

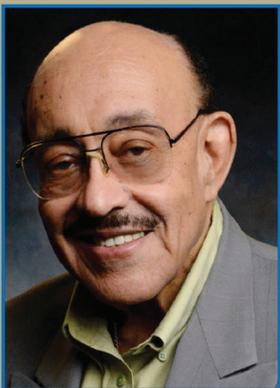
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

# ACHIEVEMENTS IN WATER INDEPENDENCE

*Annual Budget 2016/2017*



WATER REPLENISHMENT DISTRICT  
OF SOUTHERN CALIFORNIA



*Willard H. Murray, Jr.*  
Division One



*Rob Katherman*  
Division Two



*John D.S. Allen*  
Division Three



*Sergio Calderon*  
Division Four



*Albert Robles*  
Division Five

**THE WATER REPLENISHMENT DISTRICT  
BOARD OF DIRECTORS**

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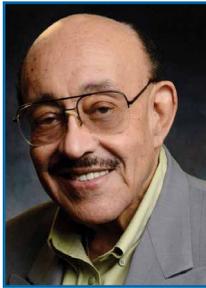
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## Mission Statement

*“To provide, protect and preserve high quality groundwater through innovative, cost-effective and environmentally sensitive basin management practices for the benefit of residents and businesses of the Central and West Coast Basins.”*

## Board of Directors

*Division 1*



*Willard  
H. Murray, Jr.  
Director*

*Division 2*



*Rob  
Katherman  
President*

*Division 3*



*John D.S.  
Allen  
Vice President*

*Division 4*



*Sergio  
Calderon  
Secretary*

*Division 5*



*Albert  
Robles  
Treasurer*

## Budget Team

*Robb Whitaker,  
P.E.*

*General Manager*

*Scott M. Ota,  
CPA, CFF,  
CIRA, CGMA*

*Chief Financial Officer*

*Elizabeth Betham*

*Senior Accountant*

*Jenna Shaunessy*

*Manager of Financial Services*

*Binhyen Bui*

*Senior Accountant*

*Kathryn Burns*

*Senior Accountant*

*With special thanks:*

*Michael Wray*

## Contact

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of Southern California

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## General Manager's Report



**Robb Whitaker**  
General Manager

### **DROUGHT IN SOUTHERN CALIFORNIA**

While the widely-forecast and much-anticipated *El Niño* dropped heavy rain and snow in the watersheds of Northern California, in many cases lifting reservoirs to near capacity, *El Niño* did not materialize in Southern California in the 2015/16 water year, leading us into another year of drought conditions. In the popular press, those conditions are characterized in many different ways. “We are in our fourth year of extreme drought.” “We are in our fifth year of exceptional drought.” “Rainfall has been below normal in nine of the past 10 years.”

Taking the longer view, it could well be that what we customarily have regarded as “normal” rainfall numbers are actually less than we thought. In terms of its duration, this drought may not be exceptional at all. Reviewing rainfall statistics in WRD’s service area for the past 89 years, there is a significant difference between the average rainfall of just over 14 inches and median rainfall of 12 inches. If we look at the past 20 years, both the average and the median have dropped an inch from their 89-year levels.

Rainfall and dry patterns are cyclical. Starting in 1935, we had a 10-year “wet period,” where rainfall levels continued to rise year-over-year. That was followed by a 30-year “dry period,” where rainfall levels steadily dropped. In the current cycle, we are actually in the 16th year of a “dry period.” Even the *El Niño* impact in Northern California may well be an anomaly from a long-term statistical standpoint.

All this means two main things to WRD. For planning purposes, we cannot assume that what has been regarded as “normal” precipitation over the long-term will ever be normal again. That is not to say that we should not be prepared to capture as much local rainfall as we can when it does rain. We should, we can and we do. But it also means from an historic and factual standpoint that water imported from Northern California and the Colorado River cannot be relied on to meet the replenishment needs of WRD.

That is why the decision of the WRD Board a decade ago to adopt the Water Independence Now (WIN) strategy for water replenishment supply has proved to be prescient and prudent.

### **WHERE WIN STANDS**

The WIN initiative took very significant strides this year:

#### **Leo J. Vander Lans AWTF**

Full operation commenced at the expanded Leo J. Vander Lans Advanced Water Treatment Facility (AWTF). The expansion project increased the capacity at the facility from 3,300 acre-feet per year to 8,000 acre-feet per year, eliminating altogether the need for imported water at the Alamitos Barrier.

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## **Robert W. Goldsworthy Desalter Expansion**

The District broke ground on a project to double the capacity of the Robert W. Goldsworthy Desalter. This project will treat an additional 2,400 acre-feet of brackish groundwater to provide a total of 4,800 acre-feet of potable water to the City of Torrance each year.

## **GRIP**

The Groundwater Reliability Improvement Program (GRIP) is the cornerstone of WRD's WIN initiative. GRIP will allow WRD to become 100% independent of imported water for groundwater replenishment. Once completed in 2018, GRIP will enable WRD to offset the current use of imported water with a combined total of 21,000 acre-feet per year of both tertiary treated water (11,000 acre-feet) and advanced treated water (10,000 acre-feet) for groundwater replenishment in the Central Basin via the Montebello Forebay. GRIP has two main components:

### **Turnout Structures**

WRD completed work on two new turnout structures to connect the Los Angeles County Sanitation Districts' recycled water delivery pipeline to the Montebello Forebay Spreading Grounds and the San Gabriel River. The structures are key elements of GRIP and starting this summer will enable delivery to the spreading grounds of an additional 11,000 acre-feet of recycled water per year on average.

### **Advanced Water Treatment Facility**

The Advanced Water Treatment Facility (AWTF) is the centerpiece of GRIP and a final piece of the first phase of the WIN initiative. Major steps were taken this year to make this long-planned project a reality. Specifically, the WRD Board:

- Certified the Final Environmental Impact Report for the project
- Adopted a design/build procurement process for project delivery
- With active community participation, conducted a robust and highly competitive design competition for the treatment building and related facilities
- Selected a design concept and an architectural and design team to work with the engineering and construction team to implement final design
- Hired an Owner's Engineer/Agent to provide professional program management and technical advisory services relating to the GRIP AWTF for the duration of advanced planning, design, entitlement, permitting and commissioning.
- Executed a Project Labor Agreement for the project with the Los Angeles/Orange County Construction Trades Council
- Selected an engineering, construction and operations and maintenance team to build the project and operate the treatment facility once complete

## **The Future of WIN**

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WIN doesn't end when water starts flowing in just under three years from the GRIP AWTF. While the district may become self-reliant from a replenishment standpoint, we fully realize that we are not separate and apart from the larger region and that what we all like to call integrated water resource management requires a regional perspective. The district took three steps this year in acknowledgement of that fact.

First, WRD joined the Gateway Region Integrated Regional Water Management JPA to help develop a regional plan for the management of water resources. That JPA consists of 17 cities and the Central Basin Municipal Water District.

Second, WRD is providing the Metropolitan Water District (MWD) with groundwater modeling to perform computer simulations of potential groundwater recharge scenarios for MWD's possible recycled water/recharge project. Currently undertaking a feasibility analysis, the project may produce 67,000 acre-feet of advanced treated recycled water in its next phase for groundwater recharge in MWD's service area, which includes Central and West Basin. Completely built out, the project could produce over 200,000 acre-feet of recycled water annually. The regional water resource implications are enormous.

And finally, in 2015, voters passed Proposition 1, which among other things dedicates \$2.7 billion for investment in the public benefits of water storage. The money will be allocated by the State Water Commission, beginning as early as next year. The Commission recently solicited concept papers from potential storage project sponsors. 47 concept papers were submitted. Ten were submitted by Southern California water entities and seven of those were submitted by WRD. Any groundwater storage projects in WRD's service area, of course, will provide benefits to the region and the state.

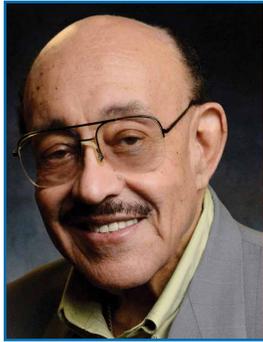
So the WIN initiative will continue long after WRD itself is independent of imported water for our own replenishment needs.

*Robb Whitaker*

*General Manager*



## President's Report



*Willard H.  
Murray, Jr.*  
President

This was an extraordinarily productive year for WRD. Projects completed or started will produce or enable the delivery of nearly 40,000 acre-feet of local water. The expanded Vander Lans Advanced Water Treatment Facility (AWTF) became fully operational. We broke ground on the expansion of the Robert W. Goldsworthy Desalter. The turnout structures connecting our major source of recycled water to our major spreading grounds was completed. And we broke ground on the crown jewel of our Water Independence Now (WIN) initiative—the 10,000 acre-foot capacity GRIP AWTF.

### FIVE-YEAR STRATEGIC ACTION PLAN

During an all-day workshop to assess WRD priorities, the Board refined its vision and strategic direction for the next five years. The results of that robust discussion were reflected in a Strategic Action Plan adopted by the Board. The five main goals of the District identified in the Plan:

- Continue to implement Water Independence Now (WIN)
- Provide high quality groundwater
- Promote organizational excellence
- Advance groundwater awareness
- Foster environmental stewardship and sustainability

At WRD, the Strategic Action Plan is not a document we adopt and put on the shelf for five years. Its implementation governs virtually everything we do. Executing the WIN initiative is a relentless pursuit, reflected by our brick-and-mortar projects. High quality groundwater is the objective and result of our Safe Drinking Water program under which we adopted three additional projects this year. The fact that our staff routinely holds leadership positions in state professional organizations attests to our own organizational excellence, as does the fact that WRD has received 17 budget awards in the last five years and financial reporting awards in each of the last 11. We enhanced organizational excellence this year by awarding contracts to help us implement an Asset Management Plan and Supervisory Control and Data Acquisition Plan, both indispensable elements of sophisticated management for the modern organization.

### CORE VALUES

*The Water Replenishment District executes its role in groundwater management through:*

#### Financial Responsibility:

*Long-term prudent financial decisions are made about staffing, operational expenses, rates, bonds and reserves.*

#### Transparent Decision Making:

*The board makes decisions in open meetings with the public heard in a respectful manner. Additionally, the public is encouraged to provide input through participation in a variety of focused forums and public hearings.*

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Our education and outreach efforts, highlighted by our much-emulated ECO Gardener program, cover every corner of the District. And our implementation of local supply projects greatly reduces the carbon footprint for the region.

## **FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**

The Board adopted an updated Five-Year Capital Improvement Program (CIP), providing a road map that will take us through 2020/21. The CIP summarizes ongoing and planned capital projects and equipment purchases and links those projects and purchases to WRD's Strategic Action Plan and annual budget. The CIP includes a total of \$214 million in capital projects and reflects more than \$37 million in grant funding WRD has received.

## **GRANT FUNDING**

Grant funding helps reduce the Replenishment Assessment the District would otherwise have to adopt. Just this year, we received three grants totaling over \$9 million. Nine million dollars is equivalent to roughly \$39 for one year on the Replenishment Assessment. The grants included just over \$5 million for the GRIP Recycled Water Turnout Structures and just over \$4 million for the Goldsworthy Desalter expansion. Both were from the Drought Solicitation Round of Proposition 84 Implementation Grants. WRD also received an \$85,250 grant from the Metropolitan Water District for our Tracer Alternative Research Project.

Pending is a grant of up to \$15 million from the State Water Resources Control Board that will go toward the cost of the GRIP AWTF.

## **DEBT FINANCING**

WRD had the good fortune to undertake one of the most successful California water district financings in years. Armed with an exceptionally strong AA+ credit rating from Standard and Poor's and Fitch Rating Service backed by solid revenue projections and a favorable interest rate climate, WRD this year sold \$148,345,000 in Replenishment Assessment Revenue Bonds. The bonds sold at an effective AAA interest rate cost of 3.49%, saving \$23.7 million as a result of the bond sale exceeding expectations.

Fitch based its rating on five key WRD characteristics:

1. Robust financial flexibility relative to alternate water supply costs.
2. The District's steady transitioning from costly imported water to recycled water for aquifer replenishment.
3. The essential service WRD provides as a groundwater manager with a customer base of 43 municipalities and large private water companies.
4. WRD's rising capital needs with the financial flexibility to meet those needs.
5. The District's history of sound debt service coverage, which since fiscal year 2011 has remained above 1.3x.

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The bonds provide \$69,500,000 in new money to fund WRD's 5-Year Capital Improvement Plan, including the GRIP AWTF. \$109,743,000 refunds previously issued debt that carried interest rates as high as 6.15%. The refinancing saved WRD \$9.7 million in interest costs that it otherwise would have had to pay.

## **THANKS!**

In terms of solid accomplishments and performance, project and program decisions, phenomenal financing and the sheer caliber of work performed, this was an astonishing year and easily the most productive in WRD's nearly 57-year history. For that, I want to thank the diligence and dedication of my fellow Board members and express appreciation to the superb professional staff that helps make WRD one of the best-managed water districts in California.

*Willard H. Murray, Jr.*  
*President*



## 2016/2017 Budget-in-Brief

### **FINANCIAL OVERVIEW – REPLENISHMENT ASSESSMENT: INCREASE OF 5.0% TO \$297/ACRE-FOOT**

The District manages the Central and West Coast groundwater basins which provide groundwater for approximately 4 million residents in 43 cities of Southern Los Angeles County. Its mission statement is “to provide, protect and preserve high quality groundwater through innovative, cost-effective and environmentally sensitive water basin management practices for the benefit of residents and businesses of the Central and West Coast Basins.”

The District accomplishes this through its various projects and programs; each of which are explained in detail in other parts of this budget document. The District’s budget is divided into three major categories:

1. Operating Expenses – Primarily used to track expenses related to projects, programs and administrative costs
2. Other Special Programs and Supportive Costs
3. Capital and Other Non-Operating Revenues and Expenses

Project, program and administrative costs are tracked in the category of operating expenses. These projects and programs include activities that enhance the replenishment operations, increase the reliability of groundwater resources, improve and protect groundwater quality and ensure that the groundwater supplies are suitable for beneficial use. Direct administrative supportive costs include the Board of Directors, General Manager, Administration, Finance and Communication and Education.

Other special programs and supportive costs include expenses related to litigation, Proposition 218 and Senate Bill 620; SB 620 costs relate to the District’s efforts to comply with the law establishing the Budget Advisory Committee (BAC) and the biennial election of a seven-member committee. Election expenses are also included in this category of expenses and represent mandatory pass-through costs from the County Registrar-Recorder to manage the election of the District’s elected officials.

The District has debt service payments on its 2015 Water Revenue Bonds which are included in the third category of expenses: Capital and Other Non-Operating Revenues and Expenses.

### **RELATIONSHIP OF FUNDS, PROJECTS AND PROGRAMS**

The District operates two major funds: the Replenishment Fund and the Clean Water Fund. Expenses are allocated to each fund through the various projects and programs. For budget purposes, projects and programs are separated into either Replenishment, Clean Water Projects or Dual Purpose Projects and Programs. Dual purpose projects and programs are those that address both replenishment operations and clean water efforts.

#### **Replenishment Fund**

The annual amount pumped from the Central and West Coast Groundwater Basins is greater than the natural replenishment of groundwater aquifers, creating an annual deficit or annual overdraft. WRD is enabled under the California State Water Code to purchase and recharge additional water to make up the overdraft. The Replenishment Fund is the budgetary control for all expenses related to the District’s replenishment efforts. This includes the two primary expenses of the District, Water Supply Purchases and Water Supply Production, which make up approximately 67% of all annual costs. Total budgeted expense related to the Replenishment Fund is about \$56.6 million or 92.3% of the total budget.

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## **CLEAN WATER FUND**

Consistent with WRD's mission to provide, protect and preserve high quality groundwater, the District annually collects nearly 600 groundwater samples from its monitoring well network and analyzes them for over 100 water quality constituents to produce nearly 60,000 individual data points to help track the water quality in the basins. By analyzing and reviewing the results on a regular basis, any new or growing water quality concerns can be identified and managed effectively. The Clean Water Fund is the budgetary control for all expenses related to the District's efforts to provide clean and safe water to approximately four million users of groundwater in the District's service area. Total budgeted expense related to the Clean Water Fund is about \$4.7 million or 7.7% of the total budget.

## **REVENUES – Sources of Revenues Remain the Same**

The District's primary source of revenue is generated by the replenishment assessment; making up 95.6% of the District's revenue or \$68,606,000. The replenishment assessment is collected based on the amount of water pumped from the Central and West Coast basins.

The District also expects to collect \$1,910,000 or 2.7% of total revenue from water sales to the Orange County Water District (OCWD) and Metropolitan Water District (MWD) subsidies from the Leo J. Vander Lans Advanced Water Treatment Facility. This facility provides advanced treated water to the Alamitos Seawater Intrusion Barrier Project which would otherwise need more expensive non-interruptible imported water.

The Goldsworthy Desalter is located in the West Coast Basin and treats brackish groundwater for sale to the City of Torrance. The anticipated revenue is \$720,000 which remains materially flat and holds steady at 1.0% of District revenue.

Other income and expenses account for \$515,000 or 0.7% and is the net of interest income, property tax revenue and other expenses not charged to the replenishment assessment.

## **COMPARISON TO 2015/16 YEAR'S BUDGETED REVENUES**

Budgeted revenues from the prior year were similar to that of the current year. Replenishment Assessment revenues made up 95.2% of total revenues or \$69,076,000. Revenues from both the Leo J. Vander Lans Advanced Water Treatment Facility and the Goldsworthy Desalter were \$2,688,000 (3.7%) and \$810,000 (1.1%), respectively. Prior year's Replenishment Assessment was \$283 per acre-foot.

## **EXPENSES – Conservative Fiscal Policy Keeps Expenses Relatively Flat**

The most significant budgetary item for the District is water and water-related costs. Of the District's total budgeted expenses of \$71,751,000, about \$48,060,000 (67.0%) is related to either water supply purchases, production of water or water conservation efforts. Details and explanations of the various Projects and Programs are located in their specific sections of this budget document; the total budgeted costs for these replenishment and clean water projects are \$7,727,000 (10.8%) of the 2016/17 adopted budget. Administration costs including GASB 45 related costs are budgeted to be \$4,757,000 (6.6%), Other Special Programs & Supportive Costs \$775,000 (1.1%), Capital Improvement Program Expenses \$13,232,000 (18.4%) and rate relief of \$2,800,000 (-3.9%).

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## **COMPARISON TO 2015/16 YEAR'S BUDGETED EXPENSES**

Total budgeted expenses for 2015/16 were \$72,574,000 with 65.3% of those costs relating to water and water-related costs. In 2016/17 total expenses remained stable with a slight decrease of \$823,000 from \$72,574,000 to \$71,751,000. Water and water-related costs increased 1.7% to 67.0% of total expenses.

## **FUND BALANCE**

The District's fund balance is governed by §60290 of the California State Water Code which states that the "District may establish an annual reserve fund in an amount not to exceed ten million dollars (\$10,000,000) commencing with the 2000/01 fiscal year. The maximum allowable reserve fund may be adjusted annually commencing with the 2001/02 fiscal year to reflect percentage increases or decreases in the blended cost of water from district supply sources."

Based on the percentage increase in the blended cost of water for fiscal year 2016/17 from District supply sources, the maximum allowable reserve in accordance with §60290 of the California State Water Code is now \$25.9 million.

Additionally, §60291 states that the limitation on the reserve established in §60290 does not apply to funds appropriated for capital projects.

If for some reason, the District has more than \$10,000,000 (adjusted for the blended cost of water) or \$25,000,000, §60328.1 states that the District shall apply the estimated fiscal year end balance in excess of the amount allowed in §60290 to a replenishment assessment rate reduction or to the purchase of water in the succeeding fiscal year.

## **PLANNING FOR THE FUTURE**

Plenty of water had always been available from the Colorado River and even more would flow through the State Water Project beginning in 1972. Even so, the Board of Directors of the Water Replenishment District was skeptical about the long-term prospects for imported water. When WRD was founded in 1959, who would have guessed that claims by other states to their share of the Colorado River would shrink by half the available supply of water to Southern California within a mere 40 years? And who would have predicted that constraints on the State Water Project would also reduce in half the amount of water originally allocated to our region?

## **IMPACTS OF LONG-RANGE PLANS ON FUTURE BUDGETS**

In the past, a large percentage of replenishment water came from sources in Northern California and the Colorado River. The District is moving toward an independence from expensive imported water through the Water Independence Now (WIN) initiative, a series of projects that will fully utilize storm water and recycled water sources to restore and protect the groundwater resources of the Central and West Coast Groundwater Basins.

The WIN-related projects will allow the District to become completely independent from imported water. In order to fund WIN, the District has obtained financing through its 2015 Series Water Revenue Bonds. With the leadership provided by the Water Replenishment

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District's Board of Directors, the transparency and financial stability of the District and the AA+ rating from both Standard and Poor's and Fitch Ratings, the District was able to obtain AAA pricing in December 2015. This will continue to provide savings to the users of groundwater in the WRD service area for 30 years.

The District has also applied for a combination of grant and loan financing through the California Clean Water State Revolving Fund (CWSRF) which is a federal-state partnership to help ensure safe drinking water by providing interest-free grants and below-market interest rate loans to qualified projects. Pursuing such financing opportunities will lessen any increases to the current and future replenishment assessment rates.

The projected budget impact of principal and interest payments associated with the 2015 Series Replenishment Assessment Revenue Bonds and funding through the Clean Water State Revolving Fund is as follows:

	2016/17	2017/18	2018/19	2019/20	2020/21
<b>2015 Water Revenue Bonds</b>	\$9.246M	\$9.247M	\$9.247M	\$9.249M	\$9.248M
<b>CW State Revolving Fund</b>	1.860M	3.720M	3.720M	3.720M	3.720M
<b>Total</b>	\$11.106M	\$12.967M	\$12.967M	\$12.969M	\$12.968M
<b>Projected Production (in acre-feet)</b>	231,000	234,300	237,500	240,800	244,000
<b>Impact to Assessment (per acre-foot)*</b>	<b>\$48.08</b>	<b>\$55.34</b>	<b>\$54.60</b>	<b>\$53.86</b>	<b>\$53.15</b>

\* Calculation of impact to assessment is total costs divided by projected production

The offset to these capital costs will be replacing imported replenishment water with the additional use of recycled water, greater storm water capture and the production of highly treated recycled water. Each year, more water is pumped from the Central and West Coast Groundwater Basins ("the Basins") than nature can replenish. The District makes up the difference by purchasing imported and recycled water. In the past, the District purchased 21,000 acre-feet of imported spreading water to help replenish the Basins. Once the Groundwater Reliability Improvement Program (GRIP) is complete, we will have replaced all 21,000 acre-feet of imported water at a 2016/17 cost of \$15.3 million per year. Cost savings will be immediate and the value of the investment in capital assets only increases over time as the cost for imported water continues to climb steadily each year.

## **RATING AGENCIES AFFIRM AA+ RATING; DISTRICT RECEIVES AAA PRICING**

On December 10, 2015, the District issued its 2015 Series Replenishment Assessment Revenue Bonds. The bonds were issued to:

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1. Finance the acquisition, construction, and installation of certain capital improvement projects of WRD
2. Prepay the 2004 Certificates of Participation
3. Prepay in advance the 2008 Certificates of Participation
4. Prepay in advance the 2011 Certificates of Participation

Both Standard & Poor's and Fitch ratings affirmed the WRD's credit rating of AA+ with a stable outlook. This helped in the District obtaining AAA pricing, in line with the Metropolitan Water District pricing the day before WRD priced its bonds. The District will have level debt service payments of \$9.25 million annually for 30 years. Refunding resulted in a net present value (NPV) of \$9.72 million and an all-in lowering of total interest cost of 3.49%, compared to the 2004 COP – 4.52%, 2008 COP – 6.15%, 2011 COP – 4.70%. Due to the District's strong credit rating and aggressive pricing by the District's Underwriting team, the demand for the bonds was four-times the offering amount.

With the District serving over four million people and 10% of the State of California's population, it is even more important to become self-reliant. A big portion of the costs will be debt financed and, therefore, future generations will share not only in the benefits of the WIN Program, but also in the costs. This program will provide a locally, sustainable and reliable water supply for the residents served by WRD.

## **STAFFING**

District staffing increased from 34 to 37 positions, however the total full-time equivalent (FTE) allocated to the Replenishment Assessment is still only 34. This is caused by the District being appointed the Administrative Body of the Central and West Coast Basins Watermaster. This function requires three FTEs in order to provide the administrative function as Watermaster and is accounted for through a separate budget, not associated with the Water Replenishment District's Replenishment Assessment.

While the total staff attributed to the WRD budget remains at 34, there have been some reclassifications which are designed to increase efficiencies. The primary change is the development of an Internal Services Department. Previously the Administrative Department, the Internal Services Department's functional duties increased in its scope of responsibilities necessary to support the day-to-day functions of the District. Table 1 shows the District's comparative staffing by department.

The District provides salary and benefits in accordance with the Memorandum of Understanding (MOU) with the Employee Association of the American Federation of State, County and Municipal Employees (AFSCME), AFL-CIO, Chapter 1902. Through the MOU, the District provides medical and dental benefits for its employees, along with retirement benefits in accordance with the California Public Employees' Pension Reform Act (PEPRA), which took effect in January 2013. Prior to PEPRA, the District provides a 3.0% at 60 formula through the California Public Employee Retirement System (CalPERS).

*Scott M. Ota, CPA, CFF, CIRA, CGMA*  
*Chief Financial Officer*

## GOVERNMENT

The District is divided into five elected divisions. The governing board is made up of one elected director from each division. The General Manager is appointed by the Board of Directors. The District's budget process consists of activities that encompass the development, implementation and evaluation of a fiscal plan for the utilization of the District's assets and resources.

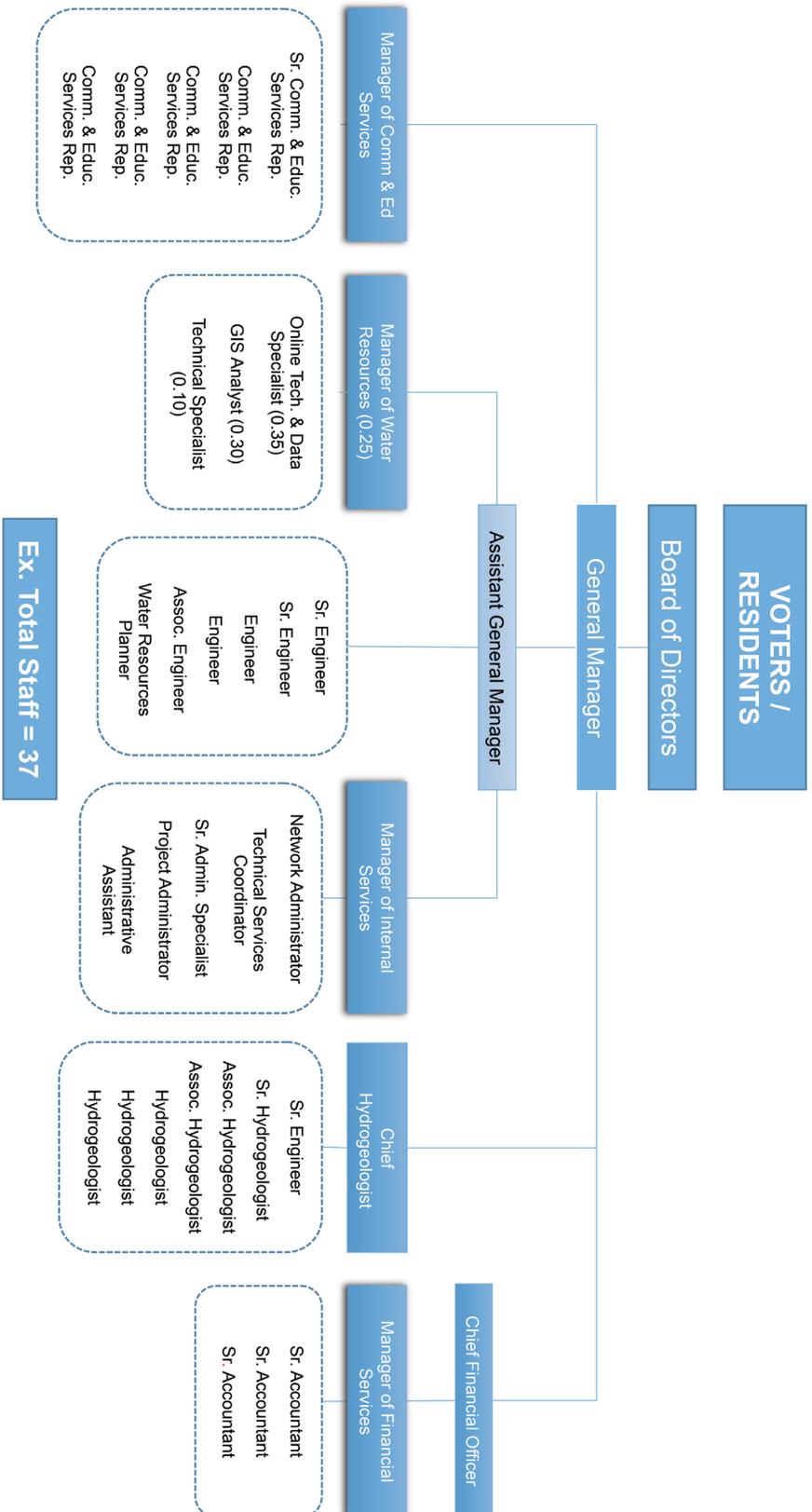


Figure 1 – Organizational Chart

# Annual Budget 2016/2017

*Table 1*  
**Summary of Personnel by Department  
 2016/17 Budget**

	2014/15 Budget	2015/16 Budget	2016/17 Budget	Change from 2015/16 Budget
<b>General Management</b>				
General Manager	1	1	1	-
<b>Hydrogeology Department</b>				
Chief Hydrogeologist	1	1	1	-
Senior Engineer	1	1	1	-
Senior Hydrogeologist	1	1	1	-
Hydrogeologist	2	2	3	1
Associate Hydrogeologist	1	2	2	-
Assistant Hydrogeologist	1	-	-	-
<b>Engineering Department</b>				
Assistant General Manager/Chief Engineer	1	1	1	-
Manager of Water Resources	1	1	1	-
Senior Engineer	2	2	2	-
Engineering	1	1	2	1
Water Resource Planner	1	1	1	-
Geographic Information Systems Analyst	1	1	1	-
Associate Engineer	1	1	1	-
Online Technology and Data Specialist	1	1	1	-
Senior Administrative Specialist	-	-	-	-
Senior Analyst	1	1	-	(1)
Technician Specialist	1	1	-	-
<b>Financial Services Department</b>				
Chief Financial Officer	1	1	1	-
Manager of Financial Services	1	1	1	-
Senior Accountant	3	3	3	-
Accountant	1	-	-	-
Accounting Technician	-	-	-	-
<b>Communication &amp; Education Services Department</b>				
Manager of Comm & Ed Services	1	1	1	-
Senior Government Affairs Representative	1	-	-	-
Senior Comm & Ed Services Rep	2	1	1	-
Comm & Ed Services Rep	2	3	4	1
Associate Government Affairs Representative	-	-	-	-
Administrative Specialist	-	1	-	(1)
<b>Internal Services and Human Resources Department</b>				
Manager of Internal Services	-	-	1	1
Deputy Secretary	1	1	-	(1)
Senior Administrative Specialist	1	1	1	-
Administrative Specialist	1	1	1	-
Network Administrator	1	1	1	-
Technical Services Coordinator	-	-	1	1
Project Administrator	-	-	1	1
<b>Total</b>	<b>34</b>	<b>34</b>	<b>37</b>	<b>3</b>

## Background & History

The Water Replenishment District of Southern California (District) was formed by a vote of the people in 1959 for the purpose of protecting the groundwater resources of the Central and West Coast Groundwater Basins (Basins) in Southern Los Angeles County.

The District provides groundwater for over 4.0 million residents in 43 cities of Southern Los Angeles County. The 420 square mile service area uses about 250,000 acre-feet of groundwater per year, which equates to 40% of the total demand for water. Prior to the formation of the District, over-pumping of both basins caused many wells to go dry and seawater to intrude into the groundwater aquifers – underground geological formations that store water. In 1957, the accumulated overdraft in the Central Basin alone was almost one million acre-feet, which translates to a tremendous withdrawal of water from aquifers in excess of the amount that naturally, or artificially, replaces it. In both basins, groundwater levels had dropped to below sea level. During the 1950's the Los Angeles County Flood Control District (LACFCD) purchased 500,000 acre-feet of imported water to artificially replenish the basins.

In 1959, the Central Basin Water Association (CBWA) and West Basin Water Association (WBWA), comprised of the major groundwater producers from each basin, jointly proposed and obtained voter approval for formation of the Water Replenishment District of Southern California to manage the Central and West Coast Groundwater Basins.

The District's role expanded as it developed programs to capture stormwater, recharge recycled wastewater, monitor water quality and take advantage of evolving MWD of Southern California water rates. In 1990, legislation was passed to strengthen the District's role in groundwater quality protection and to provide a special assessment ability to the District to fund clean water programs.



Figure 2 – WRD Groundwater Demand

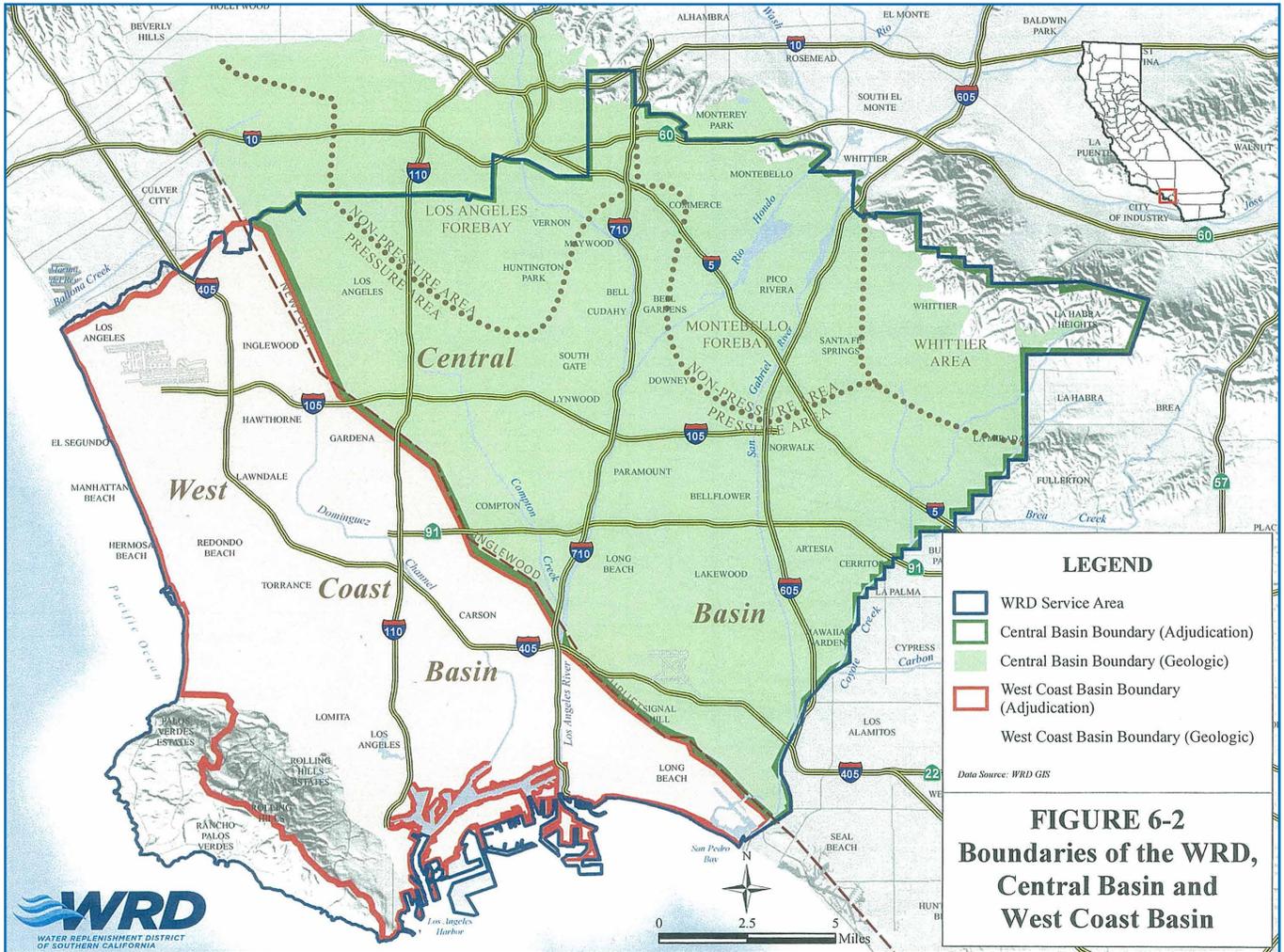


Figure 3 – Service Area Map

## *Local Economy*

The District office is located in Los Angeles County, with over 10 million residents in 88 cities spread across 4,100 square miles; Los Angeles County's population exceeds that of 43 states. If it were a country, it would be the twentieth largest economy in the world. In addition to its signature industries—entertainment, tourism and fashion—its enormous and diversified economy is home to the largest port complex in the Western Hemisphere and the largest number of manufacturing jobs of any county in the country. Other major industries include health care, education and knowledge creation and business services.

The county added 94,700 jobs in 2015, equivalent to a 2.2% annual increase. A majority of the county's major industries added jobs last year, as broad-based growth pushed wage and salaried jobs to a record high. Los Angeles County should continue to add jobs this year. Along with job growth, the unemployment rate fell to 6.9%, the lowest rate of the post-recession period. The unemployment rate should further improve.

Population growth is expected to slow slightly this year and next, with the rate of growth at approximately 0.6% this year and 0.4% in 2017. Even at such low growth rates, the county will increase by over 100,000 residents during that time period. Most of the recent population growth in Los Angeles County has been due to natural increase (births outnumbering deaths), while net migration was slightly negative again last year. The county's high cost of living and lack of affordable housing units for low and middle-income households are contributing to the slowdown in population growth.

Like the nation and state, Los Angeles County experienced broad-based job gains in 2015, adding approximately 95,000 jobs last year. Job gains were seen in most of the county's major industries, with records reached in seven (out of 17) and two more poised to surpass their pre-recession peaks in 2016. The largest job gains occurred in health care and social assistance (21,800 jobs), followed by leisure and hospitality (19,600 jobs) and government (10,000 jobs). The fastest growing sectors in percentage terms were construction (5.9%), leisure and hospitality (4.2%), wholesale trade (3.5%), and health care and social assistance (also 3.5%). Private sector job losses occurred in manufacturing, information, finance and insurance, and the natural resources sector.

As America's gateway to Asia, international trade plays an important role in the Los Angeles economy. The twin ports rebounded after the labor negotiations early in the year to post their third-best year in 2015, with throughput of 15.4 million containers. Despite this, low inflationary pressure combined with a strong dollar brought the value of two-way trade through the Los Angeles Customs District down to \$393.4 billion from the record-setting volume of \$416.6 billion in 2014.

# Annual Budget 2016/2017

In terms of employment, the professional services super-sector is the second largest in Los Angeles County, with over 620,000 workers in 2015 (surpassed only by health care and education). There are three major industries in this group: professional, scientific and technical services; management of enterprises; and administrative, support and waste services. All saw solid gains in 2015. Professional, scientific and technical services was the largest of the three with 288,700 jobs in 2015. The industry, which includes legal, accounting, architecture, computer systems design, consulting, research and advertising, added 5,800 jobs, equivalent to a 2.0% growth rate. Finally, the administrative, support and waste services sector added 4,900 jobs (1.8%) for a total of 271,900. All three components of professional services and technology are expected to see additional job gains in 2016 and 2017.

Los Angeles County has seen steady improvement over the past four years, both in terms of job gains and unemployment rate declines. This improvement is expected to continue in 2016 and 2017, although at a slower pace. With the economy back at full employment levels, wage gains are expected over the next year across many occupations. Households could experience significant gains in purchasing power this year as wage gains spread out more broadly than in recent years.

California water supplies are much better off than they were a year ago. The 2015/16 *El Niño* did produce additional rain and snow, however it was much farther north than expected. The additional rain in northern California has led to a healthy replenishment of the state's northern reservoirs including Shasta, Oroville and Folsom. Toward Los Angeles and San Diego, the winter's moisture has been much more disappointing. However, with the runoff from the storms in northern California boosting the reservoir levels, the Department of Water Resources (DWR) increased its water delivery estimate for most recipients to 60 percent of requests for the calendar year. DWR's initial State Water Project allocation, announced in December, was 10 percent of requests.

On the water conservation side of the equation, the State Water Resources Control Board recently announced that Californians have reduced residential water use by 28 percent in May 2016, compared to the same month in 2013. Cumulatively, local water suppliers have saved 1.6 million acre-feet in the 12 months since mandatory conservation goals began. Starting in June 2016, the State Water Resources Control Board recently updated emergency water conservation regulations to provide urban water agencies the ability to set their own conservation standards based on a "stress test" of supply reliability. Water suppliers must demonstrate that they have sufficient supplies to withstand three years of continuous drought or take additional measures that include mandatory conservation targets. The regulation is in effect through January 2017.

# Annual Budget 2016/2017

The Water Replenishment District of Southern California has embraced water conservation and the use of recycled water for many years. Through coordination and planning with other local and regional water suppliers, the District continues to engage in developing long-term solutions to the various water supply challenges. These efforts are evidenced in the District's participation in regional conjunctive use programs as well as local groundwater storage and recovery projects. It is through participation in these and other programs, such as the District's Water Independence Now (WIN) program, that will enable the District to continue to meet its long-term water supply needs.

The WIN program is specifically designed to make use of local water supplies to become completely independent of imported water from the Colorado River and the California State Water Project. Prior to 1961/62, the West and Central Groundwater Basins received about 36% of the replenishment water from storm water and 64% from imported water. Today, the demand for imported water has dropped dramatically due to the many projects and cooperative interagency programs WRD has helped develop. The increase in replenishment due to natural recharge is a direct result of storm water capture projects which increases the ability to benefit from local storm events. The WIN program will completely eliminate the need for imported water by replacing the current imported water needs with recycled water. This will be accomplished through completion of the Groundwater Reliability Improvement Program (GRIP) and the use of 100% recycled water at the West Coast and Dominguez Gap Seawater Intrusion Barrier Projects.

*Source of economic data: Los Angeles County Profile; Los Angeles County Economic Development Corporation.*



# Annual Budget 2016/2017

*Table 2*  
**Demographics and Economics Statistics - County of Los Angeles**  
**Last Ten Fiscal Years**

<b>Year</b>	<b>Los Angeles County Unemployment Rate (1)</b>	<b>California Unemployment Rate (1)</b>	<b>U.S. Unemployment Rate (1)</b>	<b>Population (1)</b>	<b>Personal Income (thousands of dollars) (2)</b>	<b>Personal Income per Capita (2)</b>
2007	5.10%	4.89%	4.60%	9,773,894	\$400,366,343	\$41,273
2008	7.50%	5.35%	4.60%	9,796,812	\$417,454,378	\$42,881
2009	11.60%	7.21%	5.80%	9,805,233	\$394,980,563	\$40,356
2010	12.60%	11.33%	9.30%	9,825,077	\$428,019,654	\$43,564
2011	12.30%	12.36%	9.60%	9,860,904	\$438,356,626	\$44,454
2012	11.10%	10.60%	8.20%	9,945,031	\$448,142,986	\$45,062
2013	9.60%	8.60%	7.60%	10,019,365	\$468,615,720	\$46,771
2014	8.20%	7.60%	6.10%	10,099,350	\$484,859,694	\$48,009
2015	7.00%	6.40%	5.50%	10,181,140	\$500,117,959	\$49,122
2016	4.90%	5.20%	4.70%	10,274,040	\$515,037,625	\$50,130

# Annual Budget 2016/2017

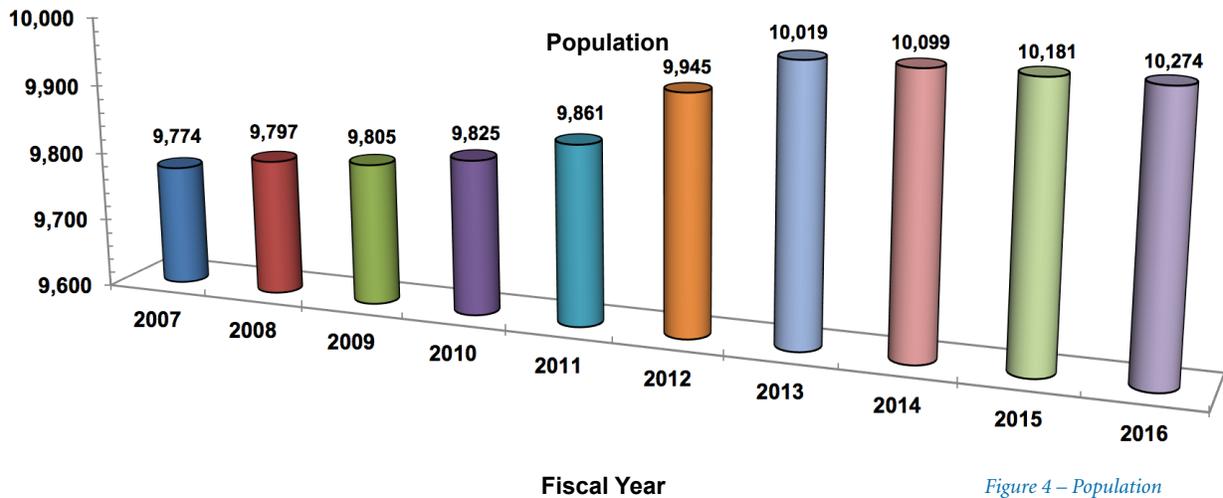


Figure 4 – Population

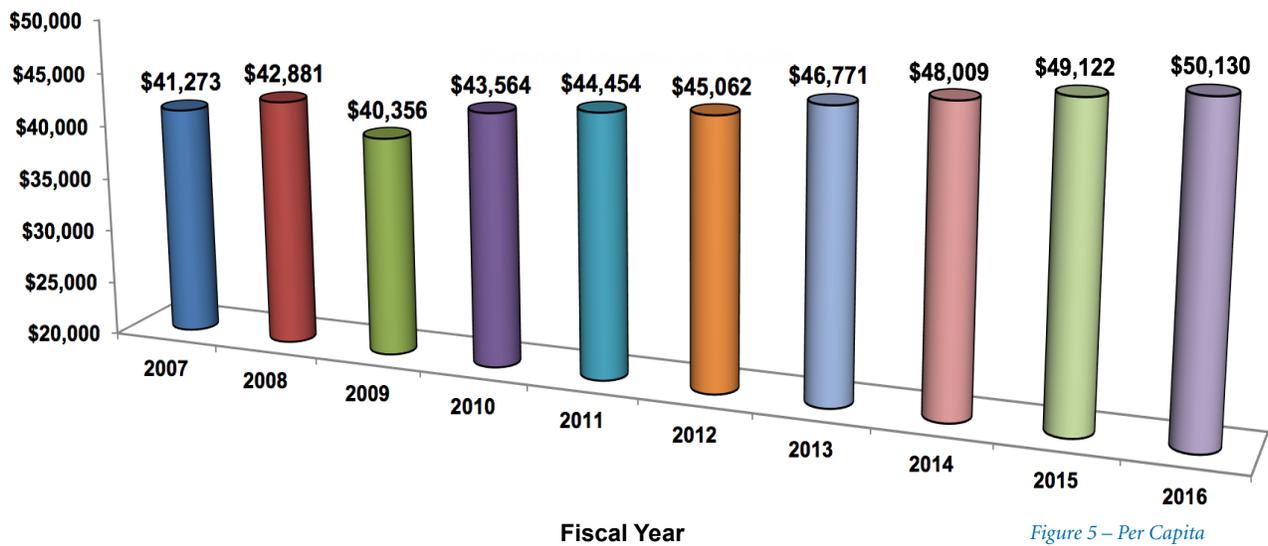


Figure 5 – Per Capita

**Notes:**

1. Updated annually. Table: Population Estimates and Components of Change by County.  
Sources: California Department of Finance, California Labor Market Info, Los Angeles Business Journal, U.S. Bureau of Labor Statistics
2. Personal Income per Capita was computed using Census Bureau midyear population estimates.  
Sources: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, CalGov.com Los Angeles County Employment Forecast

## *Relevant Financial Policies*

### **BUDGET CONTROLS AND REVISIONS**

The District reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise. The intent of the District is that the costs of managing the groundwater basins on a continuing basis be financed or recovered primarily through user charged replenishment assessments, capital grants and similar funding. Revenues and expenses are recognized on the full accrual basis of accounting.

Operating Revenues result from exchange transactions associated with the District's principal activity. Exchange transactions are those in which each party receives and gives up essentially equal values. Non-operating revenues, such as grant funding and investment income, result from non-exchange transactions in which the District gives (receives) value without directly receiving (giving) value in exchange. Operating expenses, such as water purchases, are the result of the District's exchange transactions along with associated expenses for running the District's day-to-day operations. Non-operating expenses, such as interest paid on debt service or election costs are the result of expenses that do not relate to the District's day-to-day operations.

### **FINANCIAL REPORTING**

The District's basic financial statements are presented in conformance with the provisions of Government Accounting Standards Board (GASB) Statement No. 34, "Basis Financial Statement and Management's Discussion and Analysis for State and Local Governments" (GASB No. 34). This statement established revised financial reporting requirements for state and local governments throughout the United States for the purpose of enhancing the understandability and usefulness of financial reports.

### **BUDGETARY POLICIES**

The District adopts an annual budget for planning, control, and evaluation purposes. Budgetary control and evaluation are affected by comparisons of actual revenues and expenses with planned revenues and expenses for the period. More detail of budget control and revisions can be found in the Budget Process section of this document. Each year, the Board of Directors follows the legislation as set forth in the California State Water Code when preparing and adopting the annual budget and establishing the ensuing year's Replenishment Assessment.

### **REPLENISHMENT ASSESSMENT (RA) POLICY**

On or before the second Tuesday of May each year, the Board of Directors (BOD), in accordance with California Water Code Section 60315 sets the Replenishment Assessment rate for the ensuing fiscal year. In order to prepare for this action, the District holds public hearings in the spring of each year to determine to what extent the estimated costs for the ensuing year shall be paid for by a Replenishment Assessment (RA). In preparing for these hearings, the District develops an annual operating budget and updates its five-year capital plan. These documents outline the funds needed to:

# Annual Budget 2016/2017

1. Purchase replenishment water
2. Protect and preserve the groundwater supply
3. Pay for the related administrative expenses

The new rate structure becomes effective each year on July 1.

## **INVESTMENT POLICY**

The Board of Directors has adopted an investment policy that conforms to California State law, District ordinance and resolutions, prudent money management, and the “prudent person” standards. The objectives of the investment policy are safety, liquidity, and yield. In 2009, at the direction of the Board of Directors, the District implemented its Community Banking Program and invested in several local community banks that are fully insured by the Federal Deposit Insurance Corporation (FDIC) or secured as required by state law. The Board of Directors reviews the adopted investment policy on an annual basis and approves any changes.

## **CAPITAL ASSETS**

Capital assets acquired and/or constructed are capitalized at historical cost. District policy has set the capitalization threshold for reporting capital assets at \$5,000. Donated assets are recorded at estimated fair value at the date of donation. Upon retirement or other disposition of capital assets, the cost and related accumulated depreciation are removed from the respective balances and any gains or losses are recognized. Provision for depreciation is computed using the straight-line method over the following estimated useful lives of the assets:

- Utility plant and equipment – 30 years
- Monitoring and injection equipment – 3 to 20 years
- Service connection – 50 years
- Office furniture and equipment – 5 to 10 years

This policy is approved by the Board of Directors.

## **PROCUREMENT POLICY**

Purchases will be made in accordance with the District’s Procurement Policies & Procedures as outlined in chapter 10 of the District’s Administration Code. The District gives preference to local businesses when the District enters into contracts for supplies, materials and equipment, construction and professional services totaling under \$25,000. Summarized below are the significant provisions of the District’s procurement policies and procedures:

1. All contracts for construction work, materials, equipment, supplies and professional services shall be in writing and, at a minimum, include the relevant scope of work, duration and terms of payment.
2. All contracts valued less than \$10,000 may be approved and signed by the General Manager or other District’s representative authorized by the Board of Directors. The General Manager may not execute multiple contracts on behalf of the District with the same person or entity within a one-year period that cumulatively total \$10,000 or more without the Board of Directors’ prior approval.

