sup> 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.

2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598
2002	25,855	2,533	5,075	744

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

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

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

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

(In AFY)

Year (ending 6/30)	DRWF <sup>13</sup>	Future GW <sup>14</sup>	IDP (Potable)	IDP (Nonpotable)
2015	43,300	0	5,640	3,898
2020	43,300	3,469	5,640	3,898
2025	43,300	12,352	5,640	3,898
2035	43,300	12,352	5,640	3,898

(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).

<sup>13</sup> 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 for the OPA well and 6,300 for Wells 21&22.

<sup>14</sup> Under development.



The OCWD MPR and LTFP examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. With the implementation of OCWD's preferred projects, the Basin yield in the year 2025 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage ("BPP") that OCWD sets based on these factors.<sup>15</sup> 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 has completed its replenishment supply project, 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 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.

***Sustainable Groundwater Management Act.*** Pursuant to the Sustainable Groundwater Management Act (SGMA), the DWR has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. By January 31, 2017, local groundwater producers must establish or designate an entity (referred to as a groundwater sustainability agency, or "GSA"), subject to DWR's approval, to manage each high and medium priority groundwater basin. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the GSA for such basin.

<sup>15</sup> OCWD has adopted a basin production percentage of 72% for 2014-15. 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.

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

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

## 6. References

*Water Resources Master Plan*, Irvine Ranch Water District, March, 2002 (supplemented January, 2004)

*2010 Urban Water Management Plan*, Irvine Ranch Water District, June, 2011

*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

*2008-2009 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*2009-2010 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*2012-2013 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*, Orange County Water District

*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*

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

*Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010*

**Exhibit A**

Depiction of Project Area



**Exhibit B**  
Uses Included in Project





County of Orange  
California

James Campbell  
Land Development Manager

January 22, 2015

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

Re: Request for Water Supply Availability Assessment (Water Code §10910 et seq.) for West Alton Development Plan

The County of Orange hereby requests an assessment of water supply availability for the below-described project. The County has determined that the project is a "project" as defined in Water Code §10912, and has determined that [[an environmental impact report/negative declaration/mitigated negative declaration]] is required for the project.

### Proposed Project Information

Project Title: West Alton Development Plan

Location of project: On the former USMC El Toro Air Station and northwest of the intersection of Alton Parkway and Irvine Boulevard. Site is located along the Irvine Boulevard and north of an existing industrial complex and an existing IRWD Facility; and in the City of Irvine Planning Area 51.

(For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on: \_\_\_\_\_ . This application requests a new Water Supply Assessment, due to the following (check all that apply):

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

### Type of Development:

- Residential: No. of dwelling units: 970
- 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: 32.3

### Acreage devoted to landscape:

Greenbelt None golf course None parks 2.5 acres (Passive use)  
Agriculture None other landscaped areas 10.4 Acres  
Number of schools None Number of public facilities None

County Executive Office  
333 W. Santa Ana Blvd.  
Third Floor  
Santa Ana, California  
92701-4062

Tel: (714) 227-1011  
Web: www.ocgov.com

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

Low flow fixtures and a water efficient landscape irrigation system with drought tolerant landscape design

What is the current land use of the area subject to a land use change under the project?

Agricultural

Is the project included in the existing General Plan? No \_\_\_\_\_ If no, describe the existing General Plan Designation Agriculture

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

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

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

Date: Jan. 24, 2015


By: Kellie Walker  
Irvine Ranch Water District

REQUEST COMPLETE:

Date: Jan. 28, 2015

By: Kellie Walker  
Irvine Ranch Water District



April 13, 2015  
Prepared by: A. Murphy/M. Cortez  
Submitted by: K. Burton  
Approved by: Paul Cook 

## ACTION CALENDAR

### GREEN ACRES PROJECT PIPELINE SEGMENT CATHODIC PROTECTION SYSTEM UPGRADES CONSTRUCTION AWARD

#### SUMMARY:

This project will install a cathodic protection system to protect a 1,310 linear foot segment of the Green Acres Project (GAP) pipeline on University Drive in Newport Beach. Staff recommends that the Board:

- Authorize a budget increase in the amount of \$231,000, from \$121,000 to \$352,000, for Project 30415, and
- Authorize the General Manager to execute a construction contract with Farwest Corrosion Control Company in the amount of \$154,275 for the GAP Pipeline Segment Cathodic Protection System Upgrades, Project 30415.

#### BACKGROUND:

IRWD constructed a 24-inch recycled water pipeline to interconnect the IRWD and Orange County Water District (OCWD) recycled water systems as part of the GAP Intertie project in 1997. The pipeline is located on University Drive between Jamboree Road and the 73 Freeway overpass as shown in Exhibit "A". Prior to 2011, IRWD owned and maintained the pipeline upstream of the intertie metering structure, and OCWD owned and maintained the segment downstream of the metering structure. In 2011, OCWD requested that IRWD assume ownership of the GAP pipeline segment between the metering structure and Jamboree Road. This segment of the GAP pipeline has experienced multiple leaks due to ongoing corrosion issues. This project will construct a cathodic protection system to protect the recently acquired 1,310 linear feet of the existing GAP pipeline between the metering structure and Jamboree Road.

