



# FISCAL YEAR 2016-2017 BUDGET

## Letter of Transmittal

Honorable President and Members of the Board of Directors:

On behalf of District staff, the Fiscal Year (“FY”) 2016-17 Operations & Maintenance (“O&M”) and Capital Improvement Program (“CIP”) budgets are presented for your consideration. The budget document before you represents a departure from past budget documents in that it presents expense and revenue forecasts for fiscal year 2016-17 from the Long-Range Financial Plan alongside the proposed budget, in order to show how the proposed budget fits in with long-term policy objectives. Significant strides have been made over the last fiscal year to cohesively integrate the District’s many long-term planning tools and studies with its guiding policies and documents. This budget document serves that end by identifying the resources required to fulfil the immediate operating needs necessary for the continued implementation of the District’s long-term policy objectives.

As a public document, the budget serves not only as a means to communicate the financial plans and management of the District to its customers, but also as a designation of fiscal authority by the Board to the General Manager and her staff to execute the programs and projects identified in this document subject to the District’s purchasing policy.

The District enters this fiscal year having experienced a full year of the State Water Resources Control Board’s (“SWRCB”) mandated 20 percent reduction in water use. Successes towards achieving those goals would not have been possible without the resounding customer response to the implementation of Stage II of the District’s Water Shortage Contingency Plan (“WSCP”). The Governor recently issued a new executive order that extends the emergency regulations through January 2017. In order to respond to the Governor’s renewed executive order, the District will look to refine its successful conservation programs by drawing on past experience as well as incorporating new information about customer water use decisions and rebates from its academic partnerships with UC Riverside and Stanford.

Despite the reduction in water sales, the District enters the new fiscal year in a financially strong position with a ‘AAA’ rating from Fitch Ratings and ‘AA+’ from Standard and Poor’s Ratings Services. Beginning the year with such a favorable financial position is a direct result of the prudent financial policies and management that have been facilitated by regular review and update of long-term financial forecasts as directed by the Board of Directors. Regular financial updates by staff are critical to the Board’s ability to confidently make fully-informed decisions based on defined and prioritized objectives that ensure financial responsibility and accountability. This year the District will expand its regular update and review even further: the District’s Reserve, Investment, and Capital Financing policies are all incorporated into this budget document and included as part of the District’s annual budget review process.

Because of the District’s strong financial health, the programs, projects, and resources presented for your consideration in this budget document are related to environmental stewardship and enhanced service to our customers, not decreased revenues. In a time when many utilities are being forced to increase rates or postpone needed infrastructure investments as they adapt to this new environment, the District is able to focus on conservation programs and new capital projects that improve both system and supply reliability.

As stewards of the water, wastewater, and recycled water systems and supplies our ratepayers have invested in over the last 56 years, it is our responsibility to ensure the continued reliability of those investments. Ensuring continued system reliability through reinvestment in the District's two billion dollar critical infrastructure has remained a priority: nearly half of the \$46 million in capital expenses budgeted for FY 2016-17 and more than 75 percent of the \$282 million ten-year CIP can be attributed to the replacement or refurbishment of existing infrastructure. In addition to the ongoing reservoir maintenance and lift station replacement projects that have been outlined in previous budgets, the ten-year CIP presented in this budget document includes the District's new valve replacement program. Many of the District's valves have exceeded their useful life and are no longer operating or have increased maintenance requirements. Through this program the District expects to replace more than 1,200 valves on critical transmission and distribution mains over the next ten years. Recognizing that reinvestment in critical infrastructure is only beneficial to its customers if there is also sufficient supply reliability, the District has elected to partner with Santa Margarita Water District by budgeting to purchase capacity in the Trampas reservoir in order to support seasonal recycled water demands and the fifth phase of its recycled water system expansion. In addition to the new recycled water supply, the District will further diversify its water supply portfolio as it begins to receive potable water from the Baker Water Treatment Plant when it comes online later this year.

### [Summary of Factors and Assumptions Guiding the Fiscal Year 2016-17 Budget](#)

The integrated planning efforts and cross-departmental collaboration required to continue cost-effectively implementing and executing the District's long-term objectives are highlighted in this budget document. As a planning tool, the budget is built to anticipate future needs, prioritize those needs, and make appropriate fiscal allocations of public funds.

The Board's pragmatic infrastructure investment and prudent fiscal decisions have factored significantly into the District's ability to control costs and operate efficiently today. The factors and assumptions that guided the development of this budget are summarized below:

- Reduced water purchases and sales from historical averages due to continued water use reductions and the transition to permanent regulations implemented by the SWRCB to enact the Governor's Drought Executive Order in May of 2016.
- The budget proposes new water efficiency activities, such as smart timer and turf removal direct install programs to make efficient water use easier for customers, implementation of Advanced Meter Infrastructure, a new customer portal to put the data from AMI to help customers and research programs to optimize water use efficiency spending.
- Asset Management Planning for the renewal and replacement of the District's infrastructure.
- Water supply and reliability investment and planning needs.
- Grant funding opportunities to help fund planning and capital programs.
- Terms of the four-year Memorandum of Understanding with the employees. This budget covers year four of the agreement.
- Additional resources needed to address District needs and growing challenges consistent with Board policy goals.

## Summary of Budget Assumptions

There are a number of assumptions that affect the fiscal year 2016-17 budget, many of which are only apparent on a District-wide basis. Some of the key assumptions are listed here:

- Total water purchases are budgeted at 25,000 acre-feet (“AF”), a 7.26 percent increase above FY 2015-16 budgeted purchases. This increase reflects continued below average sales projections due to increasingly efficient water use by customers but a slight relaxation from FY 2015-16 conservation levels.
- Water deliveries from Baker for FY 2016-17 are budgeted at 5,640 AF, reflecting eight months of full deliveries based on the plant coming online by end of October 2016. The remaining 19,360 AF of water deliveries will be supplied from imported sources via Metropolitan Water District of Southern California (“MWDSC”) through purchases furnished by the District’s wholesaler, the Municipal Water District of Orange County (“MWDOC”).
- Recycled water production is budgeted at 6,937 AF, consistent with budgeted FY 2015-16 recycled water use.
- Based on property tax data from the Orange County Tax Assessors’ office and the District’s tax consultant, property tax revenue has increased due to the appreciation of home values in the District in conjunction with the recapture of adjusted property values due to Proposition 8. Property taxes continue to be a significant source of revenue to supplement water and sewer rates.
- Water and sewer rates are budgeted at scheduled levels adopted by the Board in February 2015 and consistent with the District Long Range Financial Plan. The District will review the realized revenues and expenses in Fall 2016 as well as begin a new rate study for the continued implementation of the District’s Long Range Financial Plan for future years.

The following is a summary of the General Fund (includes Funds 1, 7, 12, and 14) highlighting the main expense categories as well as source of funds:

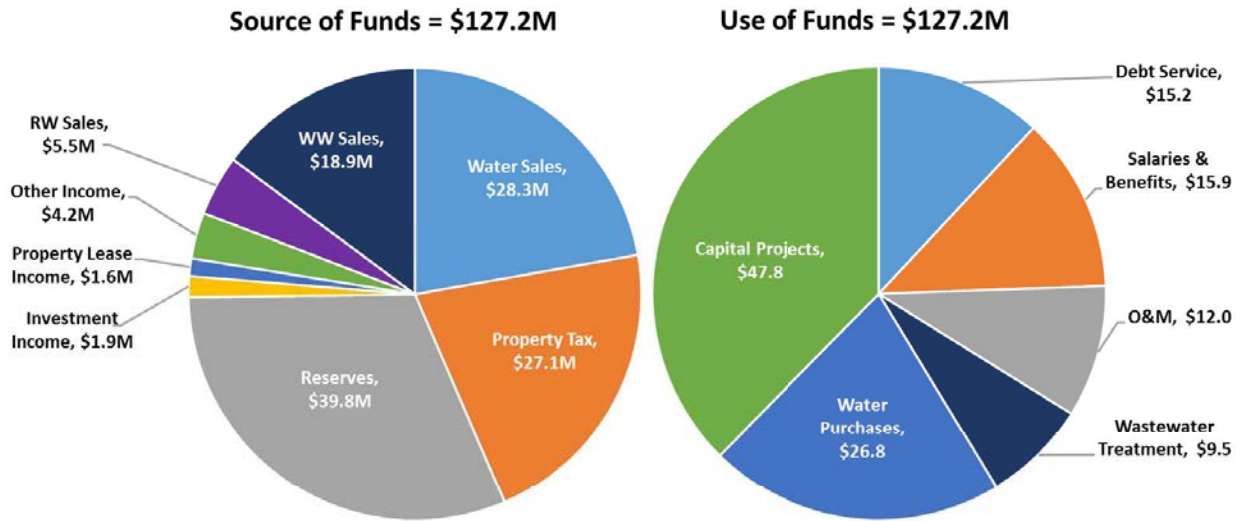


Figure LOT 1: FY 2016-17 General Fund Summary

The following is a summary of the Water Efficiency Fund (Fund 6) highlighting the main expense categories as well as source of funds:

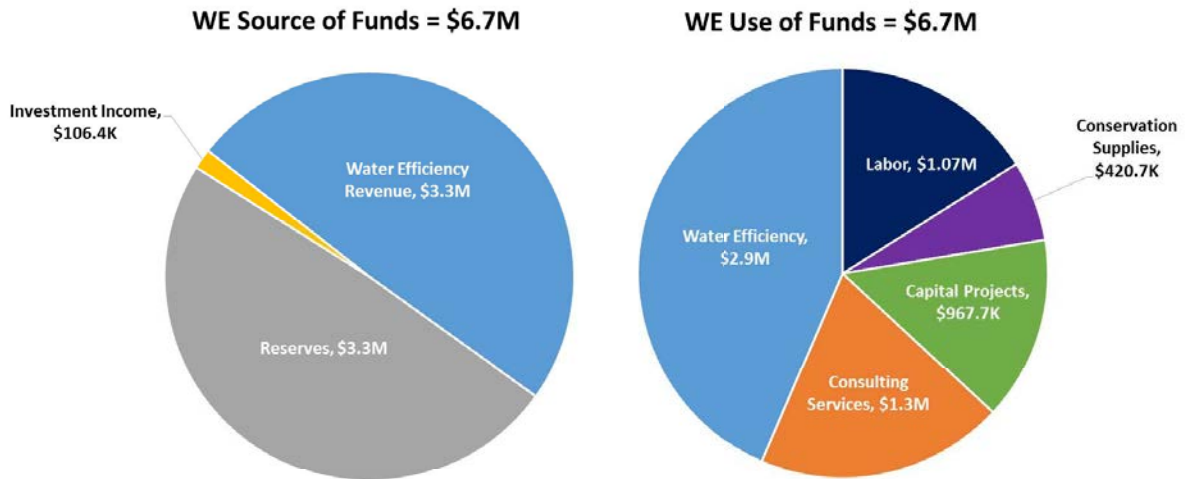


Figure LOT 2: FY 2016-17 Water Efficiency Fund Summary

The District has done better than merely weather the drought. In a time of increased scrutiny and financial stress, the District has proved its ability to mitigate risk and adapt to changing conditions, whether from drought, legislation, or regulation. The forward-thinking policies implemented by the Board of Directors have protected our customers from the challenges the drought has caused for agencies across the state, while continuing to promote the efficient use of water. These challenges have served as an opportunity to demonstrate leadership and vision as an organization for the benefit of our customers and for the region. The budget will provide resources, both financial and staffing, to continue to advance water efficiency programs, address infrastructure needs, expand water recycling, and further increase communication programs, all without the need to increase rates from approved levels. I appreciate the thoughtful attention and effort provided by the Board of Directors, staff, and the community as we all work together to preserve our resources and continue to provide reliable, cost-effective and high quality water and wastewater service that meets the needs of our customers, protects public health and promotes water-use efficiency.

Respectfully Submitted,



Joone Lopez  
General Manager

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## Executive Summary

### Budget Overview

The Operating & Maintenance and Capital expenditures for the Fiscal Year 2016-17 Budget are included in the budget document and broken down by the fund that expenditures are authorized from. Fund 1 is the General Fund for the District, which is utilized for operating expenditures and small capital outlays. Fund 6 is the Water Efficiency Fund which is accounted for separately and utilized to fund water efficiency and reliability projects to offset wasteful water usage. Fund 7, 12 and 14 make up the Capital Improvement Program funds which are drawn down throughout the year or funded through budget transfers authorized through the budget resolution. The debt service funds are utilized to hold restricted bond accounts and through authorized transfers from the budget resolution, to fund debt service payments. The total District financial flow of funds for FY 2016-17 is shown in Figure ES 1.

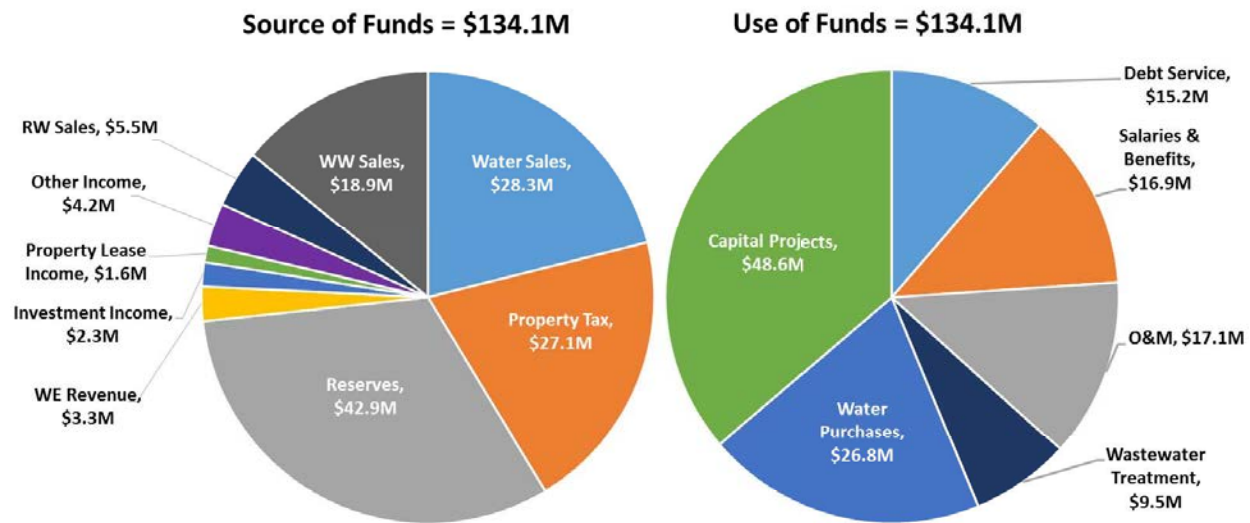


Figure ES 1: FY 2016-17 District Flow of Funds Summary

The largest portion of the District's budget reflects spending down of existing cash reserves to fund investments in Capital Improvements, per Board direction. The following budget sections will detail the components that make up each of the expenditures for the FY 2016-17 budget. As stated in the Letter of Transmittal, this budget marks a shift towards an annual budget that utilizes a ten-year projection of the financial position of the District as a tool to inform fiscally prudent decisions.

### Integrated Financial Planning

The objective of the Long-Range Financial Plan ("LRFP") is to identify strategies and actions to ensure sufficient financial resources to enable the District to achieve its mission and to utilize those financial resources effectively. The plan projects the operating budget and incorporates the capital improvement program in order to determine the financial impact of future operating and capital needs and develops strategies to address those needs. Hence, the District's operating budget serves as a key input into the long range financial outlook for the District. Additionally, the District's ten-year cashflow summary serves as key contextual information to aid in making near-term financial decisions.

The long-range financial planning model (also known as the “Ten-Year Cash Flow Model” or “Model”) is District built, owned and operated. Updates are continually made to the model to reflect changes in existing assumptions and future outlooks to create adaptive financial management strategies. The long-range planning and annual operating and capital budgeting processes are interrelated and form a single planning and budgeting system.

The availability of funds required to finance the capital construction and operations of the District is tracked through the model. Capital typically spans across a long time horizon, hence, a ten-year plan enables the District to plan out the financing needs for future capital expenditures and determine the ability of the District to fund them through internal fund-balance reserves, grants, state loans, property tax and rate revenues or the issuance of debt. The main output from the long range financial plan is the identification of revenue adjustments needed to maintain the long term financial health of the District.

The District has historically maintained a strong financial position based upon conservative planning and budgeting, maintenance of adequate unrestricted cash balances, and solid debt service coverage. A major objective of the LRFPP is to ensure that this strong performance continues into the future through timely and thoughtful financial analysis, budgeting, and planning. The District’s debt obligations were recently affirmed at “AAA” by Fitch Ratings and “AA+” by Standard & Poor’s with a Stable Rating Outlook.

As the District transitions its focus from developing infrastructure to maintaining and replacing infrastructure, the LRFPP in conjunction with other long-term planning efforts provide a roadmap for future needs and actions. Currently, the District is implementing an aggressive Capital Improvement Plan, implementing the strategies outlined in the 2015 Urban Water Management Plan, and evaluating local and regional supply reliability projects in the Long Range Water Reliability Plan. The Model provides the ability to evaluate the outputs of these planning processes in addition to changes in financial determinants such as usage. With all the future considerations to account for, the Model provides a tool to create adaptive management strategies to be evaluated as major assumptions fluctuate.

As the District has integrated long range and near term planning documents, a higher degree of resolution and accuracy has been realized yielding a consistent plan and message to rate payers. This is realized through the regular update of the Ten-Year Cash Flow Model in discussions with the Board of Directors to provide context and clarity in making short term financial fiduciary and policy decisions.

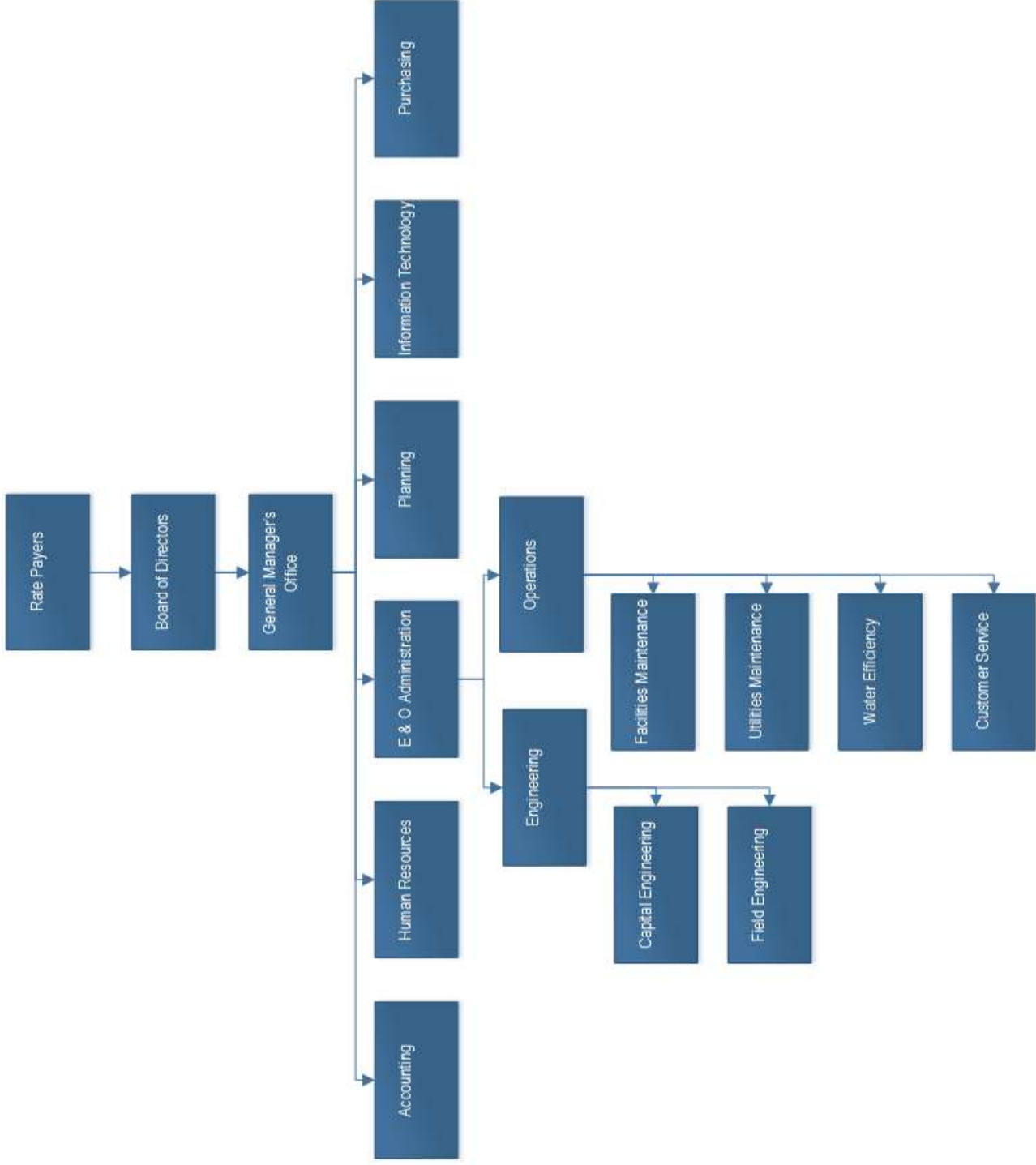
Below in Table ES 1, the dates of previous outputs of the Ten-Year Cash Flow Model are shown:

Table ES 1: Ten-Year Cashflow Model Outputs Comparison

LRFP Update	Rate Adjustment					Bond Issuance	
	2014-15	2015-16	2016-17	2017-18	2018-19	Fiscal Year	Amount
Nov 2014	7.0%	7.0%	5.0%	4.0%	4.0%	2016-17	\$30 million
May 2015	7.0%	7.0%	5.0%	4.0%	4.0%	2018-19	\$26 million
Oct 2015	7.0%	7.0%	5.0%	4.0%	4.0%	No Debt	
May 2016	7.0%	7.0%	5.0%	4.0%	4.0%	2017-18, 2021-22	\$52 million, \$34 million
June 2016	7.0%	7.0%	5.0%	4.0%	4.0%	2017-18, 2021-22	\$54 million, \$42 million

Overall, the District’s ten-year financial outlook for rate increases has remained consistent across updates to the Long Range Financial Plan. The debt-issuance increase between May and June of 2016 was primarily driven by changes to the District’s reserve policy to align reserves with the current risk profile. The District’s debt issuances have increased lately as updated information on asset needs is developed. The high bond rating and strong financial position, aided by the Ten-Year Cash Flow Model, will serve as tools to aid in appropriately sizing debt to mitigate volatile rate increases and maintain a consistent financial plan.

# Functional Organization Chart



## FY 2016-17 Proposed Staffing Plan

Division, Department and Position Title	Adopted FY 2015-16	Proposed FY 2016-17	Notes
<b><u>Board of Directors</u></b>			
BOARD MEMBERS	7	7	
	<u>7</u>	<u>7</u>	
<b>Board of Directors Total</b>	<b>7</b>	<b>7</b>	
<b><u>Administration</u></b>			
<i>General Manager</i>			
ADMINISTRATIVE ANALYST	1	1	
ASSISTANT GENERAL MANAGER	1	1	
ASSISTANT TO THE GENERAL MANAGER	1	1	
BOARD SECRETARY/EXECUTIVE ASSISTANT	1	1	
GENERAL MANAGER	1	1	
PUBLIC AFFAIRS COORDINATOR	1	1	
	<u>6</u>	<u>6</u>	
<i>Human Resources</i>			
DIRECTOR OF HUMAN RESOURCES	1	1	
HUMAN RESOURCES ANALYST	1	1	
	<u>2</u>	<u>2</u>	
<i>Information Technology</i>			
BUSINESS SYSTEMS ADMINISTRATOR	1	1	
INFORMATION SYSTEMS OFFICER	0	1	New Position Proposed for FY 16-17
INFORMATION TECHNOLOGY MANAGER	1	1	
OPERATIONS SYSTEMS ADMINISTRATOR	1	1	
SYSTEMS ANALYST	2	2	
	<u>5</u>	<u>6</u>	
<i>Contracts and Purchasing</i>			
CONTRACTS & PROCUREMENT MANAGER	1	1	
INVENTORY CONTROL WORKER	1	1	
PURCHASING AGENT	1	1	
	<u>3</u>	<u>3</u>	
<b>Administration Total</b>	<b>16</b>	<b>17</b>	
<b><u>Engineering and Operations</u></b>			
<i>Administrative Services</i>			
ADMINISTRATIVE ASSISTANT	2	2	
ASSISTANT DIRECTOR OF ENGINEERING	1	1	
ASSISTANT DIRECTOR OF OPERATIONS	1	1	
DIRECTOR OF ENGINEERING & OPERATIONS	1	1	
SAFETY AND COMPLIANCE COORDINATOR	1	1	
	<u>6</u>	<u>6</u>	
<i>Engineering Services</i>			
CROSS CONNECTION INSPECTOR	5	6	New Position Proposed for FY 16-17
CROSS CONNECTION SUPERVISOR	1	1	
ENGINEERING/GIS TECHNICIAN	2	2	
INSPECTION SUPERVISOR	1	1	
INSPECTOR	4	4	
PERMIT TECHNICIAN	1	1	
PRINCIPAL ENGINEER	2	3	New Position Proposed for FY 16-17
RECORDS AND MAPPING COORDINATOR	1	1	
SENIOR ENGINEER	1	2	New Position Proposed for FY 16-17
SENIOR GIS ANALYST	1	1	
SUPERINTENDENT OF ENGINEERING	1	1	
	<u>20</u>	<u>23</u>	

Division, Department and Position Title	Adopted FY 2015-16	Proposed FY 2016-17	Notes
<b><u>Engineering and Operations</u></b>			
<i>Facilities Maintenance</i>			
ELECTRICAL/INSTRUMENTATION SERVICES SUPERVISOR	1	1	
ELECTRICAL/INSTRUMENTATION SYSTEMS PROGRAMMER	2	2	
FACILITIES COORDINATOR	1	1	
MAINTENANCE WORKER - FACILITIES	7	7	
STATION MAINTENANCE SUPERVISOR	1	1	
SUPERINTENDENT OF OPERATIONS	1	1	
WATER DISTRIBUTION SUPERVISOR	1	1	
WATER SYSTEMS OPERATOR	3	4	New Position Proposed for FY 16-17
	<u>17</u>	<u>18</u>	
<i>Utilities Maintenance</i>			
COLLECTION SYSTEM SUPERVISOR	1	1	
MAINTENANCE WORKER - COLLECTION SYSTEM	7	7	
MAINTENANCE WORKER - STREETS	12	14	2 New Positions Proposed for FY 16-17
MECHANIC	2	2	
STREET CREW SUPERVISOR	1	2	New Position Proposed for FY 16-17
SUPERINTENDENT OF OPERATIONS	1	1	
SUPPORT SERVICES SUPERVISOR	1	1	
	<u>25</u>	<u>28</u>	
<i>Customer Service</i>			
CUSTOMER ACCOUNT REPRESENTATIVES	12	13	New Position Proposed for FY 16-17
CUSTOMER ACCOUNT SUPERVISOR	1	1	
CUSTOMER SERVICE REPRESENTATIVE	13	13	
CUSTOMER SERVICE SUPERVISOR	2	2	
SUPERINTENDENT OF CUSTOMER SERVICE	1	1	
	<u>29</u>	<u>30</u>	
<i>Water Efficiency</i>			
POLICY & OUTREACH ANALYST	1	1	
SENIOR FINANCE & RESOURCES ANALYST	1	1	
WATER CONSERVATION REPRESENTATIVE	3	3	
WATER CONSERVATION SUPERVISOR	1	1	
WATER RESOURCES ANALYST	1	1	
WATER RESOURCES MANAGER	1	1	
WATER USE EFFICIENCY ANALYST	1	1	
	<u>9</u>	<u>9</u>	
<b>Engineering and Operations Total</b>	<b>106</b>	<b>114</b>	
<b><u>Finance</u></b>			
<i>Administrative Services</i>			
DIRECTOR OF FINANCE & TREASURER	1	1	
	<u>1</u>	<u>1</u>	
<i>Accounting</i>			
ACCOUNTANT	4	4	
ACCOUNTING SUPERVISOR	1	1	
CONTROLLER	1	1	
	<u>6</u>	<u>6</u>	
<b>Finance Total</b>	<b>7</b>	<b>7</b>	
<hr/>			
<b>Full Time Total</b>	<b>129</b>	<b>138</b>	
<b>Board Members</b>	<b>7</b>	<b>7</b>	

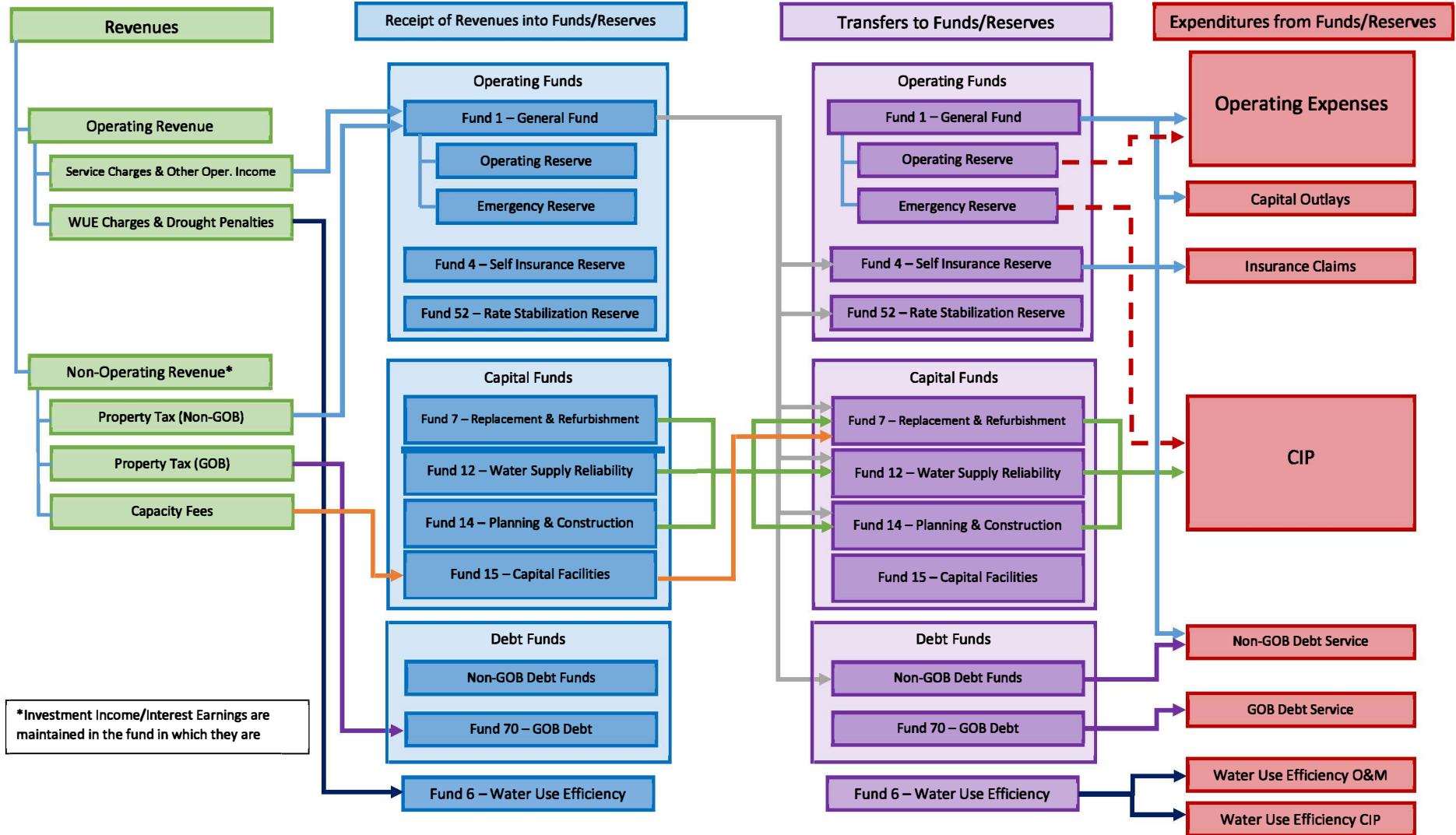
## Account Category Breakdown

Account Category	Category Components
<b><u>Operating Revenues:</u></b>	
Water Sales	Potable Water Usage Charges and Service Charges
Recycled Water Sales	Recycled Water Usage Charges and Service Charges
Sewer Sales	Sewer Service Charges
Other Operating Income	Meter Sales, Meter Sales - Misc Parts, Reconnect Fees, Tag Fees, Reconnect Fees Aft Hours, Back Flow Notice, Service Installation Chg, Site Visit Chg, Meter Removal/Re-Set, Fog Fees, Operating Inc - Misc, Plan Check & Inspection Fee, Returned Check Fee
Water Efficiency Revenue	Charges for inefficient potable and recycled water usage
<b><u>Non-Operating Revenues:</u></b>	
Property Tax Revenue	Secured Property Taxes, Secured Taxes paid to SCWD, Supplemental and Miscellaneous Taxes, Unsecured Taxes
Investment Income	Interest earned on reserve balances and investments
Property Lease Income	Lease agreements with cell carriers for placement of cell towers on District property
Misc. Non-Operating Income	Board Room Rental Fees, Sale of Scrap, Cash Discounts, Misc Non-Operating Income, General Obligation Property Tax, AMP RPOI, Tax Credit Subsidy
Connection Fees	Connection Fees, Plan Check & Inspection Fees
<b><u>Operating Expenses:</u></b>	
Salaries	Director's Fees, Full Time, Overtime, Compensatory Time Expense, Standby, Merit
PERS Employer Contributions	District share of annual CalPERS contribution requirements
PERS Employee Contributions	Fractional payment of CalPERS contribution for Tier 1 employees during "catch-up" period. FY 2015-16 was last year of "catch-up" period. Tier 1 employees now fully contributing.
PERS Other (Side Fund, 401A)	401A Employer Contribution, CalPERS Sidefund Amortization (UAL Payment)
Educational Courses	Educational Courses, Certifications
Travel & Meetings	Seminar, Conferences, Training, Travel Costs
Employee Relations	Employee Relations (Recognition, Medical, Safety), Pre-Employment Costs
General Services	Billing Services, Accounting Services, Tax Collection Charges, Bad Debt Expense, Bad Debt Write-Off, Mapping Updates, Uniform Service
Annual Audit	VTD Financial Audit and other AUPs

<b>Account Category</b>	<b>Category Components</b>
<b><u>Operating Expenses:</u></b>	
Member Agencies O&M	San Juan Basin Authority (SJBA), Upper Chiquita Reservoir (UCR), 5B Reservoir, R6 Reservoir, IRWD Emergency Interconnection, Upper Oso Reservoir System
Dues & Memberships	District Dues and Memberships, Staff Dues and Memberships
Election Expenses	Election cost estimates from Registrar of Voters Office
Consulting Services	Document Management, Orange Label, Outreach, Finance Consultants, Software Consultants, Engineering Support, Operations Support, and Water Efficiency/Reliability Support
Equipment Rental	Office Equipment Rentals (Prudential, Foodcraft), Overall Tools & Equipment Rentals (forklifts, generators, equipment, etc.)
District Fuel	Unleaded Fuel - Vehicles, Diesel Fuel - Generators, Diesel Fuel - Vehicles, Vehicle Oil
Insurance - District	Automobile and General Liability, Property Insurance, Misc. Insurance General
Insurance - Personnel	Employer FICA, Medicare Insurance, State Unemployment, Workers Comp
Insurance - Benefits	Life and Health Insurance, Dental Insurance, Vision Insurance, Disability Insurance, Auto Allowance, OPEB Costs
Legal Services - Personnel	Personnel-related legislation and other HR policy inquiries
Legal Services - General	BB&K legal counsel, contract and agreement review
District Office Supplies	Billing Supplies, Community Relations, General Office Supplies, Shipping Costs
District Operating Supplies	Chemicals, Warehouse Stock
Repairs & Maint. - Equipment	Computer Support Contracts, Field Equipment, Office Equipment, Infrastructure Technology Hardware, Vehicle Maintenance and Repair
Repairs & Maint. - Facilities	Contract & Maintenance Agreements, Hazardous Materials Removal, Electrical & Instrumentation, Landscape and Tree Maintenance, Paving Repairs, Pest Control, System Maintenance, System Repairs, Janitorial Services, Underground Service Alert, Permits, Raising Valves and Manholes
Safety & Compliance	Regulatory Compliance, Safety Equipment and Supplies, Safety Shoes, Safety Training
SOCWA	General Fund, PC 2 - JB Latham Treatment Plant, 3A Treatment Plant, PC 5 - San Juan Creek Ocean Outfall, PC 2SO - Recycled Water Permit, PC 15 - Coastal Treatment Plant, PC 17 - Regional Treatment Plant, PC 21 - Effluent Transmission Main, PC 24 - Aliso Creek Ocean Outfall, Pretreatment Program, Use Audit Refund

<b>Account Category</b>	<b>Category Components</b>
<b><u>Operating Expenses:</u></b>	
Special Outside Assessments	Department of Health Services (DOHS) Fees, LAFCO Fees, Property Tax Assessment
Utilities	Electric Utilities (SCE and SDG&E), Gas Utility (Southern CA Gas), Overall Telephone, Mobile Communication
Water Purchases	MWD Water Purchases (Treated and Untreated), MWDOC Charges (Capacity, Connection, and RTS), MWDOC Reclaimed Water Rebate, Baker Water Treatment Plant, Joint Regional Water Supply System (JRWSS), Santiago Aqueduct Commission (SAC), East Orange County Feeder #2 (EOCF2), South County Pipeline (SCP)
Meter Purchases	Replacement meters and warehouse inventory
Labor	Personnel costs attributed to water efficiency or water reliability programs and management
Conservation Supplies	Community Relations and Outreach supplies attributed to water efficiency or water reliability programs and management
Water Efficiency	Rebates and administration of rebate programs attributed to water efficiency or water reliability programs and management

Flow of Funds



\*Investment Income/Interest Earnings are maintained in the fund in which they are

## Budget Process & Schedule

The budget process is initiated by District staff in mid-December of each year. The Financial Planning department works with each District department head and each of their supervisors to develop a budget based on expected resource needs to meet overall District goals. Requests for new personnel are submitted to executive management for thorough review. Additionally, in mid-December the Engineering Department coordinates with District staff to collect new capital projects to integrate into the Ten-Year Capital Improvement Program.

In March, District staff discuss overall approach and initiate discussions with the District's Board of Directors to receive feedback, early and often, related to District goals and strategic objectives for the upcoming Fiscal Year. In January, the District held a long range planning session to discuss in detail District goals that drive resource needs in order to best serve ratepayers. A dedicated section later in the budget document identifies the goals, and details their impact on operations and the proposed budget. The District has transitioned to an annual budget to integrate the long range planning developed in the internal Ten-Year Cashflow Model and Ten-Year Capital Improvement Program.

In April, staff presented the proposed Ten-Year Capital Improvement Program to the Board of Directors in a public meeting. At a special public Board Workshop on May 11, District Staff presented the remaining portions of the District Fiscal Year 2016-17 budget. District staff integrate feedback and discuss the proposed budget at the May and June Board and committee meetings. The final Fiscal Year 2016-17 budget is scheduled for adoption on June 16, 2016.

*Table BP 1: Budget Process & Schedule*

<b>Budget Process</b>	<b>Date</b>
<b>Budget Staff Coordination Kick-Off</b>	<b>December 2015</b>
<b>Budget Kick-Off with Board</b>	<b>March 16, 2016</b>
<b>Presentation of Ten-Year FY 2016-17 CIP</b>	<b>April 18, 2016</b>
<b>Presentation of Proposed FY 2016-17 Budget</b>	<b>May 11, 2016</b>
<b>Financial Policies Board Workshop</b>	<b>May 25, 2016</b>
<b>FY 2016-17 Budget Adoption</b>	<b>June 16, 2016</b>

## Fund 1 – General Fund

As an enterprise fund, the District operates as a self-sufficient entity that oversees the operations, maintenance, and capital infrastructure needed to provide potable, recycled, and wastewater services to its customers. This autonomy allows the District to structure its costs to accurately reflect both its approach to management and planning, and its commitment to maintaining exemplary service while continuing to keep rates low. In 2011, the District’s Board of Directors recognized two distinct cost centers beginning to develop: costs related to providing continued service to customers for the efficient use of water, and costs related to conservation.

The District’s General Fund, identified as Fund 1, accounts for the programs and activities related to providing service for the efficient use of its potable and recycled water systems, and the management of its wastewater system.

### Fund 1 – Summary Statement

The General Fund budget is reported on an accrual basis, and is developed so that the use of District funds is carefully balanced with identified funding sources. The difference between the \$66.2M in operating and capital outlay expenses budgeted for FY 2016-17 and \$53.2M in projected sales and operating income the District expects are met by property tax receipts and other non-operating revenues. As shown in Table F1 - 1, the District is projecting a net revenue of \$21.5M in its General Fund, prior to any transfers to other funds for capital project and debt service related costs or held in reserve to meet bond covenant and financial policy requirements.

Table F1 - 1: Statement of Revenues, Expenses, and Changes in Net Position

<b>MOULTON NIGUEL WATER DISTRICT</b>								
<b>GENERAL FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION</b>								
	<b>FY 2015 Approved Budget</b>	<b>FY 2015 Actuals</b>	<b>FY 2015 Difference</b>	<b>FY 2016 Approved Budget</b>	<b>FY 2017 Forecasted Budget</b>	<b>FY 2017 Proposed Budget</b>	<b>FY 2017 Difference</b>	<b>FY 2017 %Δ</b>
<b>Operating Revenues:</b>								
Water Sales	27,325,000	24,708,832	(2,616,168)	25,449,137	28,926,159	28,338,290	(587,869)	-2.03%
Recycled Water Sales	4,725,000	4,880,742	155,742	5,249,795	6,129,777	5,489,814	(639,963)	-10.4%
Sewer Sales	17,150,000	16,182,196	(967,804)	18,053,647	19,064,651	18,911,865	(152,786)	-0.8%
Other Operating Income	483,500	325,825	(157,675)	483,500	489,905	491,585	1,680	0.3%
<b>Total Operating Revenues</b>	<b>49,683,500</b>	<b>46,097,595</b>	<b>(3,585,905)</b>	<b>49,236,079</b>	<b>54,610,492</b>	<b>53,231,554</b>	<b>(1,378,938)</b>	<b>-2.5%</b>
<b>Non-Operating Revenues:</b>								
Property Tax Revenue	21,848,500	24,011,516	2,163,016	26,501,190	27,049,765	27,069,573	19,808	0.1%
Investment Income	2,973,207	2,624,306	(348,901)	1,867,913	2,259,666	2,242,424	(17,242)	-0.8%
Property Lease Income	1,740,000	1,731,352	(8,648)	1,660,096	1,569,878	1,569,878	-	0.0%
Misc. Non-Operating Income	68,000	3,681,896	3,613,896	68,000	3,249,646	3,249,646	-	0.0%
Connection Fees	-	551,179	551,179	-	179,150	468,818	289,668	161.7%
<b>Total Non-Operating Revenues</b>	<b>26,629,707</b>	<b>32,600,250</b>	<b>5,970,543</b>	<b>30,097,199</b>	<b>34,308,105</b>	<b>34,600,339</b>	<b>292,234</b>	<b>0.9%</b>
<b>Total Revenues</b>	<b>76,313,207</b>	<b>78,697,844</b>	<b>2,384,637</b>	<b>79,333,278</b>	<b>88,918,597</b>	<b>87,831,893</b>	<b>(1,086,704)</b>	<b>-1.2%</b>
<b>Operating Expenses:</b>								
Salaries	9,550,317	9,235,167	(315,150)	10,307,516	10,779,313	11,181,396	402,083	3.7%
PERS Employer Contributions	990,416	965,687	(24,729)	1,306,049	1,358,291	1,480,783	122,492	9.0%
PERS Employee Contributions	196,566	181,559	(15,006)	149,890	155,885	-	(155,885)	-100.0%
PERS Other (Side Fund, 401A)	214,956	195,746	(19,210)	250,770	260,800	267,655	6,855	2.6%
Educational Courses	51,720	25,495	(26,225)	44,270	45,055	51,580	6,525	14.5%
Travel & Meetings	251,034	181,497	(69,537)	238,644	242,875	253,320	10,445	4.3%
Employee Relations	14,800	12,103	(2,697)	15,000	69,818	78,397	8,579	12.3%
General Services	402,776	362,745	(40,031)	458,095	412,073	394,750	(17,323)	-4.2%
Annual Audit	40,000	40,665	665	48,080	48,932	53,000	4,068	8.3%
Member Agencies O&M	1,231,370	1,345,750	114,380	1,542,495	1,594,314	692,228	(902,086)	-56.6%
Dues & Memberships	93,968	85,580	(8,388)	96,510	98,221	101,245	3,024	3.1%
Election Expenses	150,000	10,173	(139,827)	-	-	83,000	83,000	-
Consulting Services	1,602,900	1,300,440	(302,460)	2,248,900	2,288,768	1,315,400	(973,368)	-42.5%
Equipment Rental	65,000	64,365	(635)	65,000	66,152	69,000	2,848	4.3%
District Fuel	340,000	235,727	(104,273)	340,000	349,677	340,000	(9,677)	-2.8%
Insurance - District	576,151	511,888	(64,263)	561,275	540,744	443,170	(97,574)	-18.0%
Insurance - Personnel	468,100	386,112	(81,988)	438,275	455,806	460,266	4,460	1.0%
Insurance - Benefits	2,360,333	2,258,256	(102,078)	2,587,061	2,690,023	2,924,922	234,900	8.7%
Legal Services - Personnel	50,000	6,399	(43,602)	50,000	50,886	50,000	(886)	-1.7%
Legal Services - General	170,000	143,345	(26,655)	200,000	203,546	420,000	216,454	106.3%
District Office Supplies	499,900	404,843	(95,057)	475,400	483,828	473,250	(10,578)	-2.2%
District Operating Supplies	315,850	301,346	(14,504)	392,967	401,261	390,450	(10,811)	-2.7%
Repairs & Maint. - Equipment	867,287	638,432	(228,855)	738,469	752,176	626,269	(125,907)	-16.7%
Repairs & Maint. - Facilities	3,550,995	2,909,459	(641,536)	4,135,970	4,219,951	3,447,205	(772,746)	-18.3%
Safety & Compliance	285,250	139,734	(145,516)	309,450	314,936	191,650	(123,286)	-39.1%
SOCWA	8,450,820	8,448,293	(2,527)	9,204,735	9,367,916	9,480,877	112,961	1.2%
Special Outside Assessments	230,300	200,296	(30,004)	225,000	233,989	240,000	6,011	2.6%
Utilities	2,126,000	2,173,236	47,236	2,258,900	2,334,786	2,373,260	38,474	1.6%
Water Purchases	27,976,295	25,978,276	(1,998,019)	23,697,841	26,121,968	25,826,807	(295,161)	-1.1%
Meter Purchases	868,000	662,151	(205,849)	906,000	922,062	615,000	(307,062)	-33.3%
<b>Total Operating Expenses</b>	<b>63,991,103</b>	<b>59,404,765</b>	<b>(4,586,339)</b>	<b>63,292,562</b>	<b>66,864,053</b>	<b>64,324,880</b>	<b>(2,539,173)</b>	<b>-3.8%</b>
<b>Change in Operating Position</b>	<b>12,322,104</b>	<b>19,293,080</b>	<b>6,970,976</b>	<b>16,040,716</b>	<b>22,054,544</b>	<b>23,507,013</b>		<b>6.6%</b>
<b>Non-Operating Expenses:</b>								
Capital Outlay Expense	978,624	1,045,572	(66,948)	1,075,652	-	1,962,017	1,962,017	-
<b>Projected Change in Fund</b>	<b>11,343,480</b>	<b>18,247,508</b>	<b>7,037,924</b>	<b>14,965,064</b>	<b>22,054,544</b>	<b>21,544,996</b>		<b>-2.3%</b>

A detailed accounting of the revenues and expenses that comprise each of the line items presented in Table F1 - 1 are provided in the subsequent sections. Note that as a result of the District's efforts to realign its accounts to reflect changes in operations, the totals related to *Employee Relations*, *General Services*, *Member Agency O&M*, and *Water Purchases* will differ from those reported above. The totals shown in Table F1 - 1 are consistent with the account mapping used for the development of the

respective budget or fiscal year the costs were incurred, whereas the detailed tables reflect the historical trends of the individual expenses that make up today's accounts.

## Fund 1 – Detailed Budget – Revenues

Table F1 - 2: Overall District Revenues

Description	FY 2014-15			FY 2015-16 Approved Projections	FY 2016 17			
	Approved Projections	Actuals	Difference		Forecasted Projections	Proposed Projections	Difference	% Change
<b>Operating Revenue</b>								
Water Sales	27,325,000	24,708,832	(2,616,168)	25,449,137	28,926,159	28,338,290	(587,869)	-2%
Sewer Sales	17,150,000	16,182,196	(967,804)	18,053,647	19,064,651	18,911,865	(152,786)	-1%
<b>Total Operating Revenue Budget</b>	<b>49,683,500</b>	<b>46,097,595</b>	<b>(3,585,905)</b>	<b>49,236,079</b>	<b>54,610,492</b>	<b>53,231,554</b>	<b>(1,378,938)</b>	<b>-3%</b>
<hr/>								
Secured Property Taxes	21,137,300	22,542,117	1,404,817	25,289,990	25,813,493	25,589,376	(224,117)	-1%
Supplemental and Miscellaneous Taxes	700,000	930,375	230,375	700,000	714,490	930,375	215,885	30%
<b>Total Property Tax Summary Budget</b>	<b>21,848,500</b>	<b>24,011,516</b>	<b>2,163,016</b>	<b>26,501,190</b>	<b>27,049,765</b>	<b>27,069,573</b>	<b>19,808</b>	<b>0%</b>
Investment Income	2,973,207	2,624,306	(348,901)	1,867,913	2,259,666	2,242,424	(17,242)	-1%
Misc. Non-Operating Income	68,000	3,681,896	3,613,896	68,000	3,249,646	3,249,646	-	0%
<b>Total Other Non-Operating Revenue</b>	<b>4,781,207</b>	<b>8,588,733</b>	<b>3,807,526</b>	<b>3,596,009</b>	<b>7,258,340</b>	<b>7,530,766</b>	<b>272,426</b>	<b>4%</b>
<b>Total Revenue Budget</b>	<b>76,313,207</b>	<b>78,697,844</b>	<b>2,384,637</b>	<b>79,333,278</b>	<b>88,918,597</b>	<b>87,831,893</b>	<b>(1,086,704)</b>	<b>-1%</b>

### Operating Revenues

#### Water Sales

As a result of both long-term local conservation efforts and short-term response to the water use reduction targets mandated by the SWRCB, water sales have declined annually since FY 2013-14, with an overall general decline in water use since FY 2006-07. As water sales are seasonal by nature, water utilities are particularly susceptible to financial stress from reduced sales if they are recovering even a small portion of their fixed costs on a volumetric basis. Recognizing the inherent timing difference between highly seasonal water sales and largely fixed annual costs, the District's Board adopted a rate structure which allowed it to begin recovering 100 percent of its fixed costs on a fixed basis. After a comprehensive cost-of-service analysis, it was determined that by utilizing various non-sales revenues to partially offset fixed costs, the District is able to recover the remainder of its fixed costs through fixed service charges and only rely on volumetric water sales revenues to recover variable water purchase and delivery costs. Because of this approach, the District's overall financial position has not been impacted by mandatory statewide water conservation regulations.

The operating and financial benefits of the District's rate structure are made clear by the negligible impact that water sales reductions have had on the development of the FY 2016-17 General Fund operating budget; however, the success of a marginal cost based price structure is dependent on accurate projections of the underlying costs incurred as a result of providing that service. The District's Planning Department actively monitors any potential changes in wholesale or utilities rates to ensure the District will continue to fully recover its operating costs.

Water sales are projected at \$28.3M for FY 2016-17, two percent below forecasted values. Potable water usage is projected at 23,261 AF for FY 2016-17. The methodology used to develop water usage projections is consistent with the methodology used to develop the long-term demand projections reported in the District's 2015 Urban Water Management Plan, and reflect maintained low usage through most of the fiscal year with a small allowance for partial reversion to pre-drought usage characteristics. Projected water sales revenue for FY 2016-17 includes a scheduled rate increase that become effective January 1, 2017.

#### *Recycled Water Sales*

Recycled water sales are projected at \$5.5M, ten percent below forecasted sales and five percent above FY 2015-16 projected values. Initial forecasts for FY 2016-17 incorporated an increase in recycled water usage in FY 2014-15 that was observed after projections for the FY 2015-16 budget had been prepared. Conservation remained strong among recycled water customers last year and the proposed FY 2016-17 recycled water sales are projected to remain low. Recycled water usage is budgeted at 6,937 AF, consistent with budgeted FY 2015-16 recycled water use. Projected recycled water sales revenue for FY 2016-17 includes a scheduled rate increase that become effective January 1, 2017.

#### *Sewer Sales*

Sewer sales are projected at \$18.9M, less than one percent below forecasted sales and five percent above FY 2015-16 projected sales. As part of the rate structure change in April 2015, sewer charges are now collected on an entirely fixed basis. The decrease from forecasted values is a result of improved customer meter counts. Projected sewer sales revenue for FY 2016-17 includes a scheduled rate increase that become effective January 1, 2017.

#### *Other Operating Income*

Other operating income includes many of the user fees customers pay to utilize specific services such as turn on, turn off, late bill payments and other service fees. The negligible increase above forecasted values is the result of projection refinements that occur as actual revenues are recorded.

### *Non-Operating Revenues*

#### *Property Tax*

The District receives an apportionment of Ad Valorem property taxes from the County of Orange. As the global economy has recovered, property tax revenue for the District has steadily increased more than 25 percent over the past four years. This has been a key component of the District's revenue base and provided customers with some of the lowest water rates in South Orange County. Property tax revenue budgeted for FY 2016-17 represents about a two percent increase over the budget for FY 2015-16. Local South Orange County property tax forecasts suggest about a five percent increase year over year but actuals are coming in under the budgeted FY 2015-16 amount.

Additionally, in 1997 a portion of the South Coast Water District (SCWD), an area called Laguna Sur/ Monarch Pointe, annexed into the MNWD service area. However, the area remains served by SCWD for sewer service. The District maintained the SCWD procedure of collecting the charges on the property tax bill as supplementary tax collected by the County and remits payment to SCWD.

### *Investment Income*

The District currently holds a diverse portfolio of investments to meet both short term liquidity, mid-term cash funded Capital Improvement Programs, and long-term earnings. The goals for the District's investments are:

- Safety
- Liquidity
- Earn a total rate of return commensurate with the first two goals

The average investment earnings rate projected for FY 2016-17 is approximately two percent which yields the budgeted \$2.2M based on average expected level of capital invested throughout the fiscal year.

### *Property Lease Income*

The main source of revenue for the Property Lease Income line item is from leasing District facilities to cell site carriers to place antennae's and equipment on reservoirs and other District locations. In the 1990s, the Moulton Niguel Water District (District) approved the first communication facility to be constructed at one of the District's sites. As the communication industry grew, District was approached about use of District sites for cell tower equipment installations. The District developed the Communications License Program (Program) with a primary objective to provide economic benefit to District ratepayers through a monthly lease program. The District's first responsibility is to provide water and wastewater service to its customers, and development of the Program can not interfere with District's ability to provide quality service. With those objectives in place, the Board of Directors approved a Communications Lease Agreement and Lease Policy, which was implemented on January 1, 2001, and updated to a Communication License Agreement and License Policy on March 15, 2012. On December 14, 2015, the Board of Directors adopted an update to the Communication License Agreement and License Policy.

Since implementation of the Communications Lease Agreement and Lease Policy, the Program has grown to include 56 agreements with various amendments on several of those agreements. These communications facilities are distributed among 17 District sites. Many cell carriers are merging such as Sprint and Nextel, and no long need duplicative sites, which is the main reason for the decrease in budget from FY 2014-15 of \$1.74M to \$1.66M in FY 2015-16 to \$1.57 in the FY 2016-17 proposed budget.

### *Misc. Non-Operating Income*

The line item for Miscellaneous Non-Operating Income includes the supplemental property tax assessed on properties in improvement districts 6 and 7, as well as the interest reimbursement for the 2009 Build America Bonds.

### *Connection Fees*

The District assesses charges on new development to buy into the existing assets existing customers have paid to develop. The District's private development group actively works with the local cities to produce a ten-year private development forecast. This forecast is utilized to develop the proposed budget for FY 2016-17 of \$468,818. Much of the forecasted activity is for in-fill projects as the District is largely built-out. The previous two Fiscal Year's did not include a budget for connection fees as the

budget was largely focused on expenditures; however, as part of the District’s overall efforts to align its governing documents, connection fees have been incorporated into the FY 2016-17 proposed budget.

## Fund 1 – Detailed Budget – Expenses

### Operating Expenses

#### Salaries and Benefits

Table F1 - 3: Salaries and Benefits

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Salaries</b>								
Full-Time Salaries	8,639,638	8,329,302	(310,336)	9,403,091	9,834,189	10,183,739	349,550	4%
Directors Fees	167,580	133,360	(34,220)	175,963	183,881	180,600	(3,281)	-2%
Overtime	587,099	607,396	20,297	572,462	598,223	654,157	55,934	9%
Standby	156,000	158,700	2,700	156,000	163,020	158,100	(4,920)	-3%
Compensatory Time Expense	-	6,409	6,409	-	-	4,800	4,800	-
<b>Total Salaries Budget</b>	<b>9,550,317</b>	<b>9,235,167</b>	<b>(315,150)</b>	<b>10,307,516</b>	<b>10,779,313</b>	<b>11,181,396</b>	<b>402,083</b>	<b>4%</b>
<b>CalPERS Budget</b>								
PERs Employer Contributions	990,416	965,687	(24,728)	1,306,049	1,358,291	1,480,783	122,492	9%
PERs Employee Contributions	196,566	181,559	(15,006)	149,890	155,885	-	(155,885)	-100%
PERs Other (Side Fund, 401A)	214,956	195,746	(19,210)	250,770	260,800	267,655	6,855	3%
<b>Total CalPERS Budget</b>	<b>1,401,937</b>	<b>1,342,992</b>	<b>(58,945)</b>	<b>1,706,709</b>	<b>1,774,976</b>	<b>1,748,437</b>	<b>(26,539)</b>	<b>-1%</b>
<b>Insurance - Benefits Budget</b>								
Life and Health Insurance	1,730,955	1,634,958	(95,997)	1,903,124	1,979,249	2,308,772	329,523	17%
Dental Insurance	157,813	150,882	(6,931)	170,488	177,308	203,149	25,841	15%
Vision Insurance	23,923	23,262	(661)	27,880	28,995	28,788	(207)	-1%
Disability Insurance	63,185	64,696	1,511	74,111	77,075	78,966	1,891	2%
OPEB Costs	361,057	361,057	-	388,058	403,580	281,847	(121,733)	-30%
Auto Allowance	23,400	23,400	-	23,400	23,815	23,400	(415)	-2%
<b>Total Insurance - Benefits Budget</b>	<b>2,360,333</b>	<b>2,258,256</b>	<b>(102,078)</b>	<b>2,587,061</b>	<b>2,690,023</b>	<b>2,924,922</b>	<b>234,900</b>	<b>9%</b>
<b>Total Salaries and Benefits Budget</b>	<b>13,312,588</b>	<b>12,836,415</b>	<b>(476,172)</b>	<b>14,601,286</b>	<b>15,244,312</b>	<b>15,854,756</b>	<b>610,444</b>	<b>4%</b>

Total salary and benefit costs for Fund 1 are budgeted at \$15.9M: a nine percent increase above FY 2015-16 budget, but only a four percent increase above the forecasted FY 2016-17 budget. For all fund expenditures, salaries and benefits makes up less than 13 percent of District FY 2016-17 proposed budgeted expenses. The proposed budget includes the addition of nine full time staff, which were not assumed in the forecasted FY 2016-17 budget. As the majority of staffing costs are driven by salaries, which are in turn largely driven by terms of the MOU, the forecasted salaries and benefits costs for FY 2016-17 represent status quo cost increases. A comparison of the proposed salaries and benefits costs for FY 2016-17 to their respective forecasted values highlights the District’s ability to control costs: despite a seven percent increase in staffing, staffing related costs only increased four percent above expected levels.

The District recognizes the long-term financial commitment additional staffing represents and incorporates ten-year cashflow impacts from its LRFP into its staffing decisions. Consistent with its overall cost-alignment approach, the District utilizes consultants to meet temporary or project specific resource needs and carefully matches increases in staffing to identified long-term needs. A detailed discussion of the District’s planned use of consultants for FY 2016-17 can be found in the Consulting Services section. It is important to note that the cashflow impacts of staffing decisions also consider potential cost savings from bringing resources in-house. The decision to rely on outside resources for the management of a particular project, program, or other cost center of the District, is continually re-

evaluated. Should the District determine it is no longer cost-effective to outsource, a plan will be developed to bring in resources to shift management in-house.

Last year, the District completed a system wide valve replacement program study as part of its ongoing evaluation of system infrastructure. Using the results of this study, Staff developed a program that will replace 1,245 critical valves over the next ten years. As part of the cost analysis for the program, several scenarios were considered to determine the optimal mix of additional staffing and outside contracting. The analysis identified distinct valve groups that would require specific skill sets and equipment and compared the costs of replacing those valves with additional District staff or specialized contractor labor and equipment. Staff recommended a plan in which roughly three quarters of the identified valves will be replaced by a new District valve crew—a seven person team consisting of four existing employees and three new staff—while the remaining valves—all over twelve inches in diameter and requiring specialized labor and heavy equipment—will be replaced by contractors. Despite the increase in staffing, the recommended program represents \$26M in cost savings over ten years compared to using contractors exclusively. The valve replacement program is just one example of the District’s ability to control total costs through effective management and planning.

The District also recognizes the long-term cost savings—which in turn result in long-term rate savings for customers—that can be achieved by building upon programs that have already proven successful. Water Purchases represents the single largest operating cost for the District and even marginal improvements in the District’s ability to control that cost can have tremendous long-term cost savings. In FY 2014-15, the District underwent an extensive audit of its water distribution system, which resulted in the development of a pilot water loss control program and the prioritization of preventative maintenance as a means to reduce real water loss. Since that time system losses have decreased from 8.3 percent to 7.2 percent, which represents 200 AFY in water savings, or more importantly avoided water purchases. The District looks to improve upon these early successes and has included a new Water Systems Operator in its proposed staffing plan for FY 2016-17.

A major achievement for FY 2015-16 was the in-house development of the District’s Urban Water Management Plan (UWMP) 2015 Update. As part of the UWMP, the District identified expansion of its recycled water system as a critical component of its portfolio of demand management and supply development that would ensure long-term supply reliability for the District’s service area. Preliminary analysis of the Phase V expansion of the recycled water system, indicates approximately 2,000 of average year potable demand can be converted to recycled water use. Regulatory changes from the Regional Water Quality Control Board and the District’s emphasis on recycled water expansion will place increasing demands on the District’s existing Cross-Connection Inspectors, whose workflow is not easily outsourced. As the District looks to begin the next phase of its recycled water system expansion, cost-effective sites will continue to be converted and the proposed Cross-Connection Inspector will assist with conversions in the short-term and transition to inspections in the long-term.

A critical component of the cost analyses that go into developing the projects that make up the District’s Ten-Year Capital Improvement Program (CIP) is project execution. District staff has been vigilant in its efforts to close the gap between budgeted CIP expenditures and execution. Because of these efforts, CIP execution percentage for FY 2015-16 is expected to increase by nearly 20 percent over FY 2013-14 levels, despite the budgeted CIP for FY 2015-16 having doubled since FY 2013-14. Proposed staffing for

FY 2016-17 includes provisions for two new engineers to ensure the execution gap continues to close while the District expands its CIP in order to meet infrastructure needs.

Maintaining the reliability of its potable, recycled, and wastewater system infrastructure is crucial to the long-term success of the District, and by incorporating the cashflow impacts of staffing decisions into the management of its operations and planning, the District can maintain the reliability of its infrastructure cost-effectively. However, as operations continue to become more efficient and departments become more integrated, the District must ensure that IT infrastructure is a priority as well. Due to increased publicity and worsening water supply conditions, agencies are beginning to utilize increasingly sophisticated analytical tools to inform policy and educate customers. Through participation in groups such as the California Data Collaborative, the District has taken a leadership role in demonstrating the potential of informed policy making and operating efficiencies that are made possible by data analysis. Recognizing the increased reliance on data and the increased demands placed on its IT infrastructure, the District proposed the creation of an Information Systems Officer position to administer the development of policies and evaluation procedures to ensure software architecture consistency and long-term planning for the expansion of its infrastructure.

The multitude of planning and operating efforts required for the District's continued success all relate back to a common origin: providing exemplary service to our customers. In addition to its work with other departments and long-term planning, the Customer Accounts Department serves as an interface between customers and the District. As the District enters what is likely to be another year of drought, customer education will continue to be a priority in continuing the District's success, and the proposed Customer Account Representative will help to ensure the continued partnership between the District and its customers.

The proposed staffing plan for FY 2016-17 was developed cooperatively by the District's supervisory and management staff to ensure that a consensus was reached as to which positions had the most immediate need and could not be easily outsourced.

The new positions proposed in the FY 2016-17 Staffing Plan represent resources needed to continue executing existing operating and project goals for the District, as well as resources needed to implement the new operating and project goals that have been established by Board policy, including: increased reliability, improved system maintenance, minimize rate increases, expansion of the recycled water system, regulatory compliance, and a better understanding of wastewater treatment.

### **Specific Factors**

- **Salaries:** Despite low CPI-measured inflation rates during FY 2015-16, a two percent cost of living adjustment was applied to salary schedules, consistent with terms of the MOU.
- **CalPERS Budget:** In 2009, the Board took action to reduce the District's outstanding retirement benefits liabilities through the creation of a new CalPERS tier and a plan to gradually move employees towards a retirement benefit cost-sharing partnership with the District. This fiscal year is the first year of full cost-sharing between the District and its employees. Based on recent CalPERS actuarial valuations, the District has increased its funded ratio to nearly 86.5 percent of the present-value of its projected benefits. Because of this partnership, the District has been able to continue to provide for its employees while keeping budgeted retirement expense increases to a minimal 2.4 percent over the FY 2015-16 budget.

- Medical Insurance:** Historically, the District has done an exemplary job of controlling medical insurance costs. Health care premiums have increased minimally over the last three fiscal years: zero percent, four percent, and four percent, respectively. However, in response to rising medical care costs, the District issued a Request for Proposals to ensure its medical plan costs remain competitive. As a result of this process, vision and dental plan premiums will not increase and health care premiums will only increase four percent above the rates for FY 2015-16.
- Other Postemployment Benefits (OPEB) Costs:** Cognizant of the long-term liabilities the District faced as a result of changing market conditions, the Board of Directors has prioritized reducing the District’s outstanding retirement benefit commitments. Along with the restructuring of its CalPERS tiers, the District restructured its post-employment health benefits for dedicated employees to work in unison with Medicare benefits and began making annual payments to the California Employer’s Retiree Benefit Trust (“CERBT”) to prefund health benefits and reduce outstanding liabilities. As a result of this plan, the District has decreased its unfunded accrued liability to less than 63 percent of what it was in FY 2010. This plan has had a significant impact on budgeted OPEB costs for FY 2016-17. Because of the Board’s commitment to reducing outstanding benefits liabilities, the District was well positioned for changes in market conditions, and as a result OPEB costs for the proposed budget are approximately 30 percent below the forecasted amount.

*Education and Training, Travel and Meetings, and Employee Relations*

*Table F1 - 4: Education and Training, Travel and Meetings, and Employee Relations*

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016-17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Educational Courses</b>								
Educational Courses	35,200	13,937	(21,263)	31,400	31,957	32,950	993	3%
Certifications	16,520	11,558	(4,962)	12,870	13,098	18,630	5,532	42%
<b>Total Educational Courses Budget</b>	<b>51,720</b>	<b>25,495</b>	<b>(26,225)</b>	<b>44,270</b>	<b>45,055</b>	<b>51,580</b>	<b>6,525</b>	<b>14%</b>
<b>Travel &amp; Meetings</b>								
Travel and Expenses	89,744	49,129	(40,615)	88,867	90,442	89,900	(542)	-1%
Seminars, Conferences, and Meetings	161,290	132,368	(28,922)	149,777	152,432	163,420	10,988	7%
<b>Total Travel &amp; Meetings Budget</b>	<b>251,034</b>	<b>181,497</b>	<b>(69,537)</b>	<b>238,644</b>	<b>242,875</b>	<b>253,320</b>	<b>10,445</b>	<b>4%</b>
<b>Employee Relations</b>								
Pre-Employment Costs	14,800	12,103	(2,697)	15,000	15,675	29,197	13,522	86%
Employee Relations (Recognition, Medical, Safety)	51,776	41,024	(10,752)	53,200	54,143	49,200	(4,943)	-9%
<b>Total Employee Relations Budget</b>	<b>66,576</b>	<b>53,127</b>	<b>(13,449)</b>	<b>68,200</b>	<b>69,818</b>	<b>78,397</b>	<b>8,579</b>	<b>12%</b>

The District places considerable value on its staff’s ability to adapt to a changing operating environment, not only from a regulatory compliance standpoint but also from a technological and risk management standpoint. While in total the costs reported in Table F1 - 4 represent a small fraction of the proposed FY 2016-17 budget, they include provisions for ongoing training and education for accounting, IT and SCADA system security, contracts management, enterprise billing, capital planning, GIS, and vocational training, as well as the costs for maintaining the environmental, distribution, collections, backflow, and safety certifications necessary for the continued operation of the District. In addition to providing for the known education and training needs of its staff, the District also encourages staff to attend regional

seminars and keep themselves apprised of developing technologies that could make the District more efficient or potential legislation that could affect operations or management practices.