# Annual Budget 2016/2017

3. All contracts valued \$10,000 or more shall be authorized by the Board of Directors and signed by the President and the Secretary except that the Board of Directors may, by resolution for a specific expense, authorize the General Manager or the other District's representative to sign contracts in the name of the District, not to exceed \$25,000.
4. Where the contract amount is less than \$25,000, an informal solicitation may be made by the General Manager by informal quotes through telephone, mail or electronic inquiry, comparison of prices on file or other. Every attempt shall be made to receive at least three price quotations.
5. Before making any contract for construction work or purchase of materials, supplies, and equipment that total \$25,000 or more within any 12 month period, the District shall advertise for bids by issuing a Contract Solicitation.
6. Advertising should be in a newspaper of general circulation in Los Angeles County at least once a week for four consecutive weeks. Advertisement for bids shall set forth all of the following information:
  - a. That plans and specifications for the work to be done can be seen and obtained at the District's office;
  - b. That the Board of Directors will receive sealed bids for the contract;
  - c. That the contract will be awarded to the lowest responsive and responsible bidder;
  - d. That bids will be publicly opened at a given time and place.
7. Bids shall be opened in public at the time and place stated in the notice inviting bids. Two District employees and/or representatives shall be present at the bid openings. As each bid is opened, the bidder's name and bid amount shall be announced. At the conclusion of the bid opening, the name of the apparent low bidder and its bid amount shall be announced. A tabulation of all bids received shall be open for public inspection during regular business hours for a period of not less than 30 calendar days after the bid opening.
8. Before making any contract for professional services, the District may solicit a Request for Proposal (RFP) for such services. However, a RFP is not required for professional services contracts. The District from time to time may issue a request for qualifications for the purpose of developing a list of qualified consultants to provide professional services for future work. Prior to issuing a request for qualifications or a request for proposal, District staff shall obtain the approval from the Board of Directors.
9. Request for qualifications may be advertised in a publication of the respective professional society or by any other means reasonably calculated to reach its intended audience. Upon review and receipt of the qualifications from the interested consultants, the District shall develop the list of qualified consultants based upon criteria established by the District.

## **DEBT MANAGEMENT**

Each year during the budgeting process the Board of Directors of the Water Replenishment District of Southern California reviews the District's capital improvement plan to determine the ensuing year's capital needs. Based on this review, the Board of Directors determines whether there is a need for any additional long-term debt financing or whether projects can be funded on a pay-go basis. If the Board of Directors determines that additional debt financing is necessary, the Board holds public workshops in order to obtain stakeholder input relating to any increases to the RA due to annual debt service payments. Additionally, as part of this process, the District prepares a five-year financial projection in order to ascertain the long-term impact to the RA. The Board of Directors approves the debt management structure when adopting the five-year Capital Improvement Plan.

## **AUDITING**

As required by the California State Water Code Section 60292, once a year the District hires an independent accounting firm to perform the annual financial and compliance audits of the District's basic financial statements and supplemental schedules in accordance with Generally Accepted Auditing Standards (GAAS).

## **INTERNAL CONTROL STRUCTURE**

The Board of Directors manages the District's internal control structure through the Board-adopted Administrative Code, which provides internal control guidelines. They also monitor internal controls through communications with the independent financial auditor. District Management is responsible for the establishment and maintenance of the internal control structure that ensures the assets of the District are protected from loss, theft, or misuse. The internal control structure also ensures that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The District's internal control structure is designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of control should not exceed the benefits likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgments by management.

## **RISK MANAGEMENT**

The District is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets; errors and omissions, injuries to employees, and natural disasters. The District is a member of the Association of California Water Agencies/Joint Power Insurance Authority (ACWA/JPIA), an intergovernmental risk sharing joint powers authority created to provide self-insurance programs for California water agencies. The purpose of the ACWA/JPIA is to arrange and administer programs of self-insured losses and to purchase excess insurance coverage. Risk management policy is not adopted by the Board of Directors, but is a requirement of membership in the ACWA/JPIA.

# Annual Budget 2016/2017

## RESERVE POLICIES

Based on §60290 of the California State Water Code, the District may establish an annual reserve fund in an amount not to exceed ten million dollars (\$10,000,000). This ten million dollars may be adjusted for the percentage increase or decrease in the blended cost of water from District water supply sources on an annual basis. Based on a percentage increase in the blended cost of water for fiscal year 2016/17 from District supply sources, the maximum allowable reserve in accordance with §60290 of the California State Water Code is \$25.9 million.

Additionally, §60291 states that the limitation on the reserve established in §60290 does not apply to funds appropriated for capital projects.

If for some reason, the District has more than \$10,000,000 (adjusted for the blended cost of water), §60328.1 states that the District shall apply the estimated fiscal year end balance in excess of the amount allowed in §60290 to a Replenishment Assessment (RA) rate reduction or to the purchase of water in the succeeding fiscal year.

Description of Reserve Categories:

- **Water Purchase Reserve** – This category of funds represents amounts carried over from previous years when imported spreading water was unavailable for purchase. The District only uses these funds to purchase water in future years when water becomes available.
- **Restricted for Capital Projects** – This category of funds represents amounts reserved due to commitments made by the Board of Directors for capital projects which includes the Groundwater Reliability Improvement Program, capital replacement plan for the Leo J. Vander Lans AWTF and the Goldsworthy Desalter as well as the proceeds from the 2015 Replenishment Assessment Revenue Bond held in trust by US Bank. By law, these funds can only be spent for capital projects.
- **Debt Service** – The debt service reserve consists of funds encumbered by the Board of Directors to help maintain the District's AA+ rating from both Standard and Poor's and Fitch Ratings.
- **CalTrans Trust** – These funds are held in trust by WRD with the California Department of Transportation for dewatering of the 105 freeway. The trust funds decrease to pay for the Replenishment Assessment (RA) for water pumped from below the freeway.
- **GASB 45 Requirement** – This category of funds accounts for the WRD's Annual Required Contribution (ARC) related to Other Post Employment Benefits (OPEB) in compliance with the Government Accounting Standards Board (GASB) Statement Number 45 enacted by the GASB due to the growing concerns over the potential magnitude of government employer obligations for post-employment benefits. This is a financial reporting provision required by all government employers.
- **Unreserved** – This category of funds is restricted to \$10,000,000, adjusted for the annual increase or decrease in the blended cost of water from District water supply sources, as documented in §60290 of the California State Water Code. For fiscal year 2016/17, the adjusted amount is \$25.9 million.

## Budget Process

The budget process is not simply an exercise in balancing one year at a time, it is strategic in nature, encompassing a multi-year financial and operating plan that allocates resources on the basis of identified goals and objectives. These goals and objectives were established by the Board of Directors and District staff through the District's Strategic Plan and the five-year Capital Improvement Program. We moved beyond the traditional concept of line item expense control and provided incentives and flexibility to project/program managers that has led to improved program efficiency and effectiveness. The District's staff continually assesses program and financial performance to encourage progress toward achieving the goals and objectives of the District.

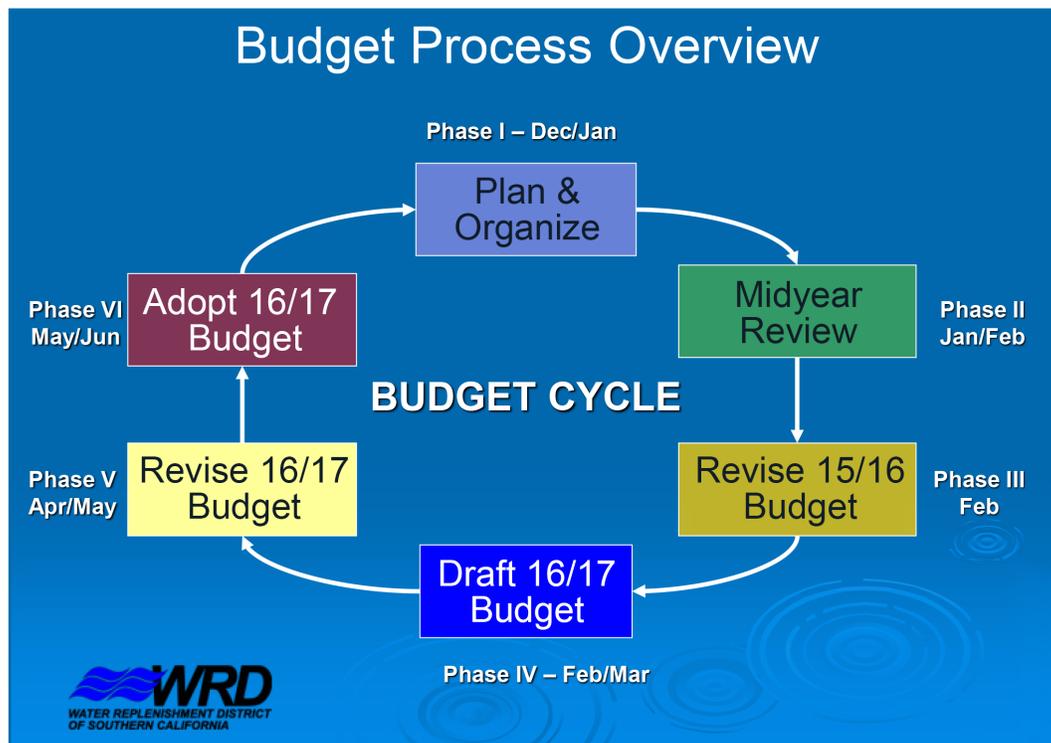


Figure 6 – Budget Process

### PLAN & ORGANIZE

The budget sets forth a strategic resource allocation plan that is distinctly aligned with the District's mission and the Board of Director's goals and objectives for staff. The budget process is a year-long effort of monitoring revenue and adjusting expenses based on the changing needs of operations. The Finance Department organizes the ensuing year's budget as early as November and December the year before. This phase includes preparing election ballots for the Budget Advisory Committee (in election years), preparing a midyear budget review as well as budget request forms that are provided to the Project/Program Managers.

# Annual Budget 2016/2017

## **MIDYEAR BUDGET REVIEW**

The Midyear Budget Review is a time when the District measures how we are tracking according to the planned budget and how we expect to end the fiscal year. It provides a financial assessment of the District's budget condition and is based on 4 months of actual data and 8 months of projected data. The midyear analysis is also a platform and guide to the ensuing year's budget.

The Midyear Review analysis is presented to the Board of Directors and the public. It is a time when the Board is given details of how well District projects and programs are aligned with the Board's goals and objectives.

## **REVISE CURRENT YEAR'S BUDGET**

Based on feedback provided by the Board of Directors and the public, the Board may direct staff to adjust resources to various projects or programs and modify the budget through Board approval. This process helps to ensure that the Board is aware of the financial and human resources allocated to each of the District's goals and objectives.

## **DRAFT ENSUING YEAR'S BUDGET**

With the Midyear Review and adjustments completed, staff prepares the first draft of the ensuing year's budget. Project and program managers prepare their budget requests and submit them to the Finance Department who then organize and compile all budget information into a consolidated package. To confirm that all project and program expense requests are in line with the directions of the Board, the General Manager and Assistant General Manager, along with the Finance Staff, review each individual line item expense prior to submitting it to the Finance Committee for review. The Finance Committee of the Board of Directors is responsible to study, advise and make recommendations regarding the budget to the Board of Directors. Once reviewed and verified through the Finance Committee, the budget is presented to the Board of Directors.

## **REVISE ENSUING BUDGET**

Staff makes the necessary adjustments to the budget based on the feedback obtained through meetings with the General Manager and public budget workshops with the Finance Committee and the Board of Directors. These refinements are related to reallocation of resources to best accomplish the Board's goals and objectives.

## **ADOPT BUDGET**

Based on section 60315 of the California State Water Code, the Board of Directors must adopt the ensuing year's Replenishment Assessment no later than the second Tuesday in May. The basis of the Replenishment Assessment is the annual budget, which is adopted at the same time as the Board sets the Replenishment Assessment. In recent years, staff has provided more than 10 public budget workshops in an effort to maintain the highest level of transparency and accountability. These workshops give the public a chance to offer comments on the budget and the budget process. They also provide an opportunity to present the inflow and outflow of resources and how they are applied to providing water users in the Central and West Coast Basins with clean and reliable groundwater.

# Annual Budget 2016/2017

The District's water sales have historically remained relatively constant and FY 16/17 reflects a 5% increase to the Replenishment Assessment. As we show in Figure 7 below, the Replenishment Assessment rate charged to District customers increased in fiscal year 2016/17 to \$297 per acre-foot.

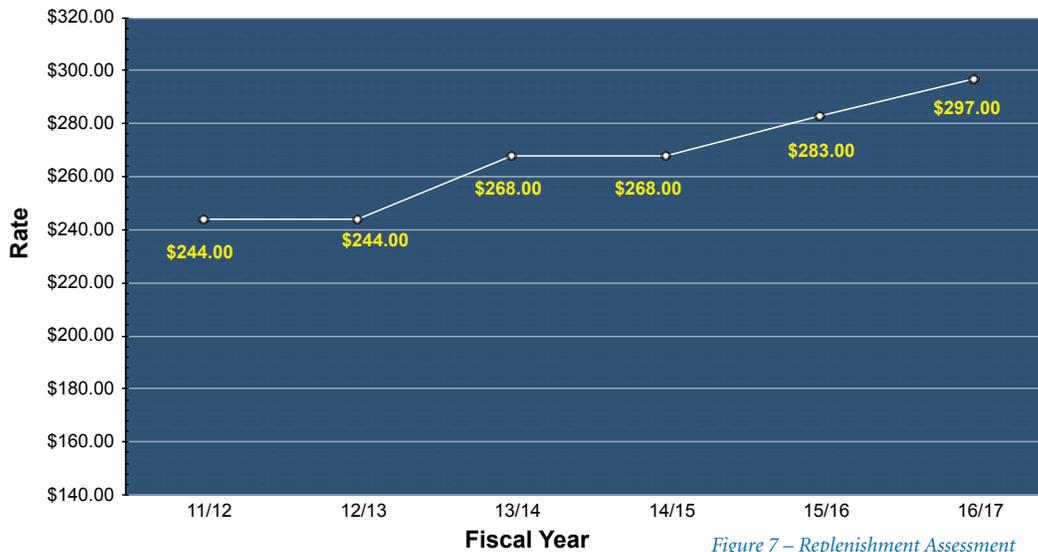


Figure 7 – Replenishment Assessment

## BUDGET CONTROLS AND REVISIONS

The District's budget is prepared on an annual basis and since the budget is an estimate, at times it is necessary to make adjustments to meet the priorities and needs of the District.

The first milestone in this process is the midyear budget review. During this process, the District compiles the first three months of actual financial data and projects the final nine months of data to obtain a new 12 month projected budget. The Finance Department compares the adjusted 12 month projection to the original budget adopted by the Board of Directors and presents the results to the Finance Committee and the Board.

The budget is revised when expenses are anticipated to exceed estimates. A report outlining the reasons for increasing any budget appropriation is prepared and submitted to the Board of Directors for consideration.

Increases in budget appropriations must be approved by the Board of Directors. Budget transfers affecting personnel and capital outlay must be approved by the General Manager. Reallocations or transfers within a department or project/program require the approval of the General Manager or Department Manager.

In the District's continuing commitment to transparency and accountability, the Board established the Audit and Budget Advisory Committee (ABAC) in 2011. This Committee was established so the Board could receive input directly from its pumpers relating to the two most important financial functions of the District: the independent Comprehensive Annual Financial Audit (CAFA) and the annual budget process.

# *Annual Budget 2016/2017*

Subsequent to the Audit and Budget Advisory Committee, Senate Bill 620 (SB 620) added provisions to Section 60233 of the California State Water Code establishing a Budget Advisory Committee (BAC) for the purposes of reviewing the District's replenishment assessment, the annual budget and reserve funds maintained by the District. This Committee replaces the Audit and Budget Advisory Committee (ABAC) previously established by the WRD Board of Directors.

The Budget Advisory Committee consists of seven members who serve a two-year term, are elected from among representatives of producers and who are owners or operators of groundwater producing facilities that are subject to the replenishment assessment. No later than the second Tuesday in April of each year, the Budget Advisory Committee will make its recommendation to the WRD Board of Directors on the annual replenishment assessment, reserve funds, and the draft budget.



# Annual Budget 2016/2017

## **PROPOSITION 218 - NOTICE OF PUBLIC HEARING ON DISTRICT'S 2016/17 REPLENISHMENT ASSESSMENT**

Proposition 218 (Prop 218), also known as the Right to Vote on Taxes Act, was adopted by California voters in November 1996. Prop 218 amended the California Constitution (Articles XIII C and XIII D) which, as it relates to assessments, requires the local government agencies to have a vote of effected property owners for any proposed new or increased assessment before it could be levied. Prop 218 imposes a number of substantive requirements on property-related fees. These substantive requirements are found in Article XIII D, Section 6(b) of the California Constitution. The Cost of Service Report has been prepared by the District to explain how the Replenishment Assessment (RA) complies with these requirements. The Cost of Service Report describes the services the District anticipates performing during the fiscal year and analyzes the costs of providing these services. The costs associated with these services are described using the best available information, along with an evaluation of the fair and equitable RA necessary to cover these costs. The Cost of Service Report is available via the District's web site at [www.wrd.org](http://www.wrd.org).

The May 1, 2016 Hearing has been conducted pursuant to Article XIII D, Section 6 of the California Constitution. On March 17, 2016 the District mailed notice of the May 1, 2016 Hearing to stakeholders throughout its service area. One hundred seventy-four (174) notices were sent to water rights holders within its jurisdiction that services approximately 4 million residents in 43 cities covering over 420 square miles.

The District approved its RA of \$297 for fiscal year 2016/17 at the public hearing on May 9, 2016. The RA was approved after an extensive and transparent process to inform all parcel owners and groundwater pumping rights holders in the District's service area. The funds generated from the RA cover the cost of water purchased to replenish the two largest and most utilized groundwater basins in Southern California. Moreover, the new RA is critical to helping achieve the District's goal in becoming 100% independent from costly and unreliable imported water.

## **BUDGET CALENDAR**

- October** Internal budget meetings with District Staff to communicate the expectations, responsibilities and projected timeline to all staff involved in the budget process.
- November** Budget interviews with Project and Program Managers in order to complete the Midyear Budget Review of the District's operations. This review process starts with three months of actual financial data from July 1 through September 30, nine months of financial projections and a twelve month analysis of all of the data. The Midyear Budget Review serves as the basis for planning for the ensuing year's budget.
- December** Staff prepares their budget requests for the ensuing year's budget. The Finance Department compiles all of staff's budget requests into a draft report which accounts for all of the District's financial needs. The draft budget is reviewed by the General Manager and the budget team. The resulting draft budget is presented to the public through several budget workshops, ending with the final budget workshop and the Board of Directors setting the Replenishment Assessment no later than the second Tuesday in May.

# Annual Budget 2016/2017

## February

### [Budget Workshop #1](#)

February 23, 2016 – Special Finance/Audit Committee meeting 2015/16 Midyear Budget Presentation and 2016/17 Draft Budget presentation and Replenishment Assessment Discussion.

### [Budget Workshop #2](#)

February 25, 2016 – 2016 SB620 Budget Advisory Committee (BAC) meeting. First meeting of the Budget Advisory Committee (BAC)

## March

### [Budget Workshop #3](#)

March 03, 2016 – Meeting of the Board of Directors 2015/16 Midyear Budget Review Presentation of the first draft of the 2016/17 Budget to the Board of Directors.

### [Budget Workshop #4](#)

March 08, 2016 – Budget Advisory Committee (BAC) meeting

### [Budget Workshop #5](#)

March 22, 2016 – Budget Advisory Committee (BAC) meeting Provide recommendation to the Board of Directors

### [Budget Workshop #6](#)

March 30, 2016 – Water Resources Committee meeting

## April

### [Budget Workshop #7](#)

April 7, 2016 – Meeting of the Board of Directors

- Presentation of the 2016/17 Draft Budget
- Receive and file the Budget Advisory Committee recommendation
- Receive and file the Cost of Service Report

### [Budget Workshop #8](#)

April 11, 2016 – Finance/Audit Committee meeting, presentation of the 2016/17 Draft Budget Provide recommendation to the Board of Directors

### [Budget Workshop #9](#)

April 19, 2016 – Budget Advisory Committee (BAC) meeting

- Presentation of the 2016/17 Draft Budget
- Continue Public Hearing on the Fiscal Year 2016/17 proposed Replenishment Assessment per Water Code §60306

### [Budget Workshop #10](#)

April 21, 2016 – Meeting of the Board of Directors

- Continue Public Hearing on the Fiscal Year 2016/17 proposed Replenishment Assessment per Water Code §60306
- Additional Budget Discussion

### [Budget Workshop #11](#)

# Annual Budget 2016/2017

[April 28, 2016](#) – Meeting of the Board of Directors

- Receive and file the Finance/Audit Committee and the Water Resource Committee recommendation
- Continue Public Hearing on the Fiscal Year 2016/17 proposed Replenishment Assessment per Water Code §60306
- Open Proposition 218 Public Hearing
- Close Public Hearings on the Replenishment Assessment and Proposition 218
- Additional Budget Discussion

## **May**

[Budget Workshop #12](#)

[May 09, 2016](#) – Meeting of the Board of Directors

- Adopt Resolution No. 16-1032 to establish the Fiscal Year 2016/17 Replenishment Assessment
- Adopt the FY2016/17 Budget

## Financial Highlights

### BASIS OF ACCOUNTING

The basis of accounting refers to the timing of revenue and expense recognition for financial reporting. In preparing the budget, the District applies the same methodology. The District operates as a utility enterprise, and all enterprise funds are accounted for using the full accrual basis where revenues are recognized when earned, and expenses are recognized when they are incurred. During the year end June 30, 2012, the District implemented certain provisions of Government Accounting Standards Board (GASB) No 62, Codification of Accounting and Financial Reporting Guidance contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, specifically the accounting for rate-regulated activities which allows deferral of the recognition of revenues until the related costs or charges associated with the rates assessed are incurred. The District's accounting and financial reporting systems are maintained in compliance with Generally Accepted Accounting Principles and standards of the Government Accounting Standards Board (GASB).

**Total Operating Revenues = \$71,237,000**  
**16/17 Operating Revenue (In Thousands)**

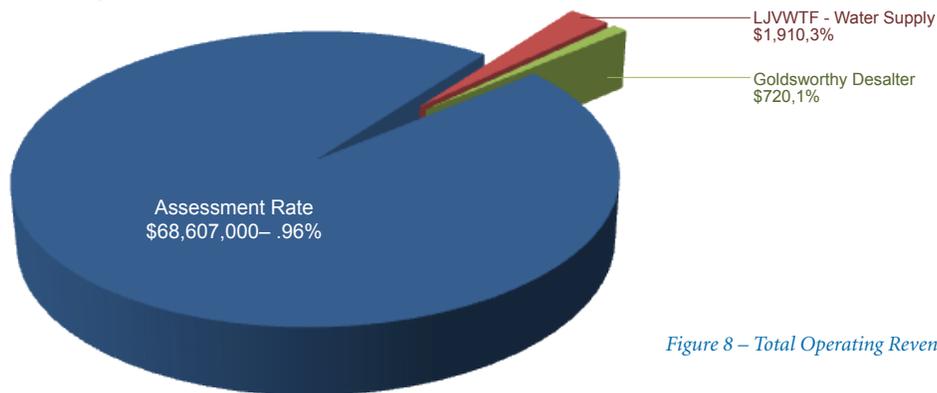


Figure 8 – Total Operating Revenues

**Total Operating Expenses = \$61,319,000**  
**16/17 Operating Expenses (in thousands and percent of total)**

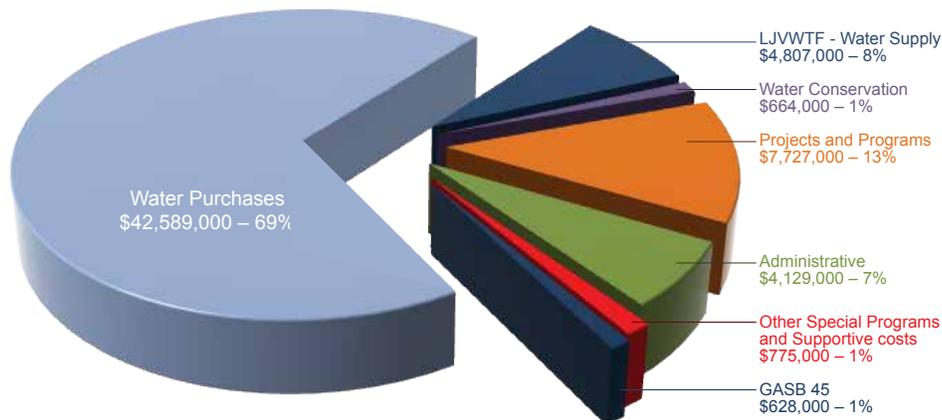


Figure 9 – Total Operating Expenses

# Annual Budget 2016/2017

Table 3A shows the District's comparative accrual basis Statement of Revenues, Expenses, and Changes in Net Assets. These statements reflect the operations and maintenance expenses and does not include capital expenses, except for the payments to cover debt service.

<i>Table 3A</i>			
<b>2016/17 Proposed Statement of Revenues, Expenses and Changes in Net Assets</b>			
	<b>2014/15 Actual</b>	<b>2015/16 Projected</b>	<b>2016/17 Budget</b>
<b>Operating Revenue</b>			
Replenishment Assessment	\$79,087,000	\$65,090,000	\$68,607,000
LJVWTF - Water Supply	\$444,000	\$1,077,000	\$1,910,000
Goldsworthy Desalter Sales	\$625,000	\$1,170,000	\$720,000
<b>Total Operating Revenue</b>	<b>\$80,156,000</b>	<b>\$67,337,000</b>	<b>\$71,237,000</b>
<b>Operating Expenses</b>			
Water Purchases	\$46,342,000	\$37,808,000	\$42,589,000
Water Conservation	\$330,000	\$775,000	\$664,000
LJVWTF - Water Supply	\$1,994,000	\$3,645,000	\$4,807,000
Projects/Programs	\$5,710,000	\$6,901,000	\$7,727,000
General Administration	\$5,821,000	\$4,104,000	\$4,129,000
GASB 45 (Required Retirement Funding)	\$777,000	\$638,000	\$628,000
Other Special Programs & Supportive Costs	\$10,270,000	\$4,819,000	\$775,000
<b>Total Operating Expenses</b>	<b>\$71,244,000</b>	<b>\$58,690,000</b>	<b>\$61,319,000</b>
Use of Water Purchase Carryover Fund	\$-	\$(13,080,000)	\$(2,800,000)
<b>Subtotal</b>	<b>\$71,244,000</b>	<b>\$45,610,000</b>	<b>\$58,519,000</b>
<b>Operating Income (Loss)</b>	<b>\$8,912,000</b>	<b>\$21,727,000</b>	<b>\$12,718,000</b>
<b>Other Revenue (Expenses)</b>			
Interest Income	\$164,000	\$180,000	\$375,000
Debt Service Expense	\$(4,682,000)	(10,482,000)	(13,232,000)
Other (Property Tax & Misc)	\$4,537,000	\$(24,000)	\$140,000
<b>Total Other Revenue (Expenses)</b>	<b>\$19,000</b>	<b>\$(10,326,000)</b>	<b>\$(12,717,000)</b>
Replenishment of Operating Reserves	\$(5,750,000)	\$-	\$-
Encumbered for Bond Compliance	\$-	\$-	\$-
<b>Change in Net Assets</b>	<b>\$3,181,000</b>	<b>\$11,401,000</b>	<b>\$1,000</b>

# Annual Budget 2016/2017

## REVENUE SOURCES

The District's major revenue sources are as follows:

**REPLENISHMENT ASSESSMENT (RA)** – The District bills the users of groundwater on a monthly basis for water pumped from the basins. The basins' new top twenty pumpers are as follows:

<i>Table 3B</i>		
<b>MONTHLY PRODUCTION SUMMARY</b>		
<b>Top Twenty Pumpers / Fiscal Year 2015/16</b>		
<b>Number</b>	<b>Name</b>	<b>Production (AF)</b>
1	Long Beach, City of	29,969
2	Golden State Water Company	19,312
3	California Water Service Company	14,879
4	Downey, City of	11,992
5	Los Angeles Department of Water and Power	8,012
6	South Gate, City of	6,779
7	Tesoro Refining & Marketing Company	6,738
8	Lakewood, City of	6,463
9	Compton, City of	6,123
10	Cerritos, City of	5,637
11	Vernon, City of	5,529
12	Paramount, City of	4,657
13	Phillips 66 Company	4,562
14	Bellflower-Somerset Mutual Water Company	4,375
15	Lynwood, City of	4,366
16	Pico Rivera, City of	3,827
17	Liberty Utilities	3,534
18	Torrance, City of	3,227
19	Suburban Water Systems	2,996
20	Whittier, City of	2,867
<b>Total</b>		<b>155,843</b>

## LEO J. VANDER LANS AWTF – WATER SUPPLY

The revenue from the Leo J. Vander Lans AWTF comes from the sale of the product water to Orange County Water District as well as a subsidy received from Central Basin Municipal Water District through a Local Resources Program (LRP) offered by MWD.

## GOLDSWORTHY DESALTER

Overpumping of the West Coast Basin caused seawater to intrude into some aquifers in coastal area cities affecting the local groundwater supply. To respond to seawater intrusion, the District constructed the Goldsworthy Desalter that is capable of removing 2,000 gallons of brackish water per minute from the City of Torrance's drinking water supply. The product water is then sold to the City of Torrance.

## Revenues

### **BASIS FOR REPLENISHMENT ASSESSMENT REVENUE ESTIMATE**

The District has statutory authority to set and collect a Replenishment Assessment (RA) from all entities that own or lease water rights on each acre-foot (AF) of groundwater that they pump from the basins.

For fiscal year 2016/17, the District estimates that it will collect approximately \$68.6 million from the RA based on the estimated groundwater pumping of 231,000 AF at the adopted RA of \$297 per AF.

Pursuant to the Water Code and applicable regulations, the RA is established annually by the Board of Directors. Mathematically, the RA is calculated based on the cost allocation analysis which includes assessing the beneficiaries (i.e., pumpers) their proportional share of the cost to provide water replenishment services.

As required by the Water Code, the District annually prepares the Engineering Survey & Report (ESR) that provides the Board of Directors with the necessary information to justify the setting of an RA for the ensuing fiscal year to purchase replenishment water and to fund projects and programs related to groundwater replenishment and groundwater quality. The ESR contains the following key components:

- A discussion of groundwater production with the District
- An evaluation of groundwater conditions with the District, including estimates of the annual overdraft, the accumulated overdraft, changes in water levels, and the effects of water level fluctuations on the groundwater resources
- An appraisal of the quantity, availability, and cost of replenishment water required for the ensuing water year
- A description of current and proposed programs and projects to accomplish replenishment goals and to protect and preserve high quality groundwater supplies within the District.

Specifically, the ESR provides an estimate of the total groundwater pumping quantity for the ensuing year, which is approximately 231,000 AF in the District's service area. Furthermore, the ESR identifies the quantity of supplemental water required to replenish and protect the groundwater basins from pumping. The total estimated cost of service for FY 16/17 is approximately \$68,606,000 which is necessary to service the estimated 231,000 AF of groundwater pumped from the basins. Therefore, the estimated total cost of service is allocated in proportion to the estimated total groundwater pumped. The unit cost, or RA, per AF of water pumped is calculated as follows:

$$\frac{\text{Total Cost of Service \$}}{\text{Total Groundwater Pumped (AF)}} = \text{Unit Cost (\$/AF pumped)}$$

# Annual Budget 2016/2017

Based on the ensuing year's main mitigating factors, there are three Groundwater Pumping Estimates. The 5-Year Projection of 244,000 AF, Pumping Estimate from FY15/16 midyear of 231,000 AF and a worst case scenario of 220,000AF based on a reduction of 24,000 AF due to unprecedented mandatory conservation. Based on the series of Budget Presentations, the Board of Directors arrived at the total groundwater AF pumped to determine the unit cost as follows:

$$\frac{\text{Total Cost of Service } (\$68,606,000)}{\text{Total Groundwater Pumped } (231,000\text{AF})} = \text{Unit Cost } (\$297/\text{AF})$$

The amount of RA charged to an individual operator is calculated based on the quantity of water they pump multiplied by the RA. For example, if an operator pumps a total of 1,000 AF, that operator will be charged a total of \$297,000 (1,000 AF x \$297/AF).

The RA consists of two components: funds for replenishment and funds for clean water. Most of the District's efforts are related to the replenishment of the Central and West Coast Groundwater Basins. The revenue collected through the Replenishment Assessment (RA) is split 94% to the replenishment fund and 6% to the clean water fund based on the anticipated use of the revenue.

## **BASIS FOR CAPITAL REVENUE ESTIMATES**

The District receives revenue from two capital assets, the Leo J. Vander Lans Advanced Water Treatment Facility and the Robert W. Goldsworthy Desalter.

**The Leo J. Vander Lans Advanced Water Treatment Facility** supplies advanced treated water to the Alamitos Seawater Barrier Project in order to keep seawater from intruding into the fresh groundwater supplies in the Central Basin. The revenue from the Facility comes from the sale of water production to the Orange County Municipal Water District as well as a subsidy received from the Central Basin Municipal Water District through a Local Resource Program offered by the Metropolitan Water District (MWD). In fiscal year 2015/16, the District completed the Leo J. Vander Lans Expansion Project which doubles the capacity of the treatment plant and completely replaces the need for imported water with highly treated recycled water at the Alamitos Seawater Intrusion Barrier. This is one of the key components in the District's Water Independence Now (WIN) Program. The estimated total revenue from this treatment facility is approximately \$1,910,000 for FY2016/17.

**Fund Allocation** – The primary purpose of this project is to provide a more reliable means of replenishing the basins through the use of advanced treated recycled water, 100% of this revenue is allocated to the Replenishment Fund.

**The Robert W. Goldsworthy Desalter** has been operating since 2002 to remove 18,000 acre-feet of brackish groundwater from a seawater intrusion plume in the Torrance area that was stranded inland of the West Coast Basin Seawater Intrusion Barrier after the barrier project was put into operation in the 1950s and 1960s. The production well and desalting facility are located within the City of Torrance and the product water that would otherwise be useless due to the Saline Plume located in the West Coast Basin is delivered for potable use to the City's distribution system. The treatment capacity is about 2,200 acre-feet per year. The City is responsible for the operation and maintenance of the treatment plant under contract with WRD. The revenue from the Desalter comes from the sale of water production to the City of Torrance as well as a subsidy received from the City of Torrance through a Local Resource Program offered by the Metropolitan Water District (MWD). The estimated total revenue from this treatment facility is approximately \$720,000 for fiscal year 2016/17.

# Annual Budget 2016/2017

**Fund Allocation** – The purpose of the Desalter is directly related to remediating degraded groundwater quality and costs are thus attributed 100% to the Clean Water Fund.

## BASIS FOR OTHER REVENUE ESTIMATES

### Other Income

The District receives property tax revenue each year. The total revenue from this source is estimated to be \$400,000. The District also receives an interest income for FY2016/17, it is estimated to be \$375,000.

**Fund Allocation** – The revenue collected through other revenue (e.g., property taxes and interest income) is split 94% to the replenishment fund and 6% to the clean water fund based on the anticipated use of the revenue.

Groundwater is a very economical source of water. For example, the District's Replenishment Assessment (RA) is \$297 per acre-foot. The cost of pumping and treating water to bring it up to drinking water standards adds slightly to the cost. In contrast, the price for one acre-foot of treated imported water is projected to be about \$1,032, a savings of approximately \$735 per acre-foot.

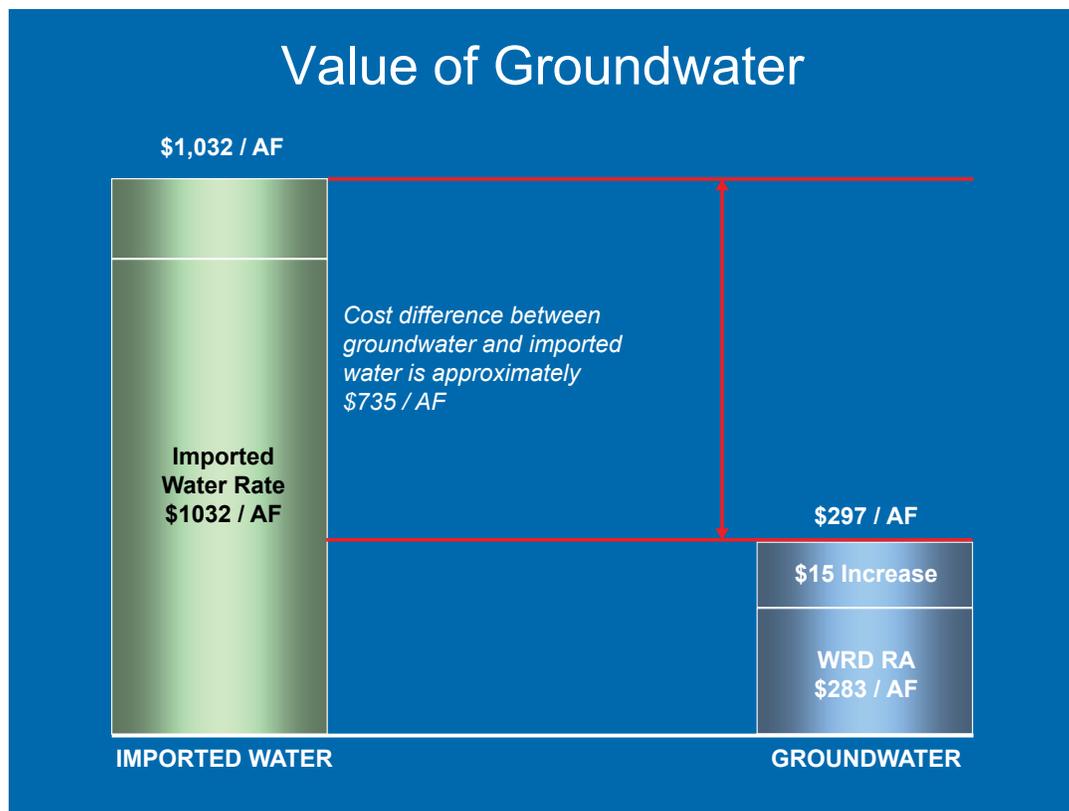


Figure 10 – Value of Groundwater

# Annual Budget 2016/2017

*Table 4*  
Comparative Revenue by Year by Fund

Description	Allocation		2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Projected	2016/17 Budget
	Replenishment Fund	Clean Water Fund					
<b>Replenishment Fund</b>							
Replenishment Assessment	94%		\$54,482,000	\$55,146,000	\$74,342,000	\$61,185,000	\$64,491,000
LJVWTF - Water Supply	100%		\$1,187,000	\$679,000	\$444,000	\$1,077,000	\$1,910,000
Other Revenues/(Expenses)	94%		\$696,000	\$1,091,000	\$18,000	\$(9,561,000)	\$(11,954,000)
<b>Subtotal Replenishment Fund</b>			<b>\$56,365,000</b>	<b>\$56,916,000</b>	<b>\$74,804,000</b>	<b>\$52,701,000</b>	<b>\$54,447,000</b>
<b>Clean Water Fund</b>							
Replenishment Assessment		6%	\$3,477,000	\$3,520,000	\$4,745,000	\$3,905,000	\$4,116,000
Goldsworthy Desalter Sales		100%	\$1,106,000	\$1,042,000	\$625,000	\$1,170,000	\$720,000
Other Revenues/(Expenses)		6%	\$44,000	\$70,000	\$1,000	\$(610,000)	\$(763,000)
<b>Subtotal Clean Water Fund</b>			<b>\$4,627,000</b>	<b>\$4,632,000</b>	<b>\$5,371,000</b>	<b>\$4,465,000</b>	<b>\$4,073,000</b>
<b>Total All Funds</b>			<b>\$60,992,000</b>	<b>\$61,548,000</b>	<b>\$80,175,000</b>	<b>\$57,166,000</b>	<b>\$58,520,000</b>

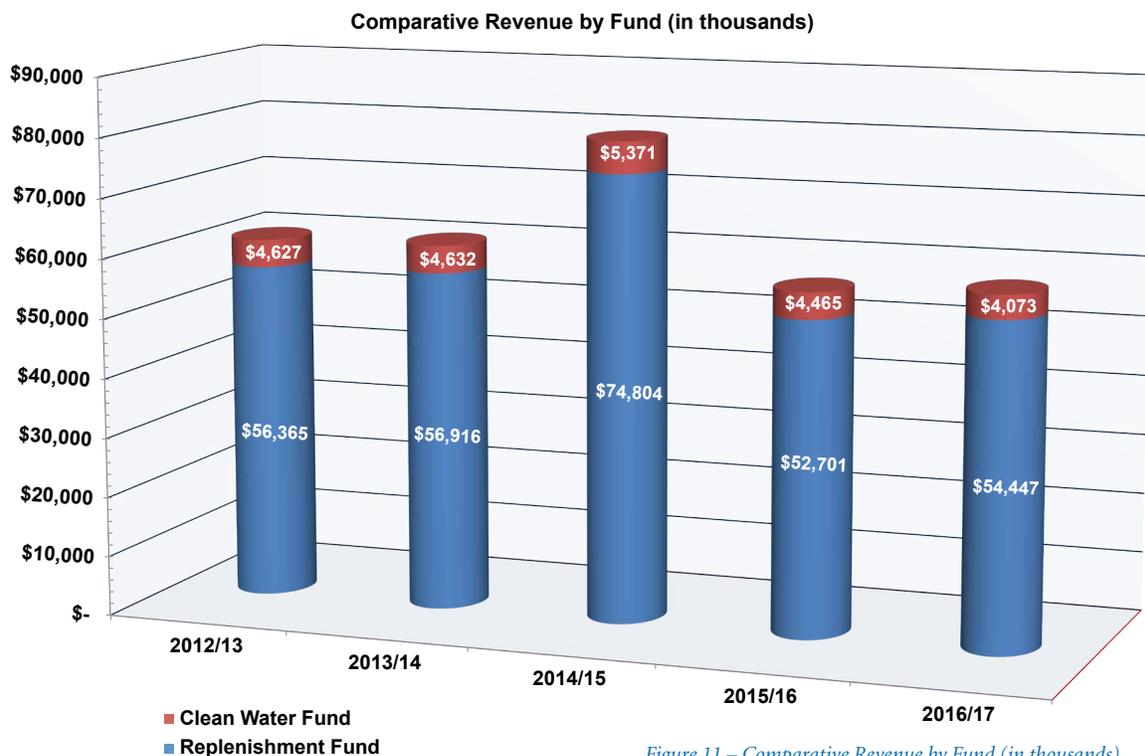


Figure 11 – Comparative Revenue by Fund (in thousands)

## Expenses

### **OPERATING AND CAPITAL EXPENSES BY FUND ALLOCATION**

California Water Code Sections 60220 through 60226 describe the broad purposes and powers of the District to perform any acts necessary to replenish, protect, and preserve the groundwater supplies of the District. In order to meet statutory responsibilities, WRD has instituted numerous projects and programs in a continuing effort to effectively manage groundwater replenishment and groundwater quality in the Central and West Coast Basins (Basins). These projects and programs include activities that enhance the replenishment program, increase the reliability of the groundwater resources, improve and protect groundwater quality, and ensure that the groundwater supplies are suitable for beneficial uses.

These projects and programs have had a positive influence on the basins, and WRD will continue these activities into the ensuing year as a necessary act to replenish, protect, preserve and enhance the groundwater resources in the basins. The following sections discuss the projects and programs that WRD will continue or initiate during the upcoming budget year. Tables 5A and 5B break down the expenses by fund. The percentages are calculated by relating the costs to the purpose benefited by those costs – replenishment or clean water. The capital expenses are funded through long-term financing.

### **BASIS FOR CHANGES FROM 2015/16 PROJECTED TO 2016/17 BUDGET**

Groundwater continues to be an extraordinary value. The cost difference between groundwater and imported water is approximately \$735 per acre foot. When examining Table 6 – 2016/17 Budgeted Expenses Analysis, it shows that budgeted expenses of \$74,551,000 for 2016/17 will exceed the projected expenses of \$69,016,000 for 2015/16. The increase of \$5,535,000 is due to the following:

- Based on an agreement with Los Angeles County Sanitation District, the cost of recycled spreading water increased \$0.69 million over that of 2015/16.
- In 2015/16 the West Coast Barrier was \$3.43 million under budget. There is a \$2.41 million increase in 2016/17 due to an additional 1,000 acre-feet of imported water and a cost increase of \$0.88 million in recycled water.
- Dominguez Gap Barrier will be using increased imported water costing an additional \$0.91 million in 2016/17.
- Leo J Vander Lans Advanced Water Treatment Facility provides advanced treatment to recycled water and was under budget for all categories due to an unanticipated shut down of three months due to source water being unavailable from County Sanitation District.
- In 2015/16 the District used banked water with the City of Long Beach to subsidize imported water costs at the Alamitos Barrier, the 2016/17 budget includes an increase of \$0.88 million increase to imported water costs.
- Conclusion of Proposition 218 litigation decreasing expenses by \$4.0 million from 2015/16.

# Annual Budget 2016/2017

Table 5A

## WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA FISCAL YEAR 2016/17 Schedule of Expenses by Fund Allocation - Replenishment Fund

Description	Allocation		2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Projected	2016/17 Budget
	Replenishment Fund	Clean Water Fund					
<b>Replenishment Fund (RF)</b>							
<b>RF Operating Expenses</b>							
Water Purchases	100%		\$22,471,000	\$29,364,000	\$46,342,000	\$37,808,000	\$42,589,000
Water Conservation	50%		\$212,000	\$217,000	\$165,000	\$388,000	\$332,000
Water Supply - Vander Lans	100%		\$1,746,000	\$1,899,000	\$1,994,000	\$3,645,000	\$4,807,000
Montebello Forebay Recycled Water	100%		\$298,000	\$273,000	\$317,000	\$507,000	\$654,000
Groundwater Resource Planning	100%		\$862,000	\$623,000	\$773,000	\$321,000	\$318,000
Dominguez Gap Barrier Recycled Water	100%		\$204,000	\$217,000	\$188,000	\$253,000	\$304,000
LADWP Well Construction	100%		\$-	\$2,000	\$(2,000)	\$-	\$-
Replenishment Operations	100%		\$299,000	\$646,000	\$242,000	\$340,000	\$363,000
Groundwater Reliability Improvement Program (GRIP)	100%		\$-	\$198,000	\$215,000	\$421,000	\$258,000
Engineering Program	100%		\$-	\$-	\$6,000	\$-	\$-
Geographic Information Systems (GIS)	50%		\$91,000	\$88,000	\$150,000	\$180,000	\$177,000
Groundwater Monitoring	50%		\$427,500	\$460,000	\$513,000	\$609,000	\$642,000
Hydrogeology Program	50%		\$526,000	\$436,000	\$300,000	\$439,000	\$551,000
Water Education	50%		\$340,000	\$273,000	\$397,000	\$366,000	\$392,000
Board of Directors	94%		\$330,000	\$261,000	\$332,000	\$328,000	\$337,000
General Manager	94%		\$357,000	\$402,000	\$402,000	\$-	\$-
Administration	94%		\$4,951,000	\$3,873,000	\$4,738,000	\$3,530,000	\$3,544,000
GASB 45 (Required Retirement Funding)	94%		\$700,000	\$730,000	\$730,000	\$600,000	\$590,000
Other Special Programs & Supportive Costs	94%		\$1,661,000	\$1,301,000	\$9,654,000	\$4,530,000	\$729,000
<b>Subtotal RF Operating Expenses</b>			<b>\$35,475,500</b>	<b>\$41,263,000</b>	<b>\$67,455,000</b>	<b>\$54,265,000</b>	<b>\$56,587,000</b>
<b>RF Capital Expenses</b>							
Water Supply - Vander Lans	100%		\$8,813,000	\$23,120,000	\$4,969,000	\$-	\$-
Groundwater Monitoring	50%		\$1,233,000	\$1,252,000	\$749,000	\$745,000	\$623,000
GRIP	100%		\$1,290,000	\$2,188,000	\$2,233,000	\$18,100,000	\$29,500,000
Whittier Narrows Conservation Pool Study	100%		\$-	\$-	\$-	\$1,226,000	\$-
Replenishment Operations	100%		\$60,000	\$-	\$173,000	\$-	\$-
<b>Subtotal RF Capital Expenses</b>			<b>\$11,396,000</b>	<b>\$26,560,000</b>	<b>\$8,124,000</b>	<b>\$20,071,000</b>	<b>\$30,123,000</b>
<b>Total Replenishment Fund</b>			<b>\$46,871,500</b>	<b>\$67,823,000</b>	<b>\$75,579,000</b>	<b>\$74,336,000</b>	<b>\$86,710,000</b>

# Annual Budget 2016/2017

*Table 5B*  
Schedule of Expenses by Fund Allocation - Clean Water Fund

Description	Allocation		2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Projected	2016/17 Budget
	Replenishment Fund	Clean Water Fund					
<b>Clean Water Fund (CWF)</b>							
<b>CWF Operating Expenses</b>							
Water Conservation		50%	\$212,000	\$216,000	\$165,000	\$387,000	\$332,000
Goldsworthy Desalter		100%	\$899,000	\$794,000	\$766,000	\$990,000	\$982,000
Water Quality Improvement Program		100%	\$429,000	\$358,000	\$346,000	\$601,000	\$756,000
Safe Drinking Water Program		100%	\$11,000	\$1,000	\$55,000	\$282,000	\$570,000
Central Basin Watermaster		100%	\$-	\$-	\$86,000	\$-	\$-
Geographic Information Systems (GIS)		50%	\$91,000	\$89,000	\$149,000	179,000	176,000
Groundwater Monitoring		50%	\$427,500	\$461,000	\$513,000	\$609,000	\$641,000
Hydrogeology Program		50%	\$526,000	\$436,000	\$300,000	\$439,000	\$551,000
Water Education		50%	\$339,000	\$274,000	\$396,000	\$365,000	\$392,000
Board of Directors		6%	\$21,000	\$17,000	\$21,000	\$21,000	\$22,000
General Manager		6%	\$23,000	\$26,000	\$26,000	\$-	\$-
Administration		6%	\$316,000	\$247,000	\$302,000	\$225,000	\$226,000
GASB 45 (Required Retirement Funding)		6%	\$45,000	\$47,000	\$47,000	\$38,000	\$38,000
Other Special Programs & Supportive Costs		6%	\$106,000	\$83,000	\$616,000	\$289,000	\$46,000
<b>Subtotal CWF Operating Expenses</b>			<b>\$3,445,500</b>	<b>\$3,049,000</b>	<b>\$3,789,000</b>	<b>\$4,425,000</b>	<b>\$4,732,000</b>
<b>CWF Capital Expenses</b>							
Goldsworthy Desalter		100%	\$199,000	\$617,000	\$1,278,000	\$8,100,000	\$4,500,000
Montebello Forebay Optimization Study/Pipeline		100%	\$-	\$-	\$-	\$204,000	\$390,000
Groundwater Master Plan Programmatic EIR		100%	\$600,000	\$3,000	\$-	\$-	\$-
Water Quality Improvement Program		100%	\$-	\$-	\$591,000	\$-	\$-
Groundwater Monitoring		50%	\$733,000	\$1,252,000	\$-	\$745,000	\$622,000
Safe Drinking Water Program		100%	\$-	\$-	\$1,000	\$1,000,000	\$1,000,000
Asset Management Program		100%	\$-	\$-	\$-	\$95,000	\$150,000
Centralized Information System		100%	\$-	\$-	\$-	\$-	\$150,000
Supervisory Control and Data Acquisition (SCADA)		100%	\$-	\$-	\$-	\$175,000	\$225,000
<b>Subtotal CWF Capital Expenses</b>			<b>\$1,532,000</b>	<b>\$1,872,000</b>	<b>\$1,870,000</b>	<b>\$10,319,000</b>	<b>\$7,037,000</b>
<b>Subtotal Clean Water Fund</b>			<b>\$4,977,500</b>	<b>\$4,921,000</b>	<b>\$5,659,000</b>	<b>\$14,744,000</b>	<b>\$11,769,000</b>
<b>Subtotal O&amp;M Expenses</b>			<b>\$38,921,000</b>	<b>\$44,312,000</b>	<b>\$71,244,000</b>	<b>\$58,690,000</b>	<b>\$61,319,000</b>
<b>Subtotal Capital Expenses</b>			<b>\$12,928,000</b>	<b>\$28,432,000</b>	<b>\$9,994,000</b>	<b>\$30,390,000</b>	<b>\$37,160,000</b>
<b>Total Expenses By Funds</b>			<b>\$51,849,000</b>	<b>\$72,744,000</b>	<b>\$81,238,000</b>	<b>\$89,080,000</b>	<b>\$98,479,000</b>

# Annual Budget 2016/2017

*Table 6*  
2016/17 Expenses Analysis

Operations and Maintenance	2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Projected	2016/17 Budget	Change from 2015/16 Projection
Water Purchases	\$22,471,000	\$29,364,000	\$46,342,000	\$37,808,000	\$42,589,000	\$4,781,000
Water Conservation	\$424,000	\$433,000	\$330,000	\$775,000	\$664,000	\$(111,000)
Water Supply - Vander Lans	\$1,746,000	\$1,899,000	\$1,994,000	\$3,645,000	\$4,807,000	\$1,162,000
Projects/Programs	\$5,770,000	\$5,629,000	\$5,710,000	\$6,901,000	\$7,727,000	\$826,000
General Administration	\$5,998,000	\$4,826,000	\$5,821,000	\$4,104,000	\$4,129,000	\$25,000
GASB 45 (Required Retirement Funding)	\$745,000	\$777,000	\$777,000	\$638,000	\$628,000	\$(10,000)
Other Special Programs & Supportive Costs	\$1,767,000	\$1,384,000	\$10,270,000	\$4,819,000	\$775,000	\$(4,044,000)
Subtotal Operating Expenses	\$38,921,000	\$44,312,000	\$71,244,000	\$58,690,000	\$61,319,000	\$2,629,000
Other Expenses	\$4,770,000	\$3,168,000	\$2,146,000	\$10,326,000	\$13,232,000	\$2,906,000
<b>Total Operating Expenses</b>	<b>\$43,691,000</b>	<b>\$47,480,000</b>	<b>\$73,390,000</b>	<b>\$69,016,000</b>	<b>\$74,551,000</b>	<b>\$5,535,000</b>

*Table 7*  
2016/17 Expenses by Department

Description	2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Projected	2016/17 Budget
Water Purchases	\$22,471,000	\$29,364,000	\$46,342,000	\$37,808,000	\$42,589,000
Water Conservation	\$424,000	\$433,000	\$330,000	\$775,000	\$664,000
Water Supply - Vander Lans	\$1,746,000	\$1,899,000	\$1,994,000	\$3,645,000	\$4,807,000
Goldsworthy Desalter	\$899,000	\$794,000	\$766,000	\$990,000	\$982,000
Montebello Forebay Recycled Water	\$298,000	\$273,000	\$317,000	\$507,000	\$654,000
Groundwater Resource Planning	\$862,000	\$623,000	\$773,000	\$321,000	\$318,000
Water Quality Improvement Program	\$429,000	\$358,000	\$346,000	\$601,000	\$756,000
Geographic Information Systems (GIS)	\$182,000	\$177,000	\$299,000	\$359,000	\$353,000
Groundwater Monitoring	\$855,000	\$921,000	\$1,026,000	\$1,218,000	\$1,283,000
Safe Drinking Water Program	\$11,000	\$1,000	\$55,000	\$282,000	\$570,000
Hydrogeology Program	\$1,052,000	\$872,000	\$600,000	\$878,000	\$1,102,000
Dominguez Gap Barrier Recycled Water	\$204,000	\$217,000	\$188,000	\$253,000	\$304,000
Replenishment Operations	\$299,000	\$646,000	\$242,000	\$340,000	\$363,000
Groundwater Reliability Improvement Program (GRIP)	\$-	\$198,000	\$215,000	\$421,000	\$258,000
Engineering Program	\$-	\$-	\$6,000	\$-	\$-
Water Education	\$679,000	\$547,000	\$793,000	\$731,000	\$784,000
Watermaster Central Basin	\$-	\$-	\$86,000	\$-	\$-
Board of Directors	\$351,000	\$278,000	\$353,000	\$349,000	\$359,000
General Manager	\$380,000	\$428,000	\$428,000	\$-	\$-
Administration	\$5,267,000	\$4,121,000	\$5,040,000	\$3,755,000	\$3,770,000
GASB 45 (Required Retirement Funding)	\$745,000	\$777,000	\$777,000	\$638,000	\$628,000
Other Special Programs & Supportive Costs	\$1,767,000	\$1,384,000	\$3,675,000	\$4,819,000	\$775,000
<b>Total Operating Expenses</b>	<b>\$38,921,000</b>	<b>\$44,311,000</b>	<b>\$64,651,000</b>	<b>\$58,690,000</b>	<b>\$61,319,000</b>

## Fund Balances

### FUND BALANCE, TRUST FUNDS AND RESERVE LEVEL

Based on §60290 of the Water Code, the District may establish an annual reserve fund in an amount not to exceed ten million dollars (\$10,000,000). This ten million dollars may be adjusted for the percentage increase or decrease in the blended cost of water from District water supply sources on an annual basis. There has been a 149% increase in the blended cost of water from District supply sources based on the rolling average calculation from the 2001/02 base year and the 2015/16 budget year. When applied to the \$10,000,000 in §60290 of the California State Water Code the operating reserve increases to approximately \$24,800,000.