#### Bid Opening:

The GAP Pipeline Segment Cathodic Protection System Upgrades project was advertised February 20, 2015 to a select list of four contractors. The bid opening was held March 25, 2015 with bids received from American Construction and Supply Inc. (American) and Farwest Corrosion Control Company (Farwest). Farwest is the apparent low bidder with a bid amount of \$154,275. American submitted a bid of \$159,725. While the low bid is \$24,150 higher than the engineer's estimate of \$130,125, the two bids are within four percent of each other. Since both bids are close, staff believes that they accurately represent the true cost of the project. Staff has reviewed Farwest's bid and determined that the bid is responsive. Staff recommends awarding the construction contract to Farwest in the amount of \$154,275. The Bid Summary is attached as Exhibit "B".

FISCAL IMPACTS:

Project 30415 (4396) is included in the FY 2014-15 Capital Budget. A budget increase is required to fund the construction and engineering support services for the project as shown in the table below.

Project No.	Current Budget	Addition <Reduction>	Total Budget
30415 (4396)	\$121,000	\$231,000	\$352,000

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption was filed with the County of Orange on May 8, 2014.

COMMITTEE STATUS:

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

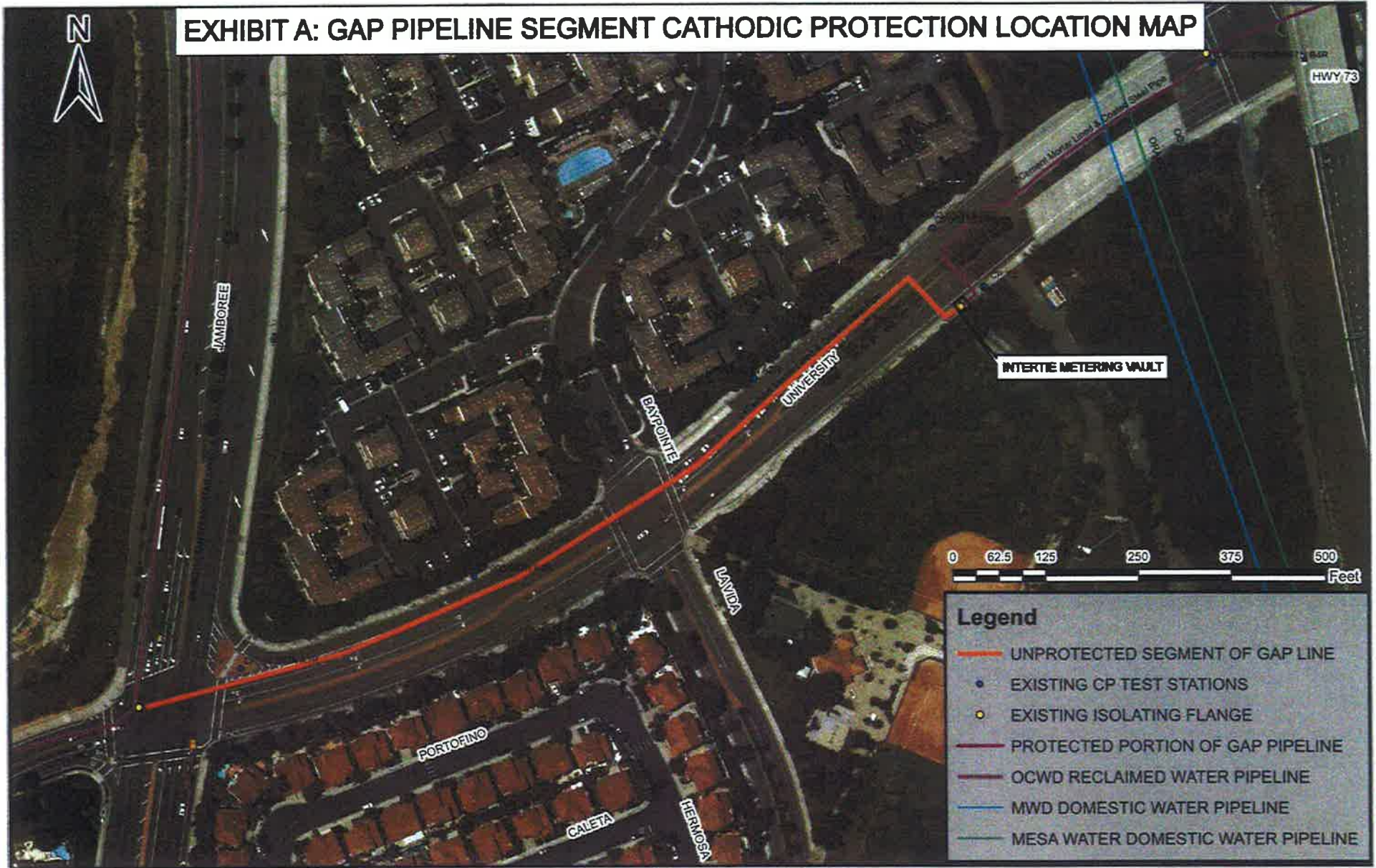
RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$231,000, FROM \$121,000 TO \$352,000, FOR PROJECT 30415 (4396); AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH FARWEST CORROSION CONTROL COMPANY IN THE AMOUNT OF \$154,275 FOR THE GREEN ACRES PROJECT PIPELINE SEGMENT CATHODIC PROTECTION SYSTEM UPGRADES, PROJECT 30415 (4396).