Reflected in *Pre-Employment*, the District’s Human Resources Department has implemented Neo-Gov Insight, an automated application processing and online job posting system which has dramatically reduced application processing times. The District received and reviewed nearly 1,300 employment applications between August and April of FY 2015-16 alone, which is more than in FY 2013-14 and FY 2014-15 combined. The proposed budget includes provisions to extend the Neo-Gov platform to the District’s onboarding process to ensure a consistent orientation and training experience for new hires. The District looks to continue the recruiting successes of FY 2015-16 as it begins to fill proposed positions.

As stated previously, the line items listed under *Employee Relations* do not match those reported in Table F1 - 1, as the totals above are intended to provide a historical comparison of the individual costs that comprise today’s accounts.

*Election Expenses, General Services, and Annual Audit*

Table F1 - 5: Election Expenses, General Services, and Annual Audit

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b><u>Election Expenses</u></b>								
Registrar of Voters	150,000	10,173	(139,827)	-	-	83,000	83,000	-
<b><u>Annual Audit</u></b>								
Annual Financial Records Audit	40,000	40,665	665	48,080	48,932	53,000	4,068	8%
<b><u>General Services</u></b>								
<b>Financial Services</b>								
Billing Services	106,000	89,368	(16,632)	106,000	107,879	106,000	(1,879)	-2%
Accounting Services	87,000	78,557	(8,443)	89,175	90,756	82,750	(8,006)	-9%
Tax Collection Charges	55,500	59,902	4,402	63,000	64,117	68,000	3,883	6%
Bad Debt Expense	100	67,010	66,910	12,000	12,213	100	(12,113)	-99%
Bad Debt Write-Off	70,000	308	(69,692)	92,320	93,957	91,000	(2,957)	-3%
<b>Engineering Services</b>								
Mapping Updates	7,400	3,838	(3,562)	7,400	7,531	11,900	4,369	58%
<b>Overall Services</b>								
Uniform Service	25,000	21,126	(3,874)	35,000	35,620	35,000	(620)	-2%
<b>Total General Services Budget</b>	<b>351,000</b>	<b>320,109</b>	<b>(30,891)</b>	<b>404,895</b>	<b>412,073</b>	<b>394,750</b>	<b>(17,323)</b>	<b>-4%</b>

The costs in Table F1 - 5 represent administrative, records keeping, and reporting activities for the District. As with other less-capital intensive items in the proposed FY 2016-17 budget, the expenses captured in Table F1 - 5 do not make up a significant portion of the District’s total costs; however, they provide for critical District functions, without which operations could not function efficiently.

The District’s Board of Directors are periodically up for re-election, with four of the seven Directors up for re-election this year. Cost estimates for election expenses are provided to the District by the Registrar of Voters; however, actual costs may vary significantly for the provided estimates. Because of this potential difference in cost and timing, election expenses are not forecasted and expenses are updated as the budget for that year is developed.

As stated previously, the line items listed under *General Services* do not match those reported in Table F1 - 1, as the totals above are intended to provide a historical comparison of the individual costs that comprise today's accounts.

*Member Agency Operations and Maintenance*

Table F1 - 6: Member Agency Operations and Maintenance

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Potable Water Facilities</b>								
San Juan Basin Authority (SJBA)	178,250	178,250	-	200,000	200,000	200,000	-	0%
Upper Chiquita Reservoir (UCR)	109,000	143,348	34,348	80,000	70,000	70,000	-	0%
5B Reservoir	6,000	-	(6,000)	6,000	6,000	6,000	-	0%
R6 Reservoir	16,000	10,756	(5,244)	16,000	20,000	20,000	-	0%
IRWD Emergency Interconnection	20,000	-	(20,000)	-	20,000	20,000	-	0%
<b>Total Potable Water Facilities</b>	<b>329,250</b>	<b>332,354</b>	<b>3,104</b>	<b>302,000</b>	<b>316,000</b>	<b>316,000</b>	<b>-</b>	<b>0%</b>
<b>Recycled Water Facilities</b>								
Upper Oso Reservoir System	181,000	264,518	83,518	364,000	376,228	376,228	-	0%
<b>Total Recycled Water Facilities</b>	<b>181,000</b>	<b>264,518</b>	<b>83,518</b>	<b>364,000</b>	<b>376,228</b>	<b>376,228</b>	<b>-</b>	<b>0%</b>
<b>Total Member Agencies O&amp;M</b>	<b>510,250</b>	<b>596,871</b>	<b>86,621</b>	<b>666,000</b>	<b>692,228</b>	<b>692,228</b>	<b>-</b>	<b>0%</b>

In order to maintain efficiencies regionally, the District participates in many shared facilities operated under agreement for regional benefit. MNWD is a member of the San Juan Basin Authority, a joint powers authority created in 1971 for the purpose of carrying out water resources development of the San Juan Basin. The members of the San Juan Basin Authority (“SJBA”) are the District, Santa Margarita Water District (“SMWD”), South Coast Water District (“SCWD”), and the City of San Juan Capistrano (“SJC”). The San Juan Basin is located in southern Orange County within the San Juan Creek Watershed. The San Juan Basin is comprised of four sub-basins: Upper San Juan, Middle San Juan, Lower San Juan, and Lower Trabuco and is bound on the west by the Pacific Ocean and by tertiary semi-permeable marine deposits. The Basin is recharged through flow from San Juan Creek, Oso Creek, and Arroyo Trabuco, precipitation to the valley floor, and Hot Spring Canyon spring flows.

The San Juan Basin Authority agencies are currently investigating alternatives for increasing the yield and maximizing the available storage within the San Juan Basin. The groundwater management plan identified that in-stream recharge is the only viable large-scale recharge method to increase the potential yield due to a lack of off-stream sites. Options for enhancing the yield of the San Juan Basin include: increasing groundwater recharge using storm water capture, and introduction of recycled water for groundwater recharge. Surface water recharge involves utilizing rubber dams and/or incidental recycled water recharge to increase the potential yield of the basin from 2,000 AF per year to 8,200 AF per year through a phased progression of these recharge project opportunities. Further analysis of the potential recharge enhancement projects is necessary to understand the regulatory, technical, and institutional challenges to implementation of the projects. The District will continue to work with the interested SJBA agencies to investigate the enhancement opportunities and the impact on the District’s potential to receive groundwater from the San Juan Basin. The District’s budgeted expenses for FY 2016-17 include the District’s share of the administration of the SJBA and salinity management for the Basin.

The District has an emergency interconnection agreement with Irvine Ranch Water District (“IRWD”) to supply treated Phase 1 water at 10.6 million gallons per day (“MGD”) with a maximum flow rate of 15.6

cfs for 30 days. The maximum incident volume IRWD will supply is 1,768 AF. The agreement also provides emergency water to the City of San Clemente, Laguna Beach County Water District, SMWD, and SCWD. Under the agreement, IRWD and the participating agencies jointly constructed various projects to transfer water to the Aufdenkamp Transmission Main and Joint Transmission Main. In 2007, the District had fewer than 2 days of average day demand in available supplies in the event that a catastrophic earthquake disabled the District's access to the Metropolitan Water District of Southern California ("MWDSC") importation system or the Deimer Water Treatment Plant. Recognizing the risk such an event posed to the service area populace, the District's Board of Directors voted to adopt Resolution 08-38, which set a policy establishing a system reliability goal of 31 days of average day demand.

The District has invested over \$70 million in system reliability projects since 2008. The proactive foresight and action by the District's Board of Directors to make investments in regional system reliability projects such as the Upper Chiquita Reservoir, the Baker Water Treatment Plant and the IRWD Intertie brought average day demand up to nearly 15 days of average day demand. The District has capacity rights of 55 percent and is responsible for the same percentage of project costs and ongoing operations and maintenance. The budgeted FY 2016-17 expenses are for the operation and maintenance of the interconnection. Upper Chiquita Reservoir is operated by SMWD and the budgeted expenses for FY 2016-17 are for the operations and maintenance of the joint facilities.

In an effort to expand emergency storage in south Orange County, the District entered into agreement in 2002 with neighboring water districts for joint use of the El Toro R6 Reservoir. The District owns 13 MG of capacity in the reservoir. The budgeted expenses for FY 2016-17 are for the District's share of the operations and maintenance of the R6 Reservoir facilities operated by El Toro Water District. SCWD operates the 5B reservoir for wholesale distribution of water to MNWD. The budgeted expenses for FY 2016-17 are for the District's share of expenses.

Lastly, the District owns capacity share in the Upper Oso Reservoir operated by SMWD. SMWD's Upper Oso Reservoir, one of the largest recycled water reservoirs in Orange County, has been in operation since 1979. It is located near the 241 Toll Road in the cities of Mission Viejo and Rancho Santa Margarita. The reservoir holds up to 1.3 billion gallons of recycled and runoff water used for outdoor irrigation in the surrounding communities, therefore conserving over a billion gallons of drinking water each year through multiple use of every drop. The benefit received from Oso Reservoir will continue to increase as the cost of water purchased from the MWDSC continues to rapidly rise. The proposed budget for FY 2016-17 is for the District's share of the operations and maintenance costs of the reservoir.

As stated previously, the line items listed under *Member Agencies O&M* do not match those reported in Table F1 - 1, as the totals above are intended to provide a historical comparison of the individual costs that comprise today's accounts.

Table F1 - 7: Dues and Memberships

Description	FY 2016-17 Proposed Budget
<b>District Dues and Memberships</b>	
Association of California Water Agencies	24,255
CalDesal	5,250
California Association of Sanitary Agencies (CASA)	18,165
California Special Districts Association	6,195
California Urban Water Conservation Council (CUWCC)	5,985
Independent Special Districts of Orange County (ISDOC)	263
Laguna Niguel Chamber of Commerce	3,150
Mission Viejo Chamber of Commerce	525
South Orange County Regional Chambers of Commerce	1,260
South Orange County Watershed Management Area (SOCWMA)	6,038
Southern California Water Committee (SCWC)	945
Southern California Water Alliance of POTW (SCAP)	630
Subscriptions	1,700
Urban Water Institute, Inc.	1,470
WaterReuse Association of California	5,670
<b>Total District Dues and Memberships</b>	<b>81,500</b>
<b>Staff Dues and Memberships</b>	
Individual Memberships for Staff	19,745
<b>Total Staff Dues and Memberships Budget</b>	<b>19,745</b>
<b>Total Dues and Memberships Budget</b>	<b>101,245</b>

The District controls Dues and Membership expenses by comparing the cost of District-wide membership and individual membership costs for specific groups. The detailed proposed dues and membership budget for FY 2016-17 is presented without historical comparison because annual participation decisions are not made on the basis of past participation, see Table F1 - 1 for historical budget and actual expenses. The District participates in groups which either serve a professional function of its operations or provide opportunities for regional coordination.

Table F1 - 8: Consulting Services

Description	FY 2016-17 Proposed Budget
<b>Fund 1 Consulting</b>	
Document Management	150,000
Orange Label	140,000
Outreach	168,000
Finance Consultants	166,400
Software Consultants	89,000
Engineering Support	404,000
Operations Support	198,000
<b>Total Fund 1 Overall Consulting Expenses</b>	<b>1,315,400</b>

As discussed in the Salaries and Benefits section, the District utilizes consultants or contractors to meet temporary or project specific resource needs. The proposed *Consulting Services* budget for FY 2016-17 is presented without historical comparison as annual contract costs are based on specific projects and resource needs requiring multi-year contracts may be more appropriately meet with additional staff, see Table F1 - 1 for a comparison of historical budgets and actual expenses.

The proposed *Consulting Services* budget for FY 2016-17 includes provisions for several engineering and operations studies, enterprise and software development, document management system development, and external financial review, as well as for temporarily meeting resource needs while the District develops its marketing strategy and determines appropriate long term-staffing levels.

**Specific Factors**

- Document Management:** District staff has identified a need to develop a document management system to keep pace with the record number of public records act requests it has received. These requests place a significant demand on existing resources. The District has retained a consultant to oversee the development of a document management system that includes the infrastructure necessary to facilitate information inquiries, and reduce the demands placed on staff.
- Orange Label:** The District has retained Orange Label to assist with graphic design work and revisions to its customer outreach strategy based on the results of a customer survey conducted during FY 2015-16 intended to determine customers’ preferred forms of communication and contact with the District. The contract is for a period of six months and will include the development of monthly newsletters, email blasts, outreach materials, and targeted digital marketing.
- Outreach:** The District has partnered with Stanford University as part of an academic study intended to determine what type of digital messaging is most effective for achieving water conservation. The District recognizes the cost effectiveness of digital marketing and will draw on results of the study to refine its future outreach strategies. The proposed *Consulting Services*

budget includes provisions for the District to retain a consultant upon completion of the study to assist with incorporating the results into its outreach strategy.

- **Finance Consultants:** The District’s Finance Department will begin an in-house cost of service rate study during FY 2016-17 and will retain a utility rate consultant as an auditor to independently validate the results of the study. The Finance Department will continue to utilize financial advisors for counsel as it prepares to issue debt, as identified in the LRFP. The Finance Department will also rely on financial consultants to gather property tax collection data and compile bond disclosure information, as well as assist with the assessment of the District’s general obligation debt service payments.
- **Software Consultants:** The proposed *Consulting Services* budget includes provisions for the District to retain consultants to assist with the installation of a web conferencing tool, ad hoc support services as well as report writing and other upgrades for its enterprise system as it looks to fill the proposed Information Systems Officer position. As with all consulting contracts, the District will re-evaluate the use of consultants for these services as staffing resources are developed.
- **Engineering Support and Operations Support:** The proposed *Consulting Services* budget includes provisions for the District to support the planning and inspection needs of its Engineering and Operations departments. As discussed in the Salaries and Benefits section, because of the increased demands on existing staff and the difficulty of meeting resource needs for recycled water inspection through consulting firms, staff collectively decided to utilize consultants to support the Engineering and Operations departments’ remaining resource needs.

*Equipment Rental and District Fuel*

Table F1 - 9: Equipment Rental and District Fuel

Description	FY 2014 15			FY 2015-16 Approved Budget	FY 2016-17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Equipment Rental</b>								
Office Equipment	59,000	62,301	3,301	59,000	60,046	67,000	6,954	12%
Misc. Field Equipment	6,000	2,064	(3,936)	6,000	6,106	2,000	(4,106)	-67%
<b>Total Equipment Rental Budget</b>	<b>65,000</b>	<b>64,365</b>	<b>(635)</b>	<b>65,000</b>	<b>66,152</b>	<b>69,000</b>	<b>2,848</b>	<b>4%</b>
<b>District Fuel</b>								
Unleaded Fuel	230,000	143,255	(86,745)	230,000	237,727	215,000	(22,727)	-10%
Diesel Fuel	110,000	89,272	(20,728)	110,000	111,950	110,000	(1,950)	-2%
Vehicle Oil	-	3,201	3,201	-	-	15,000	15,000	-
<b>Total District Fuel Budget</b>	<b>340,000</b>	<b>235,727</b>	<b>(104,273)</b>	<b>340,000</b>	<b>349,677</b>	<b>340,000</b>	<b>(9,677)</b>	<b>-3%</b>

*Equipment Rental* costs consist of leases for multifunction printers and other as needed field equipment. Costs are determined on a contract basis, and are expected to increase slightly above forecasts for FY 2016-17.

As a result of declining fuel costs as well as improved fleet and fuel storage management by the Utilities Maintenance Department, the District has been able to secure fuel contracts for FY 2016-17 at or below FY 2015-16 budgeted rates.

Insurance

Table F1 - 10: District Insurance

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Insurance - District</b>								
Property Insurance	109,000	90,307	(18,693)	103,000	104,826	112,000	7,174	7%
Automobile and General Liability	428,000	399,637	(28,363)	450,500	428,000	280,000	(148,000)	-35%
Misc. Insurance General	7,151	6,832	(319)	7,775	7,918	51,170	43,252	546%
Pollution & Remediation	32,000	15,113	(16,888)	-	-	-	-	-
<b>Total Insurance - District Budget</b>	<b>576,151</b>	<b>511,888</b>	<b>(64,263)</b>	<b>561,275</b>	<b>540,744</b>	<b>443,170</b>	<b>(97,574)</b>	<b>-18%</b>
<b>Insurance - Personnel</b>								
State Unemployment	25,000	11,329	(13,672)	25,000	26,000	25,000	(1,000)	-4%
Workers Comp	309,000	237,956	(71,044)	260,929	271,366	269,417	(1,949)	-1%
Medicare Insurance	120,496	125,610	5,114	138,817	144,370	150,108	5,739	4%
Employer FICA	13,604	11,217	(2,387)	13,529	14,070	15,741	1,671	12%
<b>Total Insurance - Personnel Budget</b>	<b>468,100</b>	<b>386,112</b>	<b>(81,988)</b>	<b>438,275</b>	<b>455,806</b>	<b>460,266</b>	<b>4,460</b>	<b>1%</b>

The District maintains several broad insurance policies through its membership with Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA). District property and operations related insurance costs for FY 2016-17 represent the largest variance from forecasted amounts. Budgeted *Automobile and General Liability* costs are below forecasted levels due to decreases in the District’s automobile insurance premiums due to increased levels of safety.

Legal Services

Table F1 - 11: Legal Services

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Legal Services</b>								
Legal Service - General	170,000	143,345	(26,655)	200,000	203,546	420,000	216,454	106%
Legal Services - Personnel	50,000	6,399	(43,602)	50,000	50,886	50,000	(886)	-2%
<b>Total Legal Services</b>	<b>220,000</b>	<b>149,743</b>	<b>(70,257)</b>	<b>250,000</b>	<b>254,432</b>	<b>470,000</b>	<b>215,568</b>	<b>85%</b>

The District separately accounts for its general and personnel related legal expenses to more accurately account for costs. Currently, the District’s has retained Best, Best, and Krieger (BBK) for its general legal services, and Liebert Cassidy Whitmore for its personnel related legal services. As it looks to better understand major components of its operating budget, the District has requested BBK conduct an extensive review of the District’s historical and current agreements with other agencies and property lease contracts, as well as perform ongoing review of new capital contracts. This one-time expense is the primary driving factor for the proposed budget increase and does not represent an increase to on-going legal costs in future years.

District Supplies

Table F1 - 12: District Supplies

Description	FY 2014 15			FY 2015-16 Approved Budget	FY 2016-17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b><u>District Office Supplies</u></b>								
General Office	113,500	120,657	7,157	114,500	116,530	136,750	20,220	17%
Billing Supplies	184,000	168,622	(15,378)	183,000	186,244	196,000	9,756	5%
Community Relations	176,900	92,002	(84,898)	143,900	146,451	100,000	(46,451)	-32%
Shipping	25,500	23,562	(1,938)	34,000	34,603	40,500	5,897	17%
<b>Total District Office Supplies Budget</b>	<b>499,900</b>	<b>404,843</b>	<b>(95,057)</b>	<b>475,400</b>	<b>483,828</b>	<b>473,250</b>	<b>(10,578)</b>	<b>-2%</b>
<b><u>District Operating Supplies</u></b>								
Operating Supplies	237,150	261,671	24,521	309,267	314,750	309,950	(4,800)	-2%
Chemicals	78,700	39,675	(39,025)	83,700	86,512	80,500	(6,012)	-7%
<b>Total District Operating Supplies Budget</b>	<b>315,850</b>	<b>301,346</b>	<b>(14,504)</b>	<b>392,967</b>	<b>401,261</b>	<b>390,450</b>	<b>(10,811)</b>	<b>-3%</b>

Table F1 - 12 provides a detailed accounting of the District’s office and operating supplies. In addition to everyday supplies such as paper, ink, envelopes, keys, small tools, and cleaning supplies, the FY 2016-17 proposed budget for District Supplies includes provisions for community education materials and other promotional items. *Community Relations* expenses for FY 2016-17 are budgeted approximately 30 percent below forecast, reflecting Staff’s ability to control costs by refining its marketing efforts as community engagement has become a regular component of the District’s communication plan.

Repairs and Maintenance, and Meter/Vault Purchases

Table F1 - 13: Repairs and Maintenance, and Meter/Vault Purchases

Description	FY 2014 15			FY 2015 16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Repairs and Maintenance - Equipment</b>								
Office Equipment	5,200	3,113	(2,087)	6,200	6,310	11,550	5,240	83%
Field Equipment	143,000	19,209	(123,791)	60,000	61,064	15,000	(46,064)	-75%
Infrastructure Technology Hardware	140,400	183,858	43,458	117,600	119,685	83,300	(36,385)	-30%
Computer Support Contracts	342,187	249,553	(92,634)	344,669	351,394	301,419	(49,975)	-14%
Vehicle Maintenance and Repair	236,500	182,699	(53,801)	210,000	213,723	215,000	1,277	1%
<b>Total Repairs and Maintenance - Equipment Budget</b>	<b>867,287</b>	<b>638,432</b>	<b>(228,855)</b>	<b>738,469</b>	<b>752,176</b>	<b>626,269</b>	<b>(125,907)</b>	<b>-17%</b>
<b>Repairs and Maintenance - Facilities</b>								
System Maintenance	635,600	497,802	(137,798)	678,700	701,501	595,250	(106,251)	-15%
System Repairs	1,142,000	741,549	(400,451)	1,459,000	1,508,014	927,300	(580,714)	-39%
Janitorial Services	46,000	39,830	(6,170)	20,000	20,355	20,000	(355)	-2%
Landscape and Tree Maintenance	270,000	237,830	(32,170)	255,000	259,521	272,732	13,211	5%
Hazardous Materials Removal	35,000	-	(35,000)	20,000	-	22,000	22,000	-
Underground Service Alert	5,000	4,367	(634)	5,000	2,185	5,000	2,815	129%
Contract & Maintenance Agreements	317,975	276,362	(41,613)	284,850	289,900	414,033	124,133	43%
Pest Control	38,420	27,184	(11,236)	38,420	39,101	28,890	(10,211)	-26%
Paving Repairs	575,000	666,386	91,386	900,000	915,955	725,000	(190,955)	-21%
Electrical & Instrumentation	77,000	75,727	(1,273)	66,000	67,170	71,000	3,830	6%
Raising Valves and Manholes	370,000	250,250	(119,750)	370,000	376,559	300,000	(76,559)	-20%
Permits	39,000	92,173	53,173	39,000	39,691	66,000	26,309	66%
<b>Total Repairs and Maintenance - Facilities Budget</b>	<b>3,550,995</b>	<b>2,909,459</b>	<b>(641,536)</b>	<b>4,135,970</b>	<b>4,219,951</b>	<b>3,447,205</b>	<b>(772,746)</b>	<b>-18%</b>
<b>Meter/Vault Purchases</b>								
Meter/Vault Replacement	868,000	662,151	(205,849)	906,000	922,062	615,000	(307,062)	-33%
<b>Total Meter/Vault Purchases Budget</b>	<b>868,000</b>	<b>662,151</b>	<b>(205,849)</b>	<b>906,000</b>	<b>922,062</b>	<b>615,000</b>	<b>(307,062)</b>	<b>-33%</b>

The ongoing repair and maintenance of equipment and facilities is one of the largest components of the Fund 1 operating budget. Controlling these costs requires efficient management of activities within each department as well as extensive coordination and collaboration across departments. All aspects of District operations have improved as a result of increased coordination and collaboration across departments; however, the repair and maintenance of the District’s facilities, equipment, and other assets provide one of the most tangible examples of the potential cost savings cross-department coordination can yield. As a result of these efforts, the proposed budget for FY 2016-17 is more than 20 percent below forecast and nearly 19 percent below FY 2015-16 budget. Realistically, cost savings are even greater as the useful life of equipment and assets is extended and facilities remain safe while lasting longer.

**Specific Factors**

- **Repairs and Maintenance – Equipment**
  - In addition to general office equipment, the FY 2016-17 proposed budget for *Repairs and Maintenance – Equipment* includes provisions for: the IT Departments continued maintenance of the District’s servers, SCADA system, enterprise billing, computer hardware, software licenses, and technology support services contracts; and the Support Services Department for maintenance and refurbishment of stationary auxiliary generators at critical wastewater and potable water stations, as well as fleet maintenance and repair. The prices and rates for the equipment, infrastructure, hardware, and software are largely determined through contracts with internal vendors.

Thus the cost savings shown in Table F1 - 13, are a result of the coordination between Departments to develop accurate repair schedules and optimal contract size. The increase in *Vehicle Maintenance and Repair* includes provisions for the outfitting of new fleet vehicles and equipment.

- **Repairs and Maintenance – Facilities**

- The proposed budget for FY 2016-17 also includes provisions for the maintenance and repair of District facilities. The costs are delineated by type in order to more accurately track budgets throughout the year as well as identify where the District is maintaining or reinvesting in its facilities and systems.
- **System Maintenance and System Repairs**
  - *System Maintenance* costs include building repairs and pump refurbishments, while *System Repairs* costs include planned reservoir cleaning, reservoir or pipeline repair, and manhole replacement, as well as emergency repairs for the District’s three utility systems. Budgeted costs are determined on an annual basis and reflect identified needs and provisions for emergency repairs based on historical spending.
- **Paving Repairs, Raising Valves and Manholes, and Permits**
  - The Inspections and Street crews coordinate regularly with planning departments from the six cities the District serves to ensure continued access to District valves and manholes after streets have been repaved and to minimize the cost of repaving streets after system repairs have been made. The reduction in paving and raising costs is due to improved timing of District system repairs and fewer city resurfacing projects.
- **Contract and Maintenance Agreements**
  - Consistent with the approach outlined in the Salaries and Benefits and Consulting Services sections, the District utilizes consultants or contractors to meet its project specific or highly specialized repair and maintenance needs. Additionally, the District relies on contracts or agreements with internal vendors to supply the equipment and materials it needs when repairs are handled in-house. As a result, the District’s Contracts and Purchasing Department issued nearly double the number of contractual vehicles between July and January of FY 2015-16 as it had during FY 2013-14. The proposed budget for FY 2016-17 includes provisions for an insurance maintenance program and an online bid system.

- **Meter/Vault Replacement**

- Meter accuracy and water loss prevention are major goals for the District. To address these goals, the District’s Customer Service – Field Department maintains a robust meter replacement plan, by which an average of 3,000 of the District’s 55,000 meters are replaced each year. As a result of the department’s efforts, meter replacements are ahead of schedule, reflected by the decrease in projected budget.

## Safety Programs and Regulatory Compliance

Table F1 - 14: Safety Programs and Regulatory Compliance

Description	FY 2014 15			FY 2015 16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Safety Program and Regulatory Compliance</b>								
Safety Equipment and Supplies	188,500	49,842	(138,658)	201,950	205,530	71,300	(134,230)	-65%
Safety Shoes	24,750	20,824	(3,926)	27,500	27,988	28,350	362	1%
Safety Training	6,000	4,693	(1,307)	15,000	15,266	22,000	6,734	44%
Regulatory Compliance	66,000	64,376	(1,624)	65,000	66,152	70,000	3,848	6%
<b>Total Safety Program and Regulatory Compliance Budget</b>	<b>285,250</b>	<b>139,734</b>	<b>(145,516)</b>	<b>309,450</b>	<b>314,936</b>	<b>191,650</b>	<b>(123,286)</b>	<b>-39%</b>

Table F1 - 14 provides a detailed accounting of the District's *Safety Program and Regulatory Compliance* costs. The Safety and Compliance Department oversees the development of the District's safety programs and ensures continued compliance with all regulatory safety requirements. The overall decrease in total *Safety Program and Regulatory Compliance* budget is driven entirely by reduced safety equipment and supply purchases. Annual equipment and supply purchases are based on inventory needs, and the proposed budget for equipment and supply purchases reflects a well-stock inventory, which is the result of an increased emphasis on worksite safety at the District. Despite the overall decrease in total *Safety Program and Regulatory Compliance* budget, the Safety and Compliance Department plans to increase safety training and compliance measures during FY 2016-17 and continue to improve worksite safety and decrease liability premiums.

## Assessments

Table F1 - 15: Assessments

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Special Outside Assessments</b>								
Department of Health Services (DOHS)	5,000	1,106	(3,894)	-	5,000	5,000	-	0%
LAFCO Fees	27,000	23,190	(3,811)	25,000	25,443	25,000	(443)	-2%
Property Tax Assessment	198,300	176,001	(22,299)	200,000	203,546	210,000	6,454	3%
<b>Total Special Outside Assessments</b>	<b>230,300</b>	<b>200,296</b>	<b>(30,004)</b>	<b>225,000</b>	<b>233,989</b>	<b>240,000</b>	<b>6,011</b>	<b>3%</b>

The District pays fees to other governmental agencies as part of regulatory, or other governmental services provided to the District. Fees to the Local Area Formation Commission (LAFCO) and Department of Health Services (DOHS) are projected to remain flat into the next Fiscal Year. As ad valorem property tax revenue increases, assessment collection fees from the County of Orange increase. Consequently, the property tax assessment budget is proposed to be increased in line with revenue increases.

## Utilities

Table F1 - 16: Utilities

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Utilities</b>								
Electric Utilities (SCE and SDG&E)	1,925,000	1,963,581	38,581	2,048,000	2,116,801	2,191,360	74,559	4%
Gas Utility (Southern CA Gas)	6,000	6,131	131	6,900	7,132	6,900	(232)	-3%
Overall Telephone	150,000	149,627	(373)	150,000	155,039	120,000	(35,039)	-23%
Mobile Communication	45,000	53,897	8,897	54,000	55,814	55,000	(814)	-1%
<b>Total Utilities Budget</b>	<b>2,126,000</b>	<b>2,173,236</b>	<b>47,236</b>	<b>2,258,900</b>	<b>2,334,786</b>	<b>2,373,260</b>	<b>38,474</b>	<b>2%</b>

The proposed increase to the utilities budget is driven entirely by increases in electricity prices by the District's electricity providers. Opportunity for controlling electricity costs are limited to operational efficiencies. Through collaboration with other departments, the District's Distribution Department has controlled this cost by pumping water to storage facilities at night when electricity rates are low and releasing the stored water to pressurize the system via gravity to meet day-time demands. Additionally, the utilization of the Central Intertie Pipeline saves ratepayers over one million dollars per year in electricity costs from the District. The proposed increase in the utilities budget is partially offset by a decrease in the District's *Overall Telephone* costs. The District's IT Department has reduced *Overall Telephone* costs by appropriately sizing the District's telephony system for current District needs.

## SOCWA

Table F1 - 17: SOCWA Operations and Maintenance

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016 17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Wastewater Treatment</b>								
General Fund	35,580	35,580	-	998,008	1,015,701	1,027,948	12,248	1%
PC 2 - JB Latham Treatment Plant	1,013,541	1,009,889	(3,652)	960,802	977,835	989,626	11,791	1%
3A Treatment Plant	1,960,395	2,051,479	91,084	1,880,197	1,913,529	1,936,603	23,074	1%
PC 5 - San Juan Creek Ocean Outfall	149,880	149,717	(163)	91,213	92,830	93,949	1,119	1%
PC 2SO - Recycled Water Permit	65,150	65,150	-	78,915	80,314	81,282	968	1%
PC 15 - Coastal Treatment Plant	162,666	162,262	(404)	217,213	221,064	223,729	2,666	1%
PC 17 - Regional Treatment Plant	5,315,427	5,305,839	(9,588)	5,279,324	5,372,916	5,437,704	64,788	1%
PC 21 - Effluent Transmission Main	24,338	24,340	2	15,143	15,411	15,597	186	1%
PC 24 - Aliso Creek Ocean Outfall	190,423	190,199	(224)	160,485	163,330	165,300	1,969	1%
Pretreatment Program	53,420	53,420	-	43,435	44,205	44,738	533	1%
Use Audit Refund	(520,000)	(599,582)	(79,582)	(520,000)	(529,219)	(535,600)	(6,381)	1%
<b>Total Wastewater Treatment Budget</b>	<b>8,450,820</b>	<b>8,448,293</b>	<b>(2,527)</b>	<b>9,204,735</b>	<b>9,367,916</b>	<b>9,480,877</b>	<b>112,961</b>	<b>1%</b>

Given the significant annual financial contributions to wastewater treatment (approximately \$22M annually for both operating and capital expenses) there is a growing need to have additional resources and expertise to fully evaluate the resource towards the Board adopted policy to use all wastewater for beneficial use. Additionally, the District must ensure an equitable proportion of costs to ensure cost effective management of wastewater to be mindful of ratepayer impacts.

Recently, the operation of the 3A plant was transferred to SMWD and the potential for using the current outfall from the plant to expand recycled water distribution is being discussed. There are major decision points for the board to consider in the upcoming years, and we need to plan for sufficient resources to ensure informed decisions. In terms of strategic planning towards the maximal use of recycled water,

an internal resource is necessary. The proposed budget for FY 2016-17 is based on a three percent increase in costs above the FY 2015-16 budget.

*Water Purchases*

Table F1 - 18: Water Purchases

Description	FY 2014-15			FY 2015-16 Approved Budget	FY 2016-17			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<b>Variable Water Purchase Cost</b>								
MWD Full Service - Tier 1 Treated	26,000,000	24,257,752	(1,742,248)	21,708,139	20,238,080	18,560,649	(1,677,432)	-8%
MWD Full Service - Tier 1 Untreated	-	-	-	-	3,078,659	3,622,234	543,574	18%
Baker Variable Cost	-	-	-	-	745,555	745,555	-	0%
<b>Total Variable Water Cost</b>	<b>26,000,000</b>	<b>24,257,752</b>	<b>(1,742,248)</b>	<b>21,708,139</b>	<b>24,062,295</b>	<b>22,928,437</b>	<b>(1,133,857)</b>	<b>-5%</b>
<b>Fixed Water Purchase Cost</b>								
MWDOC Ready-to-Serve Charge	1,902,330	1,860,250	(42,080)	1,897,716	1,929,545	1,471,369	(458,176)	-24%
MWDOC Capacity Charge	491,465	417,345	(74,120)	500,000	500,000	418,448	(81,552)	-16%
MWDOC Connection Charge	552,500	552,437	(64)	597,640	632,743	577,142	(55,601)	-9%
Reclaimed Water Rebate	(970,000)	(1,109,508)	(139,508)	(1,005,653)	(1,023,481)	(1,005,653)	17,828	-2%
Joint Regional Water Supply System	455,214	450,267	(4,947)	454,495	460,000	460,000	-	0%
Santiago Aqueduct Commission (SAC)	3,906	-	(3,906)	20,000	36,210	36,210	-	0%
East Orange County Feeder #2 (EOCF2)	90,000	63,457	(26,543)	80,000	75,000	75,000	-	0%
South County Pipeline (SCP)	172,000	131,277	(40,723)	172,000	144,000	144,000	-	0%
Baker Fixed Cost	-	145,386	145,386	150,000	721,854	721,854	-	0%
<b>Total Fixed Water Cost</b>	<b>2,697,415</b>	<b>2,510,911</b>	<b>(186,504)</b>	<b>2,866,197</b>	<b>3,475,871</b>	<b>2,898,370</b>	<b>(577,501)</b>	<b>-17%</b>
<b>Total Water Purchase Cost</b>	<b>28,697,415</b>	<b>26,768,663</b>	<b>(1,928,752)</b>	<b>24,574,336</b>	<b>27,538,166</b>	<b>25,826,807</b>	<b>(1,711,359)</b>	<b>-6%</b>

The District has been proactive in its planning efforts to ensure water reliability. The Long Range Water Reliability Plan provides an adaptive management approach to planning for reliability. It is a working document that needs to be updated given the drought emergency and changes to the status of some of the local supply projects. Opportunities to expand recycled water, build seasonal storage and consider indirect potable reuse project in the San Juan Basin as well as potential for direct potable reuse are being evaluated by staff. Other local efforts such as ocean desalination and banking/transfer are also being closely monitored to determine the District’s and South County interest. We are experiencing some deficiency in resources participating in all these project evaluations in addition to all the increased activities at SOCWA and SJBA.

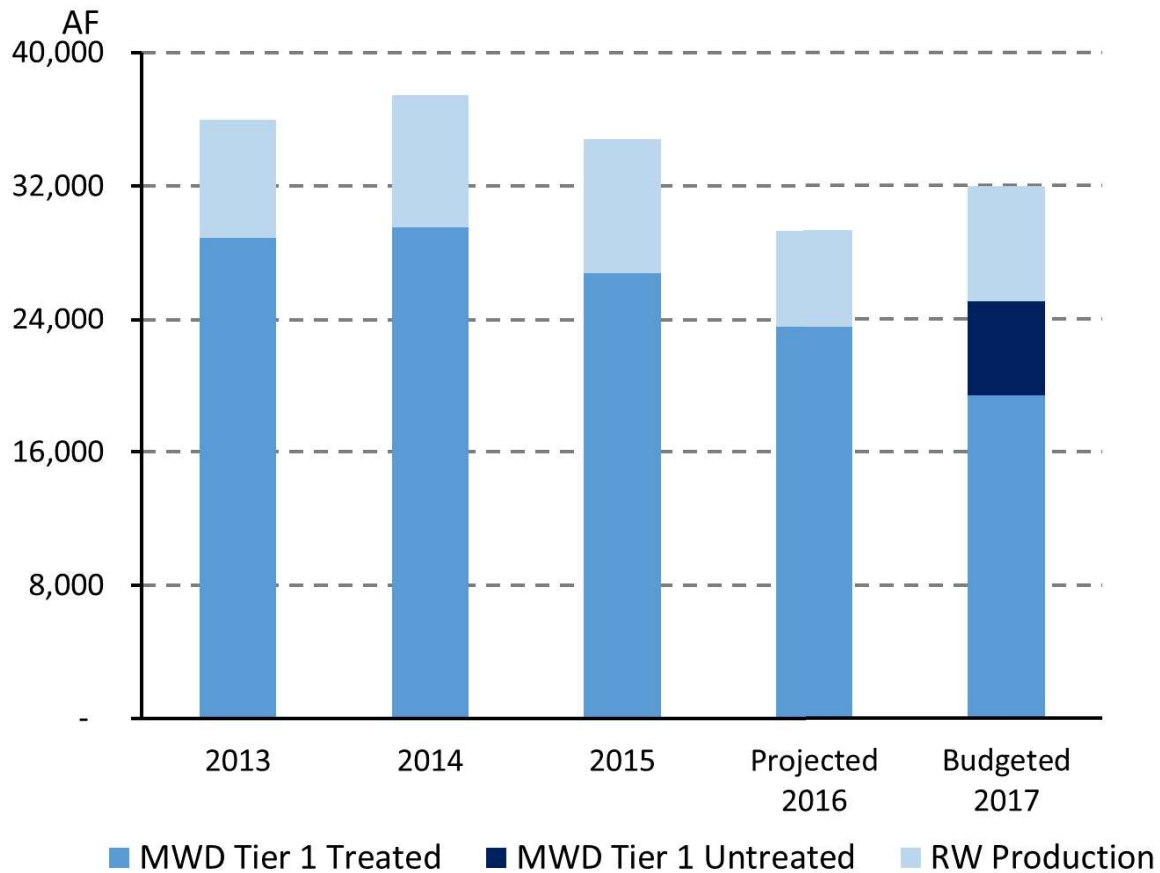


Figure F1 - 1: Water Deliveries and Recycled Water Production

Total water purchases for FY 2016-17 are budgeted at 25,000 AF based on a water loss factor of 6.95 percent, which represents a 7.26 percent increase from FY 2015-16 budgeted purchases. The methodology used to develop water usage projections is consistent with the methodology used to develop the long-term demand projections reported in the District’s 2015 Urban Water Management Plan, and reflect maintained low usage through most of the fiscal year with a small allowance for partial reversion to pre-drought usage characteristics.

As part of the Board policy to improve water supply reliability for the service area, the District has been jointly participating in the construction of the Baker Water Treatment Plant (Baker), a 28.1 million gallon per day (MGD) potable water treatment facility that receives untreated water via the Baker pipeline. Once online, the plant will provide increased water supply reliability to southern Orange County as well as provide a reliable local potable water supply in the event of emergency conditions or scheduled maintenance on the MWDSC treated water delivery system (Diemer Filtration Plant, Lower Feeder Pipeline, or Allen-McCullough Pipeline).

The District will own 13 cubic feet per second of capacity in the plant, representing approximately 9,400 AF in new supply annually. Water deliveries from Baker for FY 2016-17 are budgeted at 5,640 AF, reflecting eight months of full deliveries based on the plant coming online by October 2016 as expected. The remaining 19,360 AF of water deliveries will be supplied by MWDSC via, the Municipal Water District of Orange County (“MWDOC”).

Projected variable water rates for deliveries from both sources are inflated consistently with their input water type. Baker deliveries are based on the MWDSC untreated tier 1 rate and MWDSC deliveries to the District are based on the MWDSC treated tier 1 rate, which are expected to increase on January 1, 2017 by 12.1 percent and 3.4 percent, respectively. The total water purchase costs reported in the budget also include fixed costs from wholesalers and other partner agencies for service or facilities operation related to delivering water into the District.

With the addition of Baker and as the District looks to further diversify its supply portfolio, Staff has recommended a reclassification of water supply and delivery costs to delineate the cost of delivering water into the District from the cost of water storage and other regional partnerships. The additional line items in Water Purchases that were previously in the *Member Agencies O&M* line item include: Joint Regional Water Supply System, Santiago Aqueduct Commission, East Orange County Feeder #2, and the South County Pipeline. Additionally, the Baker Fixed Cost and Variable Cost line items are new as the project is forecasted to come online in FY 2016-17. As the project is initiated, accurately compiling the full cost to bring water into the District from the now two sources of supply provides an accurate means to compare costs.

As stated previously, the line items listed under *Water Purchases* do not match those reported in Table F1 - 1, as the totals above are intended to provide a historical comparison of the individual costs that comprise today's accounts.

## Non-Operating Expenses

### Capital Outlays

Table F1 - 19: Capital Outlays

Description	FY 2015-16	FY 2016-17
<b>Requested Capital Outlays</b>		
Pumps & Equipment	\$84,000	\$363,425
Heavy Equipment	\$391,575	\$343,592
Trucks	\$544,954	\$254,000
Electronics	\$55,123	\$31,000
<b>Subtotal - Requested Capital Outlays</b>	<b>\$1,075,652</b>	<b>\$992,017</b>
<b>Proposed - Valve Program Related</b>		
Heavy Equipment	\$0	\$550,000
Trucks	\$0	\$420,000
<b>Subtotal - Valve Program Related</b>	<b>\$0</b>	<b>\$970,000</b>
<b>Total FY 2016-17 Capital Outlays</b>	<b>\$1,075,652</b>	<b>\$1,962,017</b>

The proposed budget for Capital Outlays has two components to denote an additional program discussed previously to replace distribution system valves that have reached the end of their useful lives. The proposed FY 2016-17 capital outlay budget is consistent with the previous year's budget to replace a number of trucks and pumps that have reached the ends of their useful life. As discussed in the consulting, and salaries and benefits sections, the District evaluated different strategies to replace valves that are no longer functional. After a detailed study, the internal program with supplementary

consultants for larger valves proved the most cost effective program design. The proposed valve related equipment and trucks are to support the internal valve team’s work.

Pumps and Equipment

Table F1 - 20: Capital Outlays-Pumps and Equipment

Description	FY 2016-17
<b><u>Pumps &amp; Equipment</u></b>	
LS bypass pumps (2)	\$142,425
Golden Lantern RW PS pump replacement (3)	\$60,000
Saddleback RW PS bypass upgrade	\$17,000
Lower Salada LS 10HP submersible motor	\$15,000
Upper Salada LS 5HP submersible motor	\$10,000
PLC panel replacement (3)	\$66,000
Big Niguel PS smart motor controller for pumps (2)	\$26,000
Casa De Oso PS MCC replacement (3)	\$15,000
Crown Valley Highlands PS Amp service	\$12,000
<b>Subtotal - Pumps &amp; Equipment</b>	<b>\$363,425</b>

The District’s staff review all pumps and distribution equipment to provide contingencies for emergency backup needs and identify assets that have reached the end of their useful lives. The proposed capital outlays for pumps and equipment identify the asset needs required to maintain the level of service that the District’s customer expect.

Electronics

Table F1 - 21: Capital Outlays-Electronics

Description	FY 2016-17
<b><u>Electronics</u></b>	
Ruggedized laptops & peripherals for GIS field work (3)	\$18,000
Web conferencing software	\$13,000
<b>Subtotal - Electronics</b>	<b>\$31,000</b>

The proposed electronics equipment supports engineering staff for GIS field work and to upgrade District web conferencing software as the District participates regionally and statewide. The existing GIS equipment is past its useful life. Better web conferencing technology provides greater flexibility in holding virtual meetings.

## Heavy Equipment

Table F1 - 22: Capital Outlays-Heavy Equipment

Description	FY 2016-17
<b><u>Heavy Equipment</u></b>	
Insertion valve install equipment	\$186,592
Sewer cleaning truck	\$157,000
<b>Subtotal - Heavy Equipment</b>	<b>\$343,592</b>

The District's existing staff perform valve turning and engineering staff have identified specific projects that now have completed designs. The new equipment proposed supports the existing valve replacement and turning program. The proposed sewer cleaning truck is to replace one of the existing sewer trucks that will provide greater flexibility to serve customers.

## Trucks

Table F1 - 23: Capital Outlays-Trucks

Description	FY 2016 17
<b><u>Trucks</u></b>	
Replacement of truck #67	\$60,000
Replacement of truck #46	\$60,000
Replacement of truck #98	\$60,000
Fleet Truck for inspection position	\$40,000
Replacement of truck #45	\$34,000
<b>Subtotal - Trucks</b>	<b>\$254,000</b>

The District actively monitors the age and mileage of the fleet. All but one of the proposed trucks are to replace trucks that have reached the end of their useful lives. The last new truck is proposed to support the new recycled water inspection position.

## Valve Program Heavy Equipment

Table F1 - 24: Valve Program Capital Outlays-Heavy Equipment

Description	FY 2016-17
<b><u>Valve Program - Heavy Equipment</u></b>	
Hydro Excavator	\$425,000
Caterpillar 420F2 Backhoe/Loader	\$125,000
<b>Subtotal - Valve Program - Heavy Equipment</b>	<b>\$550,000</b>

The proposed heavy equipment is to support the District's new valve replacement crew to replace valves past their useful lives. The replacement of valves will support the localization of line breaks to provide better customer service through better control of the distribution system.

Valve Program Trucks

Table F1 - 25: Valve Program Capital Outlays-Trucks

Description	FY 2016-17
<b><u>Valve Program - Trucks</u></b>	
Dump truck	\$200,000
Tool truck w/2-ton crane	\$100,000
Flat bed truck	\$60,000
Fleet Truck	\$60,000
<b>Subtotal - Valve Program - Trucks</b>	<b>\$420,000</b>

The proposed trucks are to support the District’s new valve replacement crew to haul dirt and materials as the valves past their useful live that no longer functioning are removed.

## Fund 6 – Water Efficiency Fund

### Fund 6 – Overview and Purpose of the Water Efficiency Fund

Customers are allocated a water budget calculated based on individual needs and certain parameters to promote the efficient use of water. Customers who use water inefficiently, in excess of their calculated water budgets, place greater demands on the District’s water and recycled water systems and supplies. Those customers who use water inefficiently are therefore subject to higher water use rates to offset the costs that are created as a result of the higher demand they place on the District’s water and recycled water systems. The District invests the incremental rate difference in alternative water supply programs, rebates and water conservation and/or demand management measures to increase efficient uses of water and offset their demand.

The drought crisis presented a unique opportunity for the District in demonstrating our innovative and resourceful approach to any major challenges. We have close engagement with the SWRCB and work closely with agencies throughout the State to drive decisions and policies that will have immediate and long-term effects on the public. The Water Efficiency Fund is critical to the District’s contribution and impact to the statewide discussions as a District have been recognized by the State and our peers in the water community as being a leader in demand management. Our conservation programs, recycled water expansion plans, partnerships with academic institutions, coordination of the statewide data collaborative and budget based rate structure are just some of the reasons why we have been successful. As we enter the “new normal,” developing strategies and tools to further achieve efficiency and conservation while ensuring reliable service and economic health of our communities will be paramount.

### Highlighted FY 2015-16 Successes

- Reduced backlog of turf removal pre/post inspections from 8 weeks to 2-3 days
- Revamped the rate structure
- Successfully implemented Water Shortage Contingency Plan
- Meeting our target of 20 percent reduction target from the SWRCB
- Customer communication - ongoing
- Engaged the state on proposed additional regulations and submitted comment letters
- Developed water loss control program
- Partnerships with regional agencies and academic institutions
- Non-residential customer Bi-monthly billing to monthly billing conversion

## Fund 6 – Summary Statement

Table F6 - 1: Statement of Revenues, Expenses, and Changes in Net Position

<b>MOULTON NIGUEL WATER DISTRICT</b>								
<b>WATER EFFICIENCY FUND STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION</b>								
	<b>FY 2015</b>	<b>FY 2015</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2017</b>	<b>FY 2017</b>
	<b>Approved</b>	<b>Actuals</b>	<b>Difference</b>	<b>Approved</b>	<b>Forecasted</b>	<b>Proposed</b>	<b>Difference</b>	<b>%Δ</b>
	<b>Budget</b>			<b>Budget</b>	<b>Budget</b>	<b>Budget</b>		
<b><u>Operating Revenues:</u></b>								
Projected Water Efficiency Revenue	3,350,000	3,896,062	(546,062)	3,398,873	2,985,738	3,303,844	318,107	10.7%
<b><u>Non-Operating Revenues:</u></b>								
Investment Income	120,000	120,588	(12,700)	159,792	146,898	106,436	(40,461)	-27.5%
<b><u>Operating Expenses:</u></b>								
Labor	448,816	461,515	(12,700)	668,156	700,188	1,068,280	368,092	52.6%
Educational Courses	500	155	345	500	523	2,500	1,978	378.5%
Travel & Meetings	2,700	4,332	(1,632)	14,700	15,362	24,700	9,339	60.8%
General Services	-	-	-	5,000	-	-	-	-
Dues & Memberships	500	-	500	500	523	500	(23)	-4.3%
Consulting Services	-	-	-	850,000	888,250	1,300,000	411,750	46.4%
Legal Services	-	59,666	(59,666)	-	-	10,000	10,000	-
Conservation supplies	77,810	189,917	(112,107)	489,751	94,455	380,500	286,045	302.8%
Repairs & Maint. - Equipment	-	-	-	3,500	3,618	2,500	(1,118)	-30.9%
Water Efficiency	3,132,124	2,811,963	320,161	4,849,624	3,185,106	2,898,457	(286,649)	-9.0%
<b>Total Operating Expenses</b>	<b>3,662,450</b>	<b>3,527,549</b>	<b>134,901</b>	<b>6,881,731</b>	<b>4,888,023</b>	<b>5,687,437</b>	<b>799,414</b>	<b>16.4%</b>
<b>Change in Operating Position</b>	<b>(192,450)</b>	<b>489,101</b>	<b>(693,662)</b>	<b>(3,323,066)</b>	<b>(1,755,388)</b>	<b>(2,277,156)</b>		<b>29.7%</b>
<b><u>Non-Operating Expenses:</u></b>								
RW Retrofits	-	-	-	100,000	-	-	-	-
RW System Extension	-	-	-	1,500,000	1,515,634	-	(1,515,634)	-100.0%
Aliso Village RW Extension	-	-	-	95,611	-	-	-	-
AMI Phase I - Potable Irrigation	-	-	-	-	-	490,000	490,000	-
AMI Phase I - RW Meters	-	-	-	-	-	490,000	490,000	-
<b>Total Non-Operating Expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,695,611</b>	<b>1,515,634</b>	<b>980,000</b>	<b>(535,634)</b>	<b>-35.3%</b>
<b>Projected Change in Fund</b>	<b>(192,450)</b>	<b>489,101</b>	<b>(693,662)</b>	<b>(5,018,677)</b>	<b>(3,271,022)</b>	<b>(3,257,156)</b>		<b>-0.4%</b>

The budget presented for Fund 6 includes programs and projects continuing the District’s success in demand management and planning for future reliability investments. The proposed budget for FY 2016-17 is presented in the above table that includes the projects and programs discussed below.

Direct install Turf Removal and Smart Timer programs are proposed in the Overall Consulting line item in the FY 2016-17 Budget to make water efficiency easier for customers as well as to streamline the administrative process to make the programs more cost effective.

Table F6 - 2: Consulting Services

Description	FY 2016-17 Proposed Budget
<b>Fund 6 Consulting</b>	
Conservation Support	150,000
UC Riverside Study	100,000
RW Masterplan (AKM)	200,000
Direct Install Turf	500,000
Direct Install Smart Timers	350,000
<b>Total Fund 6 Overall Consulting Expenses</b>	<b>1,300,000</b>
<b>Total Overall Consulting Expenses</b>	<b>2,615,400</b>

These programs are based on the initial results from the UC Riverside study that highlight the need to simplify or modify the rebate process as it takes over 6 months to get a check from the time of applying. Additionally, the UC Riverside Study is entering its 2<sup>nd</sup> and 3<sup>rd</sup> Phases in FY 2016-17 with the rollout of a survey to all single family residential customers towards learning how to optimize rebate funding and marketing towards making water efficiency programs cost effective and targeted to the District's customers. As conservation program interest scales up and down, consultants are utilized to mitigate the volatility and keep customer wait times low which is shown in the conservation support line item. As part of the District's Long Range Water Reliability Plan, recycled water was shown to be the most cost effective new supply of water. To further identify and refine recycled water opportunities, the District engaged in a Recycled Water Masterplan. The budgeted component for FY 2016-17 represents the remaining work for the project.

The District is embarking on an exciting pilot study to implement Advanced Metering Infrastructure (AMI) for all dedicated landscape meters within the District (about 2,650 meters) as well as a residential pilot program on a legacy AMI system (about 1,800 meters). To support the data and put it to use to help customers, the District is supplementing the project with a Customer portal to notify customers of leaks and provide near real time water usage information. The District created an expansive marketing program in FY 2015-16 which aided in meeting the 20 percent target from the State. In order to better target marketing cost effectively, the District is working through a partnership with Stanford and Facebook to look at the incremental water savings from digital ads. Other key initiatives for the FY 2016-17 Budget include:

- Work with SWRCB and stakeholders to develop long term framework for water use efficiency
- Pursue state/federal funding opportunities
- In depth analysis of higher tier usage to target inefficient use
- Utilize the pilot recycled water and potable irrigation AMI project towards implementing a Water Loss Control Program

The District is learning more and doing more as we enter the next Fiscal Year.

## Debt Service Summary

As the District has developed over the past 56 years, issuing bonds has been a key strategy to expanding infrastructure across the service area while also keeping rates and charges affordable. Currently, the District has a portfolio of debt service with many bonds approaching their maturity. The District refunded its outstanding general obligation bonds (GOBs) in 2014, which were to fund the last of specific improvement district development in ID 6 and 7 paid for by special property tax assessments. The District currently has three loans from the State Water Resources Control Board which were used to expand the recycled water system, as well as two loans from the California Infrastructure and Economic Development Bank to replace and develop water and sewer infrastructure. In 2009, the District issued Certificates of Participation to fund reliability improvements including Upper Chiquita Reservoir, an interconnection to Irvine Ranch Water District, and to fund the District's portion of the Baker Water Treatment Plant. These projects in total increased the District's system reliability or ability to maintain service in the event of an outage at the Deimer Water Treatment Plant from two days to almost 14 days on average. Additionally, the District actively works with its Financial Advisor to identify potential refunding opportunities to make sure that the debt portfolio is at optimal interest rates. Both the 2010 COPs and 2015 Revenue Bonds initially funded water and sewer infrastructure. The 2010 Certificates of Participation (COPs), 2014 GOBs and 2015 Revenue bonds were all refunded in the last six years to save ratepayers on debt service payments. Table Debt - 1 presents the scheduled debt service payments for FY 2016-17 for each of the District's bonds.

Table Debt - 1: Summary of Debt Service Payments for Fiscal Year 2016-17

Description	FY 2016 17			
	Principal	Interest	Fees	Total
<b>2009 Certificate of Participation (Build America Bonds)</b>	\$ -	\$ 4,098,976	-	\$ 4,098,976
<b>State Water Resources Control Board</b>				
Phase III-A Revised Expansion Project (SRF 110)	\$ 480,473	\$ 16,868	-	\$ 497,342
Phase IV Reclaimed Water Distribution System Expansion (SRF 121)	\$ 1,048,283	\$ 136,312	-	\$ 1,184,595
Phase III-B Revised Expansion Project (SRF 130)	\$ 302,356	\$ 16,865	-	\$ 319,221
<b>Subtotal - SWRCB SRF Debt</b>	<b>\$ 1,831,112</b>	<b>\$ 170,046</b>	<b>-</b>	<b>\$ 2,001,158</b>
<b>California Infrastructure and Economic Development Bank</b>				
2002 On-Site Hypochlorite Generation-Reservoir Mgmt. System, Phase II (CIEDB 01-020)	\$ 17,290	\$ 98,575	\$ 1,900	\$ 117,765
2002 Sewer Rehabilitation (CIEDB 02-026)	\$ 13,449	\$ 65,310	\$ 1,273	\$ 80,032
<b>Subtotal - CIEDB Debt</b>	<b>\$ 30,739</b>	<b>\$ 163,886</b>	<b>\$ 3,173</b>	<b>\$ 197,797</b>
<b>2014 Consolidated Refunding (General Obligation) Bonds</b>				
GOB Debt ID #6	\$ 4,746,789	\$ 239,611	-	\$ 4,986,400
GOB Debt ID #7	\$ 1,313,211	\$ 66,289	-	\$ 1,379,500
<b>Subtotal - 2014 GOB Debt</b>	<b>\$ 6,060,000</b>	<b>\$ 305,900</b>	<b>-</b>	<b>\$ 6,365,900</b>
<b>2010 Refunding Certificates of Participation (Refunding of 1993 COPs)</b>	<b>\$ 1,855,000</b>	<b>\$ 114,100</b>	<b>-</b>	<b>\$ 1,969,100</b>
<b>2015 Revenue Bonds (Refunding of 2003 COPs)</b>	<b>\$ -</b>	<b>\$ 613,250</b>	<b>-</b>	<b>\$ 613,250</b>
<b>Total FY 2016-17 Debt Service Expense</b>	<b>\$ 9,776,851</b>	<b>\$ 5,466,157</b>	<b>\$ 3,173</b>	<b>\$ 15,246,181</b>

The ID 6 portion of the 2014 GOBs matures in September of 2016. Both the 2010 COPs and the SRF 110 loans expire in FY 2017-18. Additionally, the ID 7 portion of the GOBs and SRF 130 loans mature in FY 2018-19.

The District currently holds a AAA rating from Fitch and a AA+ rating from Standard and Poor's, which enables the District to go to the public finance market competitively when needing to borrow to fund

future infrastructure projects. A key component of funding the Ten-Year Capital Improvement Program presented following, is to issue debt to smooth out rate increases. This is also presented in the District’s internally created Long Range Financial Plan which is updated every year as part of the Budget process. Figure Debt-1 presents the expected debt service over the next ten years and includes two debt issuances: one in FY 2017-18 and one in FY 2021-22. This is to maintain a consistent 4 percent rate increase after the scheduled 5 percent increase on January 1, 2017. Additionally, this strategy meets the District’s guiding financial policies to be above a 1.75 debt service coverage ratio and meets the Reserve Policy targets.

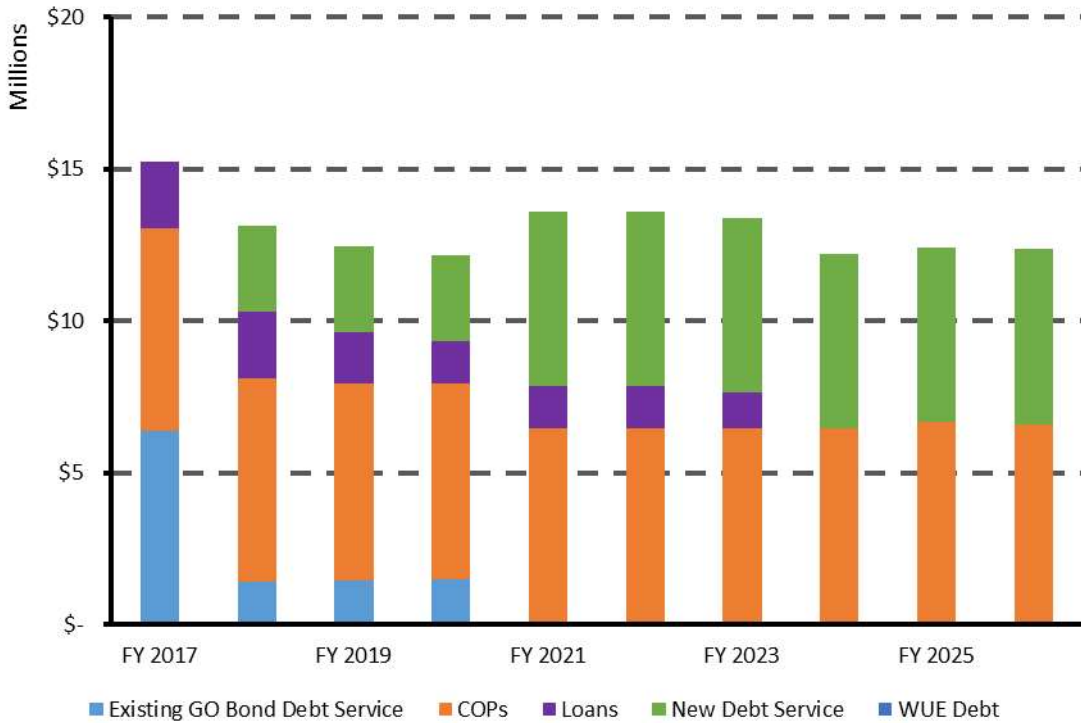


Figure Debt-1: Ten-Year Summary of Forecasted Debt Service

## District Goals for FY 2016-17

District staff actively works with the Board of Directors who establish overall District goals and policies while identifying resource needs to meet objectives to better serve ratepayers. Goals drive resource needs, which are actively integrated into the budgeting process to meet overall policy objectives which best serve the District customers. For the FY 2016-17 budget, the following were identified as key goals for the District to best meet customer needs through prudent and measured objectives:

**Financial Planning-** Provide actionable, timely financial information through adaptive modeling and forecasts to meet changing conditions with a view towards long-term, sustained fiscal health.

**Labor Relations-** Maintain strong employee morale and enhance organizational performance through: recruitment, selection and retention of the best qualified staff; maintenance and enhancement of staff skills through training and development; utilization of the District's benefit programs; compliance with labor regulations; enforcement of District policies and provisions of the MOUs; and, resolution of personnel matters in a timely manner with the highest standards of confidentiality, integrity, courtesy and respect.

**Operations Center Consolidation-** Create an adequate work environment to maximize productivity, efficiency and savings while providing added value to the stakeholders served by the District.

**Outreach/ Customer Communication-** Continue to expand and promote the District's relationship and involvement with the community and various stakeholders to build partnerships as a way to promote communication, understanding, conservation, and District goals.

**Drought Response/ Demand Management-** Develop new and improve existing strategies to cost effectively reduce water demands. Continue the District's leadership role in implementing the Governor's Water Action Plan to make "conservation a way of life" through both local action and statewide engagement.

**Data/Document Management-** Implement consistent data and document management to improve efficiencies and accessibility to help communications within District departments and statewide.

**Asset Management-** Develop and implement a comprehensive Asset Management Program that will optimize the life-cycle management of the District's infrastructure and assets.

**Water Reliability-** Plan, invest and execute steps to ensure compliance with Board policy on reliability and develop water resource programs to meet projected future demands to sustain the economic health of the region.

**Wastewater Treatment-** Provide comprehensive management strategy that maximizes wastewater resources for beneficial reuse opportunities and supports oversight and execution of the District's long-term wastewater treatment investments.

**Government Affairs-** Expand the District’s involvement of Local, County, State and Federal issues associated with water and wastewater related issues and engagement with relevant elected officials to further District policy issues or concerns.

## Departmental Collaboration to Meet Goals Cost-Effectively

In order to meet overall District goals set by the Board of Directors, Departments work collaboratively across fields to create many operational efficiencies in meeting goals to better serve customers as cost effectively as possible. Historically the District utilized consulting firms to conduct planning and analytical tasks but the District recently hired and started utilizing more in-house staff to perform these functions with the assistance of outside expertise. Maintenance of in-house expertise will enable the District to perform this analysis on a more frequent basis.

Options available to the District continue to include outsourcing or contracting certain services, or continuing to develop more efficient processes to achieve current District operations. As each opportunity is assessed, the District evaluates the cost of internally maintaining the operation compared to outsourcing or contracting out the services. Each evaluation also includes the comparison of quality of work product and service provided in addition to a cost analysis.

The following sections highlight the interdepartmental standard operating procedures which drive the integrated approach the District strives for in planning and cost-effectively meeting the key goals set by the Board of Directors.

## Financial Planning

The Finance and Accounting departments oversee the District's financial reporting and compliance as well as monitor daily cashflows and ensure sufficient funds are available to meet capital project expenses and debt service obligations. Over the last few years, the District has expanded its in-house capabilities, significantly increasing its ability to monitor reporting and accounting requirements, oversee financial control and policy development, and actively manage cash balances. Because of these expanded capabilities, financial reports, such as the Comprehensive Annual Financial Report ("CAFR"), Public Facilities Corporation ("PFC") Statements, and State Controller's Report, will all be prepared in house, and a goal has been set for both the financial audit and single audit to be completed without receiving findings or internal control comments regarding financial reporting or Governmental Accounting Standards Board ("GASB") compliance.

Financial management has become more efficient as coordination between District departments has increased. Timing of cashflows have reached a new level of precision, as increased coordination between the Finance and Accounting departments and the District's Engineering Department has allowed for the timing of its investments to be matched with liquidity needs for monthly capital and operating expenses. The active management of the District's cashflows has decreased accounting costs and maximized investment earnings. The Finance and Accounting departments have also increased coordination with other departments: Engineering for monthly CIP expense projections, GIS & Mapping for Assessor parcel data, Permitting for private development permits and Fats, Oils, and Grease ("FOG") fees, Purchasing for monthly vendor invoices and receipts, and Customer Accounts for service charge revenue projections and collections.

Accuracy and timeliness of financial information has been a critical part of the improvements that have been made in this area. The Customer Accounts Department works closely with several departments: Customer Service Field to ensure accurate meter reading and billing for the District's 55,000 service connections, Accounting to ensure accurate accounts receivable information is updated as incoming

daily payments are processed, and IT to aid in improving enterprise system functionality on a daily basis. Technical and practical support for enterprise system applications is provided by the Business Systems Administrator to ensure the best outcome for the billing processes. Over the past two fiscal years, the Customer Accounts Department has also worked closely with the Finance, Accounting, and IT departments to ensure successful implementation of the District's new rate structure and scheduled rate increases, as well as the conversion of the District's bi-monthly customers to monthly billing. In addition to its work with other departments, the Customer Accounts Department serves as an interface between customers and the District. As the District enters what is likely to be another year of drought, customer education will continue to be a priority in continuing the District's success, and the proposed Customer Account Representative will help to ensure the continued partnership between the District and its customers.

### Labor Relations

The District places considerable value on its staff's ability to adapt to a changing operating environment, not only from a regulatory compliance standpoint but also from a technological and risk management standpoint. The proposed FY 2016-17 budget, includes provisions for ongoing training and education, as well as maintaining the certifications required for the continued operation of the District. The District also encourages staff to maintain awareness of developing industry trends that could make the District more efficient or potential legislation that could affect operations or management practices.

From an operational standpoint, one of the District's biggest assets is its staff. Every position at the District has considerable responsibilities and plays a critical role in the District's continued success. The District strives to ensure that it equally benefits its employees by serving as a resource. The District hosts several workshops throughout the year that cover topics ranging from safety and emergency response to medical and retirement benefits.