If for some reason, the District has more than \$24,800,000 (adjusted for the blended cost of water), §60328.1 states that the District shall apply the estimated fiscal year end balance in excess of the amount allowed in §60290 to a replenishment assessment rate reduction or to the purchase of water in the succeeding fiscal year. Additionally, §60291 also states that the limitation on the reserve established in §60290 does not apply to funds appropriated for capital projects.

As of June 30, 2016, the District has \$9,315,000 in operating reserve. The following pages provide specific breakdowns of the District cash and investments.

**RESTRICTED FUNDS** – Restricted by the Board of Directors to recognize future commitments of resources prior to the actual expense.

**Restricted for Capital Projects** – Funds committed to the Safe Drinking Water Program or set aside for long term capital replacement costs at the Leo J. Vander Lans Advanced Water Treatment Facility and the Robert W. Goldsworthy Desalter.

#### 1. Safe Drinking Water Program

Source of Funds:	Replenishment Assessment	
Use of Funds:	Encumbered for Safe Drinking Water Projects	
Huntington Park Well #17 – Central Basin		\$ 40,000
Restricted for Safe Drinking Water Loan Program		2,497,000
		<u>\$ 2,537,000</u>

#### 2. Capital Replacement / Construction

Source of Funds:	Replenishment Assessment	
Use of Funds:	Encumbered for Projects Below	
Leo J. Vander Lans Advanced Water Treatment Facility		\$ 2,042,000
Robert W. Goldsworthy Desalter		300,000
		<u>\$ 2,342,000</u>
<b>Total Restricted for Capital Projects</b>		<u><u>\$ 4,879,000</u></u>

# Annual Budget 2016/2017

**Water Purchase Carryover Fund** – This category represents funds restricted by the Board of Directors as follows:

Source of Funds:	Replenishment Assessment	
Use of Funds:	Restricted for Water Purchases	
<b>Restricted Balance in Account</b>		<b>\$ 30,702,000</b>

**Debt Service Reserve Fund** – Based on the rate covenant, pursuant to the District's Master Agreement, the net revenues less payments made by the WRD for purchase and delivery of water, availability payments for water and In Lieu Payments made during the fiscal year is equal to a minimum of 120% of the Debt Service on Senior Obligations for the fiscal year.

These funds are reviewed by the Budget Advisory Committee each year during the rate setting process and are used to maintain the District's AA+ rating. We have recently experienced the value of maintaining such a fund during the issuance of the District's Series 2015 Water Revenue Bonds when the WRD obtained AAA pricing in the market due, in part, to its strong financial position.

## **SOURCE OF FUNDS: REPLENISHMENT ASSESSMENT**

Use of Funds: Restricted for Debt Service

Restricted Debt Service Reserve	\$ 18,380,000
Restricted for August 2016 Bond Payment	5,774,000
Less: Funds applied to Prop 218 Expenses	(8,205,000)
<b>Total Restricted for Debt Service</b>	<b>\$ <u>15,949,000</u></b>

The District's reserve balances are presented as follows:

Restricted Funds:	
Capital Projects	\$ 4,879,000
Water Purchase Carryover Fund	30,702,000
Debt Service Reserve Fund	<u>15,949,000</u>
<b>Total Restricted Funds</b>	<b>\$ <u>51,530,000</u></b>
<b>Operating Reserve Fund</b>	<b>\$ 9,315,000</b>

# Annual Budget 2016/2017

Table 8

## Projected Unreserved Fund Balances at June 30, 2017

Description	Estimated Unreserved Fund Balances 6/30/16	Estimated Revenues	Estimated Expenses	COPs Debt Service	Use of Reserves	Estimated Unreserved Fund Balances 6/30/17
Replenishment Fund	\$8,756,000	\$66,885,000	\$(56,587,000)	\$(12,439,000)	\$2,632,000	\$9,247,000
Clean Water Fund	\$559,000	\$4,867,000	\$(4,732,000)	\$(794,000)	\$168,000	\$68,000
<b>Total All Funds</b>	<b>\$9,315,000</b>	<b>\$71,752,000</b>	<b>\$(61,319,000)</b>	<b>\$(13,233,000)</b>	<b>\$2,800,000</b>	<b>\$9,315,000</b>

Table 9

## Projected Unreserved Funds Balance Five Year Forecast

Description	2016/17 Projected	2017/18 Forecast	2018/19 Forecast	2019/20 Forecast	2020/21 Forecast
Beginning Funds Balance	\$9,315,000	\$9,315,000	\$9,315,000	\$9,315,000	\$9,315,000
Add: Estimated Revenues	\$71,752,000	\$76,840,000	\$81,370,000	\$84,170,000	\$87,100,000
Total Funds Available	\$81,067,000	\$86,155,000	\$90,685,000	\$93,485,000	\$96,415,000
Less: Estimated Expenses	\$(61,319,000)	\$(63,880,000)	\$(66,550,000)	\$(69,350,000)	\$(72,280,000)
Annual Debt Service	\$(13,233,000)	\$(12,960,000)	\$(14,820,000)	\$(14,820,000)	\$(14,820,000)
Use of Reserves	\$2,800,000	\$-	\$-	\$-	\$-
<b>Ending Funds Balance</b>	<b>\$9,315,000</b>	<b>\$9,315,000</b>	<b>\$9,315,000</b>	<b>\$9,315,000</b>	<b>\$9,315,000</b>

# Annual Budget 2016/2017

*Table 10*  
June 30, 2016 Reserve Fund Balances

**Restricted Funds:**

Capital Projects	\$ 4,879,000
Water Purchase Carryover Fund	30,702,000
Debt Service Reserve Fund	15,949,000

<b>Total Restricted Funds</b>	<b>\$ 51,530,000</b>
<b>Operating Reserve Fund</b>	<b>\$ 9,315,000</b>

The District's reserve balance is presented as follows:

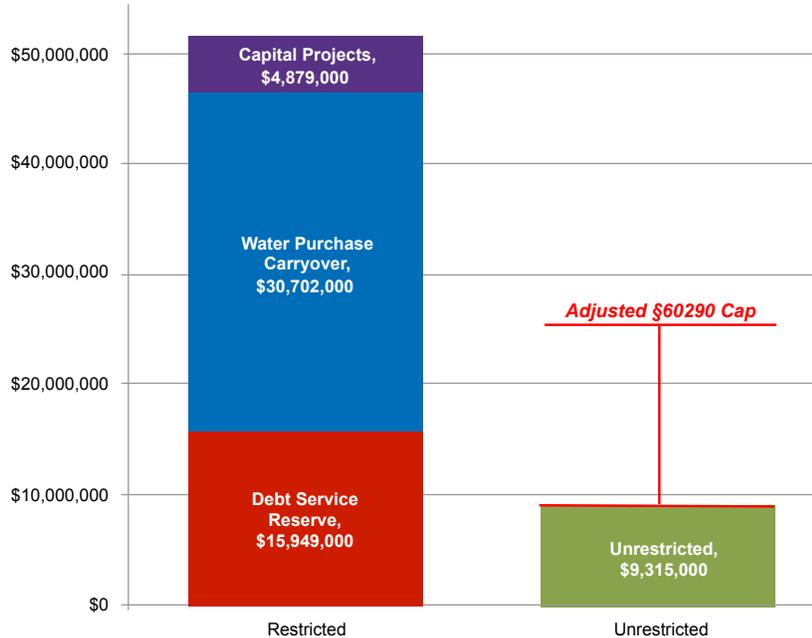


Figure 12 – Reserve Funds as of June 30, 2016

## CASH AND INVESTMENTS

At the direction of the Board of Directors, on March 31, 2009 the District implemented its Community Banking Program and has invested in several community banks in addition to the Local Area Investment Fund (LAIF).

# Annual Budget 2016/2017

*Table 11*  
**Cash and Investments By Institution**  
 (Rounded to nearest thousand)

**Cash and Investments:**

Manufacturers Bank	\$15,912,000
ProAmerica Bank	14,516,000
City National Bank	10,950,000
Bank of the West	9,583,000
Banc of California (formally Beach Business Bank)	242,000
Broadway Federal Bank	245,000
US Bank (formerly CalNational Bank)	243,000
First Bank	242,000
Preferred Bank	251,000
Union Bank	240,000

**By Amount (in thousands)**  
**June 30, 2016**

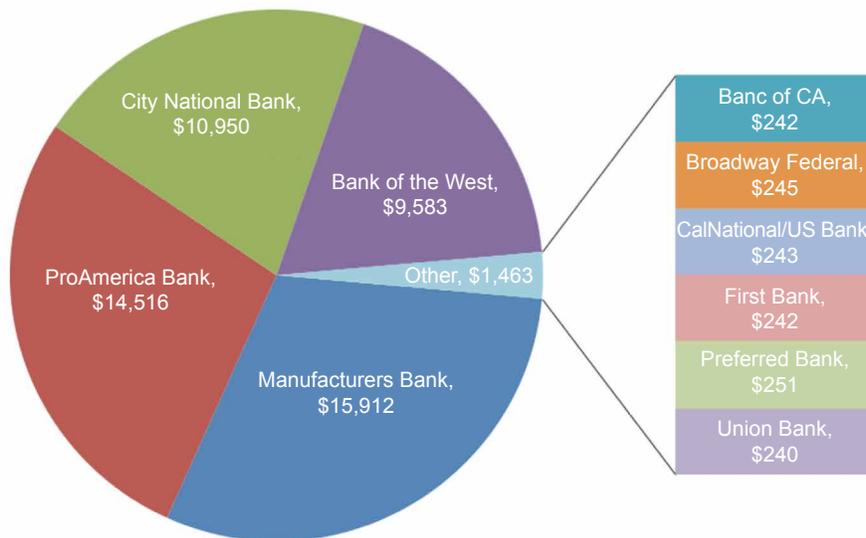


Figure 13 – Cash & Investments by Institution as of June 30, 2016



# Annual Budget 2016/2017

**CalTrans Trust** – These funds are held in trust by WRD as part of a settlement with the California Department of Transportation (CalTrans) for dewatering the 105 freeway.

Source of Funds: CalTrans Settlement

Use of Funds: Restricted for CalTrans Project and RA

Originally, the CalTrans settlement of \$8.0 million was received in June 2004. Since that time, the District has been reimbursed for costs associated with the project, as well as for charges tied to the amount of water pumped from the basin for dewatering the freeway.

**In Trust for CalTrans Project**

\$ 5,542,000

## Capital Improvement Program (CIP)

The WRD's primary responsibilities are to protect the basins by replenishing groundwater, deter seawater intrusion, and remove contaminants from the groundwater. Furthermore, with the recent drought and future uncertainty of imported water, the District is moving forward with the WIN program, a series of projects that will fully utilize stormwater and recycled water sources to protect the basins and to ensure sustainable, reliable local groundwater supply to WRD's stakeholders.

Taking a longer view on the cost-benefit side, Figure 14 below depicts the past ten years of imported water cost versus the cost of groundwater. Water imported from Northern California and the Colorado River cannot be relied on to meet the replenishment needs of WRD and the cost of imported water keeps climbing up every year. The only way to stabilize groundwater rates is to become independent of imported water.

The District's Replenishment Assessment of \$297 per acre-foot is far below the imported water rate of \$1032 per acre-foot. The District is not impacted by any fluctuations in the local economy or any financial trend indicators. Regardless of the economy, the District receives the Replenishment Assessment because the alternative to groundwater in our service area is approximately 3.75 times the cost.

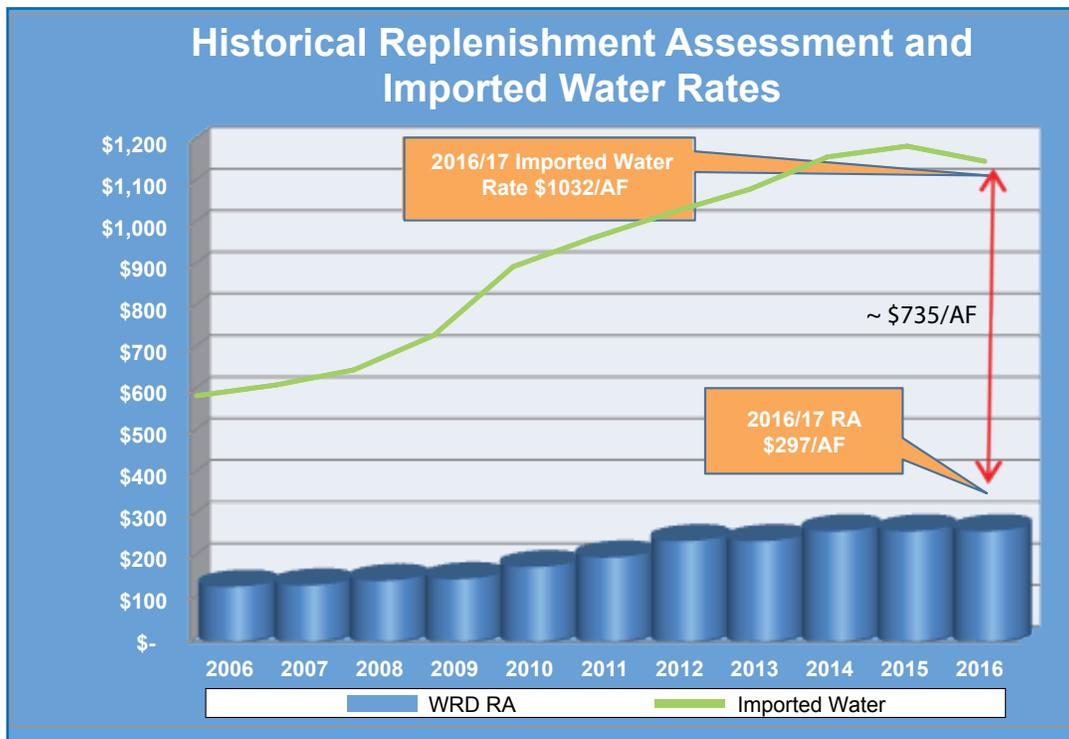


Figure 14

## OVERVIEW

The District's Updated Capital Improvement Program (CIP) serves as a comprehensive planning document that identifies capital project expenses in conjunction with anticipated revenue sources (e.g., grants, etc.), funding for the current year and the next five fiscal years. It is also an update to the District's previous five-year plan that provides information to the public regarding the upcoming capital priorities and allows for multi-year finance planning to support those priorities. Funding sources for the CIP depends on the nature of the projects, as the District identifies the most economical means of financing capital improvements (i.e., construction, non-construction, or partnership projects).

The need for future five-year capital funding will peak over the next capital improvement planning horizon as WRD's Groundwater Reliability Improvement Project (GRIP) Advanced Water Treatment Facility (AWTF) related projects transition from the advanced planning and design phase into construction and operations. Specifically, the District's capital improvements focus on completing projects identified under the Water Independence Now (WIN) initiative, such as the GRIP AWTF and water infrastructure management projects. Following the completion of the proposed GRIP AWTF, the District's focus will shift to asset management and optimizing the life of WRD's existing and future assets.

The Updated Five-Year CIP is organized into seven general project categories below. A detailed description for capital projects including financial analysis, estimated project costs, prior year highlights and funding sources are summarized in this section.

The CIP is organized into seven general project categories, including:

- WIN: Groundwater Reliability Improvement Program (GRIP AWTF)
- Brackish Water Reclamation Projects
- Stormwater Conservation & Groundwater Storage Projects
- Groundwater Management Projects
- Safe Drinking Water Program
- Water Infrastructure Management Projects
- Facilities Management, Maintenance, and Repair

# Annual Budget 2016/2017

Table 12A

## CAPITAL IMPROVEMENT PROGRAM BUDGET OVERVIEW

The Updated CIP budget includes a total of \$214 million in capital improvement projects. The CIP reflects more than \$37 million in grant funding. In addition, funding sources include an \$80 million State Water Resources Loan for GRIP, \$26.3 million from the 2011 Bonds and \$69.5 million from the 2015 bonds. The overall budget reflects a \$1 million future funding need. This is summarized below:

Water Independence Now (WIN)	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget	Grants	2011 Bonds	2015 Bonds	SRF	New Funding
Groundwater Reliability Improvement Project (GRIP): Advanced Water Treatment Facility (AWTF)	\$25,000,000	\$43,000,000	\$34,000,000	\$30,000,000	\$-	\$-	\$132,000,000	\$20,800,000	\$20,200,000	\$11,000,000	\$80,000,000	\$-
Groundwater Reliability Improvement Project (GRIP): Advanced Water Treatment Facility (AWTF) Expansion	\$-	\$-	\$-	\$-	\$250,000	\$750,000	\$1,000,000	\$-	\$-	\$-	\$-	\$1,000,000
Leo J. Vander Lans Facility: Hydraulic Analysis & Operational Efficiencies Study	\$-	\$500,000	\$-	\$-	\$-	\$-	\$500,000	\$-	\$-	\$500,000	\$-	\$-
Leo J. Vander Lans Facility: MWD Bypass Flow-Meter Assembly Improvements Project	\$-	\$35,000	\$350,000	\$-	\$-	\$-	\$385,000	\$-	\$-	\$385,000	\$-	\$-
Leo J. Vander Lans Facility: LVL Flow Equalization Improvements Project	\$-	\$-	\$250,000	\$7,700,000	\$2,000,000	\$-	\$9,950,000	\$-	\$-	\$9,950,000	\$-	\$-
<b>Total</b>	<b>\$25,000,000</b>	<b>\$43,535,000</b>	<b>\$34,600,000</b>	<b>\$37,700,000</b>	<b>\$2,250,000</b>	<b>\$750,000</b>	<b>\$143,835,000</b>	<b>\$20,800,000</b>	<b>\$20,200,000</b>	<b>\$21,835,000</b>	<b>\$80,000,000</b>	<b>\$1,000,000</b>
<b>Brackish Water Reclamation Projects</b>	<b>Prior Year Expenses</b>	<b>FY 16/17 Projected Budget</b>	<b>FY 17/18 Projected Budget</b>	<b>FY 18/19 Projected Budget</b>	<b>FY 19/20 Projected Budget</b>	<b>FY 20/21 Projected Budget</b>	<b>Total CIP Budget</b>	<b>Grants</b>	<b>2011 Bonds</b>	<b>2015 Bonds</b>	<b>SRF</b>	<b>New Funding</b>
Goldsworthy Desalter Expansion	\$1,700,000	\$6,400,000	\$14,800,000	\$600,000	\$-	\$-	\$23,500,000	\$7,000,000	\$1,700,000	\$14,800,000	\$-	\$-
<b>Total</b>	<b>\$1,700,000</b>	<b>\$6,400,000</b>	<b>\$14,800,000</b>	<b>\$600,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$23,500,000</b>	<b>\$7,000,000</b>	<b>\$1,700,000</b>	<b>\$14,800,000</b>	<b>\$-</b>	<b>\$-</b>

Table 12B  
CAPITAL IMPROVEMENT PROGRAM BUDGET OVERVIEW

Stormwater Conservation & Groundwater Storage Projects	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget	Grants	2011 Bonds	2015 Bonds	SRF	New Funding
Whittier Narrows Conservation Pool Feasibility Study	\$-	\$1,125,505	\$1,274,495	\$-	\$-	\$-	\$2,400,000	\$576,000	\$-	\$1,824,000	\$-	\$-
Dominquez Gap Seawater Intrusion Barrier- Second Connection	\$-	\$1,200,000	\$1,200,000	\$2,200,000	\$-	\$-	\$4,600,000	\$-	\$-	\$4,600,000	\$-	\$-
Groundwater Basin Optimization Pipeline: Phase 1 (Planning)	\$-	\$250,000	\$-	\$-	\$-	\$-	\$250,000	\$-	\$-	\$250,000	\$-	\$-
Perchlorate Remediation: Phase 1 (Planning)	\$-	\$75,000	\$5,750,000	\$5,525,000	\$750,000	\$750,000	\$12,850,000	\$9,100,000	\$-	\$3,750,000	\$-	\$-
West Coast Basin Brackish Water Reclamation: Phase 1 (Planning)	\$-	\$100,000	\$-	\$-	\$-	\$-	\$100,000	\$-	\$-	\$100,000	\$-	\$-
Montebello Forebay Injection Wells: Phase 1 (Planning)	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000	\$-	\$-	\$100,000	\$-	\$-
West Coast Basin Inland Injection Well System: Phase 1 (Planning)	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000	\$-	\$-	\$100,000	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$2,750,505</b>	<b>\$8,224,495</b>	<b>\$7,725,000</b>	<b>\$750,000</b>	<b>\$950,000</b>	<b>\$20,400,000</b>	<b>\$9,676,000</b>	<b>\$-</b>	<b>\$10,724,000</b>	<b>\$-</b>	<b>\$-</b>
<b>Groundwater Management Projects</b>	<b>Prior Year Expenses</b>	<b>FY 16/17 Projected Budget</b>	<b>FY 17/18 Projected Budget</b>	<b>FY 18/19 Projected Budget</b>	<b>FY 19/20 Projected Budget</b>	<b>FY 20/21 Projected Budget</b>	<b>Total CIP Budget</b>	<b>Grants</b>	<b>2011 Bonds</b>	<b>2015 Bonds</b>	<b>SRF</b>	<b>New Funding</b>
Regional Groundwater Monitoring Program	\$4,400,000	\$1,490,000	\$1,245,000	\$2,091,392	\$-	\$-	\$9,226,392	\$-	\$4,400,000	\$4,826,392	\$-	\$-
Montebello Forebay Recharge Enhancement Study	\$550,000	\$250,000	\$-	\$-	\$-	\$-	\$800,000	\$-	\$-	\$800,000	\$-	\$-
Enhanced-Montebello Forebay Recharge Enhancement Study	\$-	\$75,000	\$190,000	\$135,000	\$-	\$-	\$400,000	\$-	\$-	\$400,000	\$-	\$-
Recharge Operations-Flow Meters	\$-	\$300,000	\$200,000	\$200,000	\$-	\$-	\$700,000	\$-	\$-	\$700,000	\$-	\$-
<b>Total</b>	<b>\$4,950,000</b>	<b>\$2,115,000</b>	<b>\$1,635,000</b>	<b>\$2,426,392</b>	<b>\$-</b>	<b>\$-</b>	<b>\$11,126,392</b>	<b>\$-</b>	<b>\$4,400,000</b>	<b>\$6,726,392</b>	<b>\$-</b>	<b>\$-</b>
<b>Safe Drinking Water Projects</b>	<b>Prior Year Expenses</b>	<b>FY 16/17 Projected Budget</b>	<b>FY 17/18 Projected Budget</b>	<b>FY 18/19 Projected Budget</b>	<b>FY 19/20 Projected Budget</b>	<b>FY 20/21 Projected Budget</b>	<b>Total CIP Budget</b>	<b>Grants</b>	<b>2011 Bonds</b>	<b>2015 Bonds</b>	<b>SRF</b>	<b>New Funding</b>
SDWP- Lynwood	\$-	\$1,230,000	\$-	\$-	\$-	\$-	\$1,230,000	\$-	\$-	\$1,230,000	\$-	\$-
SDWP- Huntington Park	\$-	\$1,225,000	\$-	\$-	\$-	\$-	\$1,225,000	\$-	\$-	\$1,225,000	\$-	\$-
SDWP- CA American Water Ardington Well	\$-	\$1,800,000	\$-	\$-	\$-	\$-	\$1,800,000	\$-	\$-	\$1,800,000	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$4,255,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$4,255,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$4,255,000</b>	<b>\$-</b>	<b>\$-</b>

Table 12C

## CAPITAL IMPROVEMENT PROGRAM BUDGET OVERVIEW

Water Infrastructure Management Projects	Prior Year Expenses	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total CIP Budget	Grants	2011 Bonds	2015 Bonds	SRF	New Funding
		Projected Budget										
Asset Management Program	\$150,000	\$465,000	\$465,000	\$315,000	\$35,000	\$35,000	\$1,465,000	\$-	\$-	\$1,465,000	\$-	\$-
Centralized Information System	\$60,000	\$165,000	\$125,000	\$125,000	\$125,000	\$-	\$600,000	\$-	\$-	\$600,000	\$-	\$-
Supervisory Control and Data Acquisition (SCADA) System	\$-	\$1,698,063	\$1,312,187	\$937,500	\$360,000	\$100,000	\$4,407,750	\$-	\$-	\$4,407,750	\$-	\$-
<b>Total</b>	<b>\$210,000</b>	<b>\$2,328,063</b>	<b>\$1,902,187</b>	<b>\$1,377,500</b>	<b>\$520,000</b>	<b>\$135,000</b>	<b>\$6,472,750</b>	<b>\$-</b>	<b>\$-</b>	<b>\$6,472,750</b>	<b>\$-</b>	<b>\$-</b>
<b>Facilities Management, Maintenance, and Repair</b>												
Headquarters Building- Phase 1: Tenant Improvements	\$-	\$200,000	\$-	\$-	\$-	\$-	\$200,000	\$-	\$-	\$200,000	\$-	\$-
Headquarters Building- Phase 2: Tenant Improvements	\$-	\$25,000	\$175,000	\$-	\$-	\$-	\$20	\$-	\$-	\$200,000	\$-	\$-
Headquarters Building- Roof Replacement Project	\$-	\$-	\$10,000	\$60,000	\$-	\$-	\$70,000	\$-	\$-	\$70,000	\$-	\$-
Headquarters Building- HVAC Improvements Project	\$-	\$-	\$-	\$25,000	\$55,000	\$-	\$80,000	\$-	\$-	\$80,000	\$-	\$-
Headquarters Building- Drought Tolerant Landscape Demo Garden Improvement	\$-	\$-	\$-	\$-	\$15,000	\$75,000	\$90,000	\$-	\$-	\$90,000	\$-	\$-
Field Operations and Storage Annex Facility Project	\$-	\$3,944,000	\$47,000	\$33,500	\$1,500	\$18,000	\$4,044,000	\$-	\$-	\$4,044,000	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$4,169,000</b>	<b>\$232,000</b>	<b>\$118,500</b>	<b>\$71,500</b>	<b>\$93,000</b>	<b>\$4,684,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$4,684,000</b>	<b>\$-</b>	<b>\$-</b>
<b>TOTAL CIP BUDGET</b>												
	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget	Grants	2011 Bonds	2015 Bonds	SRF	New Funding
<b>Total</b>	\$31,860,000	\$65,552,568	\$61,393,682	\$49,947,392	\$3,591,500	\$1,928,000	\$214,273,142	\$37,476,000	\$26,300,000	\$69,500,000	\$80,000,000	\$1,000,000

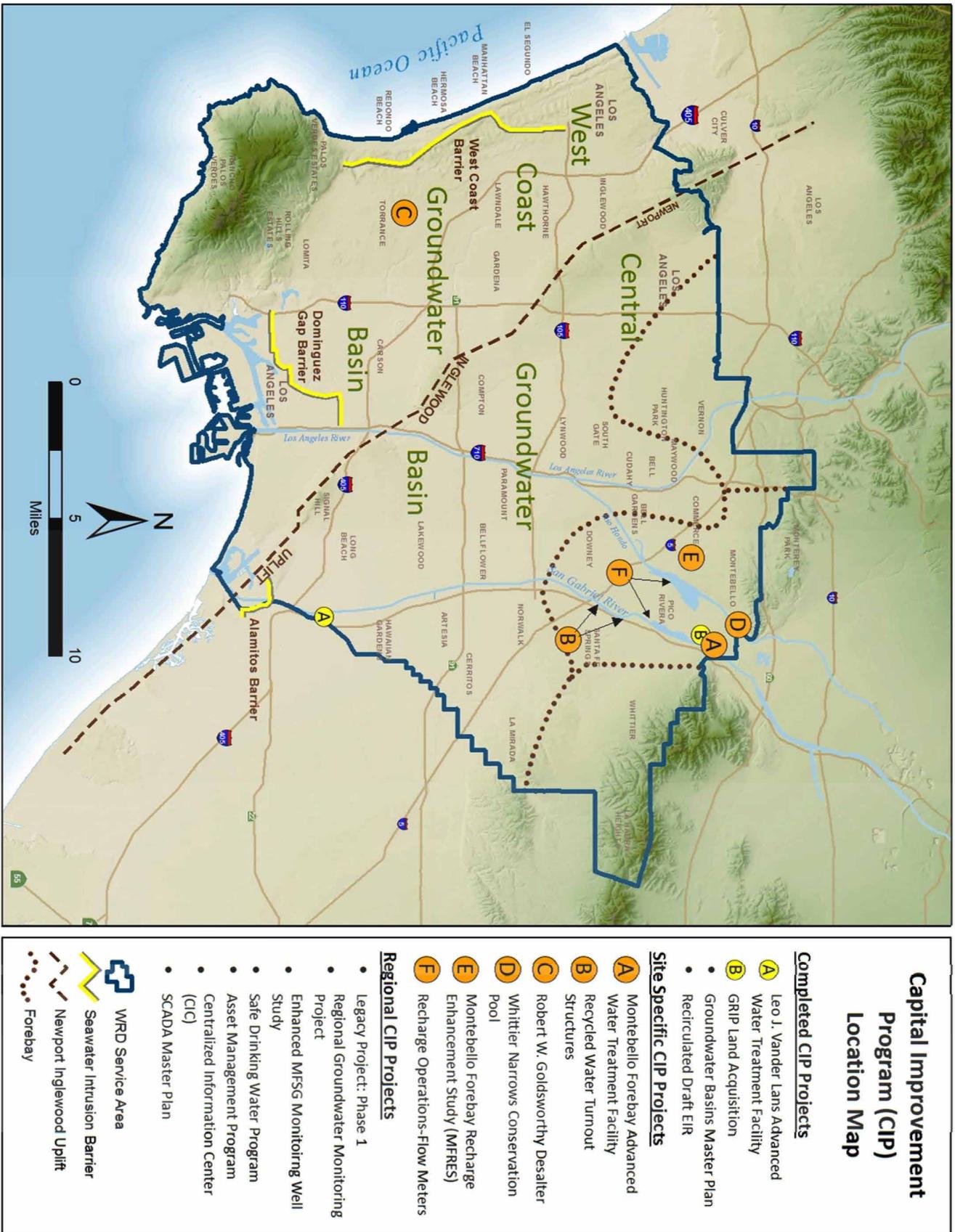


Figure 15 – Capital Improvement Program (CIP) Location Map, 2015/16

## Water Independence Now

### GROUNDWATER RELIABILITY IMPROVEMENT PROJECT (GRIP)

#### Project Description

The Groundwater Reliability Improvement Project (GRIP) will offset the current use of imported water by providing up to 21,000 acre-feet per year (AFY) with the construction of an advanced water treatment facility (AWTF), supplemental recharge wells, a brine line, and recently completed Recycled Water Turnout Structures. Approximately 11,000 AFY of additional tertiary treated recycled water will be purchased from the Los Angeles County Sanitation Districts (LACSD) and 10,000 AFY of advanced treated water will be generated at the proposed AWTF. The tertiary treated recycled water would be conveyed in the existing outfall pipeline to the Montebello Forebay Spreading Grounds (MFSG). Below is a description of the various GRIP components:



#### Advanced Water Treatment Facility (AWTF)

The District will construct the proposed AWTF for advanced treatment of 10,000 AFY of tertiary treated water from the LACSD. A new influent diversion structure will be constructed to transfer tertiary treated recycled water from the existing outfall pipeline into the proposed AWTF for further treatment. An effluent diversion structure will be constructed to transfer advanced treated water back to the existing outfall pipeline to allow blending of advanced treated water with the tertiary treated recycled water prior to spreading at the Montebello Forebay Spreading Grounds.

#### Supplemental Recharge Wells

Three supplemental recharge wells and three monitoring wells will be constructed at and near the AWTF site. The supplemental recharge wells will be operated to recharge and store up to 4.5 million gallons per day (mgd) of full advanced treated recycled water in the underlying aquifers for replenishment. Under normal operating conditions for the GRIP AWTF, the recycled water from the AWTF will be discharged to the existing MFSG for infiltration into the groundwater basin. However, when the spreading basins are unavailable, the recycled water will be directed to the three supplemental recharge wells. The supplemental recharge wells will allow the AWTF to operate at a constant minimum rate by providing alternate means to recharge the produced recycled water.

#### Brine Line

As part of the GRIP AWTF project, off-site improvements are required, including the construction of a 16-inch diameter pipeline for disposal of brine concentrate that will be generated by the new treatment facility. This 16-inch diameter brine pipeline will connect to an existing LACSD 63-inch diameter sewer pipeline that runs in proximity to the GRIP AWTF site. Other necessary off-site improvements include street modifications that were requested by the City of Pico Rivera, including a redesign of traffic lanes and signals at the intersection of San Gabriel River Parkway and Beverly Boulevard in the City of Pico Rivera.

#### Recycled Water Turnout Structures (Turnouts)

This component of GRIP included the construction of two reinforced concrete turnout structures on the existing recycled water pipeline that extends from the San Jose Creek Water Reclamation Plant (SJCWRP) to the Montebello Forebay Spreading Grounds. Specifically, these Turnouts will allow the delivery of 11,000 AFY of recycled water. The construction of the Turnouts were completed in June 2016.

# Annual Budget 2016/2017

## Funding

In addition to Tax-Exempt Revenue Bond proceeds, the District has submitted and continues processing its final funding agreement in accordance with the Water Recycling Funding Program funded by Proposition 1 and the State Revolving Fund for \$95 million, which includes an \$80 million one-percent 30 year loan and \$15 million in grant funding. In addition, the District submitted an application for the Rivers and Mountains Conservancy Proposition 1 Grant Program.



## Impact of Capital Investment on Operating Budget

There are no operating impacts at this time. Operation of the proposed AWTF is expected to commence in late 2018. The primary goal of the Water Replenishment District is to provide safe and reliable groundwater. The Water Independence Now (WIN) program is a series of projects that will fully utilize stormwater and recycled water sources to restore and protect the groundwater resources of the Central and West Coast basins. In the past, a large percentage of replenishment water came from sources in Northern California and the Colorado River. WIN seeks to completely eliminate this dependence on imported water to ensure the future security of our region by developing local resources to create a locally sustainable groundwater supply.

The Groundwater Reliability Improvement Program (GRIP) is a comprehensive plan anchored by the GRIP Advanced Water Treatment Facility (AWTF). It also includes the GRIP recycled water turnout structures which will together, will provide 21,000 acre-feet of recycled and advanced treated recycled water to the Montebello Forebay Spreading Grounds for groundwater recharge. This replaces 21,000 acre-feet of imported water that would otherwise have to be purchased to replenish groundwater supplies.

The benefit related to this project is expected to be as follows, with status quo being no change to the imported and recycled water purchased for spreading at the Montebello Forebay Spreading Grounds and GRIP being the costs related to the AWTF source water, capital costs and operating and maintenance costs:

*Table 13*

<b>AWTF SOURCE WATER, CAPITAL COSTS AND OPERATING AND MAINTENANCE COSTS</b>					
	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>
Status Quo	\$19,460,000	\$19,891,000	\$20,616,000	\$21,076,000	\$21,560,000
GRIP	19,001,000	19,108,000	19,237,000	19,389,000	19,565,000
Savings	\$ 459,000	\$ 783,000	\$ 1,379,000	\$ 1,687,000	\$ 1,995,000

The other primary benefit is the reliability of this water and the independence from water from Northern California and the Colorado River. Reliability is extremely difficult to quantify, but it allows the District to continue to replenish the groundwater basins even when water is unavailable from other sources, particularly in times of drought.

# Annual Budget 2016/2017

The GRIP AWTF Expansion Project will be analyzed in the future as the current phase of the project is completed and put into service.

## Prior Year Highlights

The District Board certified the Final Environmental Impact Report for the GRIP AWTF in June 2015. Also, the District hosted a community charrette to ensure the communities participation in the development of the GRIP AWTF design. The District unveiled the final design in November 2015. In addition, the District Board selected JF Shea and TetraTech as the Design-Build Entity for the construction of the GRIP AWTF in April 2016 and completed its contract negotiations and finalized its final design-build agreement in June 2016. A Notice to Proceed was processed in July 2016, and the GRIP AWTF is scheduled to be completed and fully operational in 2018. As mentioned previously, the construction of the Turnouts is completed.

*Table 14*  
**GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP)  
ADVANCED WATER TREATMENT FACILITY (AWTF)**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$19,000,000	\$-	\$-	\$-	\$-	\$-	\$19,000,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$6,000,000	\$43,000,000	\$34,000,000	\$30,000,000	\$-	\$-	\$113,000,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$25,000,000</b>	<b>\$43,000,000</b>	<b>\$34,000,000</b>	<b>\$30,000,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$132,000,000</b>
Grants	\$4,800,000	\$5,000,000	\$5,500,000	\$5,500,000	\$-	\$-	\$20,800,000
2011 Bonds	\$20,200,000	\$-	\$-	\$-	\$-	\$-	\$20,200,000
2015 Bonds	\$-	\$6,000,000	\$3,500,000	\$1,500,000	\$-	\$-	\$11,000,000
SRF	\$-	\$32,000,000	\$25,000,000	\$23,000,000	\$-	\$-	\$80,000,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning	
Design	
Construction	
Post Construction	

# Annual Budget 2016/2017

## GROUNDWATER RELIABILITY IMPROVEMENT PROJECT (GRIP) ADVANCED WATER TREATMENT FACILITY (AWTF) EXPANSION



### Project Description

The proposed advanced water treatment facility (AWTF) is in its initial stages of development. Planning for an expansion will commence until the completion of the proposed AWTF.

### Funding

The Capital Improvement Program budget for Fiscal Year 2019-2020 and 2020-2021 is \$1 million for planning.

### Impact of Capital Investment on Operating Budget

There are no operating impacts at this time. The GRIP AWTF Expansion Project will be analyzed in the future as the current phase of the project is completed and put into service.

### Prior Year Highlights

The District is in the process of initiating the development of the AWTF.

*Table 15*

**GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP)  
ADVANCED WATER TREATMENT FACILITY (AWTF) EXPANSION  
Projected 5-year CIP**

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$250,000	\$-	\$250,000
Design	\$-	\$-	\$-	\$-	\$-	\$750,000	\$750,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$250,000</b>	<b>\$750,000</b>	<b>\$1,000,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
New Funding	\$-	\$-	\$-	\$-	\$250,000	\$750,000	\$1,000,000

### Project Schedule

Planning	
Design	
Construction	
Post Construction	

## Leo J. Vander Lans Facility Projects

### PROJECT DESCRIPTION

#### Hydraulic Analysis & Operational Efficiencies Study

The project involves conducting a hydraulic analysis and operational efficiencies study in regards to the Vander Lans Facility (LVL) followed by implementation of the study's recommendations. The goals of this study are to (1) increase the recycled water injection flowrates to close to 100 percent while allowing a small portion of imported water to flow in order to avoid MWD's low-flow penalties; and (2) optimize operational and flow equalization strategies to allow consistent and stable 24/7 operations with minimum shutdowns.

#### MWD Bypass Flow-Meter Assembly Improvements Project

The District's goal is to improve the operational flexibility of its barrier injection water supply system to enable recycled water flow to approach 100 percent, while still allowing capability for a small percentage of Metropolitan Water District (MWD) water into the system and also while avoiding low flow penalties incurred from MWD. The purpose of this project is to evaluate strategies that can be implemented to increase blending ratios and avoid the low flow penalty charge from MWD. There are three alternatives that have been identified as potential strategies, including 1) virtual meeting- mass balance calculation; 2) replacement of 24-inch by 22-inch Venturi meter with a smaller magnetic meter and 3) installation of low flow meter bypass around the existing 24-inch by 22-inch Venturi meter.

#### Flow Equalization Improvements Project

This project will evaluate the additions of possible future flow equalization tanks, both upstream of LVL on the supply side and downstream of LVL on the barrier discharge end. The upstream equalization tanks would maintain source water supply to keep LVL running when the source water flow drops. The downstream equalization tanks would maintain recycled water supply to the Barrier while LVL is shutdown within a certain period.

#### Funding

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$535,000. The funding for future construction will be updated for the next fiscal year.

#### Impact of Capital Investment on Operating Budget

There are no operating impacts at this time.

#### Prior Year Highlights

This study has not commenced; hence, there are no highlights at this time. However, District has selected RMC to conduct the study, expected to start in June 2016 and be completed by January 2017.

# Annual Budget 2016/2017

*Table 16A*  
**LEO J. VANDER LANS FACILITY HYDRAULIC ANALYSIS  
 & OPERATIONAL EFFICIENCIES STUDY**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Study	\$-	\$500,000	\$-	\$-	\$-	\$-	\$500,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$500,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$500,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$500,000	\$-	\$-	\$-	\$-	\$500,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning    
 Study  
 Construction  
 Post Construction

*Table 16B*  
**LEO J. VANDER LANS FACILITY: MWD BYPASS FLOW-METER ASSEMBLY  
 IMPROVEMENT PROJECT**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$35,000	\$350,000	\$-	\$-	\$-	\$385,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$35,000</b>	<b>\$350,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$385,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$35,000	\$350,000	\$-	\$-	\$-	\$385,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning  
 Design  
 Construction    
 Post Construction

# Annual Budget 2016/2017

*Table 16C*  
**LEO J. VANDER LANS FACILITY: FLOW EQUALIZATION IMPROVEMENTS PROJECT**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$250,000	\$7,700,000	\$2,000,000	\$-	\$9,950,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$250,000</b>	<b>\$7,700,000</b>	<b>\$2,000,000</b>	<b>\$-</b>	<b>\$9,950,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$250,000	\$7,700,000	\$2,000,000	\$-	\$9,950,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## *Brackish Water Reclamation Projects*

### **GOLDSWORTHY DESALTER EXPANSION**

#### **Project Description**

This project will expand the capacity of the existing desalting facility located in the City of Torrance and construct two new groundwater wells to extract water from a saline plume in the West Coast Basin. Once completed, the project will provide approximately 2,400 AFY of additional treated “remediated” brackish groundwater to supplement potable water supplies. It is anticipated that the City of Torrance will use the product water from the expansion. Additional measures may be necessary in the future to fully contain and remediate the saline plume, which extends beyond the Torrance area. The District continues to work with stakeholders in the West Coast Basin in determining long term solutions for removal of the saline plume.

#### **Funding**

This project received a total of \$7 million in grant funding; \$4 million from Proposition 84 Integrated Regional Water Management (IRWM) 2014 Drought Grant and \$3 million from Proposition 50, Round 3 Desalination Grant Program.

#### **Impact of Capital Investment on Operating Budget**

The City of Torrance will continue to operate the Goldsworthy Desalter. The remediation of the saline plume in the West Coast Basin is the primary reason for the expansion of this project with an added benefit of providing the City of Torrance with an additional 2,400 acre-feet per year of potable water. The total estimated cost of the expansion is expected to be \$23,500,000 which is offset by outside funding. No accurate financial value can be placed on remediating the saline plume trapped in the West Coast Groundwater Basin; similar to the District’s Safe Drinking Water Program where there is no quantifiable value that can be placed on the remediation of groundwater contaminants. The benefit is to the Central and West Coast Basins; safe and reliable groundwater.

#### **Prior Year Highlights**

As of the end of FY15/16, the District has completed the construction of two new source water wells. The expansion of the Desalter started in January 2016 and is scheduled to be completed by May 2017.

# Annual Budget 2016/2017

*Table 17*  
**GOLDSWORTHY DESALTER EXPANSION**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$1,000,000	\$-	\$-	\$-	\$-	\$-	\$1,000,000
Construction	\$700,000	\$6,400,000	\$14,800,000	\$600,000	\$-	\$-	\$22,500,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$1,700,000</b>	<b>\$6,400,000</b>	<b>\$14,800,000</b>	<b>\$600,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$23,500,000</b>
Grants	\$-	\$3,500,000	\$3,500,000	\$-	\$-	\$-	\$7,000,000
2011 Bonds	\$1,700,000	\$-	\$-	\$-	\$-	\$-	\$1,700,000
2015 Bonds	\$-	\$2,900,000	\$11,300,000	\$600,000	\$-	\$-	\$14,800,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## Stormwater Conservation & Groundwater Storage Projects

### WHITTIER NARROWS CONSERVATION POOL FEASIBILITY STUDY

#### Project Description

The Whittier Narrows Dam provides flood control, recreation and a reliable means of capturing storm water flows for groundwater replenishment in the Montebello Forebay. The U.S. Army Corps of Engineers (USACE), Los Angeles County Flood Control District (LACFCD) and WRD are interested in raising the maximum conservation pool elevation from 201.6 feet to 205 feet to allow for an estimated additional 1,100 AFY of storm water conservation that would otherwise be wasted to the ocean. The elevation increase does not require capital improvements, however, it does need USACE approval and updates to various studies and environmental documents related to dam operations at an increased conservation pool elevation. The WRD and LACFCD are working closely with USACE on a strategy to complete an updated Whittier Narrows Conservation Pool Feasibility Study (Study) to allow for a permanent change to the operating plan.

#### Funding

This project received a \$576,000 Proposition 84 Integrated Regional Water Management (IRWM) Round 2 Grant, and \$1,824,000 will come from the 2015 Replenishment Assessment Revenue Bond.

#### Impact of Capital Investment on Operating Budget

Whittier Narrows Dam is managed by USACE and all operating changes must be approved by the USACE. The project will provide for an estimated 1,100 acre-feet per year of additional storm water capture which will offset the need for imported water.

*Table 18A*  
**WHITTIER NARROWS DAM ESTIMATED SAVINGS**

	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Savings</b>	\$647,000	\$706,000	\$749,000	\$811,000	\$805,000

#### Prior Year Highlights

A federal cost-share agreement, which is required to commence the Study, was signed by all parties (USACE, LACFCD, and WRD). Subsequently, a kick-off meeting for the Study was held at WRD.

# Annual Budget 2016/2017

*Table 18B*  
**WHITTIER NARROWS CONSERVATION POOL FEASIBILITY STUDY**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Feasibility Study	\$-	\$1,125,505	\$1,274,495	\$-	\$-	\$-	\$2,400,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,125,505</b>	<b>\$1,274,495</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$2,400,000</b>
Grants	\$-	\$288,000	\$288,000	\$-	\$-	\$-	\$576,000
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$837,505	\$986,495	\$-	\$-	\$-	\$1,824,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Study

Construction

Post Construction



## **DOMINGUEZ GAP SEAWATER INTRUSION BARRIER- SECOND CONNECTION**

### **Project Description**

The Los Angeles Department of Water and Power (LADWP) is expanding the Terminal Island Water Reclamation Plant/Advanced Water Purification Facility (TIWRP/AWPF), which produces the advanced treated recycled water that is currently injected at the Dominguez Gap Seawater Intrusion Barrier (Barrier). Once the TIWRP/AWPF is expanded by 2017, 100% advanced treated recycled water will be injected at the Barrier, thus replacing all the imported water that is currently utilized at the Barrier. Currently, the advanced treated recycled water is delivered by pipeline from the TIWRP/AWPF to one connection point at the Barrier. To allow for the increased delivery of recycled water and ensure the reliability of the delivery, a second connection and an associated pipeline must be constructed.

The pipeline associated with the second recycled water connection was being designed by MWH under contract to LADWP. LADWP's contract with MWH expired and only 60 percent of the design had been completed. LADWP requested WRD's assistance to complete the remaining 40 percent of the design and manage the procurement and construction of the pipeline. This project will not only increase the use of recycled water in the basin, but will also reduce dependency on imported water, which is a crucial component of WRD's Water Independence Now (WIN) Program.

### **Funding**

The second recycled water connection at the Barrier will be financed, designed, and constructed by WRD. It is expected that LADWP shall reimburse WRD approximately \$3.42 million, plus any contingency funds that are expended for the design and construction of the pipeline. The balance would be paid for by the District.

### **Impact of Capital Investment on Operating Budget**

There are no operating impacts at this time. Once the expansion is completed, 100% advanced treated recycled water will be injected to replace all costly imported water at the Barrier.

### **Prior Year Highlights**

Since MWH has already commenced design of the associated pipeline, WRD will retain MWH for the design of the second recycled water connection.

# Annual Budget 2016/2017

*Table 19*  
**DOMINGUEZ GAP SEAWATER INTRUSION BARRIER – SECOND CONNECTION**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$1,200,000	\$1,200,000	\$2,200,000	\$-	\$-	\$4,600,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,200,000</b>	<b>\$1,200,000</b>	<b>\$2,200,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$4,600,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$1,200,000	\$1,200,000	\$2,200,000	\$-	\$-	\$4,600,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



# Annual Budget 2016/2017

## GROUNDWATER BASIN OPTIMIZATION PIPELINE: PHASE 1

### Project Description

The WRD's Groundwater Basin Master Plan (GBMP) proposes the Groundwater Basin Optimization Pipeline (GBOP), which will install new extraction wells within the Montebello Forebay and pump water to users to the south, creating storage capacity for additional stormwater capture in the MFSG. The Draft GBMP estimates that an additional 17,000 AFY of stormwater that currently flows to the ocean during large storm events can be captured and recharged at the MFSG with the increased storage capacity, creating a new, local water supply for the region. The GBOP will require an increase in pumping by 25,000 AFY to reduce elevated groundwater levels and allow for additional stormwater recharge during/following high storm flow periods. This project will shift pumping patterns, thus shifting pumping from elsewhere in the Central Basin to the Montebello Forebay. The project will require installation of up to nine new extraction wells, pipelines and pump stations to deliver the water to existing water users downstream of the Montebello Forebay area.

### Funding

The total Capital Improvement Program budget for Fiscal Years 2016/17 is \$250,000

### Impact of Capital Investment on Operating Budget

No operation impacts at this time. The increase of storm water storage capacity directly benefits the replenishment of the groundwater in the basin.

### Prior Year Highlights

This project is in its planning stages; hence there are no highlights at this time.