LIST OF EXHIBITS:

Exhibit "A" – Location Map  
Exhibit "B" – Bid Summary

EXHIBIT "A"



## Exhibit B

Bid Opening: Wednesday, March 25, 2015 @ 2:00 P.M.

Irvine Ranch Water District Bid Summary For  
Green Acres Pipeline (GAP) Segment Cathodic Protection System  
PR 30415 (4396)

Entered By: J.K. Irey

Item No.	Description	Qty	Unit	Engineer's Estimate		1 Farwest Corrosion Control Co. Downey, CA		2 American Construction & Supply Corte Madera, CA		
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	
1	Mobilization, Demobilization, Cleanup and Spoil Disposal	1	LS	\$7,000.00	\$7,000.00	\$3,500.00	\$3,500.00	\$8,000.00	\$8,000.00	
2	Install anode ground bed per plan detail including but not limited to anodes, shunt panel, CTS box, anode lead wires routed to CTS box, traffic control, and all other appurtenant work for Location 1.	1	LS	\$25,000.00	\$25,000.00	\$22,650.00	\$22,650.00	\$26,500.00	\$26,500.00	
3	Install anode ground bed per plan detail including but not limited to anodes, shunt panel, CTS box, anode lead wires routed to CTS box, traffic control, and all other appurtenant work for Location 2.	1	LS	\$26,000.00	\$26,000.00	\$25,300.00	\$25,300.00	\$24,500.00	\$24,500.00	
4	Install anode ground bed per plan detail including but not limited to anodes, shunt panel, CTS box, anode lead wires routed to CTS box, traffic control, and all other appurtenant work for Location 3.	1	LS	\$26,000.00	\$26,000.00	\$25,300.00	\$25,300.00	\$24,500.00	\$24,500.00	
5	Install anode ground bed per plan detail including but not limited to anodes, shunt panel, CTS box, anode lead wires routed to CTS box, traffic control, and all other appurtenant work for Location 5.	1	LS	\$32,000.00	\$32,000.00	\$41,750.00	\$41,750.00	\$38,000.00	\$38,000.00	
6	Sawcut, Remove, and Pavement Repair and Replacement per the City of Newport Beach Encroachment Permit	1350	SQ FT	\$4.00	\$5,400.00	\$13.00	\$17,550.00	\$11.00	\$14,850.00	
7	Sawcut, Remove, and Concrete Repair and Replacement per the City of Newport Beach Encroachment Permit	300	SQ FT	\$5.00	\$1,500.00	\$27.00	\$8,100.00	\$40.00	\$12,000.00	
8	Sawcut, Remove, and Concrete Repair (Colored and Stamped) and Replacement per the City of Newport Beach Encroachment Permit	25	SQ FT	\$9.00	\$225.00	\$125.00	\$3,125.00	\$175.00	\$4,375.00	
9	Startup, Testing, and Commissioning	1	LS	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	
10	Prepare record drawings	1	LS	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	
Subtotal						\$130,125.00		\$154,275.00		\$159,725.00
Adjustment (+ or -)						\$0.00		\$0.00		\$0.00
<b>Total Amount of Bid</b>						<b>\$130,125.00</b>		<b>\$154,275.00</b>		<b>\$159,725.00</b>
						<u>Manufacturers:</u>		<u>Manufacturers:</u>		
						Anodes: Farwest Corrosion		Anodes: Anotec		
						Shunt Panel: Farwest Corrosion		Shunt Panel: Mesa Products		
						CTS Box: J&R Concrete		CTS Box: Mesa Products		
						<u>Subcontractors:</u>		<u>Subcontractors:</u>		
						Jet Drilling: Auger Drilling		Handy & Harper: Patch Paving		
						Ben's Asphalt: Asphalt				



April 13, 2015

Prepared by: T. Mossbarger

Submitted by: C. Clary

Approved by: Paul Cook 

## ACTION CALENDAR

### ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENT RENEWAL

#### SUMMARY:

The Oracle Software Maintenance and Support Agreements which provide for upgrades and maintenance of the District's Oracle Customer Care and Billing (CC&B) software, Oracle eBusiness Suite (EBS) Financial software, and Oracle Technology software will expire in May 2015. These agreements provide pricing for software maintenance and licenses contained in the Unlimited License Agreement (ULA) executed with Oracle in May 2014 as well as the EBS Financial Software Agreement executed with Oracle in May 2010. Staff recommends the Board authorize renewal of the District's annual Oracle Software Maintenance and Support Agreements and additional licenses and support in the amount of \$928,572.