As operations continue to evolve, the need to supplement existing staff will continue to grow. When program cost analyses show that it is cost-effective to meet resource needs with additional staff, it is critical that the District be able to fill those positions with qualified individuals who fit its unique needs and culture. With the implementation of Neo-Gov Insight, an automated application processing and online job posting system, the District has increased its visibility to potential candidates and dramatically reduced application processing times. The District received and reviewed nearly 1,300 employment applications between August and April of FY 2015-16 alone, which is more than in FY 2013-14 and FY 2014-15 combined. The proposed budget includes provisions to extend the Neo-Gov platform to the District's onboarding process to ensure a consistent orientation and training experience for new hires. The District looks to continue the recruiting successes of FY 2015-16 as it begins to fill proposed positions.

Labor relations continue and will always be the most critical component to determining the success of any organization, and the District's experience confirms this. In the last four years, the District has made great strides to improve labor relations and change the way the agency is regarded in the region and State. The current MOU was developed in one day, which speaks to the trust and relationship established between the employees and the District. FY 2016-17 represents the last year of the four-year MOU and the District looks to build on the trust and success that have been established to develop

another multi-year MOU that ensures both financial health of the District and the welfare of its employees. Having an exceptional Human Resources Department has been invaluable in building the trust through care, credibility and performance. Recruitment and retention are a concern as many agencies are interested have indicated interest in the District's highly skilled employees and increasing compensation and benefits to attract talent.

### Operations Center Consolidation

There is an overwhelming consensus from both staff and management that a centralized headquarters would be extremely beneficial in terms of improving productivity, communication, and collaboration. The District's current facilities require extensive structural and functional rehabilitation. Staffing has expanded as operations have evolved. As a result, functional workspace needs have outgrown both facilities, requiring staff to regularly reconfigure workspaces, which is costly, to accommodate additional resources.

After extensive work to identify the appropriate site for the new Operations Center, the District has elected to move forward with plans to build at its 2A site. Working with the Board appointed ad-hoc committee, significant progress has been made and the District looks to break ground this year. Regular community meetings with the City of Laguna Hills and the surrounding residents have been held to ensure communication and coordination. This fiscal year, the District will extend communications about this project to all of its customers. Customers have been made aware for some time about this project and the associated costs, which have been budgeted for several years. However, the District will remain active and begin sharing progress updates for these effort. To date, District customers and the cities remain very supportive and understanding of the need to build a new operations center.

### Outreach/ Customer Communication

The District has always prioritized a high level of customer service and communication. Leading these efforts are the Customer Service Department and customer account representatives who help with inquiries on bills and any other customer inquiries. Additionally, customer account representatives work across departments to direct questions and service orders to the respective department. As the District has grown, communication and outreach have evolved with it.

Since 2012, the District has been developing its outreach program and taken a pragmatic approach to expanding the program's function. In response to the drought, the District has ramped up program efforts significantly. With increased resources and the formation of the Board appointed ad-hoc, the District's success has been lauded by the State, and customers have appreciated the increased communication. The value of outreach has been made clear by record numbers of District customers living within their budgets and unprecedented positive media coverage. Feedback from customers and the cities has been positive as well: they appreciate the increased communication and would like to see more. The District has done a lot with limited staff. Critical gaps have been filled on an interim basis with outside consultants; however, after much evaluation, some of these gaps will need to be addressed with internal resources over the coming years.

Outreach as a function is foundational to all District staff. A large portion of the District's staff start in the customer service department, which creates an ethos in all functions at the District of the importance of customer communication as well as consistent messaging. In the past, the focus was that of pipes in the ground with the goal of being unseen. However, as the District has evolved, that spirit of communication to customers and service first mentality is seen in how Street Crew responds to line breaks, how the Customer Service Field staff work late to turn on a customer before the weekend and how conservation staff have attended dozens of HOA meetings to help some of the largest customers be more efficient.

The multitude of planning and operating efforts required for the District's continued success all relate back to a common origin: providing exemplary service to customers. In addition to its work with other departments and long-term planning, the Customer Accounts Department serves as an interface between customers and the District. As the District enters what is likely to be another year of drought, customer education will continue to be a priority in continuing the District's success, and the proposed Customer Account Representative will help to ensure the continued partnership between the District and its customers

#### [Drought Response/ Demand Management](#)

Implementation of the current comprehensive demand management programs did not happen overnight. In an effort to reduce water usage during the 2009 to 2010 drought, the District issued a mandate specifying which days of the week customers could irrigate. The mandate was paired with a strong enforcement effort, which resulted in nearly 20,000 warning letters and fines being issued to customers. Ultimately, the strategies resulted in negligible water usage reductions, as many customers would over-irrigate on watering days, and created resentment from customers who now viewed the District as "water cops". The experience taught the District that any demand management policy must maintain customer choice and equity in order to provide disincentive for water waste. The goal of an effective demand management policy should be to achieve demand reductions through informed decisions by customers about how they choose to use water. The first step in implementing the District's demand management portfolio began on July 1, 2011 with a strong pricing signal for customers to be efficient through a water budget based rate structure.

As an immediate follow-up to the creation of the water budget-based rate structure, the District created a rebate program to reduce the cost of customer compliance with their individually calculated water budgets. Rebates are offered for transforming landscapes to low water use plants, and for both irrigation efficient devices and indoor water efficient devices. Customer participation since 2010 has been tremendous with over 17,000 rebates sent out for conservation actions through the end of 2015.

The District implemented a targeted and strategic marketing strategy based on much of the information collected through the rate structure. Targeted messages were sent via postcards and email blasts to customers who met certain criteria. For instance, customers without yards were targeted with messages to look for indoor leaks while customers with yards were targeted with outdoor conservation actions. By utilizing the account information collected to calculate customer water budgets, the District was able to not only ensure the right message was sent to the right customers, but also that postage

and printing costs were kept to a minimum. Additionally, the District has ventured into targeted digital marketing through Facebook and LinkedIn.

The District's current demand management programs would not have been successful without internal coordination that has expanded dramatically in recent years yielding enormous benefits. Planning works with conservation staff, and customer service as well as all District staff to make sure messaging of demand management programs is consistent Districtwide. This is shown with the District's recent conversion of bi-monthly to monthly billing where Planning, Information Technology and Billing put forth a plan and implemented it successfully so that now all customers are billed monthly, ultimately providing customers with more regular information on their budget and water usage to help them be more efficient. In addition, an outreach plan was implemented to provide customers information well ahead of the change through staff coordination. In that spirit, Customer Service and Operations staff started the implementation of the Phase 1 pilot AMI project. This project provides a phased, manageable entry into AMI to provide customers with leak notification and hourly water usage information through a secure customer portal. The project is slated to be completed in the first half of FY 2016-17.

#### Data/Document Management

In the water industry, it has been long recognized by agencies and State officials that there are serious deficiencies in terms of data. Despite individual agencies and state agencies all collecting some level of data, there is a lack of consistency in what data is collected and how it is analyzed and used. Because of this inconsistency, past and current statewide actions to promote water efficiency and conservation have been based on limited information, resulting in contentious implementation. Additionally, as legal cases related to rates and public scrutiny increases, how agencies manage their documents and data is beginning to come into question, and the District has received a record number of public records act requests. As the District utilizes more data to provide operational and marketing efficiencies, data infrastructure is needed to support those needs. Additionally, as District staff coordinate more and utilize information across departments, a need has developed for a modern document management system to provide Districtwide staff the ability to query and pull up information to maintain and even expand the exciting initiatives in demand management and leverage operational efficiencies even further.

This fiscal year, the District facilitated an exciting and groundbreaking statewide data collaborative, which has received much support and interest from water agencies, ACWA and the SWRCB, to help inform decision makers on water issues. Internally, the District has undertaken efforts to update and strengthen its document management program and develop the necessary infrastructure to facilitate information inquiries, making it faster and easier to access District information. These efforts will place significant demands on existing resources and the District will need to plan accordingly and set realistic expectations for implementation.

#### Asset Management

Management of the District's 1,307 miles of pipeline, 39 reservoirs, four treatment plants, 53 pump and lift stations, and the necessary infrastructure and equipment necessary to ensure their continued

operation requires extensive collaboration across all Departments and job types. Development of a comprehensive asset management strategy has been a critical component of the District's ability to both efficiently execute the daily repair and maintenance of its existing assets, and cost-effectively plan for long-term infrastructure needs.

As outlined in the District's Asset Management Framework Plan, daily maintenance of existing facilities is essential to the District's ability to cost-effectively provide service to its customers: routine maintenance prolongs the useful life of existing assets and minimizes avoidable operating costs.

Daily inspection as well as routine maintenance and repair of the District's 53 pump and lift stations is overseen by the Station Maintenance Crew, a member of the Facilities Maintenance Department. In addition to its other responsibilities, the crew is responsible for all pump refurbishments, which ensures flows can be diverted in the event of emergency or planned repair. The Station Maintenance Crew relies on coordination with several other crews for their success: the Electrical/Instrumentation Services Crew disconnects motors and drives, programs all pump motor drives, and troubleshoots flow meter issues; the Collections Crew schedules use of its Vactor truck to prevent damage of wet-well pumps and assist with potential sewer overflows; while the Support Services Crew maintains the 28 stationary auxiliary generators and performs needed repairs on-site. The continued operation of the District's pump and lift stations, made possible by coordinated maintenance and repair, is vital to the Distribution Department's ability to move flows through the District's systems and continue reducing system water losses.

Maintenance and monitoring of the District's Potable and Recycled Water Reservoirs, Flow Control Facilities, Master Meter Takeout Facilities, Potable and Recycled Pressure Reducing Stations, and reservoir chlorination systems is overseen by the Distribution Department. Utilizing computer based telemetry control (SCADA) and direct field control, Distribution staff continuously monitors system flows in order to maintain optimal pressure the District's distribution system. Due to the service area's varied topography, water must be moved through numerous pressure zones before it reaches customers. Consequently, Distribution staff must coordinate regularly with Station Maintenance and Electrical/Instrumentation staff to ensure pumps are operational in the particular zone in order to maintain enough pressure to deliver water but not so much as to cause valve or pipe failures that would require costly repairs and cause potential water loss. The collaboration between departments—IT staff for SCADA infrastructure reliability, and Station Maintenance and Electrical/Instrumentation staff for pump reliability—ensures the Distribution Department is able to actively monitor system flows and manage distribution system assets. Cost-savings beyond avoided asset failure are made possible through this collaboration, as Distribution is able to utilize storage in high-elevation reservoirs and rely on gravity to provide sufficient system pressure for day-time demands, then pump water back up to the reservoirs at night when electricity rates are low.

The Collection System Maintenance Crew, a member of the Utilities Maintenance Department, oversees the maintenance and inspection of the District's more than 500 miles of sanitary sewer mains and manholes. Because of the potential health hazard and environmental impacts that failure of collection system assets can cause, preventative maintenance and proactive asset management are essential. Collaboration with other departments has significantly increased the efficiency of Collection Crew operations. Through collaboration with GIS staff, Collections has been able to combine routine sewer line cleaning with its preventative maintenance program as well as integrate both CCTV inspection

software (GraniteNet) and manhole condition assessments with GIS data to better manage and map wastewater assets.

In addition to routine system maintenance, the District has implemented programs to address both the reactive and proactive maintenance needs of its assets based on the results of a Water Loss Control Audit that was performed in 2015. Programs such as the Valve Turning Program, Proactive Leak Detection Program, and Meter Replacement Program have prioritized proactive asset management and improved the District's ability to respond to line breaks.

The Street Crew, a member of the Utilities Maintenance Department, has been responsible for responding to reported line breaks and now also oversees the proactive maintenance of the District's potable, recycled, and wastewater infrastructure. Street Crew began a proactive leak detection program within several residential neighborhoods last year, and is looking to expand the program to cover nearly one third of the District in FY 2016-17. As part of the Valve Turning Program, staff exercises potable and recycled water system valves to ensure area can be isolated in the event of a line break or scheduled repair. The Street Crew is planning to expand its efforts in FY 2016-17 by collaborating with the GIS department to implement full use of Infra-Map software for valve turning and increase the amount of valves exercised for the year by nearly 40 percent. Discussed in the Salaries and Benefits section and Appendix D, valve-related asset management will continue to remain a priority as the District implements its Valve Replacement Program.

Because water loss reductions can only be measured by accurate meters, the District's Customer Service – Field Department maintains a robust meter replacement plan, by which an average of 3,000 of the District's 55,000 meters are replaced each year. As a result of the Department's efforts, meter replacements are ahead of schedule.

The daily execution requirements of these programs require internal resources: needed repairs are labor intensive and have considerable costs. Collaboration between departments has integrated previously separated asset data and enabled staff to efficiently execute an asset management program that has increased reliability and avoided water purchase costs. The District will continue to utilize consultants based on cost-effectiveness analysis. Additionally, for all construction related work, when the District determines that a consultant will be used for a specific project or task, the District's Inspection Department will ensure the work performed meets District standards and is consistent with overall asset management goals.

Despite the improvements and newly integrated work efforts that have been made possible by collaboration between departments, the District still lacks the infrastructure necessary to fully integrate its system asset data and enterprise billing, financial and payroll software. To address this need the District has prioritized the development and implementation of a Computerized Maintenance Management System (CMMS), that would allow for reported asset values to be updated in real-time as staff continues to execute the District's asset management plan.

Major activities underway or planned include selection and implementation of an upgraded Computerized Maintenance Management System (CMMS), optimization of Capital Improvement Program implementation, optimization of Operation and Maintenance practices, Valve Replacement and Maintenance Program development, and Pipeline Rehabilitation and Replacement Program

Development. In addition, GIS mobile technology will be implemented as required, along with continued GIS population and accounting itemization of all District asset attributes.

### Water Reliability

The District has been proactive in its planning efforts to ensure water reliability. A major achievement for FY 2015-16 was the in-house development of the District's Urban Water Management Plan (UWMP) 2015 Update. The UWMP incorporated analysis from all of the District's planning tools to create a holistic forecast of the District's long-term supply reliability picture, including: the Long Range Water Reliability Plan, Recycled Water Master Plan, Water Shortage Contingency Plan, and Long-Range Financial plan. As part of the UWMP, the District identified expansion of its recycled water system as a critical component of its portfolio of demand management and supply development that would ensure long-term supply reliability for the District's service area. Preliminary analysis of the Phase V recycled water system expansion, indicates approximately 2,000 AF of average year potable demand can be converted to recycled water use. However, due to increased active and passive conservation measures, potential recycled water supplies have declined as wastewater flows in the District service area have decreased over 30 percent in the last five years. The District is evaluating the impact of continued wastewater flow decreases, and will continue to look for opportunities to optimize flows both locally and regionally to achieve the Board's goal of all wastewater within the service area being put towards beneficial reuse. The District has identified some deficiency in terms of its ability to allocate sufficient resources to participate in these project evaluations in addition to the increased activities at SOCWA and SJBA.

Regulatory changes from the Regional Water Quality Control Board and the District's emphasis on recycled water expansion will place increasing demands on the District's existing Cross-Connection Inspectors, whose workflow is not easily outsourced. As the District looks to begin the next phase of its recycled water system expansion, cost-effective sites will continue to be converted and the proposed Cross-Connection Inspector will assist with connecting customers to the recycled water system in the short-term and transition to inspections as more sites connect.

### Wastewater Treatment

Over the years, the District has relied on SOCWA (South Orange County Wastewater Authority) for all wastewater treatment issues. Given the significant annual financial contributions to SOCWA (approximately \$22M annually for both operating and capital expenses) and some inequity issues that currently exist as well as the current cost allocation study by SOCWA, there is a growing need for additional in-house resources and expertise to fully evaluate these and other future actions.

Recently, the operation of the 3A plant was transferred to SMWD and the potential for using the current outfall from the plant to expand recycled water distribution is being discussed. There are major decision points for the Board to consider in the upcoming years, and the District must plan for sufficient resources to ensure informed decisions. Outsourcing has been utilized; however, in terms of strategic planning and understanding of the District, an internal resource is necessary. This is especially critical as the District looks to implement the Board adopted policy to put all wastewater to beneficial use.

## Government Affairs

The District has made great strides in establishing local, regional and statewide relationships; however, much work still remains. Prior to 2012, there was no government affairs function, similar to outreach. More and more, and particularly with the drought, there are increasing legislative initiatives, and both local and regional activities that impact the District and its customers. Existing staff, supplemented by consultants, have lead these efforts. The District has done all it can with available resources, but it is not enough. The Board has expressed the need to be more aware and engaged in local, regional, and statewide issues that impact its communities, and District staff has echoed these concerns. The District will need to evaluate resources needs to address this significant gap.



**moulton niguel** water district

**CAPITAL IMPROVEMENT PROGRAM**

**FOR**

**FISCAL YEAR 2016-17**

**JUNE 2016**

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- Appendix C – Proposed 2016-17 Budget
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## Overview

The Moulton Niguel Water District (District) Capital Improvement Program (CIP) outlines the expenditure plan for future capital projects for the next decade and provides a CIP budget for the upcoming Fiscal Year (FY). The 10-year look-ahead should best be viewed as a financial planning document. Project costs are planning estimates and are reviewed and further refined each year. Spending authorization is given only at the time the District's Board of Directors formally adopts the proposed FY budget, and, at that time, funds are only appropriated for the FY. Information is shown in subsequent years to provide a snapshot of the facilities the District plans to construct or existing infrastructure requiring replacement or refurbishment. The District uses an additional expenditure check through various contracting instruments. The District's Board of Directors authorized the General Manager to approve contractual expenses up to \$75,000. Contracts and agreements above that level require specific Board of Directors action on a contract by contract basis.

The CIP projects will be funded from four sources: Water Efficiency (WE) Fund 6, Replacement and Refurbishment (R&R) Fund 7, Water Supply Reliability (WSR) Fund 12, and Planning and Construction (P&C) Fund 14.

The development of the CIP is an on-going process. Facilities that need replacement and refurbishment are identified through a continuous process of inspections and assessments. In addition, staff is developing annual rehabilitation programs such as reservoir recoating, valve replacement, sewer lining and manhole rehabilitation. Through various planning processes staff is also identifying projects to enhance water reliability and system performance. All the projects are compiled into one document to provide as complete a picture as possible of the upcoming CIP projects and expenditures. The projects are spread out over the next ten years via a prioritization process that looks at such factors as criticality, probability of failure, safety requirements, operational efficiency, vulnerability, and regulatory compliance. The ten-year program is used as a basis for selecting specific projects for implementation in the upcoming Fiscal Year.

## 10-Year Capital Improvement Program

The 10-year CIP represents potable, recycled, and wastewater system projects and district-wide projects that are required to maintain and operate the District's infrastructure. Appendix A lists the projects in the 10-year CIP. The budgets are budgetary level costs based on similar completed projects and engineering estimates and are refined as new information becomes available. The planning efforts that contributed to the list of projects include the staff knowledge of replacement, repair and improvement needs, the District's current Asset Management Model, and both local and regional water reliability needs identified through various planning efforts.

The 10-year CIP contains proposed expenditures totaling \$282.9 million for FY 2016-17 through FY 2025-26. About 30% (\$85 million) of these expenditures are associated with the District's participation in regional activities such as Joint Power Authorities (JPAs) and regional water supply projects. Figure 1 shows the breakdown of costs for the 10-year CIP between the various systems:

- Potable – projects associated with repair, maintenance, and improvement of the potable water system
- Recycled – projects associated with repair, maintenance, and improvement of the recycled water system
- Wastewater – projects associated with repair, maintenance, and improvement of the wastewater collection system and wastewater treatment plants operated by South Orange County Wastewater Authority (SOCWA) and Santa Margarita Water District (SMWD)
- District-wide – projects associated with facilities that provide benefits to all of the District such as office space, geographic information systems, and any project that covers more than one system
- Regional – projects in which there is more than one agency participating, such as: Joint Regional Water Supply System (JRWSS), Baker Water Treatment Plant, Upper Oso Reservoir, and Chiquita Reservoir.
- Unanticipated – unforeseen projects that come up during the year.

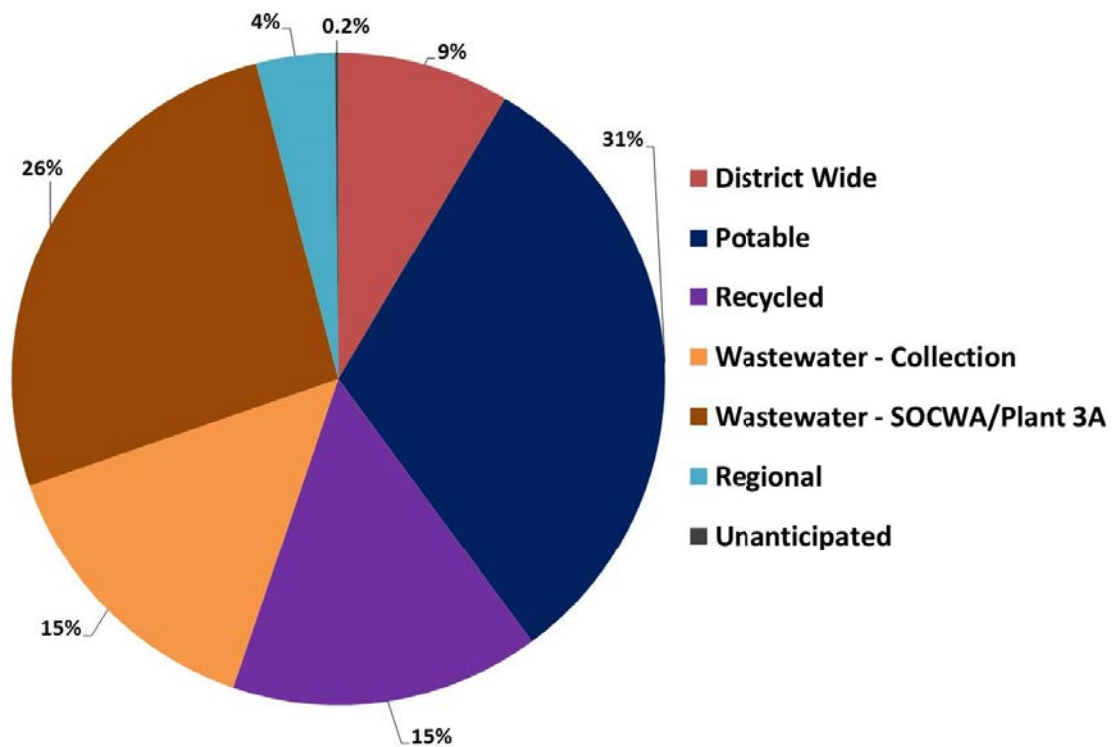


Figure 1: Distribution of the 10-Year Capital Improvement Program

Figure 2 shows the distribution of the budget over the next 10 years.

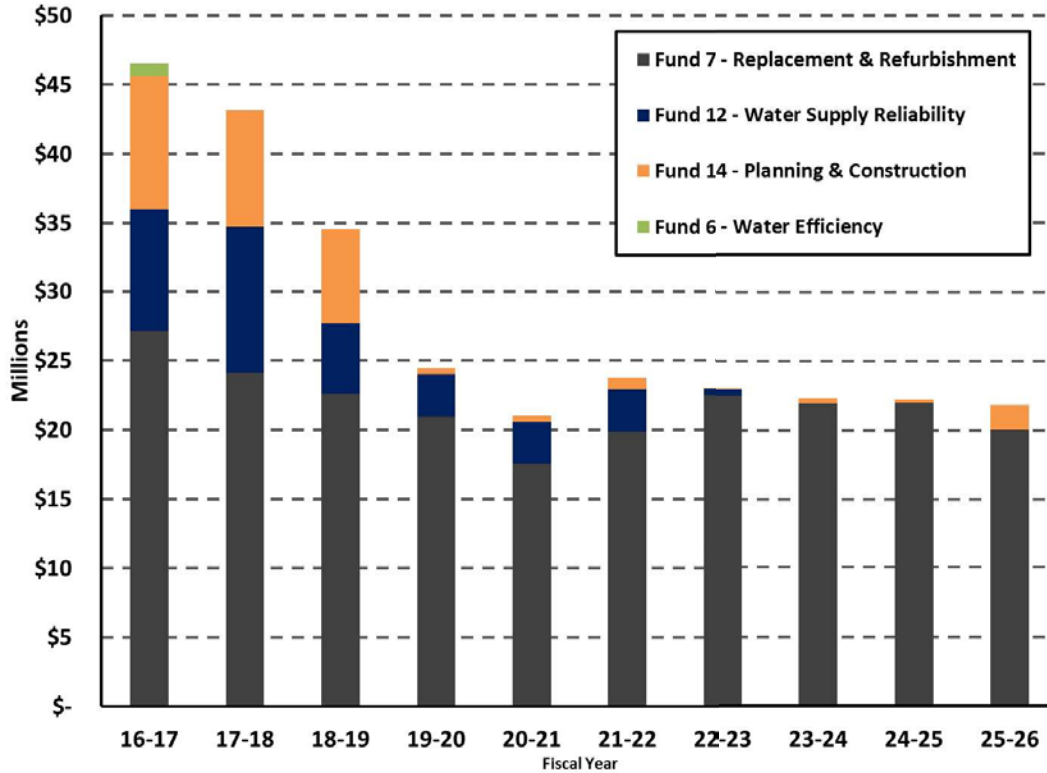


Figure 2: Proposed Budget Distribution over 10-Year Planning Horizon

### Fiscal Year 2015-16 Adopted Budget

The CIP for the FY 2015-16 as adopted by the Board of Directors in June of 2015 had a budget of \$46.8 million. The FY 2015-16 budget contained 64 individual projects and two unanticipated project line items. At the end of the fiscal year, 27 projects will be completed, 14 projects will be in construction and 21 projects will be in various stages of design. During the fiscal year, \$36 million or 75% of the budget was contracted with \$24 million forecasted to be paid out.

Table 1 summarizes the FY 2015-16 adopted budget. Appendix B Table B-1 lists the projects in the 2015-16 budget, while Table B-2 lists the projects that will be closed by the end of the FY. Table B-3 lists the projects that will be carried forward to FY 2016-17.

Table 1: FY 2015-16 Adopted Capital Improvement Program Budget

Item/Fund	FY 2015-16 Adopted Budget
Water Efficiency – Fund 6	\$1,695,611
Replacement and Refurbishment - Fund 7	\$20,767,825
Water Supply Reliability - Fund 12	\$14,778,582
Planning and Construction - Fund 14	\$9,572,481
Total	\$46,814,499
Projected Expenditures for FY2015-16 <sup>(1)</sup>	\$24,028,742
Construction in Progress or Completed	\$35,749,009

Note 1. Projected expenditures based on data through April 26, 2016 and expenditures projected through the end of the fiscal year

### Fiscal Year 2016-17 Proposed Budget

The FY 2016-17 CIP outlines \$46.6 million in appropriations to continue funding of existing projects and provide funding for new projects. Projects carried forward from FY 2015-16 account for about \$27.1 million of the FY 2016-17 CIP budget - \$11.5 million is currently in construction and \$15.6 million is in various design phases. Appropriations for new projects are about \$5.1 million, primarily for design and bidding. Construction of the new projects will occur during later fiscal years and is budgeted in the ten-year CIP. The regional projects, totaling \$13.9 million, include projects proposed by South Coast Water District (SCWD) for the JRWSS; SMWD for jointly-owned facilities such as Upper Oso, Chiquita Reservoirs and Plant 3A; and SOCWA for wastewater treatment. Appendix C Table C-1 lists the projects proposed for the 2016-17 budget. The projects are described individually in Appendix D.

Table 2 summarizes the proposed budget for each of the various Funds while Figure 2 shows the percentage allocation. Rehabilitation and replacement needs drive the budget requirements and account for almost 60% of the fiscal year budget. This is in line with the age of the District and its transition from growth to maintenance. Staff expects that replacement and refurbishment activities of the District will increase as the District’s assets reach their useful-life expectancies and/or annual operating costs dictate replacement.

Table 3 summarizes the proposed expenditure by system while Figure 3 displays the percentage distribution across systems. The wastewater system, at 36%, is the biggest component of the next fiscal year budget.

Table 2: Proposed Budget for FY 2016-17 by Fund

Item/Fund	FY 2016-17 Proposed Budget
Water Efficiency – Fund 6	\$950,990
Replacement and Refurbishment - Fund 7	\$13,257,897
SOCWA & JRWSS - Fund 7	\$13,886,529
Water Supply Reliability - Fund 12	\$8,861,074
Planning and Construction - Fund 14	\$9,613,031
<b>Total FY 2016-17 Proposed Budget</b>	<b>\$46,569,520</b>

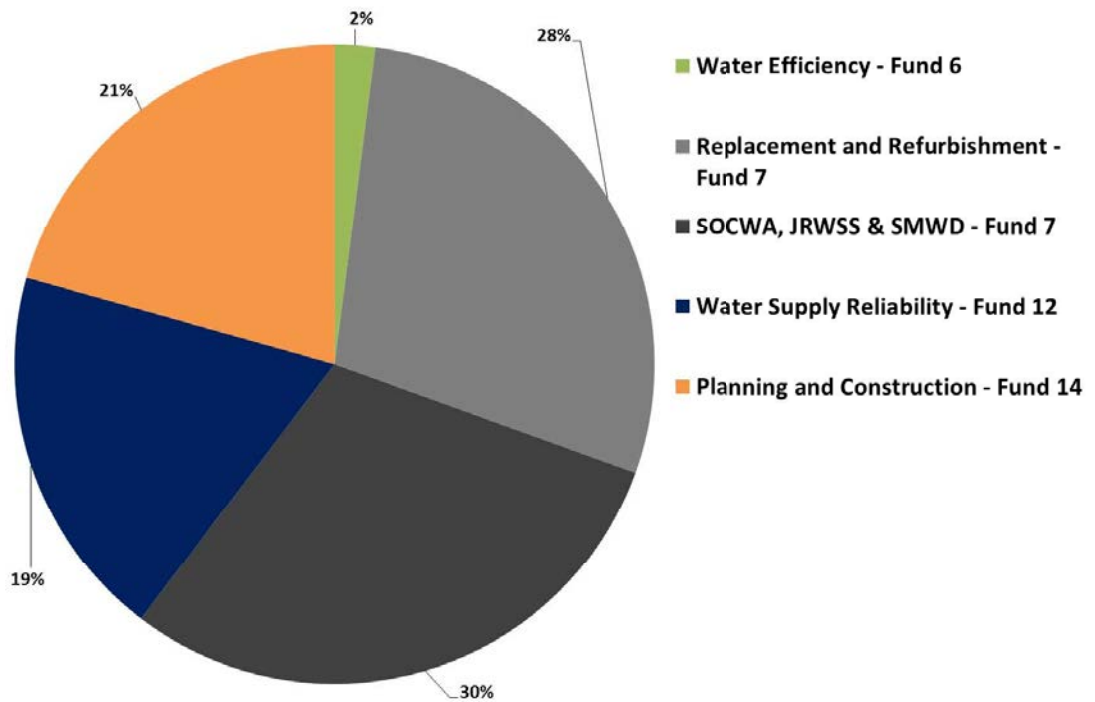


Figure 3: Percent Distribution of Proposed Budget for FY 2016-17 by Fund

Table 3: Proposed Budget for FY 2016-17 by System

System	FY 2016-17 Proposed Budget
District Wide	\$8,969,552
Potable Water	\$7,480,213
Recycled Water	\$7,162,694
Wastewater	
Collection	\$4,547,021
Treatment (SOCWA & Plant 3A)	\$12,040,105
Regional (i.e. Baker, JRWSS, Upper Oso, etc.)	\$5,919,935
Unanticipated Projects	\$450,000
<b>Total</b>	<b>\$46,569,520</b>

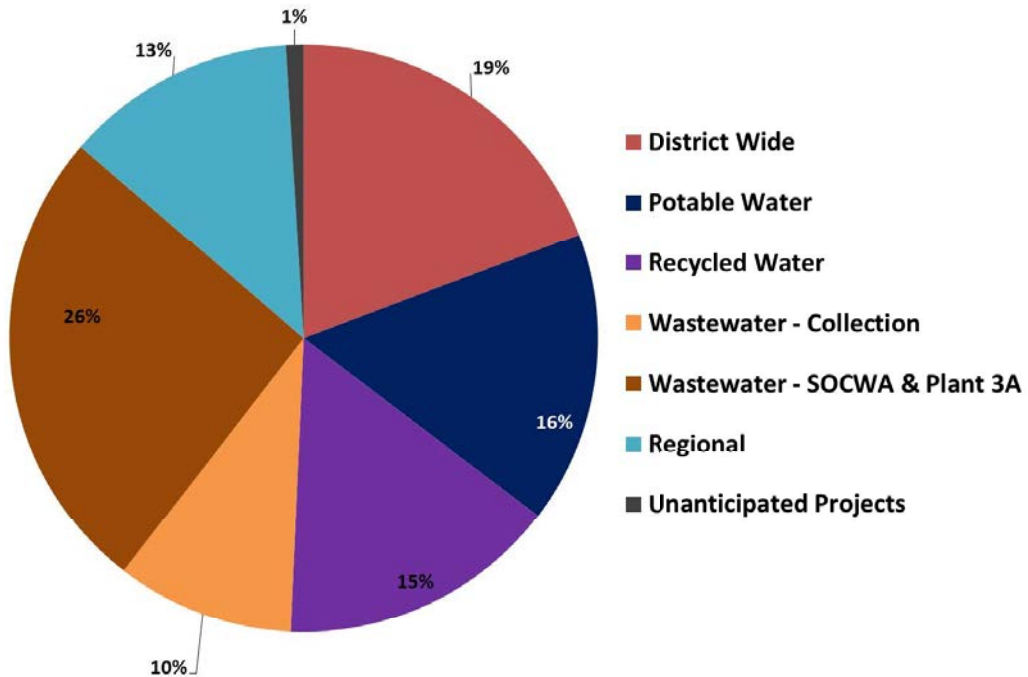


Figure 4: Percent Distribution of Proposed Budget for FY 2016-17 by System

**Appendix A**  
**10-year Capital Improvement Program**

APPENDIX A  
10-YEAR CAPITAL IMPROVEMENT PROGRAM

Project No.	Fund	Project Name	Project Status/Priority	Total Project Value	Expended from Inception to Date	Forecast Total Project Expenditures Through FYE	Remaining Project Budget	Proposed Budgets			
								FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20 to FY 2025-26
<b>DISTRICTWIDE</b>											
2006038	7	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	Construction	\$2,020,630	\$1,561,078	\$1,561,078	\$459,552	\$8,000,000	\$6,000,000	\$6,493,626	
2014015	14	DISTRICT HEADQUARTERS	Design	\$23,000,000	\$456,374	\$506,374	\$22,493,626	\$60,000	\$200,000	\$200,000	
2011034	7	GIS VIEWER AND CONFIGURATION	Design	\$60,000	\$60,000	\$60,000	\$60,000	\$200,000	\$185,000	\$289,000	
2011033	7	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	92%	\$500,000	\$235,000	\$235,000	\$389,000	\$100,000	\$250,000	\$250,000	
2011077	14	MOULTON PEAK RADIO TOWER IMPROVEMENTS	80%	\$235,000	\$235,000	\$235,000	\$389,000	\$100,000	\$250,000	\$250,000	
2011024	7	DOCUMENT MANAGEMENT	72%	\$389,000	\$389,000	\$389,000	\$389,000	\$100,000	\$289,000	\$289,000	
<b>POTABLE</b>											
2014001	7	BEAR BRAND RESERVOIR RECOATING & SAFETY IMPROVEMENTS	Construction	\$778,100	\$20,985	\$270,985	\$507,115	\$507,115	\$507,115	\$507,115	
2014013	14	PRADERA 860 ZONE LOOP	Construction	\$812,000	\$62,101	\$62,101	\$759,899	\$759,899	\$759,899	\$759,899	
2015002	7	2015-16 VALVE REPLACEMENT	Construction	\$1,470,000	\$36,768	\$36,768	\$1,433,232	\$1,433,232	\$1,433,232	\$1,433,232	
2015017	14	FALL PROTECTION SYSTEM - PW RESERVOIRS	Construction	\$240,000	\$6,868	\$6,868	\$233,132	\$233,132	\$233,132	\$233,132	
2015019	6	AMI PHASE I - POTABLE IRRIG METERS	Construction	\$490,000	\$14,505	\$14,505	\$475,495	\$475,495	\$475,495	\$475,495	
2015023	7	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ	Construction	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$250,000	
2011010	7	HILLARY PRS REPLACEMENT	Design	\$460,000	\$37,839	\$37,839	\$422,161	\$422,161	\$422,161	\$422,161	
2011012	7	LARGO PRS REPLACEMENT	Design	\$460,000	\$38,174	\$38,174	\$421,826	\$421,826	\$421,826	\$421,826	
2011015	7	WILKES PRS REPLACEMENT	Design	\$460,000	\$38,042	\$38,042	\$421,958	\$421,958	\$421,958	\$421,958	
2014012	7	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	Design	\$420,000	\$43,208	\$43,208	\$376,792	\$188,396	\$188,396	\$188,396	
2015011	7	PALMS APT'S EASEMENT PW LINE REPLACEMENT	Design	\$460,000	\$625	\$625	\$459,375	\$459,375	\$459,375	\$459,375	
2015012	7	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	Design	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	
2015013	7	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	Design	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	
2015015	7	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	Design	\$1,235,000	\$1,235,000	\$1,235,000	\$1,235,000	\$1,235,000	\$1,235,000	\$1,235,000	
2015022	7	CROWN VALLEY PW RESERVOIR 3 RECOATING	Design	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	
7	7	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - PW	Design	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	
7	7	PW PROJECTS PER ASSET MANAGEMENT MODEL	Program	\$9,000,000	\$9,000,000	\$9,000,000	\$9,000,000	\$9,000,000	\$9,000,000	\$9,000,000	
7	7	RESERVOIR MANAGEMENT SYSTEM REPLACEMENT PROGRAM	Program	\$11,450,000	\$11,450,000	\$11,450,000	\$11,450,000	\$11,450,000	\$11,450,000	\$11,450,000	
7	7	RESERVOIR RECOATING PROGRAM	Program	\$11,250,000	\$11,250,000	\$11,250,000	\$11,250,000	\$11,250,000	\$11,250,000	\$11,250,000	
7	7	SERVICE SECTION AND MCC PW REPLACEMENT PROGRAM	Program	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	
7	7	VALVE REPLACEMENT PROGRAM	Program	\$19,830,000	\$19,830,000	\$19,830,000	\$19,830,000	\$19,830,000	\$19,830,000	\$19,830,000	
7	7	HIGHLAND PUMP PRESSURE RELIEF TO 650 ZONE	84%	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	
7	7	2016-17 VALVE REPLACEMENT	80%	\$2,860,000	\$2,860,000	\$2,860,000	\$2,860,000	\$2,860,000	\$2,860,000	\$2,860,000	
14	14	920 ZONE LOOP PIPELINE	78%	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	
7	7	54-INCH CIP IMPROVEMENTS	76%	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	
2009010	14	MISSION HOSPITAL SECONDARY FEED	76%	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	
14	14	SADDLEBACK PS GENERATOR EMERGENCY CONNECTION	76%	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
14	14	SECONDARY FEED FOR 1050 ZONE	72%	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	
2012011	7	EASEMENT REHABILITATION PROGRAM - Phase 1	64%	\$7,850,000	\$7,850,000	\$7,850,000	\$7,850,000	\$7,850,000	\$7,850,000	\$7,850,000	
2011032	7	OLD RANCH ROAD EASEMENT REFURBISHMENT	64%	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	
2012010	7	CVP 16-INCH PW LINE REHABILITATION	64%	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	
7	7	UTILITY SERVICE ENTRANCE REPLACEMENTS	62%	\$738,000	\$738,000	\$738,000	\$738,000	\$738,000	\$738,000	\$738,000	
2011037	7	MISSION VIEJO HIGH SCHOOL LINE/VAULT REFURBISHMENT	60%	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	
7	7	PZ450 ALISO CREEK POTABLE LINE RELOCATION	58%	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	
2010001	14	650-ZONE NIGUEL ROAD INTERTIE	56%	\$320,000	\$320,000	\$320,000	\$320,000	\$320,000	\$320,000	\$320,000	
7	7	EASEMENT REHABILITATION PROGRAM - Phase 2	56%	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	
7	7	STEEL TANKS SEISMIC & STRUCT RETROFITS - PW	56%	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	
7	7	BEAR BRAND PS PUMP REPLACEMENT	52%	\$410,000	\$410,000	\$410,000	\$410,000	\$410,000	\$410,000	\$410,000	
7	7	LITTLE NIGUEL PS PUMP REPLACEMENT	52%	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
7	7	PACIFIC PARK PS PUMP & ENGINE REPLACEMENT	52%	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	
7	7	ROLLING HILLS PS ENGINE & PUMP REPLACEMENT	52%	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	
7	7	SHEEP HILL PS ENGINE & PUMP REPLACEMENT	52%	\$1,040,000	\$1,040,000	\$1,040,000	\$1,040,000	\$1,040,000	\$1,040,000	\$1,040,000	
14	14	MARGUERITE/OSO CIP TAKEOUT	50%	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	
7	7	VAULT REMOVAL (11 SITES)	48%	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	
2015006	7	ID. 1 MASTER METER RELOCATION	48%	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	
12	12	SOUTH COUNTY PIPELINE TAKEOUT FACILITY	48%	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000	
2011026	7	RANCHO UNDERGROUND PS REFURBISHMENT	44%	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	





**Appendix B**  
**Adopted 2015-16 Budget**

Table B-1 Adopted and Amended  
2015-16 Projects

Table B-2 Closed Projects

Table B-3 Carry-forward Projects

**TABLE B-1  
MOULTON NIGUEL WATER DISTRICT  
FY 2015-16 PROJECTS AND BUDGET, AS ADOPTED AND AMENDED**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	FY2015-16 EXPENDITURES	ESTIMATED COMPLETION DATE
<b><i>WATER EFFICIENCY FUND (FUND 06)</i></b>						
2014010	ALISO VILLAGE RW EXTENSION	\$150,000	\$121,562	\$95,611	\$5,627	6/30/16
2014011	RECYCLED WATER SYSTEM EXTENSION PROJECT	\$2,146,552	\$117,427	\$1,500,000	\$12,844	6/30/17
2015014	FY 2015-16 RW RETROFITS	\$100,000	\$760	\$100,000	\$760	6/30/16
<b><i>Fund 6 Total</i></b>		<b><i>\$2,396,552</i></b>	<b><i>\$239,749</i></b>	<b><i>\$1,695,611</i></b>	<b><i>\$19,231</i></b>	
<b><i>REPLACEMENT &amp; REFURBISHMENT FUND (R&amp;R) (FUND 07)</i></b>						
2006038	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	\$2,020,530	\$1,561,078	\$561,546	\$16,047	6/30/16
2009115	SAN JUAN CREEK 30 EFFLUENT TM	\$3,600,000	\$1,614,991	\$1,600,228	\$1,338,745	6/30/17
2009115	SAN JUAN CREEK 30 EFFLUENT TM - SMWD REIMBURSEMENT	(\$1,214,889)		(\$450,000)		6/30/17
2010018	MATHIS-OSO BY-PASS	\$778,670	\$777,474	\$527,615	\$372,149	12/30/15
2010033	NEW DISTRICT ENTERPRISE SOFTWARE	\$3,375,000	\$2,993,618	\$0	\$139,119	12/31/15
2011010	HILLARY PRS REPLACEMENT	\$460,000	\$37,839	\$422,979	\$819	6/30/16
2011012	LARGO PRS REPLACEMENT	\$460,000	\$38,174	\$423,171	\$1,114	6/30/16
2011015	WILKES PRS REPLACEMENT	\$460,000	\$38,042	\$423,303	\$1,114	6/30/16
2011016	PLC PANEL REPLACEMENT	\$440,000	\$369,375	\$111,087	\$18,854	6/30/16
2011033	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	\$430,000	\$0	\$150,000	\$0	6/30/18
2011034	GIS VIEWER AND CONFIGURATION	\$60,000	\$0	\$60,000	\$0	6/30/16
2012009	BEACON HILL PS PUMP/GENERATOR REPLACEMENT	\$675,000	\$504,966	\$578,863	\$408,061	12/30/15
2012012	FIELD GIS - SEWER LINE CLEANING & MH	\$40,000	\$0	\$40,000	\$0	6/30/16
2012024	UPPER SALADA LS AUX GENERATOR REPLACEMENT	\$650,000	\$48,684	\$100,000	\$8,459	6/30/17
2012037	OSO PKWY 12"RW MAIN RELOCATION	\$244,898	\$173,275	\$94,898	\$173,275	12/30/15
2013001	EAST ALISO CREEK RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$2,313,586	\$2,029,229	\$771,046	\$246,893	12/30/15
2013002	MATHIS RW RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$1,036,415	\$784,778	\$1,016,415	\$775,974	6/30/16
2013003	SOUTH RIDGE RW RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$600,000	\$402,374	\$0	\$4,190	6/30/15
2013004	REGIONAL LS FORCE MAIN REPLACEMENT	\$8,900,000	\$59,990	\$100,000	\$0	6/30/22
2013005	LOWER SALADA LS FORCE MAIN REPLACEMENT	\$5,900,000	\$40,000	\$200,000	\$0	6/30/20
2013010	GALLUP SEWER REPLACEMENT	\$340,000	\$251,137	\$296,525	\$225,428	12/30/15
2014001	BEAR BRAND RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$865,000	\$20,985	\$845,000	\$12,181	6/30/16
2014002	DEL AVION LS AUX GENERATOR REPLACEMENT	\$630,000	\$56,734	\$300,000	\$7,877	6/30/17
2014003	DEL AVION LS WET WELL COATING REHABILITATION	\$125,000	\$116,709	\$4,541	\$16,025	8/31/15
2014004	ENCANTAMAR 16" ABANDONMENT	\$90,665	\$77,118	\$90,665	\$77,118	8/31/15
2014005	UTILITY MAIN BREAKERS REPLACEMENTS	\$216,700	\$65,981	\$126,427	\$11,641	6/30/16
2014006	UPPER SALADA LS HEADER REPLACEMENT	\$133,363	\$107,420	\$3,235	\$0	8/31/15
2014007	LA SIENA MAINLINE REPLACEMENT	\$699,165	\$543,981	\$49,298	\$12,048	8/31/15
2014008	2014-15 VALVE REPLACEMENT	\$655,037	\$618,770	\$426,044	\$287,824	10/31/15

**TABLE B-1  
MOULTON NIGUEL WATER DISTRICT  
FY 2015-16 PROJECTS AND BUDGET, AS ADOPTED AND AMENDED**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	FY2015-16 EXPENDITURES	ESTIMATED COMPLETION DATE
2014012	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	\$380,000	\$43,208	\$360,000	\$19,515	6/30/16
2015002	2015-16 VALVE REPLACEMENT	\$1,000,000	\$36,768	\$1,000,000	\$36,768	10/31/16
2015003	ALISO CREEK LS REHABILITATION	\$270,000	\$0	\$50,000	\$0	12/30/17
2015004	CROWN VALLEY RW RESERVOIRS 1 AND 2 RECOATING & SAFETY IMPROV	\$1,480,000	\$0	\$50,000	\$0	12/30/17
2015005	FY2015-16 MH REHABILITATION	\$250,000	\$100,891	\$250,000	\$100,891	6/30/16
2015006	I.D. 1 MASTER METER RELOCATION	\$600,000	\$0	\$60,000	\$0	6/30/18
2015007	LA PAZ TRAIL CROSS WW SIPHON REPAIR	\$325,000	\$146,475	\$100,000	\$146,475	6/30/17
2015008	LINDA VISTA DR SEWER LINING	\$450,000	\$0	\$75,000	\$0	6/30/17
2015009	LOWER BOUNDARY OAK LS UPGRADE	\$410,000	\$0	\$50,000	\$0	6/30/17
2015010	NATIONAL PARK SEWER LINING	\$300,000	\$0	\$75,000	\$0	6/30/17
2015011	PALMS APTS EASEMENT PW LINE REPLACEMENT	\$350,000	\$625	\$50,000	\$625	6/30/17
2015012	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	\$150,000	\$0	\$25,000	\$0	6/30/16
2015013	RESERVOIR MANAGEMENT SYSTEMS REFURBISHMENT	\$6,200,000	\$0	\$100,000	\$0	6/30/22
2015015	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	\$1,235,000	\$0	\$50,000	\$0	6/30/17
2015021	IT DEPT RECONFIGURATION	\$100,000	\$61,606	\$100,000	\$61,606	6/30/16
2015022	CROWN VALLEY PW RESERVOIR 3 RECOATING	\$15,000	\$0	\$15,000	\$0	6/30/17
2015023	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ	\$500,000	\$0	\$150,000	\$0	6/30/19
JRWSS	SCWD/JRWSS CAPITAL PROJECT	\$13,336,378	\$0	\$65,274	\$0	6/30/16
SMWD	PLANT 3A IMPROVEMENTS	\$12,335,357	\$316,195	\$1,129,754	\$316,195	6/30/16
SOCWA124	2015/2016 SOCWA CAPITAL PC 2(R)	\$14,632,161	\$1,690,290	\$2,123,955	\$1,690,290	6/30/16
SOCWA127	2015/2016 SOCWA CAPITAL PC 15(R)	\$9,829,078	\$141,329	\$704,615	\$141,329	6/30/16
SOCWA128	2015/2016 SOCWA CAPITAL PC 17(R)	\$36,116,121	\$1,796,392	\$5,090,343	\$2,681,875	6/30/16
SMWD	SMWD CAPITAL PROJECTS-JOINT FACILITIES	\$186,000	\$0	\$186,000	\$0	6/30/16
UP1516RR	UNANTICIPATED PROJECTS FUND 7	\$300,000	\$0	\$35,000	\$0	6/30/16
<b>Fund 7 Total</b>		<b>\$135,734,234</b>	<b>\$17,666,502</b>	<b>\$20,767,825</b>	<b>\$9,350,525</b>	

**TABLE B-1  
MOULTON NIGUEL WATER DISTRICT  
FY 2015-16 PROJECTS AND BUDGET, AS ADOPTED AND AMENDED**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	FY2015-16 EXPENDITURES	ESTIMATED COMPLETION DATE
<b><i>WATER SUPPLY RELIABILITY FUND (WSR) (FUND 12)</i></b>						
2006071	BAKER PIPELINE REGIONAL TREATMENT PLANT	\$32,598,645	\$33,056,151	\$14,778,582	\$11,320,724	6/30/17
2006099	ETWD/MNWD INTERTIE W/30 DIEMER PI	\$503,140	\$451,101	\$252,042	\$109,760	12/30/15
2006099	ETWD/MNWD INTERTIE W/30 DIEMER PI REIMBURSEMENT	(\$503,140)	(\$451,101)	(\$252,042)	(\$109,760)	12/30/15
<i>Fund 12 Total</i>		<b>\$32,598,645</b>	<b>\$33,056,151</b>	<b>\$14,778,582</b>	<b>\$11,320,724</b>	
<b><i>PLANNING &amp; CONSTRUCTION FUND (P&amp;C) (FUND 14)</i></b>						
2011038	EAST ALISO CREEK RESERVOIR RECIRCULATION SYSTEM	\$141,000	\$135,957	\$51,981	\$46,938	12/30/15
2012028	GENERATOR AT BEAR BRAND RESERVOIR	\$72,029	\$65,954	\$57,724	\$22,526	8/31/15
2012029	GENERATOR AT BRIDLEWOOD TAKEOUT	\$75,440	\$69,055	\$61,135	\$35,451	8/31/15
2012030	GENERATOR AT MARGUERITE RESERVOIR	\$92,825	\$86,834	\$78,520	\$28,706	8/31/15
2012031	GENERATOR AT MATHIS RESERVOIR PS	\$61,403	\$56,294	\$47,098	\$14,163	8/31/15
2012033	GENERATOR AT SEVILLE RESERVOIR	\$68,568	\$62,808	\$54,264	\$22,507	8/31/15
2014013	PRADERA 850 ZONE LOOP	\$370,000	\$52,101	\$337,194	\$10,653	6/30/16
2014015	DISTRICT HEADQUARTERS	\$23,000,000	\$456,374	\$8,000,000	\$149,574	6/30/18
2014018	FLORES AVE 8-INCH WATERLINE INSTALLATION	\$300,000	\$187,418	\$254,565	\$161,411	6/30/16
2015016	2015-16 NEW SYSTEM VALVES	\$150,000	\$75,694	\$150,000	\$75,694	6/30/16
2015017	FALL PROTECTION SYSTEM - PW RESERVOIRS	\$240,000	\$6,868	\$240,000	\$6,868	6/30/16
2015018	FALL PROTECTION SYSTEM - RW RESERVOIRS	\$40,000	\$0	\$40,000	\$0	6/30/16
2015019	AMI PHASE I - POTABLE IRRIG METERS	\$411,000	\$14,505	\$25,000	\$14,505	6/30/17
2015020	AMI PHASE I - RW IRRIG METERS	\$411,000	\$14,505	\$25,000	\$14,505	6/30/17
UP1516PC	UNANTICIPATED PROJECTS FUND 14	\$150,000	\$0	\$150,000	\$0	6/30/16
<i>Fund 14 Total</i>		<b>\$25,583,265</b>	<b>\$1,255,356</b>	<b>\$9,572,481</b>	<b>\$603,502</b>	
<i>Total</i>		<b>\$196,312,696</b>	<b>\$52,217,758</b>	<b>\$46,814,499</b>	<b>\$21,293,982</b>	

**TABLE B-2  
MOULTON NIGUEL WATER DISTRICT  
CLOSED FY 2015-16 PROJECTS**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	ESTIMATED PROJECT COSTS FOR FY 2015-16	ESTIMATED PROJECT SAVINGS
<b>WATER EFFICIENCY FUND (FUND 06)</b>						
2015014	FY 2015-16 RW RETROFITS	\$100,000	\$760	\$100,000	\$760	\$99,241
<i>Fund 6 Total</i>		<b>\$100,000</b>	<b>\$760</b>	<b>\$100,000</b>	<b>\$760</b>	<b>\$99,241</b>
<b>REPLACEMENT &amp; REFURBISHMENT FUND (R&amp;R) (FUND 07)</b>						
2010018	MATHIS-OSO BY-PASS	\$778,670	\$777,474	\$527,615	\$372,149	\$1,196
2010033	NEW DISTRICT ENTERPRISE SOFTWARE	\$3,375,000	\$2,993,618	\$0	\$139,119	\$381,382
2011016	PLC PANEL REPLACEMENT	\$440,000	\$369,375	\$111,087	\$18,854	\$70,625
2012009	BEACON HILL PS PUMP/GENERATOR REPLACEMENT	\$675,000	\$504,966	\$578,863	\$408,061	\$170,034
2012012	FIELD GIS - SEWER LINE CLEANING & MH	\$40,000	\$0	\$40,000	\$0	\$40,000
2012037	OSO PKWY 12"RW MAIN RELOCATION	\$244,898	\$173,275	\$94,898	\$173,275	\$71,623
2013001	EAST ALISO CREEK RESERVOIR RECOATING & SAFETY IMPROVEM	\$2,313,586	\$2,029,229	\$771,046	\$246,893	\$284,356
2013003	SOUTH RIDGE RW RESERVOIR RECOATING & SAFETY IMPROVEM	\$600,000	\$402,374	\$0	\$4,190	\$197,626
2013010	GALLUP SEWER REPLACEMENT	\$340,000	\$251,137	\$296,525	\$225,428	\$88,863
2014003	DEL AVION LS WET WELL COATING REHABILITATION	\$125,000	\$116,709	\$4,541	\$16,025	\$8,291
2014004	ENCANTAMAR 16" ABANDONMENT	\$90,665	\$77,118	\$90,665	\$77,118	\$13,547
2014006	UPPER SALADA LS HEADER REPLACEMENT	\$133,363	\$107,420	\$3,235	\$0	\$25,943
2014007	LA SIENA MAINLINE REPLACEMENT	\$699,165	\$543,981	\$49,298	\$12,048	\$155,184
2014008	2014-15 VALVE REPLACEMENT	\$655,037	\$618,770	\$426,044	\$287,824	\$36,267
2015005	FY2015-16 MH REHABILITATION	\$250,000	\$100,891	\$250,000	\$100,891	\$149,109
2015007	LA PAZ TRAIL CROSS WW SIPHON REPAIR	\$325,000	\$146,475	\$100,000	\$146,475	\$178,525
2015021	IT DEPT RECONFIGURATION	\$100,000	\$61,606	\$100,000	\$61,606	\$38,394
JRWSS	SCWD/JRWSS CAPITAL PROJECT	\$13,336,378	\$0	\$65,274	\$0	N/A
SMWD	PLANT 3A IMPROVEMENTS	\$12,335,357	\$316,195	\$1,129,754	\$316,195	N/A
SMWD	SMWD CAPITAL PROJECTS-JOINT FACILITIES	\$186,000	\$316,195	\$186,000	\$0	N/A
SOCWA124	2015/2016 SOCWA CAPITAL PC 2(R)	\$14,632,161	\$1,690,290	\$2,123,955	\$1,690,290	N/A
SOCWA127	2015/2016 SOCWA CAPITAL PC 15(R)	\$9,829,078	\$141,329	\$704,615	\$141,329	N/A
SOCWA128	2015/2016 SOCWA CAPITAL PC 17(R)	\$36,116,121	\$1,796,392	\$5,090,343	\$2,681,875	N/A
UP1516RR	UNANTICIPATED PROJECTS FUND 7	\$300,000	\$0	\$35,000	\$0	N/A
<i>Fund 7 Total</i>		<b>\$97,920,478</b>	<b>\$13,534,820</b>	<b>\$12,778,756</b>	<b>\$7,119,646</b>	<b>\$1,910,965</b>
<b>WATER SUPPLY RELIABILITY FUND (WSR) (FUND 12)</b>						
2006099	ETWD/MNWD INTERTIE W/30 DIEMER PI	\$503,140	\$451,101	\$252,042	\$109,760	\$0
2006099	ETWD/MNWD INTERTIE W/30 DIEMER PI REIMBURSEMENT	(\$503,140)	(\$451,101)	(\$252,042)	(\$109,760)	\$0
<i>Fund 12 Total</i>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**TABLE B-2  
MOULTON NIGUEL WATER DISTRICT  
CLOSED FY 2015-16 PROJECTS**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	ESTIMATED PROJECT COSTS FOR FY 2015-16	ESTIMATED PROJECT SAVINGS
<b>PLANNING &amp; CONSTRUCTION FUND (P&amp;C) (FUND 14)</b>						
2011038	EAST ALISO CREEK RESERVOIR RECIRCULATION SYSTEM	\$141,000	\$135,957	\$51,981	\$46,938	\$5,043
2012028	GENERATOR AT BEAR BRAND RESERVOIR	\$72,029	\$65,954	\$57,724	\$22,526	\$6,075
2012029	GENERATOR AT BRIDLEWOOD TAKEOUT	\$75,440	\$69,055	\$61,135	\$35,451	\$6,385
2012030	GENERATOR AT MARGUERITE RESERVOIR	\$92,825	\$86,834	\$78,520	\$28,706	\$5,991
2012031	GENERATOR AT MATHIS RESERVOIR PS	\$61,403	\$56,294	\$47,098	\$14,163	\$5,109
2012033	GENERATOR AT SEVILLE RESERVOIR	\$68,568	\$62,808	\$54,264	\$22,507	\$5,760
2014018	FLORES AVE 8-INCH WATERLINE INSTALLATION	\$300,000	\$187,418	\$254,565	\$161,411	\$112,582
2015016	2015-16 NEW SYSTEM VALVES	\$150,000	\$75,694	\$150,000	\$75,694	\$74,306
UP1516PC	UNANTICIPATED PROJECTS FUND 14	\$150,000	\$0	\$150,000	\$0	N/A
<i>Fund 14 Total</i>		<i>\$1,111,265</i>	<i>\$740,013</i>	<i>\$905,287</i>	<i>\$407,396</i>	<i>\$221,252</i>
<b>Total</b>		<b>\$99,131,743</b>	<b>\$14,275,592</b>	<b>\$13,784,043</b>	<b>\$7,527,802</b>	<b>\$2,231,458</b>

**TABLE B-3**  
**MOULTON NIGUEL WATER DISTRICT**  
**FY 2015-16 PROJECTS CARRIED TO FY 2016-17**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	ESTIMATED PROJECT COSTS FOR FY 2015-16	PROJECT STATUS
<b>WATER EFFICIENCY FUND (FUND 06)</b>						
2014010	ALISO VILLAGE RW EXTENSION*	\$150,000	\$121,562	\$95,611	\$5,627	Design
2014011	RECYCLED WATER SYSTEM EXTENSION PROJECT*	\$2,146,552	\$117,427	\$1,500,000	\$12,844	Construction
	<i>Fund 6 Total</i>	<b>\$2,296,552</b>	<b>\$238,990</b>	<b>\$1,595,611</b>	<b>\$18,471</b>	
<b>REPLACEMENT &amp; REFURBISHMENT FUND (R&amp;R) (FUND 07)</b>						
2006038	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	\$2,020,530	\$1,561,078	\$561,546	\$16,047	Construction
2009115	SAN JUAN CREEK 30 EFFLUENT TM	\$3,600,000	\$1,614,991	\$1,600,228	\$1,338,745	Construction
2009115	SAN JUAN CREEK 30 EFFLUENT TM - SMWD REIMBURSEMENT	(\$1,214,889)		(\$450,000)		Reimbursement
2011010	HILLARY PRS REPLACEMENT	\$460,000	\$37,839	\$422,979	\$819	Design
2011012	LARGO PRS REPLACEMENT	\$460,000	\$38,174	\$423,171	\$1,114	Design
2011015	WILKES PRS REPLACEMENT	\$460,000	\$38,042	\$423,303	\$1,114	Design
2011033	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	\$430,000	\$0	\$150,000	\$0	Design
2011034	GIS VIEWER AND CONFIGURATION	\$60,000	\$0	\$60,000	\$0	Design
2012024	UPPER SALADA LS AUX GENERATOR REPLACEMENT	\$650,000	\$48,684	\$100,000	\$8,459	Design
2013002	MATHIS RW RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$1,036,415	\$784,778	\$1,016,415	\$775,974	Construction
2013004	REGIONAL LS FORCE MAIN REPLACEMENT	\$8,900,000	\$59,990	\$100,000	\$0	Design
2014001	BEAR BRAND RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$865,000	\$20,985	\$845,000	\$12,181	Construction
2014002	DEL AVION LS AUX GENERATOR REPLACEMENT	\$630,000	\$56,734	\$300,000	\$7,877	Design
2014005	UTILITY MAIN BREAKERS REPLACEMENTS	\$216,700	\$65,981	\$126,427	\$11,641	Construction
2014012	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	\$380,000	\$43,208	\$360,000	\$19,515	Design
2015002	2015-16 VALVE REPLACEMENT	\$1,000,000	\$36,768	\$1,000,000	\$36,768	Construction
2015003	ALISO CREEK LS REHABILITATION	\$270,000	\$0	\$50,000	\$0	Design
2015004	CROWN VALLEY RW RESERVOIRS 1 AND 2 RECOATING & SAFETY IMPR	\$1,480,000	\$0	\$50,000	\$0	Design
2015008	LINDA VISTA DR SEWER LINING	\$450,000	\$0	\$75,000	\$0	Design
2015009	LOWER BOUNDARY OAK LS UPGRADE	\$410,000	\$0	\$50,000	\$0	Design
2015010	NATIONAL PARK SEWER LINING	\$300,000	\$0	\$75,000	\$0	Design
2015011	PALMS APTS EASEMENT PW LINE REPLACEMENT	\$350,000	\$625	\$50,000	\$625	Design
2015012	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	\$150,000	\$0	\$25,000	\$0	Design
2015013	RESERVOIR MANAGEMENT SYSTEMS REFURBISHMENT	\$6,200,000	\$0	\$100,000	\$0	Design
2015015	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	\$1,235,000	\$0	\$50,000	\$0	Design
2015022	CROWN VALLEY PW RESERVOIR 3 RECOATING	\$15,000	\$0	\$15,000	\$0	Design

**TABLE B-3**  
**MOULTON NIGUEL WATER DISTRICT**  
**FY 2015-16 PROJECTS CARRIED TO FY 2016-17**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2015-16 ADOPTED BUDGET	ESTIMATED PROJECT COSTS FOR FY 2015-16	PROJECT STATUS
2015023	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ	\$500,000	\$0	\$150,000	\$0	Construction
2013005	LOWER SALADA LS FORCE MAIN REPLACEMENT	\$5,900,000	\$40,000	\$200,000	\$0	Postpone
2015006	I.D. 1 MASTER METER RELOCATION	\$600,000	\$0	\$60,000	\$0	Postpone
<i>Fund 7 Total</i>		<b>\$37,813,756</b>	<b>\$4,447,878</b>	<b>\$7,989,069</b>	<b>\$2,230,879</b>	
<b>WATER SUPPLY RELIABILITY FUND (WSR) (FUND 12)</b>						
2006071	BAKER PIPELINE REGIONAL TREATMENT PLANT	\$32,598,645	\$33,056,151	\$14,778,582	\$11,320,724	Construction
<i>Fund 12 Total</i>		<b>\$32,598,645</b>	<b>\$33,056,151</b>	<b>\$14,778,582</b>	<b>\$11,320,724</b>	
<b>PLANNING &amp; CONSTRUCTION FUND (P&amp;C) (FUND 14)</b>						
2014013	PRADERA 850 ZONE LOOP	\$370,000	\$52,101	\$337,194	\$10,653	Construction
2014015	DISTRICT HEADQUARTERS	\$23,000,000	\$456,374	\$8,000,000	\$149,574	Design
2015017	FALL PROTECTION SYSTEM - PW RESERVOIRS	\$240,000	\$6,868	\$240,000	\$6,868	Construction
2015018	FALL PROTECTION SYSTEM - RW RESERVOIRS	\$40,000	\$0	\$40,000	\$0	Construction
2015019	AMI PHASE I - POTABLE IRRIG METERS**	\$411,000	\$14,505	\$25,000	\$14,505	Construction
2015020	AMI PHASE I - RW IRRIG METERS**	\$411,000	\$14,505	\$25,000	\$14,505	Construction
<i>Fund 14 Total</i>		<b>\$24,472,000</b>	<b>\$544,353</b>	<b>\$8,667,194</b>	<b>\$796,106</b>	
<i>Total</i>		<b>\$97,180,953</b>	<b>\$38,287,372</b>	<b>\$33,030,456</b>	<b>\$13,766,180</b>	

\* NOTE: THESE TWO PROJECTS WERE APPROVED WITHIN FUND 6 FOR FY 2015-16, BUT ARE PROPOSED WITHIN FUND 12 FOR FY 2016-17; SEE TABLE C-1

\*\* NOTE: THESE TWO PROJECTS WERE APPROVED WITHIN FUND 14 FOR FY 2015-16, BUT ARE PROPOSED WITHIN FUND 6 FOR FY 2016-17; SEE TABLE C-1

**Appendix C**  
**Proposed 2016-17 Budget**

**TABLE C-1  
MOULTON NIGUEL WATER DISTRICT  
PROPOSED FY 2016-17 PROJECTS**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM		ESTIMATED COMPLETION DATE
			INCEPTION TO FY	FY 2016-17	
			DATE	BUDGET	COMPLETION DATE
<b>WATER EFFICIENCY FUND (FUND 06)</b>					
2015019	AMI PHASE I - POTABLE IRRIG METERS	\$490,000	\$14,505	\$475,495	12/31/16
2015020	AMI PHASE I - RW IRRIG METERS	\$490,000	\$14,505	\$475,495	12/31/16
<i>Fund 6 Total</i>		<b>\$980,000</b>	<b>\$29,011</b>	<b>\$950,990</b>	
<b>REPLACEMENT &amp; REFURBISHMENT FUND (R&amp;R) (FUND 07)</b>					
2006038	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	\$2,020,630	\$1,561,078	\$459,552	12/31/16
2009115	SAN JUAN CREEK 30 EFFLUENT TM	\$4,226,054	\$1,614,991	\$2,211,063	6/30/17
2009115	SAN JUAN CREEK 30 EFFLUENT TM - SMWD REIMBURSEMENT	(\$1,213,027)	\$0	(\$1,213,027)	6/30/17
2011010	HILLARY PRS REPLACEMENT	\$460,000	\$37,839	\$422,161	6/30/17
2011012	LARGO PRS REPLACEMENT	\$460,000	\$38,174	\$421,826	6/30/17
2011015	WILKES PRS REPLACEMENT	\$460,000	\$38,042	\$421,958	6/30/17
2011024	DOCUMENT MANAGEMENT	\$389,000	\$0	\$100,000	6/30/18
2011028	VALENCIA LS REFURBISHMENT	\$700,000	\$0	\$75,000	6/30/18
2011033	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	\$500,000	\$0	\$300,000	6/30/18
2011034	GIS VIEWER AND CONFIGURATION	\$60,000	\$0	\$60,000	12/31/16
2012024	UPPER SALADA LS AUX GENERATOR REPLACEMENT	\$850,000	\$48,684	\$400,000	6/30/18
2013002	MATHIS RW RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$1,036,415	\$784,778	\$51,637	12/31/16
2013004	REGIONAL LS FORCE MAIN REPLACEMENT	\$8,900,000	\$59,990	\$150,000	6/30/22
2014001	BEAR BRAND RESERVOIR RECOATING & SAFETY IMPROVEMENTS	\$778,100	\$20,985	\$507,115	12/31/16
2014002	DEL AVION LS AUX GENERATOR REPLACEMENT	\$630,000	\$56,734	\$573,266	6/30/17
2014005	UTILITY MAIN BREAKERS REPLACEMENTS	\$216,700	\$65,981	\$150,719	12/31/16
2014012	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	\$420,000	\$43,208	\$188,396	6/30/18
2015002	2015-16 VALVE REPLACEMENT	\$1,470,000	\$36,768	\$1,433,232	12/31/16
2015003	ALISO CREEK LS REHABILITATION	\$270,000	\$0	\$270,000	6/30/17
2015004	CROWN VALLEY RW RESERVOIRS 1 AND 2 RECOATING & SAFETY IMPROV	\$1,600,000	\$0	\$1,600,000	6/30/17
2015008	LINDA VISTA DR SEWER LINING	\$450,000	\$0	\$450,000	6/30/17
2015009	LOWER BOUNDARY OAK LS UPGRADE	\$410,000	\$0	\$410,000	6/30/17
2015010	NATIONAL PARK AND OTHER MISC SEWER LINING	\$300,000	\$0	\$300,000	6/30/17
2015011	PALMS APTS EASEMENT PW LINE REPLACEMENT	\$480,000	\$625	\$480,000	6/30/17
2015012	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	\$175,000	\$0	\$175,000	12/31/16
2015013	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$2,050,000	\$0	\$300,000	6/30/18
2015015	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	\$1,235,000	\$0	\$200,000	6/30/18
2015022	CROWN VALLEY PW RESERVOIR 3 RECOATING	\$350,000	\$0	\$350,000	6/30/17