*Table 20*  
**GROUNDWATER BASIN OPTIMIZATION PIPELINE**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$250,000	\$-	\$-	\$-	\$-	\$250,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$250,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$250,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$250,000	\$-	\$-	\$-	\$-	\$250,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Design

Construction

Post Construction

## **PERCHLORATE REMEDIATION IN THE LOS ANGELES FOREBAY PROJECT**

### **Project Description**

The District has been investigating a perchlorate groundwater plume with the assistance of various regulatory agencies in association with our Los Angeles Forebay Task Force. The groundwater impacts are located in a disadvantaged community within a deep regional aquifer system currently utilized by various water purveyors in the Los Angeles Forebay. The perchlorate concentrations are among the highest in California. The WRD has identified a “hot spot” that represents a substantial threat to the Central Groundwater Basin and will require treatment to reduce the threat to a local groundwater source within the Los Angeles Forebay region of the Central Groundwater Basin. A responsible party (RP) has not been identified by either the Department of Toxic Substances Control (DTSC) or the Los Angeles Regional Water Quality Control Board (LARWQCB). The WRD is currently pursuing grant funds to remediate the “hot spot” under Proposition 1.

### **Funding**

A successful grant submittal will require funding contributions from the WRD. In our preliminary discussions with state grant fund representatives the required contribution may be up to 20%. The anticipated budget is projected for five years through FY 20/21. The first three years will include treatment system design / construction and will receive grant funds up to 80%. The post construction tasks in the final two years will not be eligible for grant funds as the state does not reimburse applicants for treatment system O&M.

### **Impact of Capital Investment on Operating Budget**

No operation impacts at this time.

### **Prior Year Highlights**

This project is in its planning stages; hence there are no highlights at this time.

# Annual Budget 2016/2017

*Table 21*  
**PERCHLORATE REMEDIATION**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$75,000	\$225,000	\$-	\$-	\$-	\$300,000
Construction	\$-	\$-	\$5,525,000	\$5,525,000	\$-	\$-	\$11,050,000
Post Construction	\$-	\$-	\$-	\$-	\$750,000	\$750,000	\$1,500,000
<b>Total</b>	<b>\$-</b>	<b>\$75,000</b>	<b>\$5,750,000</b>	<b>\$5,525,000</b>	<b>\$750,000</b>	<b>\$750,000</b>	<b>\$12,850,000</b>
Grants	\$-	\$60,000	\$4,620,000	\$4,420,000	\$-	\$-	\$9,100,000
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$15,000	\$1,130,000	\$1,105,000	\$750,000	\$750,000	\$3,750,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## **WEST COAST BASIN BRACKISH WATER RECLAMATION: PHASE 1**

### **Project Description**

This regional project, which will consist of multiple desalter treatment plants, will remove the saline plume in the Silverado Aquifer located in the West Coast groundwater basin in south Los Angeles County. Operation of seawater barrier injection wells has effectively curtailed seawater intrusion into the West Coast Basin, however, a large residual saline plume remains trapped inland of the barrier wells, occupying 600,000 acre-feet of volume in the West Coast groundwater basin. This project will completely remediate the saline plume over a 40-year period by pumping and desalting 15,000 acre-feet of brackish groundwater each year. This project would provide a significant new potable water supply in the West Coast Basin and also reclaiming groundwater storage capacity in the basin by removing the brackish plume. The WRD's Groundwater Basin Master Plan assumes this project would operate on a regional basis, providing a new potable source of water for several groundwater pumpers located within that basin whose pumping options are currently limited by the saline plume. This effort would ultimately adjust pumping patterns to maximize containment and removal of the saline plume, which would result in groundwater contamination remediation, reclamation of significant groundwater storage volume in the basin and creation of a significant new local water supply.

### **Funding**

The total Capital Improvement Program budget for Fiscal Years 2016/17 is \$100,000

### **Impact of Capital Investment on Operating Budget**

No operation impacts at this time. The measurable financial benefit comes from identifying and reducing hot spots that represents a threat to the quality of groundwater basins.

### **Prior Year Highlights**

This project is in its planning stages; hence there are no highlights at this time.

# Annual Budget 2016/2017

*Table 22*  
**WEST COAST BASIN BRACKISH WATER RECLAMATION**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$100,000	\$-	\$-	\$-	\$-	\$100,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-		\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$100,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$100,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$100,000	\$-	\$-	\$-	\$-	\$100,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning



Design

Construction

Post Construction

## **MONTEBELLO FOREBAY INJECTION WELLS: PHASE 1**

### **Project Description**

To increase replenishment of recycled water, the WRD's Groundwater Basin Master Plan (GBMP) includes additional replenishment via injection at new wells in the Montebello Forebay. This project may require diversions to the existing sewage collection system in the vicinity of the Whittier Narrows Water Reclamation Plant. With the sewer diversions, the wastewater flow that is currently treated at Joint Water Pollution Control Plan (JWPCP) and discharged via Los Angeles County Sanitation District's existing ocean outfall off the coast of Palos Verdes would instead be recharged at the Montebello Forebay. New advanced water treatment facilities will be installed at the Montebello Forebay and Los Coyotes Water Reclamation Plant to produce approximately 18,190 acre-feet of advanced-treated water. This water will then be conveyed and injected into the Montebello Forebay through new pipelines and up to 17 new injection wells. It should be noted that since the development of the GBMP, Metropolitan Water District of Southern California (MWD) has initiated studies to develop recycled water from the JWPCP and convey to areas of the Central Basin. If this project proceeds, the MWD recycled water would serve as an alternative source for the injection described above.

### **Funding**

The total Capital Improvement Program budget for Fiscal Years 2016/17 is \$100,000

### **Impact of Capital Investment on Operating Budget**

No operation impacts at this time. The measurable financial benefits will come when the replenishment of recycled water is increased at the groundwater basin.

### **Prior Year Highlights**

This project is in its planning stages; hence there are no highlights at this time.

# Annual Budget 2016/2017

*Table 23*  
**MONTEBELLO FOREBAY INJECTION WELLS**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-		\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$100,000</b>	<b>\$100,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## **WEST COAST BASIN INLAND INJECTION WELL SYSTEM: PHASE 1**

### **Project Description**

This project increases water replenishment within the West Coast Basin through the installation of a new injection well system inland from existing injection barriers. The system will be supplied with local recycled water produced at a proposed new advanced water treatment facility at Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant (JWPCP), which will produce up to 17,000 AFY of advanced treated water. The WRD's Groundwater Basin Master Plan assumes that 15,000 AFY can be injected into the groundwater basin at the new Inland Injection Well System, and the remaining 2,000 AFY will be used for injection at the Dominguez Gap Barrier Project. The proposed project will require construction of advanced treatment capacity at the JWPCP, new pipelines, pump stations, and injection wells. Up to 16 new extraction wells with wellhead treatment facilities will be required, as determined by participating pumpers. It should be noted that since the development of the GBMP, MWD has initiated studies to develop recycled water from the JWPCP and convey to areas of the West Coast Basin. If this project proceeds, the MWD recycled water would serve as an alternative source for the injection wells described above.

### **Funding**

The total Capital Improvement Program budget for Fiscal Years 2020/21 is \$100,000

### **Impact of Capital Investment on Operating Budget**

No operation impacts at this time. The measurable financial benefits come when the water replenishment is increased within the West Coast Basin.

### **Prior Year Highlights**

This project is in its planning stages; hence there are no highlights at this time.

# Annual Budget 2016/2017

*Table 24*  
**WEST COAST BASIN INLAND INJECTION WELL SYSTEM**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-		\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$100,000</b>	<b>\$100,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$-	\$-	\$-	\$100,000	\$100,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## Groundwater Management Projects

### REGIONAL GROUNDWATER MONITORING PROGRAM

#### Project Description

The Regional Groundwater Monitoring Program (RGMP) collects groundwater level and groundwater quality data used for groundwater basin management for the Central Basin and West Coast Basin, two of the most utilized urban groundwater basins in the nation. This is achieved through groundwater monitoring, modeling, and planning, which provides the basis to understanding the dynamic changes in the basins. The RGMP currently consists of a network of 324 specialized monitoring wells at 58 locations throughout the District to a maximum depth of nearly 3,000 feet, and WRD staff, comprised of hydrogeologists and engineers, provide the expertise to collect, analyze and report on the collected groundwater data. WRD uses the data generated by the RGMP to address current and potential water quality issues and groundwater replenishment within the basins. In addition, the RGMP provides flexible management practices to adjust groundwater resources planning as circumstances or conditions warrant. The RGMP has proved valuable as WRD works to implement its Water Independence Now program, maximizing local water sources to replenish, preserve and protect the basins and eliminating its dependence on imported water.

#### Project Description

The capital costs are for the construction of new monitoring wells (five for regional monitoring and six for contamination investigations) and data collection equipment.

#### Impact of Capital Investment on Operating Budget

Wells are monitored by WRD staff. The new wells will be folded into the current operations plan. There is no measurable financial benefit to drilling additional groundwater monitoring wells. The benefit comes from the data collected related to groundwater levels and the quality of the groundwater to address water quality issues and replenishment in the Central and West Coast Basins.

#### Prior Year Highlights

The RGMP was awarded the 2011 Groundwater Protection Award from the National Groundwater Association. In 2011, because of success and extensiveness of the RGMP, the State of California designated WRD as the official California Statewide Groundwater Elevation Monitoring (CASGEM) entity for the Central and West Coast Basins, responsible for providing the State's Department of Water Resources with groundwater data from the RGMP.

# Annual Budget 2016/2017

*Table 25*  
**REGIONAL GROUNDWATER MONITORING PROGRAM**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$4,400,000	\$1,490,000	\$1,245,000	\$2,091,392	\$-	\$-	\$9,226,392
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$4,400,000</b>	<b>\$1,490,000</b>	<b>\$1,245,000</b>	<b>\$2,091,392</b>	<b>\$-</b>	<b>\$-</b>	<b>\$9,226,392</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$4,400,000	\$-	\$-	\$-	\$-	\$-	\$4,400,000
2015 Bonds	\$-	\$1,490,000	\$1,245,000	\$2,091,392	\$-	\$-	\$4,826,392
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Design

Construction

Post Construction

## **MONTEBELLO FOREBAY RECHARGE ENHANCEMENT STUDY (MFRES)**

### **Project Description**

The Montebello Forebay Recharge Enhancement Study (MFRES) will review and update the findings of the Montebello Forebay Recharge Optimization Study (Optimization Study). The Optimization Study, completed in 2001, describes how additional local stormwater could potentially be captured for recharge if the water table could be lowered through increased pumping. The Optimization Study identifies approximately 17,000 AFY of additional stormwater to be captured as a preferred alternative from a range of 2,000 to 29,000 AFY of stormwater; however it depends on the level of pumping and depth of the water table. The MFRES will review the assumptions made in the Optimization Study and assess its findings in response to the various physical and operational improvements to the Montebello Forebay completed since 2001.

### **Funding**

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$250,000.

### **Impact of Capital Investment on Operating Budget**

There are no operating impacts at this time. The study will provide data for District staff to review and assess in determining the next course of action. There is no financial benefit analysis for this study but an analysis will be performed if the study proceeds to planning and construction.

### **Prior Year Highlights**

The MFRES project commenced in 2014; the review and compilation of historical data was substantially completed in early 2015. The preparation of the hydrologic model and Montebello Forebay Spreading Grounds Operational Model (MFSGOM) were initiated in late 2014 and are on schedule to be completed in spring 2016.

# Annual Budget 2016/2017

*Table 26*  
**MONTEBELLO FOREBAY RECHARGE ENHANCEMENT STUDY**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Study	\$550,000	\$250,000	\$-	\$-	\$-	\$-	\$800,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$550,000</b>	<b>\$250,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$800,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$550,000	\$-	\$-	\$-	\$-	\$-	\$550,000
2015 Bonds	\$-	\$250,000	\$-	\$-	\$-	\$-	\$250,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Study

Construction

Post Construction

# Annual Budget 2016/2017

## ENHANCED-MONTEBELLO FOREBAY RECHARGE ENHANCEMENT STUDY (E-MFRES)

### Project Description

The Enhanced-Montebello Forebay Recharge Enhancement Study (E-MFRES) will review and update the findings of the Montebello Forebay Recharge Enhancement Study (MFRES). This project will commence at the completion of the MFRES.

### Funding

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$75,000.

### Impact of Capital Investment on Operating Budget

There are no operating impacts at this time. There is no financial benefit analysis for this project, the data obtained through this project will provide a more accurate measure of water flowing into the Montebello Forebay Spreading Grounds.

### Prior Year Highlights

This project has not commenced; hence, there are no highlights at this time.

*Table 27*  
**ENHANCED MONTEBELLO FOREBAY RECHARGE ENHANCEMENT STUDY**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Study	\$-	\$75,000	\$190,000	\$135,000	\$-	\$-	\$400,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$75,000</b>	<b>\$190,000</b>	<b>\$135,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$400,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$75,000	\$190,000	\$135,000	\$-	\$-	\$400,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Study

Construction

Post Construction

# Annual Budget 2016/2017

## RECHARGE OPERATIONS- FLOW METERS

### Project Description

The District will install flow metering devices to enhance the measurement of the rate and volume of imported, recycled, and storm waters entering the Montebello Forebay and the spreading grounds. Metering devices will expand the existing network of gaging stations operated by the USGS, Army Corps of Engineers, and Los Angeles County Flood Control District. In addition, troublesome gaging stations may be improved or replaced.

### Funding

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$300,000.

### Impact of Capital Investment on Operating Budget

There are no operating impacts at this time. There is no financial benefit analysis for this project, the data obtained through this project will provide a more accurate measure of water flowing into the Montebello Forebay Spreading Grounds.

### Prior Year Highlights

This project has not commenced; hence, there are no highlights at this time.

*Table 28*  
**RECHARGE OPERATIONS FLOW METERS**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Study	\$-	\$75,000	\$190,000	\$135,000	\$-	\$-	\$400,000
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$75,000</b>	<b>\$190,000</b>	<b>\$135,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$400,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$75,000	\$190,000	\$135,000	\$-	\$-	\$400,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Study

Construction

Post Construction

## Safe Drinking Water Program

### SAFE DRINKING WATER PROGRAM

(Lynwood, Huntington Park, & CA American Water Arlington Well)

#### Project Description

The Safe Drinking Water Program (Program) provides incentives to groundwater producers to pump and treat contaminated groundwater rather than abandoning affected wells. The Program offers two options, grant assistance and loan assistance to basin pumpers for wellhead treatment to remove contaminants and improve water quality. The grants assistance program provides treatment for removing groundwater contaminants from man-made sources (e.g. Volatile Organic Compounds). The loan assistance program provides ten-year, zero-interest loans for water treatment to remove or reduce to compliance standards groundwater contaminants from natural sources (e.g. iron, manganese, and arsenic). Since the Program's inception, the District has funded 13 grants, four loans and one demonstration project. This CIP project is intended to cover the costs associated with Grant Funded Projects only.

The District Board recently approved three wellhead treatment system projects for FY 16/17, including Lynwood, Huntington Park, and CA American Water Arlington Well. The wellhead treatment system at all three wells will consist of a complete granular activated filtration system built within the boundaries of the existing well sites owned and operated by the water systems. Granulated Activated Carbon filtration is a closed system that has long been recognized as an effective means for removing Volatile Organic Compounds (VOCs), including PCE and TCE, from groundwater wells. The treatment systems will have the capacity to treat the full flow of the wells. The three wells are affected by VOCs and qualify for a Priority "A" Treatment Grant where the District funds the cost of design and construction. The District will take the lead on procurement and installation of the treatment facilities. However, operation, maintenance, and all permits remain the responsibility of the water system.

#### Funding

For Loan Assistance Projects, the District developed the Safe Drinking Water Program Revolving Loan Fund, which stabilizes funding and expands the loan assistance program's overall use.

#### Impact of Capital Investment on Operating Budget

There are no operating impacts at this time. Wellhead treatment provides pumpers with facilities to treat groundwater for potable use. Not unlike the Goldsworthy Desalter Project, these programs remediate groundwater contaminants located in the aquifers. No accurate financial benefit is determinable for groundwater cleanup. However, since the pumper would be able to use groundwater instead of more expensive imported water, the economic value to the pumper would be the difference in the rate of Imported Water to that of the District's Replenishment Assessment in any given year. The non-financial benefit is the cleanup of the Central and West Coast Groundwater Basins.

#### Prior Year Highlights

The District developed the Safe Drinking Water Program Revitalization Plan to maximize participation in the Program and the Safe Drinking Water Disadvantaged Communities (DAC) Pilot Program, which identifies DAC water systems with contaminated water issues and provides technical assistance.

# Annual Budget 2016/2017

Table 29A

## SAFE DRINKING WATER PROGRAM – LYNWOOD Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$30,000	\$-	\$-	\$-	\$-	\$30,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$1,200,000	\$-	\$-	\$-	\$-	\$1,200,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,230,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$1,230,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$1,230,000	\$-	\$-	\$-	\$-	\$1,230,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning	
Design	
Construction	
Post Construction	

Table 29B

## SAFE DRINKING WATER PROGRAM – CA AMERICA ARLINGTON WELL Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$1,800,000	\$-	\$-	\$-	\$-	\$1,800,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,800,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$1,800,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$1,800,000	\$-	\$-	\$-	\$-	\$1,800,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning	
Design	
Construction	
Post Construction	

# Annual Budget 2016/2017

*Table 29C*  
**SAFE DRINKING WATER PROGRAM – HUNTINGTON PARK**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$25,000	\$-	\$-	\$-	\$-	\$25,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$1,200,000	\$-	\$-	\$-	\$-	\$1,200,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,225,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$1,225,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$1,225,000	\$-	\$-	\$-	\$-	\$1,225,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning	
Design	
Construction	
Post Construction	

## Water Infrastructure Management Projects

### ASSET MANAGEMENT PROGRAM

#### Project Description

The District has invested more than \$127 million in capital improvement projects that need to be managed and maintained over their useful life; hence the District Board of Directors initiated the development of an Asset Management Program, specifically an Asset Management Master Plan and Phase 1 Pilot Project. The Asset Management (AM) Plan was completed in FY 15/16 and it establishes a priority list of recommended actions and projects using factors as level of effort, business drivers, cost, staff involvement, duration and alignment to the District's strategic direction including any future strategic plans for Supervisory Control and Data Acquisition (SCADA) and Centralized Information System (CIS), respectively. The completed AM Program proposed initiatives that are grouped into four elements, including:

- Planning
- Develop a Risk Management Framework
- Draft and implement AM Policy
- Develop an AM Strategy (including AM Governance Structure, Framework, and business process mapping to implement strategies to give effect to the policies established)
- Core Service Delivery
- Improve the Capital Improvement Projects processes and practices for major maintenance, asset renewals, and replacement (including asset lifecycle planning)
- Implement Advance Maintenance Practices
- Performance Management
- Develop Levels of Service Framework
- Support Services
- Develop an Information Technology (IT) Master Plan
- Implementation of a Computerized Maintenance Management System (CMMS) software (including a pilot program and a District-wide roll-out)
- Pilot Program Asset Data Collection
- GIS Software Update
- Document Management System Update and Reconfiguration

# Annual Budget 2016/2017

The Phase 1 Pilot Project is scheduled to commence in FY 16/17 at the Leo J. Vander Lans Advanced Water Treatment Facility and will evaluate the asset management system and database and provide a baseline for a strategic implementation of all the District's capital projects. Implementation of an AM Program will extend or renew the service life of the District's assets, resulting in reduced long-term maintenance and operating costs.

## Funding

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$465,000.

## Impact of Capital Investment on Operating Budget

No operation impacts at this time. Impacts are expected once the Phase 1 Pilot Project is implemented. This pilot project will allow the management of capital improvement projects. There is no financial benefit analysis for this program, it is a tool that staff will use to more effectively manage District assets and avoid future problems through analysis of current operations.

## Prior Year Highlights

An Asset Management Master Plan (MP) Report on Asset Management Gap Analysis was completed. The MP provides recommended initiatives and a roadmap for full Asset Management Program implementation. Following the recommendation of the MP, an Information Technology (IT) Master Plan was initiated. Also, the District selected a CMMS software product and an implementer for the Phase 1 Pilot Project.

*Table 30*  
**ASSET MANAGEMENT: PLANNING**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$100,000	\$80,000	\$80,000	\$80,000	\$-	\$-	\$340,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$100,000</b>	<b>\$80,000</b>	<b>\$80,000</b>	<b>\$80,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$340,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$80,000	\$80,000	\$80,000	\$-	\$-	\$240,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

## Project Schedule

Planning	
Design	
Construction	
Post Construction	

# Annual Budget 2016/2017

*Table 31A*  
**ASSET MANAGEMENT: CORE SERVICE (LIFE ASSET MANAGEMENT)**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$100,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning  
 Design  
 Construction  
 Post Construction

*Table 31B*  
**ASSET MANAGEMENT: PERFORMANCE MANAGEMENT (REPORTING, MONITORING)**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$75,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning  
 Design  
 Construction  
 Post Construction

# Annual Budget 2016/2017

*Table 31C*  
**ASSET MANAGEMENT: SUPPORT SERVICES (FINANCE/ADMIN, IT, DATA MGMT)**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$50,000	\$350,000	\$350,000	\$200,000	\$-	\$-	\$950,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$50,000</b>	<b>\$350,000</b>	<b>\$350,000</b>	<b>\$200,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$950,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$350,000	\$350,000	\$200,000	\$-	\$-	\$900,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## **CENTRALIZED INFORMATION SYSTEM (CIS)**

### **Project Description**

The District will establish a comprehensive Central Information System (CIS) at the District headquarters that will serve as the master Supervisory Control and Data Acquisition (SCADA) System control room and the centralized data repository for the District's Enterprise Asset Management System (AM), Computerized Maintenance & Management System (CMMS), Groundwater Monitoring and Modeling System(s) and Geographic Information System (GIS). Centralized information will facilitate the development of reports that show the broad range of activities that the District is engaged in, simplify administrative tasks, improve security, make data management more efficient and it will maintain the integrity of all the data that the District manages. The CIS will be developed simultaneously to the implementation of the various other operation systems, such as AM, CMMS and SCADA.

### **Funding**

The total Capital Improvement Program budget for Fiscal Years 2016/17 is \$165,000

### **Impact of Capital Investment on Operating Budget**

No operation impacts at this time. There is no financial benefit analysis for this program, the system will provide data integrity and accessibility.

### **Prior Year Highlights**

The hardware and software of the CIS have been installed at the District; however, configuration of the system is expected next fiscal year.

# Annual Budget 2016/2017

*Table 32*  
**CENTRALIZED INFORMATION SYSTEM**  
Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$60,000	\$40,000	\$-	\$-	\$-	\$-	\$100,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$125,000	\$125,000	\$125,000	\$125,000	\$-	\$500,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$60,000</b>	<b>\$165,000</b>	<b>\$125,000</b>	<b>\$125,000</b>	<b>\$125,000</b>	<b>\$-</b>	<b>\$600,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$60,000	\$-	\$-	\$-	\$-	\$-	\$60,000
2015 Bonds	\$-	\$165,000	\$125,000	\$125,000	\$125,000	\$-	\$540,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning	
Design	
Construction	
Post Construction	

## **SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM**

### **Project Description**

The Supervisory Control and Data Acquisition (SCADA) System project includes the completion of a needs assessment, a comprehensive SCADA System Master Plan strategy, which creates a standardized control system architecture for all of the District's respective operating facilities and a project portfolio. The SCADA System Master Plan specifies the priorities and costing of a standardized SCADA system that will meet the expanding needs of the District, as related to the implementation of proposed and ongoing construction projects including the expansion of the Robert W. Goldsworthy Desalter (Goldsworthy Desalter), the two turnout structures at the Montebello Forebay Spreading Grounds and the new Groundwater Reliability Improvement Program (GRIP) Advanced Water Treatment Facility (AWTF). The SCADA System Master Plan provides a Project Portfolio which describes a list of recommended implementation projects to achieve the intended SCADA vision, goals and objectives set forth by the District. The Project Portfolio is outlined as follows:

- Foundational Projects
- GRIP Recycled Water Turnout Structures Base Human Machine Interface (HMI), including Galaxy Repository and Historian
- Programmable Logic Center (PLC) and HMI Software Standards Creations (standards given to System Integrators for upcoming construction projects)
- HMI Licensing and Support Renewal (Wonderware System Platform- provides centralized configuration, deployment, communication, security, data connectivity, and collaboration)
- PLC and other Industrial Control System hardware purchasing and software licensing and support renewal
- SCADA System Integration for Construction Projects
- Goldsworthy Desalter Expansion- communication to WRD office; HMI Integration to WRD office
- GRIP AWTF Communication to WRD office; HMI Integration to WRD office
- Centralized Information System (CIS) creation at WRD office
- SCADA System Integration-Other
- Communications Options to the WRD nested groundwater monitoring well network; integration to SCADA system at CIS
- SCADA system integration to WRD's Computerized Maintenance Management System (CMMS)
- SCADA Network Security and Maintenance (Network Protection and Diagnostics)

The master SCADA system control room will reside at the WRD's headquarters within the CIS.

# Annual Budget 2016/2017

## Funding

The Capital Improvement Program budget for Fiscal Year 2016/17 is \$1,698,063.

## Impact of Capital Investment on Operating Budget

No operation impacts at this time. The SCADA System refers to centralized systems which monitor and control entire sites or complexes of systems spread out over large areas. The benefit to this is an integrated system where staff can monitor and control all District facilities in one location. No specific financial benefit analysis was performed. With the District expanding its projects to include the Water Independence Now (WIN) Program, the need for a centralized control system is becoming more necessary.

## Prior Year Highlights

The SCADA System Master Plan was completed. The Master Plan specifies the priorities and costing of a standardized SCADA system that will meet the expanding needs of the District, as related to the implementation of proposed and ongoing construction projects.

Table 33A

### SCADA: FOUNDATIONAL PROJECTS (TURNOUTS; PLC/HMI SOFTWARE; WONDERWARE) Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$1,114,000	\$-	\$-	\$-	\$-	\$1,114,000
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$1,114,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$1,114,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$1,114,000	\$-	\$-	\$-	\$-	\$1,114,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

## Project Schedule

Planning

Design

Construction

Post Construction

# Annual Budget 2016/2017

*Table 33B*  
**SCADA: SYSTEM INTEGRATION (GW MONITORING WELLS; SECURITY; I&C HARDWARE)**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$50,000	\$975,000	\$857,500	\$360,000	\$100,000	\$2,342,500
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$50,000</b>	<b>\$975,000</b>	<b>\$857,500</b>	<b>\$360,000</b>	<b>\$100,000</b>	<b>\$2,342,500</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$50,000	\$975,000	\$857,500	\$360,000	\$100,000	\$2,342,500
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction

*Table 33C*  
**SCADA: SYSTEM INTEGRATION FOR CONSTRUCTION PROJECTS (GOLDSWORTHY; LVL)**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$484,063	\$287,187	\$80,000	\$-	\$-	\$851,250
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$484,063</b>	<b>\$287,187</b>	<b>\$80,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$851,250</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$484,063	\$287,187	\$80,000	\$-	\$-	\$851,250
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction

## *Facilities Management, Maintenance, & Repair*

### **HEADQUARTERS BUILDING IMPROVEMENTS PROJECTS**

#### **Project Description**

The District headquarters building located at 4040 Paramount Blvd in the City of Lakewood has upkeep and maintenance needs, which are outlined in various phases and projects, including:

- Phase 1 and Phase 2 of Tenant Improvement Repair: includes the reconfiguration of office space, improvement and renovation of elements, such as walls, carpets, paint, etc. and other work space needs
- Roof Replacement Project
- HVAC Improvements Project
- Drought Tolerant Landscape Demonstration Garden Improvement

#### **Funding**

The Capital Improvement Program budget for Fiscal Year 2016/17 of \$225,000 are directly related to Phase 1 and Phase 2 of Tenant Improvement Repairs.

#### **Impact of Capital Investment on Operating Budget**

There are no operating impacts at this time.

#### **Prior Year Highlights**

Planning for Phase 1 and Phase 2 of Tenant Improvement Repair was initiated.

# Annual Budget 2016/2017

Table 34A

## PHASE 1: TENANT IMPROVEMENT REPAIR Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$200,000	\$-	\$-	\$-	\$-	\$200,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$200,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$200,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$200,000	\$-	\$-	\$-	\$-	\$200,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Design

Construction

Post Construction

Table 34B

## PHASE 2: TENANT IMPROVEMENT REPAIR Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$25,000	\$175,000	\$-	\$-	\$-	\$200,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$25,000</b>	<b>\$175,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$200,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$25,000	\$175,000	\$-	\$-	\$-	\$200,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

### Project Schedule

Planning

Design

Construction

Post Construction

# Annual Budget 2016/2017

*Table 34C*  
**HEADQUARTERS BUILDING- ROOF REPLACEMENT PROJECT**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$10,000	\$60,000	\$-	\$-	\$70,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$10,000</b>	<b>\$60,000</b>	<b>\$-</b>	<b>\$-</b>	<b>\$70,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$10,000	\$60,000	\$-	\$-	\$70,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction

*Table 34D*  
**HEADQUARTERS BUILDING- HVAC IMPROVEMENTS PROJECT**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$25,000	\$55,000	\$-	\$80,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$25,000</b>	<b>\$55,000</b>	<b>\$-</b>	<b>\$80,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$-	\$25,000	\$55,000	\$-	\$80,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction

# Annual Budget 2016/2017

*Table 34E*  
**HEADQUARTERS BUILDING- DROUGHT TOLERANT LANDSCAPE  
 DEMONSTRATION GARDEN IMPROVEMENT**  
 Projected 5-year CIP

Project Budget	Prior Year Expenses	FY 16/17 Projected Budget	FY 17/18 Projected Budget	FY 18/19 Projected Budget	FY 19/20 Projected Budget	FY 20/21 Projected Budget	Total CIP Budget
Planning	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Design	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction	\$-	\$-	\$-	\$-	\$15,000	\$75,000	\$90,000
Post Construction	\$-	\$-	\$-	\$-	\$-	\$-	\$-
<b>Total</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$15,000</b>	<b>\$75,000</b>	<b>\$90,000</b>
Grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2011 Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2015 Bonds	\$-	\$-	\$-	\$-	\$15,000	\$75,000	\$90,000
New Funding	\$-	\$-	\$-	\$-	\$-	\$-	\$-

**Project Schedule**

Planning

Design

Construction

Post Construction



## Long-Term Debt

### **REPLENISHMENT ASSESSMENT REVENUE BONDS, SERIES 2015**

With water independence on the horizon, on December 10, 2015 the District issued its \$148,345,000 Replenishment Assessment Revenue Bonds, Series 2015. Additionally, the District formed "The Authority", a joint exercise of powers agency organized under the laws of the State of California and formed pursuant to that certain Joint Exercise of Powers Agreement dated August 6, 2015 by the California Municipal Finance Authority (CMFA), a joint exercise of powers authority organized and existing under and by virtue of the laws of the State of California.

Both Standard and Poor's and Fitch Ratings affirmed the WRD's credit rating of AA+ with a stable outlook. This helped in the District obtaining AAA pricing, in line with the Metropolitan Water District pricing the day before WRD priced its bonds. The District will have level debt service payments of \$9.25 million annually for 30 years. Due to the District's strong credit rating and aggressive pricing by the District's Underwriting team, the demand for the bonds was four-times the offering amount.

The bonds were issued by the Authority to: (i) finance the acquisition, construction and installation of certain capital improvement projects of the WRD, (ii) currently prepay the Water Replenishment District of Southern California (WRDSC) Revenue Certificates of Participation, prepay in advance the WRDSC 2008 and 2011 Certificates of Participation and (iii) to pay costs of issuance of the bonds.

The refunding resulted in a net present value (NPV) of \$9.72 million and an all-in lowering of total interest cost of 3.49%, compared to the 2004 COP – 4.52%, 2008 COP – 6.15%, 2011 COP – 4.70%.

The net proceeds of \$69,500,000 are being used to fund the following:

1. Improvements consisting of the Groundwater Reliability Improvement Program Advanced Water Treatment Facility and water diversion structures;
2. Brackish Water Reclamation Program;
3. Stormwater Conservation and Groundwater Storage Program;
4. Groundwater Basin Management Program;
5. Improvements related to the Safe Drinking Water Program; and
6. Improvements related to the Groundwater Infrastructure Management Program.

### **Groundwater Reliability Improvement Program Facility and Diversion Structures.**

A significant portion of the Project will consist of the construction costs for an advanced water treatment facility (the Treatment Facility) and complementing diversion structures along the San Gabriel River (the Turnout Structures) under the WRD's Groundwater Reliability Improvement Program (GRIP). Following the completion of GRIP facilities, this project will offset the current use of 21,000 acre-feet of imported water by providing a local source of recycled water for groundwater replenishment, as follows:

- The WRD plans to construct the proposed Treatment Facility for advanced treatment of up to 10,000 acre-feet per year of tertiary treated water acquired from the Los Angeles County Sanitation Districts (the LACSD).

- The WRD also plans to construct the Turnout Structures, which shall be reinforced concrete turnout structures on the existing recycled water pipeline, extending from LACSD's San Jose Creek Water Reclamation Plant (SJCWRP). Once completed, the Turnout Structures will allow an approximate delivery of 11,000 acre-feet per year of recycled water to the Montebello Forebay Spreading Grounds for groundwater replenishment.

**Goldsworthy Brackish Water Reclamation Program.** The project will remediate brackish groundwater to supplement potable water supplies, which includes the expansion of a desalting facility and construction of new groundwater wells. Once completed, the expansion of the desalting facility, the Goldsworthy Desalter located in the City of Torrance, will provide approximately 2,400 acre-feet per year of additional treated, "remediated" brackish groundwater. The new groundwater wells will extract and remediate brackish groundwater from a saline plume in the West Coast Basin. It is anticipated that the City of Torrance will use the product water from the expansion and new groundwater wells.

**Stormwater Conservation and Groundwater Storage Program.** The project will increase the flexibility of water delivery to the spreading grounds and groundwater storage. The WRD plans to capture additional storm water from the San Gabriel River and use it via various recharge mechanisms, such as new percolation or injection facilities within the Montebello Forebay and the Los Angeles Forebay in the Central Basin. The U.S. Army Corps of Engineers (USACE), Los Angeles County Flood Control District (LACFCD) and WRD are working closely to complete an updated Whittier Narrows Conservation Pool Feasibility Study to allow for a permanent change to the operating plan to raise the maximum conservation pool elevation at the Whittier Narrows Dam and allow for an estimated additional 1,100 acre-feet per year of storm water conservation. The elevation increase does not require capital improvements, however, it does need USACE approval and updates to various studies and environmental documents related to dam operations at an increased conservation pool elevation. To further augment groundwater storage, opportunities exist to construct a new satellite advanced water treatment facility to produce high quality recycled water for injection into the Los Angeles Forebay. In the West Coast Basin, WRD will develop new injection facilities to increase replenishment opportunities.

**Groundwater Basin Management Program.** The project will drill new monitoring wells and install flow meter devices in order to continue expanding the Regional Groundwater Monitoring Program (RGMP). The RGMP collects groundwater level and groundwater quality data used for groundwater basin management for the Central Basin and West Coast Basin, two of the most utilized urban groundwater basins in the United States. This is achieved through groundwater monitoring, modeling, and planning, which provides the basis to understanding the dynamic changes in the basins. The RGMP currently consists of a network of 324 specialized monitoring wells at 58 locations throughout the WRD service area to a maximum depth of nearly 3,000 feet, and WRD staff, comprised of hydrogeologists and engineers, provide the expertise to collect, analyze and report on the collected groundwater data. WRD uses the data generated by the

RGMP to address current and potential water quality issues and groundwater replenishment within the basins. In addition, the RGMP provides flexible management practices to adjust groundwater resources planning as circumstances or conditions warrant. The Project shall include the capital costs of the construction of new monitoring wells (for regional monitoring and contamination investigations) and data collection equipment, all in furtherance of the RGMP.

**Safe Drinking Water Program.** The project will continue and expand the Safe Drinking Water Program (the “Program”) to construct wellhead treatment facilities to remove contaminants and improve water quality. The Program provides incentives to groundwater producers to pump and treat contaminated groundwater rather than abandoning affected wells. The Program offers two options, grant assistance and loan assistance. The grant assistance program provides treatment for removing groundwater contaminants from man-made sources (e.g., Volatile Organic Compounds). The loan assistance program provides ten-year, zero-interest loans for water treatment, and removing unacceptable levels of contaminants from natural sources (e.g. iron, manganese, and arsenic). Since the Program’s inception, the District has funded 13 grants, four loans and one demonstration project. The WRD developed the Safe Drinking Water Program Revolving Loan Fund, which stabilizes funding and expands the loan assistance program’s overall use. The costs of wellhead treatment facilities are prohibitive to most pumpers, specifically those serving disadvantaged communities. Accordingly, the WRD developed the Safe Drinking Water Disadvantaged Communities Pilot Program to expand the grant assistance option and maximize participation in the program.

**Groundwater Infrastructure Management Program.** The project is expected to include capital improvements that will develop programs and plans to manage all of WRD’s assets, data and databases and develop a standardized control system for all respective operating facilities, resulting in reduced long-term maintenance and operating costs. A centralized information system, such as the development and implementation of a Computerized Maintenance Management System (CMMS) and Supervisory Control and Data Acquisition (SCADA) system is needed to centralize existing databases and progress of District operations. The WRD Centralized Information System Project is intended to fully integrate WRD’s Finance, Asset Management, CMMS, SCADA, and other systems and process databases into a single centralized system. The project shall include capital costs of implementing various components of the Centralized Information System Project, in an amount of approximately \$500,000.

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## CLEAN WATER STATE REVOLVING FUND

The District has also applied for a combination of grant (\$15 million) and loan (\$80 million) financing through the California Clean Water State Revolving Fund (CWSRF) which is a federal-state partnership to help ensure safe drinking water by providing below interest-free grants and below-market interest rate loans to qualified projects. Pursuing such financing opportunities will lessen any increases to the current and future replenishment assessment rates. The rate for the \$80 million loan is at 1.0% for 30 years.

## Projected Budget Impact of Debt Service

The projected budget impact of principal and interest payments associated with the 2015 Series Replenishment Assessment Revenue Bonds<sup>1</sup> and funding through the Clean Water State Revolving Fund is as follows:

<i>Table 35A</i>					
<b>IMPACT OF DEBT SERVICE</b>					
	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>
2015 Replenishment Assessment Bonds <sup>1</sup>	\$9.246M	\$9.247M	\$9.247M	\$9.249M	\$9.248M
CW State Revolving Fund	<u>1.860M</u>	<u>3.720M</u>	<u>3.720M</u>	<u>3.720M</u>	<u>3.720M</u>
<b>Total</b>	<b>\$11.106M</b>	<b>\$12.967M</b>	<b>\$12.967M</b>	<b>\$12.969M</b>	<b>\$12.968M</b>
Projected Production (in acre-feet)	231,000	234,300	237,500	240,800	244,000
Impact to Assessment (per acre-foot)	<u>\$48.08</u>	<u>\$55.34</u>	<u>\$54.60</u>	<u>\$53.86</u>	<u>\$53.15</u>

## Debt Ceiling

There is currently no debt limit or ceiling documented in the California State Water Code for the WRD. The costs associated with the Capital Improvement Program projects will be primarily funded through long term debt.

<sup>1</sup>Not including any additional bond reserve fund related expenses

# Annual Budget 2016/2017

*Table 35B*  
**Future Debt Service Payments are as follows:**

<b>Fiscal Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	1,655,000	4,118,895	5,773,895
2017	2,350,000	6,944,700	9,294,700
2018	2,445,000	6,850,700	9,295,700
2019	2,560,000	6,752,900	9,312,900
2020	2,690,000	6,624,900	9,314,900
2021	2,830,000	6,490,400	9,320,400
2022	2,975,000	6,348,900	9,323,900
2023	3,125,000	6,200,150	9,325,150
2024	3,285,000	6,043,900	9,328,900
2025	3,455,000	5,879,650	9,334,650
2026	3,630,000	5,706,900	9,336,900
2027	3,815,000	5,525,400	9,340,400
2028	4,015,000	5,334,650	9,349,650
2029	4,220,000	5,133,900	9,353,900
2030	4,435,000	4,922,900	9,357,900
2031	4,660,000	4,701,150	9,361,150
2032	4,900,000	4,468,150	9,368,150
2033	5,155,000	4,223,150	9,378,150
2034	5,415,000	3,965,400	9,380,400
2035	5,695,000	3,694,650	9,389,650
2036	5,985,000	3,409,900	9,394,900
2037	6,295,000	3,110,650	9,405,650
2038	6,615,000	2,795,900	9,410,900
2039	6,955,000	2,465,150	9,420,150
2040	7,315,000	2,117,400	9,432,400
2041	7,685,000	1,751,650	9,436,650
2042	8,040,000	1,367,400	9,407,400
2043	8,370,000	1,045,800	9,415,800
2044	8,710,000	711,000	9,421,000
2045	9,065,000	362,600	9,427,600
	<b>\$148,345,000</b>	<b>\$129,068,795</b>	<b>\$277,413,795</b>

## Replenishment Projects and Programs

### WATER PURCHASES

Annually, the District faces overdraft because more groundwater is pumped out of the basins than is naturally replaced. Therefore, the District purchases replenishment water from external sources (artificial replenishment water) to help make up the overdraft. The artificial replenishment water enters the basins either by percolation into the underground aquifers at the Montebello Forebay spreading grounds (Rio Hondo, San Gabriel River, and Whittier Narrows Reservoir), or through direct injection into the aquifers at the West Coast Basin, Dominguez Gap, and Alamitos seawater barrier projects.

The District currently has available to it recycled and imported water sources for use as artificial replenishment water. These two sources are described below:

#### Recycled Water:

Recycled water is sewer water that is treated at local wastewater treatment plants to meet high quality standards so that it can be reused as a valuable water resource instead of being wasted to the ocean. Other agencies use recycled water to irrigate parks, golf courses, plants and crops, or for industrial purposes. WRD and numerous other agencies also use recycled water for groundwater recharge. In semi-arid areas such as Southern California where groundwater and imported water are in short supply, recycled water has proven to be a safe and reliable additional resource to supplement the water supply. Recycled water is used at the spreading grounds after undergoing tertiary treatment and also at the seawater barrier wells after tertiary and additional treatment by microfiltration, reverse osmosis, and in some cases ultraviolet light.

#### Imported Water:

This source originates from Northern California (State Water Projects) and the Colorado River and is brought to the District by the MWD of Southern California. Raw imported water is used at the spreading grounds for aquifer replenishment. Treated imported water is used at the seawater intrusion barriers and for in-lieu replenishment when available. Because of treatment and transportation costs, it is the most expensive source for recharge water. The supply is under full upstream control, and its availability at the spreading grounds is limited and variable, especially during drought years.

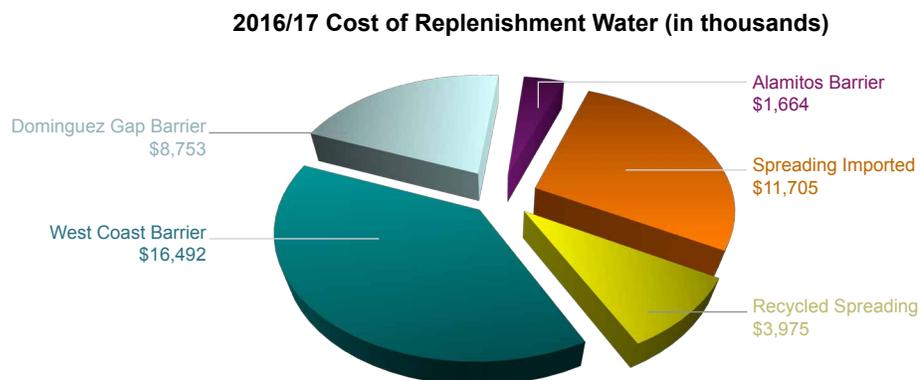


Figure 16 – 2016/17 Cost of Replenishment Water (in thousands)

### RECOMMENDED QUANTITIES OF REPLENISHMENT WATER

WRD estimates its projected need for artificial replenishment water by calculating the annual amount of water shortage (overdraft) that is expected to occur. Details of these calculations are presented in the annual Engineering Survey and Report. The artificial replenishment water is placed into the groundwater basin at the spreading grounds or seawater barrier injection wells using recycled and imported water.

# Annual Budget 2016/2017

Table 36A

## Cost of Replenishment Water for Fiscal Year 2016/17

EXPENSE CATEGORY	2015/16 Projection	2016/17 Budget	Increase (Decrease) Over Prior Year
<b>Imported Water</b>			
<b>Spreading - Tier 1 Untreated Imported</b>			
MWD Untreated Tier 1 - Spreading	\$9,456,000	\$10,368,000	\$912,000
MWD RTS Charge	\$832,000	\$142,248	\$(689,752)
CBMWD Administrative Surcharge	\$1,536,000	\$1,120,000	\$(416,000)
CBMWD Water Service Charge	\$74,000	\$74,400	\$400
<b>Total Spreading - Tier 1 Untreated Imported</b>	<b>\$11,898,000</b>	<b>\$11,704,648</b>	<b>\$(193,352)</b>
<b>Alamitos Barrier - Imported</b>			
MWD Treated Tier 1 - Alamitos Barrier	\$469,000	\$1,028,200	\$559,200
MWD Capacity Charge	\$55,000	\$56,160	\$1,160
LBWD RTS	\$61,000	\$129,320	\$68,320
LBWD Administrative Surcharge	\$3,000	\$5,300	\$2,300
<b>Total Alamitos Barrier - Imported</b>	<b>\$588,000</b>	<b>\$1,218,980</b>	<b>\$630,980</b>
<b>Dominguez Barrier - Imported</b>			
MWD Tier 1 - Barriers	\$6,653,000	\$2,925,520	\$(3,727,480)
MWD RTS Charge	\$597,000	\$373,984	\$(223,016)
WBMWD Capacity Charge	\$305,000	\$237,455	\$(67,545)
WBMWD Administrative Surcharge	\$1,018,000	\$657,488	\$(360,512)
WBMWD Water Service Charge	\$64,000	\$57,907	\$(6,093)
<b>Total Dominguez Barrier - Imported</b>	<b>\$8,637,000</b>	<b>\$4,252,354</b>	<b>\$(4,384,646)</b>
<b>West Coast Barrier - Imported</b>			
MWD Tier 1 - Barriers	\$-	\$2,118,480	\$2,118,480
MWD RTS Charge	\$198,000	\$270,816	\$72,816
WBMWD Capacity Charge	\$101,000	\$171,951	\$70,951
WBMWD Administrative Surcharge	\$338,000	\$476,112	\$138,112
WBMWD Water Service Charge	\$21,000	\$41,933	\$20,933
<b>Total West Coast Barrier - Imported</b>	<b>\$658,000</b>	<b>\$3,079,292</b>	<b>\$2,421,292</b>
<b>In-lieu</b>			
MWD Member Agency	No IL Program	No IL Program	\$-
WBMWD Member Agency	No IL Program	No IL Program	\$-
<b>Total for In-lieu Payments</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>
<b>Recycled Water</b>			
<b>Dominguez Barrier - Recycled</b>			
LADWP Recycled Water	\$5,102,000	\$4,483,200	\$(618,800)
<b>Total Dominguez Barrier - Recycled</b>	<b>\$5,102,000</b>	<b>\$4,483,200</b>	<b>\$(618,800)</b>
<b>Recycled (SJC) Carryover to 07/08</b>			
<b>Spreading - Recycled</b>			
SDLAC - Tertiary Water (WN, SJC, Pomona)	\$3,485,000	\$3,975,000	\$490,000
<b>Total Spreading - Recycled</b>	<b>\$3,485,000</b>	<b>\$3,975,000</b>	<b>\$490,000</b>
<b>West Coast Barrier - Recycled</b>			
WBMWD Recycled Water	\$11,258,000	\$13,430,500	\$2,172,500
<b>Total West Coast Barrier - Recycled</b>	<b>\$11,258,000</b>	<b>\$13,430,500</b>	<b>\$2,172,500</b>
<b>Alamitos Recycled - WRD</b>			
WRD Recycled Water - Vander Lans	\$504,000	\$445,200	\$(58,800)
<b>Total Alamitos Recycled - WRD</b>	<b>\$504,000</b>	<b>\$445,200</b>	<b>\$(58,800)</b>
<b>Total Water Purchases</b>	<b>\$42,130,000</b>	<b>\$42,589,174</b>	<b>\$459,174</b>

**ACRONYMS:**

- CBMWD  
Central Basin Municipal  
Water District
- LBWD  
Long Beach Water  
Department
- LADWP  
Los Angeles Department of  
Water and Power
- MWD  
Metropolitan Water District  
of Southern California
- RTS  
Readiness-to-Serve
- SDLAC  
Sanitation Districts of Los  
Angeles County
- SJC  
San Jose Creek
- WBMWD  
West Basin Municipal Water  
District
- WN  
Whittier Narrows
- WRD  
Water Replenishment  
District of Southern  
California
- WRP  
Water Reclamation Plant

# Annual Budget 2016/2017

*Table 36B*  
**Quantity of Water Purchases in Acre-Feet for  
 Fiscal Year 2016/17**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Budget	(Decrease) Over Prior Year
<b>BY ACRE FEET</b>			
<b>Imported Water:</b>			
Spreading Imported	16,000	16,000	-
West Coast Barrier Imported	4,700	2,000	(2,700)
Dominguez Gap Imported	2,400	3,200	800
Alamitos Imported	500	1,060	560
In Lieu - MWD Member Agency	-	-	-
In Lieu - West Basin Customer	-	-	-
<b>Recycled Water:</b>			
Spreading Recycled (SJC & WN)	55,000	55,000	-
West Coast Barrier Recycle	14,300	17,000	2,700
Dominguez Gap Recycled	5,600	4,800	(800)
Alamitos Recycled	4,800	4,240	(560)
<b>Total Water Purchases</b>	<b>103,300</b>	<b>103,300</b>	<b>-</b>

## HOW MUCH IS AN ACRE-FOOT OF WATER?

An acre-foot is about 326,000 gallons.

It is the amount of water used by two average families in a year.

Equals the amount needed to fill a football field one foot deep in water.



Figure 17 - Definition of Acre-Foot

# Annual Budget 2016/2017

## PROJECT 001 LEO J. VANDER LANS WATER TREATMENT FACILITY – WATER SUPPLY

### Background

This facility provides advanced treatment to recycled water through a process train that includes microfiltration (MF), reverse-osmosis (RO), and advanced oxidation (AOP) using hydrogen peroxide and ultraviolet (UV) light. The product water from this facility replaces the imported water that used to supply the Alamitos Seawater Intrusion Barrier, thereby improving the reliability and quality of supply to the barrier.

The Long Beach Water Department (LBWD) operates and maintains the treatment plant under contract with WRD. Expected costs for this budget year are primarily for the expenses of operation and maintenance of the plant and for groundwater monitoring requirements from the permit.

Because the primary purpose of this project is to provide a more reliable means of replenishing the basin through injection, 100% of the costs are considered to be drawn from the Replenishment Fund.

*Table 37A*  
**Project 001 - WATER SUPPLY  
Vander Lans Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
Professional Services	\$1,952,000	\$2,530,000	\$578,000
R&M / Materials / Equipment	\$1,395,000	\$1,789,000	\$394,000
Other Expenses	\$1,000	\$8,000	\$7,000
Other General & Administrative	\$297,000	\$480,000	\$183,000
<b>Total</b>	<b>\$ 3,645,000</b>	<b>\$4,807,000</b>	<b>\$1,162,000</b>

### 2015/16 Accomplishments

- Performed first year of facility operations after the plant expansion; optimized process performance and operational efficiencies.
- Implemented state-of-the-art online real-time monitoring systems to ensure the treatment processes function properly and reliably to produce high quality recycled water.
- Continued to comply with regulatory requirements for monitoring and compliance.
- Continued to conduct recycled water testing to ensure satisfaction of water quality criteria for barrier injection.

### 2016/17 Objectives

- Perform a hydraulic modeling and analyze operational efficiency alternatives to develop operating strategies to maximize recycled water injection at the Alamitos Barrier and optimize the hydraulic performance of the entire recycled water system.
- Continue to operate the facility and comply with regulatory requirements for monitoring and compliance.
- Continue to conduct recycled water testing to ensure satisfaction of water quality criteria for barrier injection.

# Annual Budget 2016/2017

## Basis for Change 2015/16 Projected to 2016/17 Budget

No significant changes noted.

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 37B</i>				
<b>LEO J. VANDER LANS ADVANCE WATER TREATMENT FACILITY – WATER SUPPLY</b>				
<b>Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b> Develop, and complete, Programmatic Environmental Impact Report (PEIR) for Groundwater Basins Master Plan				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> % completion of PEIR	80%	90%	100%	
<b>2. GOAL:</b> Develop and evaluate concepts for increased utilization of locally available resources for replenishment.				Obtain Independence from Imported Water Sources
<b>MEASURE:</b> # of evaluations performed and supply options to optimize District replenishment functions	2	2	4	
<b>3. GOAL:</b> Review and update the District's 5-year capital improvement program				Provide Safe and Reliable Groundwater and Obtain Independence from Imported Water Sources
<b>MEASURE:</b> WRD's 5-year capital improvement program reviewed, updated and approved by BOD	Yes	Yes	Yes	
<b>4. GOAL:</b> Continue participation in IRWM Planning Process for Greater Los Angeles Region				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Participation in the Greater Los Angeles IRWM Planning Process (GLAC IRWM)	Yes	Yes	Yes	

# Annual Budget 2016/2017

Table 37B cont.