#### BACKGROUND:

In May 2014, the Board approved a ULA software agreement with Oracle for Oracle Technology software and additional CC&B software licenses for a term of 42 months. Included in the agreement was a zero percent increase in software and support maintenance for renewals beginning in 2015 and 2016. The renewal amount remains unchanged from 2014.

In May 2010, the Board approved a software agreement with Oracle for EBS Financial software licenses. The agreement includes an annual increase in software and support maintenance for renewals beginning 2011. The renewal amount increased 2.8% from 2014.

Several of the EBS software programs are licensed by enterprise based on operating revenue. For the District, this value is the audited operating revenue before adjustments for expenses and taxes generated during a fiscal year. The agreement provides that if the operating revenues increase, the District is required to order additional licenses and technical support for such licenses. The formula generates an increase of \$57,340 for additional licenses and support as required by the agreement.

The District uses Oracle Technology software to run the servers and databases that support the Oracle EBS Financial applications, Oracle CC&B applications, and Oracle Business Intelligence applications software. The agreements cover all versions of Oracle Technology software products, CC&B software products, and EBS Financial products purchased by the District, and allows for upgrade to new versions as they become available.

The following table provides a summary of costs for the Oracle software maintenance and support agreements and additional licenses and support:

Description	Cost
Oracle Technology (ULA) Software and Support Maintenance	\$ 639,282
Oracle CC&B Software and Support Maintenance	\$ 132,273
Oracle EBS Financial Software and Support Maintenance	\$ 99,677
Oracle EBS Financial Software Additional Licenses and Support Based on \$M Revenue (\$47K license, \$10.3K support)	\$ 57,340
Total Oracle Software Maintenance and Support Agreements and Additional Licenses & Support	\$ 928,572

Staff recommends renewal of the annual Oracle Software Maintenance and Support Agreements and additional licenses and support in the amount of \$928,572.

**FISCAL IMPACTS:**

Oracle Software Maintenance and Support Agreements are included in the FY 2015-16 operating budget.

**ENVIRONMENTAL COMPLIANCE:**

Not applicable.

**COMMITTEE STATUS:**

This item was reviewed by the Finance and Personnel Committee on April 6, 2015.

**RECOMMENDATION:**

THAT THE BOARD AUTHORIZE RENEWAL OF IRWD'S ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENTS AND ADDITIONAL LICENSES AND SUPPORT IN THE AMOUNT OF \$928,572.

**LIST OF EXHIBITS.**

None.

April 13, 2015

Submitted by: P. Weghorst

Approved by: Paul Cook 

## ACTION CALENDAR

### PROPOSED IRWD WATER AND ENERGY EFFICIENCY POLICY PRINCIPLES

#### SUMMARY:

Based on the ongoing activities taking place in Sacramento and around the state regarding methods to improve California's water and energy use efficiencies, staff recommends the Board adopt a policy principles paper on water and energy efficiency issues. These principles will help guide the District's advocacy efforts and participation in existing and future efficiency incentive programs. Staff will present an overview of the proposed Water and Energy Efficiency Policy Principles at the Board meeting.

#### BACKGROUND:

The conveyance, treatment, distribution, and heating of potable water, along with the treatment of sewage, are among the state's largest consumptive uses of electricity. Additionally, the production of electricity typically requires large volumes of water. Legislation is now being considered that would establish a water and energy efficiency policy for the state that would declare that water use and water treatment shall be as energy efficient as is feasible and that energy generation shall be as water efficient as possible.

Concurrently, the California Public Utilities Commission (CPUC) has authorized a series of pilot programs to determine if energy savings can be realized through water conservation measures. IRWD is a participant in one such program that will leverage IRWD's experience in energy planning to develop targeted water conservation programs and other projects that will save energy. IRWD is in a unique position to help shape state policy and to provide input to the formation of future CPUC programs to incentivize water and energy efficiency.

To guide the District's advocacy efforts on water and energy efficiency issues and IRWD participation in existing and future efficiency incentive programs, staff has prepared the proposed IRWD Water and Energy Efficiency Policy Principles paper. The draft policy paper is attached as Exhibit "A". At the meeting, staff will present an overview of the proposed policy principles. Staff recommends that the Board adopt the proposed policy principles.