**TABLE C-1  
MOULTON NIGUEL WATER DISTRICT  
PROPOSED FY 2016-17 PROJECTS**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM		ESTIMATED COMPLETION DATE
			INCEPTION TO FY DATE	FY 2016-17 PROPOSED BUDGET	
2015023	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ	\$500,000	\$0	\$250,000	12/31/20
	30-IN ETM SAN JUAN CREEK CROSSING REMOVAL	\$200,000	\$0	\$100,000	6/30/18
	2016-17 VALVE REPLACEMENT	\$2,860,000	\$0	\$460,000	6/30/18
	FY2016-17 MH REHABILITATION	\$350,000	\$0	\$350,000	6/30/17
	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - RW	\$208,000	\$0	\$208,000	6/30/17
	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - PW	\$117,000	\$0	\$117,000	6/30/17
	UPPER SALADA ELECTRICAL SWITCHGEAR REPLACEMENT	\$550,000	\$0	\$100,000	6/30/18
	54-INCH CIP IMPROVEMENTS	\$2,700,000	\$0	\$50,000	6/30/20
	NORTH ALISO CREEK LS BYPASS REPLACEMENT	\$240,000	\$0	\$50,000	6/30/18
	HIGHLAND PUMP PRESSURE RELIEF TO 650 ZONE	\$75,000	\$0	\$25,000	6/30/18
JRWSS	SCWD/JRWSS CAPITAL PROJECT	\$14,227,645	\$0	\$1,646,424	6/30/17
SMWD	PLANT 3A IMPROVEMENTS	\$12,976,500	\$0	\$3,576,500	6/30/17
SOCWA	2016/2017 SOCWA CAPITAL PC 2(R)	\$13,390,721	\$0	\$1,597,112	6/30/17
SOCWA	2016/2017 SOCWA CAPITAL PC 15(R)	\$9,385,169	\$0	\$744,978	6/30/17
SOCWA	2016/2017 SOCWA CAPITAL PC 17(R)	\$34,474,090	\$1,480,197	\$6,020,489	6/30/17
SOCWA	2016/2017 SOCWA PC 5	\$79,101	\$0	\$79,101	6/30/17
SOCWA	2016/2017 SOCWA CAPITAL PC 24	\$3,931,848	\$0	\$21,925	6/30/17
SMWD	SMWD CAPITAL PROJECTS-JOINT FACILITIES	\$200,000	\$0	\$200,000	6/30/17
UP1617RR	UNANTICIPATED PROJECTS FUND 7	\$300,000	\$0	\$300,000	6/30/17
<i>Fund 7 Total</i>		<i>\$126,448,946</i>	<i>\$5,888,075</i>	<i>\$27,144,426</i>	
<b>WATER SUPPLY RELIABILITY FUND (WSR) (FUND 12)</b>					
2006071	BAKER PIPELINE REGIONAL TREATMENT PLANT	\$37,300,000	\$33,056,152	\$4,073,511	12/31/16
2014010	ALISO VILLAGE RW EXTENSION	\$230,000	\$121,562	\$108,438	6/30/17
2014011	RECYCLED WATER SYSTEM EXTENSION PROJECT	\$2,146,552	\$117,427	\$1,629,125	6/30/17
	FY 2016-17 RW RETROFITS	\$50,000	\$0	\$50,000	6/30/17
	TRAMPAS RESERVOIR CAPACITY ACQUISITION	\$15,000,000	\$0	\$3,000,000	6/30/19
<i>Fund 12 Total</i>		<i>\$54,726,552</i>	<i>\$33,056,152</i>	<i>\$8,867,074</i>	

**TABLE C-1  
MOULTON NIGUEL WATER DISTRICT  
PROPOSED FY 2016-17 PROJECTS**

PROJECT NUMBER	PROJECT DESCRIPTION	TOTAL PROJECT BUDGET	EXPENDED FROM		ESTIMATED COMPLETION DATE
			INCEPTION TO FY DATE	FY 2016-17 PROPOSED BUDGET	
<b>PLANNING &amp; CONSTRUCTION FUND (P&amp;C) (FUND 14)</b>					
2011077	MOULTON PEAK RADIO TOWER IMPROVEMENTS	\$235,000	\$0	\$50,000	6/30/18
2014013	PRADERA 850 ZONE LOOP	\$812,000	\$52,101	\$759,899	12/31/16
2014015	DISTRICT HEADQUARTERS	\$23,000,000	\$456,374	\$8,000,000	6/30/19
2015017	FALL PROTECTION SYSTEM - PW RESERVOIRS	\$240,000	\$6,868	\$233,132	12/31/16
2015018	FALL PROTECTION SYSTEM - RW RESERVOIRS	\$40,000	\$0	\$40,000	12/31/16
	DELAVION LIFT STATION GRINDERS	\$120,000	\$0	\$120,000	6/30/17
	2016-17 NEW SYSTEM VALVES	\$100,000	\$0	\$100,000	6/30/17
	SADDLEBACK PS GENERATOR EMERGENCY CONNECTION	\$60,000	\$0	\$60,000	6/30/17
	920 ZONE LOOP PIPELINE	\$200,000	\$0	\$50,000	6/30/18
	PLANT 3A FLOOD PROTECTION	\$500,000	\$0	\$50,000	6/30/19
UP1617PC	UNANTICIPATED PROJECTS FUND 14	\$150,000	\$0	\$150,000	6/30/17
<i>Fund 14 Total</i>		<i>\$25,457,000</i>	<i>\$575,343</i>	<i>\$9,673,037</i>	
<i>Total</i>		<i>\$207,612,498</i>	<i>\$39,488,579</i>	<i>\$46,569,520</i>	

**Appendix D**  
**Project Descriptions**

## Capital Improvement Program – Project Description

**Project No:** 2006.038

**System:** District Overall

**Fund:** 7

**Project Name:** Replace Digital Lines with Wireless Network

**Project Location:** District Wide

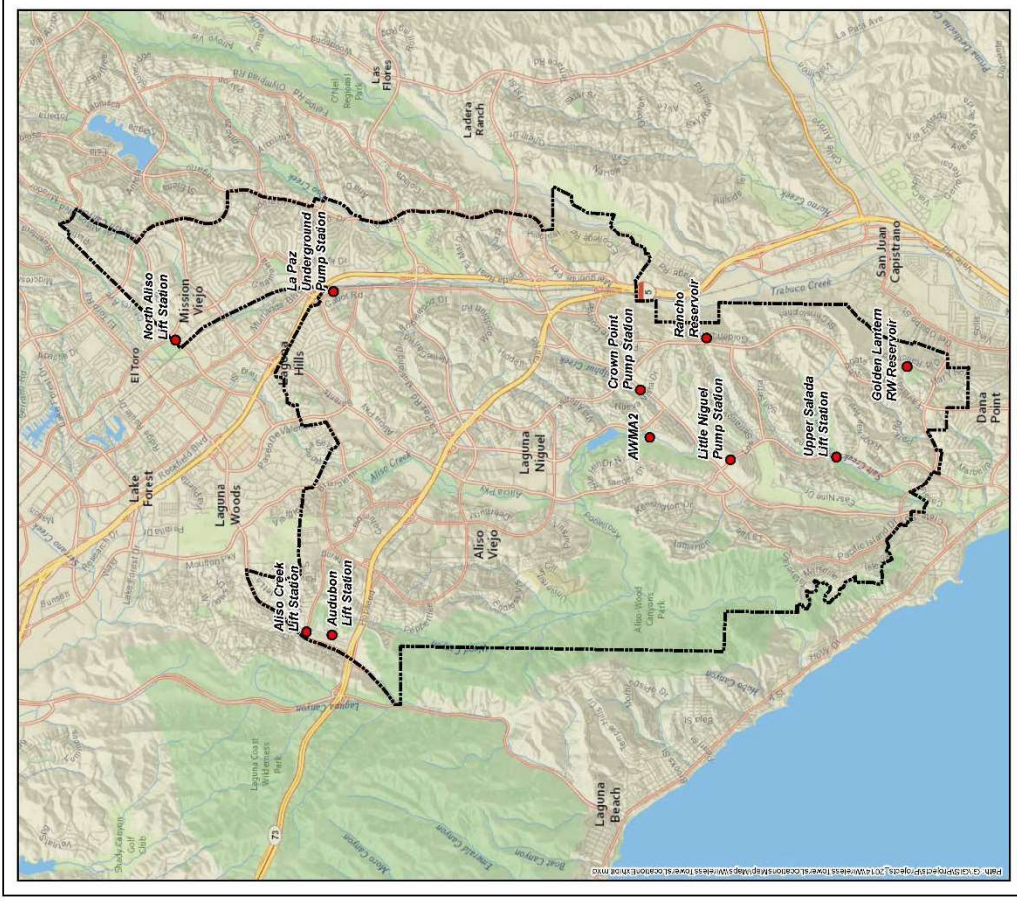
**Project Description:** The District is in the process of installing a wireless network for communication between various District facilities. Staff completed a majority of the installations with the remaining 10 sites requiring structural design due to pole requirements. These remaining sites will be installed by a contractor.

**Project Need:** In order to communicate with the various District facilities, a reliable network is needed. This wireless network replaces a failing digital lines network.

**Project Status:** In construction.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$74,000
CEQA Compliance	\$38,000
Construction Contract	\$375,000
Inspection	\$25,000
District Labor/Parts	\$1,508,630
<b>Total Project Budget</b>	<b>\$2,020,630</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.015

**System:** District Overall

**Fund:** 14

**Project Name:** District Headquarters

**Project Location:** Plant 2A

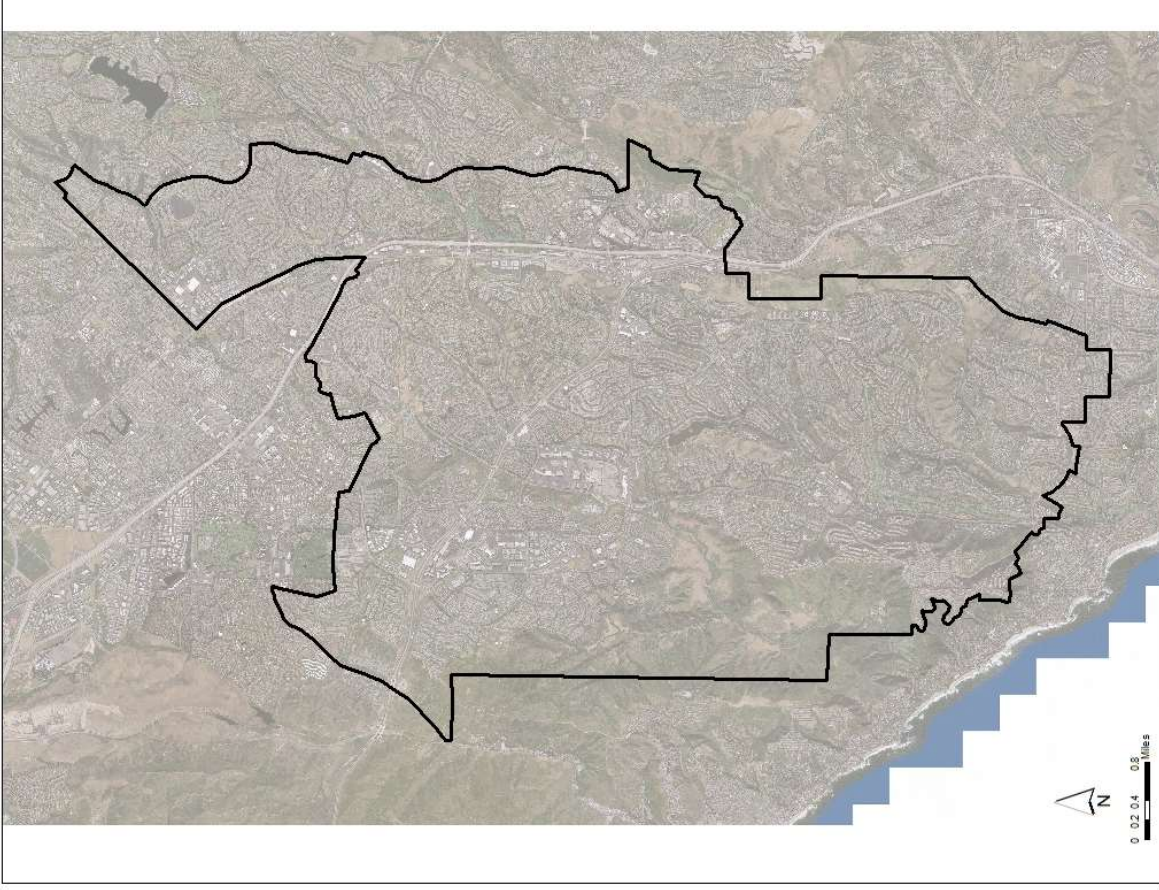
**Project Description:** Construct new District administrative and operational facilities to support the needs and requirements for all District Departments. All facilities will be constructed at Plant 2A.

**Project Need:** Currently, the District operates out of two offices (“Main Office” and “Maintenance Facility – 2A”). The existing facilities are in need of significant repair and/or expansion based on the size and condition of the current buildings. This project will consolidate the two offices into a single operations center at Plant 2A.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$2,000,000
CEQA Compliance	\$500,000
Construction	\$20,500,000
<b>Total Project Budget</b>	<b>\$23,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.034

**System:** District Overall

**Fund:** 7

### **Project Name:** GIS Viewer and Configuration

**Project Location:** District-wide

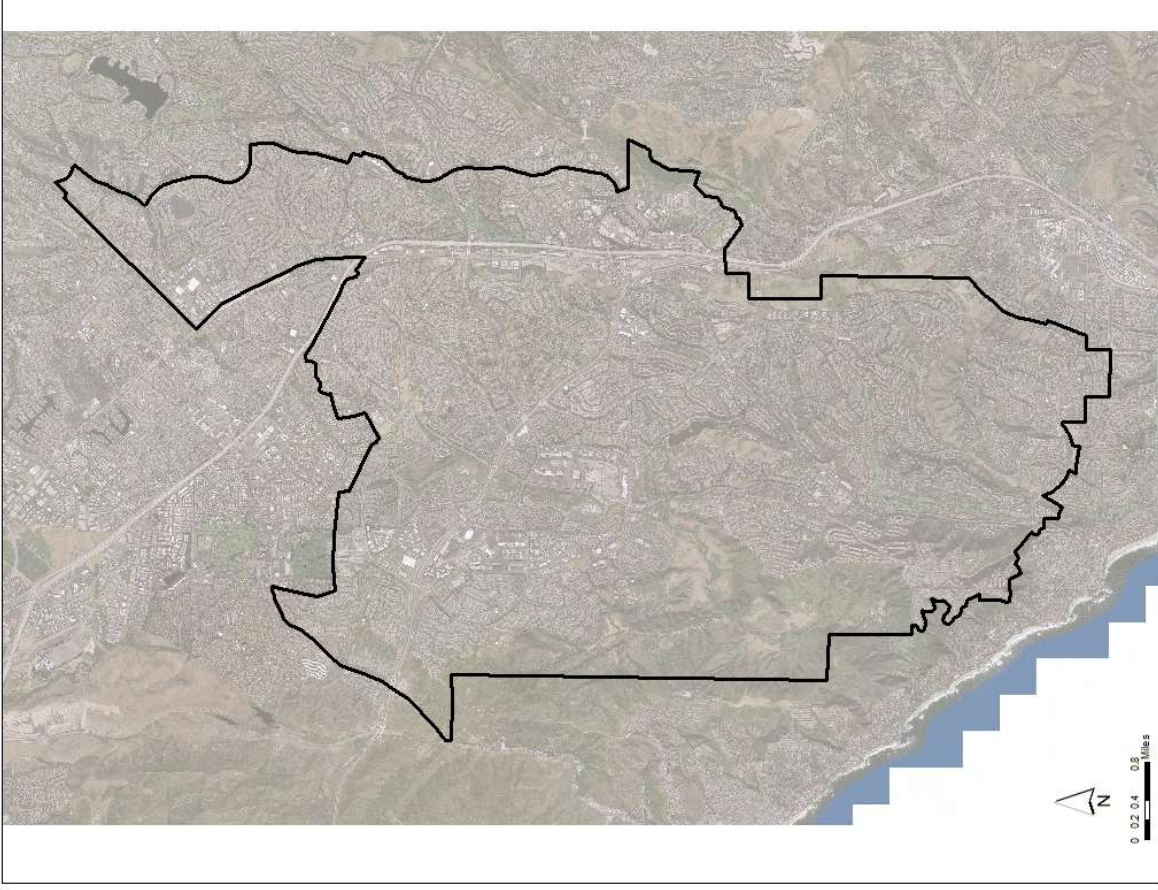
**Project Description:** Select, install, and configure a new GIS Viewer application for use across the District.

**Project Need:** As part of the GIS Implementation Plan, certain business needs have been identified throughout the District. There is a need for a new GIS Viewer that can be used across the District and allow for easy user interface, access to District asset data, display and reporting linkages between District databases, and advanced linkage and display of record drawings for customer service, operations and engineering, in order to support day-to-day operations.

**Project Status:** In Design

### **Estimated Project Amount:**

Item	Estimated Cost
Configuration	\$25,000
Software Acquisition	\$35,000
CEQA Compliance	Exempt
<b>Total Project Budget</b>	<b>\$60,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.033

**System:** District Overall

**Fund:** 7

**Project Name:** *Asset Management Program / CMMS Implementation*

**Project Location:** District-wide

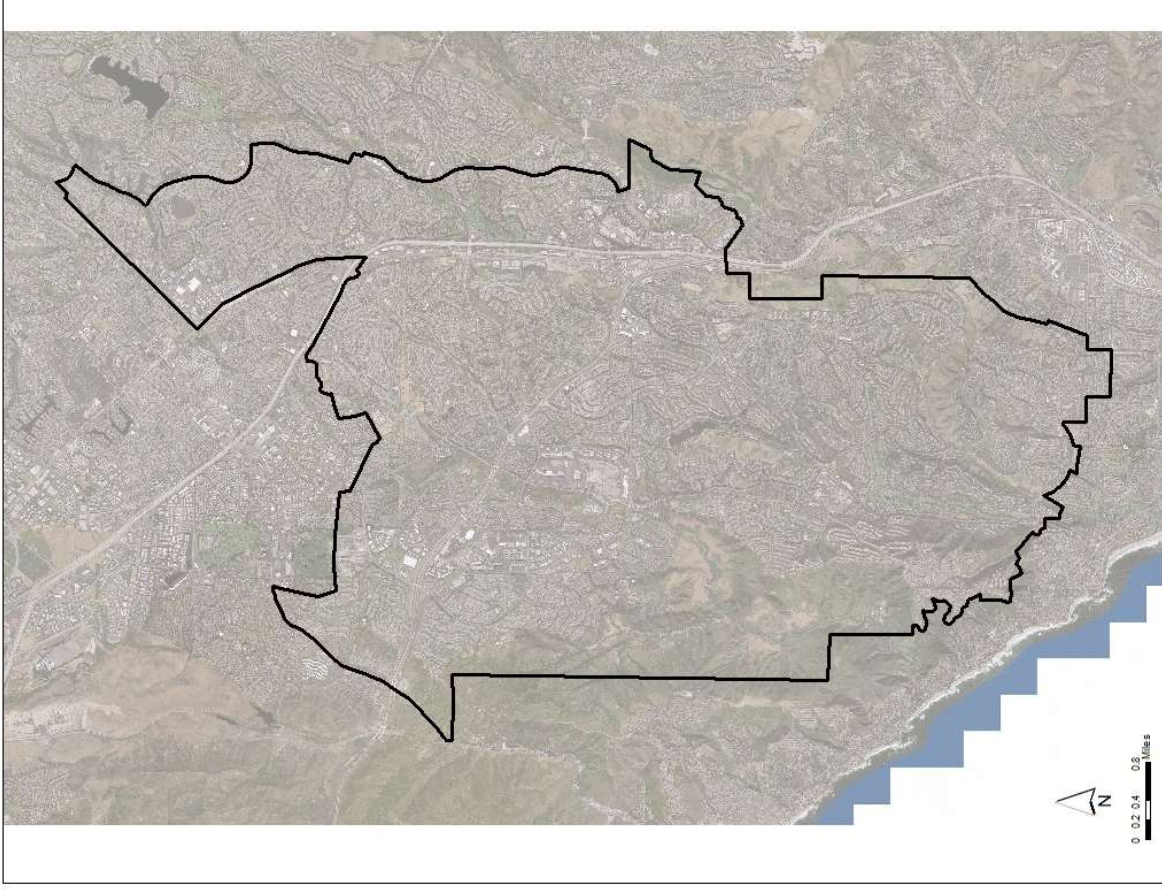
**Project Description:** Review existing Asset Management database – both structure and data – for accuracy and completeness. Identify and implement changes to software program, database, and data, to support advanced analysis for Replacement and Refurbishment (Fund 7) projects prioritization, Master Planning, and miscellaneous engineering and financial asset analyses.

**Project Need:** The District has previously utilized an Asset Management Program developed for the District by Brown and Caldwell. In support of the GIS Implementation Plan, the existing asset management database must be reviewed for content and completeness. Pertinent data must be migrated to the new GIS geodatabase, or linkages established between separate databases. Finally, the current program must be evaluated for future use, and other software packages reviewed for potential implementation. The Asset Management software, existing or new, will require configuration with the new GIS geodatabase, and workflows defined to assure that data and database linkages stay current.

**Project Status:** In planning

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$50,000
Data Acquisition	\$100,000
Implementation	\$350,000
CEQA Compliance	Exempt
<b>Total Project Budget</b>	<b>\$500,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.077

**System:** District Overall

**Fund:** 14

### **Project Name:** Moulton Peak Radio Tower Improvements

**Project Location:** Moulton Peak Reservoir, Aliso Viejo

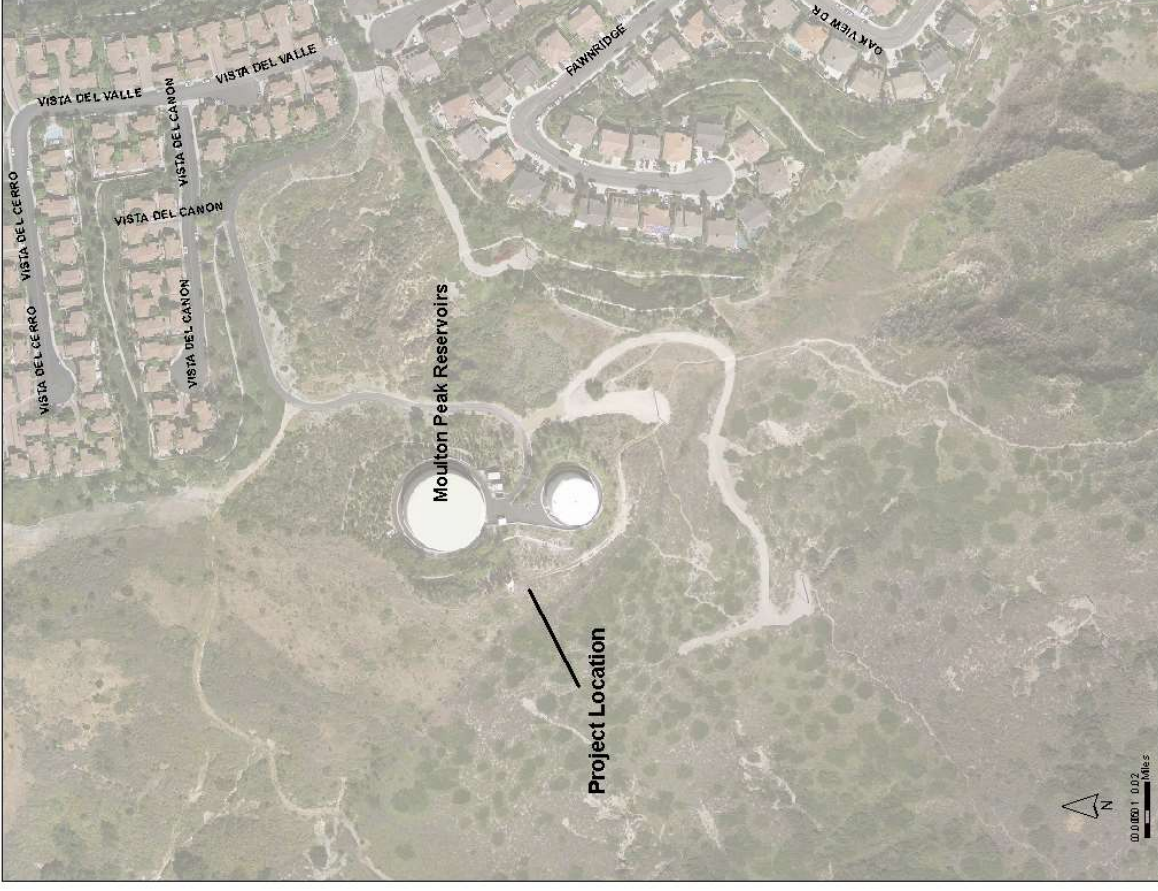
**Project Description:** Provide access to site, and provide turn around for vehicles (Tower is not currently accessible by vehicle). This will involve grading adjacent to ridgeline and coordination with the County for approval.

**Project Need:** The site was given to the District by COX Communication. The District has installed a vital communication system between the Main Office and Plant 2A on this site. There is no safe vehicle access to maintain and repair equipment.

**Project Status:** In planning.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	\$30,000
Geotechnical	\$10,000
Construction Contract	\$135,000
Inspection/Other	\$20,000
<b>Total Project Budget</b>	<b>\$235,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.024

**System:** District Overall

**Fund:** 7

**Project Name:** *Document Management/Paperless Agenda Project*

**Project Location:** MNWD Main Office, 27500 La Paz Road, Laguna Niguel

**Project Description:**

- Update computer hardware and software for agenda distribution, meeting notes, document management and legislative management action items
- Computerize equipment for recording all District meetings and provide live and website streaming, allowing a direct link to each agenda item
- Automated Staff Report workflow, enhanced web posting of meeting agendas and attached Staff Reports, electronic delivery of agenda to Board Members
- Manage meeting minutes during meeting with action notes linked to each agenda item
- Utilize LED monitor technology and touch screen monitors or small touch screen devices for meeting presentations, updated microphone and audio switching equipment. Include digital speaker queue, vote and roll call automation.

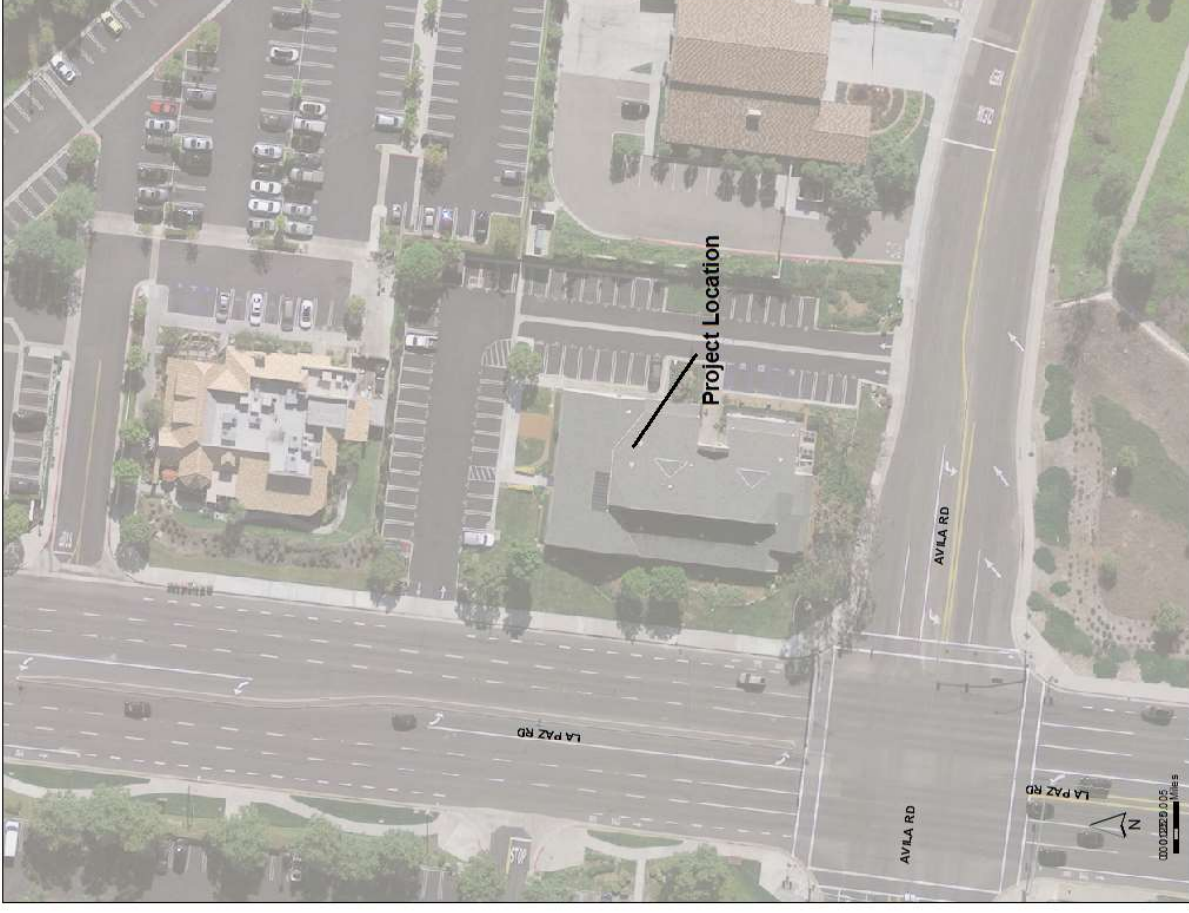
**Project Need:**

Need for improved staff efficiency and allowing for improving transparency to MNWD customers for all public meetings by provided audio of each meeting.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Implementation	\$389,000
CEQA Compliance	Exempt
<b>Total Project Budget</b>	<b>\$389,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.001

**System:** Potable

**Fund:** 7

**Project Name:** *Bear Brand Reservoir Re-Coating & Safety Improvements*

**Project Location:** Laguna Niguel

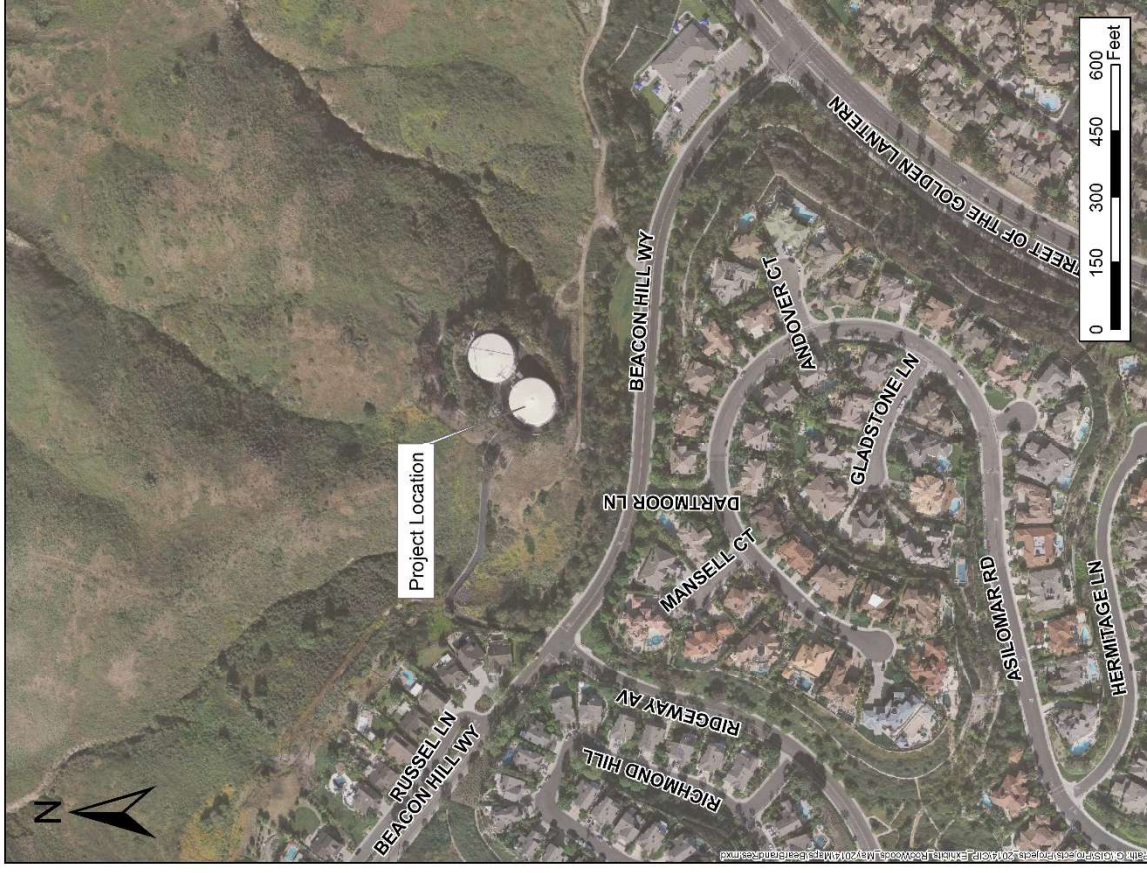
**Project Description:** Re-coat the interior and exterior of the 2.5 MG steel reservoir (Reservoir No. 1), construct structural and corrosion repairs, tank operation and safety improvements, and a cathodic protection system.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed.

**Project Status:** In Construction

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$683,100
Specialty Inspection	\$75,000
Legal & District Labor	\$5,000
<b>Total Project Budget</b>	<b>\$778,100</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.013

**System:** Potable

**Fund:** 14

**Project Name:** Pradera 850 Zone Loop

**Project Location:** La Paz and Pradera, Mission Viejo; Sectional pg. J-10.

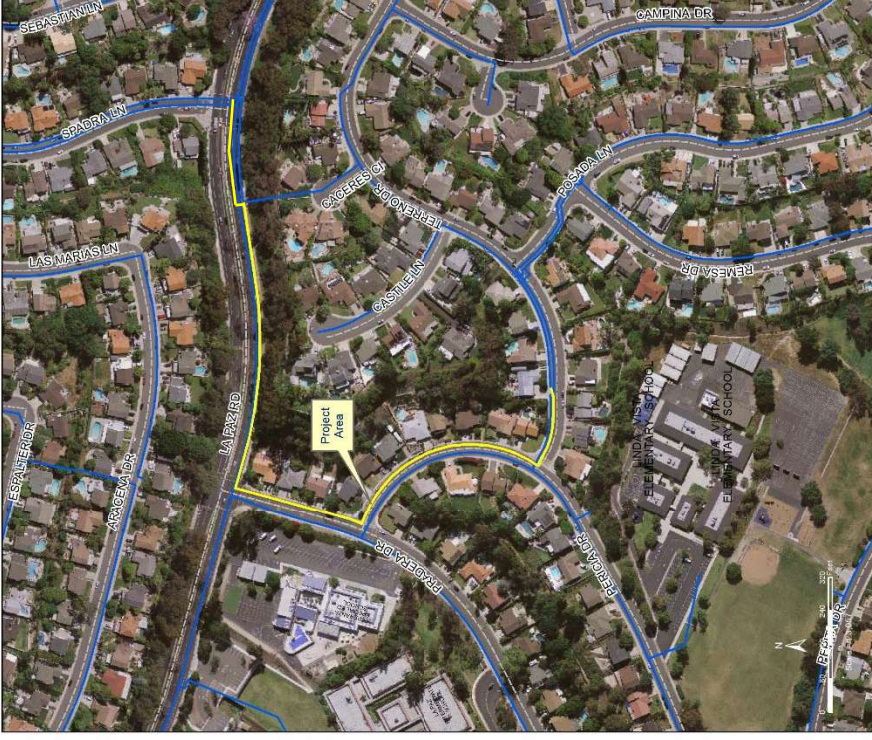
**Project Description:** Install 2,000 linear feet of 8-inch water main on La Paz Road and extend into tract No. 6310 and tie to Terreno Dr.

**Project Need:** This subdivision with 55 homes is fed with a single pipeline in an easement within a steep slope. The only backup is a hi-low interconnection from the 650 zone. This project could not commence until now because of a pavement moratorium in place from the City of Mission Viejo.

**Project Status:** In Design

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$722,000
Inspection/Other	\$30,000
<b>Total Project Budget</b>	<b>\$812,000</b>



Pradera 850 Loop System

## Capital Improvement Program – Project Description

**Project No:** 2015.002

**System:** Potable

**Fund:** 7

**Project Name:** 2015-2016 Valve Replacements

**Project Location:** District-wide

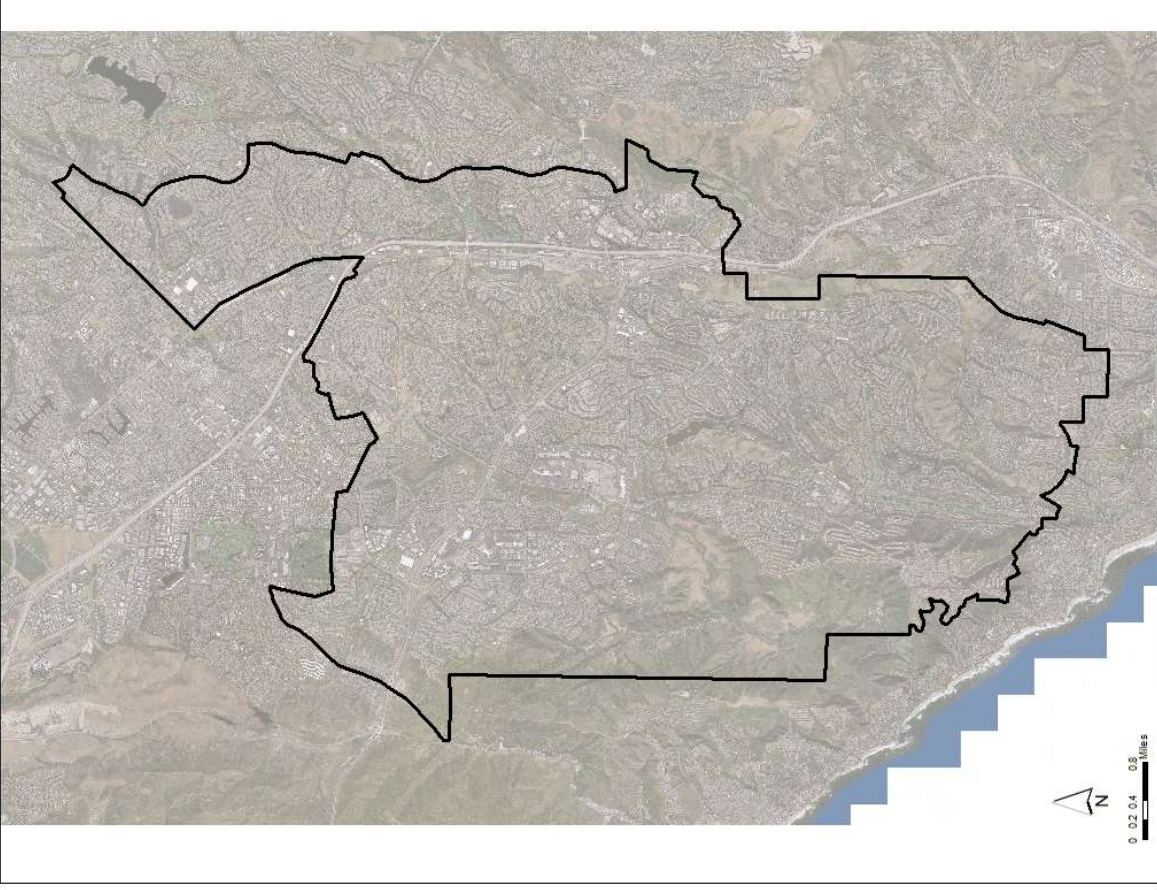
**Project Description:** Replace failed in-line valves.

**Project Need:** Many of the District's valves have exceeded their useful life and are no longer operating or have increased maintenance requirements. This program focuses on replacement of these valves on critical transmission and distribution mains. Valves in subdivisions, usually lines 8-inches and smaller, are replaced as part of the valve turning program through the operations budget.

**Project Status:** In design.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Geotechnical	\$50,000
Construction Contract	\$1,320,000
Inspection/Other	\$50,000
<b>Total Project Budget</b>	<b>\$1,470,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.017 & 2015.018

**System:** Potable & Recycled

**Fund:** 14

**Project Name:** *Fall Protection System – PW and RW Reservoirs*

**Project Location:** District-wide

**Project Description:** Install cable and anchor fall protection systems which meet Cal/OSHA requirements on top of 23 potable water and 3 recycled water reservoirs.

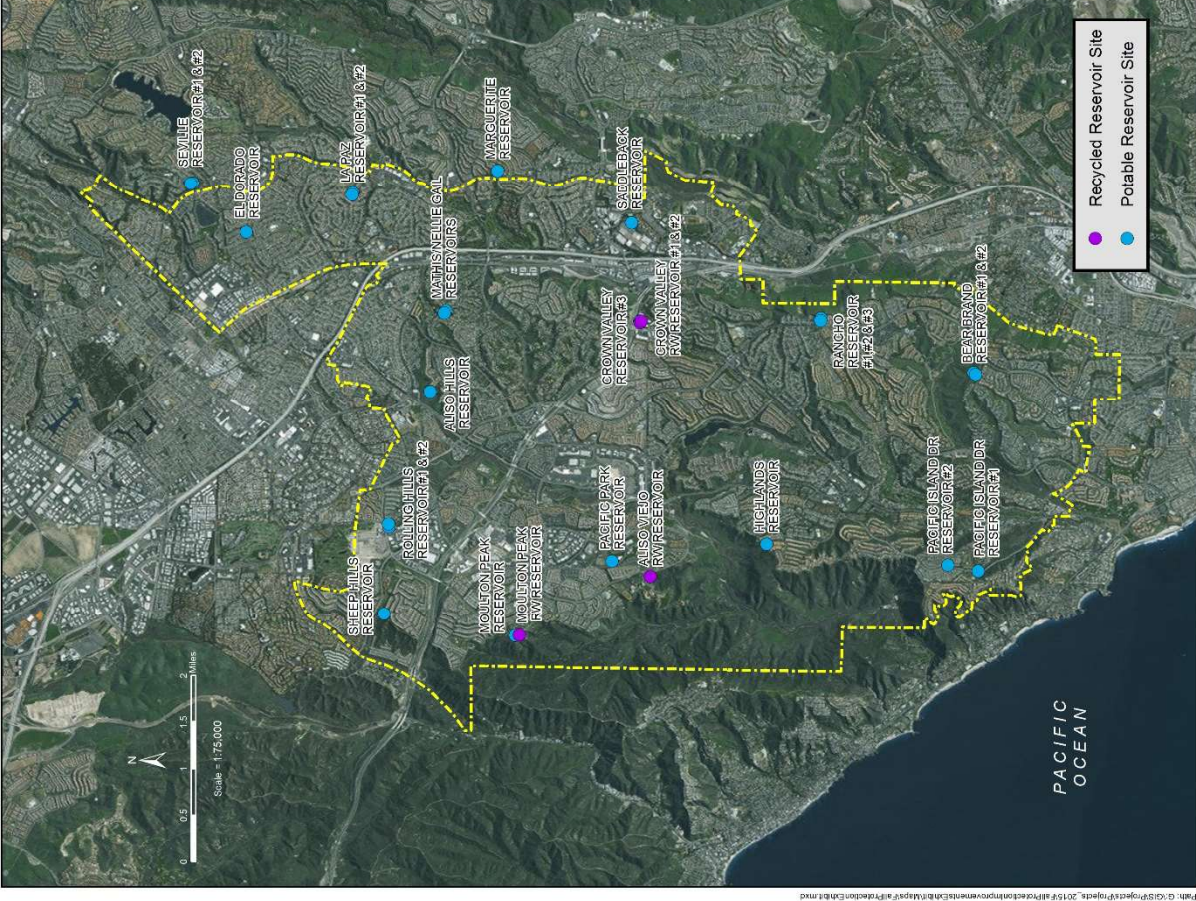
**Project Need:** A fall protection system is required per Cal/OSHA to walk on top of the reservoirs in areas without guardrails. District staff require access to these areas to perform maintenance activities. The 23 potable water and 3 recycled water reservoirs do not currently have full perimeter guardrails and are not scheduled to have guardrails installed by the end of FY16-17.

**Project Status:** In Construction

### Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection	\$5,000
<b>Total Project Budget*</b>	<b>\$280,000</b>

\*Note: \$240,000 related to potable and \$40,000 related to recycled



## **Capital Improvement Program – Project Description**

**Project No:** 2015.019 and 2015.020

**System:** Potable and Recycled

**Fund:** 6

**Project Name:** *AMI Phase I – Potable Irrigation and Recycled Water*

**Project Location:** District-wide

**Project Description:** Phase I of this AMI Implementation Program will expand upon the District’s efforts to promote water use efficiency by establishing a remote reading and communications network, considering acoustic leak detection to detect distribution leaks, and implementing a meter data management system to complement the AMI. The District’s Potable and Recycled Water Irrigation as well as 1,800 residential customers would be provided with access to an interactive AMI customer portal which would provide reliable, secure, and real time access to their water usage data.

**Project Need:** The current recycled water program has required the purchase of make-up potable imported water in previous years, due to increased spikes in peak-hour demand that exceeded the available quantities of recycled water. Additionally, irrigation customers (combined potable and recycled water) utilize over a third of the District’s water demand, and optimizing water use efficiency through AMI’s capabilities would help to minimize water losses and improve customer education. Implementing AMI would assist the District in proactively identifying leaks, assist operations through demand-side

time-of-use management, and benefit the customers by providing tools for monitoring water usage and promoting behavioral changes to optimize their operations in terms of water use efficiency. This project would not only promote water use efficiency, it would serve as a pilot for Phase II of the AMI Implementation Program, which would expand the program to include all 53,600 potable water connections, in addition to the 1,301 recycled water connections and 1,368 potable irrigation connections. It is the goal of the District to fully test and fine-tune the AMI system to maximize the benefits to both the District and its customers prior to implementing the technology District-wide.

**Project Status:** Implementation Phase

**Estimated Project Amount:**

<b>Item</b>	<b>Estimated Cost</b>
Equipment	\$572,000
Software	\$146,000
Training, Installation, and Setup	\$104,000
<b>Total Project Budget*</b>	<b>\$980,000</b>

\* Note: **\$490,000** related to potable and **\$490,000** related to recycled

## Capital Improvement Program – Project Description

**Project No:** 2015.023

**System:** Potable

**Fund:** 7

**Project Name:** Northern Transmission Main Improvements North of La Paz

**Project Location:** Approximately 500 feet west of the Chrisanta Drive and Escala Drive Intersection in Mission Viejo; within railroad right-of-way

**Project Description:** Performance of immediate repair and above ground relocation and protection of 30-inch Diemer Pipeline. Subsequent phase includes performance of grading; installation of grouted rip-rap; cleaning of existing storm drain piping; installation of cut-off wall to improve the drainage beneath an above ground portion of the Diemer pipeline. This project will require close coordination with the railroad and other adjacent utility owners.

**Project Need:** During an emergency pipeline repair to the 30-inch Diemer Line, it was observed that the drainage channel crossing the pipeline needed to be re-established. This will help to ensure that the repairs performed will remain intact so that this important District facility is not compromised in the future, particularly during heavy rain events.

**Project Status:** In design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	\$25,000
Construction Contract	\$400,000
Inspection/Permits/Other	\$25,000
<b>Total Project Budget</b>	<b>\$500,000</b>





## Capital Improvement Program – Project Description

**Project No:** 2011.012

**System:** Potable

**Fund:** 7

### **Project Name:** Largo Pressure Reducing Station Replacement

**Project Location:** Largo Drive in Laguna Hills

**Project Description:** Removal of existing pressure reducing station and construction of a new station.

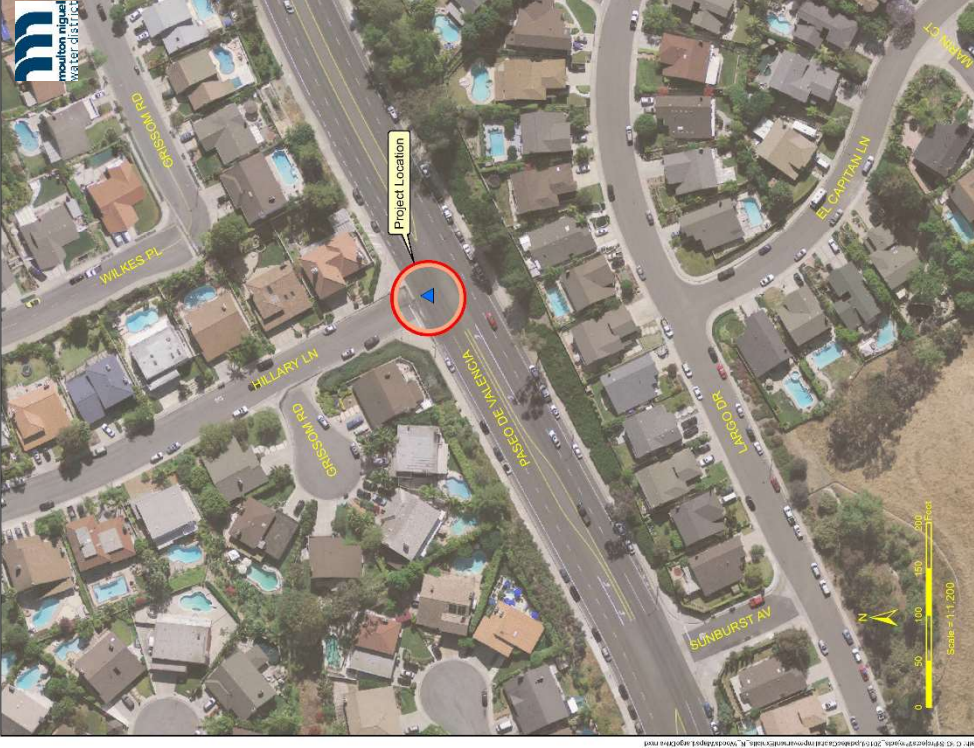
**Project Description:** Removal of existing pressure reducing station and construction of a new station.

**Project Need:** The facility is approaching its useful life and is in a hard- to access location with a substandard design that makes it difficult and dangerous to access and maintain. It needs to be relocated for easier and safer access and to replace aging equipment.

**Project Status:** In design.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$35,000
CEQA Compliance	exempt
Geotechnical	\$10,000
Construction	\$400,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$460,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.015

**System:** Potable

**Fund:** 7

### **Project Name:** Wilkes Pressure Reducing Station Replacement

**Project Location:** Stockport Street in Laguna Hills

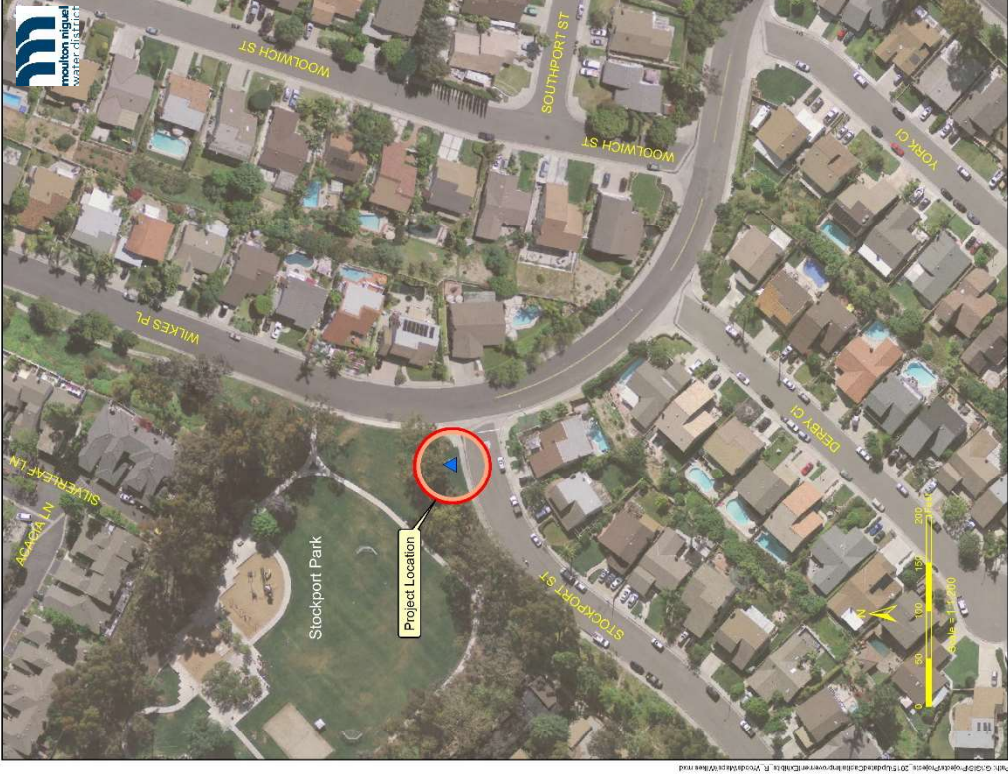
**Project Description:** Removal of existing pressure reducing station and construction of a new station.

**Project Need:** The facility is approaching the end of its useful life and is in a hard-to-access location with substandard design that makes it difficult and dangerous to access and maintain. It needs to be relocated for easier and safer access and to replace aging equipment.

**Project Status:** In design.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$35,000
CEQA Compliance	exempt
Geotechnical	\$10,000
Construction Contract	\$400,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$460,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.012

**System:** Potable

**Fund:** 7

**Project Name:** Hidden Hills Village Easement Pipeline Rehabilitation

**Project Location:** Tessier Street, Laguna Niguel

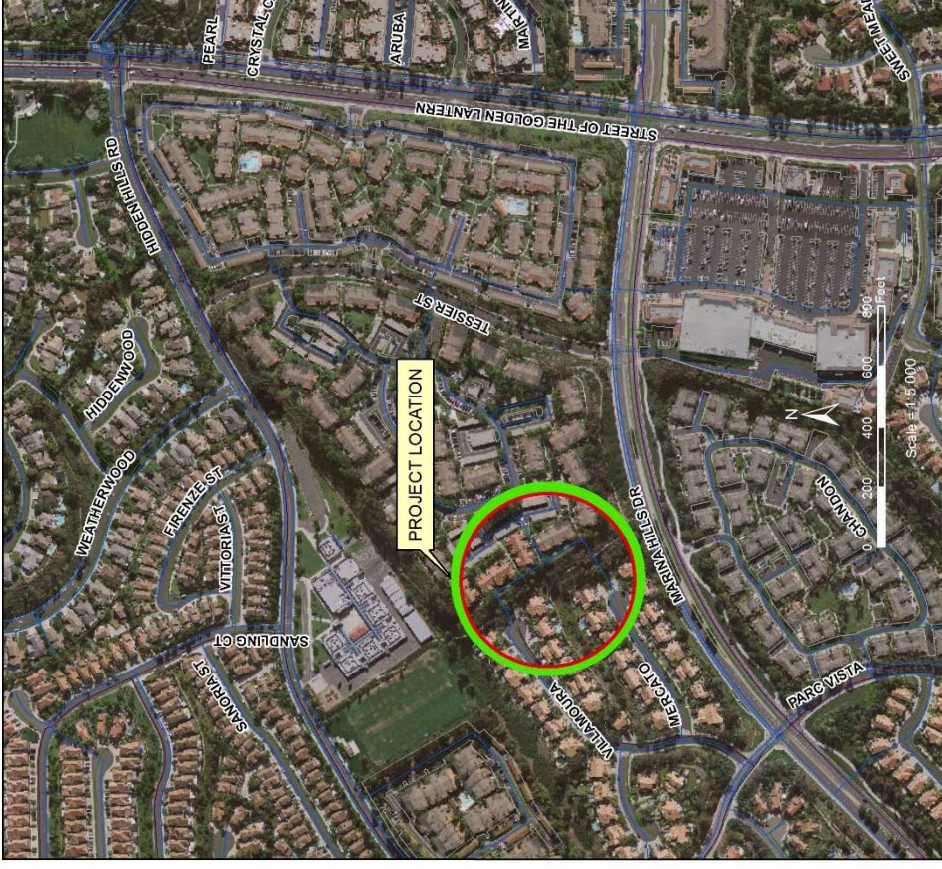
**Project Description:** Perform an analysis to determine the best method for rehabilitating two failed easement pipelines. Rehabilitate the pipelines based on the result of the analysis.

**Project Need:** Tract has two of the four feeds isolated because of easement pipeline failures.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$330,000
Inspection/Other	\$30,000
<b>Total Project Budget</b>	<b>\$420,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.011

**System:** Potable

**Fund:** 7

**Project Name:** Palms Apartments Easements PW Line Replacements

**Project Location:** North of Palms Apartment Buildings of Tract 12789; Southeast of Moulton Parkway/Aliso Niguel Intersection in Laguna Niguel

**Project Description:** Replacement of approximately 800 linear feet of leaking 8” ductile iron pipeline (and related valves) constructed within 4 easements connecting various tracts. Abandonment of “temporary” easement between Milt Circle and Hollyberry Lane.

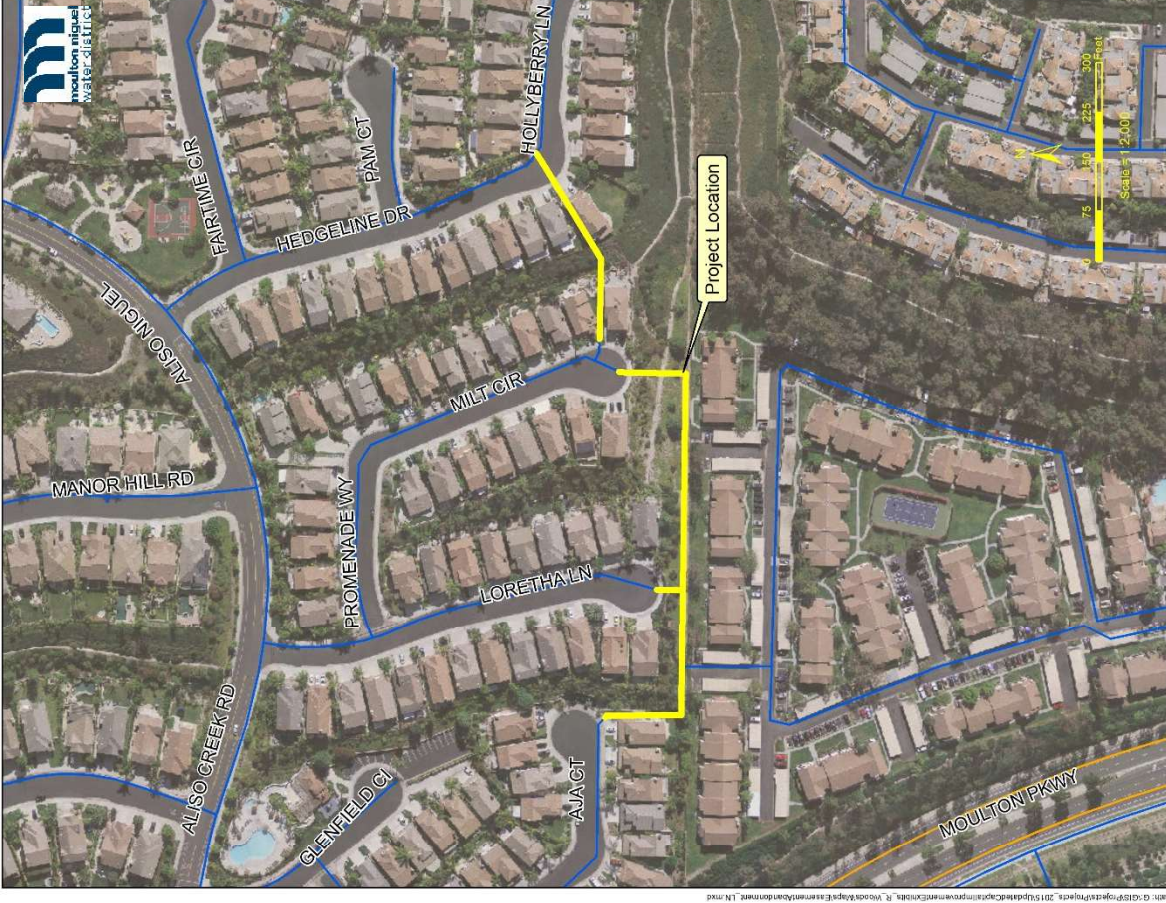
**Project Need:** This area has been under investigation since 2010, having received multiple customer complaints due to highly saturated soil within these easement areas. The existing isolation valves in this area also fail to close water tight. Staff evaluated whether or not these easements were candidates for abandonment; four out of the five easements evaluated were not candidates, thus requiring replacement.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract*	\$400,000
Inspection/Other	\$40,000
<b>Total Project Budget</b>	<b>\$480,000</b>

\*Includes significant restoration requirements



## Capital Improvement Program – Project Description

**Project No:** 2015.012

**System:** Potable

**Fund:** 7

### **Project Name:** Paseo de Valencia 24" Railroad Crossing Abandonment

**Project Location:** Railroad Crossing East of Paseo de Valencia/Cabot Road Intersection

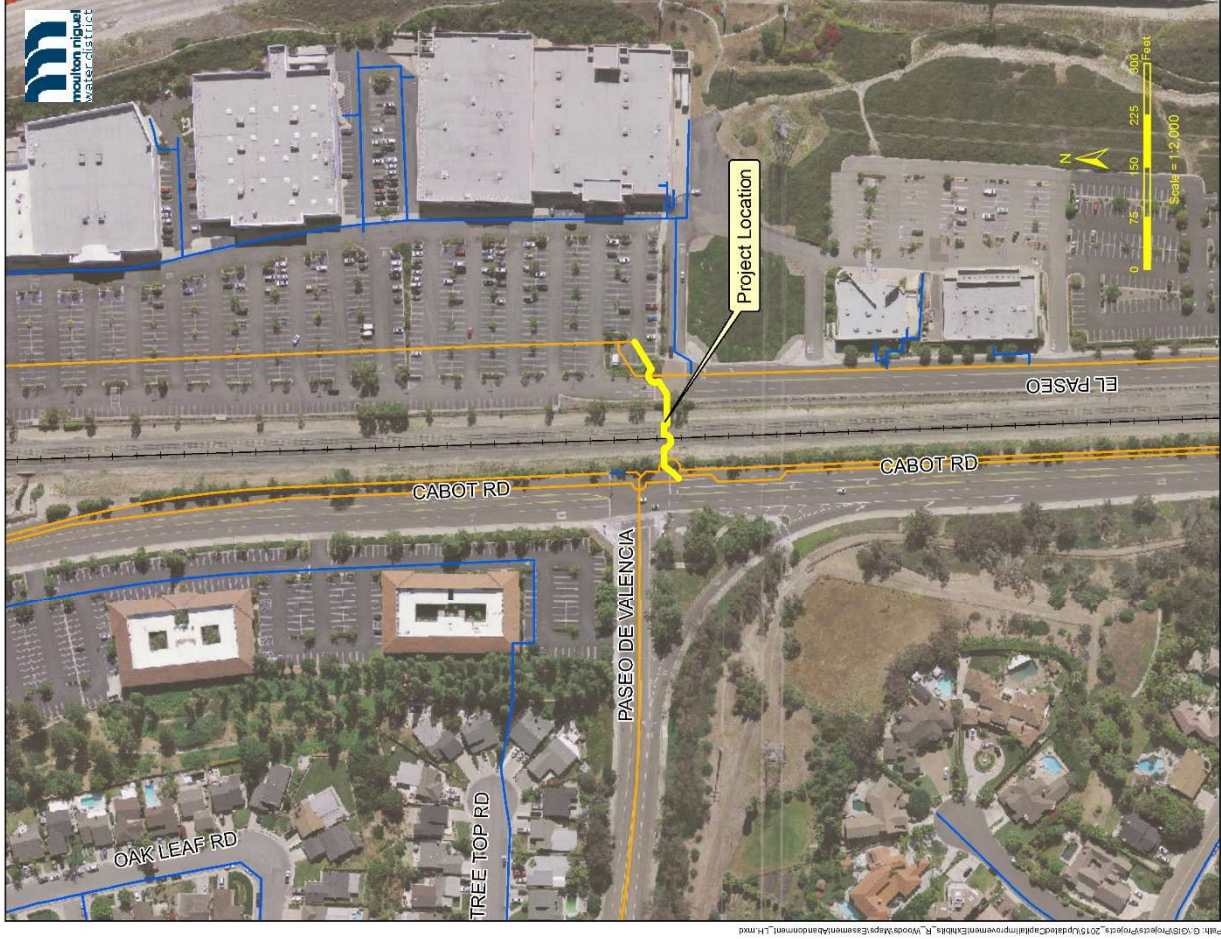
**Project Description:** Abandonment of 650 Zone 24" steel pipe railroad crossing adjacent to Paseo de Valencia.

**Project Need:** Due to a leak that was discovered on the easterly side of the railroad tracks, this crossing has been "out of service" since discovery. Isolation valves are closed on both sides of the railroad tracks. Staff evaluated whether or not this crossing was a candidate for abandonment. Results indicated that the crossing was not required (with or without the Central Intertie Pipeline in service).

**Project Status:** In Design

#### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$125,000
Inspection/Other	\$25,000
<b>Total Project Budget</b>	<b>\$175,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.013

**System:** Potable

**Fund:** 7

### **Project Name:** 2016-17 Reservoir Management System Replacement

**Project Location:** East Aliso Creek, La Paz, and Seville Reservoir Sites

**Project Description:** Remove existing on-site generation water quality reservoir management systems and protective structures and replace with new water quality reservoir management systems and permanent style buildings. A systemwide reservoir disinfection technology study was completed in July 2015. The study recommends to install liquid sodium hypochlorite and ammonia water quality reservoir management systems for the replacement systems.