## LEO J. VANDER LANS ADVANCE WATER TREATMENT FACILITY – WATER SUPPLY Performance Measures

<b>5. GOAL:</b>				
Continue coordination efforts with the U.S. Army Corps of Engineers and LACDPW to complete the update of studies to allow for the capture of additional stormwater behind Whittier Narrows Dam				Provide Safe and Reliable Groundwater and Obtain Independence from Imported Water Sources
<b>MEASURE:</b>				
% completion of study updates	20%	50%	100%	
<b>6. GOAL:</b>				
Continue to provide technical support for development of conjunctive use projects				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Stakeholder meetings and workshops	2	4	6	
<b>7. GOAL:</b>				
Continue to evaluate District projects in order to make them more competitive for future grant funding opportunities. (e.g., monitoring / assessing potential grant funding opportunities)				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
WRD's grant funding evaluation opportunities	Prop 84	Prop 84	Prop 84	
<b>8. GOAL:</b>				
Continue to attend meetings of the Central and West Basin Water Associations to keep them appraised of ongoing District activities				Promote Organizational Excellence
<b>MEASURE:</b>				
Central and West Basin Water Associations meeting attended	24	24	24	
<b>9. GOAL:</b>				
Continue to monitor other water agencies and assess the impact of their actions on WRD				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Number of other water agencies assessed	5	5	5	

## PROJECT 004 MONTEBELLO FOREBAY RECYCLED WATER

### Background

Recycled water has been and continues to be a cost-effective, reliable source of water for surface spreading in the Montebello Forebay and injection at the seawater intrusion barriers. In light of the prolonged drought, record-low rainfalls, and increasing uncertainty in the future availability of imported supplies, recycled water has become increasingly attractive as a locally sustainable solution to improving the reliability of the local groundwater supply. WRD's Water Independence Now, or WIN, program seeks to replace our imported water supplies with recycled water and stormwater to ensure reliable groundwater replenishment sources.

WRD participates in a variety of activities to ensure that the use of recycled water for groundwater

recharge purposes continues to remain safe. From an operational standpoint, the District will continue to fulfill groundwater monitoring as required by the permits and submit the results to the regulatory agencies to demonstrate that the current practices and operation of utilizing recycled water, along with other sources of water, remain safe.

In addition to providing regular monitoring and sampling associated with the spreading grounds, WRD, in conjunction with other agencies, participates in research efforts to more fully investigate the effectiveness of soil aquifer treatment during percolation. These studies are partially sponsored by the WaterReuse Foundation and the American Water Works Association Research Foundation (AWWARF). The overall objectives are to characterize the percolation process and quantify the purifying properties of the underlying soil on constituents of concern such as nitrogen, total organic compounds (TOC), Biodegradable Dissolved Organic Carbon (BDOC), and emerging contaminants, such as pharmaceuticals, endocrine disruptors, and personal care products.

Recycled water represents a significant portion of the source water portfolio for the three seawater intrusion barrier projects (Alamitos Gap, West Coast, and Dominguez Gap Barriers). Work associated with the use of recycled water at those barrier facilities is managed under the specific project (e.g., Leo J. Vander Lans Water Treatment Facility) that delivers the source water to the barriers or under the program related to recycled water use at the specified barrier.

Projects under this program help to improve the reliability and utilization of an available local resource, i.e., recycled water, which is used to improve replenishment capabilities. This is a regular program with standard, recurring year to year activities. The projects under this program are funded entirely from the Replenishment Fund.

*Table 38A*  
**Project 004 - MONTEBELLO FOREBAY  
Recycled Water Budget Summary**

<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
Professional Services	277,000	350,000	73,000
R&M / Materials / Equipment	12,000	37,000	25,000
Other Expenses	47,000	56,000	(9,000)
Other General & Administrative	171,000	211,000	40,000
<b>Total</b>	<b>\$ 507,000</b>	<b>\$ 654,000</b>	<b>\$ 147,000</b>

# Annual Budget 2016/2017

## 2015/16 Accomplishments

- Continued to comply with water recycling permit requirements for the Montebello Forebay Spreading Grounds, including bi-monthly monitoring of monitoring wells, semi-annual monitoring of production wells and quarterly monitoring of intakes to the spreading facilities.
- In collaboration with the Sanitation Districts of Los Angeles County, completed and submitted a comprehensive Compliance Assessment Report (CAR) to the Division of Drinking Water to demonstrate how the existing Montebello Forebay Recycled Water Project fulfills the requirements under the 2014 Groundwater Replenishment using Recycled Water Regulations (GRRRs). Held discussions with regulators over content of the report.
- Completed a controlled field experiment in July and August 2015 to collect monitoring data on the fate and transport of chosen candidate tracers from recharge ponds to groundwater (artificial sweeteners, temperature, and conductivity). The purpose of the experiment is to help the Montebello Forebay Recycled Water Project demonstrate its ongoing compliance with the 2014 GRRRs.
- Facilitated the ongoing dialogue between the Sanitation Districts of Los Angeles County and the Division of Drinking Water to help increase the amount of recycled water from the San Jose Creek East Water Reclamation Plant conveyed to the spreading grounds. Currently, approximately 5 million gallons per day of the plant's influent is being wasted due to certain regulatory constraints.

## 2016/17 Objectives

- Update the Compliance Assessment Report (CAR) for the Montebello Forebay tertiary spreading project after receiving comments from Division of Drinking Water.
- Initiate work on the updated Title 22 Engineering Report for the Montebello Forebay tertiary water recharge project.
- Continue to comply with water recycling permit requirements for the Montebello Forebay Spreading Grounds, including bi-monthly monitoring of monitoring wells, semi-annual monitoring of production wells and quarterly monitoring of intakes to the spreading facilities, until permit amendment is obtained with modifications to this sampling plan.
- Continue to facilitate the ongoing dialogue between the Sanitation Districts of Los Angeles County and the Division of Drinking Water to help increase the amount of recycled water from the San Jose Creek East Water Reclamation Plant conveyed to the spreading grounds. Currently, approximately 5 million gallons per day of the plant's influent is being wasted due to certain regulatory constraints.
- Collaborate with other agencies and organizations on research investigations of percolation of recycled water.

## Basis for Changes 2015/16 Projected to 2016/17 Budget

The increase is based on projects placed on hold and maintenance postponed due to anticipated reduced pumping which will be completed in fiscal year 2016/17 and staff labor increasing slightly.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 38B</i>				
<b>MONTEBELLO FOREBAY RECYCLED WATER</b>				
<b>Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b> Continue to comply with water recycling permit requirements for the Montebello Forebay Spreading Grounds				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Complied with the water recycling permit requirements for the Montebello Forebay Spreading Grounds	Yes	Yes	Yes	
<b>2. GOAL:</b> Perform bi-monthly monitoring of monitoring wells				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Successful bi-monthly monitoring of wells	Yes	Yes	Yes	
<b>3. GOAL:</b> Perform semi-annual monitoring of production wells				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Successful semi-monthly monitoring of wells	Yes	Yes	Yes	
<b>4. GOAL:</b> Perform quarterly monitoring of intakes to the spreading facilities				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Successful quarterly monitoring of intakes	Yes	Yes	Yes	
<b>5. GOAL:</b> Evaluate opportunities to increase recycled water reuse for groundwater recharge at the spreading grounds				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Facilitated the ongoing dialogue between the SDLAC and the Division of Drinking Water to help increase the amount of recycled water from the SJC East Water Reclamation Plant conveyed to the spreading grounds	Yes	Yes	Yes	
<b>6. GOAL:</b> Collaborate with other agencies and organizations on research investigations of percolation of recycled water				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Collaborated with other agencies and organizations on research investigations of recycled water percolation	Yes	Yes	Yes	
<b>7. GOAL:</b> Initiate work on updated Title 22 Engineering Report for the Montebello Forebay and complete CAR.				Provide Safe and Reliable Groundwater and Obtain Independence from Imported Water Sources
<b>MEASURE:</b> Submit CAR and progress towards updated Title 22 Engineering Report	N/A	N/A	N/A	

# Annual Budget 2016/2017

## PROJECT 005 GROUNDWATER RESOURCE PLANNING

### Background

The Groundwater Resources Planning Program was instituted to evaluate basin management issues and to provide a means of assessing project impacts over the Central and West Coast Groundwater Basins. Prior to moving forward with a new project, an extensive evaluation is undertaken. Within the Groundwater Resources Planning Program, new projects and programs are analyzed based on benefits to overall basin management. This analysis includes performing an extensive economic evaluation to compare estimated costs with anticipated benefits. As part of this evaluation process, all new capital projects are brought to the District's Technical Advisory Committee (TAC) for review and recommendation. Projects deemed worthy by the TAC and District Board will be recognized as independent projects and may be included within the District's Project Work Plan.

WRD will continue to coordinate with basin stakeholders to bring to reality workable groundwater storage programs. Meanwhile, the District will also continue

to determine the effects of such programs on the overall management of the basins and the specific impacts to aspects such as water levels, annual overdraft, accumulated overdraft, etc. The management alone of such a program will definitely require close review and administration by District staff.

During the coming year, work under this program will continue to focus on storage issues, operational alternatives for the Central and West Coast basin, and implementation of the District's Water Independence Now, or WIN program. The WIN program seeks to replace the District's imported water demands at the three seawater intrusion barriers and spreading grounds with locally available recycled water sources.

In addition, District staff will be holding quarterly workshops with basin stakeholders to review concepts identified in the Groundwater Basins Master Plan and facilitate their further development. The concepts identified in the Plan are intended to further reduce the region's reliance on imported water through the development of local resources.

The District is also expected to continue to evaluate the projects identified in the Project Work Plan. Specifically, funds have been allocated to perform a further evaluation of projects in order to make them more competitive for future grant funding opportunities.

District staff will continue to closely monitor and participated in the ongoing development and refinement of the Integrated Regional Water Management Plan (IRWMP) for the Los Angeles region. Participation in this process is necessary if the District wishes to secure grant funding under Proposition 84, Proposition 1, and other future state grant funding opportunities. District staff will also continue to monitor other State and Federal grant programs to determine applicability to the District's list of potential projects. WRD will continue to work with Federal agencies such as the U.S. Bureau of Reclamation to identify potential opportunities for funding.

*Table 39A*  
**Project 005 - GROUNDWATER RESOURCE  
Planning Budget Summary**

<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>2016/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	165,000	166,000	1,000
<b>R&amp;M / Materials / Equipment</b>	-	-	-
<b>Other Expenses</b>	32,000		(24,000)
<b>Other General &amp; Administrative</b>	124,000	144,000	20,000
<b>Total</b>	<b>\$321,000</b>	<b>\$318,000</b>	<b>\$(3,000)</b>

# Annual Budget 2016/2017

## 2015/16 Accomplishments

- Developed agendas and provided background information for Technical Advisory Committee meetings, included detailed project summary information and economic analyses.
- Monitored ongoing activities at other regional water agencies and assessed potential impacts of their actions on WRD.
- Participated in the Greater Los Angeles Integrated Regional Water management Planning Process (GLAC IRWM).
- Continued coordination efforts with the U.S Army Corps of Engineers and Los Angeles County Department of Public Works to complete the update of studies to allow for the capture of additional stormwater behind Whittier Narrows Dam.
- Continued development of a Programmatic Environmental Impact Report for the Groundwater Basins Master Plan.
- Attended monthly and quarterly meetings of the Central and West Basin Water Associations, providing each with an update on ongoing District activities.
- Held a Groundwater 101 Symposium with basin stakeholders to review the conjunctive use framework that was established with the recent Central and West Coast Basin judgment amendments.
- Evaluated potential groundwater storage and supply options to optimize District replenishment functions.

## 2016/17 Objectives

- Initiate follow up studies that arise as a result of the development of the Groundwater Basins Master Plan, particularly increased utilization of the Montebello Forebay.
- Review and update the District's 5-year capital improvement program.
- Continue to provide as needed technical support for Judgment amendments for development of conjunctive use framework.
- Continue to attend meetings of the Central and West Basin Water Associations to keep them apprised of ongoing district activities.
- Continue management of grant funding received by the District.
- Monitor local, State and Federal grant funding opportunities and assess applicability to District projects.
- Continue participation in Integrated Regional Water Management Planning process for Greater Los Angeles Region.
- Continue to monitor other water agencies and assess the impact of their actions on WRD.

# Annual Budget 2016/2017

## Basis for Change 2015/16 Projected to 2016/17 Budget

No significant changes noted. • Continue to monitor other water agencies and assess the impact of their actions on WRD.

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 39B</i> <b>GROUNDWATER RESOURCE PLANNING</b> Performance Measures				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Develop, and complete, Programmatic Environmental Impact Report (PEIR) for Groundwater Basins Master Plan				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> % completion of PEIR	80%	90%	100%	
<b>2. GOAL:</b> Evaluate alternative sources for imported water for the replenishment of the Montebello Forebay Spreading grounds				Obtain Independence from Imported Water Sources
<b>MEASURE:</b> # of potential evaluation performed and supply options to optimize District replenishment functions	2	2	4	
<b>3. GOAL:</b> Review and update the District's 5-year capital improvement program				Provide Safe and Reliable Groundwater and Obtain Independence from Imported Water Sources
<b>MEASURE:</b> WRD's 5-year capital improvement program reviewed, updated and approved by BOD	Yes	Yes	Yes	
<b>4. GOAL:</b> Continue participation in IRWM Planning Process for Greater Los Angeles Region				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Participation in the Greater Los Angeles IRWM Planning Process (GLAC IRWM)	Yes	Yes	Yes	
<b>5. GOAL:</b> Continue coordination efforts with the U.S. Army Corps of Engineers and LACDPW to complete the update of studies to allow for the capture of additional stormwater behind Whittier Narrows Dam				Provide Safe and Reliable Groundwater and Obtain Independence from Imported Water Sources
<b>MEASURE:</b> % completion of study updates	20%	50%	100 %	
<b>6. GOAL:</b> Continue to provide technical support for Judgment amendments for development of conjunctive use framework				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> # of technical support provided for Judgment amendments	2	4	6	

# Annual Budget 2016/2017

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**7. GOAL:**

Continue to evaluate District projects in order to make them more competitive for future grant funding opportunities. (e.g., monitoring / assessing potential grant funding opportunities)

Provide Safe and Reliable Groundwater

**MEASURE:**

WRD's grant funding evaluation opportunities

Prop 84

Prop 84  
Prop 1

Prop 1

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**8. GOAL:**

Continue to attend meetings of the Central and West Basin Water Associations to keep them apprised of ongoing District activities

Provide Safe and Reliable Groundwater

**MEASURE:**

Central and West Basin Water Associations meeting attended

24

24

24

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**9. GOAL:**

Continue to monitor other water agencies and assess the impact of their actions on WRD

Provide Safe and Reliable Groundwater

**MEASURE:**

Number of other water agencies assessed

5

5

5

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## PROJECT 18 DOMINGUEZ GAP BARRIER RECYCLED WATER PROJECT

### Background

This Project involves the delivery of recycled water from the City of Los Angeles Terminal Island Treatment Plant (TITP) to the Dominguez Gap Barrier (DGB). The portion of the TITP effluent destined for the Barrier first undergoes a set of advanced treatment, consisting of microfiltration, reverse osmosis, and chlorination, at the Advanced Water Treatment Facility. Plans are underway to expand the design capacity of TITP from the current 6.0 million gallons per day (mgd) to 10.0 mgd. One of the goals of the TITP expansion is to eliminate the use of imported water at the DGB by 2017.

The Regional Water Quality Control Board issued the Waste Discharge Requirements and Water Reclamation Requirements (WDRs/WRRs) to allow injection of the water on October 2, 2003. Additional improvements were implemented to satisfy water quality requirements of the County of Los Angeles Department of Public Works (LACDPW) before deliveries began in February 2006.

The maximum percent of recycled water for this project is 50 percent, or 5 million gallons per day (mgd), whichever is less. The City of Los Angeles Bureau of Sanitation (LABOS) and Los Angeles Department of Water and Power (LADWP) is responsible for the treatment and delivery of the recycled water and all the water quality sampling associated with the final recycled water and imported water. The District conducts groundwater monitoring, which is required to observe changes in aquifer water quality conditions and to anticipate potential problems before recycled water reaches drinking water wells. The District also performs groundwater modeling to simulate the fate and transport of the recycled water in the aquifers after injection. This monitoring commenced with the start of the recycled water deliveries in February 2006. Baseline monitoring was completed to establish preexisting groundwater quality conditions prior to the start of deliveries.

Recycled water use at the barriers improves the reliability of a water supply that is needed on a continuous basis, in order to prevent seawater intrusion. Traditionally, water purchases for the barriers have been viewed as a replenishment function. Therefore, this program is funded entirely through the Replenishment Fund.

*Table 40A*  
**Project 018 - DOMINGUEZ GAP BARRIER  
Recycled Water Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	115,000	150,000	35,000
<b>R&amp;M / Materials / Equipment</b>	-	18,000-	18,000
<b>Other Expenses</b>	5,000	6,000	1,000
<b>Other General &amp; Administrative</b>	133,000	130,000	(3,000)
<b>Total</b>	<b>\$ 253,000</b>	<b>\$ 304,000</b>	<b>\$ 51,000</b>

# Annual Budget 2016/2017

## **2015/16 Accomplishments**

- Continued participation with LABOS and LADWP in moving towards 100% recycled water at the DGB.
- Participated in regular meetings with LABOS, LADWP, and LACDPW to measure treatment plant upgrade progress and draft a new agreement between parties.
- Continued to prepare compliance monitoring reports and coordinate reporting and compliance with co-permittees, i.e. LADWP, LABOS, and LACDPW.
- Continued to conduct groundwater monitoring in accordance with the permit requirements.
- Updated and improved the computer model of the groundwater flow system in the vicinity of the Dominguez Gap Seawater Intrusion Barrier.
- Met with LA Water Board to discuss co-permittee status for new permit for 100% recycled water at the DGB.

## **2016/17 Objectives**

- Receive regulatory approval to expand the amount of recycled water at the barrier from 50% to 100%, a major accomplishment to eliminate the need for imported water.
- Continue to conduct groundwater monitoring and modeling as necessary in accordance with new permit requirements.
- Anticipated additional sampling and analysis as part of the approval process to move from a 50% project to a 100% recycled water injection project.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

There were additional monitoring and maintenance deferred due to reduced anticipated pumping.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 40B</i>				
<b>DOMINGUEZ GAP BARRIER RECYCLED WATER PROJECT</b>				
<b>Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Assist LABOS in completing the Title 22 Engineering Report to expand the barrier from 50% recycled water to 100% recycled water.				Obtain Independence from Imported Water Sources
<b>MEASURE:</b> Assisted and supported LABOS in completing Title 22 Engineering Report	Yes	Yes	Yes	
<b>2. GOAL:</b> Prepare compliance monitoring reports and coordinate compliance with co-permittees (i.e., LADWP, LABOS, & LACDPW) to ensure all regulatory permit requirements and deadlines are met.				Obtain Independence from Imported Water Sources
<b>MEASURE:</b> % of regulatory permit requirements and deadlines met	100%	100%	100%	
<b>3. GOAL:</b> Conduct groundwater monitoring/sampling in accordance with the new permit requirements				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> In compliance with permit requirements (Yes/No)	Yes	Yes	Yes	

## PROJECT 23 REPLENISHMENT OPERATIONS

### Background

WRD actively monitors the operations and maintenance practices at the spreading grounds and seawater barrier wells owned and operated by the Los Angeles County Department of Public Works (LACDPW). Optimizing replenishment opportunities is fundamentally important to WRD, in part because imported and recycled water deliveries directly affect the District's annual budget. Consequently, the District seeks to ensure that the conservation of stormwater is maximized, and that imported and recycled water replenishment are optimized.

WRD coordinates regular meetings with LACDPW, Metropolitan Water District of Southern California, Sanitation Districts of Los Angeles County, and other water interests to discuss replenishment water availability, spreading grounds operations, scheduling of replenishment deliveries, seawater barrier improvements, upcoming maintenance activities, and facility outages or shutdowns. The

District tracks groundwater levels in the Montebello Forebay weekly to assess general basin conditions and to determine the level of artificial replenishment needed. Additionally, WRD monitors the amount of recycled water used at the spreading grounds and seawater barriers, to maximize its use while complying with regulatory limits.

As its name implies, this program deals primarily with replenishment issues, and its costs are borne completely by the Replenishment Fund.

### 2015/16 Accomplishments

- Substantially completed the Montebello Forebay Recharge Enhancement Study (MFRES) and the spreading grounds operational model to simulate operations of the Montebello Forebay spreading grounds.
- Continued working cooperatively with the LADWP, LABOS, and LACDPW on the Terminal Island Treatment Plant Expansion to provide increased recycled water to the Dominguez Gap Barrier.
- Continued participating in bimonthly meetings with replenishment agencies to maximize groundwater recharge opportunities.
- Continued to evaluate new potential replenishment opportunities (e.g., replenishment water sources, spreading grounds improvements).

<i>Table 41A</i>			
<b>PROJECT 023 - REPLENISHMENT OPERATIONS</b>			
<b>Budget Summary</b>			
<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	101,000	113,000	12,000
<b>R&amp;M / Materials / Equipment</b>	-	24,000	24,000
<b>Other Expenses</b>	43,000	43,000	-
<b>Other General &amp; Administrative</b>	196,000	183,000	(13,000)
<b>Total</b>	<b>\$ 340,000</b>	<b>\$ 363,000</b>	<b>\$ 23,000</b>

# Annual Budget 2016/2017

- Completed work with LACDPW and CSDLAC on the spreading grounds improvements – Installation of 001B and Basin 2 Turnout Structures.
- Presented monthly updates to the WRD Water Resources Committee.

## **2016/17 Objectives**

- Complete the conversion of the Montebello Forebay FEFLOW model to Modflow model as part of the Montebello Forebay Recharge Enhancement Study (MFRES).
- Continue working cooperatively with the LADWP, LABOS, and LACDPW on the Terminal Island Treatment Plant Expansion to provide increased recycled water to the Dominguez Gap Barrier.
- Continue participating in bimonthly meetings with replenishment agencies to maximize groundwater recharge opportunities.
- Continue to evaluate new potential replenishment opportunities (e.g., replenishment water sources, spreading grounds improvements).

Continue to provide monthly updates to the WRD Water Resources Committee.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

Maintenance deferred due to anticipated reduction in pumping.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 41B</i> <b>REPLENISHMENT OPERATIONS</b> Performance Measures				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b>				
Continue working cooperatively with the LADWP, LABOS, and LACDPW on the Terminal Island Treatment Plant Expansion to provide increased recycled water to the Dominguez Gap Barrier				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Recycled water increased to the Dominguez Gap Barrier	4,230 AF	3,590 AF	4,800 AF	
<b>2. GOAL:</b>				
Continue monitoring groundwater levels at the Rio Hondo and San Gabriel River Spreading Grounds				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Continued monitoring groundwater levels at the Rio Hondo and San Gabriel River Spreading Grounds	Yes	Yes	Yes	
<b>3. GOAL:</b>				
Continue participating in bimonthly meetings with replenishment agencies to maximize groundwater recharge opportunities				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Participation in bimonthly meetings	Yes	Yes	Yes	
<b>4. GOAL:</b>				
Continue to evaluate new potential replenishment opportunities (e.g., replenishment water sources, spreading grounds improvements)				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
# of successful new potential replenishment opportunities	1	6	N/A	
<b>5. GOAL:</b>				
Complete the Montebello Forebay Recharge Enhancement Study (MFRES) and the spreading grounds operational model to simulate operations of the Montebello Forebay spreading grounds				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
% completion GW Flow Model Conversion and Project Documentation	60%	95%	5%	

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<b>6. GOAL:</b> Testing of Interconnection Pipeline between San Gabriel Coastal Spreading Grounds and Rio Hondo Coastal Spreading Grounds				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Pumps tested for minimum of five (5) consecutive days	N/A	N/A	N/A	
<b>7. GOAL:</b> Continue working cooperatively with the LACDPW, LBWD, and OCWD on the Alamitos Gap Barrier Project to provide increased recycled water to the Alamitos Gap Barrier				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Recycled water increased to the Alamitos Gap Barrier	320 AF	1,310 AF	4,240 AF	
<b>8. GOAL:</b> Continue working cooperatively with the LACDPW and WBMWD on the West Coast Barrier Project to provide increased recycled water to the West Coast Barrier				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Recycled water increased to the West Coast Barrier	13,400 AF	13,410 AF	17,000 AF	
<b>9. GOAL:</b> Continue working cooperatively with the LACDPW and CSD on the Montebello Forebay Spreading Grounds to provide increased recycled water				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Recycled water increased recycled water to the Spreading Grounds	46,830 AF	55,890 AF	55,000 AF	

# Annual Budget 2016/2017

## PROJECT 033 GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM

### Background

The Water Replenishment District of Southern California (WRD), which serves approximately 4 million people in 43 cities, currently replenishes the Central and West Coast Basins with over 95,000 acre-feet per year of water. Approximately 64,000 acre-feet of this total is met using recycled water with another 21,000 acre-feet of water being imported into the basin. The future availability of this imported water is uncertain. Given the prolonged statewide drought and uncertain future of imported water supplies for Southern California, WRD is in the process of implementing the District's Water Independence Now, or the WIN program. The WIN program seeks to replace the District's imported water demands at the three seawater intrusion barriers and spreading grounds with locally available recycled water sources.

A corner stone of the WIN program is the Groundwater Replenishment Improvement Program (GRIP). The goal of the GRIP is to replace imported water currently being used at the spreading grounds for replenishing the area's groundwater supplies with 21,000 acre feet per year of recycled water, a locally sustainable water resource. The GRIP was instituted to identify new and reliable water supplies for use as replenishment water. One of these program's main elements includes the construction of an Advanced Water Treatment Facility (AWTF), entitled the GRIP AWTF, to further purify recycled water from LACSD's San Jose Creek Water Reclamation Plant using micro filtration and reverse osmosis followed by disinfection with advanced oxidation (utilizing ultra-violet light and hydrogen peroxide). The highly treated recycled water will be transported through an existing pipeline to spreading basins located along the San Gabriel River for percolation into the Central Basin to offset the demand for imported water. The GRIP AWTF will provide 10,000 acre-feet per year of highly treated recycled water that is currently being disposed of in the San Gabriel River, and which ultimately flows to the ocean. An additional 11,000 acre-feet per year of tertiary treated recycled water will also be directed to the spreading basins for groundwater recharge in the same manner which has been in operation for over 50 years.

During the coming year, work will focus on starting both design and construction related project activities simultaneously using a design-build method of project delivery. Once started, work will continue until the GRIP AWTF is fully operational in 2018.

*Table 42A*

**Project 033 - GROUNDWATER RELIABILITY IMPROVEMENT Program (GRIP) Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	266,000	200,000	(66,000)
<b>R&amp;M / Materials / Equipment</b>	0	-	0
<b>Other Expenses</b>	22,000	10,000	(12,000)
<b>Other General &amp; Administrative</b>	133,000	48,000	(85,000)
<b>Total</b>	<b>\$ 421,000</b>	<b>\$ 258,000</b>	<b>\$ (163,000)</b>

# Annual Budget 2016/2017

The primary purpose of this project is to identify new and reliable water supplies for use as replenishment water, therefore, it is 100% funded from the Replenishment Fund.

## **2015/16 Accomplishments**

- Entered into design-build agreement with design-build entity
- Completed GRIP AWTF Pico Rivera site deconstruction project
- Started work on GRIP AWTF Brine Pipeline project
- Completed Turnout Structures Project

## **2016/17 Objectives**

- Commence construction of GRIP AWTF project
- Complete GRIP AWTF Brine Pipeline project
- Complete construction of three (3) groundwater injection wells
- Complete State Revolving Fund funding agreement
- Complete GRIP AWTF Title 22 Engineering Report

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

The decrease is due to GRIP moving from planning to construction phase which will be funded through bond proceeds.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 42B</i>				
<b>GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM</b>				
<b>Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b>				
Design & Construction of the GRIP AWTF				
<b>MEASURE:</b>				
Construction Phase of the GRIP	0%	10%	40%	Obtain Independence from Imported Water Sources
<b>2. GOAL:</b>				
Construction of the two new Diversion (Turnout) Structures at the SGRCSG				
<b>MEASURE:</b>				
Construction Phase of the two Diversion (Turnout) Structures at the SGRCSG	0%	100%	File Notice of Completion	Obtain Independence from Imported Water Sources
<b>3. GOAL:</b>				
State Revolving Fund (SRF) funding agreement				
<b>MEASURE:</b>				
Update on the SRF	N/A	In Process	Final Draft Review	Obtain Independence from Imported Water Sources
<b>4. GOAL:</b>				
Construction of three groundwater injection wells				
<b>MEASURE:</b>				
Installation of groundwater monitoring wells	N/A	N/A	Completed	Obtain Independence from Imported Water Sources
Installation Phase of three groundwater injection wells	N/A	N/A	Starting Phase	
<b>5. GOAL:</b>				
GRIP AWTF Brine Pipeline Project				
<b>MEASURE:</b>				
Brine Disposal Pipeline & Street Improvement Phase	N/A	N/A	Construction Contract Awarded	Obtain Independence from Imported Water Sources

## Clean Water Projects and Programs

### PROJECT 002 GOLDSWORTHY DESALTER

#### Background

The Robert W. Goldsworthy Desalter (Desalter) has been operating since 2002 to remove impacted groundwater from a saline plume stranded inland of the West Coast Basin Barrier after the barrier was put into operation. The production well and desalting facility are operated by the City of Torrance, and the product water is delivered for potable use to the City's distribution system.

The District is expanding the Desalter to double its production capacity from 2.5 million gallons per day (mgd) to 5.0 mgd. The District has been awarded a total \$7.0 million grant funding for the expansion project, including \$4.0 million from the Proposition 84 IRWM Round 3 Grant and \$3.0 million from the Proposition 50 Water Desalination Grant. The construction for expansion is scheduled to complete by the second quarter of FY2016/17.

*Table 43A*  
**Project 002 - GOLDSWORTHY DESALTER**  
**Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	275,000	288,000	13,000
<b>R&amp;M / Materials / Equipment</b>	346,000	258,000	(88,000)
<b>Other Expenses</b>	252,000	260,000	8,000
<b>Other General &amp; Administrative</b>	117,000	176,000	59,000
<b>Total</b>	<b>\$990,000</b>	<b>\$982,000</b>	<b>\$(8,000)</b>

The costs for this project will involve O&M activities and replacement costs as well as capital improvement costs (through District's bond proceeds) for the expansion construction. The purpose of the Desalter is directly related to remediating degraded groundwater quality, and costs are thus attributed 100% to the Clean Water Fund.

Additional measures may be necessary in the future to fully contain and remediate the saline plume. WRD is pursuing long-term solutions to this problem and continues to work with the City of Torrance, the Technical Advisory Committee, and other stakeholders on the future of saline plume removal in the West Coast Basin.

#### 2015/16 Accomplishments

- Completed drilling of 2 new source water supply wells in Delthorne Park and Torrance City Yard for the Desalter Expansion.
- Awarded the Desalter Expansion project to a construction contractor via public bidding. The construction for the Expansion project is 30 percent complete.
- Received State Proposition 84 grant funding for the construction.
- Treated approximately 1,000 acre feet of degraded groundwater from the saline plume and turned it into potable water supplied to the residents of the City of Torrance.
- Monitored the water quality of the Desalter product water to ensure compliance with the permit.

# Annual Budget 2016/2017

## **2016/17 Objectives**

- Complete the construction for the Desalter Expansion to double the production capacity from 2.5 million gallons per day (mgd) to 5.0 mgd.
- Continue to treat the degraded groundwater from the saline plume and turn it into potable water supplied to the residents of the City of Torrance.
- Continue to monitor the water quality of the Desalter product water to ensure compliance with the permit.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

Repairs and maintenance costs decreased due to anticipated reduced pumping with staff labor increasing slightly in fiscal year 2016/17.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 43B</i>				
<b>GOLDSWORTHY DESALTER Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b>				
Construction of two new production wells for the Desalter Expansion project.				Provide Safe and reliable groundwater
<b>MEASURE:</b>				
% of Completion.	40%	100%	Completed and converted into monitoring wells	
Number of wells completed as monitoring wells to collect useful information for the basin	0	2	3	
<b>2. GOAL:</b>				
Construction of the Goldsworthy Expansion.				Provide Safe and reliable groundwater
<b>MEASURE:</b>				
% of Completion.	20%	30%	100%	
<b>3. GOAL:</b>				
Provide Grant Funding for the Expansion project.				Provide Safe and reliable groundwater
<b>MEASURE:</b>				
Funds received from the Grant Funding.	Awarded	\$7.0 Million	\$7.0 Million	
<b>4. GOAL:</b>				
Treatment of degraded groundwater from the saline plume and turn it into potable water to supply to the City of Torrance.				Provide Safe and reliable groundwater
<b>MEASURE:</b>				
Amount of degraded groundwater treated from the Saline Plume each year.	About 730 AF well production deteriorate	500 AF	1000 AF	
<b>5. GOAL:</b>				
Permit Compliance for Water Quality				Provide Safe and reliable groundwater
<b>MEASURE:</b>				
Sample for water quality and report to State regulatory agency	Yes	Yes	Yes	

## PROJECT 006 WATER QUALITY IMPROVEMENT PROGRAM

### Background

This comprehensive program represents the District's ongoing efforts to address water quality issues that affect its projects and the pumpers' facilities. The District monitors and evaluates potential impacts of pending water quality regulations and proposed legislations. WRD reviews the justifications and the rationale accompanying the proposed requirements and, if warranted, joins in coordinated efforts with other interested agencies to resolve significant issues of concerns during the early phases of the regulatory and/or legislative processes.

The District continues to evaluate and project water quality compliance in production wells, monitoring wells, and recharge/injection waters of the basins. And where potential issues are identified, appropriate remedial actions are developed along with the associated cost estimates to achieve compliance.

The WRD service area includes a large and diverse industrial base.

Consequently, many potential groundwater contamination sources exist within the District boundaries, including but not limited to leaking underground storage tanks, refineries and petrochemical plants, dry cleaning facilities, auto repair shops, metal works facilities, and others. Such potential contamination sources may pose a threat to the drinking water aquifers. WRD, therefore, established the Groundwater Contamination Prevention Program as a key component of the Groundwater Quality Program, in an effort to minimize or eliminate existing and potential threats to groundwater supplies.

WRD is also participating in the *Water Augmentation Study*, a multi-year investigation by the Council for Watershed Health for the purpose of evaluating the feasibility and impact of using low impact development strategy to capture storm runoff that would have otherwise been discharged to the surface water.

Much of the work for the coming year will involve additional investigations at well sites known to have contaminated water, continued tracking of water quality regulations and proposed legislation affecting production and replenishment operations, further characterization of contaminant migration into the deeper aquifers, and evaluating the need to initiate cleanup activities at contaminated sites. All work under this program is related to water quality and cleanup efforts and therefore, is funded entirely by the Clean Water Fund.

The District continues to administer the Title 22 Groundwater Monitoring Program in the

*Table 44A*  
**Project 006 - GROUNDWATER QUALITY IMPROVEMENT  
Program Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	281,000	358,000	77,000
<b>R&amp;M / Materials / Equipment</b>	34,000	41,000	7,000
<b>Other Expenses</b>	69,000	83,000	14,000
<b>Other General &amp; Administrative</b>	217,000	274,000	57,000
<b>Total</b>	<b>\$ 601,000</b>	<b>\$ 756,000</b>	<b>\$ 155,000</b>

Central Basin and one system in the West Basin, which provides source water monitoring of 84 active wells owned and operated by 22 pumpers. In addition to performing the required compliance monitoring, the District prepares the annual Consumer Confidence Reports for these pumpers.

## 2015/16 Accomplishments

- Coordinated and administered meetings of the Groundwater Contamination Forum as a means for key stakeholders in the Central Basin and West Coast Basin to share data and provide updates on major groundwater contaminated sites.
- Continued to work in close consultation with project managers of the United States Environmental Protection Agency (USEPA), California Department of Toxic Substances Control (DTSC), and Los Angeles Regional Water Quality Control Board (LARWQCB) to provide data and technical support to expedite the investigation and cleanup of high-priority groundwater contaminated sites in the Central Basin and West Coast Basin.
- Continued to administer meetings of the Los Angeles Forebay Groundwater Task Force and work with regulatory agencies and water purveyors to investigate the extent of the regional volatile organic compound (VOC) and perchlorate plumes in the Los Angeles Forebay.
- Continued to participate in the multi-agency Los Angeles Basin Groundwater Restoration Convening meetings to expedite the investigation, identification, and eventual remediation of potential sources associated with contaminated drinking water wells in the Central Basin and West Coast Basin.
- Attended public meetings for various groundwater cleanup projects in the basin including those associated with the Del Amo / Montrose Superfund Sites and restoration of the former Norwalk Tank Farm.
- Sampled three deep nested groundwater monitoring wells installed by WRD. The wells were installed to characterize the vertical extent of groundwater contamination associated with the Omega Chemical Superfund Site. The data resulted in the regulatory agency requiring additional groundwater delineation as documented in a consent decree issued in April 2016. WRD continues to work closely with the responsible parties and EPA.
- WRD staff provided technical support to multiple pumpers in the basin regarding the installation of water supply wells in proximity of existing groundwater plumes and concerns raised by the Division of Drinking Water (DDW).
- Sampled three deep nested groundwater monitoring wells installed by WRD. The wells were installed to further characterize a perchlorate groundwater plume located in the City of Vernon. Prop 1 grant funds are being requested from the state to address a localized "hot spot" with some of the highest perchlorate concentrations in California. WRD is working closely with the DTSC.
- Monitored potential impacts of pending legislation and regulations on drinking water quality by participating in the California Water Reuse Legislative / Regulatory Committee,

Association of California Water Agencies' Clean Water and Safe Drinking Water Committees, and subscribing to listserv of various regulatory agencies.

- WRD staff have been participating in various activities related to the Sustainable Groundwater Management Act (SGMA):
  - Hosted a workshop with managers of adjudicated basins led by the Department of Water Resources (DWR).
  - Participating in a group discussion regarding a sustainable solution for two fringe areas located in the northern portion of the Central Basin. The main stakeholders include the City of Beverly Hills, Golden State Water Company, and Los Angeles Department of Water and Power. Staff are currently preparing an “alternative plan” for submittal to the DWR.
  - Participated on two panel discussions at a conference sponsored by the Groundwater Resources Association of California (GRAC).
- Conducted quarterly status update meetings with our on-call water quality laboratory (Eurofins Eaton Analytical). The meetings provide an opportunity for staff to communicate directly with our vendor partners ensuring the highest quality work for the District.
- Presentation at the Groundwater Resources Association of California October 2015 conference on artificial sweeteners in groundwater.
- In August 2015, a WRD article entitled “Layer by Layer: Multi-barrier treatment makes a recycled water project possible in Los Angeles County” was published in the wastewater journal Water Environment & Technology (WE&T). The article discussed our approach to pathogen reduction at the Leo J. Vander Lans Water Treatment Facility.
- Pursuing grant funding for groundwater contamination projects under Prop 1. WRD held two workshops with key grant fund managers at the State Water Resource Control Board (SWRCB). The projects are currently being developed and grant submittals are anticipated in 2016.

## 2016/17 Objectives

- Maintain a high level understanding of the highest priority contamination sites within the basin and work collaboratively with project managers at the USEPA, DTSC, and LARWQCB. Coordinate regular status update meetings for key sites via the Groundwater Contamination Forum.
- Work collaboratively with various regulatory agencies to identify responsible parties and address groundwater contamination in the Los Angeles Forebay. WRD will continue to build upon the work initiated under the Groundwater Task Force.

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- Participate in the multi-agency Los Angeles Basin Groundwater Restoration Convening.
- Monitor potential impacts of pending legislation and regulations on drinking water quality by subscribing to the listserv of various regulatory agencies and participating in the California WaterReuse Legislative/Regulatory Committee, Association of California Water Agencies' Clean Water, and Safe Drinking Water Committees.
- Provide technical support to our pumping community and continued communication via the Annual Groundwater Quality Workshop.
- Partner with and evaluate additional stormwater recharge opportunities through the Council for Watershed Health on the Water Augmentation Study and the Southern California Water Committee.
- Participate in the technical advisory committee of the Los Angeles Basin Stormwater Conservation Study undertaken by the Los Angeles County Public Works and United States Bureau of Reclamation.
- Administer the Title 22 Groundwater Monitoring Program.
- Pursue groundwater cleanup projects via grant funds related to Prop 1.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

There are small water quality and contamination projects that were deferred due to anticipated reduced pumping with an increase in staff labor for fiscal year 2016/17.

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Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 44B</i>				
<b>WATER QUALITY IMPROVEMENT PROGRAM</b>				
<b>Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Coordinate and administer meetings of the Groundwater Contamination Forum as a means for key stakeholders in the Central Basin and West Coast Basin to share data and provide updates on major groundwater contaminated sites				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Successful coordination and hosting of 2 meetings	Yes	Yes	Meeting Goal	
<b>2. GOAL:</b> Work in close consultation with project managers of the USEPA, DTSC, and LARWQCB to provide data and technical support to expedite the investigation and cleanup of high-priority groundwater contaminated sites in the Central Basin and West Coast Basin				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Regular meetings with regulatory agencies	Yes	Yes	Meeting Goal	
<b>3. GOAL:</b> Administer meetings of the Los Angeles Forebay Groundwater Task Force and work with regulatory agencies and water purveyors to investigate the extent of the regional VOC and perchlorate plumes in the Los Angeles Forebay				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Regular meetings with regulatory agencies	Yes	Yes	Meeting Goal	
<b>4. GOAL:</b> Participate in the multi-agency agency Los Angeles Basin Groundwater Restoration Convening to expedite the investigation, identification, and eventual remediation of potential sources associated with the contaminated drinking water wells in the Central Basin and West Coast Basin				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Regular meetings with LA Basin Groundwater Restoration	Yes	Yes	Meeting Goal	
<b>5. GOAL:</b> Monitor potential impacts of pending legislation and regulations on drinking water quality				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Monthly review of pending water quality activities and reporting to Groundwater Quality Committee	Yes	Yes	Meeting Goal	
<b>6. GOAL:</b> Conduct the annual groundwater quality workshop for local water purveyors to promote professional learning and networking				Promote Organizational Excellence and also to Advance Groundwater Awareness
<b>MEASURE:</b> Hold Workshop	Yes	Yes	Meeting Goal	

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<b>7. GOAL:</b>			
Participate in the Technical Advisory Committee (TAC) of the Los Angeles Basin Stormwater Conservation Study undertaken by the Los Angeles County Public Works and United States Bureau of Reclamation			Provide Safe and Reliable Groundwater
<b>MEASURE:</b>			
Attend Meetings as they Occur	Yes	Yes	Meeting Goal
<b>8. GOAL:</b>			
Title 22 Monitoring Program			Provide Safe and Reliable Groundwater
<b>MEASURE:</b>			
Administration of Program	On-going	On-going	On-going

## PROJECT 012 SAFE DRINKING WATER PROGRAM

### Background

WRD's Safe Drinking Water Program (SDWP) has operated since 1991 and is intended to promote the cleanup of groundwater resources at specific well locations. Through the installation of wellhead treatment facilities at existing production wells, the District hopes to remove contaminants from the underground supply and deliver the extracted water for potable purposes. Projects implemented through this program are accomplished through direct input and coordination with well owners.

The current program focuses on the removal of Volatile Organic Compounds (VOCs) and offers financial assistance for the design and equipment of the selected treatment facility. The program is designed to help groundwater pumpers remove VOCs from affected wells to enable the well to meet public drinking water standards. This increases groundwater pumping capacity and reduces dependence on limited and expensive imported water supplies. In addition, removal of VOCs from the groundwater supply helps prevent the contaminants from spreading to other areas.

Another component of the program offers no-interest loans for other constituents of concern that affect a specific production well. The capital costs of wellhead treatment facilities range from \$800,000 to over \$2,000,000. Due to financial constraints, this initial cost is generally prohibitive to most pumpers. Financial assistance through the District's SDWP makes project implementation much more feasible. The program places a greater priority on projects involving VOC contamination or other anthropogenic (man-made) constituents, classified as Priority A Projects. Any treatment projects for naturally-occurring constituents would be classified as Priority B Projects and funded on a secondary priority, on a case-by-case basis, and only if program monies are still available during the fiscal year.

New candidates for participation are on the rise. A total of seventeen (17) facilities are already completed and online and one facility has successfully completed removal of the contamination and no longer needs treatment.

Projects under the SDWP involve the treatment of contaminated groundwater for subsequent beneficial use. This water quality improvement assists in meeting the District's groundwater cleanup objectives. Thus, funding for the costs of the program is drawn wholly from the Clean Water Fund.

<i>Table 45A</i>			
<b>Project 012 - Safe Drinking Water Program Budget Summary</b>			
<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	259,000	458,000	199,000
<b>R&amp;M / Materials / Equipment</b>	-	-	-
<b>Other Expenses</b>	3,000	8,000	5,000
<b>Other General &amp; Administrative</b>	20,000	104,000	84,000
<b>Total</b>	<b>\$ 282,000</b>	<b>\$ 570,000</b>	<b>\$ 288,000</b>

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## 2015/16 Accomplishments

As an extension of the District's Safe Drinking Water Program, the District approved the creation of the Safe Drinking Water Disadvantage Communities (DAC) Pilot Program. The goal of this program is to assist water systems located in disadvantaged communities within the District's service area with state and federal funding to address the issues related to their drinking water wells. The focus of the program is to provide technical assistance and extensive outreach to help the systems secure funding that is set aside specifically for disadvantaged communities. Currently there are seven water systems participating in the program and receiving assistance.

## 2016/17 Objectives

Three new wells have been approved as Safe Drinking Water Projects. The three wells are affected by VOCs and qualify for a Priority A Treatment Grant where the District funds the cost of design and construction. The District will take the lead on procurement and installation of the treatment facilities. Operation, maintenance, and all permits remain the responsibility of the water system. Sufficient funds exist in the District's Capital Improvement Program (CIP) through debt service financing.

## Basis for Changes 2015/16 Projected to 2016/17 Budget

Budget increase on planning and design for the anticipated projects in the Safe Drinking Water Disadvantage Communities (DAC) program, working on seven existing projects with increased staff Labor allocated to the Safe Drinking Water Program.

<i>Table 45B</i>				
<b>SAFE DRINKING WATER PROGRAM</b>				
<b>Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b>				
Identify projects and fund up to \$1M to assist candidates with primary or secondary priority contamination removal				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
# of projects funded to provide assistance to candidates with primary or secondary priority contamination removal.	0	7(DAC)	3(SDWP)	

## Dual Purpose Projects and Programs

### PROJECT 010 GEOGRAPHIC INFORMATION SYSTEM (GIS)

#### Background

The District maintains an extensive database and Geographic Information System (GIS) in-house. The database includes water level and water quality data throughout the entire WRD service area with information drawn not only from the District's Regional Groundwater Monitoring Program, but also from water quality data received from the California Department of Public Health and the District's administration of the Title 22 Monitoring Program in the Central Basin. The system requires continuous update and maintenance but serves as a powerful tool for understanding basin characteristics and overall basin health.

GIS, in conjunction with the regional groundwater model, is used to provide better planning and basin management. The system is used to organize and store an extensive database of spatial information, including well locations, water level data, water quality information, well construction data, production data, aquifer locations, and computer model files. Staff uses the system daily for project support and database management. Specific information is available to any District pumper or stakeholder upon request and can be delivered through the preparation of maps, tables, reports, or other compatible format. Additionally, the District's web-based Interactive Well Search tool is available to the public; this web site provides users with limited access to WRD's water quality and production database.

District staff will continue to streamline and refine the existing data management system and website as well as satisfy both internal and external data requests. Continued use, upkeep, and maintenance of the GIS are planned for the coming year. In addition, District staff will work closely with the consulting team selected to develop the District's GIS-based Asset Management and CMMS system. The use of the system supports both replenishment activities and groundwater quality efforts. Accordingly, the cost for this program is equally split between the Replenishment and Clean Water Funds.

*Table 46A*  
**Project 010 - Geographic Information Systems (GIS)  
Program Budget Summary**

<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	18,000	50,000	32,000
<b>R&amp;M / Materials / Equipment</b>	-	-	-
<b>Other Expenses</b>	24,000	26,000	2,000
<b>Other General &amp; Administrative</b>	317,000	277,000	(40,000)
<b>Total</b>	<b>\$ 359,000</b>	<b>\$ 353,000</b>	<b>\$ (6,000)</b>

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## **2015/16 Accomplishments**

- Utilized GIS for development of annual overdraft values used in the Engineering Survey and Report.
- Developed graphics for use in the District's Regional Groundwater Monitoring Report.
- Refined well location information based on new GPS data.
- Developed GIS graphics for used in the GRIP unveiling ceremony.
- Developed maps for GIS User Conference that were selected to be included in ESRI's annual Map Book.
- Continued integration of GIS with Google Earth for use in presentations and analysis.
- Provided graphics and analysis results, as needed, for District presentations and public outreach materials.
- Participated in regional GIS user groups.
- Coordinated with consultant team selected to develop and implement the District's Asset Management and CMMS system.

## **2016/17 Objectives**

- Continue comprehensive review of existing datasets and quality assurance measures to ensure continued data integrity.
- Continue participation in the development of the District's Asset Management system to ensure full integration of the GIS system.
- Update existing GIS and database management system and make necessary improvements to increase utilization of data.
- Work closely with WRD Staff to assess and implement GIS support for new and ongoing projects.
- Automate flow of water quality data from the laboratory to District maintained databases.
- Develop web interface for external access to District's GIS and other data sets.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

There is a decrease in staff labor in 2016/17.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 46B</i>				
<b>GEOGRAPHIC INFORMATION SYSTEMS Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Continue comprehensive review of existing datasets and quality assurance measures to ensure continued data integrity				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Performed ongoing comprehensive review of existing datasets to ensure continued data integrity	Yes	Yes	Yes	
<b>2. GOAL:</b> Ensure full integration of GIS for presentations and analysis				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> % integration	50%	80%	100%	
<b>3. GOAL:</b> Utilize GIS for development of annual overdraft values used in the ESR				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Utilized GIS in developing annual overdraft values used in the ESR	Yes	Yes	Yes	
<b>4. GOAL:</b> Develop graphics for use in the District's Regional Groundwater Monitoring Report				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Generate graphics used in the Regional Groundwater Monitoring Report	Yes	Yes	Yes	
<b>5. GOAL:</b> Refine well location information based on new GPS data				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Review production, barrier and monitoring well locations (% completed)	50%	100%	Completed	
<b>6. GOAL:</b> Update existing GIS and database management system and make necessary improvements to increase utilization of data				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Assess and document existing database management system and develop and implement recommended improvements (% completed)	30%	60%	90%	

# Annual Budget 2016/2017

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<b>7. GOAL:</b> Streamline flow of water quality data from the laboratory to District maintained databases				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Develop and document information flows (% completed)	90%	90%	100%	
<b>8. GOAL:</b> Assess options for further improving GIS data dissemination to groundwater basin stakeholders				Provide Safe and Reliable Groundwater and also to Promote Organizational Excellence
<b>MEASURE:</b> Evaluated various options for continued improvement to disseminate GIS data to groundwater basin stakeholders	Yes	Yes	Yes	

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## PROJECT 011 REGIONAL GROUNDWATER MONITORING

### Background

The Regional Groundwater Monitoring Program continues to be very successful and currently consists of a network of over 350 WRD and USGS-installed monitoring wells at nearly 60 locations throughout the District. Monitoring well data is supplemented with information from production wells to capture the most accurate information available. WRD staff, comprised of hydrogeologists and engineers, provides the in-house capability to collect, analyze and report groundwater data. This information is stored in the District's GIS and provides the basis to better understand the characteristics of the Central and West Coast Basins.

Water quality samples from the monitoring wells are collected periodically. Automatic dataloggers record water level daily in most monitoring wells. Dataloggers are downloaded and water levels measured by WRD field staff a minimum of four times per year. These water quality and water level data are available online at <http://gis.wrd.org>. On an annual basis, staff prepares a report that documents groundwater production, groundwater level, and groundwater quality conditions throughout the District.

*Table 47A*  
**Project 011 - REGIONAL GROUNDWATER MONITORING  
Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	565,000	607,000	42,000
<b>R&amp;M / Materials / Equipment</b>	79,000	105,000	26,000
<b>Other Expenses</b>	129,000	150,000	21,000
<b>Other General &amp; Administrative</b>	445,000	421,000	(24,000)
<b>Total</b>	<b>\$1,218,000</b>	<b>\$1,283,000</b>	<b>\$ 65,000</b>

Most of the work during the coming year will involve continued bi-monthly, quarterly, and semiannual monitoring and reporting activities. The program will also work cooperatively with the U.S. Geological Survey (USGS) to address specific water quality issues, and update the hydrogeology conceptual model. Work associated with the Regional Groundwater Monitoring Program also supports activities relating to both replenishment and water quality projects. The program, therefore, is funded 50% each from the Replenishment and Clean Water Funds.

In November 2009, the State Legislature amended the Water Code mandating a statewide groundwater elevation monitoring program to track seasonal and long-term trends in California's groundwater basins. In October 2011, WRD was designated the agency responsible for collecting and reporting CBWCB groundwater level data to the California Statewide Groundwater Elevation Monitoring (CASGEM) program and continues in this role.

### 2015/16 Accomplishments

- Completed Spring and Fall groundwater quality sampling at WRD monitoring wells including analysis of over 100 chemical constituents and contaminants.
- Collected quarterly groundwater levels at WRD monitoring wells and compiled daily datalogger data to prepare historical water level hydrographs.