#### FISCAL IMPACTS:

None.

#### ENVIRONMENTAL COMPLIANCE:

None.

Action Calendar: Proposed IRWD Water and Energy Efficiency Policy Principles  
April 13, 2015  
Page 2

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on April 2, 2015.

RECOMMENDATION:

THAT THE BOARD ADOPT THE PROPOSED IRWD WATER AND ENERGY EFFICIENCY POLICY PRINCIPLES PAPER.

LIST OF EXHIBITS:

Exhibit "A" – Proposed IRWD Water and Energy Efficiency Policy Principles



# EXHIBIT "A"

## IRWD WATER AND ENERGY EFFICIENCY POLICY PRINCIPLES

April 13, 2015

### ISSUE SUMMARY:

It is widely recognized that the conveyance, treatment, distribution, and heating of potable water along with the treatment of sewage, are among the state's largest consumptive uses of electricity. Additionally, the production of electricity often requires large volumes of water. In consideration of the need to improve both water and energy efficiency throughout the state, the Administration, Legislature, and state agencies are engaged in discussions regarding the link between water and energy resources. Legislation is now being considered that would establish a water and energy efficiency policy for California that would declare that water use and water treatment shall be as energy efficient as is feasible and that energy generation shall be as water efficient as possible.

Concurrent to the described legislative efforts, the California Public Utilities Commission (CPUC) has authorized a series of pilot programs to determine if energy savings may be realized through water conservation measures. The Southern California Edison (SCE) Preferred Resources Pilot Program (PRPP) is one such program approved by the CPUC. IRWD is a participant in the PRPP that will leverage IRWD's experience in energy, greenhouse gas and embedded energy planning to develop targeted water conservation programs and other projects that will save energy. As a result of these planning activities, IRWD is in a unique position to help shape state policy and to provide input to the formation of future CPUC programs to incentivize water and energy efficiency.

### BACKGROUND:

The California Energy Commission (CEC) published a report in 2005<sup>1</sup> that provided landmark estimates of water-related energy use in California. From this effort and further research<sup>2</sup>, the CEC has established that the conveyance and treatment of water, the treatment of sewage, and the heating of water, make up 20 percent of the total electricity and 30 percent of the natural gas consumed in California (excludes natural gas used to generate electricity). Other competing estimates have reported lower consumption percentages coming from the water sector and that end user consumption of energy for the heating of water is the dominant use of energy associated with the water use cycle. This knowledge is now driving the state toward establishing policies that will coordinate water and energy efficiency programs. Legislative efforts are underway to declare that water use and water treatment shall be as energy efficient as is feasible and that energy generation shall be as water efficient as possible. The formation of such a policy should include input from water and sewer service providers that are experienced and knowledgeable in water and energy efficiency planning and project implementation.

Input from the water sector will also be required on activities that are being coordinated by the CPUC. In 2012, the CPUC directed energy utilities to consider the relationship between water

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<sup>1</sup> Source: CEC, 2005, *California's Water-Energy Relationship (CEC-700-2005-011-SF)*.

<sup>2</sup> Source: Navigant Consulting, CEC, December 2006, *Refining Estimates of Water-Related Energy Use In California (CEC-500-2006-118)*.

and energy referred to as the *water-energy nexus*<sup>3</sup> in the development of energy efficiency programs. The CPUC has authorized a series of pilot programs to determine if energy savings can occur through water conservation measures. The Energy Division of the CPUC is currently evaluating whether an increase in emphasis on measures that maximize water savings in the water sector may produce energy savings. One example of a measure being considered by the CPUC is allowing investor-owned utilities (IOUs) to provide incentives for water system leak detection programs. The CPUC is also considering how to determine the cost effectiveness of water-energy nexus programs and seeking to adopt a method to compute embedded energy in water.

*Preferred Resources Pilot Program:*

One of the pilot programs that the CPUC has already approved is the SCE PRPP. IRWD is an active participant in this program. The PRPP is focused on the development of preferred resources including energy efficiency, demand response, renewable power generation, and energy storage projects. The development of such resources will increase SCE's ability to offset the loss of the San Onofre Nuclear Generating Station and the expected retirement of several once-through-cooling power plants without building new conventional generation. The development of preferred resources will also help SCE manage the loads at two electric substations serving IRWD facilities.

To date, IRWD's participation in the PRPP has been focused on the development of the District's Embedded Energy Plan which will lay the framework for the identification of preferred resources for further consideration and the formation of targeted water conservation programs that will save energy. IRWD's Embedded Energy Plan will provide a comprehensive example to the CPUC on how to compute embedded energy in the water sector. IRWD and SCE are working together through the PRPP to demonstrate methods to analyze the cost effectiveness of preferred resources and other programs. This information will help facilitate a CPUC decision to allow SCE to provide incentives to IRWD for the development of preferred resources. This IRWD and SCE partnership is anticipated to set an example for IOUs across the state in establishing preferred resource programs with agencies in the water sector.