**Project Need:** Existing facilities are approaching their useful life and require increased maintenance.

**Project Status:** In Design

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$1,800,000
Legal/Permits/Inspection/Other	\$50,000
<b>Total Project Budget</b>	<b>\$2,050,000</b>



Sites for Clor-Tec Facilities

## Capital Improvement Program – Project Description

**Project No:** 2015.015

**System:** Potable

**Fund:** 7

**Project Name:** *Saddleback Pump Station Auxiliary Pump & Engine Replacement*

**Project Location:** 27989 Marguerite Pkwy, Mission Viejo

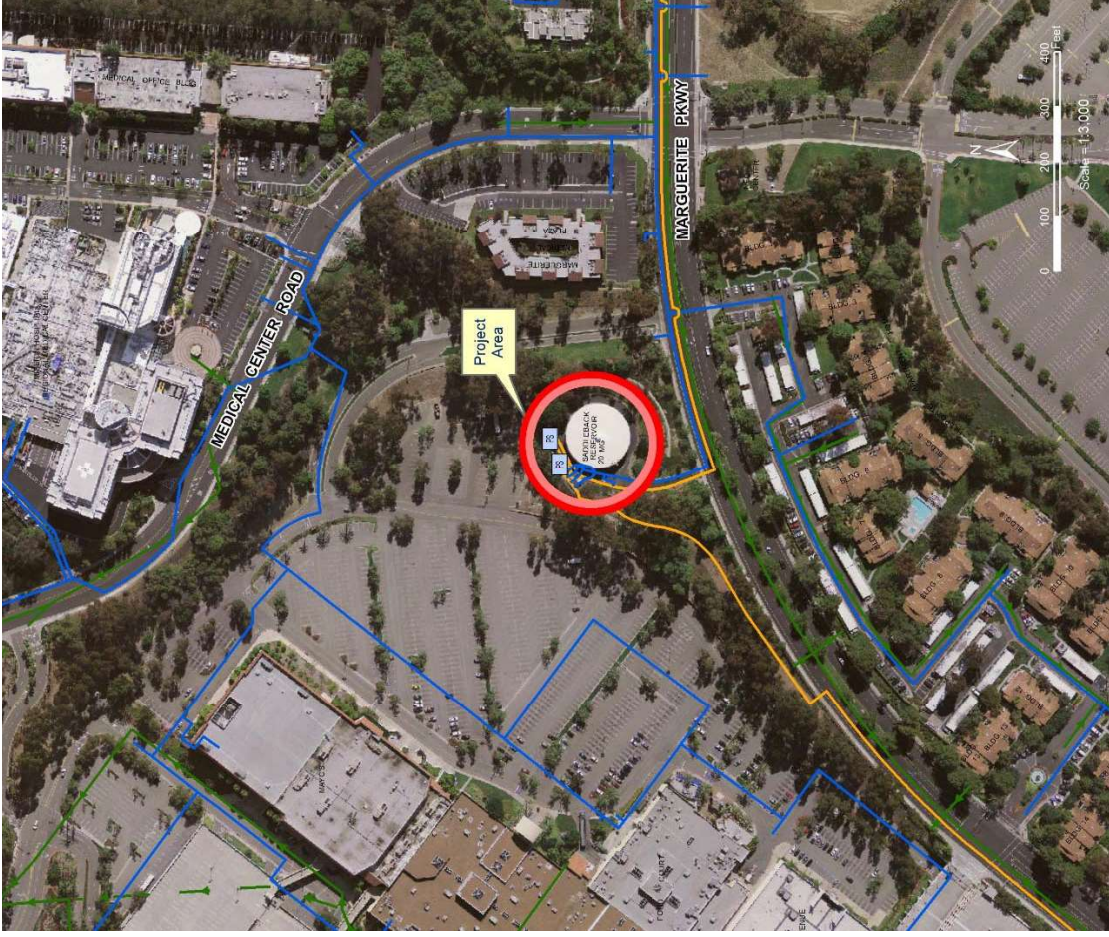
**Project Description:** Replace 1987 Waukesha Propane 550 Hp backup Auxiliary Pump, switchgear and associated piping and valves.

**Project Need:** Replacement is based on age of engine and difficulty finding off-the-shelf replacement parts. This pump is due for repairs to the heat exchanger in FY2014-15 that will cost \$35,000-\$40,000.

**Project Status:** In Design

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$1,150,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$1,235,000</b>



*Saddleback PS-Auxiliary Pump Engine Replacement*

## Capital Improvement Program – Project Description

**Project No:** 2015.022

**System:** Potable

**Fund:** 7

**Project Name:** Crown Valley Potable Water Reservoir 3 Re-Coating

**Project Location:** Laguna Niguel

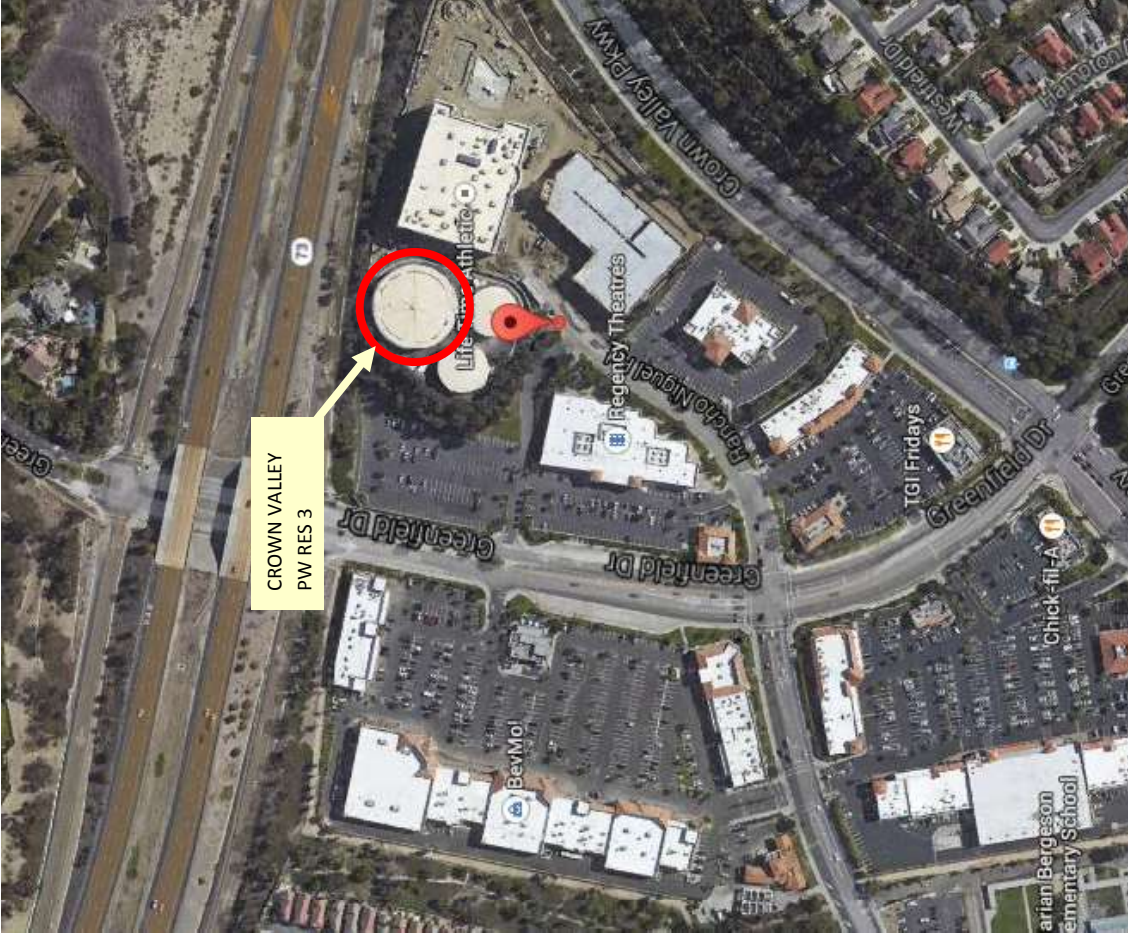
**Project Description:** Re-coat the exterior of steel reservoir as recommended in Harper & Associates’ assessment report. Project will also add isolation valves on the inlet and outlet piping and replace deteriorated LLI parts.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed.

**Project Status:** In Design

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$310,000
Inspection/Other	\$25,000
<b>Total Project Budget</b>	<b>\$350,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable and Recycled

**Fund:** 7

**Project Name:** Crown Valley Community Park Relocation

**Project Location:** Crown Valley Parkway, Laguna Niguel

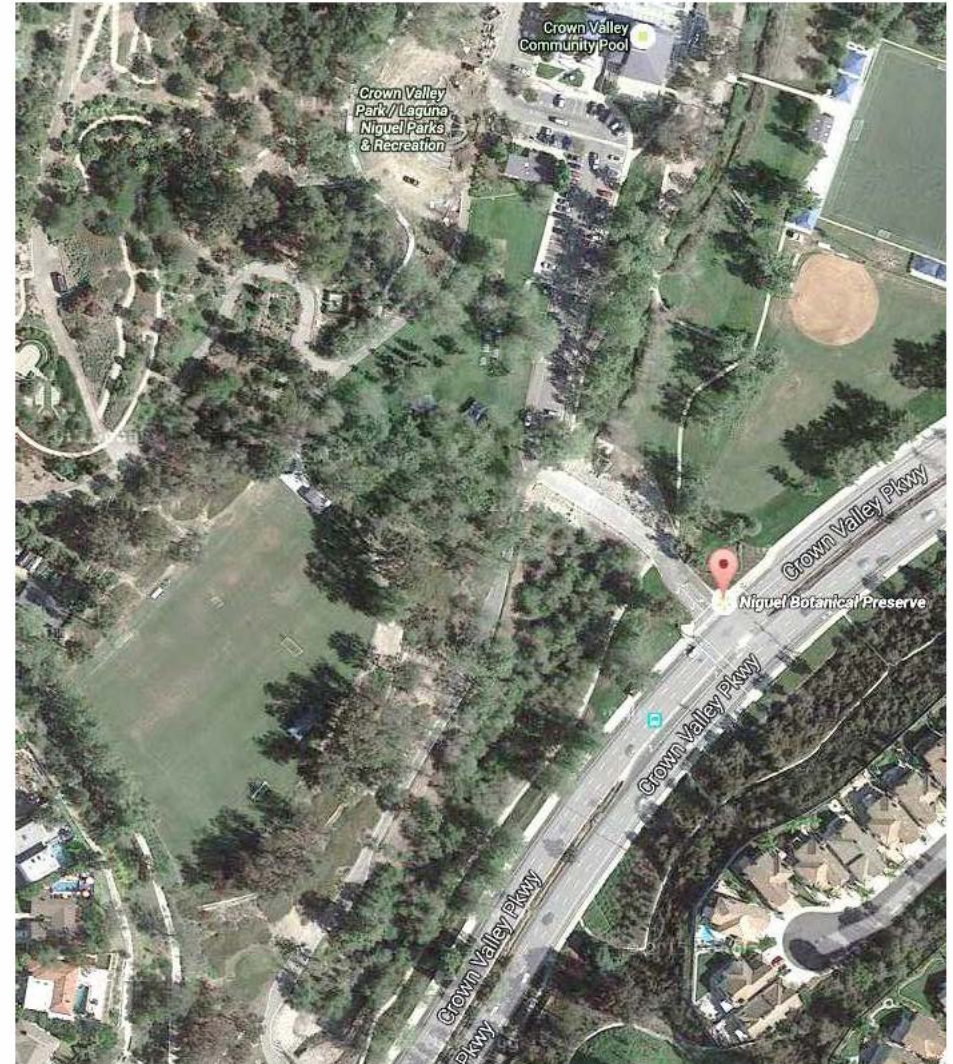
**Project Description:** Remove existing potable and recycled water main crossing the existing DIP crossing to the Crown Valley Community Park; Install approximately 650 linear feet of potable main and 450 linear feet of recycled water main to the new bottomless arch culvert crossing. Convert the existing city botanical garden to recycled water. Project management provided by City staff; District will reimburse the City for expenses related to District facilities.

**Project Need:** The City of Laguna Niguel is reconfiguring the entrance to the Crown Valley Community Park, removing the existing DIP crossing where water and recycled water mains are currently located. Existing pipelines must be relocated to the new crossing. Conversion of the City's botanical garden to recycled water will also be included, reducing potable irrigation demands.

**Project Status:** Design

### Estimated Project Amount:

Item	Estimated Cost
Design	--
CEQA Compliance	--
Geotechnical	--
Construction	\$310,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$325,000</b>



**Note:** \$117,000 is attributable to the potable water system and \$208,000 to the recycled water system.

## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Potable

**Fund:** 7

**Project Name:** *Potable Projects per Asset Management Model*

**Project Location:** District-wide

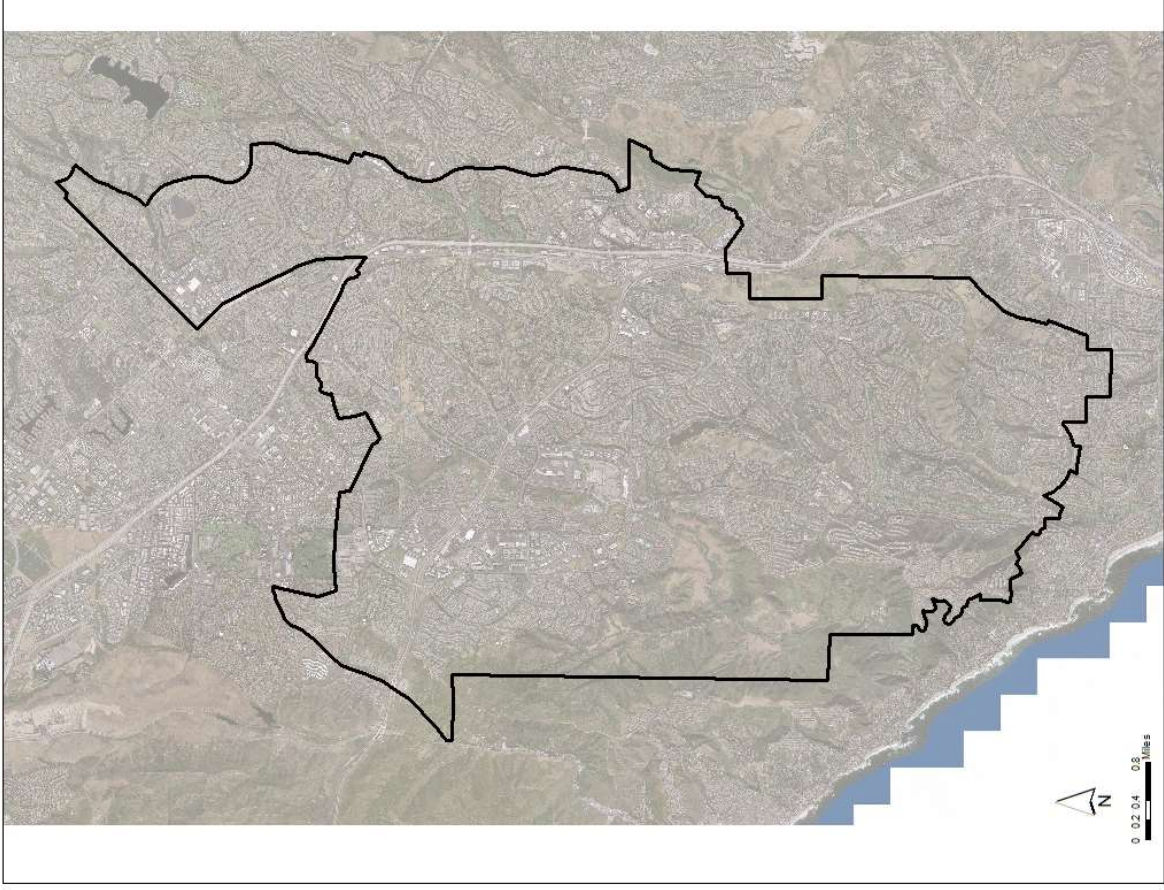
**Project Description:** Implement replacement and rehabilitation (R&R) projects utilizing funds identified as a minimum investment in the asset management model. These funds are a placeholder for actual projects and are distributed to R&R project in the corresponding fiscal year.

**Project Need:** In 2003, the District, through a consultant, developed an R&R planning model. The model was developed to obtain planning level funding needs to replace and rehabilitate District facilities. The model will be updated over the next few months and the estimated costs will be adjusted accordingly.

**Project Status:** Proposed, annual program- when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	TBD
CEQA Compliance	TBD
Construction Contract	TBD
Inspection	TBD
<b>Total Project Budget</b>	<b>\$9,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Potable

**Fund:** 7

**Project Name:** Reservoir Management System Replacement Program

**Project Location:** 21 potable reservoir sites

**Project Description:** Remove existing on-site generation water quality reservoir management systems and protective structures and replace with new water quality reservoir management systems and permanent style buildings. A systemwide reservoir disinfection technology study was completed in July 2015. The study recommends to install liquid sodium hypochlorite and ammonia water quality reservoir management systems for the replacement systems.

**Project Need:** Existing facilities are approaching their useful life and require increased maintenance.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$1,200,000
CEQA Compliance	Exempt
Construction Contract	\$10,000,000
Legal/Permits/Inspection/Other	\$250,000
<b>Total Project Budget</b>	<b>\$11,450,000</b>



Sites for Clor-Tec Facilities

## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Potable

**Fund:** 7

**Project Name:** Reservoir Recoating Program – PW Program

**Project Location:** District-wide

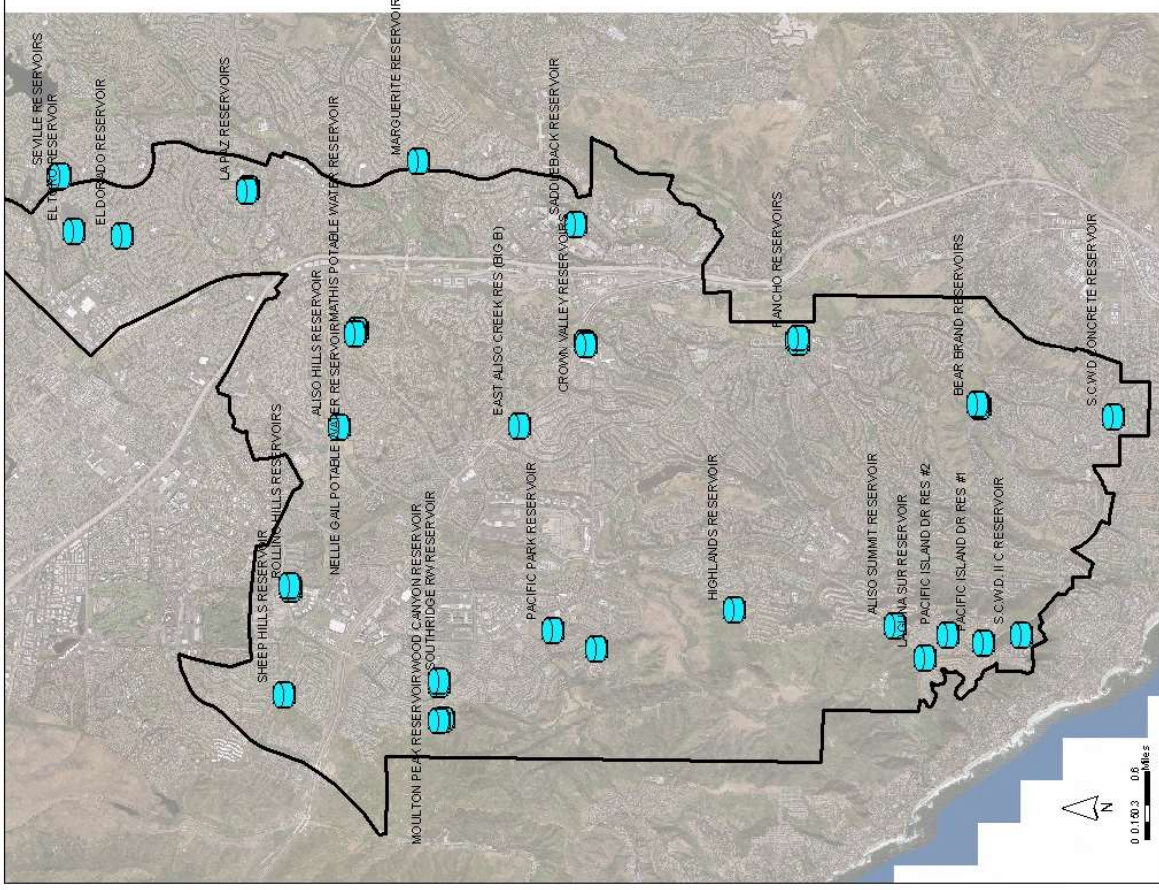
**Project Description:** Recoat the interior and exterior of steel reservoirs.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed. This project addresses the periodic nature of this activity for this asset group.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$250,000
CEQA Compliance	Exempt
Construction Contract	\$10,000,000
Inspection	\$1,000,000
<b>Total Project Budget</b>	<b>\$11,250,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Potable

**Fund:** 7

**Project Name:** Service Section and MCC Replacement Program (Potable)

**Project Location:** District-wide

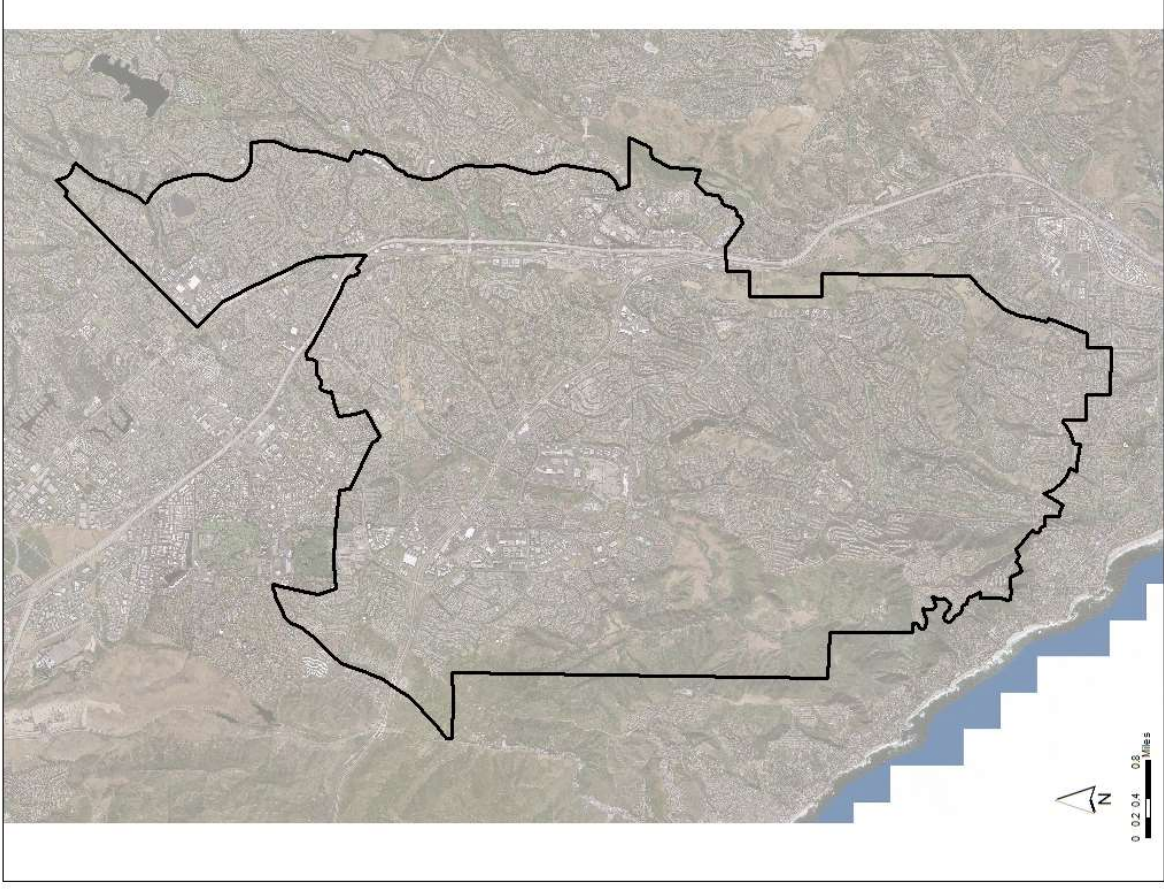
**Project Description:** Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

**Project Need:** The District has approximately forty-five (45) 480-volt 3-phase utility services, each with motor control centers and related distribution equipment. As the equipment reaches the end of its useful life, it requires replacement. Equipment age is generally between 15 years old and 50 years old. Over the next 10 years, approximately twelve (12) replacements will be required (6 related to potable stations, 2 related to recycled water stations, and 4 related to sewer lift stations).

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$150,000
CEQA Compliance	Exempt
Construction Contract	\$1,800,000
Inspection	\$100,000
<b>Total Project Budget</b>	<b>\$2,050,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Potable

**Fund:** 7

**Project Name:** Valve Replacement Program – PW Program

**Project Location:** District-wide

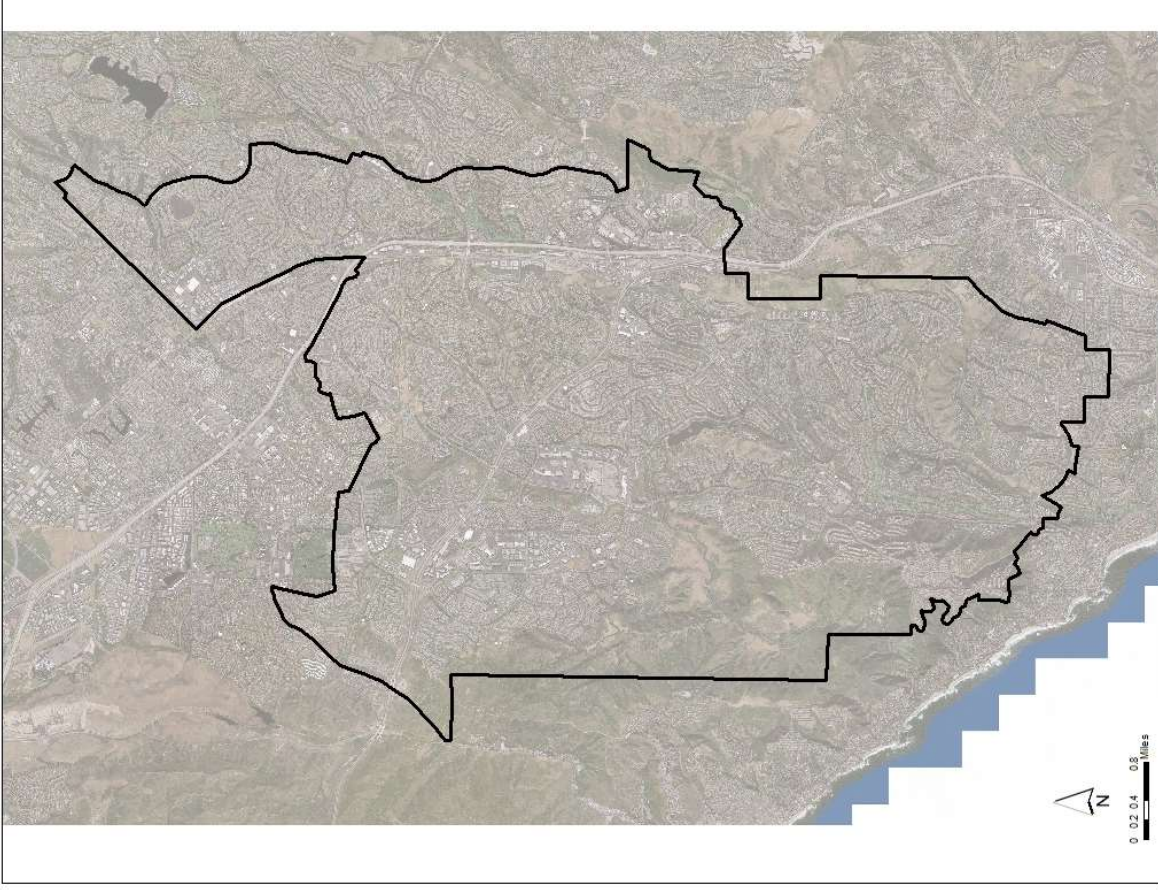
**Project Description:** Replace failed valves.

**Project Need:** The District has approximately 12,940 systems valves in the potable water system. These valves are used to isolate sections of pipe in the event of planned and emergency repairs and connections. A systemwide valve replacement program study was completed in January 2016. The study recommends 3,970 valves to be tested, of which it assumes 1,985 critical valves will need to be replaced. This program will replace approximately 60% of those valves. These critical valves are prioritized to reduce the quantity of customers required to be taken out of service during future pipeline repair and connections. They include valves on major, secondary, and local transmission and distribution mains that would reduce potential interruption of service down to two or three sections of local distribution mains.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	Exempt
Construction Contract	\$13,200,000
Inspection/Other	\$600,000
Construction by District	\$5,530,000
<b>Total Project Budget</b>	<b>\$19,830,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** Highland Pump Station Pressure Relief to the 650 Zone

**Project Location:** Highlands Pump Station, Niguel Road, Laguna Niguel

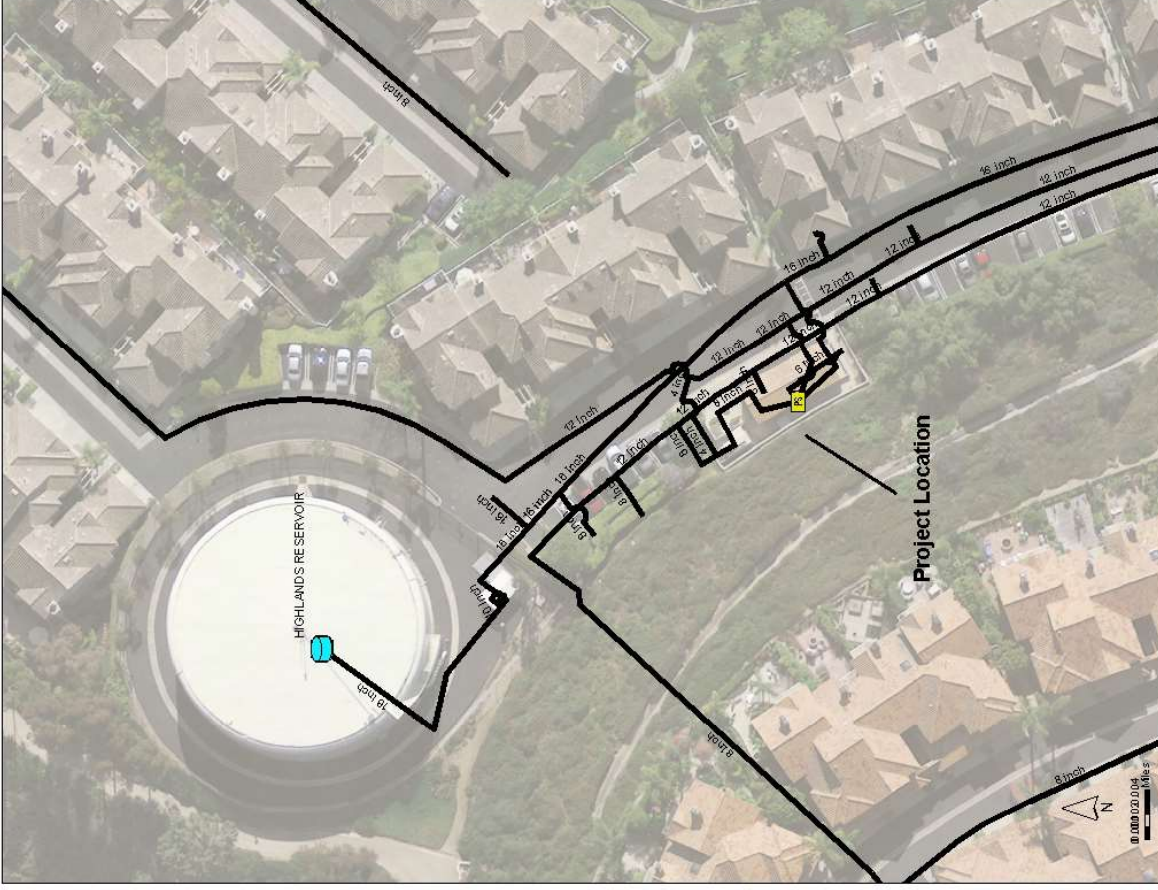
**Project Description:** Reconstruct a connection between the 920 and 650 pressure zones.

**Project Need:** This connection will allow for pressure relief from the 920 to the 650 pressure zone.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$50,000
Inspection/Other	\$5,000
<b>Total Project Budget</b>	<b>\$75,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** 2016-2017 Valve Replacements

**Project Location:** District-wide

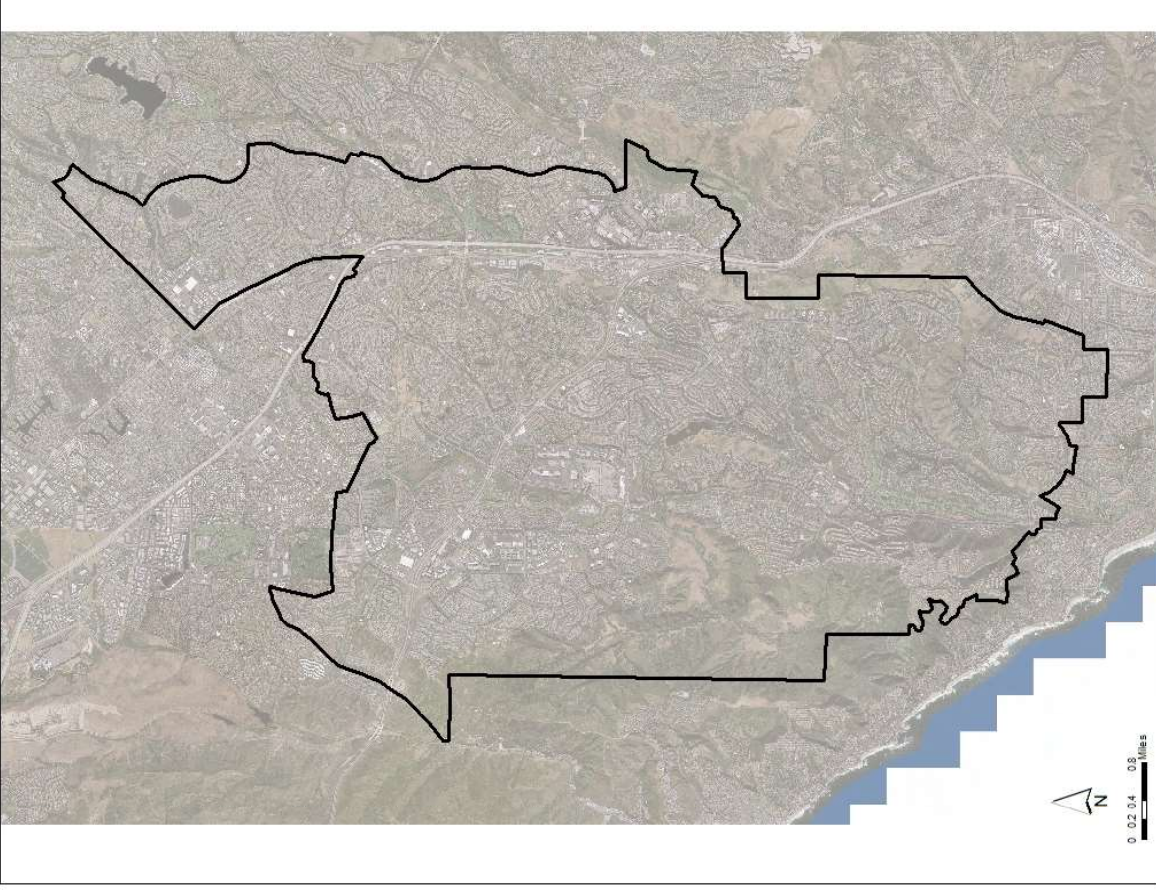
**Project Description:** Replace failed in-line valves.

**Project Need:** Many of the District's valves have exceeded their useful life and are no longer operating or have increased maintenance requirements. This program focuses on replacement of these valves on critical transmission and distribution mains. Valves in subdivisions, usually lines 8-inches and smaller, are replaced as part of the valve turning program through the operations budget.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$1,810,000
Inspection/Other	\$100,000
Construction by District	\$900,000
<b>Total Project Budget</b>	<b>\$2,860,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 14

**Project Name:** 920 Zone Loop Pipeline

**Project Location:** Pacific Island Drive, Laguna Niguel

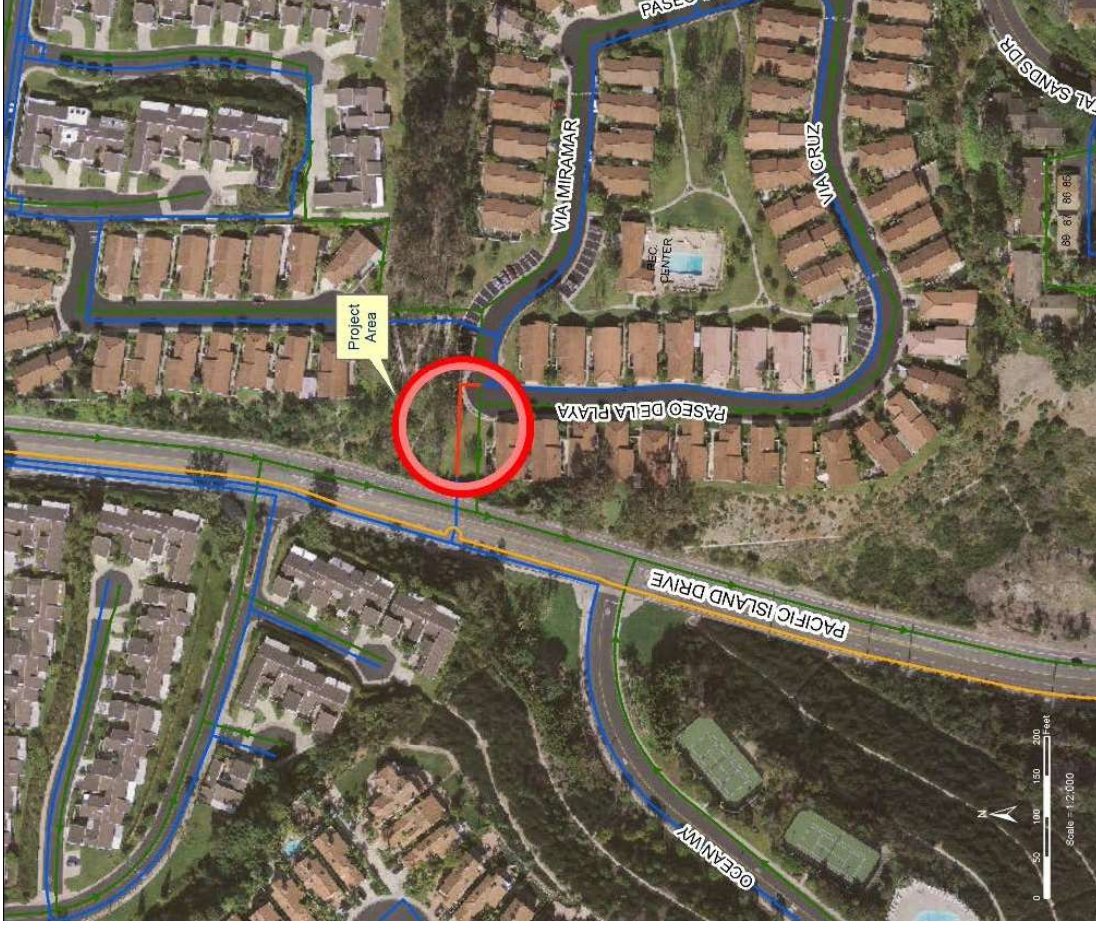
**Project Description:** Install new easement pipeline, approximately 300' linear feet of 8", from Pacific Island Drive to Via Miramar on the 920 zone to provide a second feed and loop the system.

**Project Need:** Improve hydraulics and redundancy by providing second feed and loop.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	TBD
Construction Contract	\$150,000
Inspection/Other	\$20,000
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable, District Overall

**Fund:** 7

**Project Name:** 54-inch Central Intertie Pipeline (CIP) Improvements

**Project Location:** Oso Parkway, from Bridlewood FCF to Antonio Parkway

**Project Description:** Inspection of the CIP was completed in August 2012. A summary report was prepared to describe details of the inspection and recommend immediate, near-term (2 year), and long-term capital improvements. This project provides funds to construct proposed improvements including, but not limited to repair and replacement of corroded fittings, nuts and bolts, ventilation piping, mortar repair, re-coating of valves and fittings and cathodic protection system measurements and testing. This project also provides funds to design and install an impressed current Cathodic Protection (CP) system.

**Project Need:** As a critical water delivery facility, failure of this line would be catastrophic to District operations. The improvements will enable the staff to monitor and control corrosion of pipeline and appurtenances to maintain the CIP in good working order to insure uninterrupted service. Following the 2015 MFL Condition Assessment, an impressed current CP system was deemed necessary to prevent ongoing corrosion of the CIP.

**Project Status:** Proposed Projects

### Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	\$100,000
Geotechnical	\$100,000
Construction Contracts	\$2,000,000
Inspection/Other	\$200,000
<b>Total Project Budget</b>	<b>\$2,700,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2009.010

**System:** Potable

**Fund:** 14

**Project Name:** *Mission Hospital Secondary Feed*

**Project Location:** 27700 Medical Center Road, Mission Viejo, CA 92691

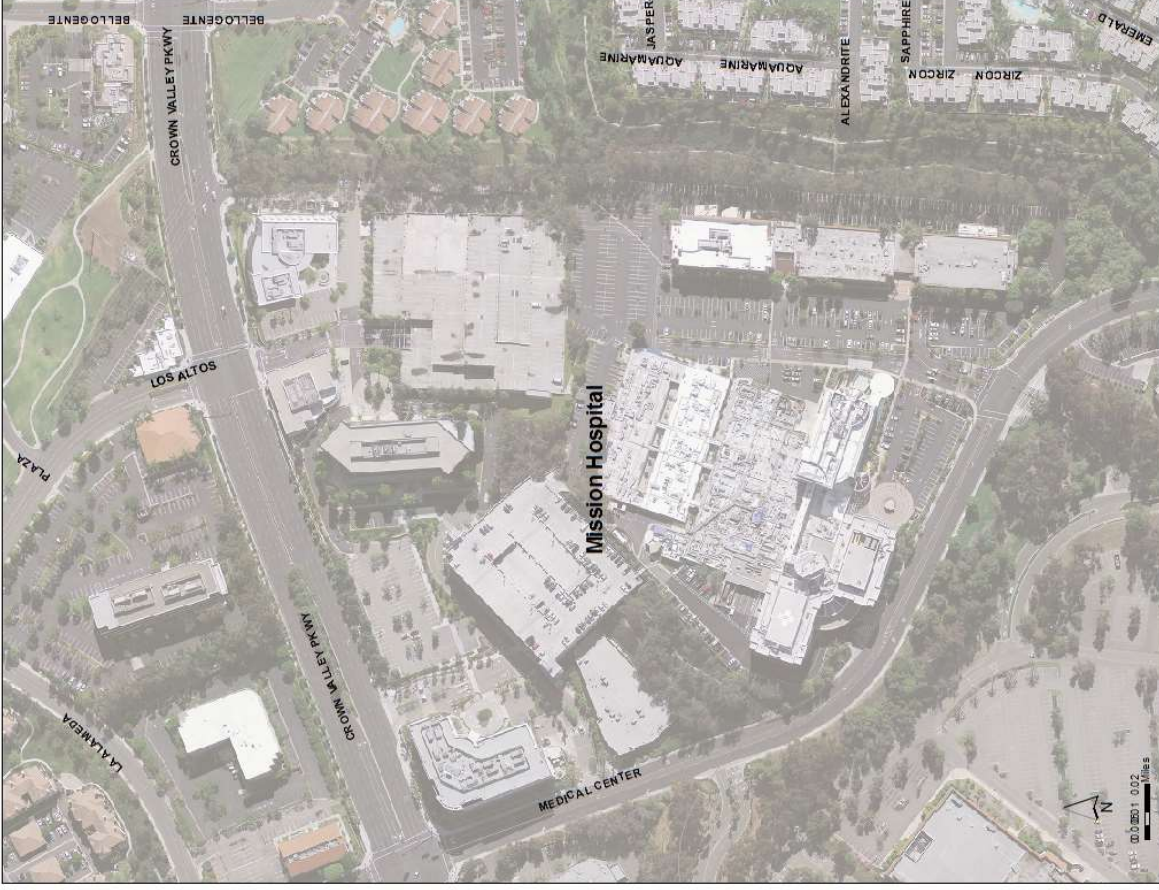
**Project Description:** Install approximately 300 linear feet of new potable water main to provide a secondary feed to Mission Hospital.

**Project Need:** In the event that the distribution main in Medical Center Road was compromised, a secondary feed from the neighborhood off of Bellogente to the East would provide a secondary source of water for this critical District customer.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction	\$300,000
Inspection	\$50,000
<b>Total Project Budget</b>	<b>\$400,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 14

**Project Name:** Saddleback PS Generator Emergency Connection

**Project Location:** Saddleback Pump Station

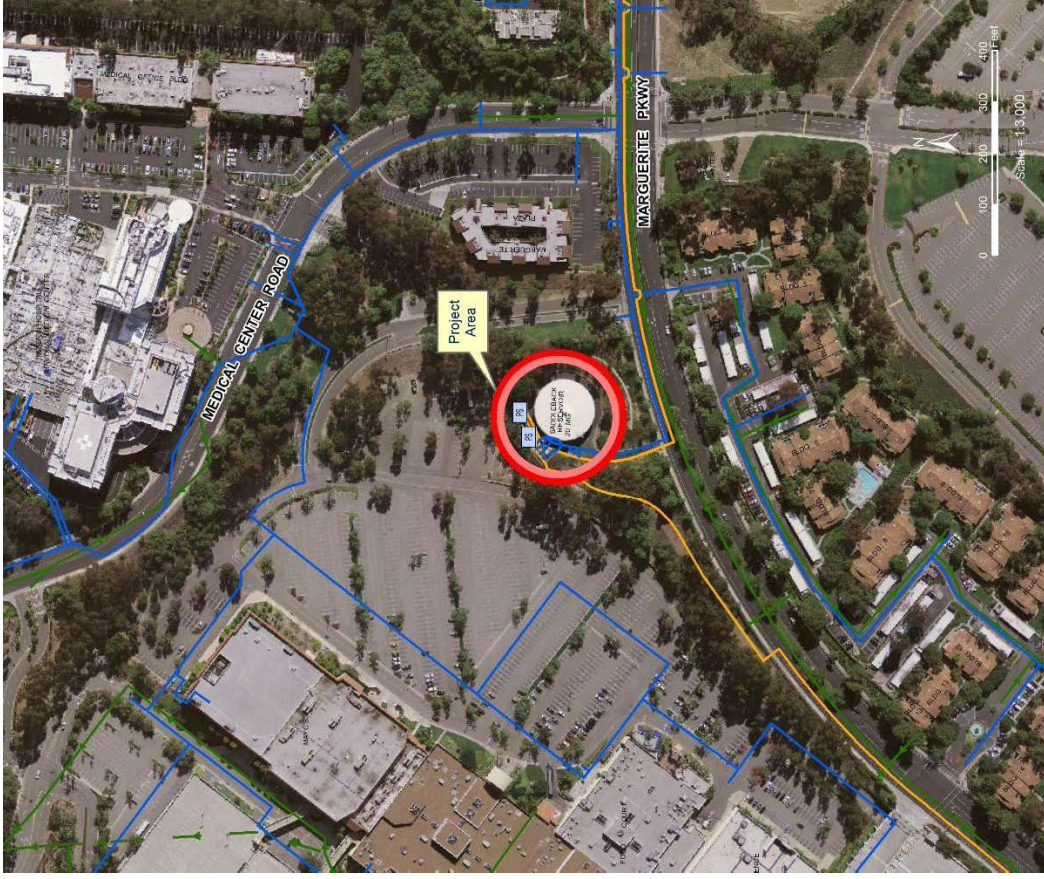
**Project Description:** Install new emergency generator connection.

**Project Need:** This pump station is a vital link between pressure zones 450 and 650 PS and serves Mission Hospital. This project will allow for a quick connection of a portable generator to the pump station.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$35,000
Inspection	\$0
<b>Total Project Budget</b>	<b>\$60,000</b>



Saddleback PS-Emergency Connections



## Capital Improvement Program – Project Description

**Project No:** 2012.011

**System:** Potable

**Fund:** 7

### **Project Name:** Easement Rehabilitation Program – Phase 1

**Project Location:** The Easement Rehabilitation Program is a District-wide program with Phase 1 located in the Marina Hills, Niguel Ranch and surrounding areas of Laguna Niguel.

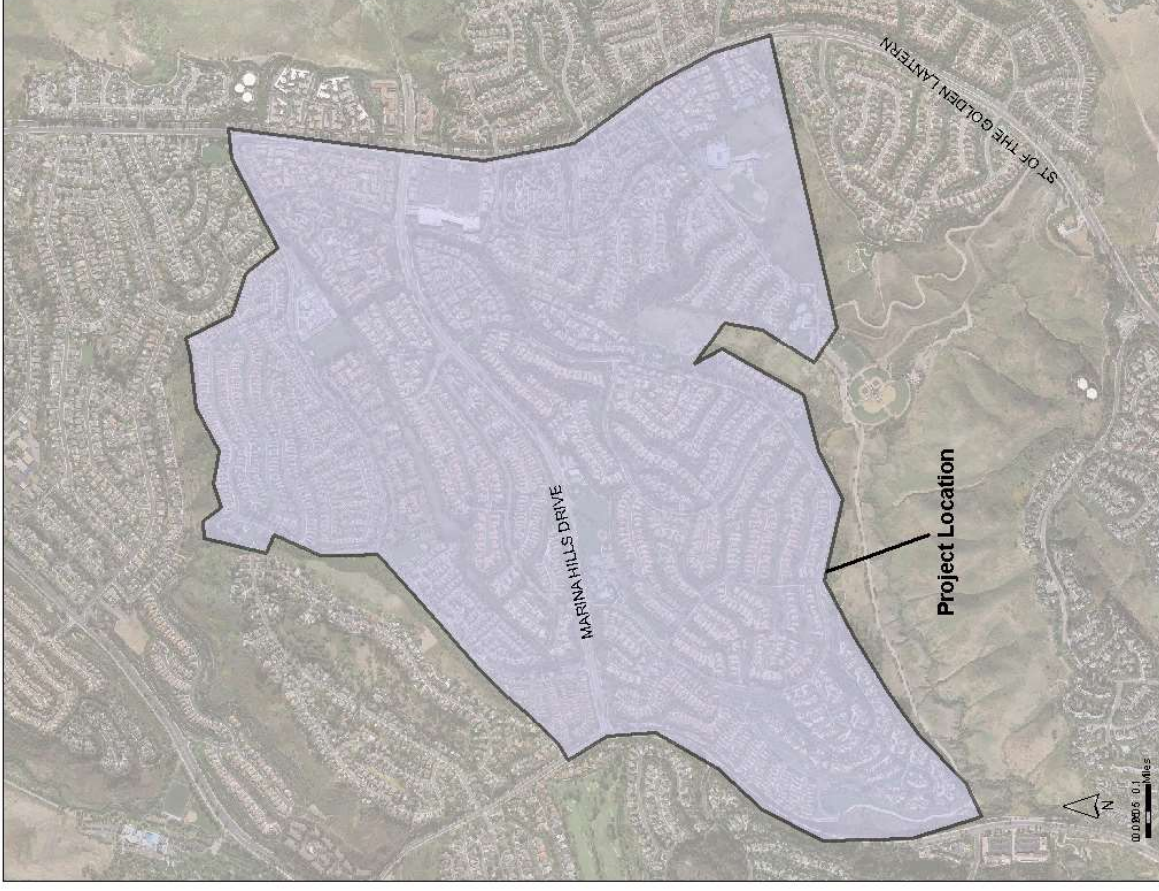
**Project Description:** This project implements the findings from Project 2010.023 – Easement Lining Program. This project evaluated and identified risks associated with the ductile iron pipes (DIP) in the project area. Based on the finding of the analysis, various improvement recommendations were proposed.

**Project Need:** As District facilities approach the end of their useful life, rehabilitation programs need to be in place to evaluate the risk of failure of a facility, replacement and/or rehabilitation options and costs, and implementation approaches. The Easement Rehabilitation Program evaluates metallic pipes in easements, their associated risks and rehabilitation/replacement needs. This is a multi-year project.

**Project Status:** In planning.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$600,000
CEQA Compliance	\$20,000
Construction Contract	\$7,000,000
Inspection	\$230,000
<b>Total Project Budget</b>	<b>\$7,850,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.032

**System:** Potable

**Fund:** 7

### **Project Name:** Old Ranch Road Easement Refurbishment

**Project Location:** off Old Ranch Road, Laguna Niguel

**Project Description:** Rehabilitate easement line from Point Catalina to Fairlane Road and abandon easement line in from Searidge to Fairlane Road.

**Project Need:** The two easement lines that connect Old Ranch Road to Fairlane Road had recent failures and are currently isolated. Hydraulic analysis indicates that the system can maintain satisfactory operation with the Searidge easement line abandoned and the Point Catalina easement line put back in operation through rehabilitation or replacement.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$160,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2012.010

**System:** Potable

**Fund:** 7

**Project Name:** *Crown Valley Parkway 16-in. Potable Water Line Rehabilitation*

**Project Location:** Crown Valley Parkway from ID #1 Master Meter to Eastern Transmission Main in Camino Capistrano

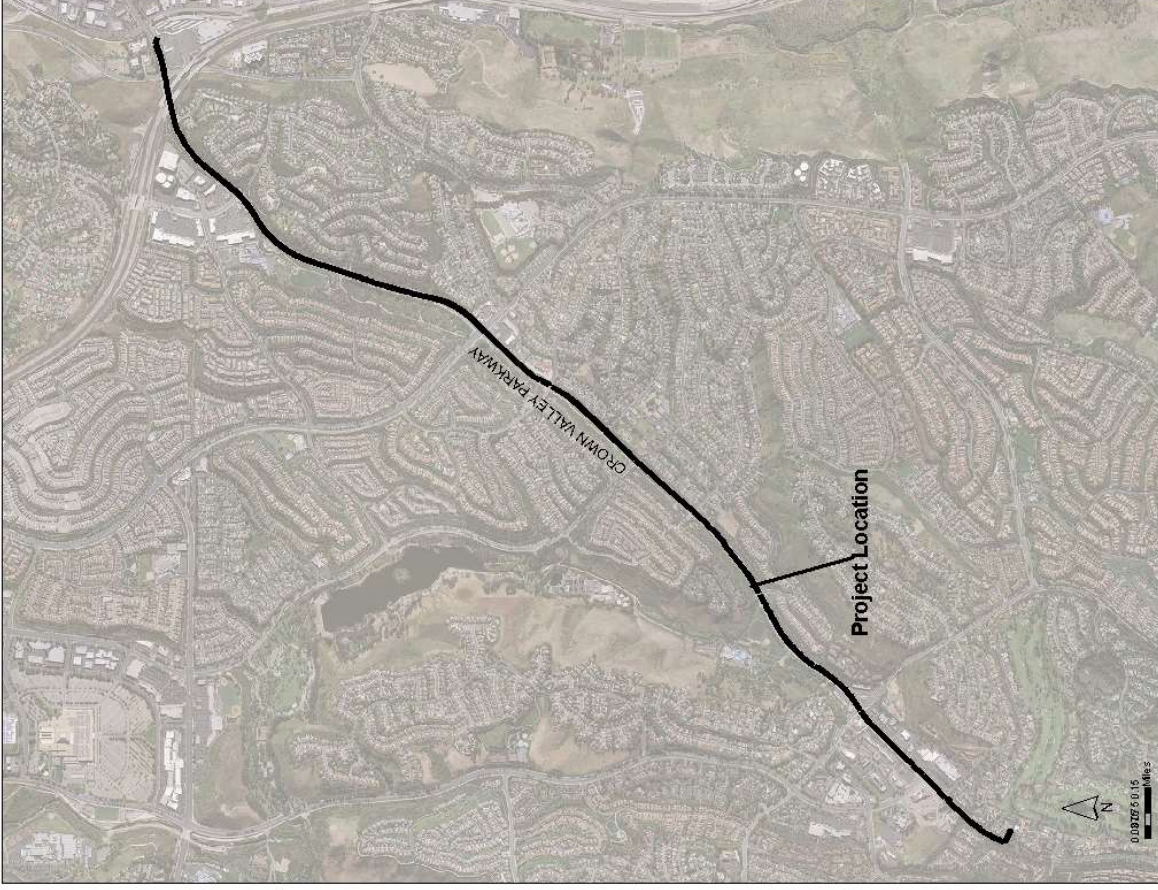
**Project Description:** Perform analysis to determine the best rehabilitation methodology for the approximately 4 miles of a 16-inch transmission main and implement recommendations.

**Project Need:** The 16-inch main was constructed in the early 1960's. The line has experienced an increased number of failures in the past few months. This project will determine the most appropriate methods to maintain this pipeline in operation, either through replacement or rehabilitation, provide a timeline for the improvements, and develop project costs to be programmed into the District's Capital Improvement Program.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Analysis & Design	\$90,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection	\$10,000
<b>Total Project Budget</b>	<b>\$650,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable, Wastewater

**Fund:** 7

### Project Name: Utility Service Entrance Replacements

**Project Location:** Pacific Island Drive Pump Stations 1, 2, and 3; Big Niguel, Marguerite, and El Dorado Pump Stations; Regional Lift Station

**Project Description:** Replace utility service sections at seven (7) sites that have reached the end of their useful life. The project will require bypass pumping at several sites.

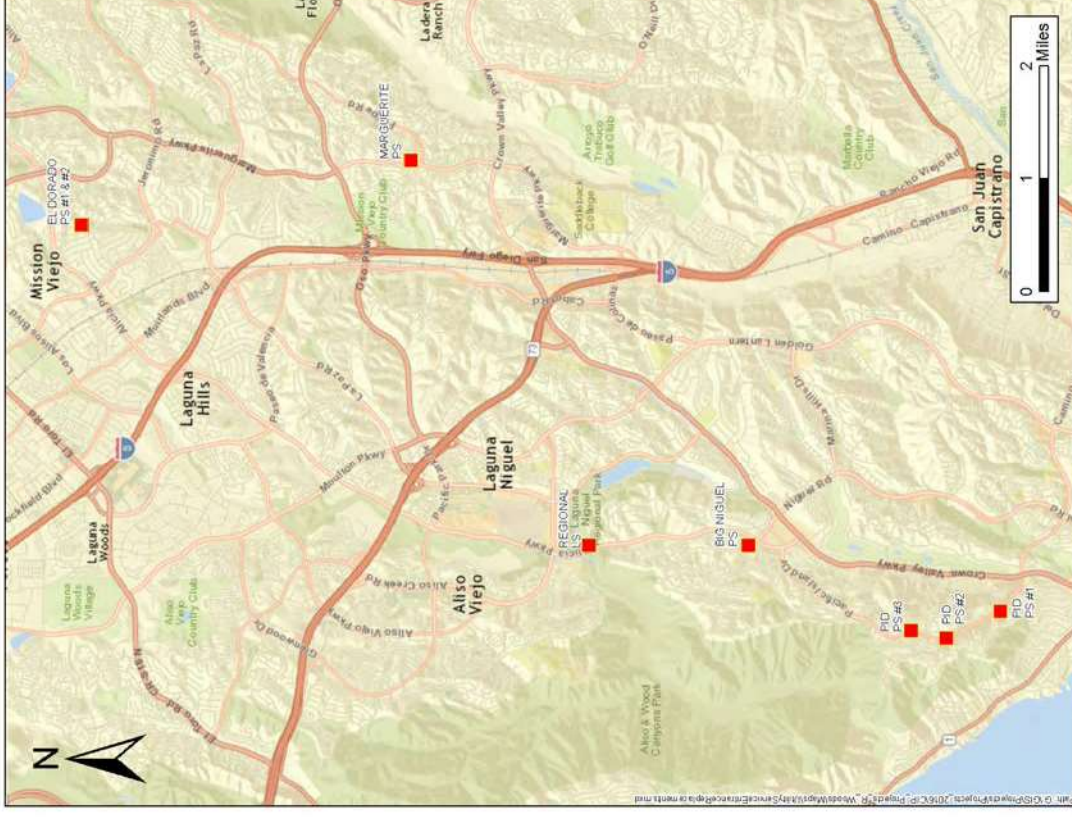
**Project Need:** These service sections and associated main circuit breakers range from 35 to 50 years old (beyond useful life). Upon failure, they could be dangerous to personnel or property and would likely never be useful again.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$180,000
CEQA Compliance	Exempt
Construction Contract	\$653,000
Inspection/Other	\$50,000
<b>Total Project Budget</b>	<b>\$883,000</b>

Note: \$738,000 related to potable and \$145,000 related to wastewater



## Capital Improvement Program – Project Description

**Project No:** 2011.037

**System:** Potable

**Fund:** 7

**Project Name:** *Mission Viejo High School Line/Vault Refurbishment*

**Project Location:** Mission Viejo High School, Chrisanta Drive/La Paz Road, Mission Viejo

**Project Description:** Remove and replace existing 6” and 4” potable water piping and vault.

**Project Need:** Refurbish existing district facilities due to age and repetitive failures.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	exempt
Construction Contract	\$165,000
Inspection	\$10,000
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** Pressure Zone 450 Aliso Creek Potable Water Line Relocation

**Project Location:** City of Laguna Hills, along Alicia Parkway south of Paseo de Valencia

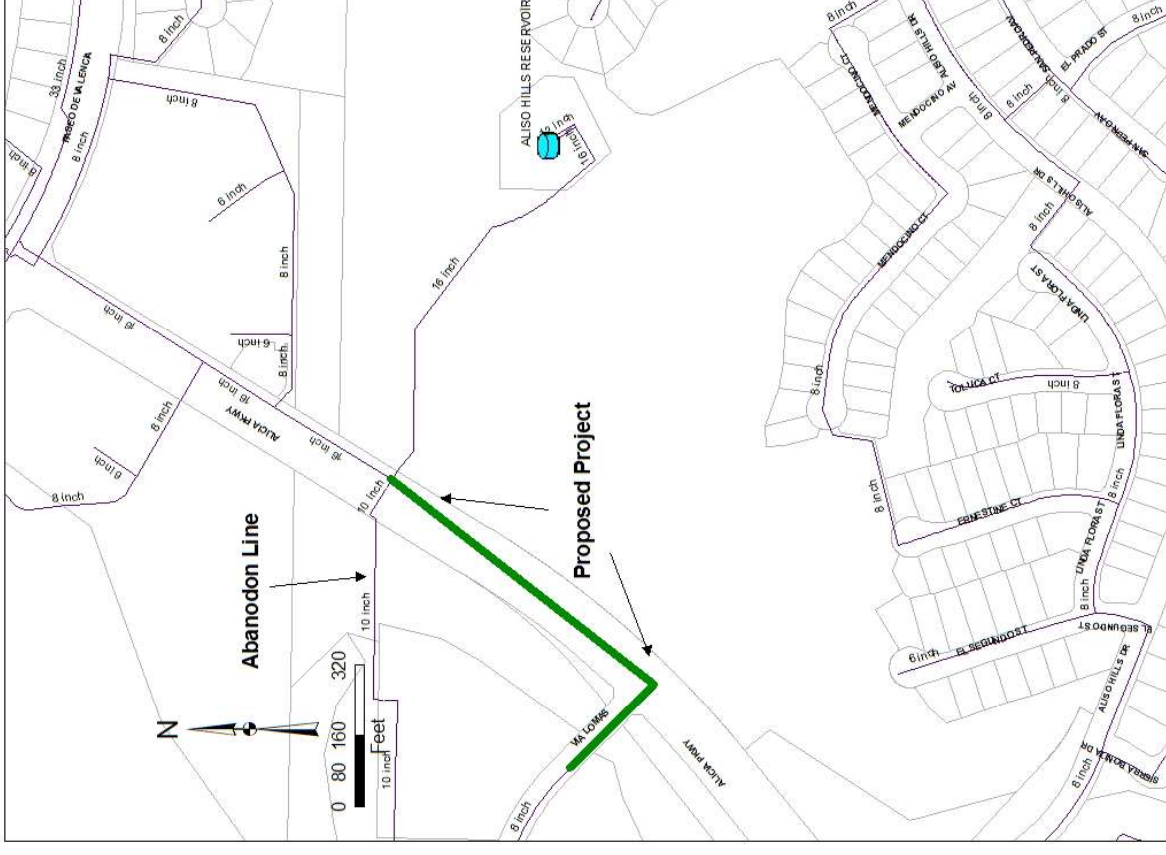
**Project Description:** Install about 1,000 feet of 10-inch diameter pipe and abandon about 500 feet under Aliso Creek.

**Project Need:** The existing potable water line under Aliso Creek has failed and is currently inactive. The new line will replace the existing line in a more environmentally acceptable location. This line is necessary to provide system connection to the Aliso Hills Reservoir.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$225,000
Inspection/Other	\$25,000
<b>Total Project Budget</b>	<b>\$300,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2010.001

**System:** Potable

**Fund:** 14

**Project Name:** 650-Zone Niguel Road Intertie

**Project Location:** Niguel Road, Laguna Niguel

**Project Description:** Evaluate intertie locations and construct pipeline and appurtenances.

**Project Need:** Improve operational efficiency in the 650 pressure zone, provide for an interconnection between the Highland and Rancho reservoirs, and evaluate the possibility of removing one or both pump stations (Little Niguel and Big Niguel).

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Analysis & Design	\$80,000
CEQA Compliance	Exempt
Construction	\$220,000
Inspection	\$20,000
<b>Total Project Budget</b>	<b>\$320,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

### **Project Name:** Easement Rehabilitation Program – Phase 2

**Project Location:** District-wide

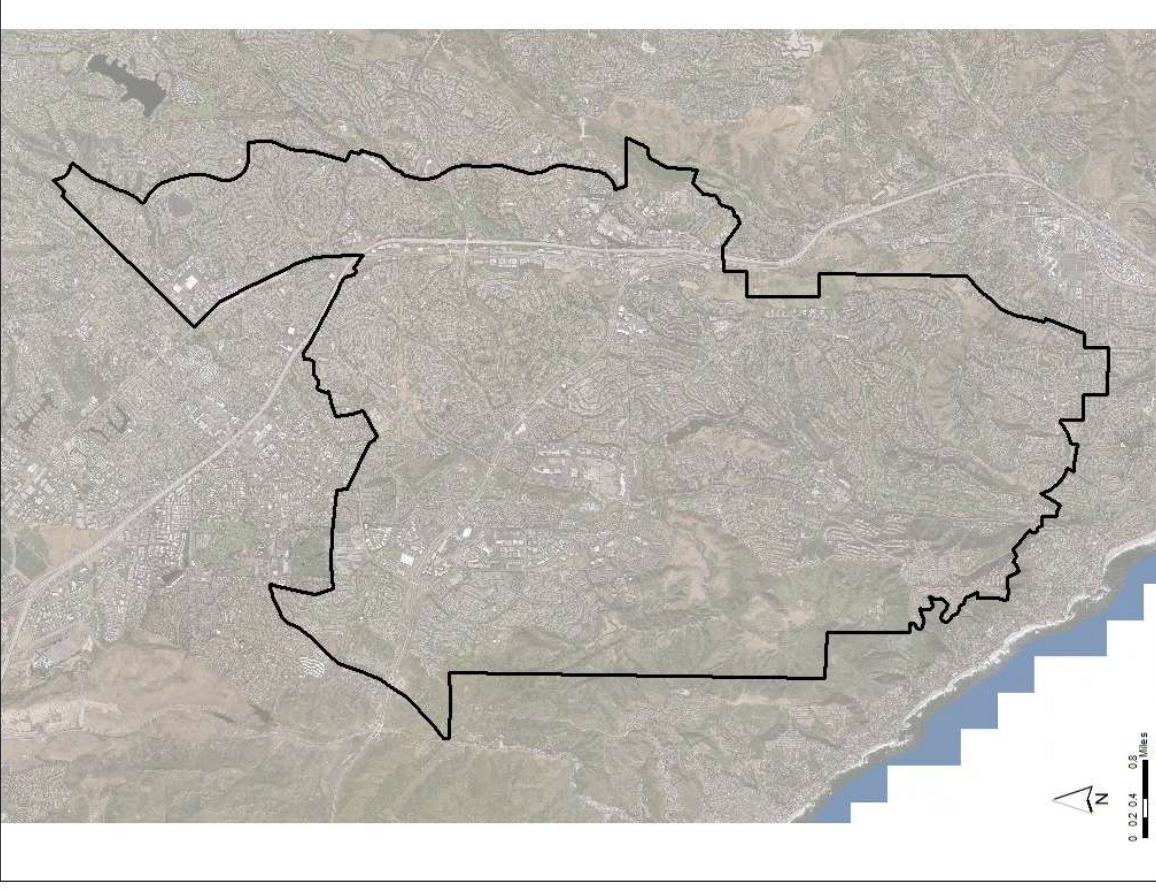
**Project Description:** This project is a continuation of an Easement Rehabilitation Program. Based on the outcome of the Phase 1, other areas where metallic pipes are in easements will be evaluated. Based on the finding of the analysis, additional improvements to easement pipes will be performed.