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- Published the annual Regional Groundwater Monitoring Report summarizing groundwater data from monitoring wells and production wells in the Central and West Coast Basins for Water Year 2014/15.
- Integrated Regional Groundwater Monitoring Program data into a salt and nutrient groundwater monitoring program that was required as part of a State-mandated basin-wide Salt and Nutrient Management Plan.
- Continued to collect and report CBWCB groundwater level data to the CASGEM program.
- Implemented a telemetry system at several monitoring wells as a test program.
- Performed extensive data logger testing, maintenance and repairs.
- Cross trained staff on sampling methods.

## 2016/17 Objectives

- Collect Spring and Fall groundwater quality samples at WRD monitoring wells. Analyze samples for over 100 chemical constituents and contaminants.
- Collect quarterly groundwater levels at WRD monitoring wells and compile daily data logger data and prepare historical water level hydrographs.
- Identify emerging contaminants of concern to the water supply community and groundwater basin managers to assess the need for a basin-wide screening to determine whether long-term monitoring is warranted in the Central and West Coast Basins.
- Continue to report Regional Groundwater Monitoring Program data in accordance with the State-mandated Salt and Nutrient Management Plan.
- Continue to collect and report CBWCB groundwater level data to the CASGEM program.
- Publish and share data collected for this program in the annual Regional Groundwater Monitoring Report and WRD Web Sites.
- Install two more deep nested monitoring wells with the U.S. Geological Survey in data gap areas.

## Basis for Changes 2015/16 Projected to 2016/17 Budget

There were six additional monitoring wells in fiscal 2016/17 and additional sampling for emerging constituents caused a small increase to this program over the fiscal year 2015/16 projection.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 47B</i>				
<b>REGIONAL GROUNDWATER MONITORING</b>				
<b>Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b> Collect Spring and Fall groundwater quality sampling at WRD monitoring wells including analysis of over 100 chemical constituents and contaminants				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Complete Spring and Fall groundwater quality sampling including analysis of over 100 chemical constituents and contaminants	Completed	Completed	Yes	
<b>2. GOAL:</b> Collect quarterly groundwater levels at WRD monitoring wells and compile daily datalogger data to prepare historical water level hydrographs				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Complete collection of quarterly groundwater levels at WRD monitoring wells and compile daily datalogger data to prepare historical water level hydrographs	Completed	Completed	Yes	
<b>3. GOAL:</b> Identify emerging contaminants of concern to the water supply community and groundwater basin managers to assess the need for a basin-wide screening to determine whether long-term monitoring is warranted in the Central and West Coast Basins.				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> # of emerging contaminants of concern identified for screening	1	1	1	
<b>4. GOAL:</b> Integrate Regional Groundwater Monitoring Program data into a salt and nutrient groundwater monitoring program				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> % of completion for the integration of Regional Groundwater Monitoring Program data into a salt and nutrient groundwater monitoring program	100%	100%	Completed	

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<b>5. GOAL:</b>				
Publish and share data collected for this program in the annual Regional Groundwater Monitoring Report and WRD Web sites				Provide Safe and Reliable Groundwater, Promote Organizational Excellence, and Advance Groundwater Awareness
<b>MEASURE:</b>				
Publish the annual Regional Groundwater Monitoring Report summarizing groundwater data from monitoring wells and production wells in the Central and West Coast Basins	Completed	Completed	Completed	
<b>6. GOAL</b>				
Continue to collect and report CBWCB groundwater level data to the CASGEM program				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Collected and reported CBWCB groundwater level data to the CASGEM program	Yes	Yes	Yes	
<b>7. GOAL</b>				
Drill and install two more nested monitoring wells in data gap areas with USGS				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Install two more monitoring wells	N/A	N/A	Yes	

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## PROJECT 025 HYDROGEOLOGY PROGRAM

### Background

This recurring program accounts for hydrogeologic analysis of the Central, West Coast, and surrounding groundwater basins. These scientific efforts are necessary for specific issues, projects, programs and basin management issues that face the District. The program includes evaluation of replenishment needs and forecasting at the spreading grounds and barrier wells, computer modeling, and assessing the overall health of the basins by analyzing water levels and water quality data, including salt and nutrient loading.

Staff work performed under this program includes the preparation of the annual Engineering Survey and Report, including the calculation and determination of important hydrogeologic factors such as annual overdraft, accumulated overdraft, change in storage, and replenishment needs. Extensive amounts of data are compiled and analyzed by internal State-certified hydrogeologists and registered engineers to determine these values. Maps are created showing water levels in the basins and production patterns and amounts. The updates, maintenance, and use of the Regional Groundwater Flow Model developed by the USGS and WRD are part of this program. This model is a significant analytical tool utilized by WRD to determine basin benefits and impacts of changes proposed in the management of the Central and West Coast Basins.

A focused effort to better characterize the hydrogeologic conditions in the District is also underway and will continue into the ensuing year. This long-term project involves compiling and interpreting extensive data which were generated during the drilling and logging of the WRD/USGS monitoring wells and collected from historical information for production wells and oil wells within the District, and from seismic reflection data obtained in 2013. The ultimate goal of this project is to incorporate these data in WRD's GIS and models, and use the system to generate aquifer depths, extents, and thicknesses throughout the District to assist staff, pumpers, and stakeholders better plan for groundwater resource projects such as new well drilling, storage opportunities, or modeling. The data will also be made available on WRD's website to be used as a reference source for hydro geologic interpretations and fulfilling project-related data requests.

Hydrogeological analysis is also needed for projects associated with groundwater quality concerns and specific cleanup projects. Work by in-house staff may include investigative surveys, data research, oversight of specific project studies, etc. Such efforts are used to relate water quality concerns with potential impact to basin resources.

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	633,000	762,000	129,000
<b>R&amp;M / Materials / Equipment</b>	19,000	28,000	9,000
<b>Other Expenses</b>	60,000	68,000	8,000
<b>Other General &amp; Administrative</b>	166,000	244,000	78,000
<b>Total</b>	<b>\$878,000</b>	<b>\$1,102,000</b>	<b>\$224,000</b>

Special projects arise occasionally under this program such as well profiling of production wells to define areas of poor water quality entering the well. Other special projects include the publication of the Technical Bulletin Series, which provides hydrogeologic data to the pumpers in the basin, analysis of optimum and minimum groundwater quantities, and groundwater tracer investigations. A State-mandated Salt Nutrient Management Plan is being prepared under this Program and was completed in 2014, with the Los Angeles Regional Water Board accepting the report in 2015.

The Hydrogeology Program addresses both groundwater replenishment objectives and groundwater quality matters. This dual service warrants that the cost of the program be split evenly between the Replenishment and Clean Water Funds.

## **2015/16 Accomplishments**

Preparation of the 2016 Engineering Survey and Report leading to the adoption of the 2016/2017 Replenishment Assessment.

Preparation of the 2016 Cost of Service Report, including an in-depth analysis of the geology of the WRD Service area. This report, along with the ESR, led to the adoption of the 2016/2017 Replenishment Assessment.

Significant progress with USGS to update and improve the regional groundwater computer model. Completed 3-D sequence stratigraphic framework and incorporation into EarthVision software. Completed aerial recharge analysis. Completed 3-D textural model in Rockware. Built framework for the Modflow Model with 11 layers. Converted model to new format – Unstructured Grids. Monthly update meetings.

Presentation of technical materials and papers at groundwater conferences.

Completed modeling updates for Dominguez Gap Barrier and Alamosos Barrier.

Completed work on a groundwater tracer experiment at the 3 seawater barriers to assess whether the noble gas xenon can be effectively used as a surrogate to follow recycled water through the aquifers.

Completed a research project on artificial sweeteners in groundwater.

Completed two wells under the Well Profiling program.

# *Annual Budget 2016/2017*

## **2016/17 Objectives**

Completion of 2017 Engineering Survey and Report.

Completion of 2017 cost of Service Report

Complete the new stratigraphic framework model with USGS.

Complete the USGS Modflow groundwater computer model.

Publish and present technical papers at conferences.

Update the Dominguez Gap Barrier and Alamitos Barrier groundwater models.

Continue well profiling program.

Assist groundwater purveyors on data needs for new production wells.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

Due to anticipated reduction in pumping, well profiling project was deferred to fiscal year 2016/17 along with staff labor costs.

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Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 48B</i> <b>HYDROGEOLOGY PROGRAM</b> <b>Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Prepare ESR leading to the adoption of the RA.				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Prepared ESR which led to the adoption of the RA.	Yes	Yes	Yes	
<b>2. GOAL:</b> Prepare annual Cost of Service report including an in-depth analysis of the geology of the WRD service area.				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Prepared annual Cost of Service report which included an in-depth analysis of the WRD service area geology.	Yes	Yes	Yes	
<b>3. GOAL:</b> Continue progression the new stratigraphic framework model with USGS				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Complete Stratigraphic Framework	75%	85%	100%	
<b>4. GOAL:</b> Continue to build USGS Modflow groundwater computer model				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Complete computer model	50%	75%	100%	
<b>5. GOAL:</b> Present technical materials and papers a groundwater conferences				Promote Organizational Excellence and Advance Groundwater Awareness
<b>MEASURE:</b> Staff to make presentations at conferences	Yes	Yes	Yes	
<b>6. GOAL:</b> Update Dominguez Gap Barrier and Alamos Barrier groundwater models				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Updated the Dominguez Gap Barrier and Alamos Barrier groundwater models	Yes	Yes	Yes	
<b>7. GOAL:</b> Continue well profiling program				Provide Safe and Reliable Groundwater
<b>MEASURE:</b> Perform profiling of water wells	Yes	Yes	Yes	

## PROJECT EAE – WATER EDUCATION & OUTREACH

### Background

The Water Education and Outreach activities aim to provide direct informative communication between WRD and a broad range of constituents including:

- Groundwater purveyors (pumpers)
- Members of the general public
- Elected officials and policy makers
- Children and Youth (schools)
- Members of the water industry
- News reporters, bloggers, etc.

<i>Table 49A</i> <b>Project EAE - Water Education Budget Summary</b>			
<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	58,000	18,000	(40,000)
<b>R&amp;M / Materials / Equipment</b>	4,000	4,000	-
<b>Other Expenses</b>	399,000	407,000	8,000
<b>Other General &amp; Administrative</b>	270,000	355,000	85,000
<b>Total</b>	<b>\$ 731,000</b>	<b>\$ 784,000</b>	<b>\$ 53,000</b>

Water Education and Outreach activities aim to engage constituents on a variety of important policy and project development areas pertaining to groundwater management and practices. These activities include: tours; participation in community events and forums; development of printed and digital educational materials; involvement in industry and organizational conferences; and promotion of education through annual public events, such as the WRD Groundwater Festival. These avenues of communication enable WRD to successfully advance discussions around critical policies and programs that promote public interest in water.

The Communication and Education Services department is tasked with the mission of leading the education and outreach programs, particularly pertaining to the Water Independence Now (WIN) Program presentations at conferences and conventions. This specific program encapsulates WRD's core projects enabling the region to become independent of imported water.

Conference and convention outreach participation includes 20 primary events, averaging approximately 1,500 attendees. Water and education outreach at conferences and conventions alone have reached over 25,000 industry leaders and elected officials and policy makers.

WRD's implementation of Project WET (Water Education for Teachers) – a water education curriculum training for K-12 teachers – has allowed WRD to expand its involvement in the classroom by equipping public school teachers with a comprehensive academic science curriculum that focuses on the science of water and groundwater. The program has already trained and provided materials to more than 100 teachers, thereby increasing the number of students being taught the curriculum to over 4,000. Lastly, the annual Groundwater Festival continues to draw more than 3,000 participants.

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## 2015/16 Accomplishments

- Developed “Water 101” Workshop for local, state and federal legislative officials
- Hosted 9th annual groundwater festival with an attendance of over 3,000 participants that was for the first time funded completely by sponsorships
- Coordinated the Robert W. Goldsworthy De-Salter Treatment Facility Expansion Kick-Off
- Coordinated the GRIP Architectural Unveiling in the City of Pico Rivera that was covered by every major news outlet in California
- Coordinated the GRIP Contract Signing Ceremony for the \$110 million project
- Increased WRD’s speaker opportunities by 45% at conferences and conventions
- Expanded social media outreach by adding 3 new social media platforms and broadened WRD’s following by a full 50%
- Completed rebranding efforts across all WRD printed and digital materials, including social media
- Began the redesign of the District website

## 2016/17 Objectives

- Launch the District’s redesigned website
- Host 10th annual groundwater festival and increase attendance by 15%
- Implement a fully integrated social media editorial calendar
- Assist technical team with outreach and education related to the Groundwater Reliability Improvement Project (GRIP) Advanced Water Treatment Facility
- Develop the final design and execute the procurement for the GRIP Visitor Center
- Double the Project WET participation among teachers
- Deliver 4 new technical abstracts and presentations at upcoming conferences
- Plan and lead the GRIP Groundbreaking Ceremony
- Have multiple positive news articles published about GRIP
- Produces a series of education videos for online publication

## Basis for Changes 2015/16 Projected to 2016/17 Budget

The decreased in professional services is due to the completion of the website design for advanced user interface for better access to the District’s technical and financial data by the public. Staff labor cost also increased.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 49B</i>				
<b>WATER EDUCATION</b>				
<b>Performance Measures</b>				
	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b>				
Redesign and launch the District's website as an on-going responsibility to maintain open communication with the public it serves				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Number of District's web presence	7 websites	1 Consolidated	1	
	6 Social Networks	8 Social Networks	8	
<b>2. GOAL:</b>				
Host Annual Groundwater Festival as an on-going Groundwater Awareness effort				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Number of Groundwater Festival hosted	8th	9th	10th	
<b>3. GOAL:</b>				
Social Media outreach efforts				Provide Safe and Reliable Groundwater
<b>MEASURE:</b>				
Number of social media outlets manage in-house by staff and increase overall followers as well as day-to-day following	6	8	8	
Expansion of Project Wet		Yes	Yes	
<b>4. GOAL:</b>				
To assist on the GRIP related outreach contracts and the Visitor Center procurement				Advance the District's Groundwater Reliability Improvement Program
<b>MEASURE:</b>				
Number of GRIP related outreach contracts assisted	6	6	3	

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## 5. GOAL:

To assist on the GRIP related outreach tasks

Advance the District's Groundwater Reliability Improvement Program

### MEASURE:

#### Assistance with the following tasks:

Designed of an updated District logo and GRIP logo	Yes	Completed		
Develop new media materials and newsletter format/layout	Yes	Completed		
Marketed GRIP at public events	Yes	Completed		
Implemented a grassroots effort to educate the public on GRIP, reaching more than 800 households	Yes	Completed		
Held GRIP Community Design Meetings	Yes	Yes		
Continuing outreach to inform the public of GRIP's progress will cultivate trusting working relationship with District stakeholders		Yes		Yes
Obtain community support for GRIP Conditional Use Permit from City of Pico Rivera		Yes		Yes
Lead successful groundbreaking ceremony for GRIP				Yes
Obtain support letters for GRIP from public officials and environmental interest groups		Yes		
Garner positive news coverage for GRIP and District's mission for sustainable groundwater basins				Yes

## 6. GOAL:

Initiative to expand its groundwater educational programs with WIN

Advance the District's WIN Program

### MEASURE:

Give Presentations at conferences and conventions	Yes	Yes	Yes	
Produce new water education videos and materials	Yes	Yes	Yes	

# Annual Budget 2016/2017

## PROJECT EAC – WATER CONSERVATION

### Background

The Water Conservation activities identify tangible strategies to successfully engage constituents, pumpers, and cities the resources to meet the State mandate of 20% water savings by 2020 and to the first ever State Mandated Cutbacks. Through custom WRD conservation programs that have long term conservation achievements, stakeholders are on track to meet 20X2020. Moreover, the District’s service area exceeded goals set by the state on the mandated cutbacks.

In light of the State’s historic drought, the WRD conservation program has increased training to be more proactive and make conservation a lifestyle. The Communication and Education Services

department expanded the number of ECO-Gardener classes for the public. This past year we hosted over 3,000 participants in the ECO Gardener and Smart Gardner residential trainings and spread courses throughout the service area to expand participation. WRD continued to partner with the Los Angeles County Department of Public Works, City of Torrance and West Basin MWD to enhance water conservation awareness to the general public as well as businesses and institutes through special events and workshops.

<i>Table 50A</i> <b>Project EAC - Water Conservation Budget Summary</b>			
<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
<b>Professional Services</b>	5,000	5,000	-
<b>R&amp;M / Materials / Equipment</b>	-	-	-
<b>Other Expenses</b>	432,000	429,000	(3,000)
<b>Other General &amp; Administrative</b>	338,000	230,000	(108,000)
<b>Total</b>	<b>\$ 775,000</b>	<b>\$ 664,000</b>	<b>\$(111,000)</b>

### 2015/16 Accomplishments

- The Lillian Kawasaki ECO Gardener programs exceeded our record of 2,500 annual participants by 25%.
- Promoted a Summer Conservation effort through talk radio programming on the award winning Randy Economy Show
- Certified an additional 300 city maintenance crews through ECO Pro Program
- Trained over 300 landscapers through ECO Landscaper Program

### 2016/17 Objectives

- Continue efforts in water conservation in-line with Governor Brown’s state-wide mandatory water restrictions, despite temporary relief
- Continue conservation partnerships with the City of Torrance and West Basin Municipal Water District
- Solicit a new RFP for ECO-Gardening Education Services
- Develop an exclusive online WRD ECO-Gardening Curriculum

### Basis for Changes 2015/16 Projected to 2016/17 Budget

The decrease in Other General & Administrative expenses is due to staff labor being allocated to other projects.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

<i>Table 50B</i>				
<b>WATER CONSERVATION</b>				
<b>Performance Measures</b>				
	<b>FY 2014/15 ACTUAL</b>	<b>FY 2015/16 ACTUAL</b>	<b>FY 2016/17 BUDGET</b>	<b>DISTRICT GOAL</b>
<b>1. GOAL:</b>				
Efforts in water conservation in-line with Governor Brown's state-wide mandatory water restrictions				Advance Groundwater Awareness
<b>MEASURE:</b>				
ECO Gardener Program – hosting residential training	Yes with improvement	Continue to Increase	Increase class sizes	
Write Opinion Editorials pushing for increased conservation efforts			Yes	
<b>2. GOAL:</b>				
Conservation Partnerships with the City of Torrance and West Basin Municipal Water District				Advance Groundwater Awareness
<b>MEASURE:</b>				
Co-Sponsorship Participation in Commercial, Industrial, Institutional, Residential and Educational Conservation Programs with the City of Torrance	Participated	Continue Participation	Continue Participation	
Co-Sponsorship Participation in Water-Use Efficiency Programs with West Basin Municipal Water District	Participated	Continue Participation	Continue Participation	

## General Administration

### BOARD OF DIRECTORS

#### Background

The Board of Directors is the policy-making and governing body of the District. It represents the highest authority within the management structure of the District. Certain portions of its authority are delegated to staff in the interest of efficiency, stability, and prudent management.

The Board of Directors develops the District's vision and strategic plan and sets policy to assist the General Manager and staff with implementing the vision and strategic plan. The various responsibilities of the board members include directing District activities, outreach, and cooperation with legislators, regulators, cities, pumpers, consultants, water agencies and other government agencies.

There are five members of the Board of Directors; each is elected from one of five divisions within the District service area, within which such Director resides.

The officers of the Board are the President, Vice President, Secretary, Treasurer, and Deputy Secretary. Officers are elected by the Board at the first regular meeting of the Board in January following the District election. With the exception of the Deputy Secretary, all Board officers are Board members.

**The President of the Board** presides over all meetings of the Board and has all authority afforded the presiding officer, including the power to constitute Standing and Ad Hoc Committees and to assign Board members to serve on such committees.

**The Vice President of the Board** presides over any meeting at which the President is not present, and performs such other services as may be requested by the President.

**The Secretary of the Board** records and certifies the minutes of all Board meetings and is responsible for the maintenance of District records. The Secretary may delegate such duties to the Deputy Secretary.

**The Treasurer of the Board** is responsible for the financial affairs of the District, including financial reporting and investment activities. The Treasurer must also serve on the Finance Committee of the Board.

**The Deputy Secretary** is recommended by the General Manager and approved by the Board.

#### 2015/16 Accomplishments

See President's Message

#### 2016/17 Objectives

See President's Message

#### Basis for Changes 2015/16 Projected to 2016/17 Budget

No significant changes noted.

*Table 51A*  
**Board of Directors Budget Summary**

EXPENSE CATEGORY	2015/16 Projection	2016/17 Proposed Budget	16/17 Budget compared to 15/16 Projection
<b>Professional Services</b>	-	-	-
<b>R&amp;M / Materials / Equipment</b>	-	-	-
<b>Other Expenses</b>	79,000	82,000	3,000
<b>Other General &amp; Administrative</b>	270,000	277,000	7,000
<b>Total</b>	<b>\$349,000</b>	<b>\$359,000</b>	<b>\$10,000</b>

# Annual Budget 2016/2017

## ADMINISTRATION

### Background

As WRD's operations evolve, so do the changes to its individual and collective department structures in an effort to adjust to the District's responsibilities and to provide increased efficiencies. In accordance with the FY2016/17 Adopted Budget, Administration includes the General Manager and newly renamed departments as follows: Financial Services, Internal Services, and Communication and Education Services.

<i>Table 51B</i> <b>Administrative Roll-up Budget Summary</b>			
<b>EXPENSE CATEGORY</b>	<b>2015/16 Projection</b>	<b>2016/17 Proposed Budget</b>	<b>16/17 Budget compared to 15/16 Projection</b>
Professional Services	582,000	558,000	(24,000)
R&M / Materials / Equipment	194,000	195,000	1,000
Other Expenses	590,000	587,000	(3,000)
Other General & Administrative	2,389,000	2,430,000	41,000
<b>Total</b>	<b>\$3,755,000</b>	<b>\$ 3,770,000</b>	<b>\$ 15,000</b>

Administration represents all indirect expenses and labor to support the general operations of WRD, including office utilities, general office utilities, general office expenses, general maintenance and repairs, general legal/litigation support, financial services, independent auditors, computer support, general storage lease, and insurance.

### General Manager

The General Manager's goals and objectives are aligned with those of the Board of Directors. The role of the General Manager includes implementing policies set by the Board, overseeing and managing the daily activities of the District, and keeping the Board informed on projects and programs to facilitate good decision making.

### Financial Services Department

The Financial Services Department is responsible for the daily financial business of the District. It reports to the Finance/Audit Committee of the Board the monthly financial statements, reserves, cash and investment reports, and demand list. The Department is responsible for the budget process and ensuring that the District meets all its fiduciary responsibilities. With the creation of the Internal Services Department, the Financial Services Department is providing additional support for the District in areas such as evaluation of the economic feasibility of projects and programs.

### Internal Services Department

In FY2016/17, the District's organizational structure includes the creation of a separate Internal Services Department whose functional duties include but are not be limited to:

- Human Resources
- Board Administrative Support
- Office Administrative Support
- Information Technology
- Asset Management
- Computerized Maintenance & Management System
- Centralized Filing/Document Retention
- Contracts Administration

Many of these duties were previously the responsibility of the Finance and Administration Departments.

## **Communication and Education Services Department**

In accordance with Board direction, the External Affairs Department was renamed Communication and Education Services to more accurately reflect the depth of services the Department provides. The Communication and Education Services Department supports the District's mission to provide clear communications to the public, the District's pumpers, and the legislators about the District's role in meeting the region's water needs. Duties and responsibilities of the Communication and Education Services Department include but are not be limited to:

- Communication
- Legislative Outreach
- Education
- Conservation
- Event Planning

The education and conservation part of the Communication and Education Services' duties are discussed in detail under the Water Education and Water Conservation Projects.

## **2015/16 Accomplishments**

- Received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for our June 30, 2015 Comprehensive Annual Financial Report (CAFR).
- Received the Award of Excellence in Budgeting from the California Society of Municipal Finance Officers (CSMFO) for our 2015/16 operating budget.
- Received the Distinguished Budget Presentation Award from the Government Finance Officers Association (GFOA) for our 2015/16 operating budget.
- Completed the Cost of Service Report for 2016/17 consistent with the proportionality requirements of Article XIII D, Section 6 of the California Constitution.
- Received the Municipal Information Systems Association of California (MISAC) award which recognizes outstanding governance and operational practices relating to quality information technology practices.
- Performed a number of accounting software upgrades to assist with expense tracking, electronic payroll and timesheet coordination.
- Hosted annual State of the District and Groundwater Festival Events.
- Performed training for the ECO Gardener, ECO Pro and ECO Landscaper Programs.
- Adopted the fiscal year 2016/17 budget reflecting an increase from \$283 per acre-foot to \$297 per acre-foot or a 5.0% increase.

# Annual Budget 2016/2017

## **2016/17 Objectives**

- Obtain Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for our June 30, 2016 Comprehensive Annual Financial Report (CAFR).
- Receive the Award of Excellence in Budgeting from the California Society of Municipal Finance Officers (CSMFO) for our 2016/17 operating budget.
- Receive the Distinguished Budget Presentation Award from the Government Finance Officers Association (GFOA) for our 2016/17 operating budget.
- Complete the Cost of Service Report for 2017/18 consistent with the proportionality requirements of Article XIII D, Section 6 of the California Constitution.
- Receive the Municipal Information Systems Association of California (MISAC) award which recognizes outstanding governance and operational practices relating to quality information technology practices.
- Host Groundwater Festival and State of the District Meeting.
- Continue strong relationships with local, state and federal legislators.

## **Basis for Changes 2015/16 Projected to 2016/17 Budget**

No significant changes noted.

# Annual Budget 2016/2017

Performance measurement results for the past two fiscal years in addition to goals for FY2016/17 are presented below.

*Table 51C*  
**ADMINISTRATION**  
**Performance Measures**

	FY 2014/15 ACTUAL	FY 2015/16 ACTUAL	FY 2016/17 BUDGET	DISTRICT GOAL
<b>1. GOAL:</b> Obtain Certificate of Achievement for Excellence in Financial Reporting from the GFOA for the CAFR				Promote Organizational Excellence
<b>MEASURE:</b> Certificate of Achievement for Excellence in Financial Reporting received from the GFOA for the CAFR	Yes	To be submitted	To be submitted	
<b>2. GOAL:</b> Receive the Award of Excellence in Budgeting from the CSMFO for the Annual Operating Budget				Promote Organizational Excellence
<b>MEASURE:</b> Award of Excellence in Budgeting received from the CSMFO for the Annual Operating Budget	Yes	Yes	To be submitted	
<b>3. GOAL:</b> Receive the Distinguished Budget Presentation Award from the GFOA for the Annual Operating Budget				Promote Organizational Excellence
<b>MEASURE:</b> Distinguished Budget Presentation Award received from the GFOA for the Annual Operating Budget.	Yes	Yes	To be submitted	
<b>4. GOAL:</b> Complete the Cost of Service Report consistent with the proportionality requirements of Article XIII, Section 6 of the California Constitution				Promote Organizational Excellence
<b>MEASURE:</b> Cost of Service Report completed, filed and issued	Yes	Yes	Yes	
<b>5. GOAL:</b> Receive the MISAC award which recognizes outstanding governance and operational practices relating to quality information technology practices				Promote Organizational Excellence
<b>MEASURE:</b> MISAC award received	Yes	Yes	To be submitted	
<b>6. GOAL:</b> Host Groundwater Festival and State of the District Meeting				Promote Organizational Excellence
<b>MEASURE:</b> Groundwater Festival and State of the District Meeting held	Yes	Yes	In Planning	
<b>7. GOAL:</b> Continue strong relationship with local, state, and federal legislators				Promote Organizational Excellence
<b>MEASURE:</b> Relationship with local, state, and federal legislators maintained	Yes	Yes	Yes	

## Performance Measures

As codified in the District's Administrative Code, the Water Replenishment District of Southern California's performance metrics are guided and determined by the District's Mission Statement:

*“To provide, protect and preserve high quality groundwater through innovative, cost-effective and environmentally sensitive basin management practices for the benefit of residents and businesses of the Central and West Coast Basins.”*



### **The Board of Director's Goals for the District and staff are to:**

1. Provide Safe and Reliable Groundwater
2. Obtain Independence from Imported Water Sources
3. Promote Organizational Excellence
4. Advance Groundwater Awareness
5. Foster Environmental Stewardship and Water Sustainability

### **The Standing Committees of the Board of Directors are as follows:**

- Water Resources Committee
- Groundwater Quality Committee
- Finance/Audit Committee
- Administrative Committee
- Communication & Education Services Committee
- Capital Improvement Projects (CIP) Committee

(Note: Completion of departmental, project and program objectives are reflected in the individual summaries. Performance measurement results for the past two fiscal years in addition to goals for FY 2016/17 are presented which link to the overall District goals enumerated above.)

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## **WATER RESOURCES COMMITTEE, THE AD HOC GRIP COMMITTEE, THE AD HOC CONTRACTS COMMITTEE, AND THE AD HOC VANDER LANS FACILITY EXPANSION COMMITTEE**

Supported by: The Engineering and Hydrogeology Departments

The Water Resources Committee shall study, advise and make recommendations with regard to the following:

1. The operation, protection and maintenance of the District's replenishment water facilities;
2. Policies, sources and means related to the stewardship of the Central and West Coast Groundwater Basins including, but not limited to, importing and distributing water, transferring water and wheeling as required by the District;
3. Policies regarding recycling, reuse and underground storage of water and use thereof;
4. Environmental compliance and requirements and the effect on the District of existing and proposed federal, state and local environmental statutes and regulations;
5. Engineering aspects of all replenishment water projects;
6. Provide input related to the District's Capital Improvement Program as it relates to replenishment water projects; and,
7. Policies related to the District's conjunctive use efforts including but not limited to California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

<b>Board Action</b>	<b>Staff Performance Measure</b>	<b>Board Objective</b>	<b>District Goal*</b>	<b>Project</b>
<p><u>Date of Board Action: 7/2/15</u></p> <p>Authorize the Board President to execute the Project Labor Agreement with the Los Angeles/Orange Counties Building and Construction Trades Council for both the GRIP Turnout Structure Nos. 001B and 002, and Goldsworthy Desalter Expansion Projects, subject to approval of form by District Counsel.</p>	<p><u>Staff Progress: Complete</u></p> <p>The District prepared a Project Labor Agreement (PLA) for both the Groundwater Reliability Improvement Program (GRIP) and Goldsworthy Desalter Expansion Projects. Approval of the PLA will allow for its immediate use on the GRIP Turnout Structure Nos. 001B and 002 Project, and incorporation into the final project plans and specification (bid document) for the Goldsworthy Desalter Expansion Project.</p>	<p>Replace imported water needs at the spreading grounds and clean up existing groundwater contamination.</p>	<p>1 &amp; 2</p>	<p>002 &amp; 033</p>

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<p><u>Date of Board Action: 7/2/15</u></p> <p>Approve Amendment No. 3 with Dakota Communications extending the contract terms to June 30, 2016 with a revised consultant rate schedule reflecting time and materials as needed for an amount not to exceed \$180,000, subject to approval of form by District Counsel.</p>	<p><u>Staff Progress: Complete</u></p> <p>Dakota serves as a lead consultant for GRIP related outreach services and also assists with coordinating communications and activities between five specialized sub-consultants as the GRIP Outreach Consulting Team. The District is continuing its planning, designing, and construction of GRIP's advanced water purification facility (AWPTF) and continuance of the GRIP outreach effort is needed for a successful completion of the GRIP effort.</p>	<p>Educate and promote stakeholder involvement on the value the District's Groundwater Reliability Improvement Program</p>	<p>4</p>	<p>033</p>
<p><u>Date of Board Action: 7/2/15</u></p> <p>Award a construction contract to the lowest responsive and responsible bidder, J.F. Shea Construction, subject to approval of form by District Counsel, for a total amount of \$5,537,775, plus a 10% contingency for unforeseen conditions, not to exceed a total of \$6,091,550.</p>	<p><u>Staff Progress: Complete</u></p> <p>The District is ready to commence construction of the two new turn out structures at the San Gabriel Coastal Basin Spreading Grounds (SGCBSG). Work with J.F. Shea to construct these turn out structures that will increase the operational flexibility at the SGCBSG to allow increased quantities of recycled water to be spread for the groundwater replenishment.</p>	<p>Replace imported water needs at the Montebello Forebay</p>	<p>1 &amp; 2</p>	<p>033</p>
<p><u>Date of Board Action: 7/2/15</u></p> <p>Authorize the issuance of a Request for Expressions of Interest, subject to approval of form by District Counsel.</p>	<p><u>Staff Progress: Complete</u></p> <p>The District issued a Request for Expression of Interest (REOI) as a Design Build Project Delivery for the GRIP Advanced Water Treatment Facility requesting Expressions of Interest (EOI) from potential Respondents for an anticipated DB solicitation process.</p>	<p>Provide a sustainable and reliable source of recycled water for groundwater basin replenishment via the Montebello Forebay.</p> <p>Protect the groundwater quality of the basin.</p>	<p>1 &amp; 2</p>	<p>033</p>
<p><u>Date of Board Action: 7/2/15</u></p> <p>Review and take note of the presentations from the six firms while considering if the design concepts incorporate community input and are buildable, complementing to the built environment, and sustainable.</p>	<p><u>Staff Progress: Complete</u></p> <p>The District carried out a solicitation process to solicit various design concepts for the GRIP Advanced Water Purification Facility (AWPF) that will incorporate public input within their final design. Six firms submitted their designs and staff took notes of their presentations. Based on input from the community outreach and WRD's basis of design report, Gillis + Panichapan Architects has defined the common ground to balance both vision.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>1 &amp; 2</p>	<p>033</p>

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<p><u><a href="#">Date of Board Action: 7/16/15</a></u></p> <p>Authorize the General Manager to execute a no-cost, one year extension to the agreement with the County of Los Angeles Flood Control District and Orange County Water District associated with Alamitos Barrier Project, subject to approval of form by District Counsel.</p>	<p><u><a href="#">Staff Progress: On-going</a></u></p> <p>Reclaimed water services to the Alamitos Barrier is provided by the County of Los Angeles Flood Control District and Orange County Water District. Staffs are working on a new agreement with several changes that will recommending a one year extension.</p>	<p>Provide Safe and Reliable Ground Water</p>	<p>1</p>	<p>023</p>
<p><u><a href="#">Date of Board Action: 7/16/15</a></u></p> <p>Authorize the General Manager to execute a no-cost, one year extension to the agreement with the County of Los Angeles Flood Control District and City of Los Angeles Department of Water and Power associated with Dominguez Gap Seawater Barrier Project, subject to approval of form by District Counsel.</p>	<p><u><a href="#">Staff Progress: On-going</a></u></p> <p>Reclaimed water is purchased by WRD from City of Los Angeles Department of Water and Power and inject into the Dominguez Gap Barrier for WRD. The District enters into a rate modification revision that extends the term of the agreement.</p>	<p>Provide Safe and Reliable Ground Water</p>	<p>1</p>	<p>023</p>
<p><u><a href="#">Date of Board Action: 7/16/15</a></u></p> <p>Approve Contract Amendment with Ruth Villalobos &amp; Associates, with a revised scope of work, to update the deviation request package and reflect a five-year temporary deviation request accordingly with a budget amount not to exceed \$18,700 and extend the contract term to December 31, 2015, subject to approval of form by District Counsel.</p>	<p><u><a href="#">Staff Progress: On-going</a></u></p> <p>Increasing the Whittier Narrows Conservation Pool elevation would allow for an estimated additional 1,100 acre-feet per year of storm water conservation. Manage contract and work with RVA to complete an updated deviation report to allow for a permanent change to the long-term operating plan for the Whittier Narrows Dam.</p>	<p>Increase storm water capture</p>	<p>1 &amp; 2</p>	<p>005</p>
<p><u><a href="#">Date of Board Action: 7/16/15</a></u></p> <p>Authorize the General Manager to amend the Water Purchase Agreement with Central Basin Municipal Water District (CBMWD) for the purchase of an additional 60,000 acre-feet of untreated tier 1 imported water, subject to approval of form by District Counsel.</p>	<p><u><a href="#">Staff Progress: On-going</a></u></p> <p>The amendment will increase 60,000 acre-feet to 120,000 acre-feet of untreated tier 1 imported spreading water that will provide a sufficient quantity to make-up for the past deficit and provide for future projected imported water purchases for 2015/16 through 2017/18</p>	<p>To maximize imported spreading water at the spreading grounds</p>	<p>1</p>	<p>WTR</p>
<p><u><a href="#">Date of Board Action: 7/16/15</a></u></p> <p>1. Approve Contract Amendment with Environmental Science Associates to extend the term of the contract to December 31, 2015, subject to approval of form by District Counsel.</p> <p>2. Approve Contract Amendment with CH2M HILL to extend the term of the contract to December 31, 2015, subject to approval of form by District Counsel.</p>	<p><u><a href="#">Staff Progress: On-going</a></u></p> <p>The District developed a Groundwater Basin Master Plan with CH2MHill and ESA, to provide a single guidance document for parties operating with and maintaining the Central and West Coast Basins. The amendment is needed for additional technical services to include GRIP in finalizing the Master Plan.</p>	<p>Increase storm water capture</p>	<p>1 &amp; 2</p>	<p>005</p>

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<p><u>Date of Board Action: 7/16/15</u></p> <p>Approve the issuance of Request for Proposal for the procurement of a consultant to provide environmental service, serve as the environmental monitor and ensure that the Mitigation Monitoring and Reporting Program (MMRP) is implemented, tracked, and documented accordingly.</p>	<p><b>Staff Progress: On-going</b></p> <p>A Request for Proposal (RFP) was issued for environmental services relating to the deconstruction of the GRIP AWTF site. The selected consultant will serve as the environmental monitor to ensure that the District are in compliance with the Californian Environmental Quality Act (CEQA) requirements throughout all phases of the GRIP AWTF project.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Adopt Resolution No. 15-1016, A Resolution of the Board of Directors of the Water Replenishment District of Southern California authorizing a design-build contract pursuant to a competitive sealed proposal method, and establishing criteria relating to a design-build for the GRIP AWTF project.</p>	<p><b>Staff Progress:</b></p> <p>The District permits the issuance of contracts through the design-build method for the GRIP AWTF, that provide benefits such as reduced project costs, expedite project completion and design features that are not achievable through the traditional design-bid-method.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Approve professional services Agreements with the following consultants, for three-year contract terms, expiring on June 30, 2018, with consultant rate schedules reflecting time and materials, as needed, subject to approval of form by District Counsel. The consultants and respective "not to exceed total Agreement amounts" are listed below: Dakota Communications for an amount not to exceed \$350,000; CCE Consulting Group for an amount not to exceed \$150,000; Citrus Studios for an amount not to exceed \$30,000; Egoscue Law Group for an amount not to exceed \$45,000; John Schwada for an amount not to exceed \$75,000.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with the GRIP related stakeholder outreach services (Dakota and the five sub-consulting firms) to inform the public of the GRIP's progress that will cultivate trusting working relationships with District stakeholders, which will lead to a successful completion of the GRIP effort.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2 &amp; 5</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Award of contract, subject to approval of form by District Counsel, to Innovative Construction Solutions for proposed site security improvements at the Groundwater Reliability Improvement Program Advanced Water Treatment Facility site in the City of Pico Rivera. The total amount for Innovative Construction Solutions is \$14,325 with a 10% contingency for unanticipated work and costs for a not to exceed amount of \$15,760. For purposes of supporting local businesses, the General Manager is authorized to hire an alternate contractor (service provider), if such a provider can be located within the City of Pico Rivera and can perform said services for equal or lesser value.</p>	<p><b>Staff Progress: Complete</b></p> <p>Work with Innovative Construction Solutions for site security improvements at the GRIP AWTF during deconstruction phase of the project.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>

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<p><u>Date of Board Action: 8/6/15</u></p> <p>Authorize the General Manager to enter into the following Agreements allowing the District to provide funding for the DRP and the Study update, subject to approval of form by District Counsel: Federal Cost-Share Agreement with USACE and LACFCD (Study), Memorandum of Understanding with USACE and LACFCD (DRP and Study), and the Board to execute the Cooperative Agreement with LACFCD (DRP and Study).</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with USACE's implementation of the required short (DRP) and long-term operational changes that will provide an additional 1,100 acre-feet per year of storm water at the Whittier's Dam by advancing local funds. Funding the studies, the District enters into terms of inter-agency-cooperation to cover the local agency cost-share.</p>	<p>Increase storm water capture</p>	<p>1</p>	<p>005</p>
<p><u>Date of Board Action: 8/20/15</u></p> <p>Reject all bids and authorize the issuance of a Request for Qualifications for As-Needed General Building Maintenance Services at the District Administration Building.</p>	<p><b>Staff Progress: Complete</b></p> <p>Staff issued Request for Qualifications for as-needed General Building Maintenance Services contract that will allow the District to quickly issue task order on an as-needed basis.</p>	<p>Maintain the District's Admin Code</p>	<p>3</p>	<p>AD-MIN</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Approve a three-year contract for Landscape Maintenance Services to Valley Crest Landscape Maintenance for an amount not to exceed \$26,500 per year, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Work with Valley Crest Landscape Maintenance to care and upkeep sustainable landscape at the District's administrative office, Leo J Vander Lans facility and two wellhead treatment locations in the City of Torrance</p>	<p>Advance the District's Organization Excellence</p>	<p>3</p>	<p>001, 002 &amp; ADM</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Authorize the General Manager to execute a no cost time extension contract amendment with the United States Geological Survey for groundwater modeling work, extending the term to September 30, 2016, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with USGS for its computer modelling upgrades which allows better simulation of groundwater flow in the complex geology of the Central and West Basins. These upgrades are multi-years process and it will take additional time to complete.</p>	<p>Increase storm water capture</p>	<p>1</p>	<p>025</p>
<p><u>Date of Board Action: 8/20/15</u></p> <p>Consider the updated rendering as the final preferred GRIP architectural design concept.</p>	<p><b>Staff Progress: Complete</b></p> <p>Staff worked with SVA (one of the six firms submitting their architectural design concepts) for additional specific elements that is incorporated as the final preferred design concept as part of the District's Design-Build Entity request for Proposal solicitation package.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>

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<p><u>Date of Board Action: 10/1/15</u></p> <p>Authorize the General Manager to execute a no-cost, 2-year time extension to Agreement No. 74570 with the County of Los Angeles Flood Control District and Orange County Water District regarding recycled water deliveries to the Alamitos Seawater Barrier Project, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with the County of Los Angeles Flood Control District and Orange County Water District with modification to recycled water deliveries to the Alamitos Seawater Barrier. Two years extension to the existing agreement allows the FCD adequate time for review and negotiation of potential changes.</p>	<p>Increase Water Deliveries to the Barrier</p>	<p>2</p>	<p>023</p>
<p><u>Date of Board Action: 10/1/15</u></p> <p>Execute a 2-year time extension to the agreement with the County of Los Angeles Flood Control District and City of Los Angeles Department of Water and Power associated with Dominguez Gap Seawater Barrier Project, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Working with FCD and LADPW on a new agreement with modification for reclaimed water service to the Dominguez Gap Barrier that will take two years for review and negotiation of potential changes..</p>	<p>Increase Water Deliveries to the Barrier</p>	<p>2</p>	<p>023</p>
<p><u>Date of Board Action: 10/1/15</u></p> <p>Renew membership with the Water Research Foundation in the amount of \$54,691 for the period of October 2015 to September 2016. This is a budgeted item.</p>	<p><b>Staff Progress: Complete</b></p> <p>Renewing the District's membership with the Water Research Foundation allows the WRD access to and participation in research developments and maximizes leverage of pooling resources for mutually beneficial projects and investigations.</p>	<p>Perform effective basin management</p>	<p>1</p>	<p>006</p>
<p><u>Date of Board Action: 10/1/15</u></p> <p>Approve a no cost time extension amendment with CDM Smith, extending the term to June 30, 2016, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>CDM Smith is the design engineer on record and has been providing engineering support during the construction. This amendment will ensure proper engineering support is provided through the end of construction. Staff is currently managing the contract to complete construction.</p>	<p>Complete construction of the GRIP AWTF</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 10/1/15</u></p> <p>Adopt Resolution No. 15-1019 to authorize the General Manager to include in the invitation to bid for the expansion of the Robert W. Goldsworthy Desalter a specification identifying Wonderware System Platform manufactured by Schneider Electric as the SCADA software for this project and establish Wonderware System Platform as the standard SCADA system software for existing and future WRD facilities.</p>	<p><b>Staff Progress: Complete</b></p> <p>The District recommended and established Wonderware System Platform as the standard SCADA system software for the expansion of the Robert W. Goldsworthy Desalter and for existing and future WRD facilities.</p>	<p>Advance the District's Organization Excellence</p>	<p>3</p>	<p>002</p>

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<p><u>Date of Board Action: 10/1/15</u></p> <p>Approve a contract amendment with Separation Processes, Inc. to include additional support on operations of the Leo J. Vander Lans Facility, subject to approval of form by District Counsel, with an additional not-to-exceed amount of \$90,000 and to extend the contract expiration date to December 31, 2016.</p>	<p><u>Staff Progress: On-going</u></p> <p>Separation Processes assisted the LVLWTF expansion with plant optimization and troubleshooting the operational issues during construction warranty period. With the completion of the plant expansion, SPI continues to provide additional assistance to update the standard operating procedures and to develop plant optimization strategies.</p>	<p>To replace all imported water at the barriers with advance-treated recycled water</p>	<p>2</p>	<p>001</p>
<p><u>Date of Board Action: 10/15/15</u></p> <p>(1)Recommend three (3) design-build entities to be short-listed; (2) Recommend distribution of the Request for Proposal (RFP) to the three (3) short-listed design-build entities; (3) Recommend issuance of \$100,000 stipend for the unsuccessful short-listed design-build entities.</p>	<p><u>Staff Progress: Complete</u></p> <p>Staff completed work on preparing and distributing design-build entity procurement documents and RFP to the three shortlisted DBE teams which includes J.F. Shea Construction, McCarthy Building Companies, and Walsh Construction Company. The District only awarded Walsh Construction Company for the recommended \$100,000 stipend as McCarthy Building Companies dropped out of the DBE team.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 10/15/15</u></p> <p>Place Amendment No. 2 to existing Project Labor Agreement for Groundwater Reliability Improvement Program (GRIP) Turnout Structure Nos. 001B and 002 Goldsworthy Desalter Expansion Project, Deconstruction of 4320, 4330 and 4334 San Gabriel River Parkway Project, Brine Pipeline Improvements Project and GRIP – Advanced Water Treatment Facility Project on regular Board agenda for discussion so that the building and construction trades can be recognized and acknowledged for their support accordingly.</p>	<p><u>Staff Progress: Complete</u></p> <p>The approved Project Labor Agreement (PLA) consisted of the GRIP Turnout Structure Nos 001B and 002, and Goldsworthy Desalter Expansion Projects. Amendment #2 was to add the GRIP AWTF project to the PLA.</p>	<p>In compliance with Federal and State Wage requirements</p>	<p>2</p>	<p>002 &amp; 033</p>
<p><u>Date of Board Action: 10/15/15</u></p> <p>Authorize the General Manager to enter into an Agreement with the Main San Gabriel Basin Watermaster for Water Deliveries from the Whittier Narrows Operable Unit.</p>	<p><u>Staff Progress: On-going</u></p> <p>Enter a new agreement with Main Basin Watermaster to account for any WNOU water that is received by WRD and credited as replenishment water at a Tier 1 untreated water rates to contain the plume from contamination and protect the Central Basin aquifers.</p>	<p>Increase Storm Water Capture</p>	<p>1 &amp; 2</p>	<p>005</p>

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<p><u>Date of Board Action: 11/12/15</u></p> <p>Approve Contract Amendment No. 1 with American Security Force, subject to approval of form by District Counsel, to provide an additional amount of \$20,000 (rounded and includes 10% contingency) for increased security services and extend the contract term through December 31, 2015.</p>	<p><u>Staff Progress: Complete</u></p> <p>Due to vandalism prior to the deconstruction phase of the GRIP AWTF, staff requested additional security services from American Security Force to discourage further break-ins until deconstruction begins.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 11/12/15</u></p> <p>Approve Contract Amendment No. 1 with Innovative Construction Solutions, Inc., subject to approval of form by District Counsel, to provide an additional amount of \$10,000 for the recent site security improvements and any future site improvements that may be necessary.</p>	<p><u>Staff Progress: Complete</u></p> <p>Innovative Construction Solutions provides temporary site security improvements during the deconstruction of the GRIP AWTF. Amendment 1 is needed to cover these additional services due to the site being vandalized.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 11/12/15</u></p> <p>AD HOC GRIP COMMITTEE</p> <p>Amend the contract for Kosmont Transaction Services from the current scope of Financial Advisor to Pricing Advisor for an amount not to exceed \$5,000.</p>	<p><u>Staff Progress:</u></p> <p>Kosmont Transaction Securities provide services to the District as a pricing advisor for the District's upcoming bond issuance and acts as a fiduciary of the District.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 11/12/15</u></p> <p>Approve \$15,000 membership and \$5,000 sponsorship of the CCCA Fall Conference.</p>	<p><u>Staff Progress: Complete</u></p> <p>The District utilize its memberships with the CCCA to take a larger role in addressing regional water issues to a broad base of the District's community and cities. As a sponsor of the CCCA Fall conference, the District will have the opportunity to focus on issues that best serves the Association's stated goals and objectives.</p>	<p>Promote Water Conservation</p>	<p>4</p>	<p>EAC</p>
<p><u>Date of Board Action: 11/12/15</u></p> <p>Approve the Resolution approving the filing of the application for the SGLA Rivers and Mountains Conservancy (RMC) Proposition 1 Grant Program for the urban greening, public access, and stormwater capture at the Groundwater Reliability Improvement Project (GRIP).</p>	<p><u>Staff Progress: On-going</u></p> <p>Work with RMC in submitting the District's state grant Proposition 1 application for the urban greening, public access and storm water capture at the GRIP site.</p>	<p>Provide the most-cost effective capital project infrastructure by securing grant funding</p>	<p>1</p>	<p>033</p>

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<p><u>Date of Board Action: 11/19/15</u></p> <p>(1) Approve the request from Innovative Construction Solutions to withdraw their bid and release their bid bond; (2) Award a construction contract to American Wrecking, Inc. for the deconstruction of the GRIP AWTF site for an amount not to exceed \$888,360.</p>	<p><b>Staff Progress: Complete</b></p> <p>The District officially awarded Innovative Construction Solutions a contract for the deconstruction of the GRIP AWTF site and formally requested to withdraw its bid. The District awarded the deconstruction contract to the lesser bidder to American Wrecking.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 11/19/15</u></p> <p>Award a professional services contract with Rincon Consultants, Inc. for environmental services related to the deconstruction of the GRIP AWTF site for an amount not to exceed \$162,883.</p>	<p><b>Staff Progress: On-going</b></p> <p>Work with Rincon Consultants in providing environmental services relating to the deconstruction of the GRIP AWTF site.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 11/19/15</u></p> <p>Authorize the General Manager to enter in to a MOU with the Los Angeles County Flood Control District for Integrated Regional Water Management Planning and Implementation for the Greater Los Angeles County Region.</p>	<p><b>Staff Progress: Complete</b></p> <p>The 2012 MOU is set to expire and entering into a 2015 MOU with the LACFCD that will allow the District to continue its participation with the GLAC IRWM Leadership Committee that ensure the planning and implementation of the IRWM Plan.</p>	<p>Perform effective basin management</p>	<p>1</p>	<p>005</p>
<p><u>Date of Board Action: 11/19/15</u></p> <p>(1) Award the construction contract for the Robert W. Goldsworthy Desalter Expansion Project to Shimmick Construction Company, Inc. in the amount of \$12,673,000; and (2) Approve the request by PCL Construction Inc. to withdraw its bids and directs staff to return the bid bond to PCL.</p>	<p><b>Staff Progress: On-going</b></p> <p>Shimmick Construction Company will be constructing the Robert W. Goldsworthy Desalter Expansion project that will double the production capacity from 2.5 to 5.0 million gallon per day (mgd).</p>	<p>Provide alternative water supply to the City of Torrance and mitigate the saline plume within the West Coast Groundwater Basin</p>	<p>1</p>	<p>002</p>
<p><u>Date of Board Action: 12/17/15</u></p> <p>Approve a no-cost time extension contract Amendment No. 3 with Ruth Villalobos &amp; Associates, extending the terms to June 30, 2016.</p>	<p><b>Staff Progress: On-going</b></p> <p>Increasing the Whittier Narrows Conservation Pool elevation would allow for an estimated additional 1,100 acre-feet per year of storm water conservation. Manage contract and work with RVA to complete an updated deviation report to allow for a permanent change to the long-term operating plan for the Whittier Narrows Dam.</p>	<p>Increase storm water capture</p>	<p>1 &amp; 2</p>	<p>005</p>

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<p><u>Date of Board Action: 12/17/15</u></p> <p>Approve Contract Amendment No. 5 with CH2M Hill to extend the term of the contract to May 31, 2016, with a budget increase, including a 10% contingency, of \$26,400.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with CH2M Hill to address additional oversight activities during the conversion of groundwater production wells into monitoring wells for the Goldsworthy Desalter Expansion Project.</p>	<p>Provide alternative water supply to the City of Torrance and mitigate the saline plume within the West Coast Groundwater Basin</p>	1	002
<p><u>Date of Board Action: 12/17/15</u></p> <p>Approve Contract Amendment with CH2M Hill to extend the term of the contract to December 31, 2016.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue working with CH2M Hill to provided technical support services for the District's Groundwater Basins Master Plan and Programmatic Environmental Impact Report. No cost extension is needed to allow more time to complete the approved scope of work.</p>	<p>Perform effective basin management</p>	1	005
<p><u>Date of Board Action: 12/17/15</u></p> <p>Adopt Resolution No. 15-1024 ordering the preparation of the 2016 Engineering Survey and Report per the requirements of Water Code section 60300.</p>	<p><b>Staff Progress: Complete</b></p> <p>Perform analysis of groundwater basin and provide information to the Board of Directors</p>	<p>Perform effective basin management</p>	1	025
<p><u>Date of Board Action: 12/17/15</u></p> <p>Approve a Contract Amendment with ESA to extend the term of the contract to December 31, 2016, with a budget increase, including a 10% contingency, of \$255,700, for additional environmental analysis associated with GRIP.</p>	<p><b>Staff Progress: On-going</b></p> <p>Staff is working with ESA to finalize the environmental analysis associated with the PEIR for the Groundwater Basin Master Plan. An extension is necessary to complete the study and added additional environmental services for the GRIP Project as a component of the Groundwater Master Plan.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 12/17/15</u></p> <p>Authorize the District's Chief Engineer to prepare and release a request for qualification, for hydraulic analysis, operations efficiencies and optimization alternatives study for the Leo J. Vander Lans Advanced Water Treatment Facility.</p>	<p><b>Staff Progress: On-going</b></p> <p>An engineering study is commissioned to address hydraulic issues, operational efficiencies, and evaluate alternatives to optimize and stabilize operation of the LJVW AWTF</p>	<p>Advance the operation of the Leo J Vander Lans AWTF facility</p>	2	001
<p><u>Date of Board Action: 2/4/16</u></p> <p>Approve a no-cost time extension with Lawrence Livermore National Laboratories (LLNL) for a Groundwater Tracer Study.</p>	<p><b>Staff Progress: On-going</b></p> <p>LLNL conducted a groundwater tracer research project required for recycled water projects at all three seawater barriers. Due to long arrival times for observing the tracer and weather delays for sample collection, a co-cost time extension is needed to complete the project.</p>	<p>Perform effective basin management</p>	1	025

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<p><u>Date of Board Action: 2/4/16</u></p> <p>Receive and file the 2014-15 Regional Groundwater Monitoring Report.</p>	<p><b>Staff Progress: Complete</b></p> <p>Major components of the staff implemented program include: establishing and maintaining a network of monitoring wells, collecting and performing in-depth analysis of water levels and water quality samples, and incorporating the information in WRD's Geographic Information System (GIS) for efficient database storage and retrieval.</p>	<p>Perform effective basin management</p>	<p>1</p>	<p>011</p>
<p><u>Date of Board Action: 2/4/16</u></p> <p>Authorize the General Manager to approve the purchase of up to 4,335 acre-feet of untreated Tier 1 water from Long Beach at the rate of \$700 per acre-foot.</p>	<p><b>Staff Progress: Complete</b></p> <p>The basin was replenished by the delivery of 4,335 acre-feet of imported untreated Tier 1 water to the spreading grounds, from Metropolitan Water District through Long Beach Water Department to replenish the basin.</p>	<p>To replenish the groundwater basin</p>	<p>1</p>	<p>023</p>
<p><u>Date of Board Action: 2/4/16</u></p> <p>Adopt the WRD Five-Year Strategic Plan.</p>	<p><b>Staff Progress: Complete</b></p> <p>The Five-Year Strategic Plan document identifies the District's five main goals and it is reviewed and updated annually.</p>	<p>Plan for the future capital and strategic needs</p>	<p>1 &amp; 2</p>	<p>005</p>
<p><u>Date of Board Action: 3/3/16</u></p> <p>Approve 2016 membership dues for the California Groundwater Coalition (CGC) in the amount of \$9,500.</p>	<p><b>Staff Progress: Complete</b></p> <p>The Coalition's mission is to educate policy makers about groundwater; represent groundwater interests and promote the benefits of comprehensive groundwater management.</p>	<p>Advance groundwater awareness with state and local officials</p>	<p>4</p>	<p>025</p>
<p><u>Date of Board Action: 3/3/16</u></p> <p>Receive and file the Engineering Survey and Report (ESR), and adopt Resolution No. 16-1026.</p>	<p><b>Staff Progress: Complete</b></p> <p>Perform analysis of groundwater basin and provide information to the Board of Directors in the ESR.</p>	<p>Perform effective basin management</p>	<p>1</p>	<p>025</p>
<p><u>Date of Board Action: 3/17/16</u></p> <p>Authorize the General Manager to execute the First Amendment to 2009 Amended and Restated Operating Agreement with the Long Beach Water Department for the Leo J. Vander Lans Water Treatment Facility.</p>	<p><b>Staff Progress: Complete</b></p> <p>Long Beach Water Department currently operates the newly expanded LJVW AWTF facility under a 2009 Operating agreement. In-lieu of an amendment, the District entered into a letter of agreement with Long Beach Water Department to revise all scope of work in regards to the expansion.</p>	<p>Perform effective operations of the barriers</p>	<p>1</p>	<p>001</p>

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<p><u>Date of Board Action: 4/21/16</u></p> <p>The Board approve amending the existing CH2M Hill for professional services to include Groundwater Modeling for an amount not to exceed \$150,000 and a pass-through agreement with MWD for an amount not to exceed \$150,000.</p>	<p><u>Staff Progress: On-going</u></p> <p>A new scope of work will be added to CH2M Hill's existing contract to perform pass-through work and costs to the Metropolitan Water District of Southern California for their Groundwater Modeling recycled water project.</p>	<p>Perform effective basin management</p>	<p>1</p>	<p>005</p>
<p><u>Date of Board Action: 5/9/16</u></p> <p>That the Board approve the 2016/17 Budget reflecting an increase to the replenishment assessment to \$297.00 per acre-foot or a 5.0% increase using \$2,800,000 from the Water Purchase Carryover Fund as rate stabilization.</p>	<p><u>Staff Progress: Complete</u></p> <p>Provide the Board with several committee recommendations for the 2016/17 RA rate increase using the Carryover Funds as rate stabilization.</p>	<p>Provide public transparency and accountability and comply with California Water Code</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 5/19/16</u></p> <p>Approve an extension of the termination date of the contract to December 31, 2016 to complete the DRP and accommodate the requests from the USACE; and to allow an additional fee adjustment of \$13,000.</p>	<p><u>Staff Progress: On-going</u></p> <p>Continue working with Ruth Villalobos in completing and updating the Deviation Request Package required by USACE for the elevation of the Whittier Narrow Conservation Pool that will capture more storm water for replenishing the spreading grounds.</p>	<p>Increase Stormwater Capture</p>	<p>1 &amp; 2</p>	<p>005</p>

**\*District Goal**

- 1 – Provide safe and reliable groundwater
- 2 – Obtain independence from imported water sources
- 3 – Promote organizational excellence
- 4 – Advance groundwater awareness
- 5 – Foster environmental stewardship & water sustainability

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## GROUNDWATER QUALITY COMMITTEE

Supported by: The Engineering and Hydrogeology Departments

The Groundwater Quality Committee shall study, advise and make recommendations with regard to the following:

1. The operation, protection and maintenance of the District's water quality facilities;
2. Engineering aspects of all water quality projects;
3. The effect on the District of existing and proposed federal, state and local water quality statutes and regulations;
4. Provide input related to the District's Capital Improvement Program as it relates to water quality projects.