*Need for Policy Guidance:*

Whether through the ongoing legislative efforts or through programs approved and implemented through the CPUC, there is much at stake for retail water and sewer service agencies. Research into the relationship of water and energy has led some to conclude that California's water sector can modify water sources, systems, facilities, and operations to reduce the amount of energy consumed in the water use cycle. Within the public utility sector, the water resources industry has the most potential to reduce peak electrical demands in the summer months<sup>4</sup>. Conclusions such as this are driving the state toward development of policies that will affect the *water-energy nexus*. Guidance from the water industry will be required for the state to implement policies that are beneficial to the state without adversely affecting the cost effectiveness of provided services.

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<sup>3</sup> Note: From a retail water agency's perspective, embedded energy is defined as the total of all energy inputs associated with the production, conveyance, treatment and distribution of water.

<sup>4</sup> Source: Laurie Park, GEI, September 2012, *California's Water Energy Nexus: Pathway to Implementation*.

As a leader in state and federal water resources public policy and governance, IRWD has worked to promote policy initiatives that allow the District, along with other water purveyors in California, to enhance the quality, cost-effectiveness and reliability of water supplies. As a means of providing input into ongoing discussions related to water and energy policy in California, and in order to guide the District's advocacy efforts related to these discussions, the District's participation in the PRPP and other related activities, the following policy principles have been adopted by the IRWD Board of Directors.

POLICY PRINCIPLES:

- Water supply reliability considerations, along with sustainability and cost factors, drive water supply selection, conveyance, treatment, and distribution decisions.
- State policies should recognize that many water agencies throughout the state already take into consideration the energy efficiency of facilities and the energy intensity (kWh/AF) of water to be produced during the planning and development of water supply and sewage treatment / water recycling projects.
- State policy should value water supply reliability and the development of cost effective water supplies in addition to energy efficiency and reductions in greenhouse gas emissions.
- In its pursuit for water and energy efficiency, the State should continue to adopt policies that encourage the treatment of impaired water supplies as well as the production and use of recycled water, including direct and indirect potable reuse, as recognized reliable water supplies that maximize the use existing resources.
- State water and energy policies should take into consideration that the heating of water by end users is the dominant water related energy use within California, and that those energy uses are independent of water sector conveyance and treatment processes.
- Actions should not be taken that would hinder or place burdens on the efforts of water sector agencies that are already taking actions to reduce the use of water and energy resources.
- Establishing state policies related to the energy efficiency of water and sewage treatment should take into consideration the need to meet local, state and federal water and air quality requirements while at the same time reinforcing the ability to reuse resources locally.
- In taking actions to improve the energy efficiency of the production, treatment and distribution of water, the state should seek to avoid conflicts with existing state policies and regulations governing water rights, water quality and environmental health.
- State policy should positively recognize renewable energy projects in the water sector that cost effectively reduce energy demands for water supply and sewage treatment processes from non-renewable sources.
- The state should encourage and provide incentives for the development of storage facilities that save energy, optimize the use of potable and recycled water, and/or reduce the competition for energy.

- The state should adopt policies to promote the use of unused groundwater storage capacity and efforts to recharge groundwater basins with sources of water that have low energy intensity.
- The state should not establish water- and/or energy-related policies that discourage exercising legal and contractual rights to import water for beneficial use purposes.
- Agencies developing water supply projects should consider the impacts to the electrical distribution system during the development phase.
- In establishing water and energy policies of the state, the Legislature should not consider the energy produced by the State Water Project (SWP) or available from the long-term contracts for the conveyance of water through the Colorado River Aqueduct (CRA) as punitive to the energy efficiency of water agencies treating and distributing water from these projects.
- Embedded energy contained in imported water supplies from the SWP and through the CRA should not be considered additive to the embedded energy of water treated and distributed by wholesale and retail water agencies.
- State policies should encourage and provide incentives for the production of energy from renewable biogas generated from the processing of biosolids.
- A water agency's development of energy efficiency, demand response, renewable power generation, and energy storage projects in partnership an electrical utility should be dependent on each water agency's determination of cost effectiveness and reliability.
- The CPUC should support incentives for development of voluntary energy efficiency, demand response, renewable power generation, and energy storage projects and the implementation of voluntary water conservation programs that will result in energy savings. Such programs should be justified by embedded energy analyses and cost effectiveness.
- The California Energy Commission should provide examples of how water sector agencies can use concepts of embedded energy planning to facilitate water and energy savings. Examples of successful embedded energy planning efforts should be published.
- The state should provide technical and financial assistance in the development of embedded energy and greenhouse gas master plans by water and sewer service agencies.
- Any state policy established relating to water and energy efficiency must preserve the powers, rights and responsibilities of local water and sewer service agencies without creating restrictive state and federal mandates.