**Project Need:** As District facilities approach the end of their useful life, rehabilitation programs need to be in place to evaluate the risk of failure of a facility, replacement and/or rehabilitation options and costs, and implementation approaches. The Easement Rehabilitation Program evaluates metallic pipes in easements, their associated risks and rehabilitation/replacement needs. This is a multi-year project.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	\$20,000
Construction Contract	\$5,280,000
Inspection	\$200,000
<b>Total Project Budget</b>	<b>\$6,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

### **Project Name:** Steel Tanks Seismic and Structural Retrofit (Potable)

**Project Location:** District-Wide

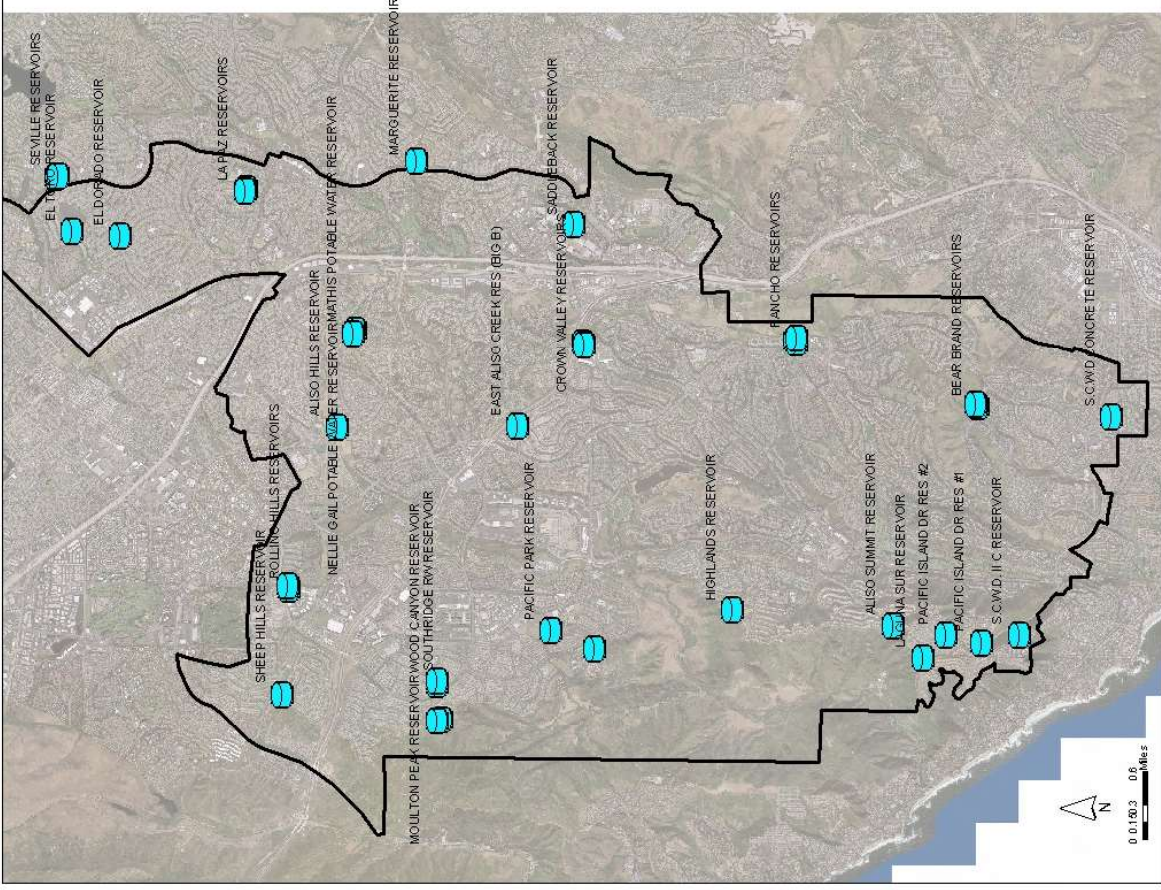
**Project Description:** Construct the recommendations from Project No. 2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

**Project Need:** Project No. 2011.014 evaluated all the District’s steel tanks for seismic, structural, and safety conditions. This is a multi-year program to bring the tanks to current standards.

**Project Status:** Proposed Projects

#### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	Exempt
Construction Contract	\$4,300,000
Inspection	\$200,000
<b>Total Project Budget</b>	<b>\$5,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** *Bear Brand PS Pump Replacement*

**Project Location:** 32644 Golden Lantern, Dana Point

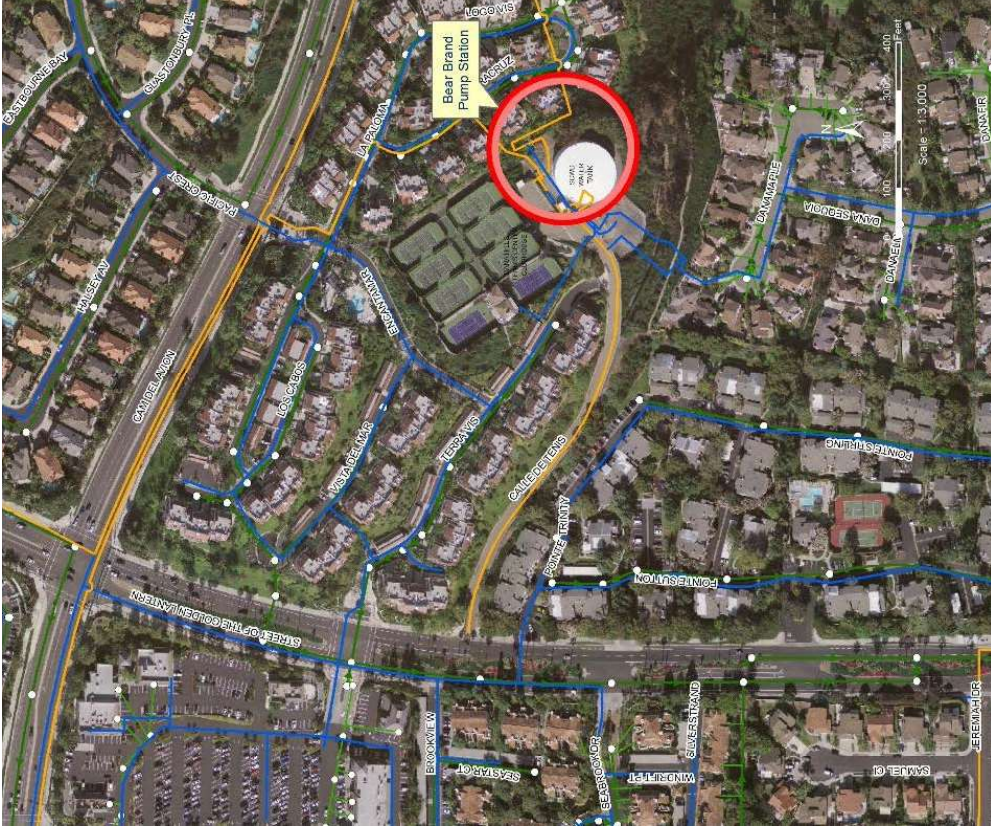
**Project Description:** Replace existing two pumps and 100 HP and 150 HP motors, and select piping and valves.

**Project Need:** Pumps are original and have reached their useful life.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$410,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

### **Project Name:** Little Niguel PS Pump Replacement

**Project Location:** Little Niguel Pump Station. 30315 Niguel Road, Laguna Niguel

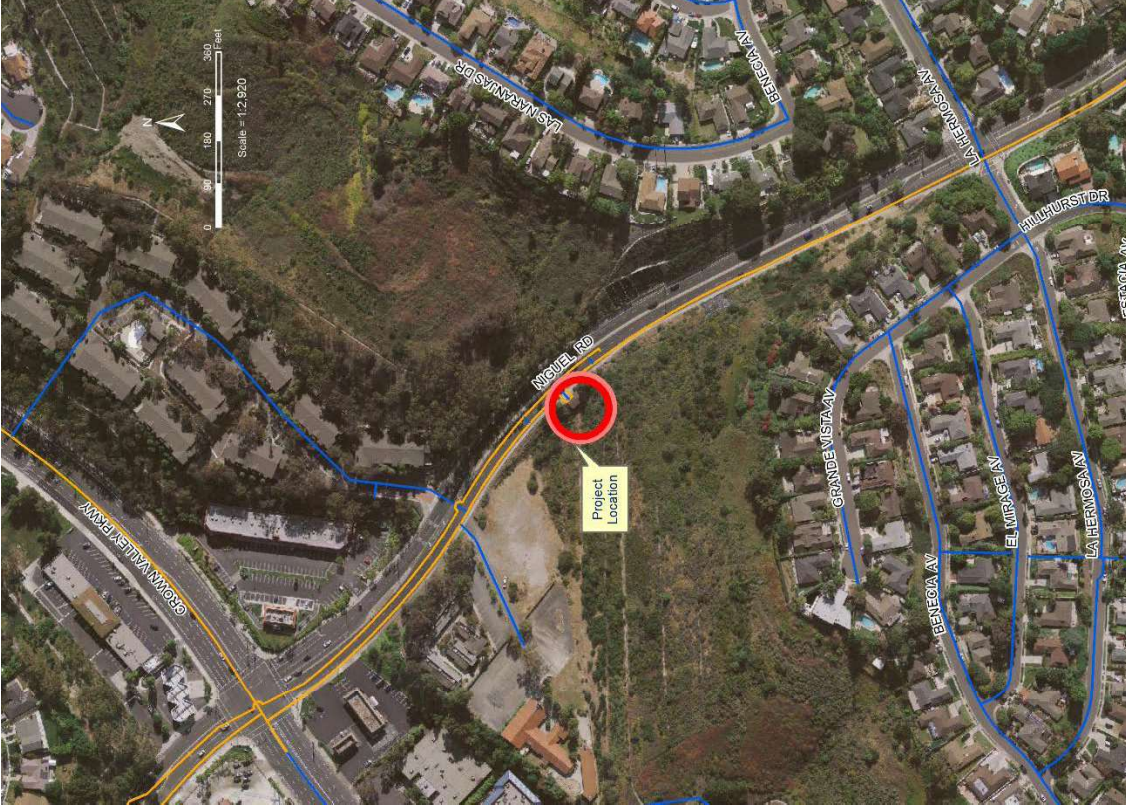
**Project Description:** Replace existing 125 HP pump, motor, and select piping and valves.

**Project Need:** Pump is original and has reached its useful life.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$200,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$250,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** Pacific Park PS Pump and Engine Replacement

**Project Location:** Laguna Niguel

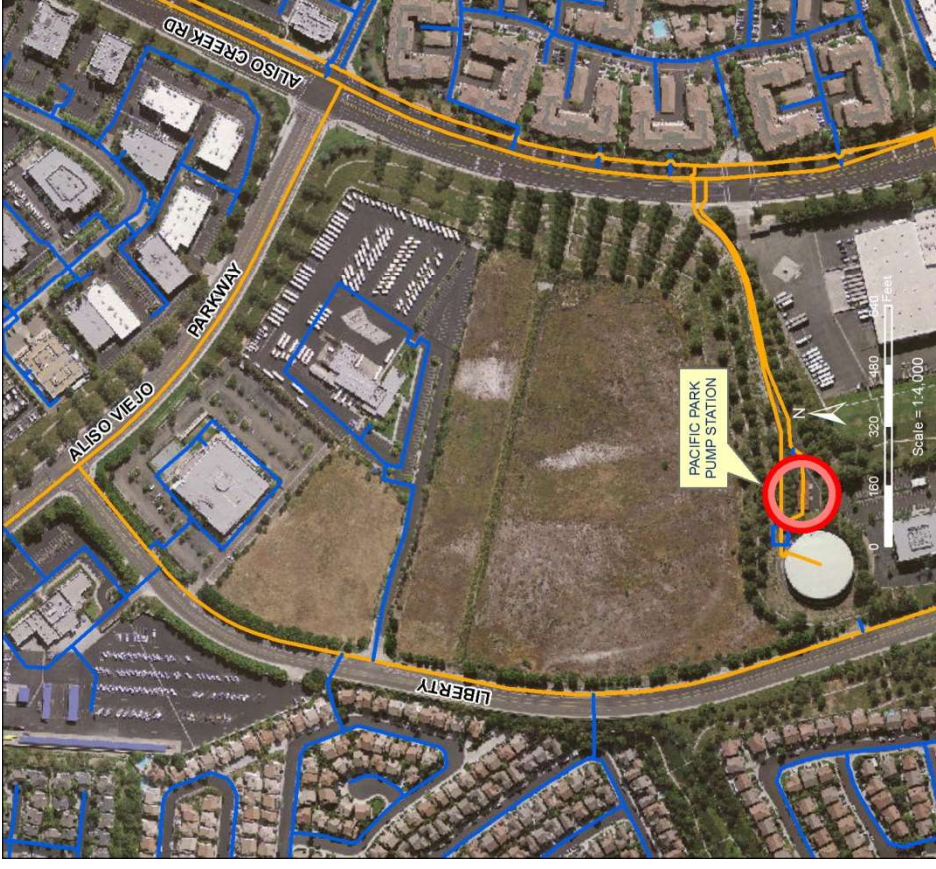
**Project Description:** Remove and replace the fire pump and natural gas engine, the pump control valve, suction and discharge valves, and associated piping.

**Project Need:** The equipment is over 25 years old. The pump and engine have out lived their life expectancy and can no longer be refurbished.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$80,000
CEQA Compliance	Exempt
Construction Contract	\$510,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$600,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

### **Project Name:** Rolling Hills Pump Station Engine and Pump Replacement

**Project Location:** Rolling Hills PS, 25343 Cedarbrook, Aliso Viejo

**Project Description:** Replace existing auxiliary engine, pump assembly, claval, suction valves and discharge valves, and associated piping.

**Project Need:** The pump was built in 1988. A replacement of the engine and pump is needed as it can no longer be refurbished.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$80,000
CEQA Compliance	Exempt
Implementation	\$585,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$675,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** Sheep Hills Pump Station Engine & Pump Replacement

**Project Location:** Aliso Viejo

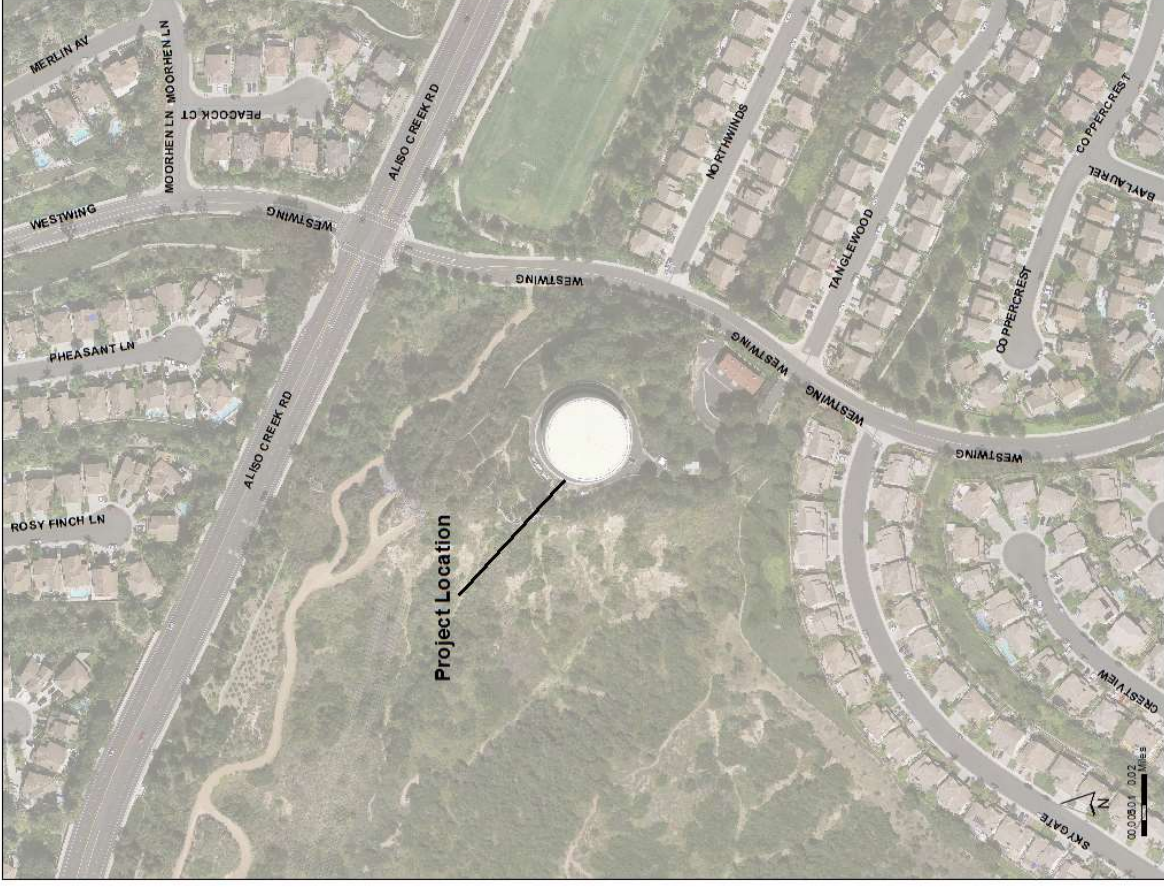
**Project Description:** Remove and replace the fire pump and gas engine, the pump control valve, and the suction and discharge shutoff valves, and associated piping.

**Project Need:** The fire pump and gas engine are over 25 years old. The equipment has out lived its life expectancy and can no longer be refurbished.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$110,000
CEQA Compliance Exempt	
Construction Contract	\$920,000
Inspection	\$10,000
<b>Total Project Budget</b>	<b>\$1,040,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 14

### **Project Name:** *Marguerite/Oso CIP Takeout*

**Project Location:** Oso Parkway & Marguerite Parkway, Mission Viejo

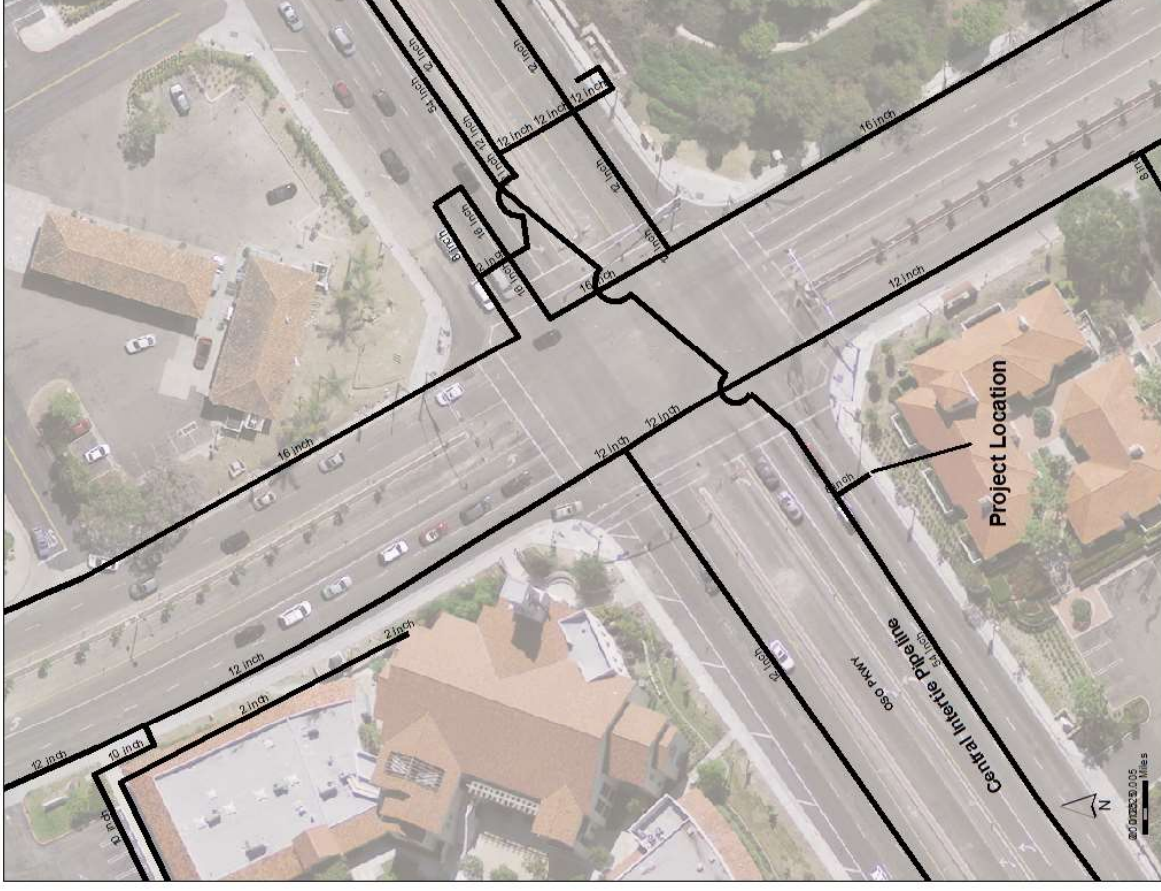
**Project Description:** Design and construct a flow control facility from the Central Intertie Pipeline (CIP) to the 750 pressure zone via Marguerite Reservoir.

**Project Need:** The facility will control flow from the CIP to District’s Mission Viejo service area. It will provide an additional source of water to the area.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	\$50,000
Construction Contract	\$2,000,000
Inspection/Other	\$150,000
<b>Total Project Budget</b>	<b>\$2,500,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 7

**Project Name:** Vault Removal (11 sites)

**Project Location:** Various – see table

**Project Description:** Remove existing appurtenances, reconnect piping and abandon concrete vaults per City requirements. In addition, investigate placing in-line micro-turbines as an alternative to abandonment.

**Project Need:** The existing vaults have significant corrosion and maintenance needs and are no longer required for system operation.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$610,000</b>

Facility	Location
Marseille PR Vault	Laguna Sur HOA, Marseille Drive at Ocean Way
Talavera Metering Vault	Laguna Sur HOA, Talavera Dr at Antibes
Niguel Road Metering Vault	Niguel Rd, north of Beacon Hill Way
Bridge Valve Vault No. 1	On Aliso Viejo Parkway between Indian Hills and Moulton.
Bridge Valve Vault No. 2	On Aliso Viejo Parkway between Indian Hills and Moulton.
Moulton/Via Lomas Metering Vault	On Moulton at entrance to Villa Solana Apts.
Alicia/Laguna Court Metering Vault	On Alicia across from Laguna Court in sidewalk. Major cross streets are Alicia and Moulton.
Clover Hill Lane Metering Vault	In grass area on easement to Via Lomas.
MOV No. 3 Vault	On Alicia south of Highlands.
MOV No. 6 Vault	On Niguel Road east of Crown Valley
La Paz Underground Check Valve Vault	On Cabot Road across the street from La Paz Underground Pump Station in the planter.

## Capital Improvement Program – Project Description

**Project No:** 2015.006

**System:** Potable

**Fund:** 7

**Project Name:** I.D. 1 Master Meter Relocation

**Project Location:** Crown Valley Parkway and Paseo Del Valle

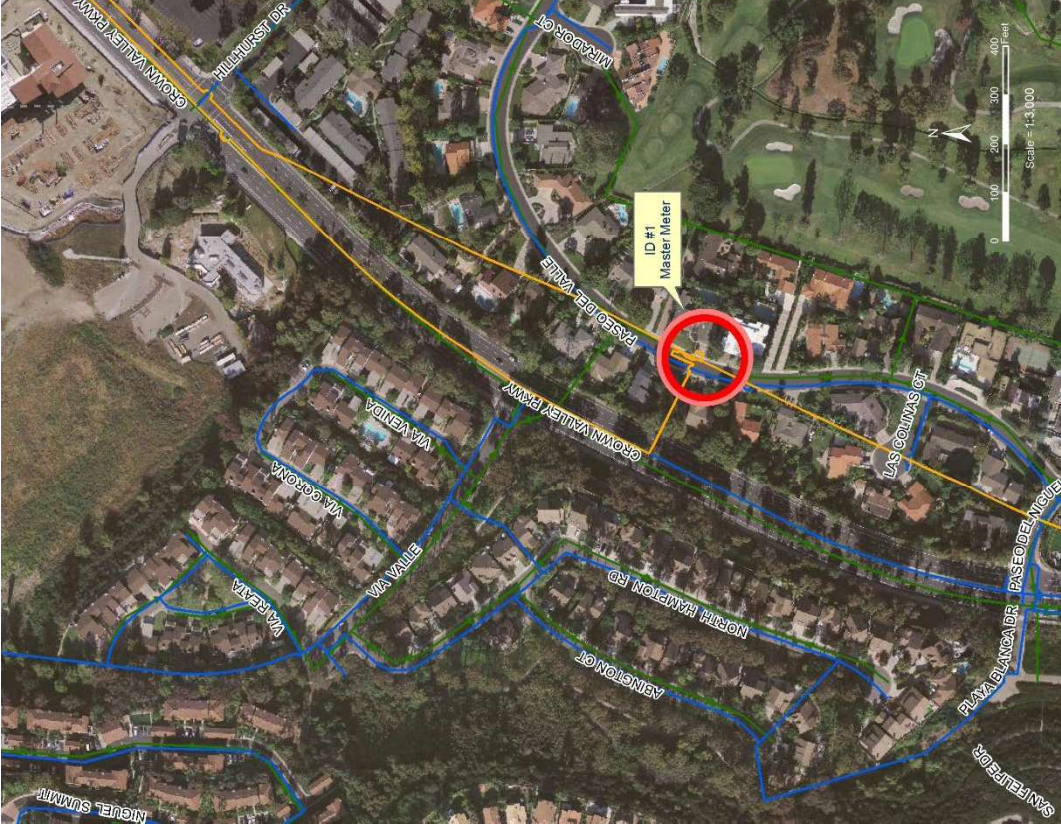
**Project Description:** Construct a meter vault and needed piping.

**Project Need:** JRWSS will be relocating the JTM out of the housing track on Paseo Del Valle and into Crown Valley Parkway. I.D. Master Meter will need to be relocated and connected to the new part of the JTM or at a different location, depending on site availability. The JRWSS project has been deferred. A moratorium is in effect along this part of Crown Valley Parkway until 2020.

**Project Status:** Deferred

### Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$450,000
Inspection/Other	\$90,000
<b>Total Project Budget</b>	<b>\$600,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 12

### **Project Name:** South County Pipeline (SCP) Takeout Facility

**Project Location:** Along the South County Pipeline, Mission Viejo, to be determined based on site availability but possibly at Jeronimo Rd & Obrero Dr.

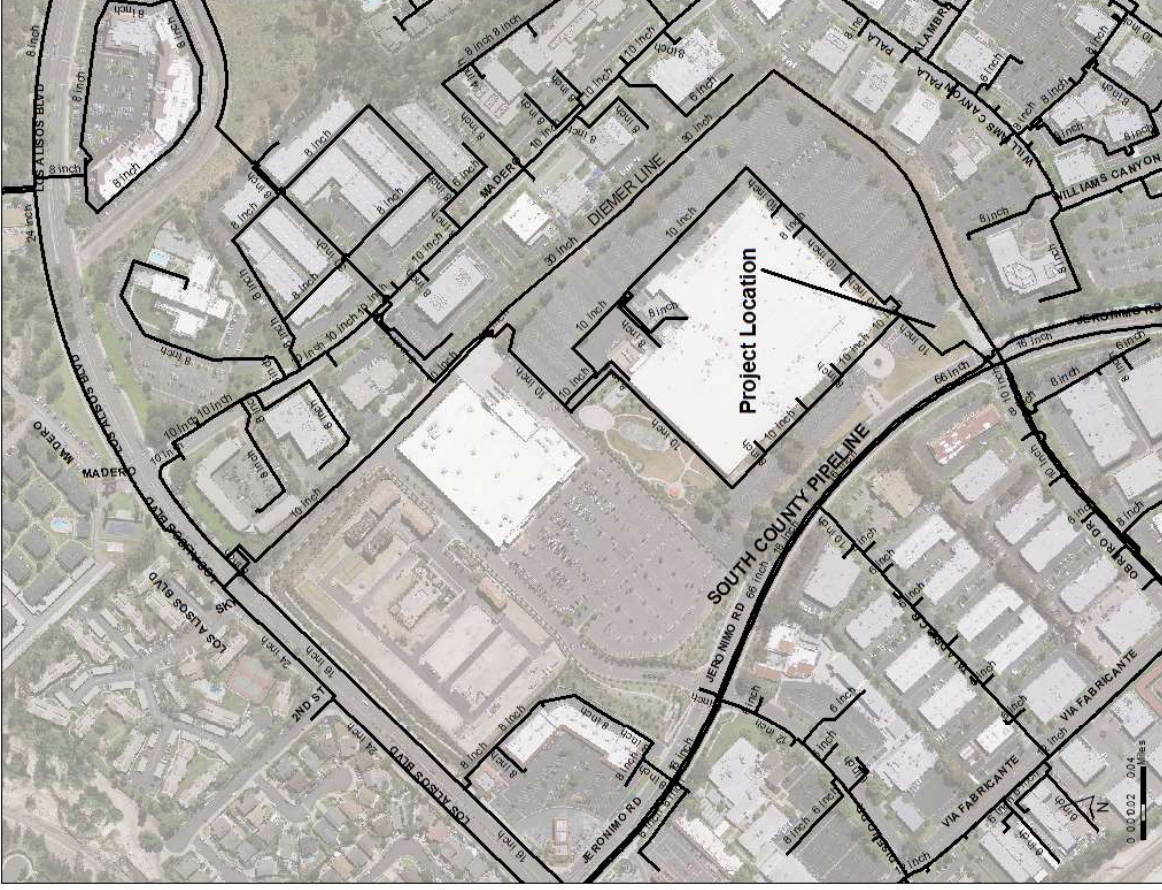
**Project Description:** Identify site, acquire property, design and construct a flow control facility.

**Project Need:** Currently, there is only one takeout facility from the SCP at Oso Parkway and Antonio Parkway. The SCP, at times, provides more than half of the District's potable water supply; and, when the Baker Water Treatment Plant begins delivering water to the District, the SCP will be at times delivering 100% of District's potable water supply. A second flow control facility will provide delivery reliability to the District in case of SCP shutdowns.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$250,000
CEQA Compliance	\$30,000
Construction Contract	\$1,900,000
Inspection	\$20,000
<b>Total Project Budget</b>	<b>\$2,200,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.026

**System:** Potable

**Fund:** 7

### **Project Name:** Rancho Underground Pump Station Refurbishment

**Project Location:** Avenida Del Caballo, Laguna Niguel

**Project Description:** Replacement of existing pumps, motors, valves, and various piping.

**Project Need:** The existing equipment has reached its useful life and requires replacement. Planned development of this area will require that the station be relocated.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$220,000
Inspection/Other	\$5,000
<b>Total Project Budget</b>	<b>\$250,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable

**Fund:** 14

**Project Name:** 2016-2017 New System Valves

**Project Location:** District-wide

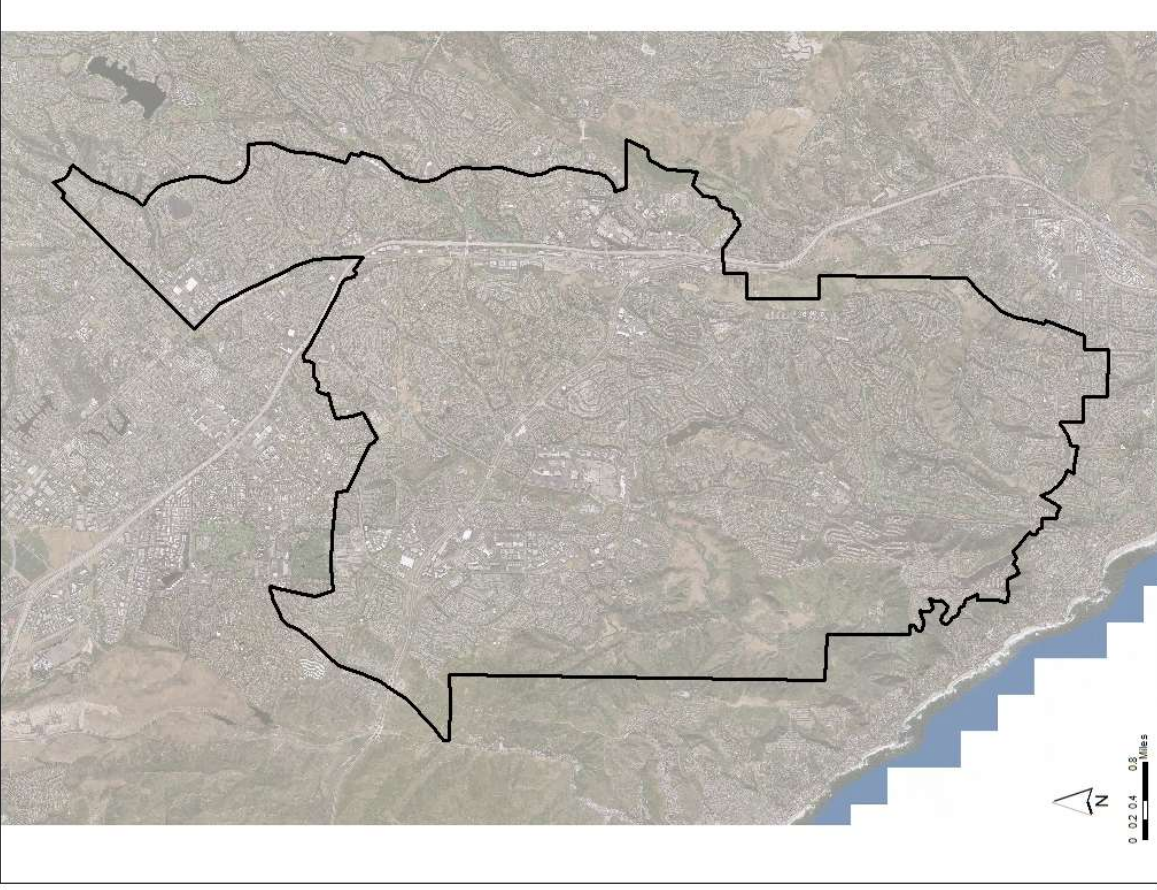
**Project Description:** Install new system valves where required.

**Project Need:** Many of the District's valves have exceeded their useful life and are no longer operating or have increased maintenance requirements. While some of these valves will be replaced as part of the valve replacement program, replacement is not necessarily imminent. During construction projects and emergencies, it occasionally becomes necessary to install new valves in order to isolate portions of the system and complete the work contemplated.

**Project Status:** Proposed Projects

### Estimated Project Amount:

Item	Estimated Cost
Design	\$5,000
CEQA Compliance	Exempt
Geotechnical	\$5,000
Construction Contract	\$85,000
Inspection/Other	\$5,000
<b>Total Project Budget</b>	<b>\$100,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2012.016

**System:** Potable

**Fund:** 7

**Project Name:** Little Niguel Pump Station Roof Replacement

**Project Location:** 30315 Niguel Road, Laguna Niguel

**Project Description:** Replace roof.

**Project Need:** The existing roof is 35-years old and damaged beyond repair with significant cracks.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$18,000
Inspection/Other	\$2,000
<b>Total Project Budget</b>	<b>\$20,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2013.002

**System:** Recycled

**Fund:** 7

**Project Name:** *Mathis Recycled Water Reservoir Re-Coating & Safety Improvements*

**Project Location:** Laguna Hills

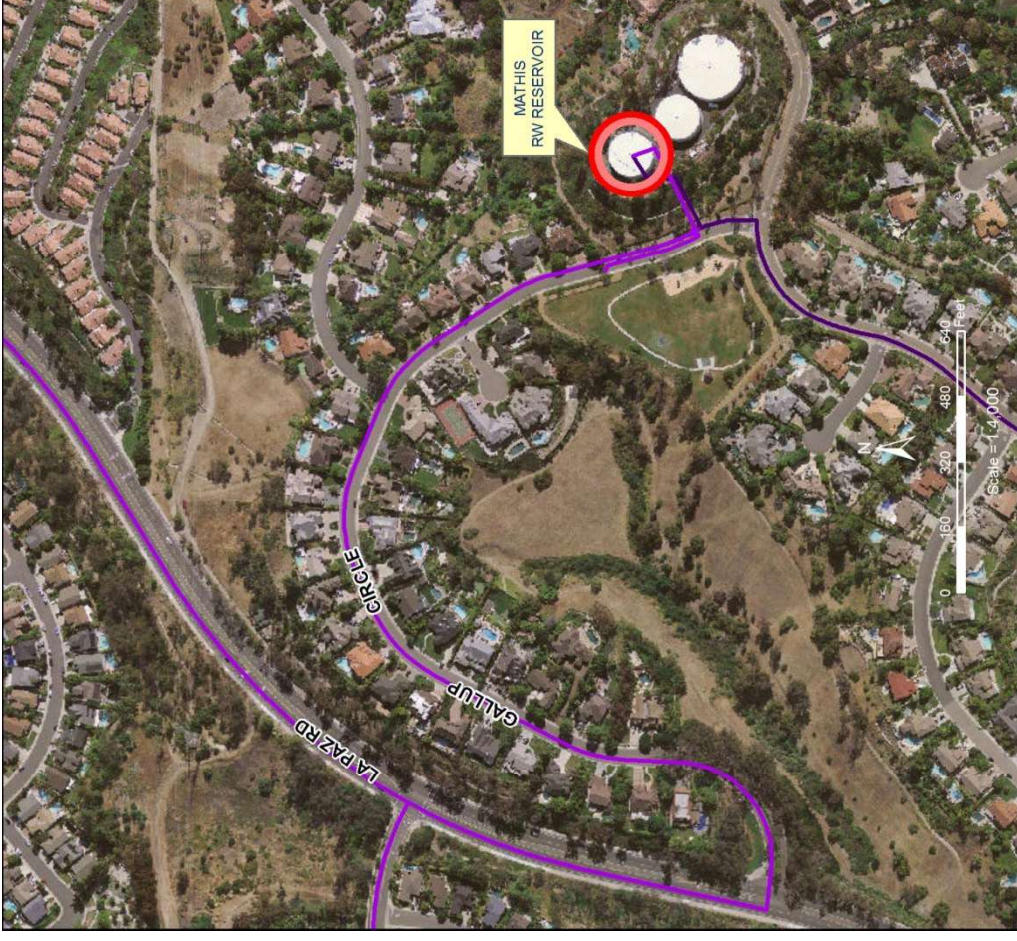
**Project Description:** Re-coat the interior and exterior of Mathis RW Reservoir, construct structural and corrosion repairs, tank operation and safety improvements, and a cathodic protection system. Re-paint the exterior of the Nellie Gail PW Reservoir located at the same site.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed.

**Project Status:** In Construction

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$926,805
Specialty Inspection	\$91,610
Legal & District Labor	\$3,000
<b>Total Project Budget</b>	<b>\$1,036,415</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.011

**System:** Recycled

**Fund:** 12

**Project Name:** *Recycled Water System Extension Project*

**Project Location:** District-wide

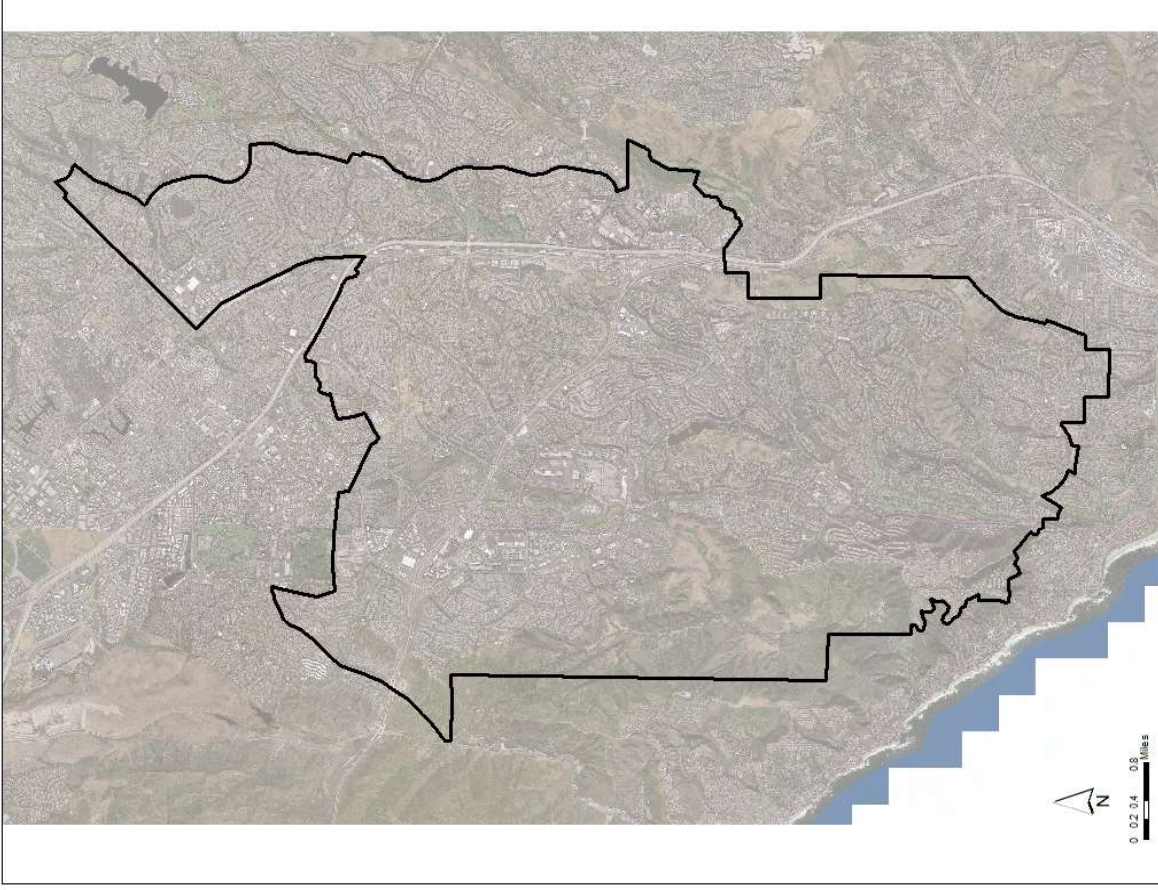
**Project Description:** Perform recycled water mainline extensions required to reach new recycled water service connections and irrigation pumps. Install recycled water services including associated meters.

**Project Need:** The project is located in the Cities of Aliso Viejo, Laguna Hills, and Laguna Niguel. The project will provide 102 acre-feet of recycled water in lieu of potable water. The project will install about 7,500 feet of 8-inch and 6-inch PVC with 32 recycled water services: 12 services in the Laguna Audubon HOA and 20 services in various locations in Laguna Niguel and Aliso Viejo. The total amount of potable water converted to recycled water will be 102 acre-feet per year.

**Project Status:** In construction.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$74,000
CEQA Compliance	\$24,000
Geotechnical	\$60,000
Construction Contract	\$1,913,552
Inspection/Other	\$75,000
<b>Total Project Budget</b>	<b>\$2,146,552</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.017 & 2015.018

**System:** Potable & Recycled

**Fund:** 14

**Project Name:** *Fall Protection System – PW and RW Reservoirs*

**Project Location:** District-wide

**Project Description:** Install cable and anchor fall protection systems which meet Cal/OSHA requirements on top of 23 potable water and 3 recycled water reservoirs.

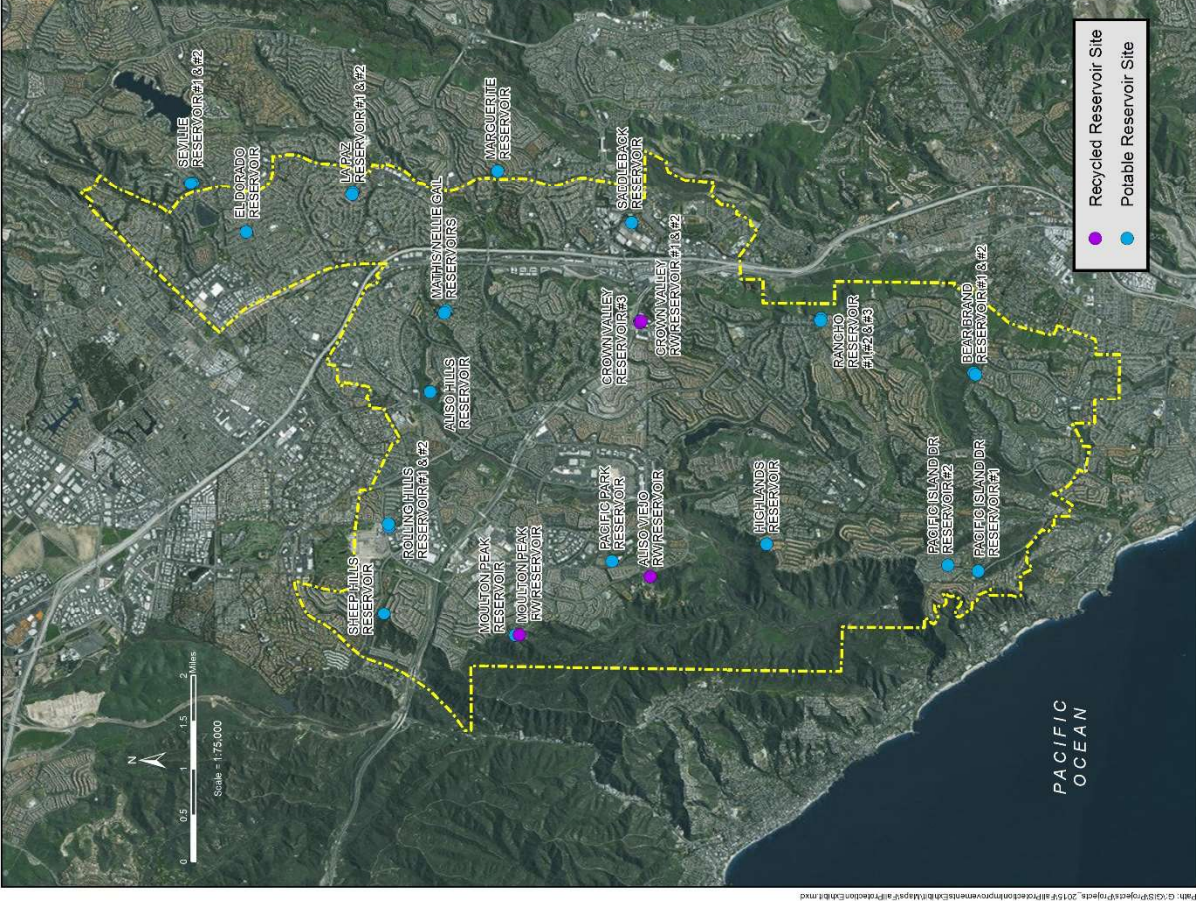
**Project Need:** A fall protection system is required per Cal/OSHA to walk on top of the reservoirs in areas without guardrails. District staff require access to these areas to perform maintenance activities. The 23 potable water and 3 recycled water reservoirs do not currently have full perimeter guardrails and are not scheduled to have guardrails installed by the end of FY16-17.

**Project Status:** In Construction

### Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection	\$5,000
<b>Total Project Budget*</b>	<b>\$280,000</b>

\*Note: \$240,000 related to potable and \$40,000 related to recycled



## **Capital Improvement Program – Project Description**

**Project No:** 2015.019 and 2015.020

**System:** Potable and Recycled

**Fund:** 6

**Project Name:** *AMI Phase I – Potable Irrigation and Recycled Water*

**Project Location:** District-wide

**Project Description:** Phase I of this AMI Implementation Program will expand upon the District’s efforts to promote water use efficiency by establishing a remote reading and communications network, considering acoustic leak detection to detect distribution leaks, and implementing a meter data management system to complement the AMI. The District’s Potable and Recycled Water Irrigation as well as 1,800 residential customers would be provided with access to an interactive AMI customer portal which would provide reliable, secure, and real time access to their water usage data.

**Project Need:** The current recycled water program has required the purchase of make-up potable imported water in previous years, due to increased spikes in peak-hour demand that exceeded the available quantities of recycled water. Additionally, irrigation customers (combined potable and recycled water) utilize over a third of the District’s water demand, and optimizing water use efficiency through AMI’s capabilities would help to minimize water losses and improve customer education. Implementing AMI would assist the District in proactively identifying leaks, assist operations through demand-side

time-of-use management, and benefit the customers by providing tools for monitoring water usage and promoting behavioral changes to optimize their operations in terms of water use efficiency. This project would not only promote water use efficiency, it would serve as a pilot for Phase II of the AMI Implementation Program, which would expand the program to include all 53,600 potable water connections, in addition to the 1,301 recycled water connections and 1,368 potable irrigation connections. It is the goal of the District to fully test and fine-tune the AMI system to maximize the benefits to both the District and its customers prior to implementing the technology District-wide.

**Project Status:** Implementation Phase

**Estimated Project Amount:**

<b>Item</b>	<b>Estimated Cost</b>
Equipment	\$572,000
Software	\$146,000
Training, Installation, and Setup	\$104,000
<b>Total Project Budget*</b>	<b>\$980,000</b>

\* Note: **\$490,000** related to potable and **\$490,000** related to recycled

## Capital Improvement Program – Project Description

**Project No:** 2014.010

**System:** Recycled

**Fund:** 12

### **Project Name:** Aliso Village RW Extension

**Project Location:** South of Aliso Village Shopping Center and north of Laguna Niguel Regional Park, Laguna Niguel

**Project Description:** Install new 6-inch recycled water main from ex. 16" recycled water main in Laguna Niguel Regional Park (north of Sulphur Creek)--approximately 280 linear feet from ex. main to terminus at 2 new services.

**Project Need:** Aliso Village shopping area has been targeted for landscape irrigation recycled water retrofit; project will establish 2 points of connection for recycled water use.

**Project Status:** In design.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contracts	\$90,000
Inspection/Other	\$15,000
Other Conversions	\$100,000
<b>Total Project Budget</b>	<b>\$230,000</b>



Aliso Village RW Extension

## Capital Improvement Program – Project Description

**Project No:** 2015.004

**System:** Recycled

**Fund:** 7

**Project Name:** *Crown Valley Recycled Water Reservoirs 1 and 2 Re-Coating & Safety Improvements*

**Project Location:** Laguna Niguel

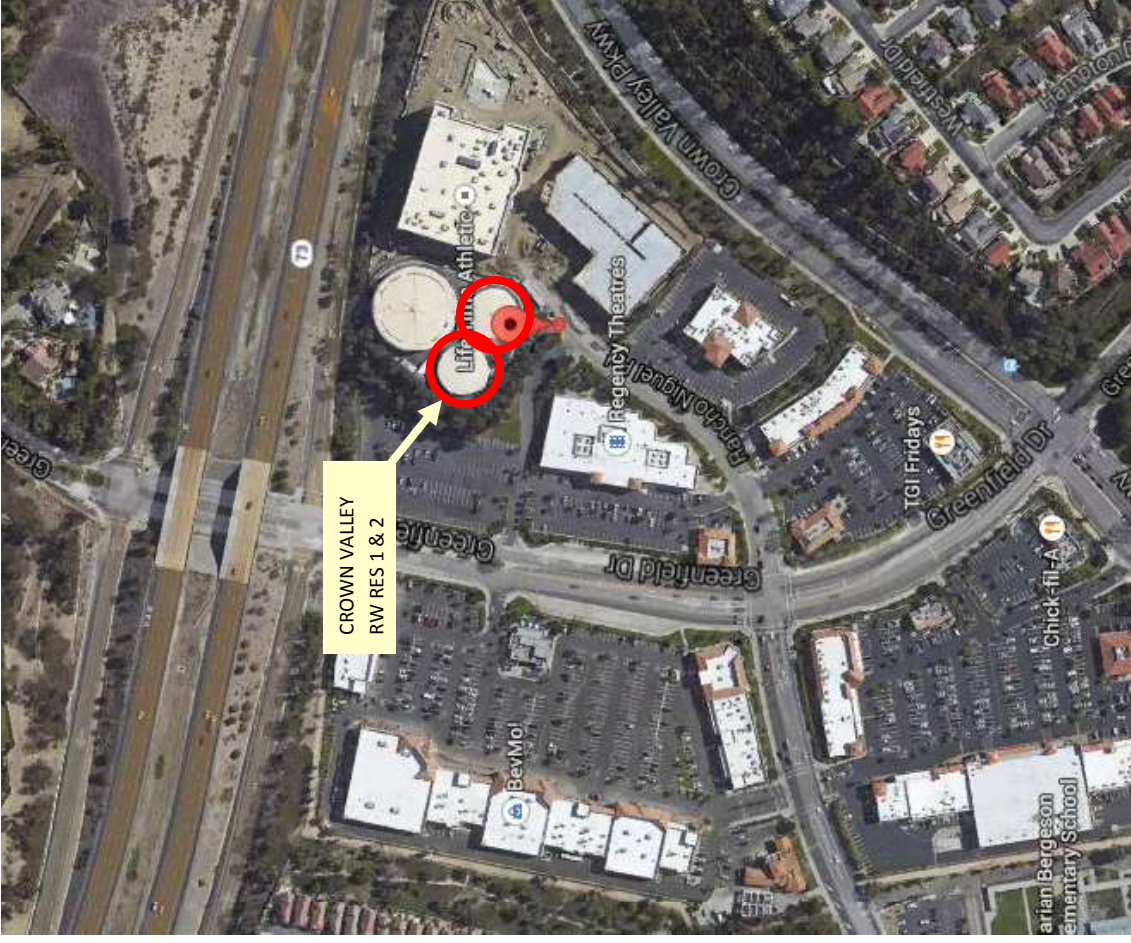
**Project Description:** Re-coat the interior and exterior of steel reservoirs and construct safety improvements as recommended in Harper & Associates' assessment report and the Steel Tank assessment Final Report.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed.

**Project Status:** In Design

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$1,440,000
Inspection/Other	\$120,000
<b>Total Project Budget</b>	<b>\$1,600,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable and Recycled

**Fund:** 7

**Project Name:** Crown Valley Community Park Relocation

**Project Location:** Crown Valley Parkway, Laguna Niguel

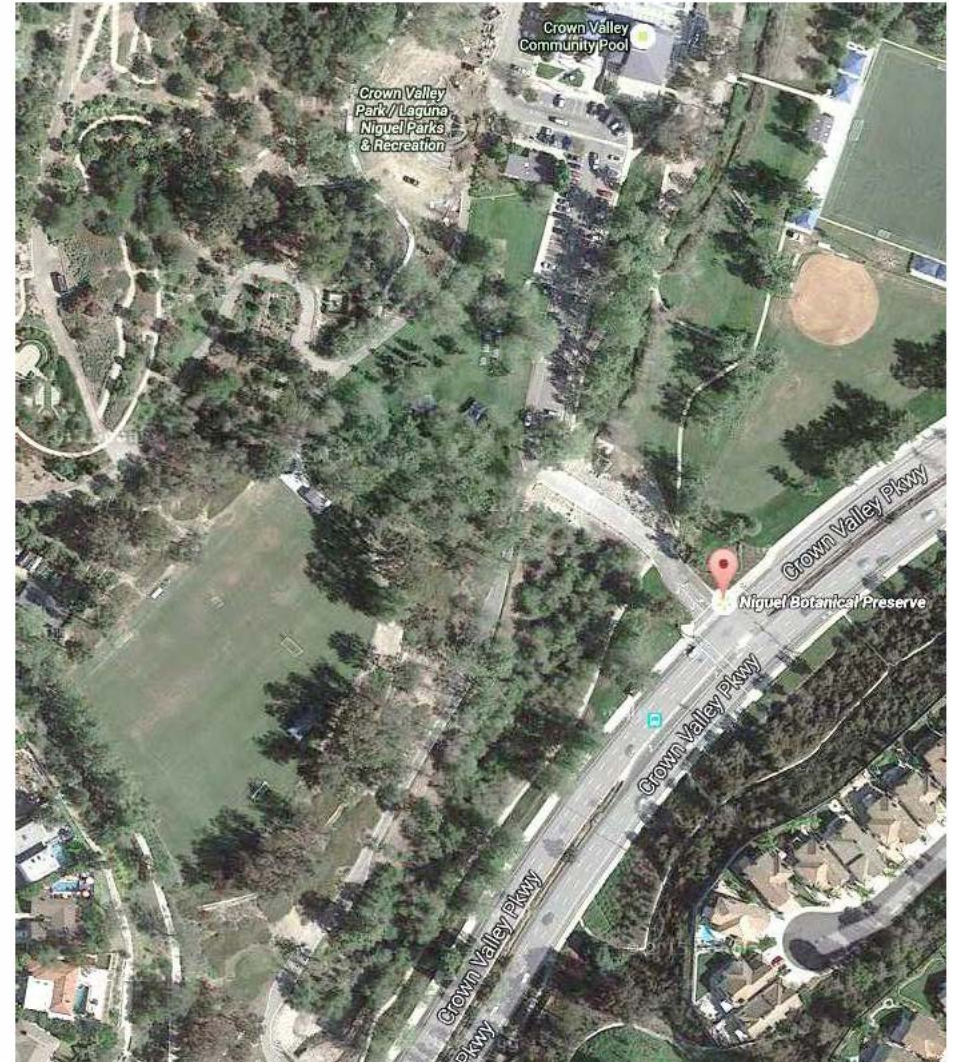
**Project Description:** Remove existing potable and recycled water main crossing the existing DIP crossing to the Crown Valley Community Park; Install approximately 650 linear feet of potable main and 450 linear feet of recycled water main to the new bottomless arch culvert crossing. Convert the existing city botanical garden to recycled water. Project management provided by City staff; District will reimburse the City for expenses related to District facilities.

**Project Need:** The City of Laguna Niguel is reconfiguring the entrance to the Crown Valley Community Park, removing the existing DIP crossing where water and recycled water mains are currently located. Existing pipelines must be relocated to the new crossing. Conversion of the City's botanical garden to recycled water will also be included, reducing potable irrigation demands.

**Project Status:** Design

### Estimated Project Amount:

Item	Estimated Cost
Design	--
CEQA Compliance	--
Geotechnical	--
Construction	\$310,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$325,000</b>



**Note:** \$117,000 is attributable to the potable water system and \$208,000 to the recycled water system.

## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Recycled

**Fund:** 7

**Project Name:** Valve Replacement Program – RW Program

**Project Location:** District-wide

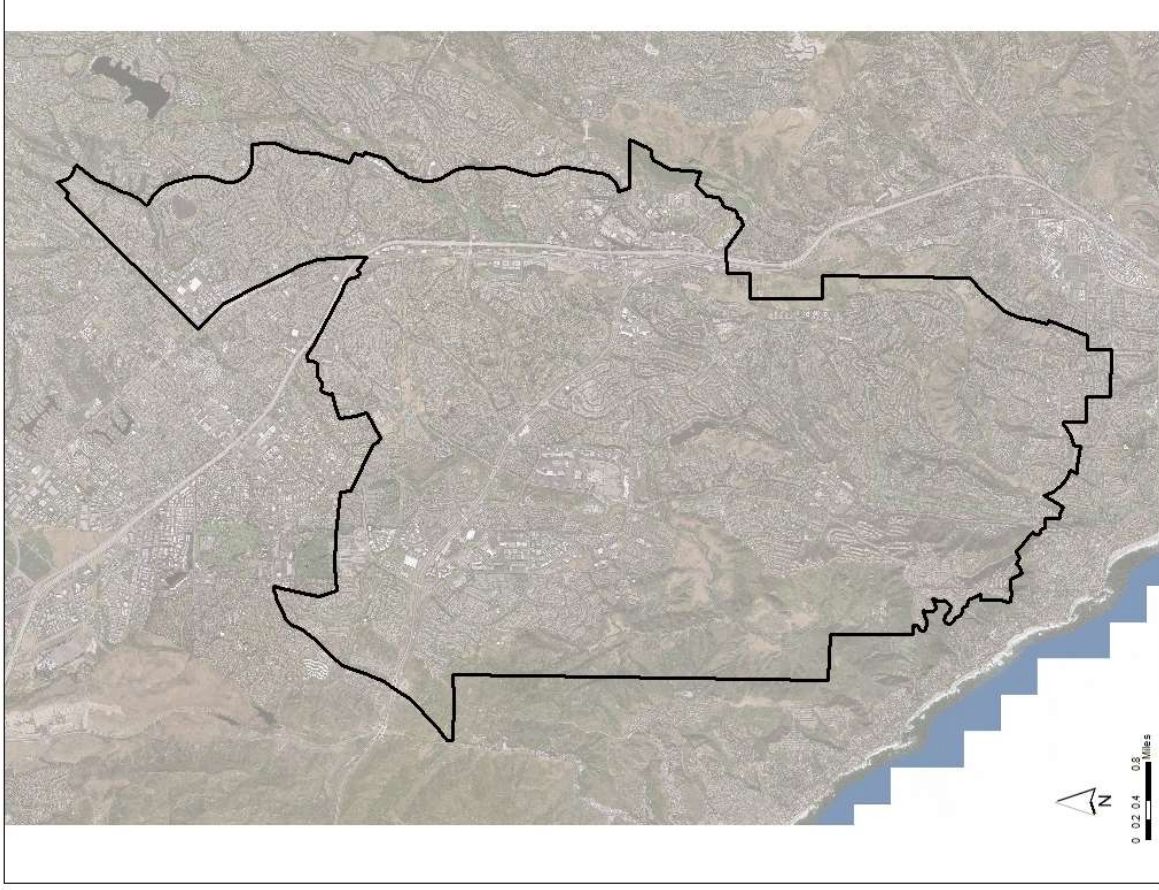
**Project Description:** Replace failed valves.

**Project Need:** The District has approximately 1,000 systems valves in the recycled water system. These valves are used to isolate sections of pipe in the event of planned and emergency repairs and connections. A systemwide valve replacement program study was completed in January 2016. The study recommends 140 critical valves to be replaced. This program will replace approximately 60% of those valves. These critical valves are prioritized to reduce the quantity of customers required to be taken out of service during future pipeline repair and connections. They include valves on major and minor distribution loops, those supplying large users (i.e. golf courses), and long pipes that are not looped.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$1,000,000
Inspection/Other	\$50,000
Construction by District	\$450,000
<b>Total Project Budget</b>	<b>\$1,600,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Recycled

**Fund:** 12

**Project Name:** *Recycled Water Retrofits*

**Project Location:** District-wide

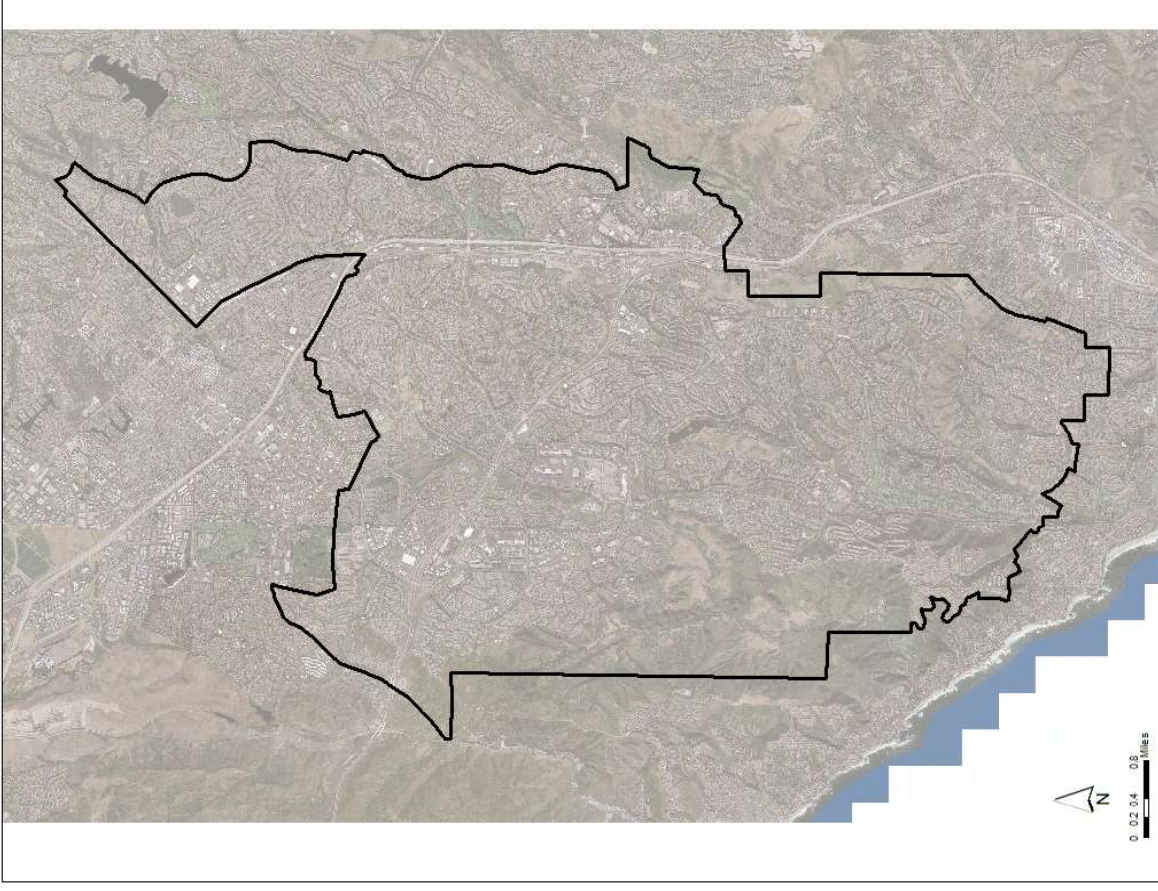
**Project Description:** Install recycled water service connection and irrigation pumps.

**Project Need:** The District is continuously evaluating irrigation sites for conversion to recycled water. When a viable site is identified, this project is used to install the recycled water service and abandon the potable service. In addition, on occasion the recycled water service is in a lower pressure zone than the existing potable service. The District installs an irrigation pump to provide the customer with similar service pressure as experienced on the potable system. This project occurs on an annual basis.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection	\$100,000
<b>Total Project Budget</b>	<b>\$450,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Recycled

**Fund:** 7

**Project Name:** Reservoir Recoating Program – RW Program

**Project Location:** District-wide

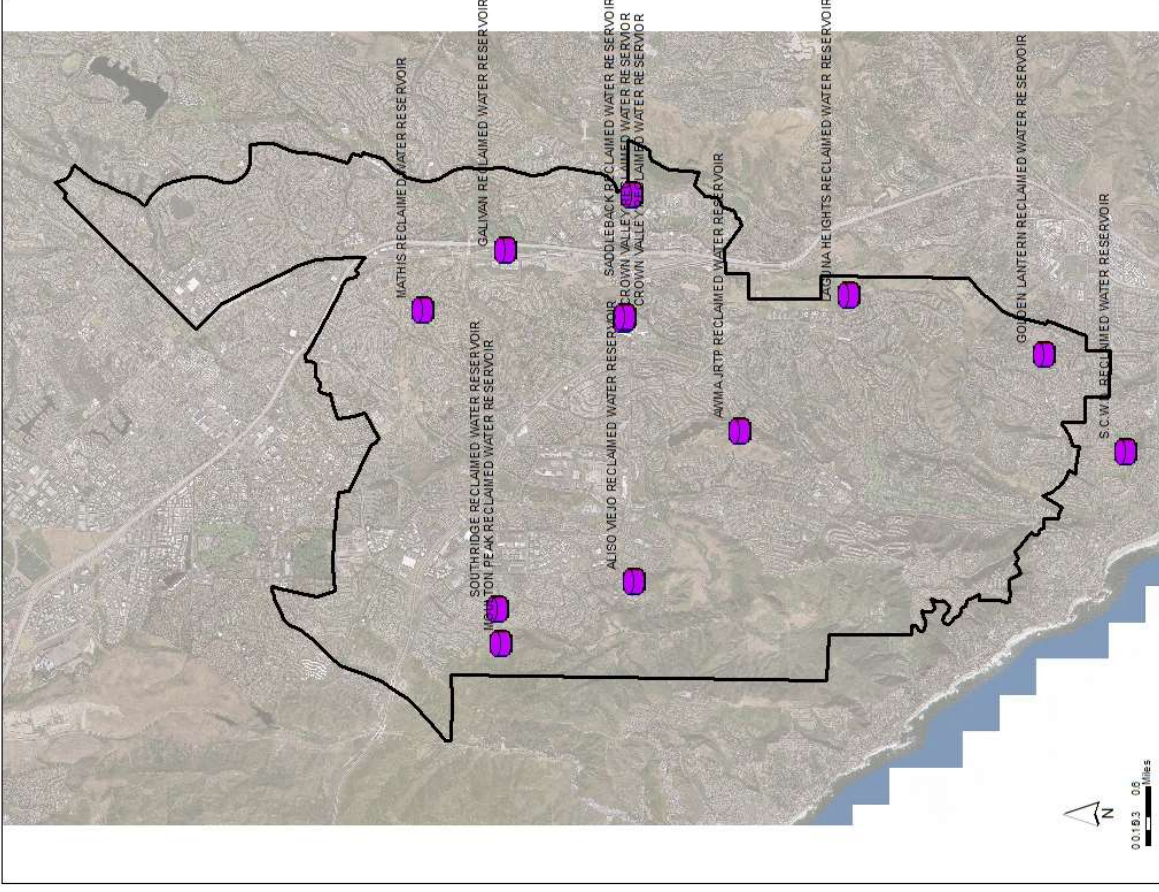
**Project Description:** Recoat the interior and exterior of six steel reservoirs in the recycled system.