### 2015/16 Performance Metrics – Groundwater Quality Committee

Board Action	Staff Performance Measure	Board Objective	District Goal*	Project
<p><u>Date of Board Action: 7/2/15</u></p> <p>Authorize the General Manager to execute a contract amendment with Kennedy Communications for professional services, for an additional amount not to exceed \$50,000 through December 31, 2015, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: Safe Drinking Water Program is on-going</b></p> <p>Manage contract and work with Kennedy Communications to provide additional outreach related to the Safe Drinking Water Disadvantaged Communities Pilot Program.</p>	Promote the Safe Drinking Water Program and groundwater cleanup	1 & 4	012
<p><u>Date of Board Action: 7/2/15</u></p> <p>Authorize Contract Amendment No. 4 with CH2M HILL for the Goldsworthy Desalter Expansion Project, subject to approval of form by District Counsel, to perform additional well drilling and construction oversight services for an amount not to exceed \$76,600, and a contract extension to December 31, 2015.</p>	<p><b>Staff Progress: Complete</b></p> <p>Converted into monitoring wells.</p>	Perform effective basin management	1	002
<p><u>Date of Board Action: 8/6/15</u></p> <p>Adopt Resolution No. 15-1017, A Resolution of the Board of Directors of the Water Replenishment District of Southern California amending Resolution No. 13-947, a Non-Consumptive Water Use Permit with Omega Chemical Group PRP Group, LLP, for groundwater remediation in Whittier, California.</p>	<p><b>Staff Progress: On-going</b></p> <p>Resolution No 15-1017 was adopted to amend Resolution No 13-947 to bring contaminated groundwater extraction associated with Northrop Grumman/Omega Chemical into full compliance under the Non-Consumptive Water User Permit.</p>	Promote the Safe Drinking Water Program and groundwater cleanup	1	006
<p><u>Date of Board Action: 8/6/15</u></p> <p>Authorize the General Manager to execute a 12-month Professional Services Agreement with Kindel Gagan, Inc. for strategic support services for a monthly fee of \$10,000 plus \$225 per hour for additional on call services for an amount not to exceed \$150,000.</p>	<p><b>Staff Progress: On-going</b></p> <p>Continue work with Kindel Gagan for strategic support services for program and policy initiatives in support of water resources.</p>	Perform effective basin management	1	005

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<p><u>Date of Board Action: 8/6/15</u></p> <p>Authorize the General Manager to award a contract to Pacific Resources Services in an amount not to exceed \$203,000 (base contract amount) plus a 10% contingency (\$20,300) for unforeseen conditions, for a total cost not to exceed \$223,600 for labor compliance monitoring and reporting services related to GRIP, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Provides Federal, State and Local labor standards compliance monitoring services for contracts funded by grants or other District provided construction funds.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Authorize the General Manager to negotiate an extended scope of work, fee, and schedule with SVA Architects, Inc. to develop an Architectural Program, which will identify the immediate and future requirements for GRIP, for an amount not to exceed \$70,000 which includes a 10% contingency.</p>	<p><b>Staff Progress: Complete</b></p> <p>Architectural Program developed identifying immediate and future requirements for GRIP, such as space allocations, building components, support area and parking requirements.</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Approve the issuance of a Request for Bids (RFB) to retain a contractor to perform deconstruction activities at the GRIP property site.</p>	<p><b>Staff Progress: Complete</b></p> <p>RFB issued &amp; contractor selected</p>	<p>Advanced the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 10/1/15</u></p> <p>Authorize a contract amendment with Ardent Environmental Group to cover out of scope items related to monitoring well construction oversight during the Los Angeles Forebay Groundwater Investigation for an amount not to exceed \$23,200, and a time extension to February 28, 2016, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: Complete</b></p> <p>Provided hydrogeologic services and construction oversight during the drilling, installation, and development of environmental monitoring wells.</p>	<p>Promote the Safe Drinking Water Program and groundwater cleanup</p>	<p>1</p>	<p>006</p>
<p><u>Date of Board Action: 12/3/15</u></p> <p>Authorize the General Manager to execute a contract amendment with Kennedy Communications for professional services, for an additional amount not to exceed \$50,000 and contract extension through June 30, 2016.</p>	<p><b>Staff Progress: Safe Drinking Water Program is on-going</b></p> <p>Manage contract and work with Kennedy Communications to provide additional outreach related to the Safe Drinking Water Disadvantaged Communities Pilot Program.</p>	<p>Promote the Safe Drinking Water Program and groundwater cleanup</p>	<p>1 &amp; 4</p>	<p>012</p>

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<p><u>Date of Board Action: 2/4/16</u></p> <p>Approve the MOU for the Safe Drinking Water Program Disadvantaged Communities (DAC) Pilot Program and authorize execution of the MOUs between the District and the DAC Participants.</p>	<p><u>Staff Progress: On-going</u></p> <p>Assists small water system providers in applying for funding from various sources including the Safe Drinking Water State Revolving Funds, the US EPA and sources through the Proposition 1 Water Bond. (City of Bell Gardens, City of Compton, City Huntington Park, City of Lynwood, Maywood Mutual Water Company No 2 &amp; 3, and Sativa LA Count City of Bell Gardens, City of Compton, City Huntington Park, City of Lynwood, Maywood Mutual Water Company No 2 &amp; 3, and Sativa LA County Water District.)</p>	<p>Promote the Safe Drinking Water Program and groundwater cleanup</p>	<p>1</p>	<p>012</p>
<p><u>Date of Board Action: 2/4/16</u></p> <p>Renew membership with the WaterReuse Research Foundation and the WaterReuse Association in the amounts of \$12,000 and \$8,624, respectively, for a total of \$20,624 for calendar year 2016.</p>	<p><u>Staff Progress: Complete</u></p> <p>Membership provides the District access to and participation in state-of-the-art research developments in the recycled water industry and also maximizes leverage of pooling of resources for mutually beneficial projects and investigations.</p>	<p>Perform effective basin management and Support water research</p>	<p>1 &amp; 4</p>	<p>004</p>
<p><u>Date of Board Action: 3/17/16</u></p> <p>Authorize the General Manager to enter into an agreement with the City of Vernon, subject to approval of form by District Counsel, for the sampling of WRD's monitoring wells as part of their permit compliance for a new drinking water well.</p>	<p><u>Staff Progress: Complete</u></p> <p>Sampled three deep nested groundwater monitoring wells installed by WRD. The wells were installed to further characterize a perchlorate groundwater plume located in the City of Vernon. Prop 1 grant funds are being requested from the state to address a localized "hot spot" with some of the highest perchlorate concentrations in California. WRD is working closely with the DTSC.</p>	<p>Address Groundwater Contamination</p>	<p>1</p>	<p>006</p>
<p><u>Date of Board Action: 4/28/16</u></p> <p>Approve amending the existing professional services agreement with WECK Laboratories for the Title 22 Groundwater Monitoring Program for an amount not to exceed \$80,000.</p>	<p><u>Staff Progress: Complete</u></p> <p>Existing professional services contract with Weck Laboratories amended for water testing and lab services related to the Title 22 monitoring program, which is related to groundwater contamination.</p>	<p>Address Groundwater Contamination</p>	<p>1</p>	<p>006</p>

**\*District Goal**

- 1 – Provide safe and reliable groundwater
- 2 – Obtain independence from imported water sources
- 3 – Promote organizational excellence
- 4 – Advance groundwater awareness
- 5 – Foster environmental stewardship & water sustainability

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## FINANCE/AUDIT COMMITTEE, AD HOC BUDGET COMMITTEE, AD HOC BOND FINANCING COMMITTEE

Supported by: The Finance Department

The Finance/Audit & Ad Hoc Budget Committee shall study, advise and make recommendations with regard to the following:

1. Financial activities of the District by reviewing the monthly demands, financial statements, reimbursements and other key financial issues of the District;
2. Be the oversight Committee responsible to the Board of Directors for coordinating the annual budget process and monitoring the budget as necessary to ensure that the operations of the District are conducted pursuant to it;
3. Be responsible to the Board for the District's investment policy and monitoring the District's investment portfolio. The committee is to monitor any short, intermediate, and long-term capital needs of the District;
4. Acts as the Audit Committee relating to the Comprehensive Annual Financial Audit (CAFA) conducted by the District's independent financial auditor; and,
5. Shall not make recommendations to the Board of Directors on any matters which are the purview of other committees.

### 2015/16 Performance Metrics – Finance/Audit Committee

Board Action	Staff Performance Measure	Board Objective	District Goal*	Project
<u>Date of Board Action: 7/16/15</u> Receive and file the demands list for May 2015.	Staff Progress: Complete	Promote organization efficiencies & provide transparency and accountability	3	ADMIN
<u>Date of Board Action: 7/16/15</u> Approve the Financial Statements for May 2015.	Staff Progress: Complete	Promote organization efficiencies & provide transparency and accountability	3	ADMIN
<u>Date of Board Action: 7/16/15</u> Approve the Reserves, Cash & Investment Reports for the periods ending March 31, April 30 & May 31 2015,	Staff Progress: Complete	Promote organization efficiencies & provide transparency and accountability	3	ADMIN
<u>Date of Board Action: 7/16/15</u> Approve the Trust fund Reports for the periods ending March 31, April 30 & May 31 2015.	Staff Progress: Complete	Promote organization efficiencies & provide transparency and accountability	3	ADMIN

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<p><u>Date of Board Action: 7/16/15</u></p> <p>Adopt Resolution No. 15-1011, A Resolution of the Board of Directors of the Water Replenishment District of Southern California to file a financial assistance application for a financing agreement with the State Water Resources Control Board for the planning, design and construction of the Groundwater Reliability Improvement Program Advanced Water Treatment Facility.</p>	<p><u>Staff Progress: Complete</u></p> <p>The federal Clean Water Act established the Clean Water State Revolving Fund (CWSRF) Program to finance protection &amp; improvement of water quality. Prop 1 authorized \$7.545 billion in general obligation bonds for water projects including surface &amp; groundwater storage, eco system &amp; watershed protection &amp; restoration, and drinking water protection. The District met with State Water Resources Control Board staff to discuss the District's application for Prop 1 Funding.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Adopt Resolution No. 15-1012, A Resolution of the Board of Directors of the Water Replenishment District of Southern California authorizing the advance of funds for the Groundwater Reliability Improvement Program Advanced Water Treatment Facility subject to later reimbursement of District expenses by the State Water Resources Control Board.</p>	<p><u>Staff Progress: Complete</u></p> <p>The federal Clean Water Act established the Clean Water State Revolving Fund (CWSRF) Program to finance protection &amp; improvement of water quality. Prop 1 authorized \$7.545 billion in general obligation bonds for water projects including surface &amp; groundwater storage, eco system &amp; watershed protection &amp; restoration, and drinking water protection. The District met with State Water Resources Control Board staff to discuss the District's application for Prop 1 Funding.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Adopt Resolution No. 15-1013, A Resolution of the Board of Directors of the Water Replenishment District of Southern California to dedicate and pledge replenishment assessment revenues to the payment of any and all Clean Water State Revolving Fund and/ or Water Recycling Funding Program Financing for the Groundwater Reliability Improvement Program Advanced Water Treatment Facility.</p>	<p><u>Staff Progress: Complete</u></p> <p>The federal Clean Water Act established the Clean Water State Revolving Fund (CWSRF) Program to finance protection &amp; improvement of water quality. Prop 1 authorized \$7.545 billion in general obligation bonds for water projects including surface &amp; groundwater storage, eco system &amp; watershed protection &amp; restoration, and drinking water protection. The District met with State Water Resources Control Board staff to discuss the District's application for Prop 1 Funding.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Award a contract to Norton Rose Fulbright, LLP for bond counsel services for \$92,500 with a 10% contingency of \$9,250 for a total not to exceed amount of \$101,750.</p>	<p><u>Staff Progress: Complete</u></p> <p>Bond counsel ensures that the bonds are legal, valid &amp; a binding obligation of the issuer. The bond counsel also verifies the tax status of the debt. WRD sold \$148,345,000 in RA Revenue Bonds at an effective AAA interest rate cost of 3.49%.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>

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<p><u>Date of Board Action: 7/16/15</u></p> <p>Award a contract to Nossaman, LLP for disclosure counsel services for \$75,000 with a 10% contingency of \$7,500 for a total not to exceed amount of \$82,500.</p>	<p><b>Staff Progress: Complete</b></p> <p>Bond disclosure counsel provides legal opinion regarding bond disclosure obligations as well as prepare the official statement and continuing disclosure agreement. Nossaman has been bond counsel for WRD in all of its 3 previous bond issuances. WRD sold \$148,345,000 in RA Revenue Bonds at an effective AAA interest rate cost of 3.49%.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 7/16/15</u></p> <p>Award a contract to Kosmont Transaction Services for financial advisor services for \$40,100 with a 10% contingency of \$4,000 for a total not to exceed amount of \$44,100.</p>	<p><b>Staff Progress: Complete</b></p> <p>The financial advisor assists in the structuring and issuance of bonds, and coordinates the interaction between the members of the financing team and the bond rating agencies. The financial advisor acts as the pricing advisor to ensure that the agency receives the best possible pricing of its debt. WRD sold \$148,345,000 in RA Revenue Bonds at an effective AAA interest rate cost of 3.49%.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Approve Norton Rose Fulbright, LLP as Bond/Disclosure Counsel for an additional \$22,500 plus a 10% contingency of \$2,250 for a total increase of \$24,750.</p>	<p><b>Staff Progress: Complete</b></p> <p>On 7/16/15, the BOD approved Norton Rose Fulbright, LLP as Bond Counsel &amp; Nossaman, LLP as Disclosure Counsel. As the District moved through the financing process, the Financing Team recommended that Norton et al provide both Bond and Disclosure Counsel services while Nossaman, LLP would assume the role of Underwriter's Counsel assisting the Underwriter in drafting bond purchase agreements, and drafting the preliminary official statement and final official statement. WRD sold \$148,345,000 in RA Revenue Bonds at an effective AAA interest rate cost of 3.49%.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 8/6/15</u></p> <p>Approve Wells Fargo Securities as the District's Senior Managing Underwriter for the 2015 bond issuance.</p>	<p><b>Staff Progress: Complete</b></p> <p>A Bond Underwriter is a securities dealer who helps government entities bring bond issues to market. The key role of the Underwriter is to buy the bonds from the issuer and then resell them to investors. The Senior Managing Underwriter provides the primary investment banking and structuring input to the District's Financial Team and coordinates the syndicate's efforts in marketing the District's bonds. WRD sold \$148,345,000 in RA Revenue Bonds at an effective AAA interest rate cost of 3.49%.</p>	<p>Obtain long term financing to fund the District's 5-year capital improvement program</p>	<p>1 &amp; 2</p>	<p>ADMIN</p>

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<p><u>Date of Board Action: 8/6/15</u></p> <p>Adopt Resolution No. 15-1018 – A Resolution of the Board of Directors of the Water Replenishment District of Southern California Approving, Authorizing, and Directing Execution of a Joint Exercise of Powers Agreement Relating to the California Municipal Finance Authority (CMFA).</p>	<p><u>Staff Progress: Complete</u></p> <p>Adoption of Resolution No. 15-1018 approves the District's membership to the CMFA with the execution of a Joint Exercise of Powers Agreement. The purpose of the CMFA is to promote economic, cultural and community development activities. A partnership with the CMFA would allow WRD to issue conduit revenue bonds rather than COPs and could result in a lower interest rate to the District.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 8/20/15</u></p> <p>AMENDED - Adopt Resolution No. 15-1011, A Resolution of the Board of Directors of the Water Replenishment District of Southern California to file a financial assistance application for a financing agreement with the State Water Resources Control Board for the planning, design and construction of the Groundwater Reliability Improvement Program Recycled Water Project.</p>	<p><u>Staff Progress:</u></p> <p>The revised resolution adjusted the amount of the financial agreement with the State Water Resources Control Board to finance the planning, design and construction of the GRIP AWTF project from the Clean Water State Revolving Fund loans provided through Prop 1 Funding.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 8/20/15</u></p> <p>AMENDED - Adopt Resolution No. 15-1012, A Resolution of the Board of Directors of the Water Replenishment District of Southern California authorizing the advance of funds for the Groundwater Reliability Improvement Program Recycled Water Project subject to later reimbursement of District expenditures by the State Water Resources Control Board.</p>	<p><u>Staff Progress:</u></p> <p>Staff filed a financial assistance application and entered into an agreement to borrow funds for the planning, design and construction of the GRIP AWTF project that is interest cost savings to the District.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 10/15/15</u></p> <p>Approve the contract restatement with the Public Agency Retirement Services (PARS).</p>	<p><u>Staff Progress:</u></p> <p>PARS Plan Restatement is amended to bring the current agreement into compliance with Internal Revenue Service guidelines.</p>	<p>Provide public transparency and accountability</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 11/12/15</u></p> <p>Approve Resolution No. 15-01 approving the Bylaws of the Water Replenishment Financing Authority.</p>	<p><u>Staff Progress:</u></p> <p>Resolution No 15-01 established bylaws for the 'Water Replenishment District of Southern California Financing Authority', that would allow the District to issue conduit revenue bonds with a lower interest rate.</p>	<p>Promote organization efficiencies &amp; provide transparency and accountability</p>	<p>3</p>	<p>ADMIN</p>

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<p><u>Date of Board Action: 11/5/15</u></p> <p>Approve regular meetings of the Water Replenishment District of Southern California Financing Authority.</p>	<p><b>Staff Progress:</b></p> <p>The regulars meeting of the Board of Directors of the Authority is held at the same location as the board of Directors meetings of the District, or such other place as the Authority may designate from time to time.</p>	<p>Promote organization efficiencies &amp; provide transparency and accountability</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 11/19/15</u></p> <p>Approve the trade-in of two fleet vehicles and purchase of a new fleet vehicle.</p>	<p><b>Staff Progress:</b></p> <p>A new all-purpose fleet vehicle was purchased at a net cost using the two old district vehicles as trade-in.</p>	<p>Provide reliable transportation for the District</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 12/3/15</u></p> <p>Approve the Policies and Guideline regarding Post-Issuance Compliance with Federal Tax Requirements Applicable to Tax-Exempt Bonds.</p>	<p><b>Staff Progress:</b></p> <p>Policies and guidelines developed by Bond Counsel was to satisfy the federal tax requirements.</p>	<p>Obtain guidelines to support the District's financial function</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 1/21/16</u></p> <p>Approve the release of Request for Qualifications for investment management services.</p>	<p><b>Staff Progress:</b></p> <p>The District issued Request for Qualification (RFQ) for Investment Management Services to assist in obtaining the maximum level of interest earning for its 2015 Series RA Revenue Bonds debt.</p>	<p>Maintaining safety and liquidity of the District assets</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 1/21/16</u></p> <p>Approve the release of Request for Proposals for facilities maintenance services.</p>	<p><b>Staff Progress:</b></p> <p>Staff issued a Request for Proposal for facilities management services to obtain additional bids and options for possibly changing the current vendor.</p>	<p>Safekeeping of District property</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 3/3/16</u></p> <p>The Board of Directors set the RA amount for the 2016/17 Proposition 218 notices at \$322.00 or 13.78%.</p>	<p><b>Staff Progress: Complete</b></p> <p>The Replenishment Assessment was set at \$322 or 13.78% (based on the worst case scenario of 220,000 acre-feet of pumping) for the 2016/17 Proposition 218 hearing proceedings.</p>	<p>Provide public transparency and accountability and comply with California State Water Code</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 4/21/16</u></p> <p>Approve to receive and file the demands list for February 29, 2016.</p>	<p><b>Staff Progress: Complete</b></p> <p>Received and filed the February 2016 Demands Lists</p>	<p>Provide public transparency and accountability</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 5/9/16</u></p> <p>Establish the Replenishment Assessment for Fiscal Year 2016/17 at a 5% increase to be \$297 per acre-foot pumped &amp; adopt Resolution No. 16-1032 from the Water Purchase Carryover Reserve Fund.</p>	<p><b>Staff Progress: Complete</b></p> <p>Provide the Board of Directors and the public with an open public hearing process related to the 2016/17 replenishment assessment and adopted the related Resolution.</p>	<p>Provide public transparency and accountability and comply with California State Water Code</p>	<p>3</p>	<p>ADMIN</p>

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<p><u>Date of Board Action: 5/9/16</u></p> <p>That the Board approve the 2016/17 Budget reflecting an increase to the replenishment assessment to \$297.00 per acre-foot or a 5.0% increase using \$2,800,000 from the Water Purchase Carryover Fund as rate stabilization.</p>	<p><u>Staff Progress: Complete</u></p> <p>The 2016/17 Budget was approved and filed with the related replenishment assessment.</p>	<p>Provide public transparency and accountability and comply with California State Water Code</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 5/19/16</u></p> <p>Adopt Resolution 10-1030 – a joint resolution of the Board of Supervisors of the County of Los Angeles, the Board of Trustees of the Greater Los Angeles County Vector Control District, the Board of Directors of the County Sanitation District No. 18 of Los Angeles County, the City Council of the City of La Mirada as successor of interest to the La Mirada-Southeast Recreation and Park District, the City Council of the City of Norwalk a successor of interest to the Norwalk-Southeast Recreation and Park District, and the Board of Directors of the Water Replenishment District of Southern California approving and accepting the negotiated exchange of property tax revenues resulting from annexation of L 054-2015 to County Lighting Maintenance District 1687.</p>	<p><u>Staff Progress: Complete</u></p> <p>The Taxing Agencies approved and accepted the negotiated exchange of property tax revenue determine by the Board of Supervisors of the County of Los Angeles.</p>	<p>Provide public transparency</p>	<p>3</p>	<p>ADMIN</p>

**\*District Goal**

- 1 – Provide safe and reliable groundwater
- 2 – Obtain independence from imported water sources
- 3 – Promote organizational excellence
- 4 – Advance groundwater awareness
- 5 – Foster environmental stewardship & water sustainability

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## ADMINISTRATIVE COMMITTEE

Supported by: The Administrative Department

The Administrative Committee shall study, advise and make recommendations with regard to the following:

1. Administrative and personnel policies and procedures to be considered by the Board of Directors;
2. Be responsible for the policies and procedures pertaining to the oversight and management of the organization, including but not limited to the District's organization and the flow of the authority and responsibility; and,
3. Periodic independent reviews and studies of the organization, classification of positions and related compensation ranges as outlined in the memorandum of understanding with the employees bargaining unit.

### 2015/16 Performance Metrics – Administrative Committee

Board Action	Staff Performance Measure	Board Objective	District Goal*	Project
<p><u>Date of Board Action: 10/15/15</u></p> <p>Adopt Resolution No. 15-1020- A Resolution of the Board of Directors of the Water Replenishment District of Southern California To Amend Sections 3.6 and 9.6 of the Administrative Code.</p>	<p>Staff Progress: Complete</p> <p>Changes to Section 3.6 (Ad Hoc Committees and Section 9.6 (Use of District Letterhead) were further amended to read "For purposes of this section Directors shall be exempt".</p>	Promote organization efficiencies & provide transparency and accountability	3	ADMIN
<p><u>Date of Board Action: 10/15/15</u></p> <p>Recommend to the Board President (1) that the External Affairs Committee no longer be a committee of the whole Board but a two-director standing committee with a designated alternate; and (2) to change the category of the Ad Hoc GRIP Committee to a standing committee of the whole consisting of all Board of Director members.</p>	<p>Staff Progress: Complete</p> <p>Modified the External Affairs and Ad Hoc GRIP committees standing based on Board approval.</p>	Promote organization efficiencies & provide transparency and accountability	3	EAE/EAC & 033

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## EXTERNAL AFFAIRS COMMITTEE

Supported by: The External Affairs Department

The External Affairs Committee shall study, advise and make recommendations with regard to the following:

1. Proposals and recommendations concerning Local, Regional, State and Federal legislation, or amendments thereto, that may affect the District;
2. Opportunities for members of the Board to assist in outreach activities, including efforts to inform members of the Legislature or the Congress of the District's position with regard to proposed legislation;
3. The effectiveness of legislative advocacy efforts;
4. The development and implementation of school education programs, including the expectations and goals for these programs;
5. The effectiveness of the District's external affairs programs and general communications efforts directed at member agencies and the general public; and
6. The selection of public information consultants and the scope of their assignments.

### 2015/16 Performance Metrics – External Affairs Committee

Board Action	Staff Performance Measure	Board Objective	District Goal*	Project
<p><u>Date of Board Action:</u> <u>7/16/15</u></p> <p>Approve the issuance of Request for Qualifications for social media services.</p>	<p><b>Staff Progress: Complete</b></p> <p>As part of its overall outreach and education efforts, WRD has established its presence via various social media outlets and will expand the District's current social media outreach to improve visibility and better provide groundwater-related information to the water community and the public.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAE</p>
<p><u>Date of Board Action:</u> <u>7/16/15</u></p> <p>Approve Continental Colorcraft to print, address, and mail three issues of the WRD tri-annual newsletter.</p>	<p><b>Staff Progress: Complete</b></p> <p>As part of its education and outreach programs, the District produces a tri-annual newsletter for distribution within its service area that features news &amp; information about the drought, water resources, conservation, the District's projects and programs, and more. Each newsletter is mailed to 20,000 residents per WRD division for a total of 100,000 copies.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAE</p>

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<p><u>Date of Board Action:</u> <u>7/16/15</u></p> <p>Support AB 530 (Rendon).</p>	<p><b>Staff Progress: Complete</b></p> <p>Existing law provides for the protections, enhancement, and restoration of California rivers. WRD would benefit from the creation of the working group and the preparation and implementation of a revitalization plan for the Lower Los Angeles River. AB 530 would allow WRD to participate as a member of the working group.</p>	<p>Perform effective basin management, promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>1, 3, 4 &amp; 5</p>	<p>EAC &amp; 005</p>
<p><u>Date of Board Action:</u> <u>7/16/15</u></p> <p>Approve the amended Fiscal Year 2015/16 list of Chamber of Commerce memberships, grants and regional sponsorships and budget amounts.</p>	<p><b>Staff Progress: Complete</b></p> <p>As part of the annual budget, the BOD approves a list of Chamber of Commerce membership dues as well as a list of sponsorships which provides the District an opportunity to educate members of the community about the mission and goals of WRD.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action:</u> <u>7/16/15</u></p> <p>Authorize the General Manager to enter into an agreement with Milagro Strategy Group for an amount not to exceed \$10,000, subject to approval of form by District Counsel.</p>	<p><b>Staff Progress: On-going</b></p> <p>Media relations training will equip Board members and staff with practical tools and skills for effectively communicating and engaging media and promoting WRD's work in groundwater management.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action:</u> <u>10/15/15</u></p> <p>Approve a regional sponsorship in the \$5,000 category of the Mujeres De La Tierra Dia De Los Muertos, November 1, 2015.</p>	<p><b>Staff Progress: Complete</b></p> <p>The Dia de Los Muertos Benefit is an annual event that offers WRD the opportunity to educate the public about regional water issues, conservation &amp; WRD projects/ programs. Mujeres de La Tierra is a non-profit community organization that educates the public &amp; promotes environmental responsibility &amp; engagement.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAC</p>
<p><u>Date of Board Action:</u> <u>11/19/15</u></p> <p>Authorize an amendment to Treefox's contract through June 2016 for an amount not to exceed \$15,000. It was also directed that staff prepare and issue an RFP for any future similar work on/or before the expiration of the aforementioned contract amendment.</p>	<p><b>Staff Progress: Complete</b></p> <p>Assists WRD staff with increasing its social media program to enhance the communication and education materials about the use and importance of using recycled water for groundwater replenishment.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAE</p>

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<p><u>Date of Board Action:</u> <u>12/17/15</u></p> <p>Authorize the General Manager to award and execute a professional services contract with Civic Resources Group (CRG) for an estimated 22 week design and creation of a new WRD web site, inclusive of GRIP, ECO Gardener, and social media integration for an amount not to exceed \$55,000.</p>	<p><b>Staff Progress: Complete</b></p> <p>Reviewed established web presence that has successfully leveraged digital communications to reach the general public, WRD's groundwater community, &amp; water experts around the world. Developed a comprehensive reorganization &amp; modernization strategy, and implementation plan to meet current &amp; future digital communication goals &amp; objectives.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAE</p>
<p><u>Date of Board Action:</u> <u>12/17/15</u></p> <p>Approve sponsoring both the 2016 Long Beach and Los Angeles Martin Luther King, Jr. Parades, and authorize staff to process payments for each, respectively, in a total amount not to exceed \$2,585.</p>	<p><b>Staff Progress: Complete</b></p> <p>Participation in the parades allowed WRD to educate the public about the WIN &amp; GRIP efforts to drought-proof the region thru the creation of sustainable groundwater basins.</p>	<p>Promote water awareness &amp; conservation</p>	<p>3, 4, &amp; 5</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action:</u> <u>12/17/15</u></p> <p>Authorize the issuance of a Request for Qualifications for ECO Gardener Services.</p>	<p><b>Staff Progress: Complete</b></p> <p>ECO Gardener program extended to include landscaping conservation, residential conservation programs, youth &amp; public education, ECO Gardener training &amp; to extend WRD's education on conservation to include giving the public the tools needed to conserve water.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action:</u> <u>12/17/15</u></p> <p>Approve the AWWA Refreshments Breaks Sponsor level, and authorize staff to process payments for the event, including a reception, in a total amount not to exceed \$3,000.</p>	<p><b>Staff Progress: Complete</b></p> <p>As a member of AWWA, WRD enjoys many membership benefits including advocacy, staff resources &amp; training, news &amp; information, and public communication tools.</p>	<p>Promote water awareness</p>	<p>4</p>	<p>EAE</p>
<p><u>Date of Board Action:</u> <u>1/21/16</u></p> <p>Authorize staff to participate with the Southern California Edison Conservation and Education partnership.</p>	<p><b>Staff Progress: On-going</b></p> <p>WRD has been an essential partner to member agencies and Community service organizations by collaborating on joint conservation &amp; educational ventures.</p>	<p>Promote water awareness &amp; conservation</p>	<p>3 &amp; 4</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action:</u> <u>3/17/16</u></p> <p>Approve to vote for Harold Bissner III as LAFCO special district representative.</p>	<p><b>Staff Progress: Complete</b></p> <p>Independent special district seats on LAFCO are filled by the Special District Selection Committee.</p>	<p>Promote water awareness &amp; conservation, and to foster environmental stewardship</p>	<p>3, 4, &amp; 5</p>	<p>EAC &amp; EAE</p>

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<p><u>Date of Board Action: 4/7/16</u></p> <p>Approve sponsoring the California Contract Cities Association Spring Municipal Seminar for an amount not to exceed \$3,500.</p>	<p><b>Staff Progress: Complete</b></p> <p>The CCCA Spring Municipal Seminar provided a new opportunity to educate &amp; update the regional leaders about relevant &amp; critical water issues facing local governments, specifically the status of GRIP located in Pico Rivera.</p>	<p>Promote water awareness</p>	<p>3 &amp; 4</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action: 4/21/16</u></p> <p>Approve a conference sponsorship not to exceed \$3,500 for the California Contract Cities Association Spring Municipal Seminar.</p>	<p><b>Staff Progress: Complete</b></p> <p>The CCCA offers WRD the unique opportunity to address multiple cities through a single forum. The Spring Municipal Seminar provided a new opportunity to educate &amp; update WRD's colleagues about relevant &amp; critical water issues facing local governments, specifically the status of GRIP located in Pico Rivera and to profile WIN.</p>	<p>Promote water awareness &amp; conservation</p>	<p>3 &amp; 4</p>	<p>EAC &amp; EAE</p>
<p><u>Date of Board Action: 4/21/16</u></p> <p>Approve taking a "support" position on Assembly Constitutional Amendment 8.</p>	<p><b>Staff Progress: Complete</b></p> <p>The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions. This measure would create an additional exception to the 1% limit for a rate imposed by certain entities, including special districts, to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of wastewater treatment, potable &amp; non-potable water producing, and stormwater treatment facilities that is approved by 55% of the voters of said entities, as applicable if the proposition meets specified requirements.</p>	<p>Promote water awareness &amp; conservation</p>	<p>3 &amp; 4</p>	<p>EAC &amp; EAE</p>

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## CAPITAL IMPROVEMENT PROJECTS (CIP) COMMITTEE

Supported by: Engineering, Hydrogeology, Finance, Admin and External Affairs.

The CIP Committee shall study, advise and make recommendations with regard to all capital improvement related projects.

1. Provide systematic evaluation of all potential projects
2. Identify the most economical means of financing capital improvements
3. A communication tool for public relations and stakeholders
4. Focus on completing projects identified under the Water Independence Now (WIN)

### 2015/16 Performance Metrics – Capital Improvement Projects (CIP) Committee

Board Action	Staff Performance Measure	Board Objective	District Goal*	Project
<p><u>Date of Board Action: 12/3/15</u></p> <p>Approve the renaming of the Groundwater Reliability Improvement Program (GRIP) standing committee to the Capital Improvement Projects (CIP) Committee. The CIP Committee will be a standing committee composed of all five Board members.</p>	<p><u>Staff Progress:</u></p> <p>CIP Committee reviews all capital improvement projects</p>	<p>Advance the District's Organization Excellence</p>	3	033
<p><u>Date of Board Action: 12/3/15</u></p> <p>Accept the Final Asset Management Master Plan and approve the issuance of a Request for Information for the selection of a pilot computerized maintenance management system (CMMS).</p>	<p><u>Staff Progress:</u></p> <p>GHD is developing an asset management program that would streamline the District's assets, which includes the completion of the AM Report and the IT conceptual diagram.</p>	<p>Develop an Asset Management Master Plan</p>	3	040
<p><u>Date of Board Action: 12/3/15</u></p> <p>Approve Contract Amendment No. 1 with GHD to revise the scope of work to develop an IT Master Plan framework with a budget amount not to exceed \$45,000, with includes a 10% contingency, and extend the contract term to September 30, 2016.</p>	<p><u>Staff Progress: On-going</u></p> <p>Working with GHD to revise the existing scope of work to include the development of an IT Master Plan Roadmap that is vital in establishing a comprehensive Asset Management program for the District.</p>	<p>Develop an Asset Management Master Plan</p>	3	040
<p><u>Date of Board Action: 12/3/15</u></p> <p>Approve Contract Amendment No. 1 with Arcadis amending the scope of work to include development of WRD's SCADA library and assist on WRD's current construction projects to ensure that they meet WRD's SCADA standards and are fully integrated with the CIS. This contract amendment will also increase the project budget by an amount not to exceed \$343,277, which includes a 10% contingency.</p>	<p><u>Staff Progress: On-going</u></p> <p>The ongoing project with Arcadis is to establish a Centralized Master SCADA system to integrate the existing facilities that are remotely operated., Additional scope of work requires an amendment with Arcadis to prepare a more comprehensive SCADA system Master Plan, that will include facilities that are under constructions and establish a centralized standards for long-term management of WRD's SCADA system.</p>	<p>Advance the District's Organization Excellence</p>	3	040

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<p><u>Date of Board Action: 12/3/15</u></p> <p>Authorize the General Manager to approve a Modification No. 3 to the Contributed Funds Agreement (CFA) with USBR to extend the terms of the contract to June 30, 2016 and increase the contract budget for an amount not to exceed \$10,000 for the review of environmental documents related to GRIP.</p>	<p><u>Staff Progress: on-going</u></p> <p>The District is in the process of completing the State Revolving Fund loan application with USBR for the construction of the GRIP AWTF. Modification #3 extended the term of the contract to comply with the National Environmental Policy and for USBR to review the application.</p>	<p>Provide the most cost-effective capital project infrastructure by securing loan funding</p>	3	033
<p><u>Date of Board Action: 1/21/16</u></p> <p>Approve Contract Amendment No. 2 with American Security Force to increase the budget by an additional amount not to exceed \$20,000 and extend the contract term through June 30, 2016.</p>	<p><u>Staff Progress: complete</u></p> <p>American Security Force continues to provide off-site improvements related to the GRIP AWTF construction.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 1/21/16</u></p> <p>Authorize the release of a Request for Bids to retain a construction contractor related to the Groundwater Reliability Improvement Project (GRIP) off-site improvements.</p>	<p><u>Staff Progress: complete</u></p> <p>Request for Bid for off-site improvements related to GRIP.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 1/21/16</u></p> <p>Approve the addition of a new Capital Improvement Project for the design and construction of a second recycled water connection and the associated pipeline for the Dominguez Gap Seawater Intrusion Barrier.</p>	<p><u>Staff Progress: complete</u></p> <p>The design and construction of the second recycled water connection at the Dominguez Gap Seawater Barrier is added to the Capital Improvement Project.</p>	<p>Advance the treated recycled water at the barriers</p>	2	018
<p><u>Date of Board Action: 2/4/16</u></p> <p>Adopt Resolution No. 16-1025 to authorize the General Manager to execute the easement agreement with the LACDPW for the GRIP Turnout Structures.</p>	<p><u>Staff Progress: complete</u></p> <p>Executed an easement agreement with LACDPW for construction of the GRIP's two new diversion structures on their property for operational flexibility in delivering recycled water to the spreading grounds for replenishment of the groundwater basin.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 2/4/16</u></p> <p>Approve Contract Amendment No. 1 with GHD to increase the budget by an additional amount not to exceed \$2,387,000, and eliminate contingency funds in the amount of \$279,989 associated with the Owner's Engineer/Owner's Agent (OE/OA) Phase 1 services for the GRIP AWTF project.</p>	<p><u>Staff Progress: complete</u></p> <p>GHD provides professional Programmatic Management and Technical Advisory Services for the GRIP AWTF project. Completed Phase 1 work associated with the DBE procurement process. Amendment #1 expanded services to Phase 2; the start of final design and construction-related activities.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 2/18/16</u></p> <p>Adopt the Capital Improvement Program &amp; Process.</p>	<p><u>Staff Progress: complete</u></p> <p>Capital Improvement Program and Process is in place to establish a more formal process and procedure for adding new projects to the CIP list.</p>	<p>Provide cost-effectiveness and conformance with established policies</p>	3	All Capital Projects

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<p><u>Date of Board Action: 2/18/16</u></p> <p>Award a professional services agreement with California Consulting for supplemental grant writing services for a period of six (6) months and a retainer of \$4,750 a month.</p>	<p><b>Staff Progress: On-going</b></p> <p>California Consulting provides the District with grant writing services</p>	<p>Advance the District's Organization Excellence</p>	<p>3</p>	<p>ADMIN</p>
<p><u>Date of Board Action: 3/3/16</u></p> <p>Approve the submittal of a final Local Resources Program (LRP) Application with the addendum for the Groundwater Reliability Improvement Project (GRIP).</p>	<p><b>Staff Progress: On-going</b></p> <p>Final LRP application is submitted with the addendum to MWD obtaining financial assistance for the GRIP AWTF that once completed will offset imported water for the spreading grounds.</p>	<p>Increase use of recycled water</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 3/3/16</u></p> <p>Authorize the General Manager to execute the Conveyance Facilities Agreement with the Los Angeles County Sanitation Districts related to the Groundwater Reliability Improvement Project Advanced Water Treatment Facility (GRIP AWTF).</p>	<p><b>Staff Progress: complete</b></p> <p>Issued a Conveyance Facilities Agreement with LA County Sanitation Districts for the construction of the new turnout discharge structures that will connect to the County's existing outfall pipeline for the GRIP AWTF.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 3/17/16</u></p> <p>(1) Authorize the General Manager to enter into an agreement with the United States Geological Survey, subject to approval of form by District Counsel, for the construction of two nested monitoring wells for the GRIP AWTF project for a cost not to exceed \$750,000; (2) Direct staff to file a Notice of Exemption for the wells under CEQA.</p>	<p><b>Staff Progress: complete</b></p> <p>Staff is working with USGS to perform the drilling, construction and analysis of the two nested monitoring wells to assist in the design and permitting of the GRIP AWTF facility.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 3/17/16</u></p> <p>Add the GRIP AWTF Supplemental Recharge Wells Project to the District's adopted Five-Year Capital Improvement Program.</p>	<p><b>Staff Progress: complete</b></p> <p>The Supplemental Recharge Wells Project is added to the District's Five-Year Capital Improvement Program. Once completed, it will serve as storage wells associated with GRIP AWTF when the spreading grounds are not available for recharge.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	<p>2</p>	<p>033</p>
<p><u>Date of Board Action: 3/17/16</u></p> <p>Add the Leo J. Vander Lans Advanced Water Treatment Facility (LVL) Hydraulic Analysis and Operational Efficiencies Alternatives Study to the District's adopted Five-Year Capital Improvement Program.</p>	<p><b>Staff Progress: complete</b></p> <p>The Hydraulic and Operational Efficiencies Alternatives Study for LJVW AWTF is added to the District's Five-Year Capital Improvement Program and RFQ is issued. Recommendations from the study should resolve issues and challenges affecting the LVL operations since the completion of the expansion.</p>	<p>Achieve Barrier injection with 100% recycled water</p>	<p>2</p>	<p>001</p>

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<p><u>Date of Board Action: 4/7/16</u></p> <p>1) to accept J.F. Shea Construction, Inc. as the Design Build Entity for the GRIP AWTF Project; 2) authorize the issuance of a \$100,000 honorarium to Walsh Construction Company II, LLC; and 3) authorize the WRD staff to negotiate a final contract including, but not limited to, scope, fee and schedule, with J.F. Shea Construction, Inc. as the Design Build Entity for the GRIP AWTF Project.</p>	<p><u>Staff Progress: complete</u></p> <p>J.F. Shea Construction was selected as the Design Build Entity for the GRIP AWTF Project. Contract is in place and construction is ready to start. \$100,000 honorarium payment was issued to Walsh Construction Company.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 4/7/16</u></p> <p>Approve staff to solicit a cost proposal from Cityworks for CMMS computer maintenance.</p>	<p><u>Staff Progress: On-going</u></p> <p>Staff provided Cityworks' proposed scope and fees and an evaluation of an implementer for the Computerized Maintenance and Management Software (CMMS) to the Board for approval.</p>	<p>Advance the District's Organization Excellence</p>	3	040
<p><u>Date of Board Action: 4/7/16</u></p> <p>Approve to receive and file the 2016 Cost of Service Report.</p>	<p><u>Staff Progress: complete</u></p> <p>Received and filed the 2016 Cost of Service Report, describing the projects, programs, administration that are necessary to support the District's operations.</p>	<p>Provide public transparency and accountability and comply with Proposition 218</p>	3	ADMIN
<p><u>Date of Board Action: 4/21/16</u></p> <p>Approve the license agreement with the City of Whittier for the Groundwater Reliability Improvement Project (GRIP).</p>	<p><u>Staff Progress: complete</u></p> <p>The license agreement will allow the District to use a piece of property owned by the City of Whittier as a temporary construction laydown area for temporary storage of construction materials for the GRIP AWTF.</p>	<p>Advance the District's Groundwater Reliability Improvement Program (GRIP)</p>	3	
<p><u>Date of Board Action: 4/28/16</u></p> <p>Approve the Safe Drinking Water Program new projects and agreements for the City of Huntington Park, California American Water and the City of Lynwood for an amount not to exceed \$3,400,000.</p>	<p><u>Staff Progress: On-going</u></p> <p>The District administers the SDWP to assist basin pumpers in sustaining active production from contaminated wells. Staff is working on development of the designs and specification for the three projects in preparation for bidding.</p>	<p>Promote the Safe Drinking Water Program and groundwater cleanup</p>	1 & 4	012
<p><u>Date of Board Action: 4/28/16</u></p> <p>Approve the professional services contract with Gillis &amp; Panichapan Architects for minor office renovations at the WRD Administration building for an amount not to exceed \$25,000.</p>	<p><u>Staff Progress: On-going</u></p> <p>Working with Gillis &amp; Panichapan Architects to do minor office renovations at the WRD Administration Building.</p>	<p>Provide improvement for the District Building</p>	3	ADMIN
<p><u>Date of Board Action: 4/28/16</u></p> <p>Approve staff to negotiate scope, schedule and fees with RMC to conduct the Leo J. Vander Lans Water Treatment Facility Hydraulic Analysis and Operation Efficiencies Alternatives Study.</p>	<p><u>Staff Progress: On-going</u></p> <p>RMC Consultants is performing hydraulic analysis and operational efficiencies alternatives study to address hydraulic issues, operational efficiencies, and evaluate alternatives to optimize and stabilize operations for the facility.</p>	<p>Provide improvement for LJVW AWTF</p>	2	001

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<p><u>Date of Board Action: 5/5/16</u></p> <p>Approve the award of a construction contract for the brine disposal pipeline and street improvement Project (GRIP) to Michael Pritch &amp; Sons Inc. for an amount not to exceed \$1,697,481 for the project.</p>	<p><b>Staff Progress: On-going</b></p> <p>Mike Pritch &amp; Sons is currently doing off-site street improvements as required for the GRIP AWTf project.</p>	<p>Advance the District's Ground-water Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 5/5/16</u></p> <p>Approve the purchase agreement of certain real property commonly addressed as 3919 Paramount Blvd, Lakewood CA and identified by the Los Angeles County Assessor's Parcel No. 7149-004-009 for a price of \$3.8M; and to approve the notice of exemption and authorize and direct the Assistant General Manager to take all action necessary or reasonably required to carry out, give effect to and consummate the transaction contemplated by Resolution No. 16-1033.</p>	<p><b>Staff Progress:</b></p> <p>The District purchased the 3919 Paramount Blvd. property for additional storage space for sampling equipment, fleet parking and other various need of the District.</p>	<p>Provide safe-keeping of the District's assets</p>	3	041
<p><u>Date of Board Action: 5/19/16</u></p> <p>Approve Contract Amendment No.1 with Rincon Consultant, Inc., to provide an additional budget amount of \$195,100 (rounded and includes 10% contingency) for environmental monitoring services.</p>	<p><b>Staff Progress: On-going</b></p> <p>Rincon provided environmental service for the Deconstruction of GRIP AWT. The existing contract was modified to continue with environmental monitoring services during construction of the Brine Disposal Pipeline and Street Improvements and the USGS Monitoring Wells Projects.</p>	<p>Advance the District's Ground-water Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 6/23/16</u></p> <p>Authorize the General Manager to execute a no-cost time extension to the Contributed Funds Account with the United States Bureau of Reclamation (USBR).</p>	<p><b>Staff Progress: On-going</b></p> <p>No-cost time extension was granted to the Contributed Funds Account to allow sufficient time for preparation of NEPA documents associated with the SRF funding for the GRIP AWTf project.</p>	<p>Advance the District's Ground-water Reliability Improvement Program (GRIP)</p>	2	033
<p><u>Date of Board Action: 6/23/16</u></p> <p>Approve Amendment No.1 to Kindel Gagan, Inc. Professional Services Agreement for Strategic Support Services</p>	<p><b>Staff Progress: On-going</b></p> <p>Kindel Gagan offered continuous strategic support services as a policy advisor for the District in developing and implementing plans, programs and policy initiatives.</p>	<p>Provide District Strategic Planning</p>	1 & 2	005
<p><u>Date of Board Action: 6/23/16</u></p> <p>Approve Resolution No. 16-1036 to adopt the final Supplemental Environmental Impact Report (SEIR), approve the Supplemental Recharge Wells Project, which includes the construction and operation of three storage wells and three monitoring wells, and authorize staff to file a Notice of Determination.</p>	<p><b>Staff Progress: Complete</b></p> <p>Adopt Resolution No, 16-1036 and Notice of Determinations were filed. Final SEIR was prepared for the GRIP Supplemental Recharge Wells Project and findings indicated no substantial evidence that the project will have a significant effect on the environmental with implementation of mitigation measures.</p>	<p>Advance the District's Ground-water Reliability Improvement Program (GRIP)</p>	3	033

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<p><u>Date of Board Action: 6/23/16</u></p> <p>Authorize the lease of a Request for Proposals for Supervisory Control and Data Acquisition (SCADA) System Integrator to provide support and maintenance services.</p>	<p><u>Staff Progress: On-going</u></p> <p>RFP for the SCADA system integrator is issued to provide technical expertise in the development, maintenance, and periodic upgrades and improvements to each of the SCADA systems.</p>	<p>Develop an Asset Management Master Plan</p>	<p>3</p>	<p>039</p>
<p><u>Date of Board Action: 6/23/16</u></p> <p>Approve a time extension for the Contract Services Agreement between WRD and The City of Torrance for the Goldsworthy Desalter.</p>	<p><u>Staff Progress:</u></p> <p>Time extension would allow sufficient time to develop a new pricing structure for the City of Torrance to purchase product water from the District.</p>	<p>Increase use of product water</p>	<p>2</p>	<p>002</p>

**\*District Goal**

- 1 – Provide safe and reliable groundwater
- 2 – Obtain independence from imported water sources
- 3 – Promote organizational excellence
- 4 – Advance groundwater awareness
- 5 – Foster environmental stewardship & water sustainability

## **FULL-TIME EQUIVALENT (FTE) AND LABOR ALLOCATION**

The Water Replenishment District's financial accounting system allows expenses to be tracked by fund, project, task and subtask. This allows for flexibility when determining performance measures on a project-by-project basis. Part of this flexibility allows the District to allocate its labor costs very specifically. The following tables represent the 2016/17 Budgeted Summary of Personnel by Department and by Program along with the District's complete 2016/17 labor allocation for all employees. Transparency is the most important aspect to the District when reporting its financial information.