April 13, 2015

Prepared by: M. Hoolihan

Submitted by: K. Burton

Approved by: Paul Cook



## ACTION CALENDAR

### ORANGE COUNTY SANITATION DISTRICT SERVICE AREA 7 RESOLUTION FOR ANNEXATION

#### SUMMARY:

On February 9, 2015 the IRWD Board authorized staff to submit an application to Orange County Local Agency Formation Commission (LAFCO) to expand IRWD's sphere of influence and boundary for the purposes of ownership and operations of sewer collection facilities in the Orange County Sanitation District's (OCSD) Service Area 7. On March 23, 2015, staff submitted an application to LAFCO to provide sewer service to Service Area 7. As part of the application process, staff recommends the Board adopt a resolution approving the District's application to annex the proposed territories to IRWD.

#### BACKGROUND:

Service Area 7 includes territory located in the City of Tustin and unincorporated county areas within the spheres of influence of Tustin and Orange; a portion overlaps IRWD's service boundary in the city of Tustin. A vicinity map of Service Area 7 is attached as Exhibit "A". This area is currently served by OCSD for both regional conveyance and treatment as well as local sewer services. OCSD stated in its 2007 and 2013 Strategic Plans that it would like to transfer local sewer services to local agencies, which would allow OCSD to focus on regional conveyance and treatment only.

#### LAFCO Municipal Service Review:

In March 2014, East Orange County Water District (EOCWD) filed an application with LAFCO to provide local retail sewer services to Service Area 7. In order to review EOCWD's application, LAFCO initiated a Municipal Service Review (MSR) for Service Area 7. As part of the MSR process, LAFCO is reviewing various aspects of EOCWD's proposed plan of service including its financing plan, its estimated cost to provide the service, potential impacts to existing customers, and alternative service providers. LAFCO identified the City of Tustin, the City of Orange, and IRWD as stakeholders in the MSR process and requested each of the identified stakeholders to respond in writing if its agency would like to be considered as an alternative sewer service provider for Service Area 7.

On November 15, 2014, staff responded to LAFCO's request stating IRWD's desire to be considered an alternative service provider. In a letter to IRWD dated December 9, 2014, LAFCO requested additional information to complete the MSR process. On March 10, 2015, IRWD submitted the requested information to LAFCO. LAFCO staff is targeting taking the MSR to the LAFCO Commission in June 2015. The items to be completed before the MSR can be brought to the LAFCO Commission are as follows:

- Distribute draft MSR distributed to affected agencies for technical review (two-week review period);
- Community workshop and presentation of draft MSR;
- Staff report and MSR public review (one-week review period); and
- MSR to LAFCO Commission – June 2015.

IRWD LAFCO Application and Next Steps:

On March 23, 2015, staff submitted the LAFCO application, fees, and Plan of Service to LAFCO to expand IRWD's service boundary to provide sewer services to Service Area 7. The following six items must be completed before LAFCO can approve IRWD's application:

1. LAFCO application, indemnification, and application fees – *completed*;
2. Board resolution for application to annex the proposed territories to IRWD – *pending*;
3. A Plan of Service to provide sewer service to Service Area 7 – *completed*;
4. CEQA documentation supporting the proposed annexation – *completed*;
5. A legal description for the proposed annexation area of Service Area 7 – *pending*;
6. County Board of Supervisors Resolution for the transfer of Ad-valorem tax revenues from OCSD to IRWD – *pending*.

Item No. 2 will be complete with Board approve of the resolution attached as Exhibit "A". Item No. 5 will be completed by an IRWD consultant with an expected completion date of late April 2015. Item 6 will be coordinated by LAFCO with an expected completion date of June or July 2015. LAFCO advised staff that it would complete the MSR process before addressing either EOCWD or IRWD's application for service. The applications for service would be brought to the LAFCO Commission in August or September 2015.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 and Section 15320. 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 15320 provides exemption for changes in the organization of local government agencies that are not changing the geographical area in which previously existing powers are exercised. A Notice of Exemption for the project was filed with the County of Orange Clerk/Recorder on February 24, 2015.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2015-\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT MAKING APPLICATION  
TO THE LOCAL AGENCY FORMATION COMMISSION FOR  
THE ANNEXATION OF TERRITORY (ANNEXATION NO. 29  
TO IRVINE RANCH WATER DISTRICT)

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LIST OF EXHIBITS:

Exhibit "A" – Vicinity Map for OCSD Service Area 7

Exhibit "B" – Resolution



# ATTACHMENT A





EXHIBIT "B"

RESOLUTION NO. 2015-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT MAKING APPLICATION  
TO THE LOCAL AGENCY FORMATION COMMISSION FOR  
THE ANNEXATION OF TERRITORY (ANNEXATION NO. 29  
TO IRVINE RANCH WATER DISTRICT)