**Project Need:** Steel reservoirs are coated to prevent oxidation of the steel shell. The life expectancy of a coating system is between 15 to 20 years. The District inspects each reservoir every 10 years to determine if and when recoating is needed. This project addresses the periodic nature of this activity for this asset group.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$70,000
CEQA Compliance	Exempt
Construction Contract	\$2,600,000
Inspection	\$300,000
<b>Total Project Budget</b>	<b>\$2,970,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Recycled

**Fund:** 7

**Project Name:** *Recycled Water Projects per Asset Management Model*

**Project Location:** District-wide

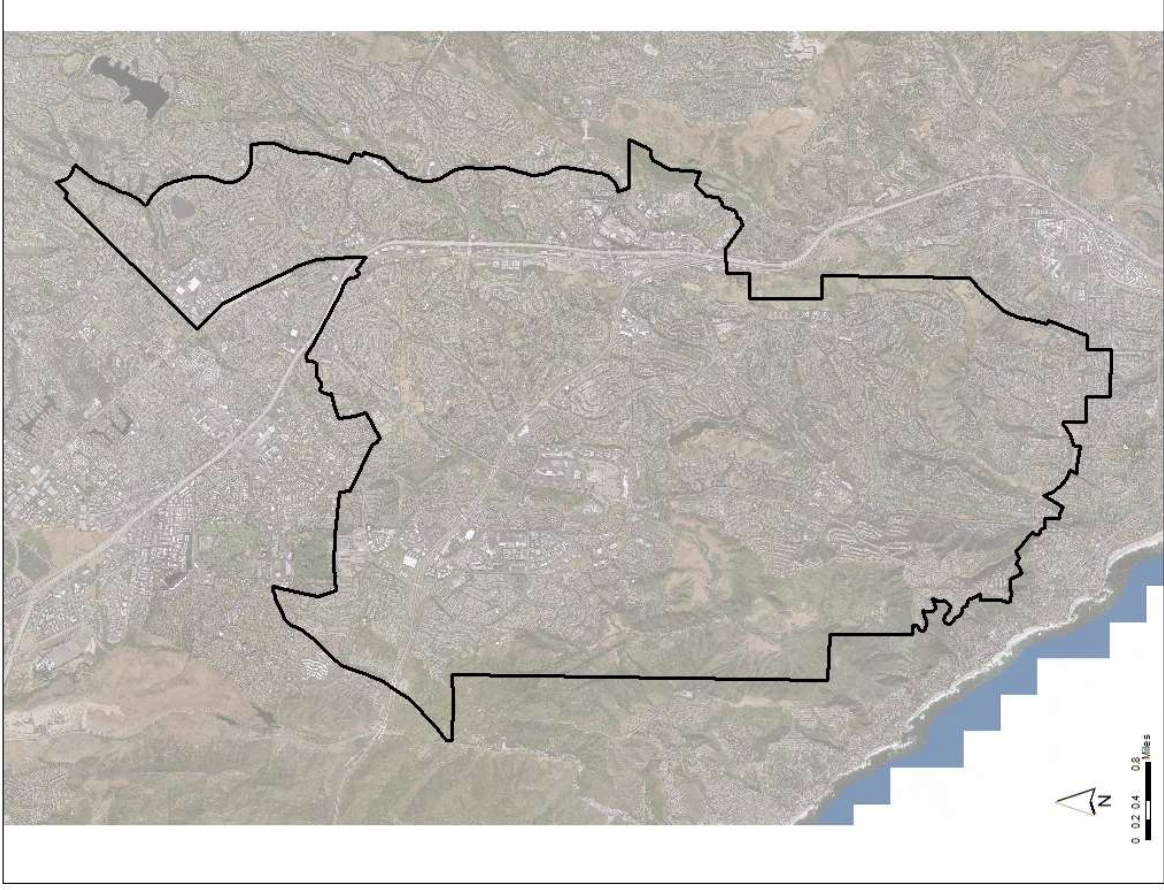
**Project Description:** Implement replacement and rehabilitation (R&R) projects utilizing funds identified as a minimum investment in the asset management model. These funds are a placeholder for actual projects and are distributed to R&R project in the corresponding fiscal year.

**Project Need:** In 2003, the District, through a consultant, developed an R&R planning model. The model was developed to obtain planning level funding needs to replace and rehabilitate District facilities. The model will be updated over the next few months and the estimated costs will be adjusted accordingly.

**Project Status:** Proposed, annual program- when individual projects are identified, funds are transferred to the specific project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	TBD
CEQA Compliance	TBD
Construction Contract	TBD
Inspection	TBD
<b>Total Project Budget</b>	<b>\$4,500,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Recycled

**Fund:** 7

**Project Name:** Service Section and MCC Replacement Program (Recycled)

**Project Location:** District-wide

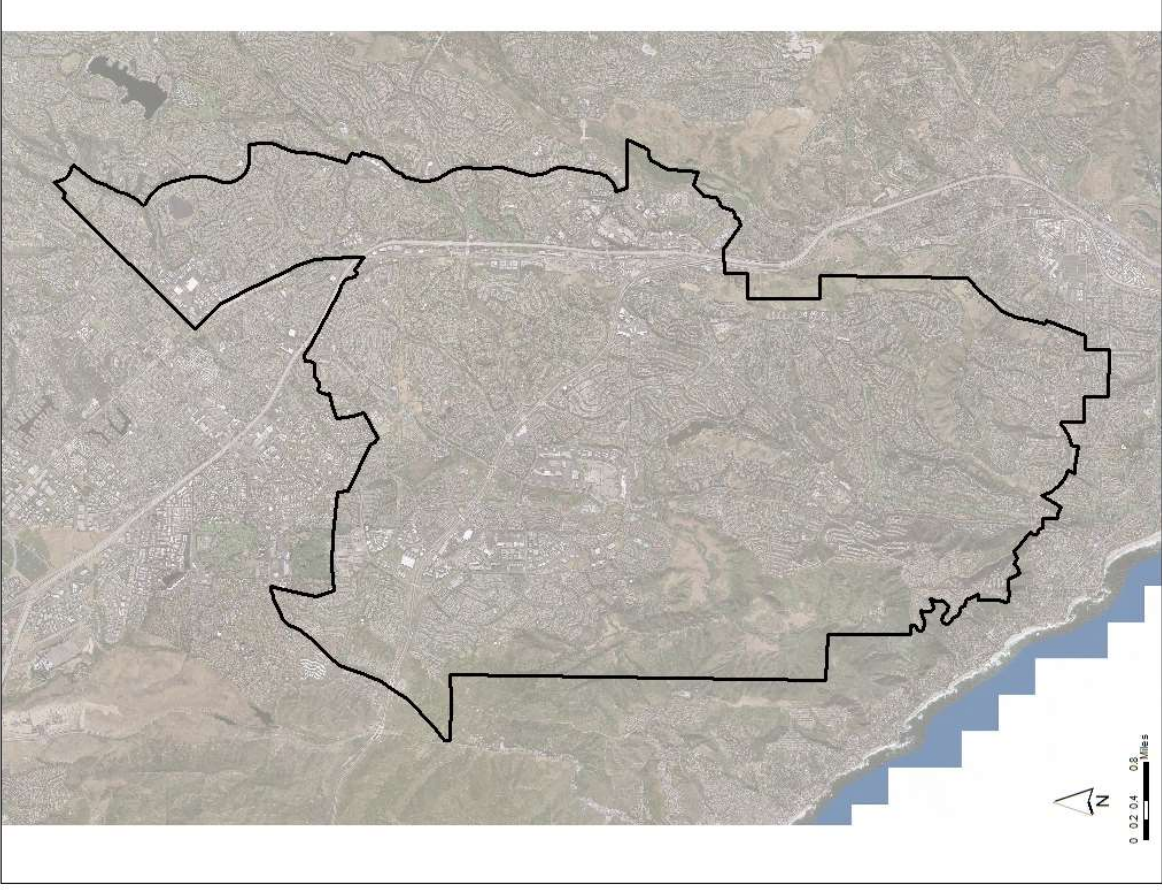
**Project Description:** Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

**Project Need:** The District has approximately forty-five (45) 480-volt 3-phase utility services, each with motor control centers and related distribution equipment. As the equipment reaches the end of its useful life, it requires replacement. Equipment age is generally between 15 years old and 50 years old. Over the next 10 years, approximately twelve (12) replacements will be required (6 related to potable stations, 2 related to recycled water stations, and 4 related to sewer lift stations).

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$600,000
Inspection	\$40,000
<b>Total Project Budget</b>	<b>\$700,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Recycled

**Fund:** 12

**Project Name:** Trampas Reservoir Capacity Acquisition

**Project Location:** Near Ortega Highway at Rancho Mission Viejo Development

**Project Description:** This project would acquire between 500 and 1,000 acre-feet of recycled water storage capacity in Santa Margarita Water District's Trampas Reservoir.

**Project Need:** This project would allow the District to capture and store available recycled water during low demand periods (winter) so that it can be used during high demand periods (summer).

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	TBD
CEQA Compliance	TBD
Construction Contract	TBD
Inspection	TBD
<b>Total Project Budget</b>	<b>\$15,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Recycled

**Fund:** 12

**Project Name:** RW Expansion Phase V

**Project Location:** Various locations throughout the District's service area

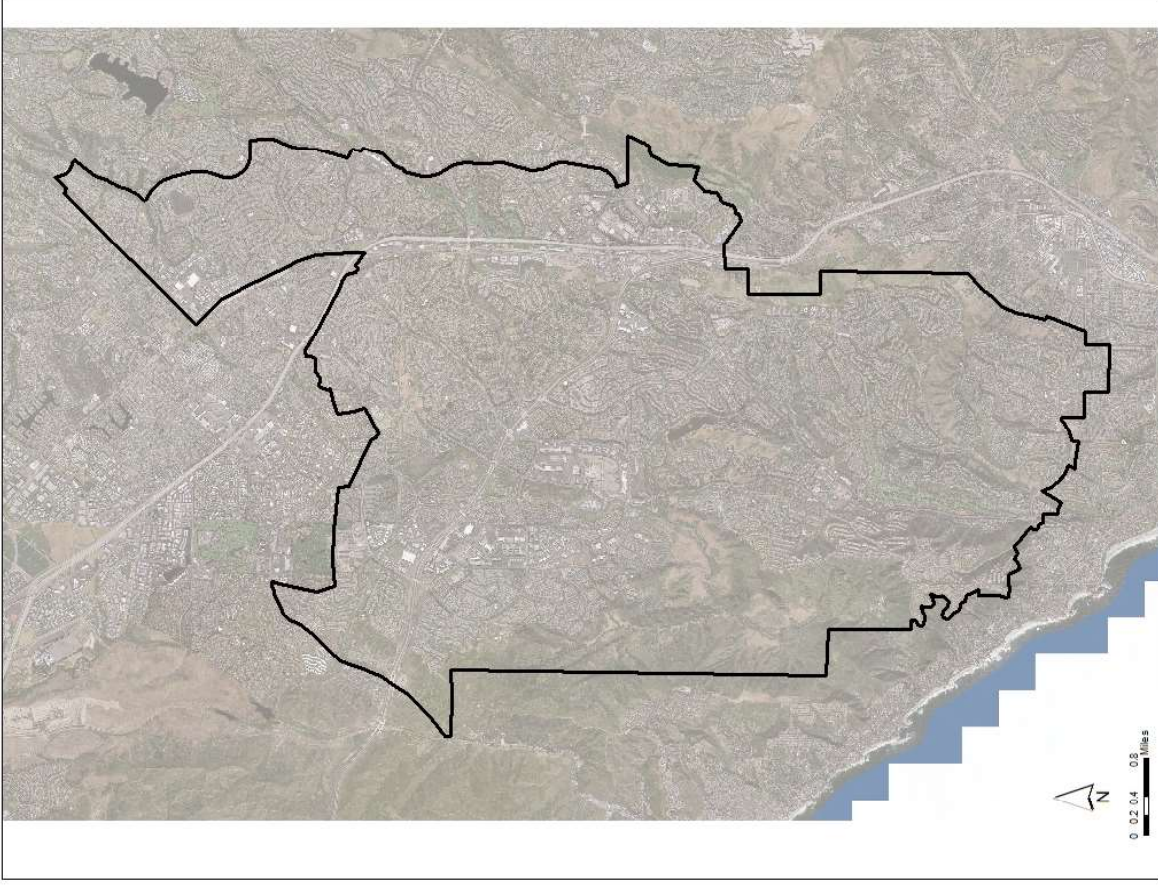
**Project Description:** The District is currently in the process of preparing a masterplan for its recycled water system. This masterplan will recommend various recycled water system projects throughout the District's service area. These projects will vary in nature and will be constructed over multiple years.

**Project Need:** Individual project needs will be described in the recycled water masterplan. In general, the projects will be constructed to improve the district-wide management of recycled water, including storage and distribution.

**Project Status:** Proposed Projects

### Estimated Project Amount:

Item	Estimated Cost
Designs	TBD
CEQA Compliance	TBD
Construction Contracts	TBD
Inspections/Other	TBD
<b>Total Project Budget</b>	<b>\$35,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** RW

**Fund:** 7

**Project Name:** Oakgrove Drive RW Pipeline Replacement

**Project Location:** Oakgrove Drive, Aliso Viejo Sectional page C-17

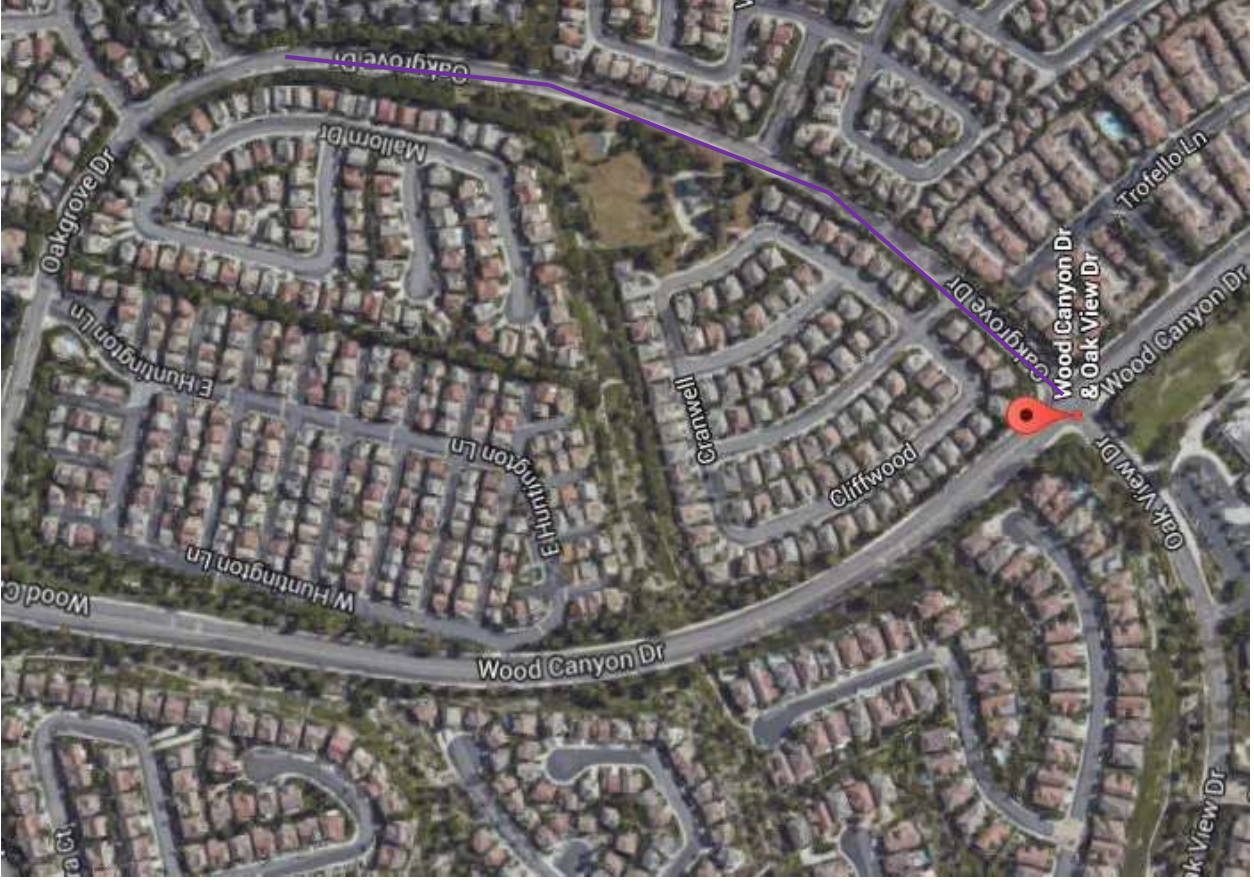
**Project Description:** Remove and replace approximately 1,500 linear feet of 8-inch DIP recycled water main. Replace all valves along the main.

**Project Need:** Numerous pipeline failures within reach.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance Exempt	
Geotechnical	\$15,000
Construction Contract	\$450,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$525,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2010.013

**System:** Recycled

**Fund:** 12

### **Project Name:** La Paz Road Bridge Crossing Recycled Water Pipeline

**Project Location:** La Paz Road between Muirlands Boulevard and Chrisanta Drive, Mission Viejo

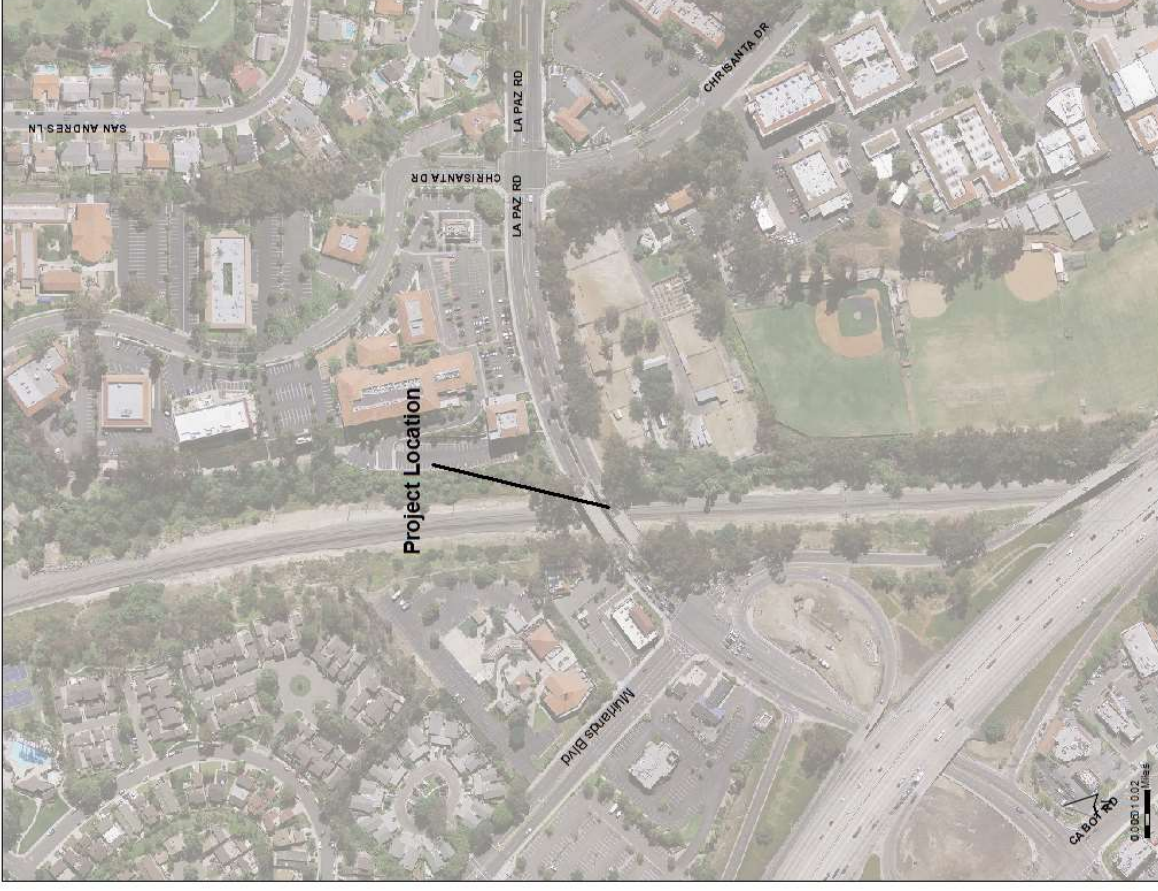
**Project Description:** Construct approximately 1,200 feet of 12-inch recycled water main in La Paz Road while the City of Mission Viejo is constructing its widening of the La Paz Road Bridge.

**Project Need:** The recycled water system has a gap in the 650 zone. The construction of the pipeline will connect the Mission Viejo and Laguna Hills systems together. The timing to construct the project as part of the City's bridge widening is a cost benefit to the District.

**Project Status:** Deferred

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$115,000
CEQA Compliance	City Project
Construction Contract	\$300,000
Inspection	\$20,000
<b>Total Project Budget</b>	<b>\$435,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Recycled

**Fund:** 14

**Project Name:** *Galivan Bypass Improvements*

**Project Location:** Galivan RW Pump Station; 26724 Camino Capistrano Laguna Hills; Sectional Page I-15

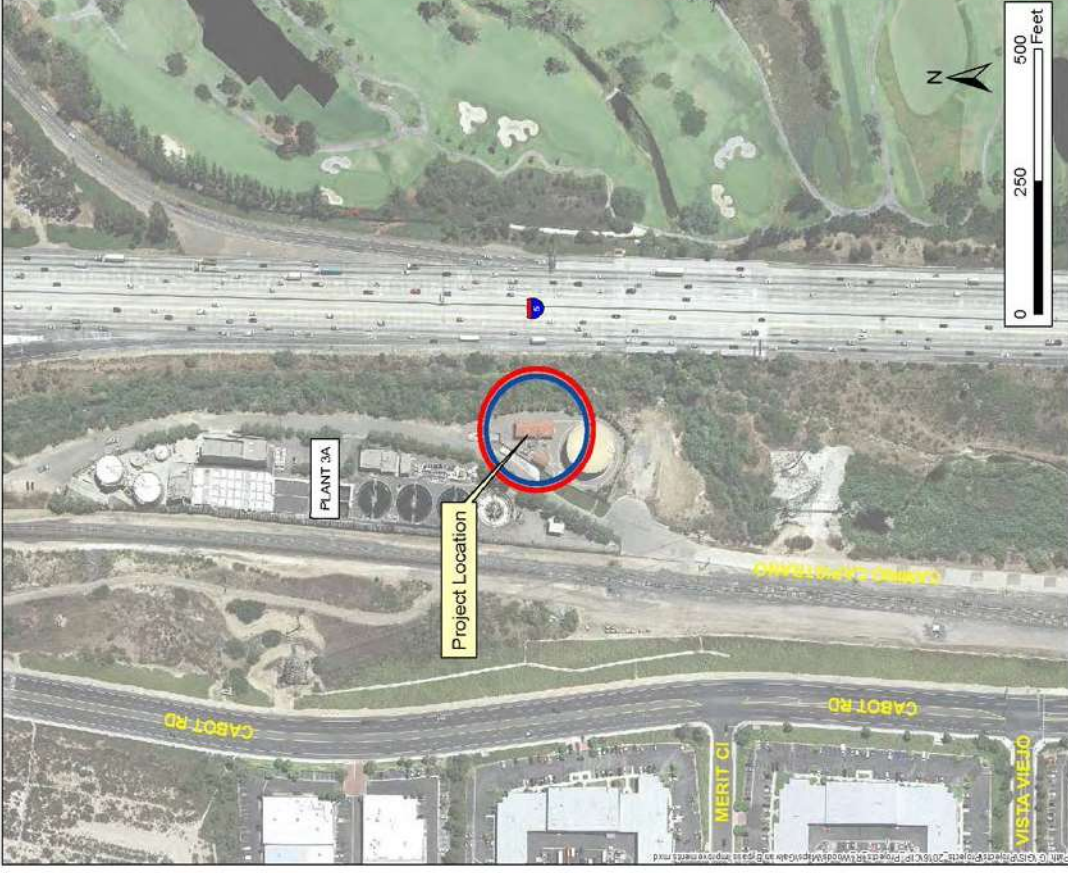
**Project Description:** Upsizing existing 3” bypass line and existing hydraulically controlled PRV inside station; also, installation of isolation valves near property line.

**Project Need:** Provides a second feed into our 450 zone by utilizing 650 zone water that can be fed from Upper Oso via our connection at Via Noveno. This would add flexibility to pull back from Upper Oso during peak summertime demands.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$150,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$175,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Recycled

**Fund:** 7

**Project Name:** *Steel Tanks Seismic and Structural Retrofit (Recycled)*

**Project Location:** District-Wide

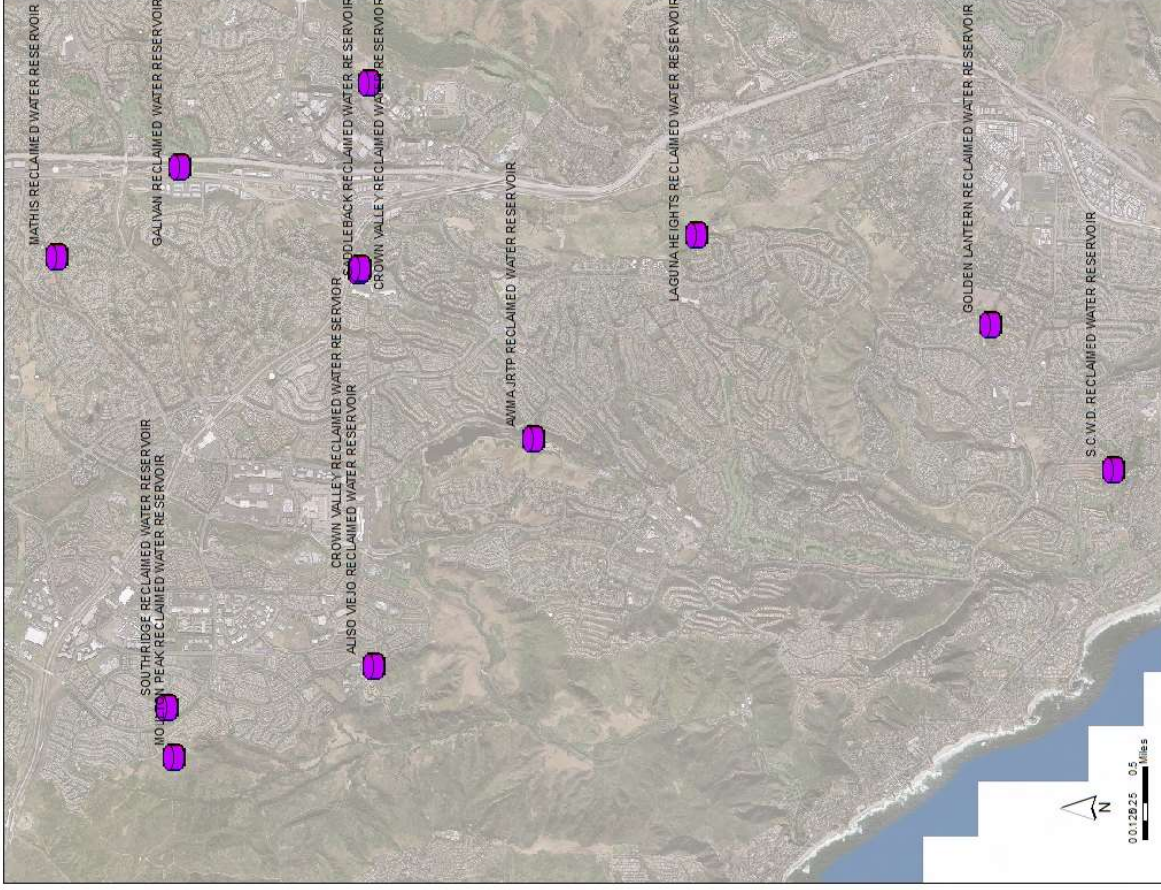
**Project Description:** Construct the recommendations from Project No. 2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

**Project Need:** Project No. 2011.014 evaluated all the District's steel tanks for seismic, structural, and safety conditions. This is a multi-year program to bring the tanks to current standards.

**Project Status:** Proposed Projects

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$10,000
CEQA Compliance	Exempt
Construction Contract	\$180,000
Inspection	\$10,000
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Recycled

**Fund:** 7

**Project Name:** *Laguna Niguel Regional Park RW Vault Reconfiguration*

**Project Location:** La Paz Road Entrance to Laguna Niguel Regional Park

**Project Description:** This project would clear existing vegetation, reconfigure the existing 3-rail fencing, and reconfigure/replace existing valving at the recycled water meter vault.

**Project Need:** As currently configured, the District’s recycled water meter Vault is not accessible due to existing fencing and landscaping. In addition, the isolation valves need to be replaced.

**Project Status:** Proposed project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	\$25,000
Construction Contract	\$75,000
Inspection/Other	\$25,000
<b>Total Project Budget</b>	<b>\$150,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2016-TBD

**System:** Recycled

**Fund:** 12

**Project Name:** 2016-17 Recycled Water Retrofits

**Project Location:** District-wide

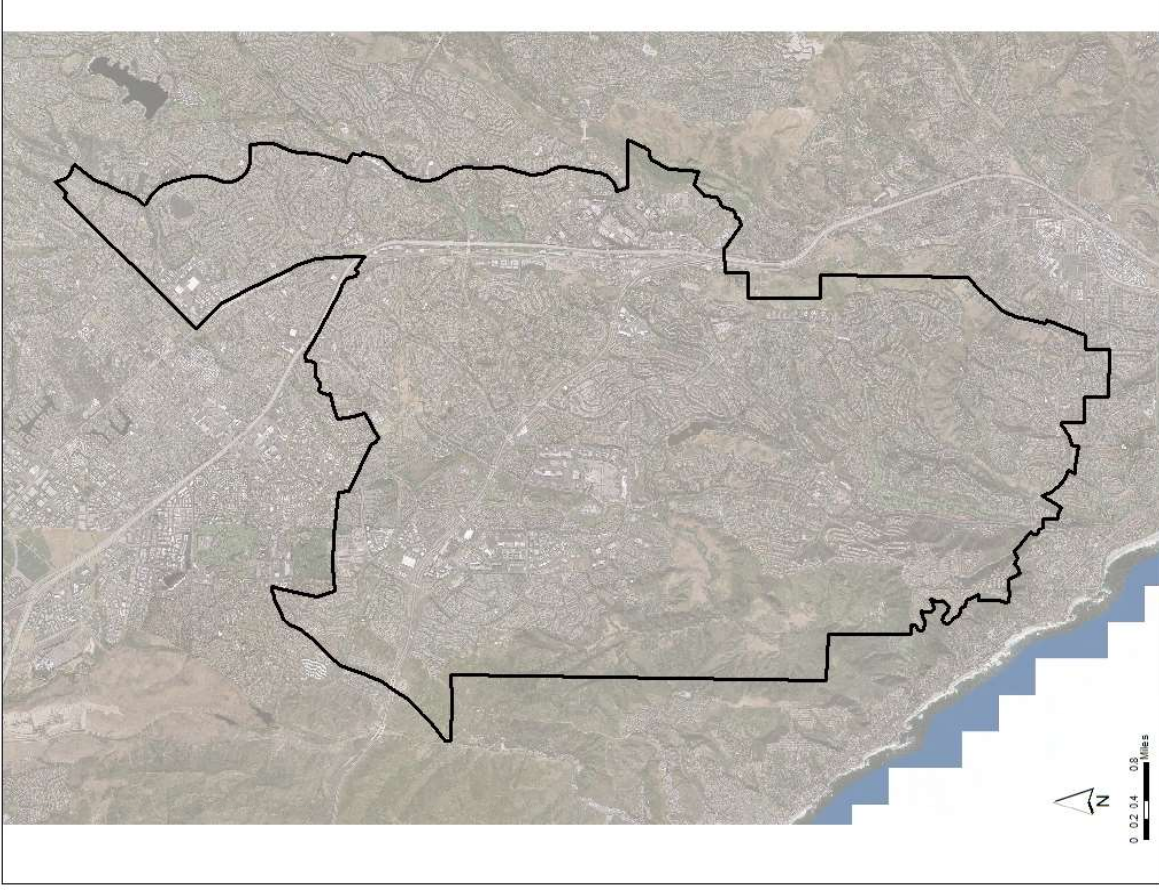
**Project Description:** Install recycled water service connection and irrigation pumps.

**Project Need:** The District is continuously evaluating irrigation sites for conversion to recycled water. When a viable site is identified, this project is used to install the recycled water service and abandon the potable service. In addition, on occasion the recycled water service is in a lower pressure zone than the existing potable service. The District installs an irrigation pump to provide the customer with similar service pressure as experienced on the potable system. This project occurs on an annual basis.

**Project Status:** Proposed Project, 2016-2017 program – when individual projects are identified funds are transferred to the specific project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contracts	\$45,000
Inspection	\$5,000
<b>Total Project Budget</b>	<b>\$50,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2009.115

**System:** Wastewater

**Fund:** 7

**Project Name:** *San Juan Creek 30-Inch Effluent TM*

**Project Location:** San Juan Creek, City of San Juan Capistrano

**Project Description:** Protect 30-inch effluent transmission main crossing (San Juan Creek) from the east bank to the tie-in with the Chiquita outfall. A new 30-inch crossing will be constructed via micro tunneling.

**Project Need:** The Plant 3A effluent transmission main, within the San Juan Creek, is exposed and is not protected from potentially damaging rain storm events.

**Project Status:** In construction.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$150,000
CEQA Compliance	\$50,000
Geotechnical	\$50,000
Construction Contract	\$3,356,298
CM/Inspection/Permits/Other	\$619,756
<b>Total Project Budget</b>	<b>\$4,226,054</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.005

**System:** Wastewater

**Fund:** 7

**Project Name:** *Utility Main Breakers Replacements*

**Project Location:** Lower Salada / Aliso Creek Lift Stations

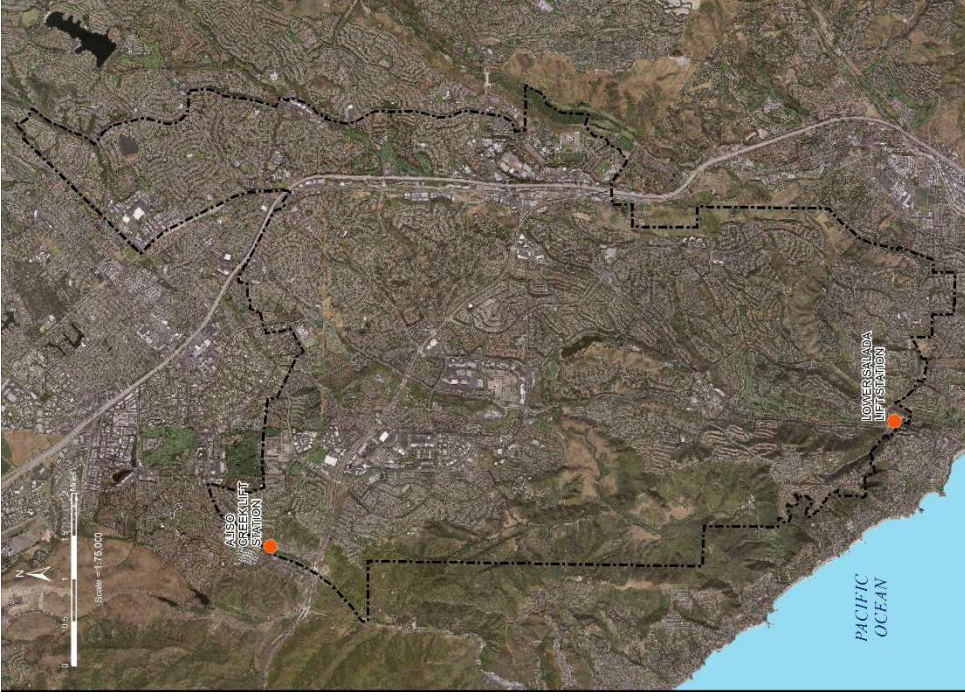
**Project Description:** Replace obsolete utility service sections. Perform miscellaneous code updates and extended maintenance on switchgear. Replacement sections will have Thermal Magnetic Breakers in lieu of fused disconnects. This project will require approximately 1 week of bypass pumping.

**Project Need:** The breakers need to be replaced in order to comply with NFPA70e requirements. Moreover, replacement breakers will require less maintenance. Lower Salada and Aliso Creek were deemed high priority because they are sewage lift stations.

**Project Status:** In construction.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$139,700
Inspection/Other	\$37,000
<b>Total Project Budget</b>	<b>\$216,700</b>



*Lower Salada and Aliso Creek LS*

## Capital Improvement Program – Project Description

**Project No:** 2012.024

**System:** Wastewater

**Fund:** 7

**Project Name:** *Upper Salada Lift Station Auxiliary Generator Replacement*

**Project Location:** 31447 Niguel Road, Laguna Niguel

**Project Description:** Replace existing natural gas generator with an AQMD compliant emergency standby diesel generator.

**Project Need:** The existing generator is fueled by natural gas. The natural gas source is piped to the site from an SDG&E pipeline. In case of gas supply interruptions or natural disasters an on-site fuel supply is needed for this critical facility. An emergency standby diesel generator with a fuel tank will achieve this requirement. Due to current site constraints, the project will require significant grading and property acquisition.

**Project Status:** In design.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA Compliance	Exempt
Geotechnical	\$30,000
Construction Contract	\$700,000
Inspection/Other	\$20,000
<b>Total Project Budget</b>	<b>\$850,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2013.004

**System:** Wastewater

**Fund:** 7

### **Project Name:** Regional Lift Station Force Main Replacement

**Project Location:** Laguna Niguel Regional Park, Laguna Niguel

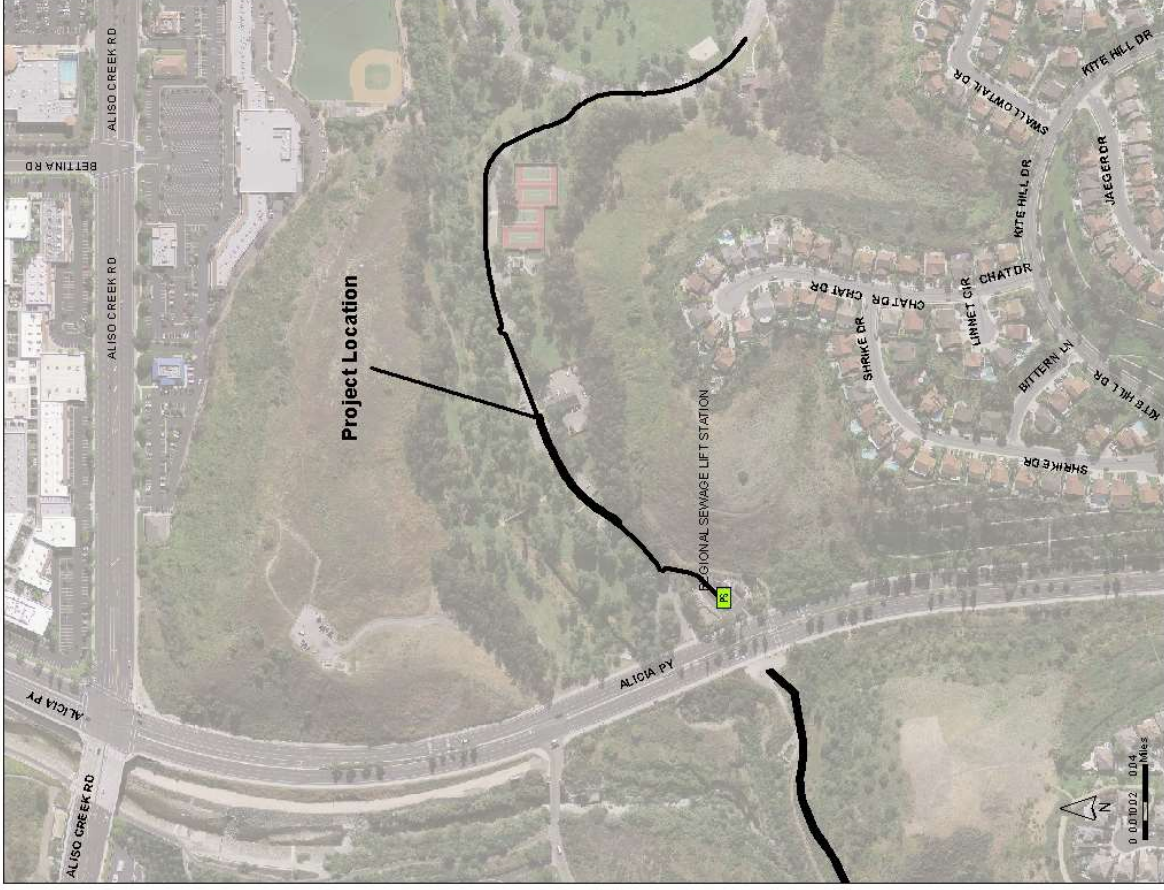
**Project Description:** Abandon existing 20” and 24” Techite force mains and construct new parallel 24-inch force mains. Approximate length of new force mains is 9,200 linear feet each.

**Project Need:** The existing force mains are deteriorated beyond repair and need to be reconstructed.

**Project Status:** In design.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$600,000
CEQA Compliance	\$500,000
Construction Contract	\$7,200,000
Inspection/Other	\$600,000
<b>Total Project Budget</b>	<b>\$8,900,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2013.005

**System:** Wastewater

**Fund:** 7

**Project Name:** Lower Salada Lift Station Force Main Replacement

**Project Location:** Crown Valley Parkway, Laguna Niguel

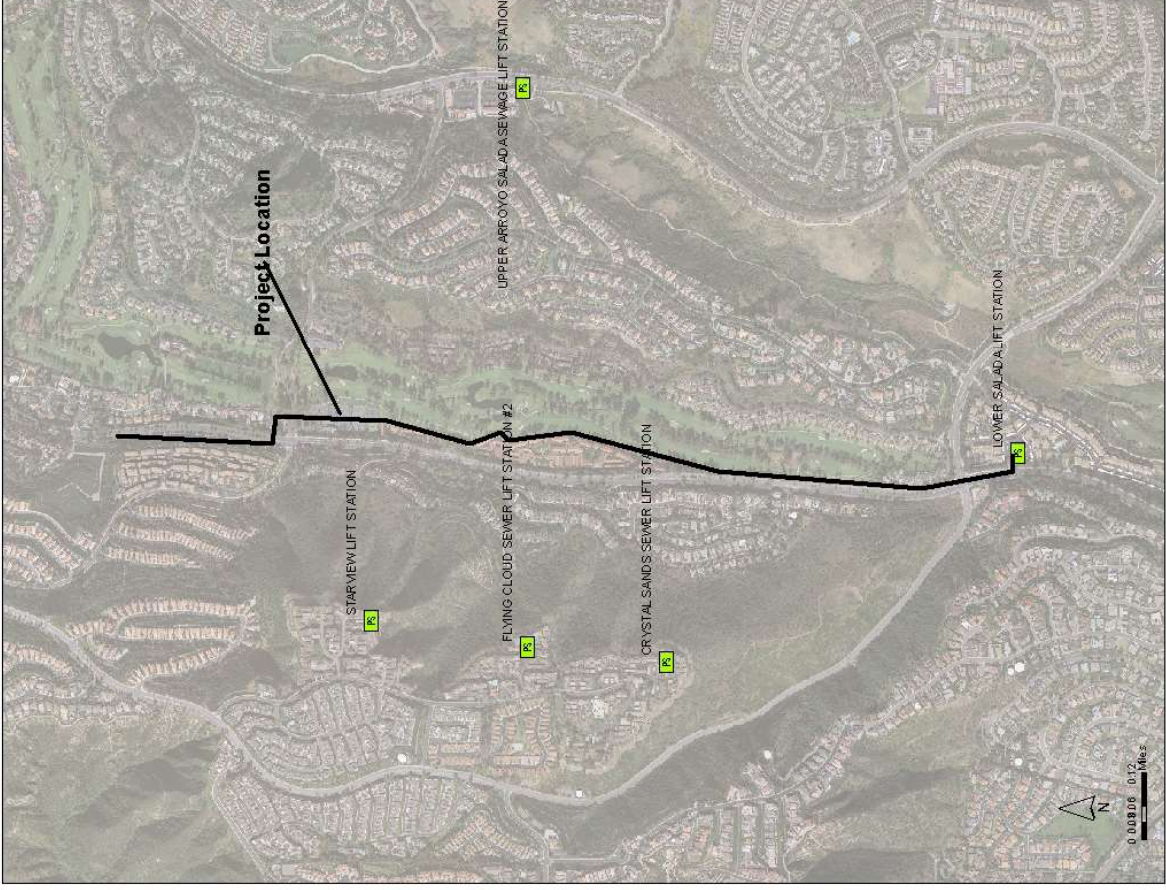
**Project Description:** Abandon existing 12" class 100 ACP force main and construct new force main in Crown Valley Parkway. Approximate length of new force main is 9,000 linear feet. A moratorium is in effect along this part of Crown Valley Parkway until 2020.

**Project Need:** The existing force main is deteriorated beyond repair and needs to be reconstructed.

**Project Status:** Deferred

### Estimated Project Amount:

Item	Estimated Cost
Design	\$400,000
CEQA Compliance	\$100,000
Construction Contract	\$5,000,000
Inspection/Other	\$400,000
<b>Total Project Budget</b>	<b>\$5,900,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2014.002

**System:** Wastewater

**Fund:** 7

**Project Name:** Del Avion LS Auxiliary Generator Replacement

**Project Location:** 24881 Camino Del Avion, Laguna Niguel

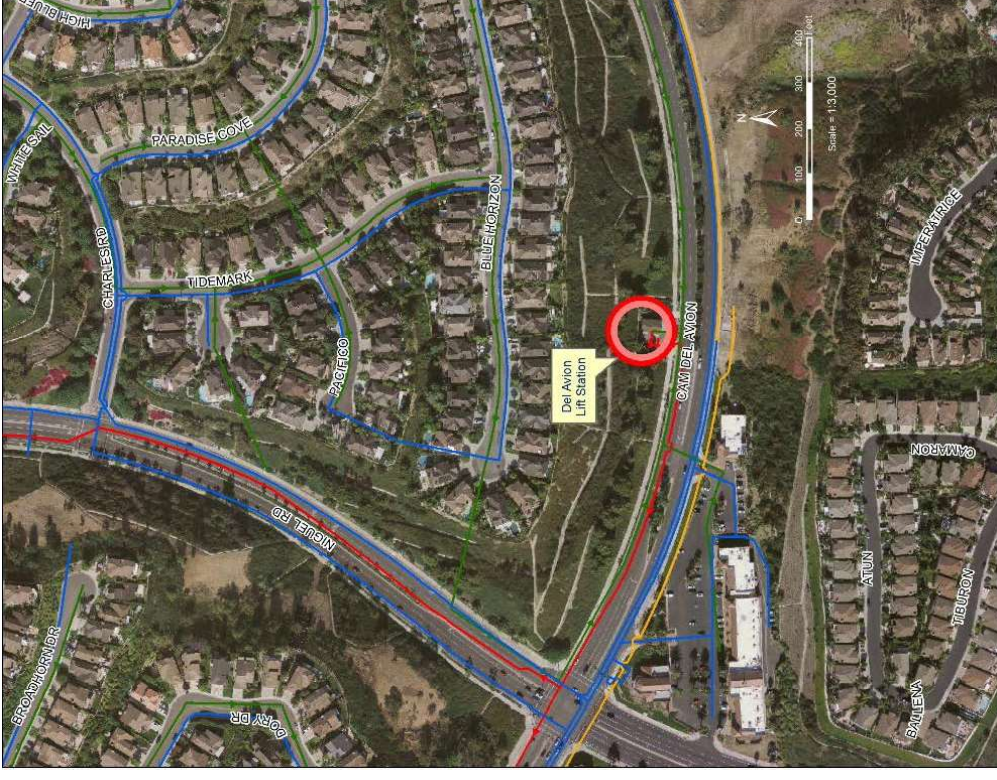
**Project Description:** Replace 1990 Cummins Natural Gas-Propane 250 KW backup generator.

**Project Need:** Replacement is based on age of engine and difficulty finding off the shelf replacement parts.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$540,000
Inspection/Other	\$15,000
<b>Total Project Budget</b>	<b>\$630,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.003

**System:** Wastewater

**Fund:** 7

**Project Name:** *Aliso Creek Lift Station Rehabilitation*

**Project Location:** Aliso Viejo

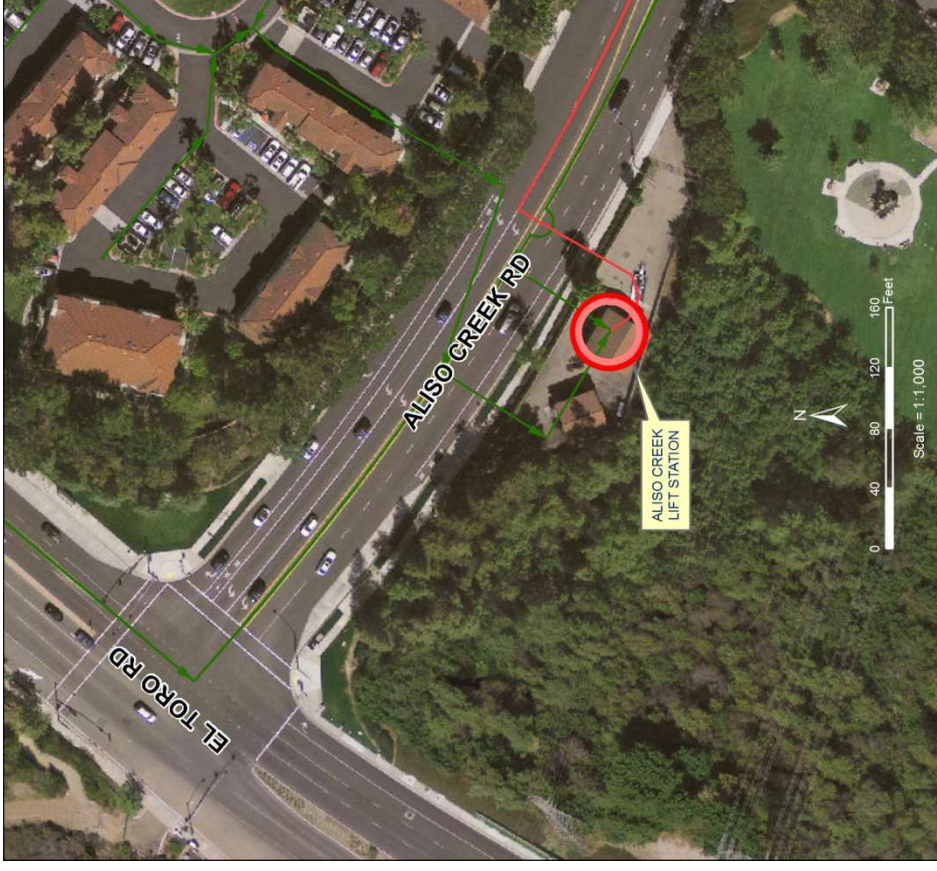
**Project Description:** Remove and replace the discharge check valves (2) and shutoff valves (3); relocate the header to a lower and ergonomically safer location. An alternative would be to install an access platform for access. This will require bypass pumping.

**Project Need:** The discharge valves are leaking, check valves are worn, and the location of these units are not ergonomically safe to work on.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	Exempt
Construction Contract	\$200,000
Inspection/Other	\$40,000
<b>Total Project Budget</b>	<b>\$270,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.008

**System:** Wastewater

**Fund:** 7

**Project Name:** Linda Vista Drive Sewer Lining

**Project Location:** Linda Vista Dr near Alicia & Paseo de Valencia, Laguna Hills

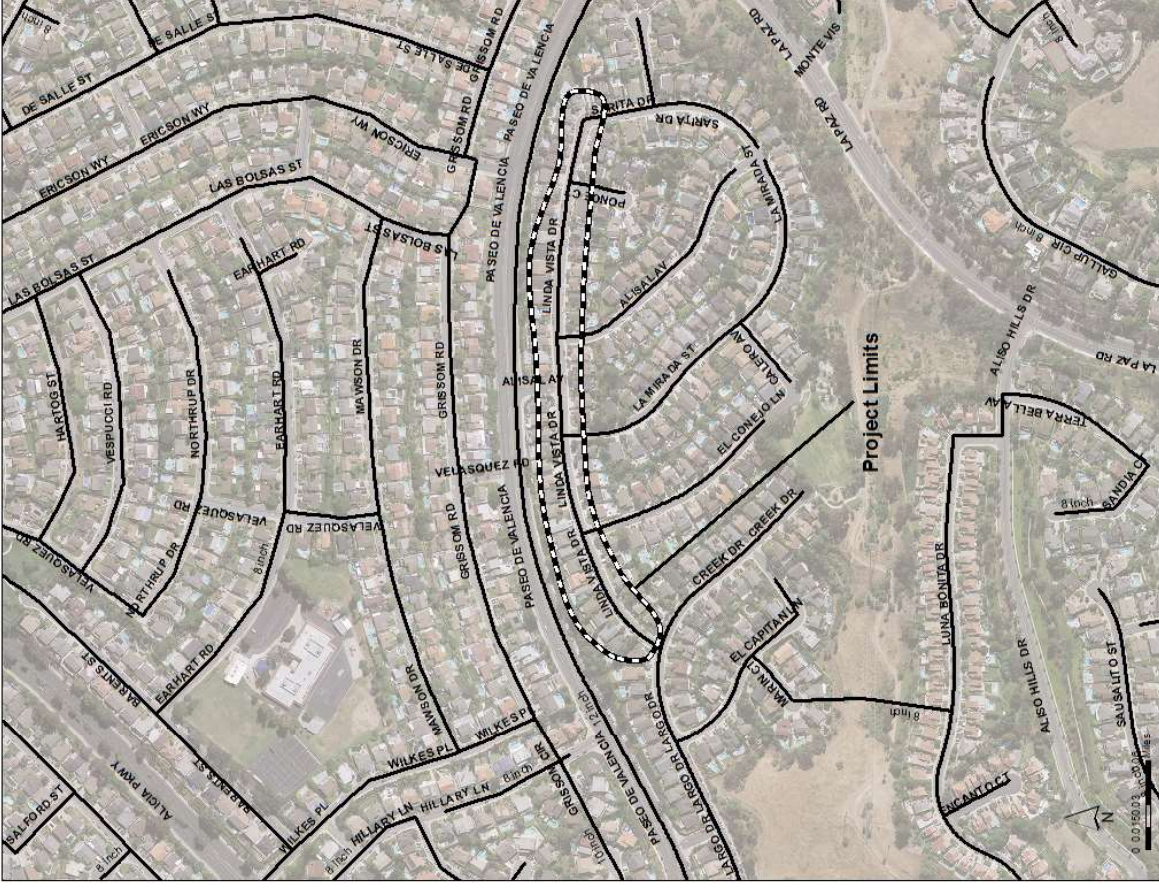
**Project Description:** Remove heavy calcium build-up in sewer line and install 1,700 feet of 8-inch cured-in-place pipe (CIPP) liner.

**Project Need:** The integrity and functionality of the collection system is being comprised by heavy calcium build-up. The lining of the sewer system will extend the useful life without having to replace the entire system.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	Exempt
Construction Contract	\$375,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$450,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2015.009

**System:** Wastewater

**Fund:** 7

**Project Name:** Lower Boundary Oak Lift Station Upgrade

**Project Location:** Lower Boundary Oak Lift Station; 27599 Oak View Drive, Aliso Viejo

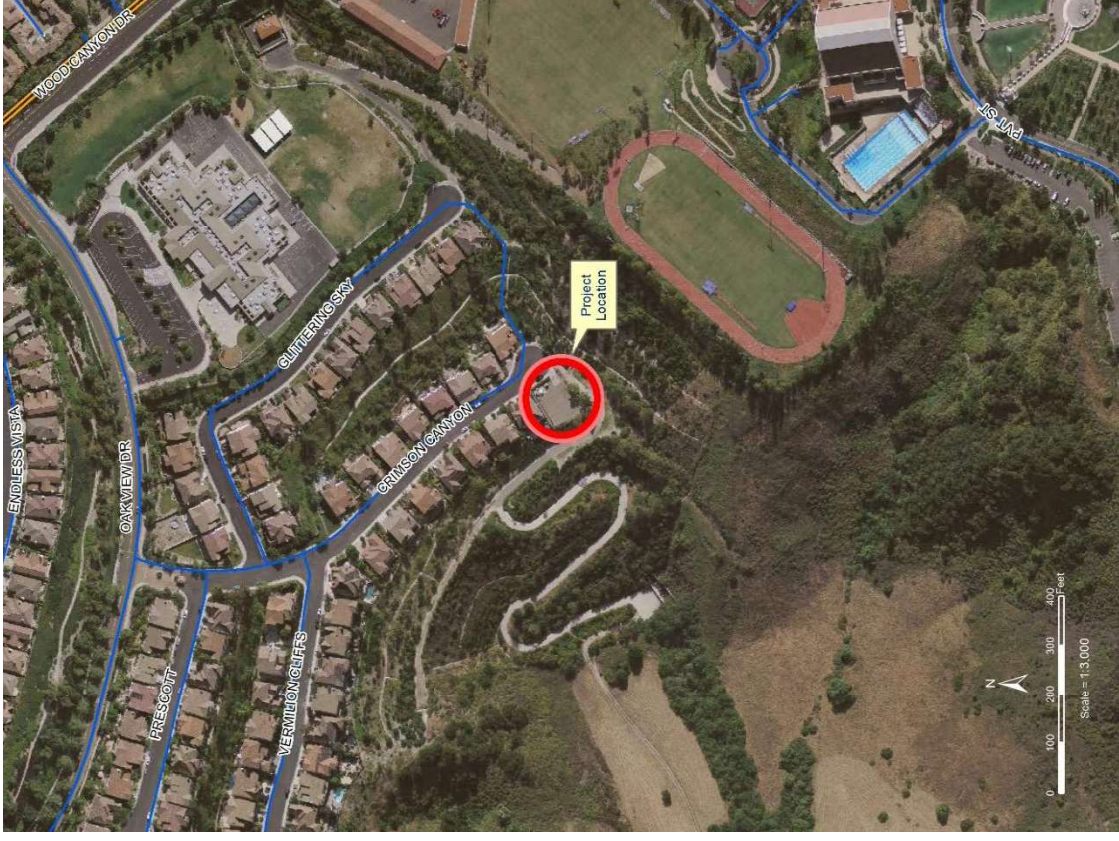
**Project Description:** Replace/upgrade packaged underground lift station, including pumps and suction lines.

**Project Need:** Current pumps are becoming maintenance intensive and are having a hard time holding prime.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$410,000</b>



Lower Boundary Oak LS Upgrade

## Capital Improvement Program – Project Description

**Project No:** 2015.010

**System:** Wastewater

**Fund:** 7

**Project Name:** *National Park and Other Miscellaneous Sewer Lining*

**Project Location:** National Park Drive (Laguna Niguel), Paseo De Esquela (Laguna Niguel), Paseo De Collinas (Laguna Niguel), Rocking Horse Lane (Laguna Hills), Benecia Ave (Laguna Niguel)

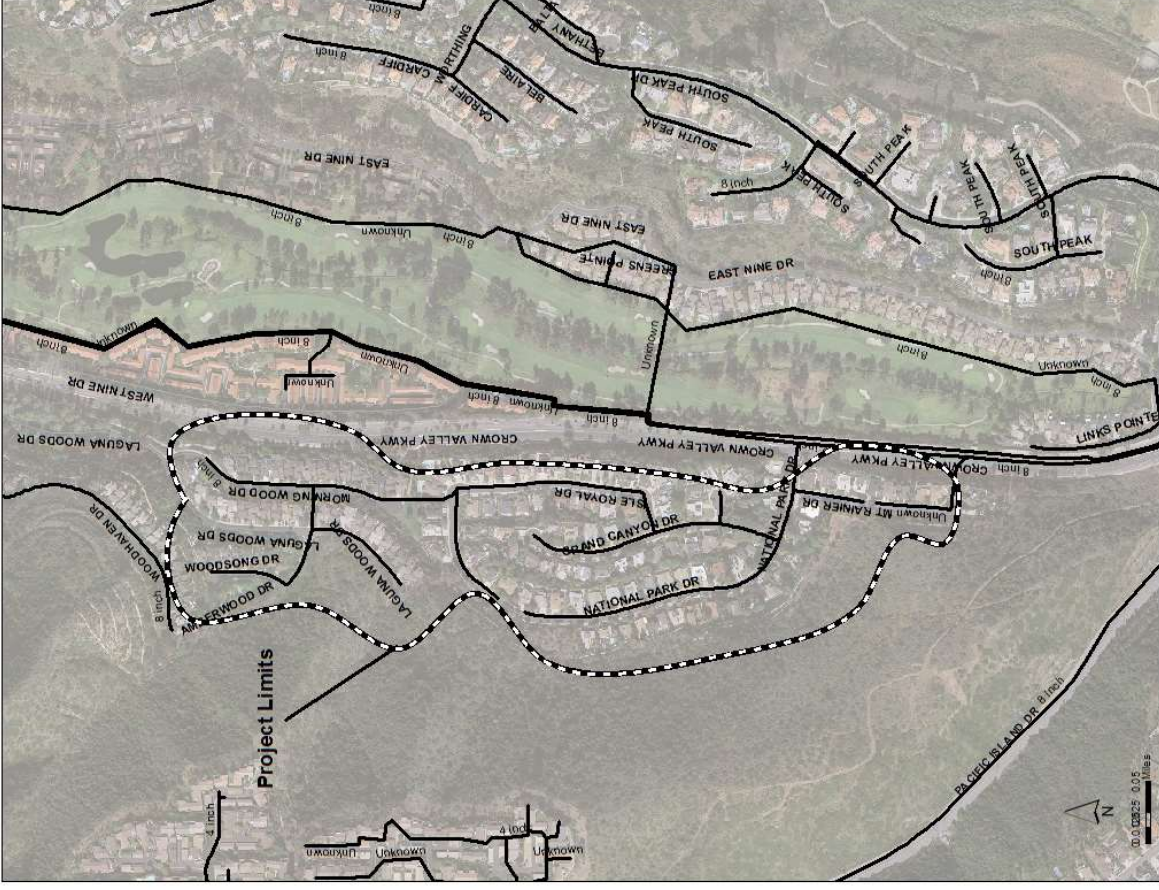
**Project Description:** Perform heavy root cutting and cleaning and install 1,300 feet of 8-inch cured-in-place pipe (CIPP) liner.

**Project Need:** The integrity of the collection system is being comprised by root infiltration. The lining of the sewer system will extend the useful life without having to replace the entire system.

**Project Status:** In Design

### Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection/Other	\$10,000
<b>Total Project Budget</b>	<b>\$300,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Wastewater

**Fund:** 7

**Project Name:** *Manhole Rehabilitation Program*

**Project Location:** District-wide

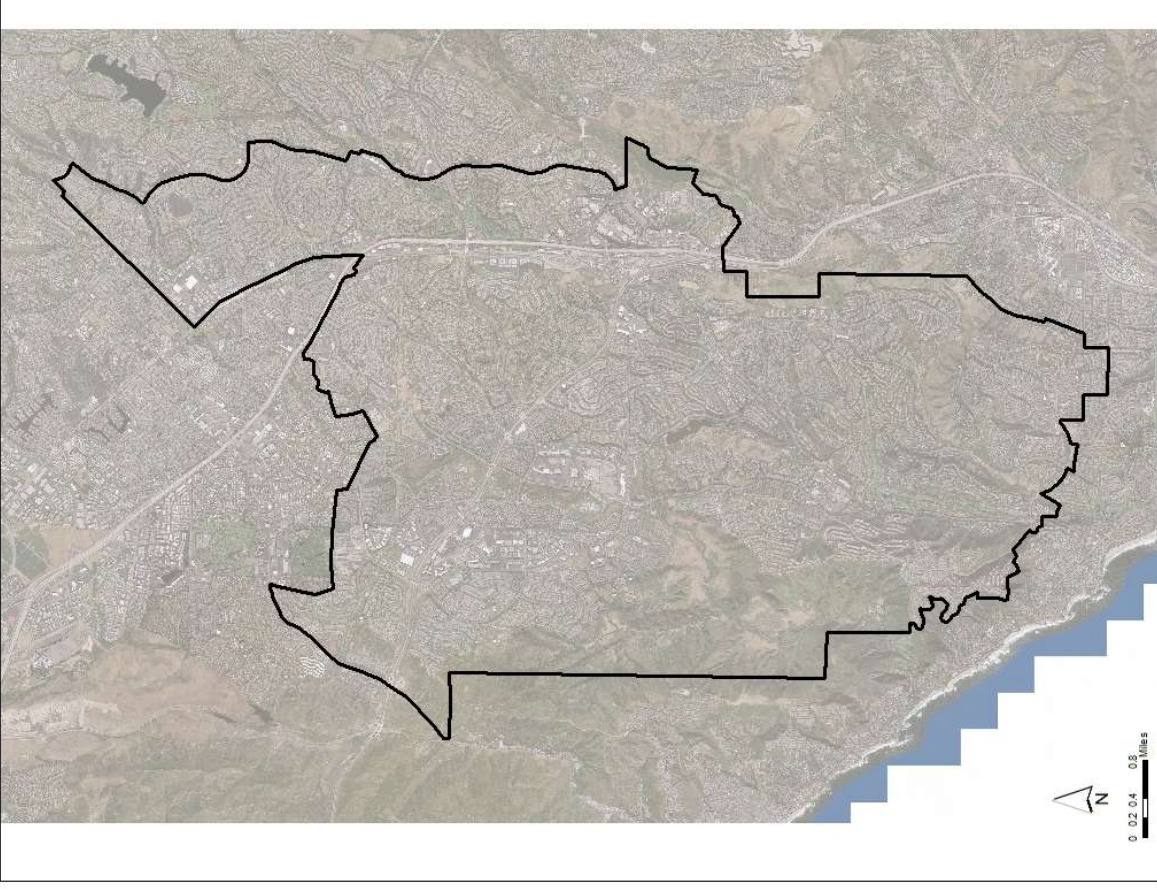
**Project Description:** Rehabilitate existing sewer manholes.

**Project Need:** District staff inspects the sewer system continuously. As damaged facilities are identified, they are either repaired or rehabilitated. Rehabilitation methods vary depending on damage but could include manhole lining, mortar replacement, or sealing.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$3,000,000
Inspection	\$150,000
<b>Total Project Budget</b>	<b>\$3,150,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Wastewater

**Fund:** 7

**Project Name:** Sewer Lining Program

**Project Location:** District-wide

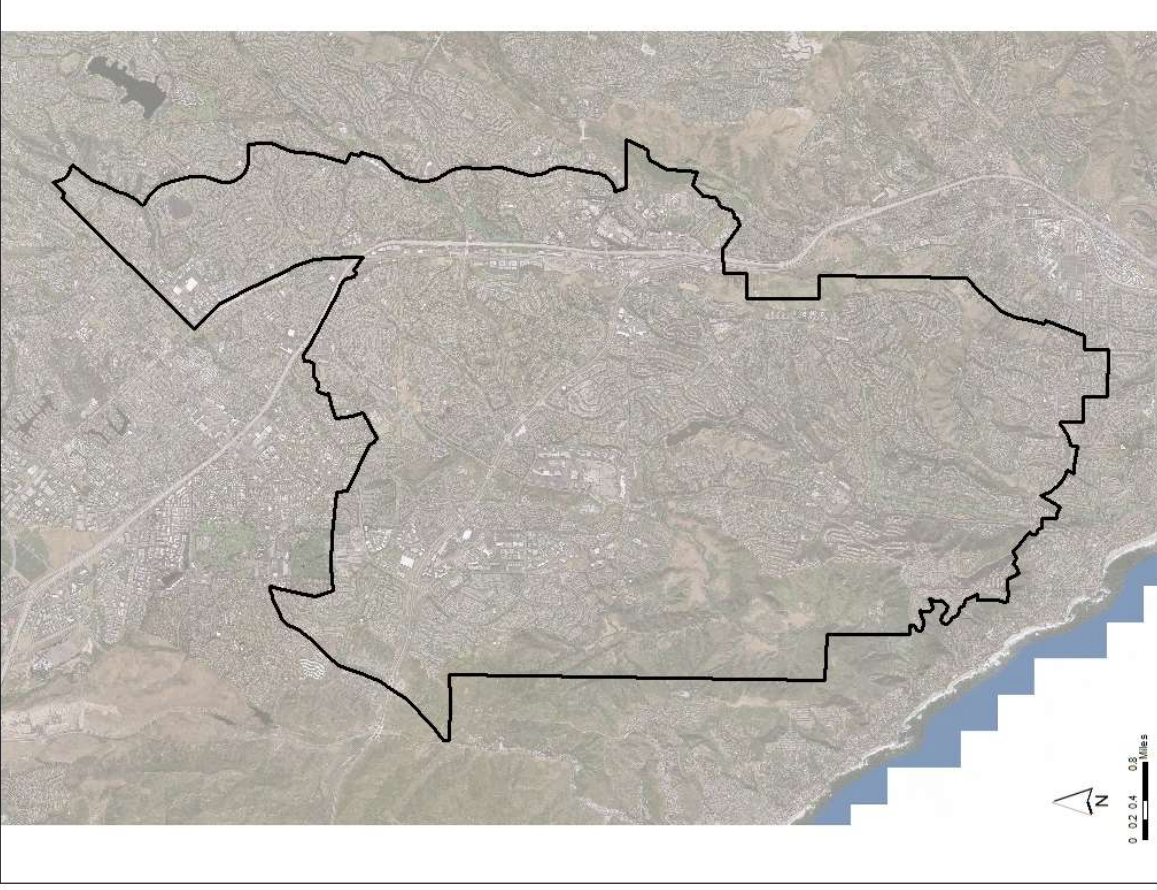
**Project Description:** Lining of sewer lines to extend useful life.