The definition of a full-time equivalent (FTE) is the number of working hours that represents one full-time employee during a fixed period of time, such as one fiscal year. FTE simplifies work measurement by converting work load hours into the number of people required to complete that work. FTE calculation is a two-step process that determines how many hours of work there are in a department and how many hours one full-time employee works. The total work load hours are then divided by the working hours of one employee. This calculates the number of full-time equivalents that are needed. FTE analysis is the method of measurement of current work activities with related time and cost measures. This helps the District understand the drivers of work load levels, organizational performance and productivity improvement opportunities.

### **2016/17 FTE by Program**

Table 64 shows a detailed analysis of the number of full-time equivalents required by each of the District's projects, programs, or administrative support department. The table shows that the District's staffing on its various projects remain relatively stable. The only increase of note is due to increased efforts within the Finance/Admin areas, specifically relating restructuring of the organization. WRD's organizational structure adjusts from time to time to make changes to operations and organizational structure in an effort to adjust to changes in District responsibilities and to provide increased efficiency.

### **2016/17 FTE Labor Cost**

All staff labor costs includes employee compensation and benefits, and are allocated to each project as; 'Other General and Administrative Costs'. Employee compensation is based on the Memorandum of Understanding between the Board of Directors of the Water Replenishment District and the American Federation of State, County and Municipal Employee, Chapter 1902.

### **2016/17 Labor Allocation Worksheet**

The annual labor allocation worksheet (Table 65) is designed to provide an accurate cost allocation of labor and overhead to each individual project, program, and administrative departments.

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*Table 52A*  
Full Time Equivalents (FTE) by Program

Program Name	2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Budget	2016/17 Budget
<b>Operations and Maintenance</b>					
Leo J Vander Lans	0.41	0.40	0.78	0.66	0.78
Water Conservation	0.83	0.80	0.92	0.91	1.50
Robert Goldsworthy Desalter	0.34	0.25	0.22	0.16	0.24
Montebello Forebay Reclaimed Water	0.54	0.37	1.00	1.01	1.15
Groundwater Resources Planning	1.32	0.74	0.70	0.66	0.70
Water Quality Program	0.99	0.92	1.22	1.31	1.40
Title 22 Program	0.33	0.28	0.42	0.41	0.00
Geographic Information System	0.97	1.95	2.17	1.86	1.90
Regional GW Monitoring Program	2.21	2.20	2.40	2.25	2.35
Dominquez Barrier Recycled Wtr	0.43	0.43	0.73	0.55	0.63
Replenishment Program	0.83	0.77	1.00	0.91	0.85
Hydrogeology	1.71	1.51	0.80	1.05	1.25
Education & Outreach	2.55	2.65	3.95	4.00	2.40
Safe Drinking Water	0.08	0.00	0.12	0.11	0.70
GRIP	0.00	0.00	0.00	0.60	0.10
<b>Total</b>	<b>13.54</b>	<b>13.27</b>	<b>16.43</b>	<b>16.45</b>	<b>15.95</b>
<b>Capital Projects</b>					
Leo J Vander Lans	1.40	1.46	0.40	0.40	0.10
Robert Goldsworthy Desalter	0.16	0.34	0.90	1.15	0.40
WRD Building	0.00	0.00	0.00	0.00	0.00
Groundwater Monitoring - New Wells	0.01	0.00	0.15	0.00	0.25
GRIP	1.01	1.36	3.02	2.85	4.00
Safe Drinking Water	0.00	0.00	0.00	0.00	0.30
Watermaster Services	0.00	0.10	0.00	1.50	1.50
LADWP Well Construction Program	0.00	0.00	0.00	0.10	0.00
<b>Total</b>	<b>2.58</b>	<b>3.26</b>	<b>4.47</b>	<b>6.00</b>	<b>6.55</b>
<b>Finance/Admin/EA</b>					
Finance/Admin/EA	<b>16.30</b>	<b>15.88</b>	<b>12.30</b>	<b>10.35</b>	<b>13.40</b>
<b>General Manager</b>					
General Manager	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
<b>Grand Total</b>	<b>33.42</b>	<b>33.41</b>	<b>34.20</b>	<b>33.80</b>	<b>36.90</b>

Note: In fiscal year 2012/13 and 2013/14, the District had staff which did not work the entire fiscal year.

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*Table 52B*  
**15/16 Labor Allocation Worksheet—Administration**

	Finance/ Admin/ EA	GM	Board of Directors	Total
<b>1010 - Board of Directors</b>				
Director			100%	100%
Director			100%	100%
Director			100%	100%
Director			100%	100%
Director			100%	100%
<b>1005- General Manager</b>				
General Manager		100%		100%
<b>1000- Internal Services (6 Staff)</b>				
Mgr of Internal Services	100%			100%
Network Administrator	100%			100%
Technical Service Coordinator	100%			100%
Sr Admin Specialist	100%			100%
Project Administrator	40%			40%
Administrative Assistant	100%			100%
<b>1040 - Finance (5 staff)</b>				
Chief Financial Officer	100%			100%
Mgr of Financial Services	100%			100%
Sr Accountant	100%			100%
Sr. Accountant	100%			100%
Sr. Accounting	100%			100%
<b>1020 - EA (6 Staff)</b>				
Mgr of Comm & Ed Services	50%			50%
Sr Comm & Ed Services	50%			50%
Comm & Ed Services	50%			50%
Comm & Ed Services	50%			50%
Comm & Ed Services	20%			20%
Comm & Ed Services	20%			20%

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<i>Table 52C</i>				
<b>15/16 Labor Allocation Worksheet—Administration</b>				
	<b>Finance/ Admin/ EA</b>	<b>GM</b>	<b>Board of Directors</b>	<b>Total</b>
<b>1030- Hydrogeology (8 Staff)</b>				
Chief Hydrogeologist				0%
Sr. Engineer				0%
Sr. Hydrogeologist				0%
Hydrogeologist				0%
Hydrogeologist				0%
Hydrogeologist				0%
Associate Hydrogeologist				0%
Associate Hydrogeologist				0%
<b>1060 - Engineering (7) Staff</b>				
Chief of Engineering and Planning	10%			10%
Senior Engineer	10%			10%
Senior Engineer	10%			10%
Engineer	10%			10%
Engineer	10%			10%
Associate Engineer	10%			10%
Senior Analyst	10%			10%
<b>1070 - Water Resources (4) Staff</b>				
Mgr of Water Resources				0%
Online Tech & Data Specialist				0%
GIS Analyst				0%
Technical Specialist				0%
<b>1050 - Retirees - (11)</b>				
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%
Retiree	100%			100%

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*Table 53A*  
16/17 Labor Allocation Worksheet – Operations and Maintenance

	Leo J Vander Lans	Water Conservation	Robert Goldsworthy Desalter	Montebello Forebay Recycled Water	Groundwater Resource Planning	Water Quality Program	Title 22 Program	Geographic Information System (GIS)	Regional Groundwater Monitoring Program	Safe Drinking Water Program	Dominguez Gap Barrier Recycled Water	Replenishment Operations	Hydrogeology Program	GRIP	West Basin Barrier	Education & Outreach	Total
<b>1010 - Board of Directors</b>																	
Director																	0%
Director																	0%
Director																	0%
Director																	0%
Director																	0%
<b>1005- General Manager</b>																	
General Manager																	0%
<b>1000- Internal Services (6 Staff)</b>																	
Mgr of Internal Services																	0%
Network Administrator																	0%
Technical Service Coordinator																	0%
Sr Admin Specialist		10%	10%		10%			10%		10%		10%					60%
Project Administrator																	0%
Administrative Assistant																	0%
1040 - Finance (5 staff)																	0%
Chief Financial Officer																	0%
Mgr of Financial Services																	0%
Sr Accountant																	0%
Sr. Accountant																	0%
Sr. Accounting																	0%
<b>1020 - EA (6 Staff)</b>																	
Mgr of Comm & Ed Services		25%													25%		50%
Sr Comm & Ed Services		25%													50%		50%
Comm & Ed Services		0%													25%		50%
Comm & Ed Services		40%													50%		50%
Comm & Ed Services		40%													40%		80%
Comm & Ed Services		40%													40%		80%

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**Table 53B**  
**16/17 Labor Allocation Worksheet – Operations and Maintenance**

	Leo J Vander Lans	Water Conservation	Robert Goldsworthy Desalter	Montebello Forebay Recycled Water	Groundwater Resource Planning	Water Quality Program	Title 22 Program	Geographic Information System (GIS)	Regional Groundwater Monitoring Program	Safe Drinking Water Program	Dominguez Gap Barrier Recycled Water	Replenishment Operations	Hydrogeology Program	GRIP	West Basin Barrier	Education & Outreach	Total
<b>1030- Hydrogeology (8 Staff)</b>																	
Chief Hydrogeologist	3%		4%	10%		10%		10%	0%	3%	10%	40%	0%				90%
Sr. Engineer	10%			20%		40%		5%		10%	5%						90%
Sr. Hydrogeologist	0%		0%	10%		15%		5%		5%	40%	10%					85%
Hydrogeologist	0%					5%		90%				5%					100%
Hydrogeologist	25%							40%		25%		10%					100%
Hydrogeologist	10%			10%		50%		5%		5%	5%	15%					100%
Associate Hydrogeologist				35%				35%				15%	15%				100%
Associate Hydrogeologist	0%			20%		10%		35%		5%	10%	10%		10%			100%
<b>1060 - Engineering (7 Staff)</b>																	
Chief of Engineering and Planning	10%	10%	0%	0%	10%	0%	0%	0%	0%	10%	0%	0%	0%	10%	0%	10%	60%
Senior Engineer	20%		20%														40%
Senior Engineer	0%			0%													0%
Engineer																	0%
Engineer																	0%
Associate Engineer	0%					0%	0%		60%								60%
Senior Analyst		0%											0%		0%		0%
<b>1070 - Water Resources (4) Staff</b>																	
Mgr of Water Resources					30%			10%									40%
Online Tech & Data Specialist								70%									70%
GIS Analyst								90%									90%
Technical Specialist					30%			20%									50%
<b>1050 - Retirees - (11)</b>																	
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%
Retiree																	0%

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*Table 53C*  
**16/17 Labor Allocation Worksheet—Capital Projects**

	LVL Construction General	Goldsworthy Expansion & Wells	Grndwtr New Monitoring Wells	Safe Drinking Water	GRIP General	Water Master Services	LADWP Well Construction Program	Total	Grand Total
<b>1010 - Board of Directors</b>									
Director								0%	100%
Director								0%	100%
Director								0%	100%
Director								0%	100%
Director								0%	100%
<b>1005- General Manager</b>									
General Manager								0%	100%
<b>1000- Internal Services (6 Staff)</b>									
Mgr of Internal Services								0%	
Network Administrator								0%	100%
Technical Service Coordinator								0%	100%
Sr Admin Specialist								0%	100%
Project Administrator								0%	100%
Administrative Assistant								0%	100%
1040 - Finance (5 staff)									
Chief Financial Officer								0%	100%
Mgr of Financial Services								0%	100%
Sr Accountant								0%	100%
Sr. Accountant								0%	100%
Sr. Accounting								0%	100%
<b>1020 - EA (6 Staff)</b>									
Mgr of Comm & Ed Services								0%	100%
Sr Comm & Ed Services								0%	100%
Comm & Ed Services								0%	100%
Comm & Ed Services								0%	100%
Comm & Ed Services								0%	100%

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Table 53D

## 16/17 Labor Allocation Worksheet—Capital Projects

	LVL Construction General	Goldsworthy Expansion & Wells	Grndwtr New Monitoring Wells	Safe Drinking Water	GRIP General	Water Master Services	LADWP Well Construction Program	Total	Grand Total
<b>1030- Hydrogeology (8 Staff)</b>									
Chief Hydrogeologist			10%					10%	100%
Sr. Engineer	10%		0%					10%	100%
Sr. Hydrogeologist			15%					15%	100%
Hydrogeologist			0%					0%	100%
Hydrogeologist								0%	100%
Hydrogeologist								0%	100%
Associate Hydrogeologist								0%	100%
Associate Hydrogeologist								0%	100%
<b>1060 - Engineering (7 Staff)</b>									
Chief of Engineering and Planning	0%	0%	0%	0%	30%	0%	0%	30%	100%
Senior Engineer		40%			10%			50%	100%
Senior Engineer		0%			90%			90%	100%
Engineer					90%			90%	100%
Engineer					90%			90%	100%
Associate Engineer	0%	0%	30%				0%	30%	100%
Senior Analyst					90%			90%	100%
<b>1070 - Water Resources (4 Staff)</b>									
Mgr of Water Resources						60%		60%	100%
Online Tech & Data Specialist						30%		30%	100%
GIS Analyst						10%		10%	100%
Technical Specialist						50%		50%	100%
<b>1050 - Retirees - (11)</b>									
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%
Retiree								0%	100%

## RESOLUTION NO. 16-1032

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA LEVYING A REPLENISHMENT ASSESSMENT ON THE PRODUCTION OF GROUNDWATER FROM THE GROUNDWATER SUPPLIES WITHIN THE DISTRICT DURING THE FISCAL YEAR COMMENCING JULY 1, 2016 AND ENDING ON JUNE 30, 2017 AS PROVIDED IN SECTION 60317 OF CALIFORNIA WATER CODE AND MAKING FINDINGS AND DETERMINATIONS REGARDING SAID ASSESSMENT IN ACCORDANCE WITH SECTIONS 60315 AND 60316 OF THE WATER CODE OF THE STATE OF CALIFORNIA**

**WHEREAS**, the Board of Directors ("the Board") of the Water Replenishment District of Southern California ("the District") on December 17, 2015 in compliance with California Water Code § 60300, timely ordered an Engineering Survey and Report ("ESR") to be made regarding the groundwater supplies and groundwater quality issues within the District; and

**WHEREAS**, the ESR has been prepared pursuant to the Board's request and the ESR has been available for inspection by any interested party for the time required by law; and

**WHEREAS**, the Board, by Resolution No. 16-1024, has declared that funds shall be raised to purchase water for replenishment of groundwater supplies within the District during the ensuing fiscal year, 2016-2017, and to accomplish all acts reasonably necessary pursuant to said replenishment, including, but not limited to, the development and operation of capital projects, and that such funds shall be raised by a replenishment assessment as provided in Chapter 2 of Part 6 of the California Water Code, and further finding that the funds to be raised will benefit, directly or indirectly, all of the persons or real property and improvements within the District; and

**WHEREAS**, the Board, by Resolution No. 16-1024, has declared that funds shall be raised to remove contaminants from groundwater supplies and to exercise any other power under California Water Code § 60224, including, but not limited to, the development and operation of capital projects, and that such funds shall be raised by a replenishment assessment as provided in Chapter 2 of Part 6 of the California Water Code, and further finding that the funds so raised will benefit, directly or indirectly, all of the persons or real property and improvements within the District; and

**WHEREAS**, the District prepared a Cost of Service Report dated April 7, 2016, which has been made available to the public, describing the services the District anticipates performing in Fiscal Year 2016-2017, estimating the costs of providing those services, and calculating a Replenishment Assessment that ensures that those costs are spread amongst water producers in an equitable manner; and

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**WHEREAS**, on April 7, 2016, as required by California Water Code § 60307, the Board opened a public hearing for the purpose of determining whether and to what extent the estimated cost of water replenishment programs and the estimated cost of water quality programs for the ensuing year shall be paid for by a replenishment assessment ; and

**WHEREAS**, notice of the April 7, 2016 hearing was published as required by law; and

**WHEREAS**, the April 7, 2016 hearing was continued to April 21, 2016, and was further continued to April 28, 2016 at which time the hearing was closed; and

**WHEREAS**, in addition to the public hearings on the Replenishment Assessment, the District also held budget workshops that were open to the public, where the District provided the public with information concerning its Fiscal Year 2016-2017 budget, which is directly related to the Replenishment Assessment; and

**WHEREAS**, in addition to the April 7, 2016 public hearing, on April 28, 2016 the Board also held a public hearing pursuant to Article XIII D, Section 6(a)(2) of the California Constitution regarding the proposed Replenishment Assessment; and

**WHEREAS**, all evidence and testimony relevant to the ESR and the Board's determination that such a Replenishment Assessment shall be levied was heard at these public hearings and at the budget workshops; and

**WHEREAS**, all other findings required by law have already been made, including, but not limited to, any findings required by California Water Code § 60231; and

**WHEREAS**, the Board voted at its May 9, 2016 public meeting to make the findings and resolutions set forth below.

**NOW, THEREFORE, BE IT RESOLVED AND DECLARED BY THE BOARD OF DIRECTORS OF THE WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA AS FOLLOWS:**

1. That said Board pursuant to §60315 of the Water Code of the State of California finds as follows:
  - a) The annual overdraft of the preceding water year, 2014-15 was 102,500 acre-feet as provided in the 2016 ESR and any updates.
  - b) The estimated annual overdraft for the current water year, 2015-16 is 84,800 acre-feet as provided in the 2016 ESR and any updates.

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- c) The estimated annual overdraft for the ensuing water year, 2016-2017 is 85,800 acre-feet as provided in the 2016 ESR and any updates.
- d) The accumulated overdraft as of the last day of the preceding water year was 832,300 acre-feet as provided in the 2016 ESR and any updates.
- e) The estimated accumulated overdraft as of the last day of the current water year is 812,100 acre-feet as provided in the 2016 ESR and any updates.
- f) The total production of groundwater from the groundwater supplies within the District during the preceding water year was 210,193 acre-feet as provided in the 2016 ESR and any updates.
- g) The estimated total production of groundwater from groundwater supplies within the District for the current water year is 230,000 acre-feet as provided in the 2016 ESR and any updates.
- h) The estimated total production of groundwater from the groundwater supplies within the District for the ensuing water year is 231,000 acre-feet as provided in the 2016 ESR and any updates.
- i) District wide, groundwater levels rose nearly 4.5 feet, although in the Montebello Forebay region water levels fell nearly 4 feet. Overall groundwater storage loss from the District was 12,700 AF, although 18,400 AF was lost in the Montebello Forebay and the remainder (5,700 AF) was a storage gain in the rest of the WRD service area. The 2016 ESR and any updates provide details of water levels and basin conditions.
- j) In the current Water Year 2015/2016, as of this writing the District has received half of normal rainfall but WRD has been purchasing imported water and recycled water for spreading. As a result, water levels in the Montebello Forebay are 5 feet higher than they were this time last year. The 2016 ESR and any updates provide details of water levels and basin conditions.
- k) The quantity of water that should be purchased by the District for the replenishment of the groundwater supplies of the District during the ensuing water year is 103,300 acre-feet, which includes 71,000 acre-feet at the spreading grounds and 32,300 acre-feet at the seawater barrier wells. Details of the calculations for these amounts are presented in the 2016 Engineering Survey and Report and any updates, and on Board decisions at the May 9, 2016 public meeting.
- l) The source and estimated cost of the water available for the replenishment described in Section (k) is presented in the 2016 ESR and any updates.

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- m) The estimated net costs of replenishing the groundwater supplies with the water so purchased are \$42,589,000. The derivation of this amount is described in the 2016 ESR, the 2016 Cost of Service Report, and any updates to these documents, and on Board decisions at the May 9, 2016 public meeting. The estimated rate of the replenishment assessment required to fund these purchases based on the anticipated pumping in the ensuing year described in Section (h) is \$184.37 per acre-foot of groundwater pumped.

The estimated additional costs to the District for its replenishment program costs, estimated capital costs, and other costs relating to accomplishing replenishment of the groundwater supplies, are \$23,635,160. The estimated rate of the replenishment assessment required to fund these costs based on the anticipated pumping in the ensuing year described in Section (h) is \$102.32 per acre-foot of groundwater pumped. A listing of the projects and programs and their intended objective – replenishment and/or clean water – is provided in the 2016 ESR and Cost of Service Reports, and any updates to these documents.

- n) It is not anticipated that additional replenishment funds need to be raised in the ensuing year for future replenishment water that should be purchased in the ensuing year but cannot be purchased due to an anticipated unavailability of replenishment water in the ensuing year.
- o) The estimated rate of the replenishment assessment required to be levied upon the production of groundwater from the groundwater supplies within the District during the ensuing fiscal year for the purposes of accomplishing replenishment activities (replenishment water plus replenishment projects and programs) is \$286.68 per acre-foot.
- p) Contaminants should be removed from groundwater supplies during the ensuing fiscal year pursuant to the District's projects and programs described in the 2016 ESR and any updates, the April 7, 2016 Cost of Service Report and any updates, the District's capital improvement program, and the District's draft annual budget document. The estimated costs to the District for the groundwater quality program for the 2016-17 fiscal year are estimated at \$5,526,840. The estimated additional rate of replenishment assessment required to be levied upon the production of groundwater from the groundwater supplies within the District during the ensuing fiscal year for those purposes is \$23.93 per acre-foot.
- q) The programs for the removal of contaminants or other actions under Water Code § 60224 are multi-year programs.

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- r) The estimated amount of reserves on hand at the end of the fiscal year of 2016-17 will not exceed the applicable limitations provided in Water Code Sections 60290 and 60291.
2. After accounting for other revenue, possible debt financing, or use of reserves, the estimated rate of the replenishment assessment required to be levied upon the production of groundwater from the groundwater supplies within the District during the ensuing fiscal year, 2016-17, for the purpose of accomplishing such replenishment and water quality programs by the District is \$297.00 per acre-foot of yearly groundwater production. After accounting for the use of an estimated \$3,080,000 in other revenue, possible debt financing for capital improvement projects, and District reserve funds as necessary, said replenishment assessment will produce the approximate necessary funds to pay the following costs: \$276.67 per acre-foot for the cost of purchasing water, financing capital improvement projects and other costs relating to accomplishing groundwater replenishment, and \$20.61 per acre-foot for clean water programs. Of the \$276.67 per acre-foot allocated to accomplishing groundwater replenishment, \$44.98 per acre-foot is allocated to capital projects. Of the \$20.61 per acre-foot allocated to clean water programs, \$2.72 per acre-foot may be allocated to capital projects. General and administrative expenses of the District will be met on a pro tanto basis given each function's (replenishment and clean water) load factor on operations.
3. Prior to accounting for other revenue, possible debt financing, or use of reserves, the entire cost of purchasing water for replenishment for the ensuing fiscal year shall be paid for by the assessment identified in Section 2 above. The cost of removing contaminants from groundwater supplies and taking other actions authorized under Water Code § 60224 shall be paid for by the assessment identified in Section 2 above, from possible debt financing for capital improvement projects, and from reserve funds as necessary maintained in accordance with Water Code § 60290. The costs of those capital projects to be undertaken in the ensuing fiscal year, but for which no capital construction accounts have been established pursuant to Water Code § 60291, shall also be paid for by the reserve fund maintained in accordance with Water Code § 60290.
4. All of the estimated costs for the ensuing fiscal year for water replenishment programs and for groundwater quality programs by the District as found in Section 1 of this Resolution shall be paid for by a replenishment assessment levied pursuant to Water Code § 60317 and by the reserve fund maintained in accordance with Water Code § 60290. There is hereby levied on the production of groundwater from groundwater supplies within the District during the fiscal year commencing July 1, 2016 and ending June 30, 2017, a replenishment assessment in the amount of \$297.00 per acre-foot produced during said fiscal year.
5. This Replenishment Assessment complies with the California Environmental Quality Act ("CEQA"), based on any one of the following grounds:

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- (a) That the District's groundwater replenishment program is exempt from CEQA pursuant to CEQA Guidelines §15261(a), in that it is an ongoing project commencing at a date such that an environmental impact report has not been required, and the 2016-2017 program is part of that ongoing project.
  - (b) Funds generated by the RA will be used for (1) operating expenses, (2) financial reserve needs, (3) purchasing or leasing supplies, equipment and materials, and (4) funds for capital projects necessary to maintain service within existing service areas. That Finding is based on documents and information provided in the record of these proceedings, including but not limited to the annual Engineering Survey Report, the 2016 Cost of Service Report, the proposed 2016-2017 budget, and the staff's written reports and PowerPoint presentations to the Board. Further, the funds raised by the RA will not be used to expand the area or territory in which the District provides services or to fund capital projects that would expand the District's service area or system. Accordingly, the District finds that its adoption of Resolution No. 16-1024 is exempt from CEQA pursuant to, among other bases, CEQA Section 20180(b) (8) and CEQA Guidelines 15261 and 15273, and the Board directs staff to file an appropriate Notice of Exemption.
  - (c) Notwithstanding the exemptions cited above, an Environmental Impact Report ("EIR") for the District's groundwater replenishment program was previously prepared and that EIR and program have been approved by the District's Board. Subsequent to the preparation of that EIR, the District prepared and certified a number of Mitigated Negative Declarations and Negative Declarations for various water quality and water supply projects (collectively, the "NDs"). The District has examined the imposition of a water replenishment assessment for the 2016-2017 fiscal year to determine whether an additional environmental document must be prepared. Based on this examination, the 2016 Engineering Survey and Report and all other evidence in the administrative record of the District's proceedings herein, the District concludes that: (1) the imposition of a water replenishment assessment for the 2016-2017 fiscal year would not have any effects that were not examined in the EIR and NDs; (2) pursuant to CEQA Guidelines §15162, no new effects would occur and no new mitigation measures would be required; and (3) the imposition of a water replenishment assessment for the 2016-2017 fiscal year is within the scope of the groundwater replenishment program covered by the EIR and NDs and such activity is adequately described in said EIR, and no new environmental document is required.
6. The Replenishment Assessment will be imposed on persons and entities that extract groundwater from the Central Basin and West Coast Basin. Extraction of groundwater from those Basins is governed by court judgments entered in 1962 and 1965 pursuant to groundwater adjudication lawsuits. Those judgments

granted certain parties an allocation to pump water based on prescriptive water rights and not based on any aspect of ownership of land overlying either Basin. Accordingly, since the pumping rights granted by the Judgments were based on prescriptive water rights, the parties do not pump the groundwater pursuant to any tenancy or fee interest in the overlying land or any rights that attach as a result of a tenancy or fee interest in overlying land. Further, neither of the Judgments for the Central and West Coast Basins included a determination of the amount or extent to which any party to said Judgment may extract groundwater from said basin without exceeding the natural safe yield of said basin.

7. The Replenishment Assessment is a charge for water basin management services provided by the District to persons exercising an allocation of pumping groundwater from adjudicated basins per a privilege granted under the court judgments referenced above. These services, which include water replenishment and water quality services, benefit those charged. All persons receiving the services or benefitting from the services by exercising pumping allocations are subject to the Replenishment Assessment. Services are not provided to those who are not charged the Replenishment Assessment and do not benefit those who are not charged the Replenishment Assessment. The amount of the Replenishment Assessment does not exceed the District's reasonable costs to provide services, confer benefits and/or grant privileges as described in this paragraph. Consequently, the Replenishment Assessment is not a "tax" within the meaning of Article XIII C, Section 1(e) of the California Constitution.

The District does not believe that its replenishment assessment is a "property-related fee" subject to the requirements of Article XIII D, Section 6 of the California Constitution. Notwithstanding this, in the interest of public participation, the District has conducted a noticed public hearing with respect to the replenishment assessment. The fact the District has done so should not be interpreted to mean that the District believes that the requirements of Article XIII D, Section 6 apply to the replenishment assessment. The Board also makes the following findings:

- (a) Notice of the April 28, 2016 Public Hearing was mailed by the District to the holders of adjudicated pumping rights in the basins.
- (b) The purpose of this mailing was to ensure that every adjudicated pumping rights holder in the basins was kept informed of the Replenishment Assessment proposal.
- (c) Such notice contained all information required by Article XIII D, Section 6(a) (1) of the California Constitution.
- (d) Such notice was mailed not less than 45 days prior to April 28, 2016.
- (e) From the date such notice was mailed through the close of the public testimony portion of the April 28, 2016 Public Hearing, the District accepted written testimony and protests, all of which were entered into the record of

# Annual Budget 2016/2017

the Public Hearing and made available for inspection by the public and by members of the Board.

- (f) At the April 28, 2016 Public Hearing, the Board considered all written testimony and protests and heard oral comments from all who wished to speak regarding the proposed Replenishment Assessment.
- (g) The Board determines that there is not a majority protest against the proposed Replenishment Assessment in the manner described in Article XIII D, Section 6(a)(2) of the California Constitution. The Board reaches this finding based on its examination of the protests.
- (h) The purpose of the Replenishment Assessment is to fund the District's water basin management services. These services are a package of services that make high quality water available to those exercising adjudicated pumping rights, and consist of: monitoring the level and quality of groundwater in the basins; purchasing and producing water needed to replenish the basins; preventing seawater contamination of the groundwater supply; funding replenishment operations; and other activities that make the basins a reliable and low-cost source of safe, high-quality water. Every activity of the District is a part of the water basin management services.
- (i) The rate of the Replenishment Assessment is such that proceeds of the Replenishment Assessment will not exceed the funds required to provide the water basin management services.
- (j) Revenues derived from the Replenishment Assessment will not be used for any purpose other than providing water basin management services.
- (k) The amount of the Replenishment Assessment imposed upon any parcel or person does not exceed the proportional cost of water basin management services attributable to that parcel or person.
- (l) No Replenishment Assessment is imposed upon any person who neither actually uses water basin management services nor has water basin management services immediately available to them.
- (m) Water basin management services are not a "general government service" that is available to the general public.
- (n) The Board finds that the memorandum dated April 7, 2016 from Robb Whitaker to the Board regarding "Cost of Service Report—Supplemental Information" (which is incorporated herein by reference) is true and correct.

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- (o) The Board notes that, in addition to replenishment assessment proceeds, the District receives an allocation of ad valorem property tax revenues. Such revenues are not subject to the requirements of Article XIII D of the Constitution. It is the intent of the Board that the District's Grants and Sponsorship Program, memberships and dues, water education expenses, and other community programs, be funded from these property tax revenues.

**[RECORD OF THE VOTE AND SIGNATURES ON FOLLOWING PAGE]**

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PASSED, APPROVED AND ADOPTED THIS 9<sup>th</sup> day of May 2016 by the following vote:

AYES: 3  
NOES: 1  
ABSENT: 1  
ABSTAIN: 0

WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

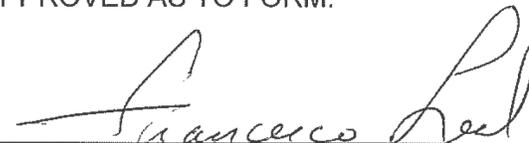
  
Willard H. Murray, Jr., President

ATTEST:

  
John D/S. Allen, Secretary

26 May 2016  
DATE

APPROVED AS TO FORM:

  
H. Francisco Leal  
Interim District Counsel

# Annual Budget 2016/2017

Table 1  
GROUNDWATER CONDITIONS AND REPLENISHMENT SUMMARY

	WATER YEAR Oct 1 - Sep 30		
	2014-2015	2015-2016 <sup>(a)</sup>	2016-2017 <sup>(a)</sup>
Total Groundwater Production	210,193 AF	230,000 AF	231,000 AF
Annual Overdraft	(102,500) AF	(84,800) AF	(85,800) AF
Accumulated Overdraft	(832,300) AF	(812,100) AF	
<b>Quantity Required for Artificial Replenishment for the Ensuing Year</b>			
<b><u>Spreading</u></b>			
	Imported for Spreading in Montebello Forebay		16,000 AF
	Recycled for Spreading in Montebello Forebay		55,000
		Subtotal Spreading	71,000
<b><u>Injection</u></b>			
	Alamitos Seawater Barrier Imported Water (WRD side only)		1,060
	Alamitos Seawater Barrier Recycled Water (WRD side only)		4,240
	Dominguez Gap Seawater Barrier Imported Water		3,200
	Dominguez Barrier Seawater Barrer Recycled Water		4,800
	West Coast Seawater Barrier Imported Water		2,000
	West Coast Seawater Barrier Recycled Water		17,000
		Subtotal Injection	32,300
<b><u>In-lieu<sup>(b)</sup></u></b>			
		Subtotal In-lieu	-
		<b>Total</b>	<b>103,300 AF</b>

(a) Estimated values

(b) In-Lieu Program currently not established for ensuing year

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Table 2  
**QUANTITY AND COST OF REPLENISHMENT WATER FOR THE ENSUING WATER YEAR**

		<b>Detailed Breakout of Water Costs and Surcharges to WRD</b>						
		Quantity	Oct-Dec	Jan-Jun	Jul-Sep	Melded	Total	
<b>Summary - All Water</b>	<b>Item</b>	<b>Quantity (AF)</b>		<b>Total Cost</b>				
	Spreading - Tier 1 Untreated Imported	16,000		\$ 11,704,648				
	Spreading - Recycled	55,000		\$ 3,975,000				
	Alamitos Barrier - Imported	1,060		\$ 1,218,980				
	Alamitos Barrier - Recycled	4,240		\$ 445,200				
	Dominguez Barrier - Imported	3,200		\$ 4,270,042				
	Dominguez Barrier - Recycled	4,800		\$ 4,483,200				
	West Coast Barrier - Imported	2,000		\$ 3,061,604				
	West Coast Barrier - Recycled	17,000		\$ 13,430,500				
	In-Lieu MWD Member	0		\$ -				
	In-Lieu WBMWD Customer	0		\$ -				
<b>TOTAL</b>	<b>103,300</b>		<b>\$ 42,589,174</b>					
		<b>Detailed Breakout of Water Costs and Surcharges to WRD</b>						
		Quantity	Oct-Dec	Jan-Jun	Jul-Sep	Melded	Total	
<b>Imported Water</b>	<b>CBMWD</b>							
	MWD Untreated Tier 1 - Spreading (\$/af)	16,000	\$ 594	\$ 666	\$ 666	\$ 648	\$ 10,368,000	
	MWD RTS (\$/month)	12	\$ 11,083	\$ 11,083	\$ 14,167	\$ 11,854	\$ 142,248	
	CBMWD Administrative Surcharge (\$/af)	16,000	\$ 70	\$ 70	\$ 70	\$ 70	\$ 1,120,000	
	CBMWD Water Service Charge (\$/month)	N/A	\$ 6,200	\$ 6,200	\$ 6,200	\$ 6,200	\$ 74,400	
	<b>Total to CBMWD</b>						<b>\$ 11,704,648</b>	
	<b>LBWD</b>							
	MWD Treated Tier 1 - Alamitos Barrier (\$/af)	1,060	\$ 942	\$ 979	\$ 979	\$ 970	\$ 1,028,200	
	MWD Capacity Charge (\$/cfs/month)	5.0	\$ 908	\$ 945	\$ 945	\$ 936	\$ 56,160	
	LBWD RTS (\$/af)	1,060	\$ 120	\$ 120	\$ 126	\$ 122	\$ 129,320	
	LBWD Administrative Surcharge (\$/af)	1,060	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5,300	
	<b>Total to LBWD</b>						<b>\$ 1,218,980</b>	
	<b>WBMWD</b>							
	MWD Treated Tier 1-DG/WC Barriers (\$/af)	5,200	\$ 942	\$ 979	\$ 979	\$ 970	\$ 5,044,000	
	MWD RTS (\$/af)	5,200	\$ 123	\$ 123	\$ 128	\$ 124	\$ 644,800	
	MWD Capacity Charge (\$/cfs/month)	46.8	\$ 708	\$ 736	\$ 736	\$ 729	\$ 409,406	
	WBMWD Administrative Surcharge (\$/af)	5,200	\$ 213	\$ 213	\$ 234	\$ 218	\$ 1,133,600	
	WBMWD Water Service Charge (\$/cfs/month)	130	\$ 62	\$ 62	\$ 68	\$ 64	\$ 99,840	
	<b>Total to West Basin MWD</b>						<b>\$ 7,331,646</b>	
	<b>IN-LIEU</b>							
MWD Member Agency (\$/af)	0	-	-	-		No IL Program		
WBMWD Member Agency (\$/af)	0	-	-	-		No IL Program		
<b>Total for In-Lieu Payments</b>						<b>\$ -</b>		
<b>Recycled Water</b>	<b>LADWP</b>							
	Recycled Water for Dominguez Barrier (\$/af)	4,800	\$ 927	\$ 927	\$ 955	\$ 934	\$ 4,483,200	
	<b>Total to LADWP</b>						<b>\$ 4,483,200</b>	
	<b>SDLAC</b>							
	Tertiary Water - WN, SJC, Pomona (\$/af) ≤50k	50,000	\$ 45	\$ 45	\$ 50	\$ 46	\$ 2,300,000	
	Tertiary Water - WN, SJC, Pomona (\$/af) >50k	5,000	\$ 332	\$ 332	\$ 344	\$ 335	\$ 1,675,000	
	<b>Total to SDLAC</b>						<b>\$ 3,975,000</b>	
	<b>WBMWD</b>							
	WBMWD Recycled Water Rate (\$/af) ≤4,500	4,500	\$ 1,214	\$ 1,214	\$ 1,274	\$ 1,229	\$ 5,530,500	
	WBMWD Recycled Water Rate (\$/af) 4,500+	12,500	\$ 626	\$ 626	\$ 648	\$ 632	\$ 7,900,000	
<b>Total to WBMWD</b>						<b>\$ 13,430,500</b>		
<b>LBWD</b>								
Source Water for Vander Lans Plant (\$/af)	4,240	\$ 104	\$ 104	\$ 108	\$ 105	\$ 445,200		
<b>Total to WRD</b>						<b>\$ 445,200</b>		
<b>TOTAL</b>	<b>103,300</b>					<b>\$ 42,589,174</b>		

Table 3  
WRD PROJECTS AND PROGRAMS

PROJECT / PROGRAM		DISTRICT	FUNCTION
		Replenishment	Clean Water
001	Leo J. Vander Lans Water Treatment Facility Project	100%	
002	Robert W. Goldsworthy Desalter Project		100%
004	Recycled Water Program	100%	
005	Groundwater Resources Planning Program	100%	
006	Groundwater Quality Program		100%
010	Geographic Information System	50%	50%
011	Regional Groundwater Monitoring Program	50%	50%
012	Safe Drinking Water Program		100%
018	Dominguez Gap Barrier Recycled Water Injection	100%	
023	Replenishment Operations (Spreading & Barriers)	100%	
025	Hydrogeology Program	50%	50%
033	Groundwater Resources Improvement Program (GRIP)	100%	0%

## Glossary of Terms

- Acre-foot (af):** The volume of water necessary to cover one acre to a depth of one foot, equal to 325,900 gallons. An acre-foot is the amount of water used by two households in one year.
- Aquifer:** The geologic formation of sand and gravel where groundwater is stored and can be easily pumped out by wells.
- Condensation:** Stage of the water cycle when water transforms from gas into a vapor and becomes a suspended in the atmosphere, visually represented by clouds.
- Conservation:** Not wasting, using something wisely
- Contamination:** An impurity in air, soil or water that can cause harm to human health or the environment.
- Desalination:** A process that converts seawater or brackish water to fresh water.
- Discharge:** To expel; water that naturally moves from an aquifer to a surface stream or lake.
- Drought:** An extended period of dry weather.
- Evaporation:** State of the water cycle when water transforms from a liquid into a gas.
- Groundwater:** Water under the ground's surface. It fills up the pore spaces (voids) between grains of gravel, sand, silt, or clay, and is a common source of water for drinking and irrigation.
- Groundwater flow:** The movement of groundwater beneath the earth's surface.
- Hydrologic cycle:** See "Water Cycle"
- Imported water:** Water that the WRD purchases from the Colorado River or Northern California to put into the groundwater basins to supplement insufficient local rainfall.
- Irrigation:** To supply water to crops, parks, golf courses and lawns.
- Permeable:** Any material that allows water to penetrate through.
- Precipitation:** Stage of the water cycle when water vapor molecules become too large and heavy to remain in the atmosphere and fall to the ground in the form of rain, snow, sleet, hail, etc.
- Quality:** To be at a high degree of excellence; something that is good or well done.
- Recharge:** To refill the groundwater basin by infiltrating rain water, imported water, or recycled water down into the aquifers.
- Recycle:** To produce a new item from an old item; to reuse parts of
- Recycled Water:** Water that has been collected after prior use, then highly treated at wastewater treatment plants so that it can be safely used again, such as for groundwater recharge.
- Runoff:** Water that does not become absorbed by the earth but flows across the surface of the land into a stream or lake.
- Saturation zone:** The area where water fills the spaces between soil, sand and rock underground.

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<b>Treatment:</b>	The process in which water is cleaned and purified.
<b>Water Cycle:</b>	The never-ending movement of water through the atmosphere, ground and back again; also called the hydrologic cycle.
<b>Water Table:</b>	The top of the saturation zone.
<b>Well:</b>	A hole or shaft drilled into the earth to pump water to the surface.
<b>Wheeling:</b>	Use of conveyance facilities by parties other than the owner.
<b>WRD:</b>	The Water Replenishment District of Southern California, an agency responsible for managing two of the most utilized groundwater basins in Southern California . These basins, the Central and West Coast, extend 420 square-miles through southern Los Angeles County and are among the region's most reliable natural water resources.

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## List of Acronyms

<b>ABAC</b>	Audit and Budget Advisory Committee	<b>CDPW</b>	California Department of Public Works
<b>ACWA/JPIA</b>	Association of California Water Agencies/Joint Power Insurance Authority	<b>CDWR</b>	California Department of Water Resources
<b>AF</b>	Acre-Feet (equivalent to 325,851 gallons)	<b>CEC</b>	Constituents of Emerging Concern
<b>AFL-CIO</b>	American Federation of Labor and Congress of Industrial Organizations	<b>CEQA</b>	California Environmental Quality Act
<b>AFSCME</b>	American Federation of State, County and Municipal Employees	<b>CERBT</b>	California Employers' Retiree Benefit Trust
<b>AFY</b>	Acre-Feet per Year	<b>CIS</b>	Centralized Information System
<b>AM</b>	Asset Management	<b>CIP</b>	Capital Improvement Program
<b>AOP</b>	Advanced oxidation using hydrogen peroxide	<b>CMFA</b>	California Municipal Finance Authority
<b>ARC</b>	Annual Required Contribution	<b>CMMS</b>	Computerized Maintenance Management System
<b>AWPF</b>	Advanced Water Purification Facility	<b>COP</b>	Certificates of Participation
<b>AWTF</b>	Advanced Water Treatment Facility	<b>CPR</b>	Common Pool Resource
<b>AWWARF</b>	American Water Works Association Research Foundation	<b>CPRA</b>	California Public Records Act
<b>BAC</b>	Budget Advisory Committee	<b>CSDLAC</b>	County Sanitation Districts of Los Angeles County
<b>BDOC</b>	Biodegradable dissolved organic carbon	<b>CSMFO</b>	California Society of Municipal Finance Officers
<b>BMP</b>	Best Management Practice	<b>CSR</b>	Cost of Service Report
<b>BOD</b>	Board of Directors	<b>CWF</b>	Clean Water Fund
<b>CAFA</b>	Comprehensive Annual Financial Audit	<b>CWH</b>	Council for Watershed Health
<b>CAFR</b>	Comprehensive Annual Financial Report	<b>CWS</b>	California Water Service Company
<b>CalPERS</b>	California Public Employee Retirement System	<b>CWSC</b>	California Water Service Company
<b>CAR</b>	Compliance Assessment Report	<b>CWSRF</b>	California Clean Water State Revolving Fund
<b>CASGEM</b>	California Statewide Groundwater Elevation Monitoring	<b>DAC</b>	Disadvantaged Communities
<b>CBMWD</b>	Central Basin Municipal Water District	<b>DDW</b>	Division of Drinking Water
<b>CBWA</b>	Central Basin Water Association	<b>DGB</b>	Dominguez Gap Barrier
<b>CBWCB</b>	Central Basin and West Coast Basin	<b>DTSC</b>	California Department of Toxic Substances Control
<b>CCR</b>	Consumer Confidence Report	<b>DWR</b>	Department of Water Resources
<b>CDIR</b>	California Department of Industrial Relations	<b>E-MFRES</b>	Enhanced-Montebello Forebay Recharge Enhancement Study
<b>DFA</b>	Contributed Funds Agreement	<b>EIR</b>	Environmental Impact Report
<b>DGB</b>	Dominguez Gap Barrier	<b>EPA</b>	U.S. Environmental Protection Agency
<b>CDPH</b>	California Department of Public Health	<b>ESR</b>	Engineering Survey and Report
		<b>FDIC</b>	Federal Deposit Insurance Corporation
		<b>FTE</b>	Full-Time Equivalent
		<b>GAAS</b>	Generally Accepted Auditing Standards
		<b>GASB</b>	Government Accounting Standards Board

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<b>GBMP</b>	Groundwater Basin Master Plan	<b>LARWQCB</b>	Los Angeles Regional Water Quality Control Board
<b>GBOP</b>	Groundwater Basin Optimization Pipeline	<b>LAX</b>	Los Angeles International Airport
<b>GFOA</b>	Government Finance Officers Association	<b>LBWD</b>	City of Long Beach Water Department
<b>GIS</b>	Geographic Information System	<b>LCP</b>	Labor Compliance Program
<b>GLAC</b>	Greater Los Angeles County	<b>LEED</b>	Leadership in Energy & Environmental Design
<b>GPS</b>	Global Positioning System	<b>LGCR</b>	Local Government Compensation Report
<b>GRAC</b>	Groundwater Resources Association of California	<b>LJVWTF</b>	Leo J. Vander Lans Water Treatment Facility
<b>GRIP</b>	Groundwater Reliability Improvement Program	<b>LRP</b>	Local Resources Program
<b>GRRR</b>	Groundwater Replenishment using Recycled Water Regulations	<b>LUST</b>	Leaking Underground Storage Tank
<b>GSWC</b>	Golden State Water Company	<b>MAR</b>	Managed Aquifer Recharge
<b>GW</b>	Groundwater	<b>MF</b>	Microfiltration
<b>GWAM</b>	Groundwater Augmentation Model	<b>MFI</b>	Modified Fouling Index
<b>HMI</b>	Human Machine Interface	<b>MFRES</b>	Montebello Forebay Recharge Enhancement Study
<b>IT</b>	Information Technology	<b>MFSG</b>	Montebello Forebay Spreading Grounds
<b>IRWMP</b>	Integrated Regional Water Management Plan	<b>MFSGOM</b>	Montebello Forebay Spreading Grounds Operational Model
<b>IS/MND</b>	Initial Study/Mitigated Negative Declaration	<b>mgd</b>	Million gallons per day
<b>JLAC</b>	Joint Legislative Audit Committee	<b>MISAC</b>	Municipal Information Systems Association of California
<b>JPA</b>	Joint Powers Authority	<b>MODFLOW</b>	MODular three-dimensional finite-difference groundwater FLOW model
<b>JWPCP</b>	Joint Water Pollution Control Plan	<b>MOU</b>	Memorandum of Understanding
<b>LABOS</b>	Los Angeles Bureau of Sanitation	<b>MWD</b>	Metropolitan Water District of Southern California
<b>LACDPW</b>	Los Angeles County Department of Public Works (Flood Control)	<b>NEPA</b>	National Environmental Policy Act
<b>LACFCD</b>	Los Angeles County Flood Control District	<b>NPV</b>	Net Present Value
<b>LACSD</b>	Los Angeles County Sanitation Districts	<b>OCWD</b>	Orange County Water District
<b>LADWP</b>	City of Los Angeles Department of Water and Power	<b>OPEB</b>	Other Post-Employment Benefits
<b>LAIF</b>	Local Agency Investment Fund	<b>PEIR</b>	Programmatic Environmental Impact Report
<b>LAMS4</b>	Los Angeles County Municipal Stormwater Permit		

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<b>PEPRA</b>	Public Employees' Pension Reform Act	<b>TBD</b>	To be determined
<b>PLA</b>	Project Labor Agreement	<b>TDS</b>	Total Dissolved Solids
<b>PLC</b>	Programmable Logic Center	<b>TITP</b>	Terminal Island Treatment Plant
<b>PPA</b>	Projects, Programs, Administration	<b>TIWRP</b>	Terminal Island Water Reclamation Plant
<b>RA</b>	Replenishment Assessment	<b>TLKEGP</b>	The Lillian Kawasaki ECO Gardener Program
<b>RFP</b>	Request for Proposal	<b>TOC</b>	Total organic compounds
<b>RFQ</b>	Request for Quote	<b>UCMR</b>	Unregulated Contaminant Monitoring Rule
<b>RGMP</b>	Regional Groundwater Monitoring Program	<b>USACE</b>	U.S. Army Corps of Engineers
<b>RHSG</b>	Rio Hondo Spreading Grounds	<b>USBR</b>	United States Bureau of Reclamation
<b>RO</b>	Reverse-osmosis	<b>USEPA</b>	United States Environmental Protection Agency
<b>RTS</b>	Readiness-to-Serve	<b>USGS</b>	United States Geological Survey
<b>RWQCB</b>	LA California Regional Water Quality Control Board – Los Angeles	<b>UV</b>	Ultraviolet
<b>SAT</b>	Soil Aquifer Treatment	<b>VOC</b>	Volatile organic compound
<b>SBPAT</b>	Structural Best Management Practices Prioritization and Analysis Tool	<b>WAS</b>	Water Augmentation Study
<b>SCADA</b>	Supervisory Control and Data Acquisition	<b>WBMWD</b>	West Basin Municipal Water District
<b>SCWC</b>	Southern California Water Committee	<b>WBWA</b>	West Basin Water Association
<b>SDLAC</b>	Sanitation Districts of Los Angeles County	<b>WDR</b>	Waste Discharge Requirement
<b>SDWP</b>	Safe Drinking Water Program	<b>WET</b>	Water Education for Teachers
<b>SGCBSG</b>	San Gabriel Coastal Basin Spreading Grounds	<b>WE&amp;T</b>	Water Environment & Technology
<b>SGMA</b>	Sustainable Groundwater Management Act	<b>WEFTEC</b>	Water Environment Federation Technical Exhibition and Conference
<b>SGSG</b>	San Gabriel Spreading Grounds	<b>WIN</b>	Water Independence Now Program
<b>SJC</b>	San Jose Creek	<b>WN</b>	Whittier Narrows
<b>SJCWRP</b>	San Jose Creek Water Reclamation Plant	<b>WPRSF</b>	Water Purchase and Rate Stabilization Fund
<b>SRF</b>	State Revolving Fund	<b>WRD</b>	Water Replenishment District of Southern California
<b>SWRCB</b>	State Water Resources Control Board	<b>WRP</b>	Water Reclamation Plant
<b>TAC</b>	Technical Advisory Committee	<b>WRR</b>	Water Reclamation Requirements

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