WHEREAS, the Orange County Sanitation District ("OCSD") provides local sewer service, and regional sewage conveyance and treatment service to the OCSD Service Area 7 (Service Area 7) area generally depicted on the map attached hereto and incorporated by reference as Exhibit "A;" and

WHEREAS, OCSD has stated in their 2013 5-Year Strategic Plan the desire to transfer local sewer systems and service to a local sewerage agency; and

WHEREAS, the governing board of the Irvine Ranch Water District ("IRWD"), based on, among other factors, an evaluation of efficiencies in service delivery, have determined that it would be in the best interest of both Service Area 7 and IRWD respective customers and property owners for IRWD to acquire and absorb the sewer system and local sewer service of Service Area 7 through annexation; and

WHEREAS, IRWD desire to obtain approval of such annexation by the Local Agency Formation Commission of Orange County ("LAFCO"), subject to the terms and conditions set forth by LAFCO; and

WHEREAS, application for annexation can be made by adoption of a resolution of application to LAFCO by the legislative body of IRWD, pursuant to California Government Code section 56654 and other requirements set forth in the Cortese-Knox-Hertzberg Local Government Reorganization Act; and

WHEREAS, the territory of Service Area 7 is outside the existing sphere of influence of IRWD; and

WHEREAS, acting as lead agency under the California Environmental Quality Act (CEQA), IRWD has determined that, with regard to sewer service, the annexation is categorically exempt from CEQA (Categorical Exemption Classes 1 and 20) as a project consisting of repairs and minor alterations of existing utility facilities involving negligible or no expansion of use; and changes in organization of local agencies not changing the area in which existing powers are exercised, under the California Code of Regulations, Title 14, Article 19, Sections 15301, and 15320.

NOW THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. This resolution of application is submitted pursuant to Title 5, Division 3, Part 3 (commencing with section 56650) of the California Government Code.

Section 2. The Board of Directors of IRWD does hereby make the following described proposal for a change of organization and request that proceedings to approve such proposal be taken by LAFCO.

Section 3. The proposal consists of an annexation, hereby designated “Annexation No. 29 to the Irvine Ranch Water District” for purposes of the records of LAFCO.

Section 4. A map of the affected territory is attached as Exhibit “A” to this Resolution, and shall be subject to such changes therein as may be made to conform to the requirements of the County Surveyor. The affected territory generally consists of the service territory of Service Area 7. The affected territory is “inhabited territory” as defined in Government Code section 56046.

Section 5. This change of organization is proposed for the purpose of more efficiently providing sewer service within the annexed area. Services will be provided pursuant to the Plan of Services, which, upon completion thereof in final form, shall be deemed incorporated herein by reference and shall be submitted to LAFCO to accompany this application.

Section 6. This change of organization is proposed by the IRWD Board of Directors conditioned on the approval of a future Transfer Agreement between IRWD and OCSD, and conditioned on the approval of a future Regional Sewage Treatment Agreement between IRWD, OCSD, and Orange County Water District, and subject to each and all of the terms and conditions set forth in the future Transfer Agreement and the future Regional Sewer Treatment Agreement.

Section 7. This change of organization is proposed by the IRWD Board of Directors subject to the following terms and conditions:

1. The effective date of the reorganization shall be as may be fixed by LAFCO. Following the effective date, IRWD shall provide local sewer service within Service Area 7, and OCSD shall continue providing regional sewage conveyance and treatment service within Service Area 7.
2. OCSD’s Annual Local Sewer Service User Fee (“the Fee”) shall continue and be reduced by an amount specified in the final Plan of Service and incorporated into this resolution in Section 5 above, following the effective date, to the extent feasible, shall be collected by IRWD rather than by OCSD. IRWD will collect the Fee by reporting it to the County of Orange, which collects it on the property tax roll. Should it not be feasible, due to statutory or County requirements, for responsibility for collection of the Fee to be

transferred to IRWD by the County for the fiscal year of the transfer of service to IRWD, OCSD shall account for and promptly transmit any such revenues it receives from the County that are attributable to the Fee imposed in Service Area 7.

Section 8. The following persons are hereby designated to receive notices in these proceedings for IRWD:

Steve Lamar, President  
Paul Cook, General Manager.

Section 9. The proposal is inconsistent with the sphere of influence of IRWD. It is hereby requested that the IRWD sphere of influence be amended to include the annexed territory, in conjunction with the proposed change of organization.

Section 10. The Secretary is hereby authorized and directed to file a certified copy of this Resolution with the Executive Officer of LAFCO. The Secretary and each other officer, employee and agent of IRWD are hereby authorized and directed to supply any other supporting information as may be requested from IRWD's staff by LAFCO and to pay required fees and take such other actions as may be necessary to carry out the purposes of this Resolution.

ADOPTED, SIGNED AND APPROVED this 13th day of April, 2015.

\_\_\_\_\_  
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:

Special Legal Counsel - IRWD

By \_\_\_\_\_