**Project Need:** As the sewer infrastructure ages, rehabilitation becomes a large component of maintaining the viability of the system. As District staff identify sections of the sewer system that require rehabilitation, this program provides a funding mechanism to implement the capital improvements. The implementation of this program increases the sewer system reliability and reduces the risk of sanitary sewer overflows.

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	Exempt
Construction Contract	\$1,800,000
Inspection	\$100,000
<b>Total Project Budget</b>	<b>\$2,400,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Wastewater

**Fund:** 7

**Project Name:** *Wastewater Projects per Asset Management Model*

**Project Location:** District-wide

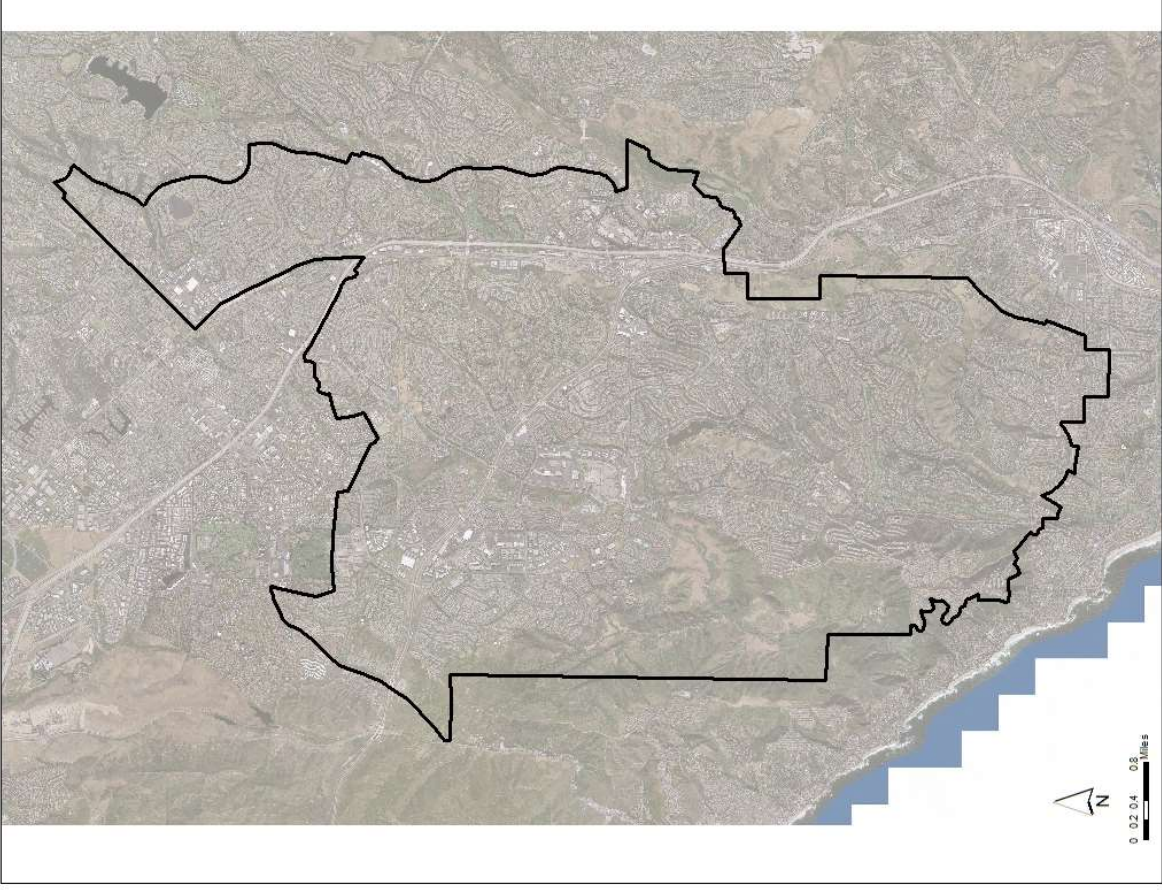
**Project Description:** Implement replacement and rehabilitation (R&R) projects utilizing funds identified as a minimum investment in the asset management model. These funds are a placeholder for actual projects and are distributed to R&R project in the corresponding fiscal year.

**Project Need:** In 2003, the District, through a consultant, developed an R&R planning model. The model was developed to obtain planning level funding needs to replace and rehabilitate District facilities. The model will be updated over the next few months and the estimated costs will be adjusted accordingly.

**Project Status:** Proposed, annual program- when individual projects are identified, funds are transferred to the specific project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	TBD
CEQA Compliance	TBD
Construction Contract	TBD
Inspection	TBD
<b>Total Project Budget</b>	<b>\$4,500,000</b>



## Capital Improvement Program – Project Description

**Project No:** Annual Program

**System:** Wastewater

**Fund:** 7

**Project Name:** Service Section and MCC Replacement Program (Wastewater)

**Project Location:** District-wide

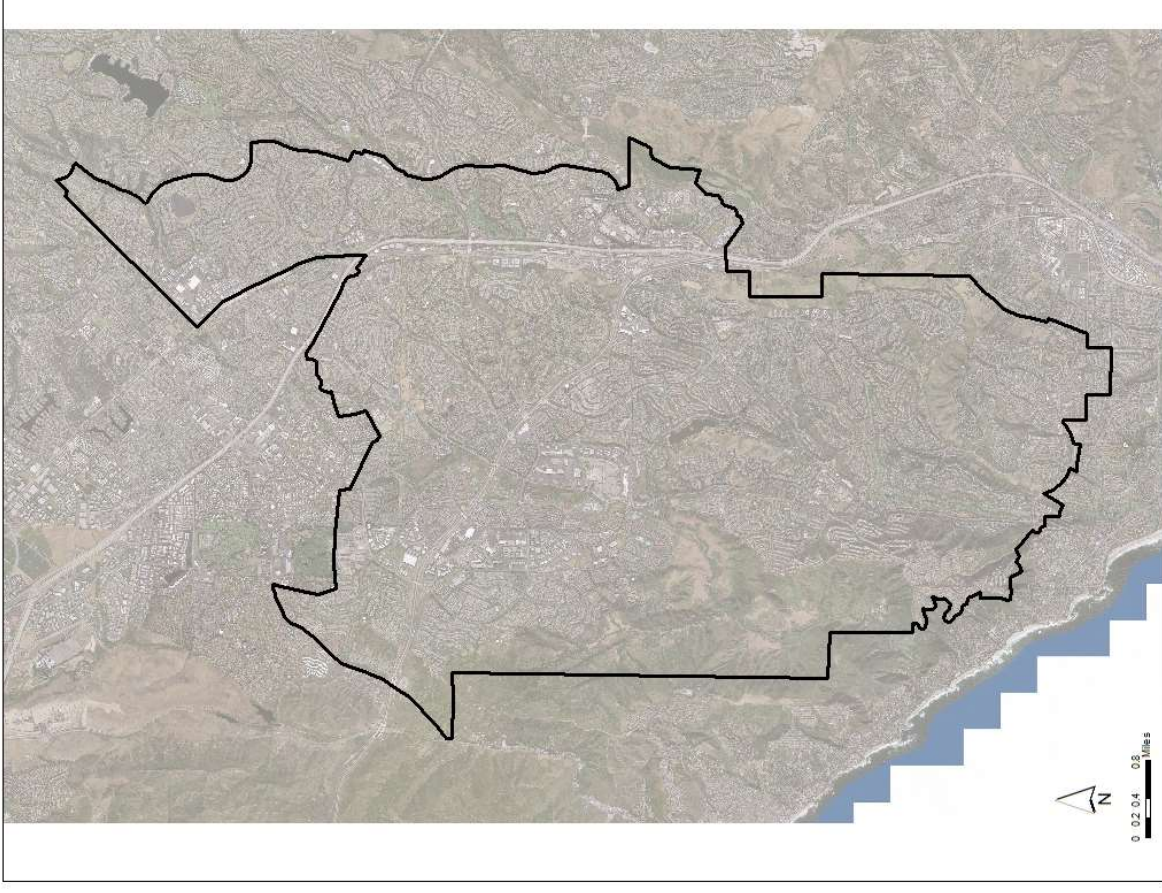
**Project Description:** Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

**Project Need:** The District has approximately forty-five (45) 480-volt 3-phase utility services, each with motor control centers and related distribution equipment. As the equipment reaches the end of its useful life, it requires replacement. Equipment age is generally between 15 years old and 50 years old. Over the next 10 years, approximately twelve (12) replacements will be required (6 related to potable stations, 2 related to recycled water stations, and 4 related to sewer lift stations).

**Project Status:** Proposed, annual program – when individual projects are identified, funds are transferred to the specific project.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$120,000
CEQA Compliance	Exempt
Construction Contract	\$1,200,000
Inspection	\$80,000
<b>Total Project Budget</b>	<b>\$1,400,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** 30-Inch ETM San Juan Creek Crossing Removal

**Project Location:** San Juan Creek, City of San Juan Capistrano

**Project Description:** Upon completion of the ETM Replacement Project, remove the existing 30-inch effluent transmission main crossing beneath the earthen portion of the San Juan Creek Channel.

**Project Need:** The County is requiring removal of this pipeline prior to closing out the encroachment permit for the ETM Replacement Project.

**Project Status:** In planning.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	\$50,000
Construction Contract	\$75,000
Inspection/Permits/Other	\$50,000
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** North Aliso Creek Lift Station Bypass Replacement

**Project Location:** North Aliso LS, Sec. pg. I-4

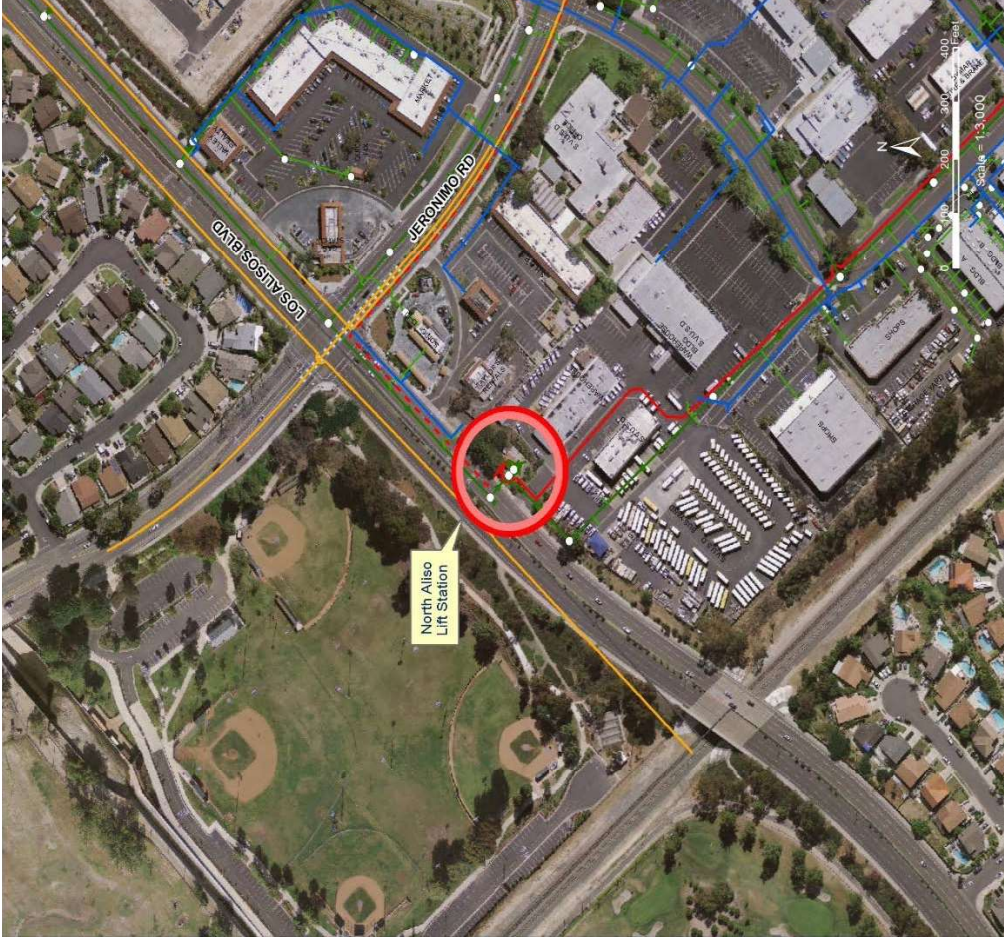
**Project Description:** Install new by-pass connection and mainline discharge valve and piping.

**Project Need:** Existing mainline discharge valve is not operational.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$160,000
Inspection/Other	\$40,000
<b>Total Project Budget</b>	<b>\$240,000</b>



North Aliso LS By-pass Replacement

## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Upper Salada Electrical Switchgear Replacement*

**Project Location:** 31447 Niguel Road, Laguna Niguel

**Project Description:** Replace existing electrical motor control center, variable frequency drives, and related equipment. This project will require a significant amount of bypass pumping.

**Project Need:** The existing electrical equipment for the station has reached the end of its useful life and requires replacement. This project will be performed at the same time that the auxiliary generator is replaced.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Geotechnical	\$10,000
Construction Contract	\$450,000
Inspection/Other	\$40,000
<b>Total Project Budget</b>	<b>\$550,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 14

**Project Name:** *Del Avion Lift Station Grinders*

**Project Location:** Del Avion Lift Station; 24881 Camino Del Avion Laguna Niguel; Sectional Page F-32

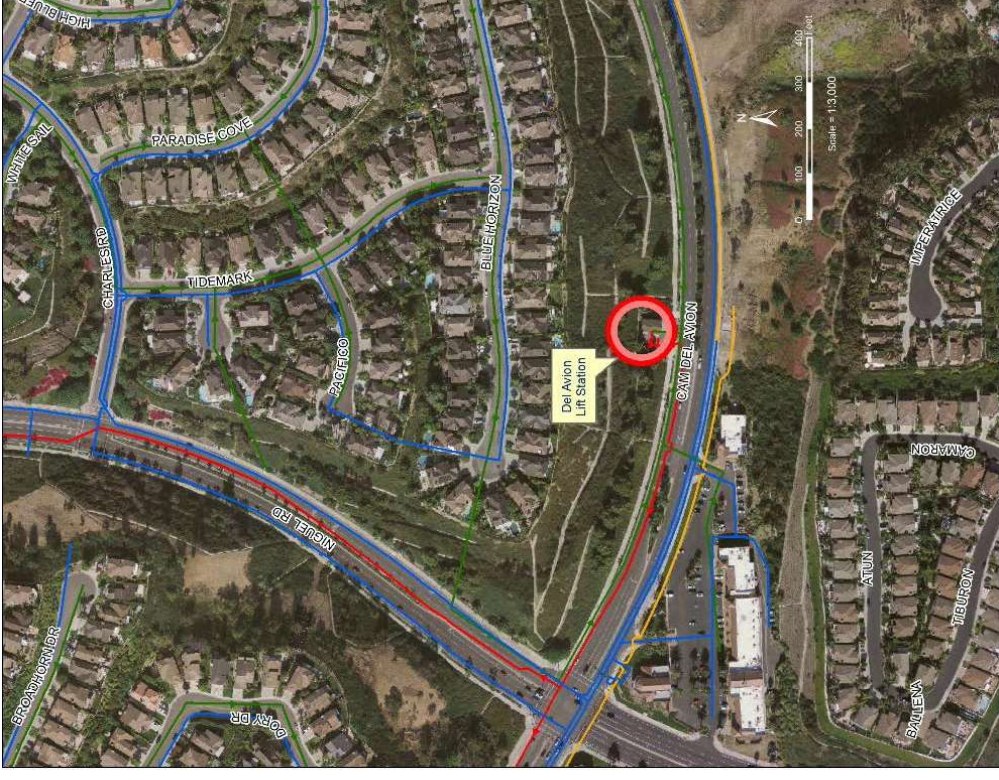
**Project Description:** Add “Muffin Monster” style grinders to the suction piping of Pumping Units 1 and 2.

**Project Need:** These pumping units tend to get clogged up which is maintenance intensive and will lead to pump failure. Adding grinders before the pumps will eliminate this problem.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$100,000
Inspection/Other	\$5,000
<b>Total Project Budget</b>	<b>\$120,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Aliso Creek LS Auxiliary Generator Replacement*

**Project Location:** 21933 Aliso Creek Road, Aliso Viejo

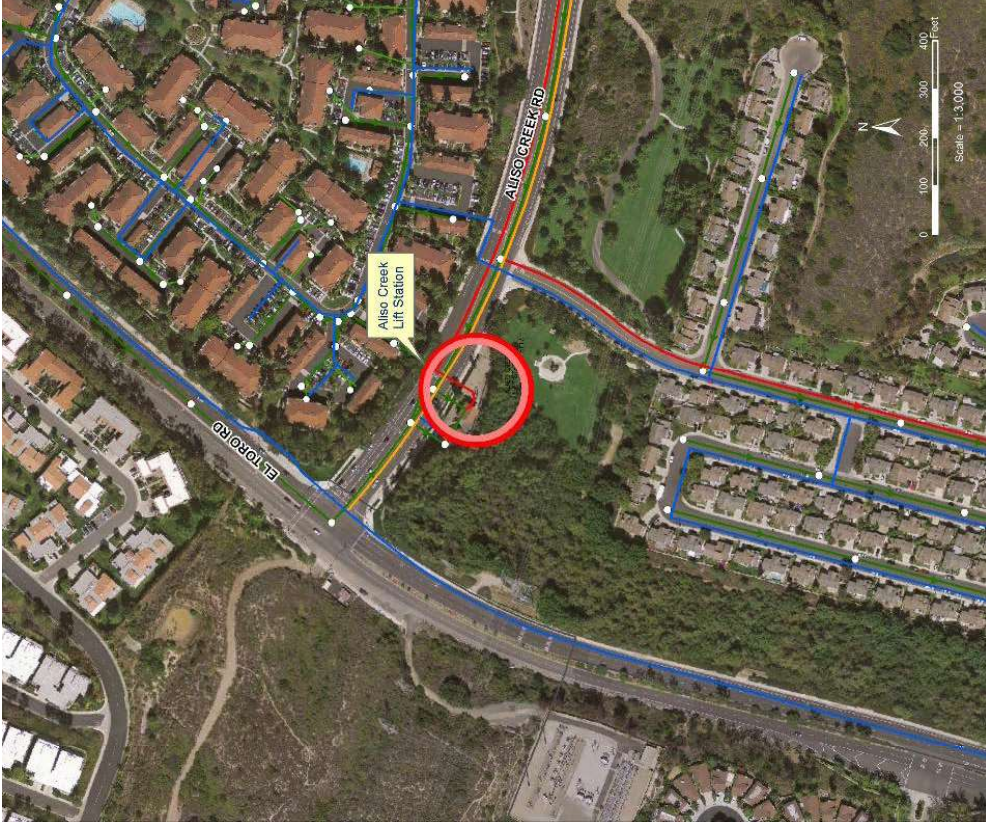
**Project Description:** Replace 1990 Cummins Propane 250 KW backup generator.

**Project Need:** Replacement is based on age of generator and difficulty finding off the shelf replacement parts.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection/Other	\$0
<b>Total Project Budget</b>	<b>\$530,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Southwing LS Auxiliary Generator Replacement*

**Project Location:** 22124 Canyon Vistas, Aliso Viejo

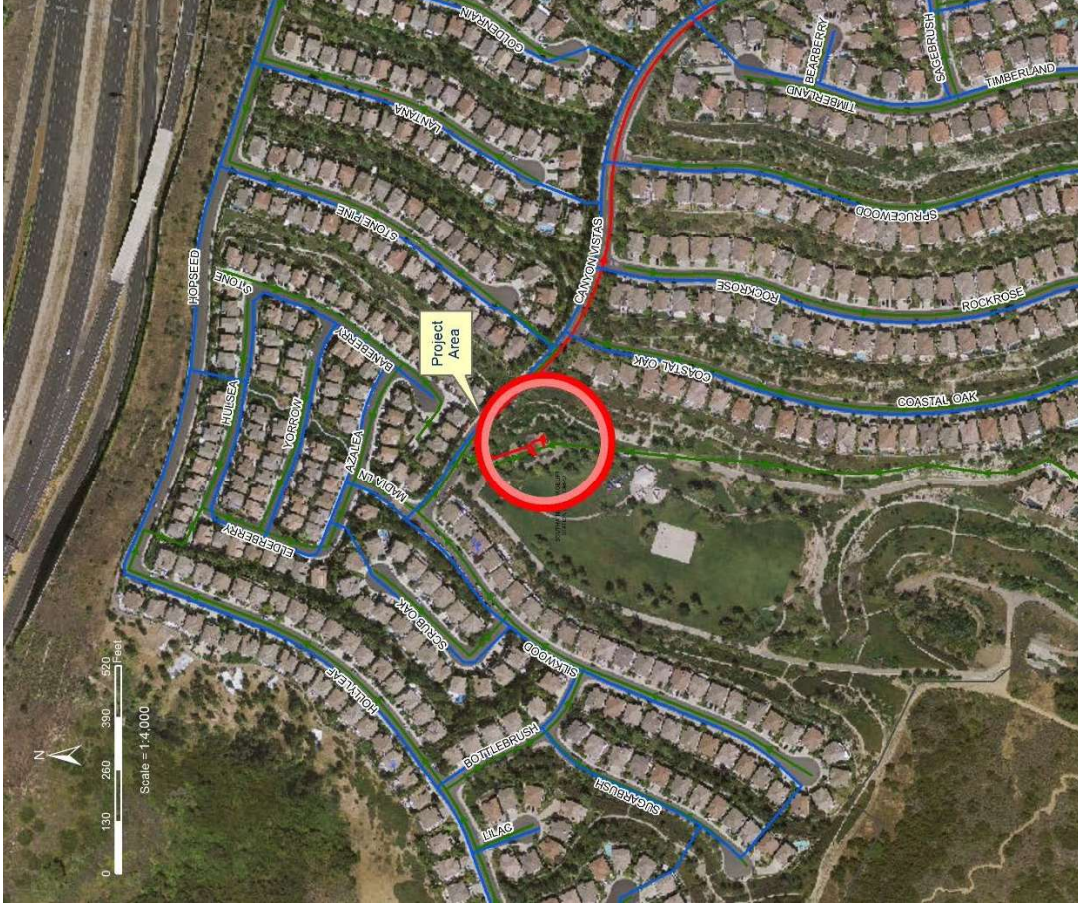
**Project Description:** Replace 1994 Cummins Propane 264 KW backup generator.

**Project Need:** Replacement is based on age of generator and difficulty finding off the shelf replacement parts.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection/Other	\$0
<b>Total Project Budget</b>	<b>\$580,000</b>



*Southwing LS-Auxiliary Generator Replacement*

## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** 2016-2017 Manhole Rehabilitations

**Project Location:** District-wide

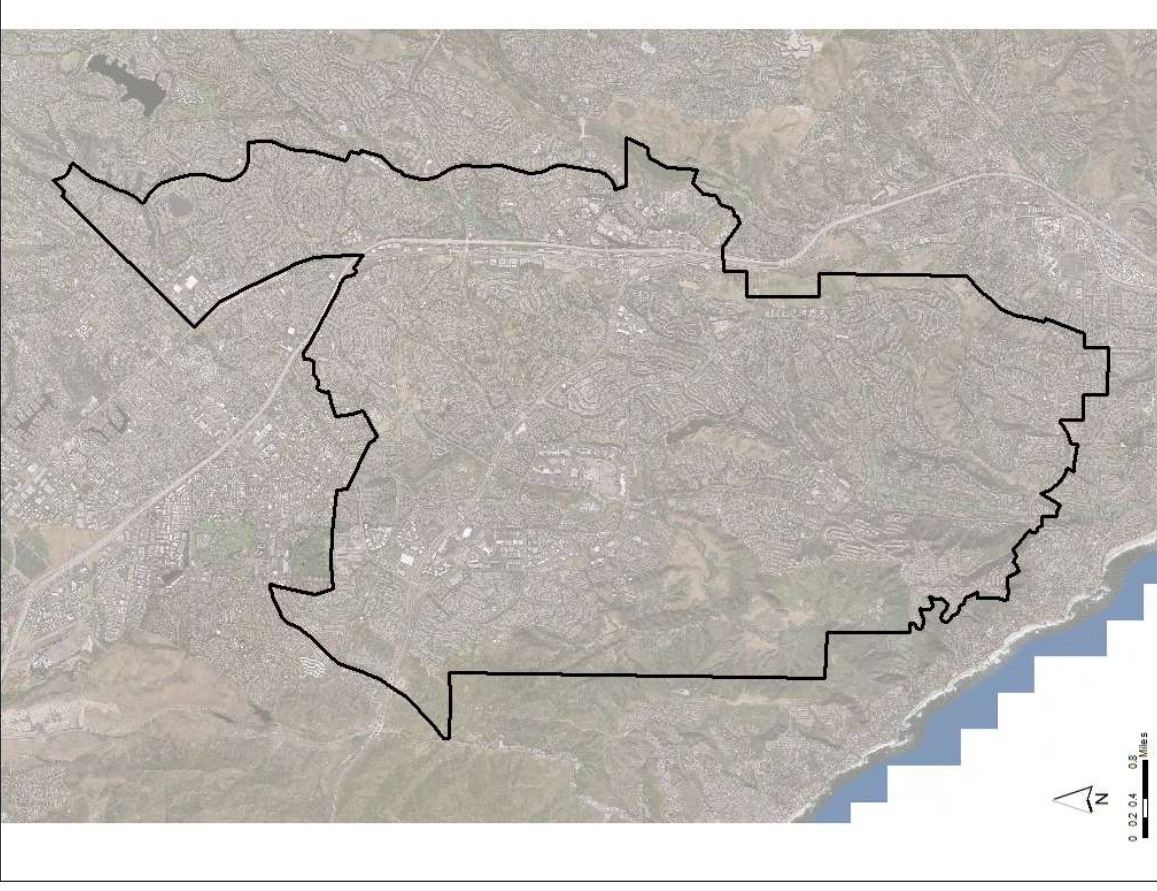
**Project Description:** Rehabilitate existing sewer manholes.

**Project Need:** District staff inspects the sewer system continuously. As damaged facilities are identified, they are either repaired or rehabilitated. Rehabilitation methods vary depending on damage but could include manhole lining, mortar replacement, or sealing.

**Project Status:** Proposed, 2016-2017 program – when individual projects are identified funds are transfer to the specific project.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$325,000
Inspection	\$25,000
<b>Total Project Budget</b>	<b>\$350,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 14

**Project Name:** Plant 3A Flood Protection

**Project Location:** Plant 3A Treatment Plant, Mission Viejo

**Project Description:** Plant 3A is located immediately adjacent to La Paz Creek. There have been several instances of flooding near the entrance gate to Plant 3A. This project will work with the environmental permitting agencies on both short and long term solutions to mitigate this hazard.

**Project Need:** When flooding occurs near the entrance gate, ingress and egress becomes problematic.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	\$100,000
Construction Contract	\$300,000
Inspection	\$25,000
<b>Total Project Budget</b>	<b>\$500,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.028

**System:** Wastewater

**Fund:** 7

### **Project Name:** Valencia Lift Station Refurbishment

**Project Location:** Paseo de Valencia & Cabot Road, Laguna Hills

**Project Description:** Replacement of existing pumps, motors, valves, and various piping. Due to the limited flows, an alternative consideration would be to convert the dry well to a wet well and install submersible pumps.

**Project Need:** The existing equipment has reached its useful life experiencing poor performance and increased maintenance. In addition, parts for the existing equipment are no longer made by the manufacturer. The equipment requires replacement.

**Project Status:** Proposed Project.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$80,000
CEQA Compliance	Exempt
Construction Contract	\$600,000
Inspection/Other	\$20,000
<b>Total Project Budget</b>	<b>\$700,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2011.043

**System:** Wastewater

**Fund:** 14

### **Project Name:** Plant 3A Outfall Line Valves

**Project Location:** Along Camino Capistrano and outlying areas by Oso Creek, City of San Juan Capistrano.

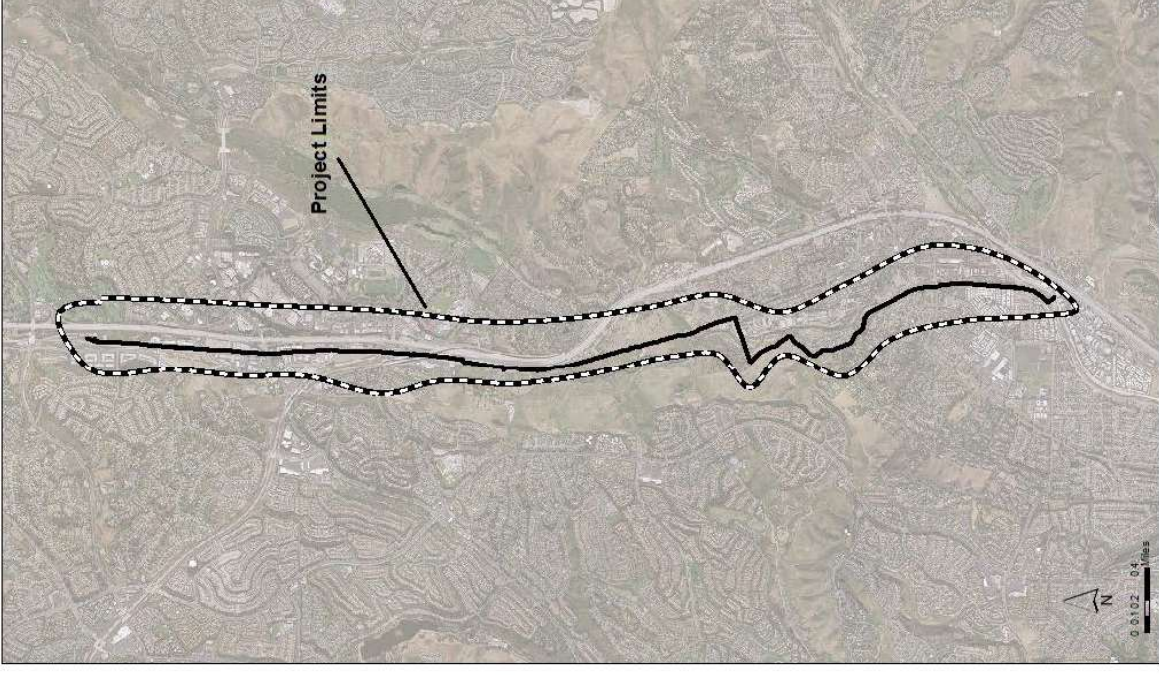
**Project Description:** Install isolation valves on the 3A outfall line.

**Project Need:** The 3A outfall line was constructed as a feed line from San Juan Capistrano to Mission Viejo Lake. The District purchased the facility and changed its use from the intended design. There is an insufficient number of isolation valves along a five mile reach. If there is a failure along this reach, the line would discharge secondary effluent into the creeks; therefore, additional isolation valves must be installed to minimize spill amounts.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$50,000
CEQA Compliance Exempt	
Construction Contract	\$380,000
Inspection	\$20,000
<b>Total Project Budget</b>	<b>\$450,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Plant 3A Effluent Transmission Main (ETM) – Creek Bank Stabilization*

**Project Location:** San Juan Capistrano

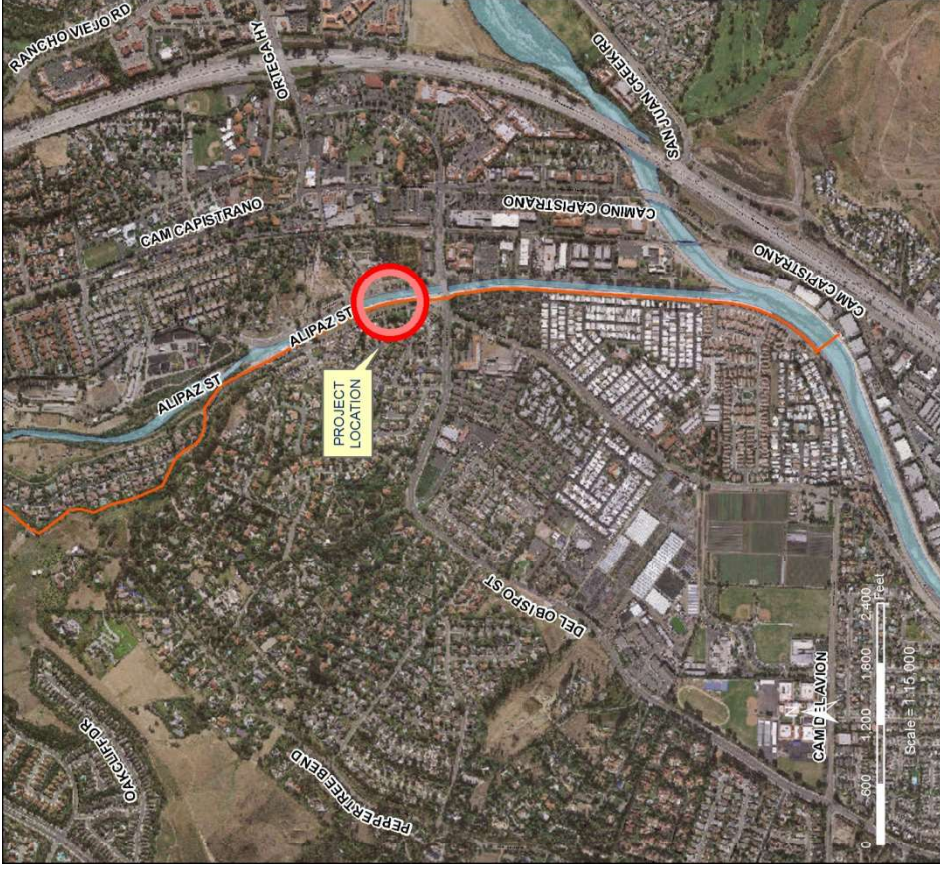
**Project Description:** Extend the existing riprap on the east side lower bank of Oso Creek beyond the downstream turn. The riprap will match existing top and toe elevation of existing riprap. The project will require acquisition of a nationwide permit from the Army Corp. of Engineers.

**Project Need:** The existing ETM is located in an embankment along an unprotected bank of Oso Creek and is at risk of failure due to erosion of the creek bank. This proposed project will extend riprap to provide protection for the existing pipe.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA Compliance	\$50,000
Construction Contract	\$1,800,000
Inspection	\$50,000
<b>Total Project Budget</b>	<b>\$2,000,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Plant 3A Effluent Transmission Main (ETM) - Avenida de la Vista Replacement*

**Project Location:** San Juan Capistrano

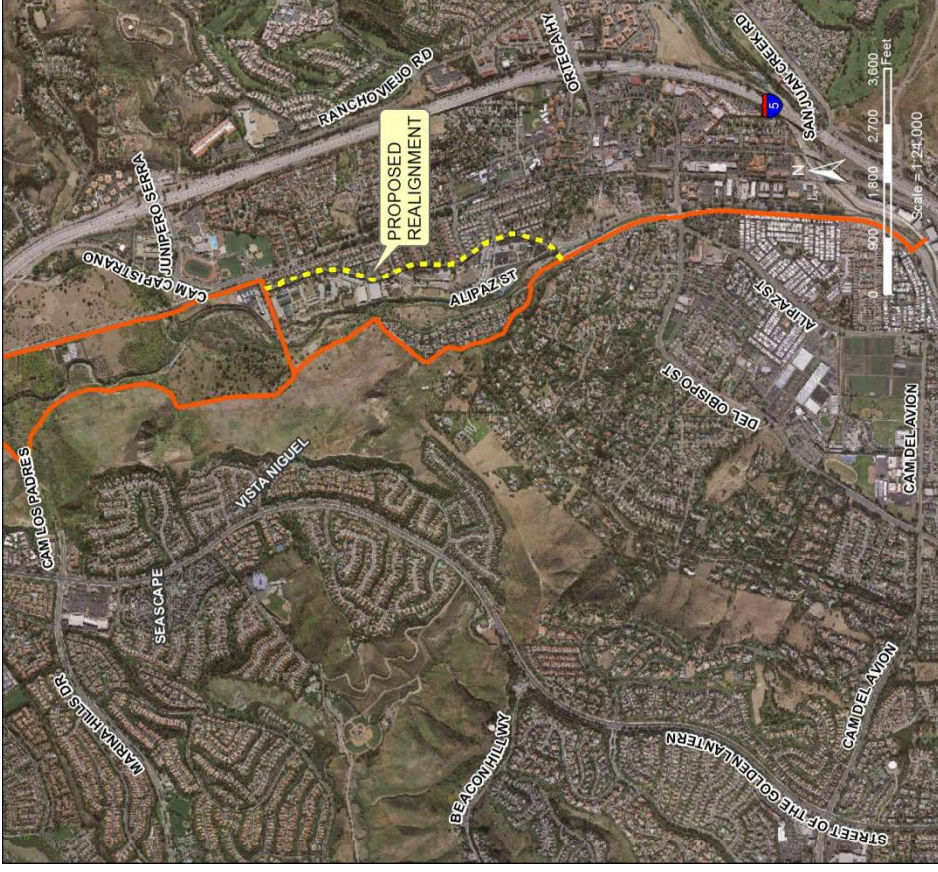
**Project Description:** Abandon the existing ETM from Station 221+00 to Station 298+00 and construct a 30-inch ductile iron pipe along Avenida De La Vista, approximately 4,700 feet from Oso Road to the cul-de-sac. The alignment will proceed 1,000 feet on Trabuco Creek Trail until it is jacked and bored under Trabuco Creek. The jack and bore will be approximately 160 feet. On the west side of the creek, the pipeline will connect to the existing 20-inch ductile iron pipe located behind the concrete creek embankment. The project will require acquisition of several easements from private properties and a nationwide permit from the Army Corp. of Engineers.

**Project Need:** The existing ETM is located in an embankment along an unprotected bank of Trabuco Creek and is at risk of failure due to erosion of the creek bank. This proposed project will abandon the existing ETM pipeline and construct a replacement pipeline in Avenida de la Vista.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$150,000
CEQA Compliance	\$75,000
Construction Contract	\$2,100,000
Inspection	\$150,000
<b>Total Project Budget</b>	<b>\$2,475,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 7

**Project Name:** *Plant 3A Effluent Transmission Main (ETM) Pipeline Replacement in Camino Capistrano*

**Project Location:** Camino Capistrano from Plant 3A to the San Joaquin Hills Toll Road Crossing in Mission Viejo, Laguna Niguel and San Juan Capistrano.

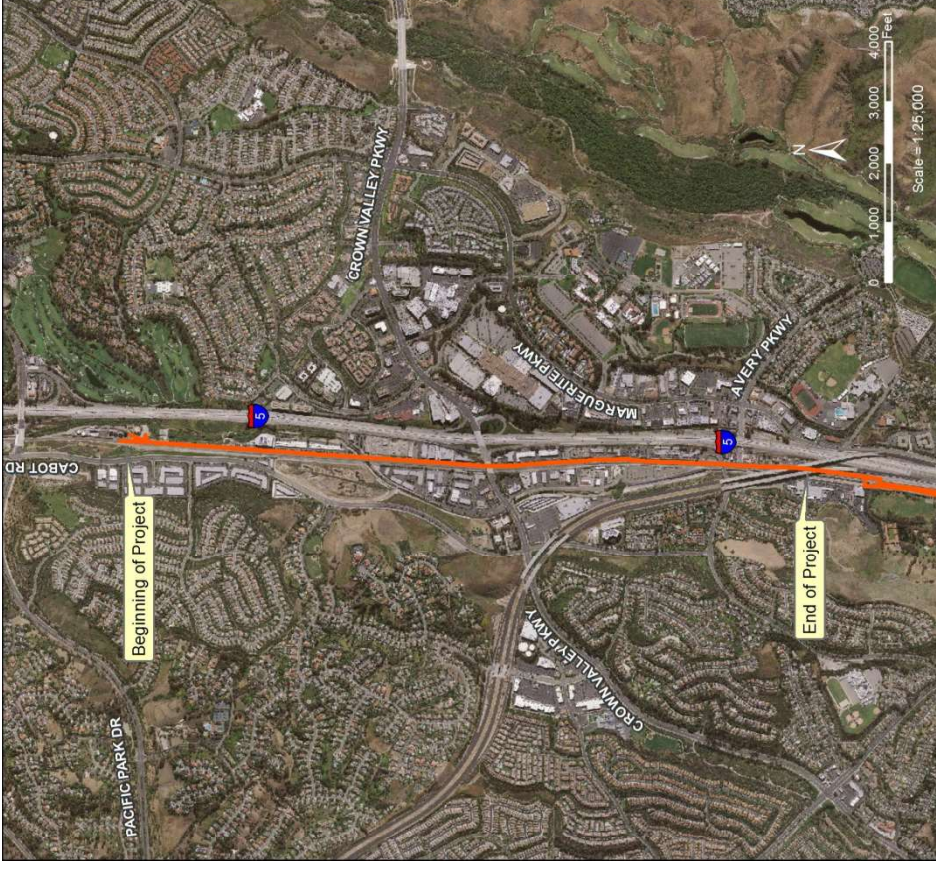
**Project Description:** Replace the existing 20-inch asbestos cement pipe from Station 3+00 to Station 109+00 with a 30-inch ductile iron pipe (approximately 10,600 feet). The replacement pipeline will be located on Camino Capistrano in the same approximately location as the existing ETM. The new pipeline will extend from the Plant 3A to the San Joaquin Hills Toll Road Crossing.

**Project Need:** The existing pipeline is approaching the end of its useful life. Replacement of the existing 20-inch pipeline will increase hydraulic capacity and improve operation of the pipeline.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$250,000
CEQA Compliance	\$100,000
Construction Contract	\$3,000,000
Inspection	\$150,000
<b>Total Project Budget</b>	<b>\$3,500,000</b>





## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 14

**Project Name:** Oso Creek Sewer Parallel Pipeline

**Project Location:** Mission Viejo Golf Course, Mission Viejo from Oso Parkway to I-5

**Project Description:** Construct approximately 3,400 feet of new sewer line.

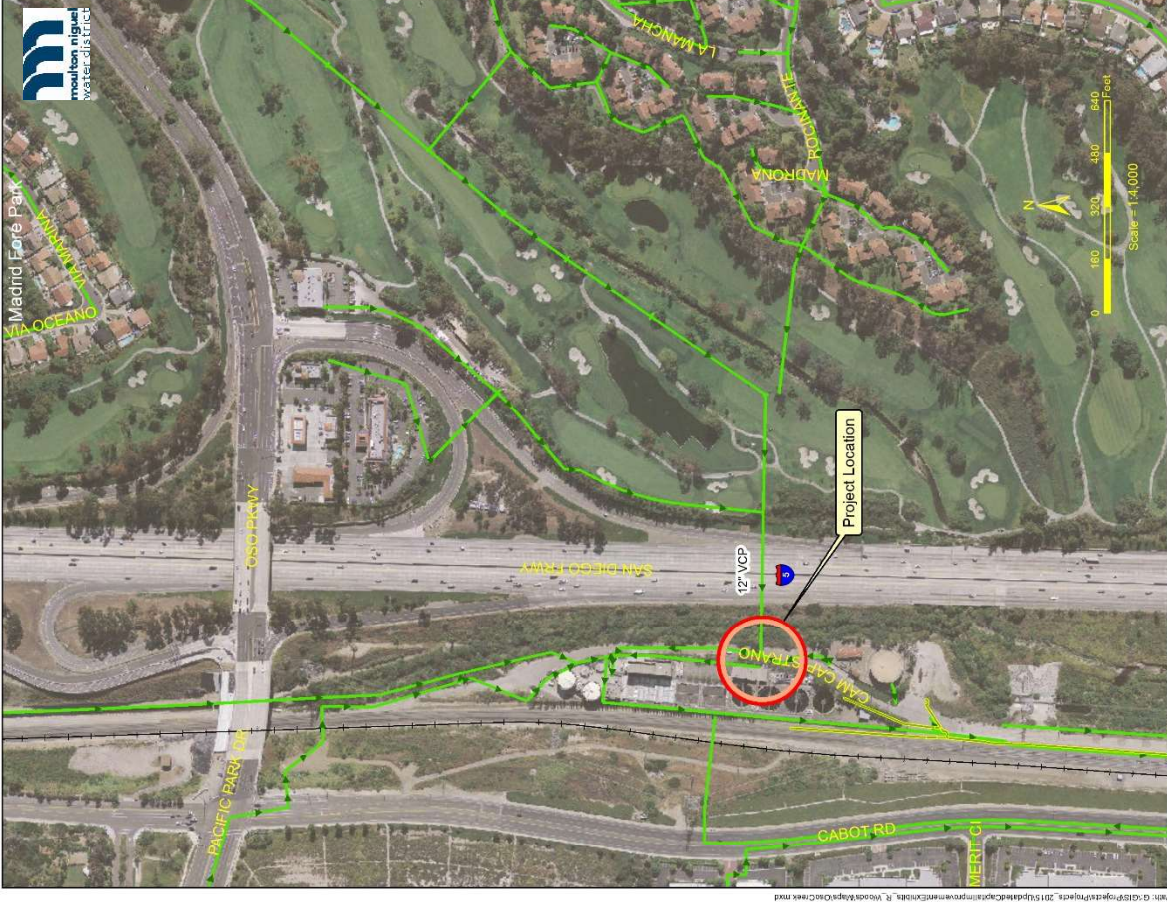
This project will involve conventionally installed sewer through a heavily landscaped golf course in addition to a bore and jack under Interstate 5.

**Project Need:** The existing sewer line that parallels Oso Creek is 8 to 12-inch vitrified clay pipe constructed in 1965. Reaches of the alignment are currently undersized for the upstream flows and need to be upsized. In addition, sections of the line could be subject to future creek erosion which could cause the line to fail. This project will evaluate the appropriate size of the sewer line and construct the improvements.

**Project Status:** Proposed Project

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	\$100,000
Construction Contract	\$1,600,000
Inspection/Other	\$50,000
<b>Total Project Budget</b>	<b>\$1,950,000</b>



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Potable, Wastewater

**Fund:** 7

### Project Name: Utility Service Entrance Replacements

**Project Location:** Pacific Island Drive Pump Stations 1, 2, and 3; Big Niguel, Marguerite, and El Dorado Pump Stations; Regional Lift Station

**Project Description:** Replace utility service sections at seven (7) sites that have reached the end of their useful life. The project will require bypass pumping at several sites.

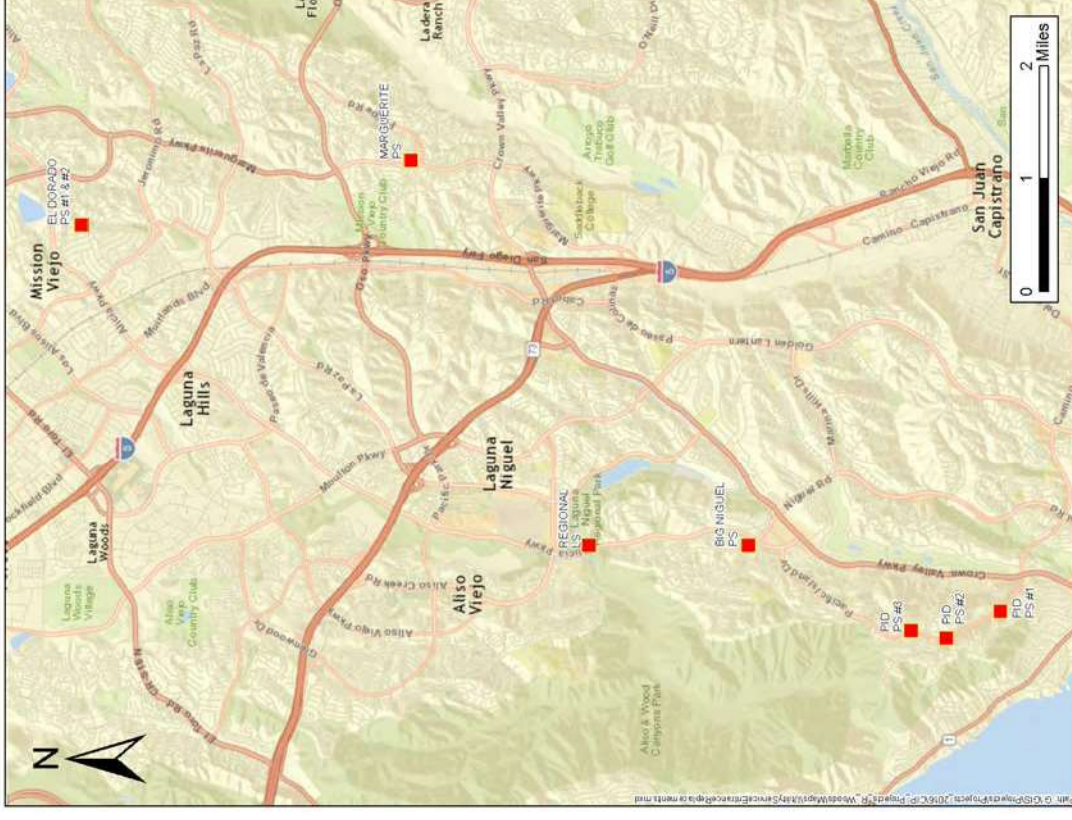
**Project Need:** These service sections and associated main circuit breakers range from 35 to 50 years old (beyond useful life). Upon failure, they could be dangerous to personnel or property and would likely never be useful again.

**Project Status:** Proposed Project

### Estimated Project Amount:

Item	Estimated Cost
Design	\$180,000
CEQA Compliance	Exempt
Construction Contract	\$653,000
Inspection/Other	\$50,000
<b>Total Project Budget</b>	<b>\$883,000</b>

Note: \$738,000 related to potable and \$145,000 related to wastewater



## Capital Improvement Program – Project Description

**Project No:** TBD

**System:** Wastewater

**Fund:** 14

### **Project Name:** Lift Stations Generator Emergency Connections

**Project Location:** 9 Lift Stations: Regional, Lower Salada, Upper Salada, Aliso Creek, Southwing, San Joaquin, Boundary Oak, Del Avion, North Aliso.

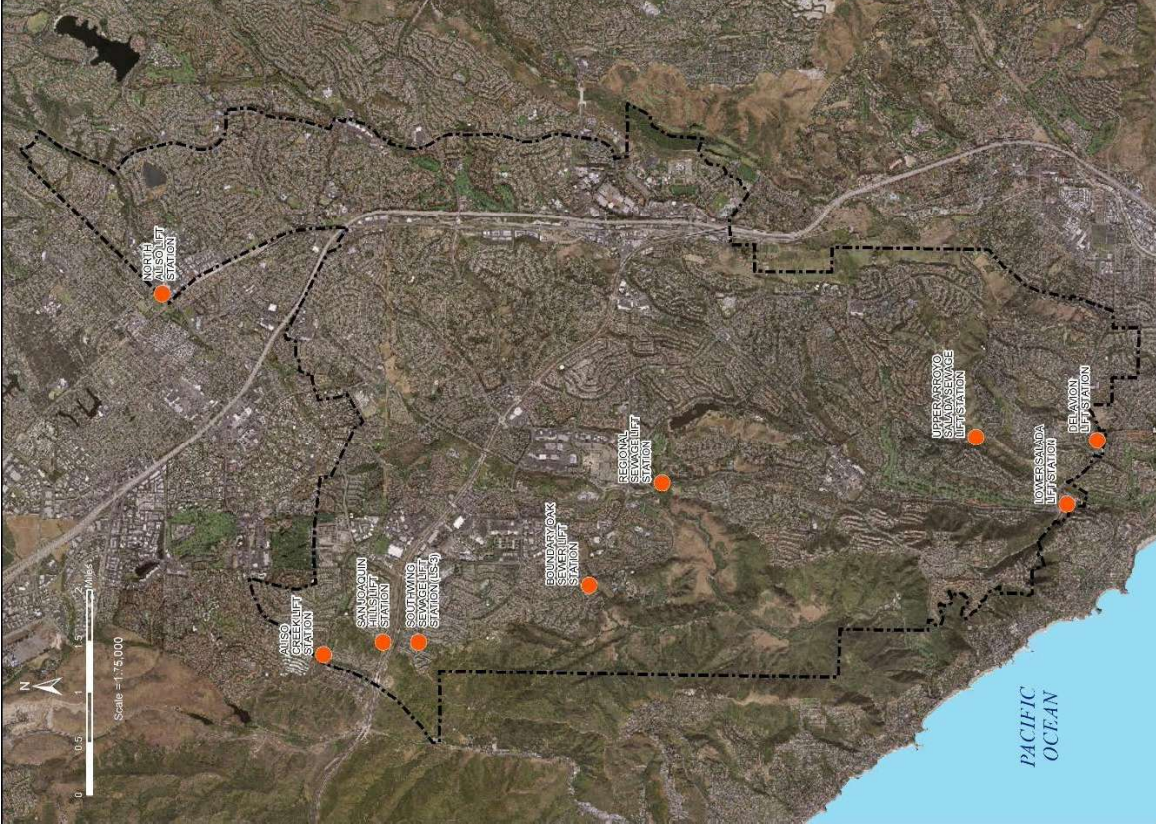
**Project Description:** Install new emergency generator connections at nine facilities.

**Project Need:** This project is needed to allow for a connection of a portable generator at these nine lift stations.

**Project Status:** Proposed Project

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection/Other	\$5,000
<b>Total Project Budget</b>	<b>\$430,000</b>



Lift Station Location Map

## Capital Improvement Program – Project Description

**Project No:** 2006.071

**System:** Regional (Potable)

**Fund:** 12

### **Project Name:** Baker Pipeline Regional Water Treatment Plant

**Project Location:** Palmwood Drive/Wisteria, Lake Forest

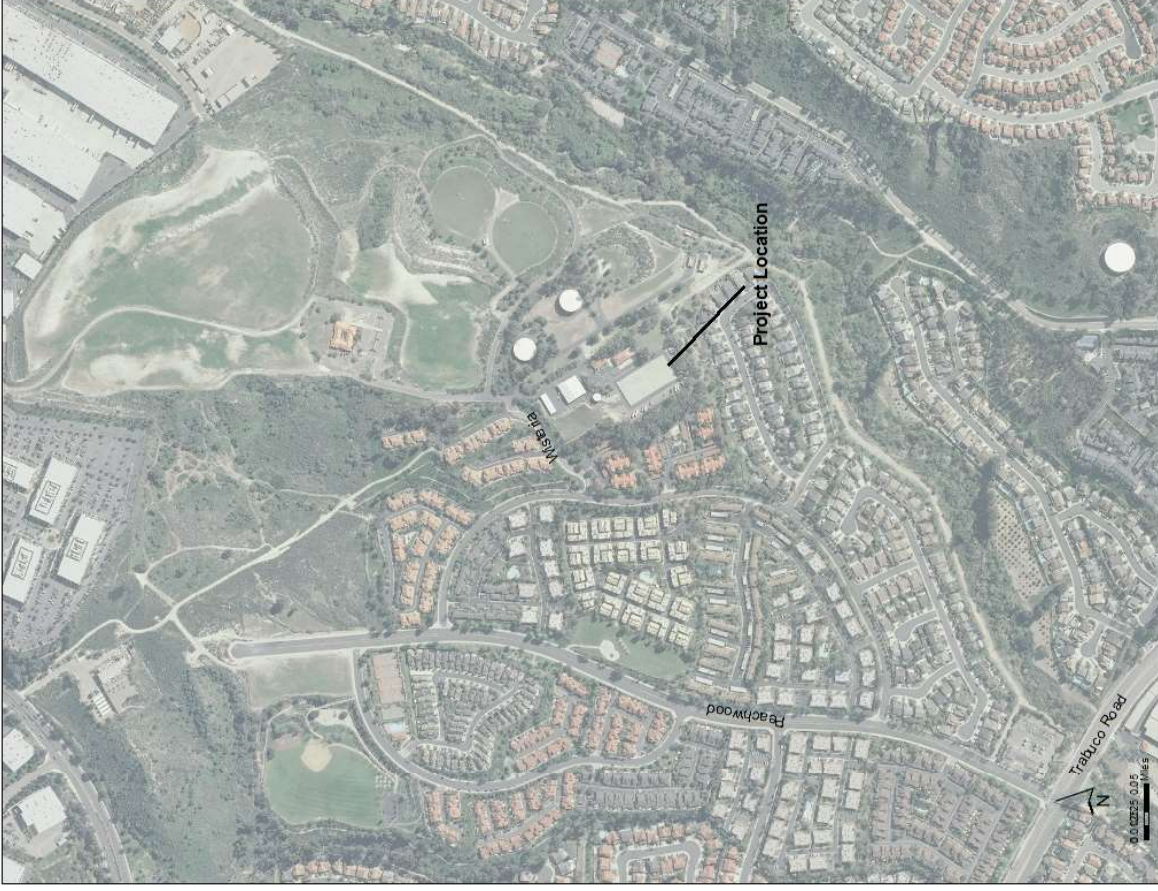
**Project Description:** Construction of the Baker Water Treatment Plant (BWTP) by Irvine Ranch Water District (IRWD). MNWD has executed an agreement with IRWD to receive 13 cubic feet per second of potable water from BWTP. In addition, a pipeline from BWTP to the South County Pipeline (SCP) will be constructed to deliver the water to the District via the SCP and the Central Intertie Pipeline (CIP).

**Project Need:** This project will provide an alternate potable water supply to the District, especially during times when the Diemer Treatment Plant is down.

**Project Status:** In construction.

### **Estimated Project Amount:**

Item	Estimated Cost
Design via IRWD	\$6,000,000
CEQA Compliance	EIR by IRWD
Construction Contract via IRWD	\$31,300,000
Inspection	IRWD
<b>Total Project Budget</b>	<b>\$37,300,000</b>



## Capital Improvement Program – Project Description

**Project No:** 2008.049

**System:** Regional (Potable)

**Fund:** 12

**Project Name:** South Orange County Coastal Ocean Desalination

**Project Location:** Dana Point

**Project Description:** This project is led by the Municipal Water District of Orange County (MWDOC) with five partnering agencies. Currently, the project is investigating the feasibility of ocean desalination. The current project amount is MNWD's share for initial planning studies. The plant, when constructed, will have a capacity of 15 mgd, with MNWD's share being 3 mgd.

**Project Need:** This project will provide an additional 3 mgd of potable water supply to MNWD and is needed for water supply diversification and drought proofing, as the desalinated water supply would not be subject to droughts.

**Project Status:** In design.

### Estimated Project Amount:

Item	Estimated Cost
Preliminary Design Analysis	\$700,000
CEQA Compliance	EIR
Construction Contract	To be determined
Inspection	To be determined
<b>Total Project Budget</b>	<b>\$700,000</b>



## Capital Improvement Program – Project Description

**Project No:** JRWSS16  
**System:** Regional (Potable)  
**Fund:** 7  
**Project Name:** SCWD/JRWSS Capital Projects

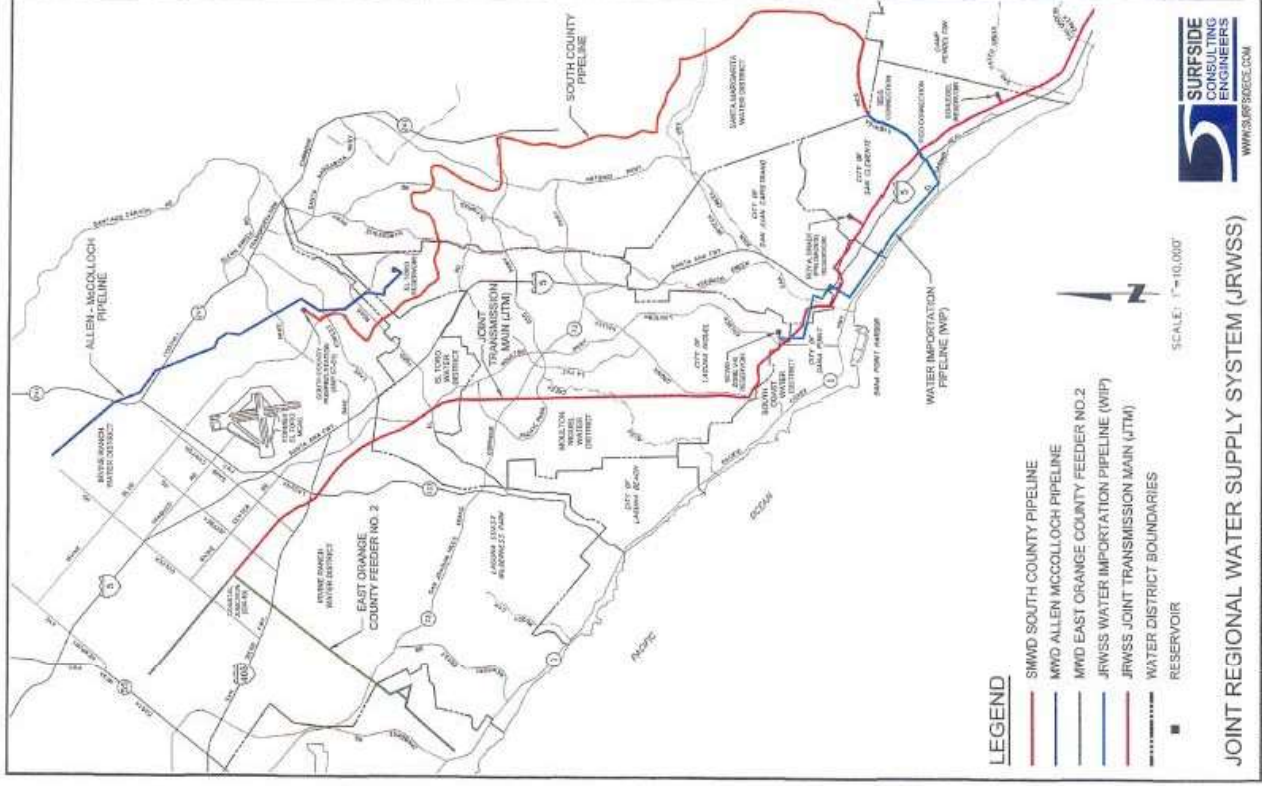
**Project Location:** Joint Transmission Main

**Project Description:** Perform capital improvements to the Joint Transmission Main (JTM).

**Project Need:** The JTM is operated and maintained by the South Coast Water District (SCWD) per an inter-agency project agreement entered in 2000. The District owns about 43% of the JTM capacity, up to 43 cubic feet per second (cfs). SCWD develops a capital improvement program (CIP) for the JTM. This project provides the funding for these CIP expenditures. SCWD updates its 6-year CIP annual and provides that information to the District.

**Project Status:** Annual as provided by SCWD. Funds are paid to SCWD upon receipt of and review of JTM associated invoices.

Estimated Project Amount:	Item	Estimated Cost
	Design	\$TBD
	CEQA Compliance	TBD
	Construction Contract	\$TBD
	Inspection	\$TBD
	<b>Total Project Budget</b>	<b>\$14,227,645</b>



## Capital Improvement Program – Project Description

**Project No:** SMWD

**System:** Regional (Potable, Wastewater)

**Fund:** 7

**Project Name:** SMWD Capital Projects- Joint Facilities

**Project Location:** Various

**Project Description:** Various CIP projects identified by SMWD for facilities that are jointly owned by MNWD and SMWD.

**Project Need:** Annual budget required for projects that have not yet been identified. Historically, funds are required to cover costs associated with these unanticipated projects.

**Project Status:** Annual as provided by SMWD. Funds are paid to SMWD upon receipt of and review of CIP associated invoices.

**Estimated Project Amount:**

Item	Estimated Cost
Design	TBD
CEQA Compliance	TBD
Construction Contract	TBD
Inspection/Other	TBD
<b>Total Project Budget</b>	<b>\$200,000</b>



## Capital Improvement Program – Project Description

**Project No:** SOCWA125

**System:** Regional (Wastewater)

**Fund:** 7

### **Project Name:** Plant 3A Improvements

**Project Location:** Plant 3A Treatment Plant, Mission Viejo

**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** SOCWA provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

### **Estimated Project Amount:**

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$12,976,500</b>



## Capital Improvement Program – Project Description

**Project No:** SOCWA124

**System:** Regional (Wastewater)

**Fund:** 7

**Project Name:** 2016/2017 SOCWA Capital Project Committee 2

**Project Location:** J.B. Latham Wastewater Treatment Plant, Dana Point

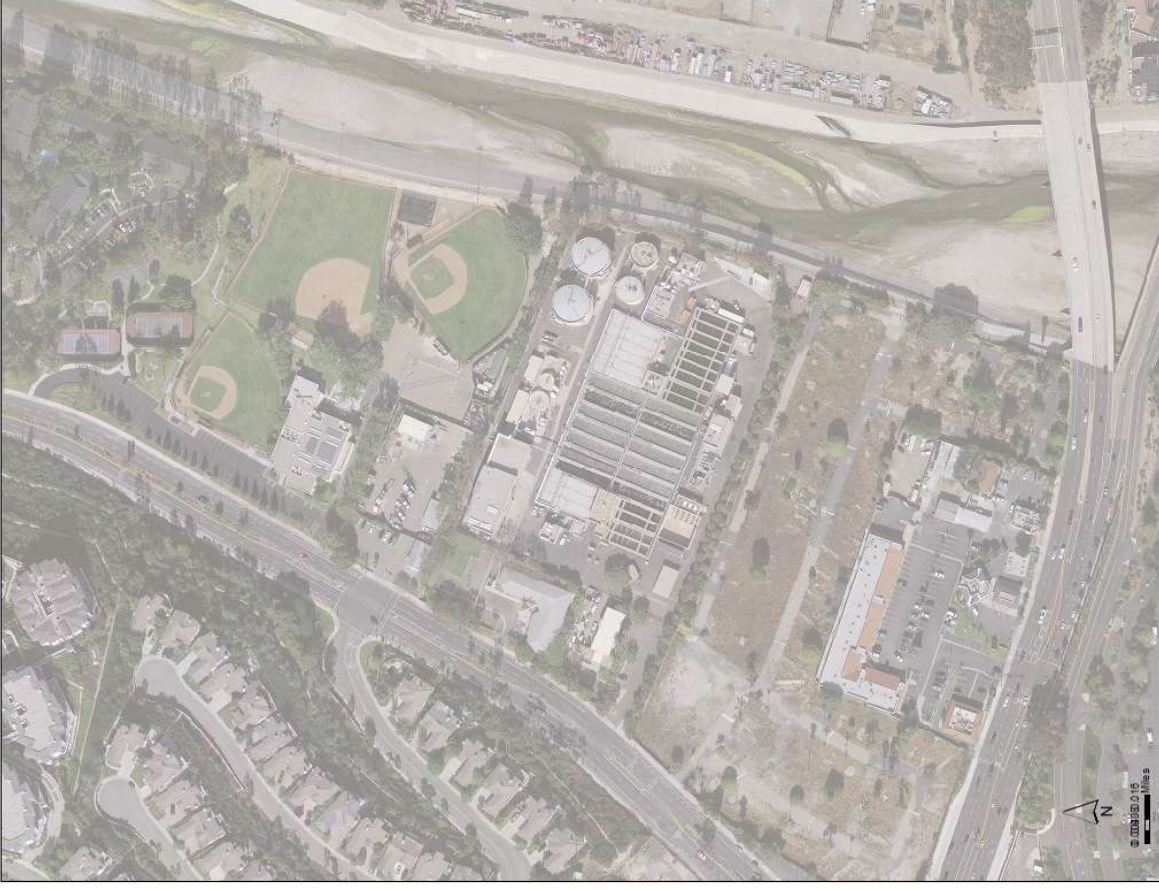
**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** SOCWA provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$13,390,721</b>



## **Capital Improvement Program – Project Description**

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**Project No:** SOCWA126

**System:** Regional (Wastewater)

**Fund:** 7

**Project Name:** 2016/2017 SOCWA Capital Project Committee 5

**Project Location:** San Juan Creek Ocean Outfall, Dana Point

**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** South Orange County Wastewater Authority (SOCWA) provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

**Estimated Project Amount:**

<b>Item</b>	<b>Estimated Cost</b>
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$79,101</b>

## Capital Improvement Program – Project Description

**Project No:** SOCWA127

**System:** Regional (Wastewater)

**Fund:** 7

**Project Name:** 2016/2017 SOCWA Capital Project Committee 15

**Project Location:** Coastal Treatment Plant, Aliso Viejo

**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** SOCWA provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$9,385,169</b>



## Capital Improvement Program – Project Description

**Project No:** SOCWA128

**System:** Regional (Wastewater)

**Fund:** 7

**Project Name:** 2016/2017 SOCWA Capital Project Committee 17

**Project Location:** Regional Treatment Plant, Laguna Niguel

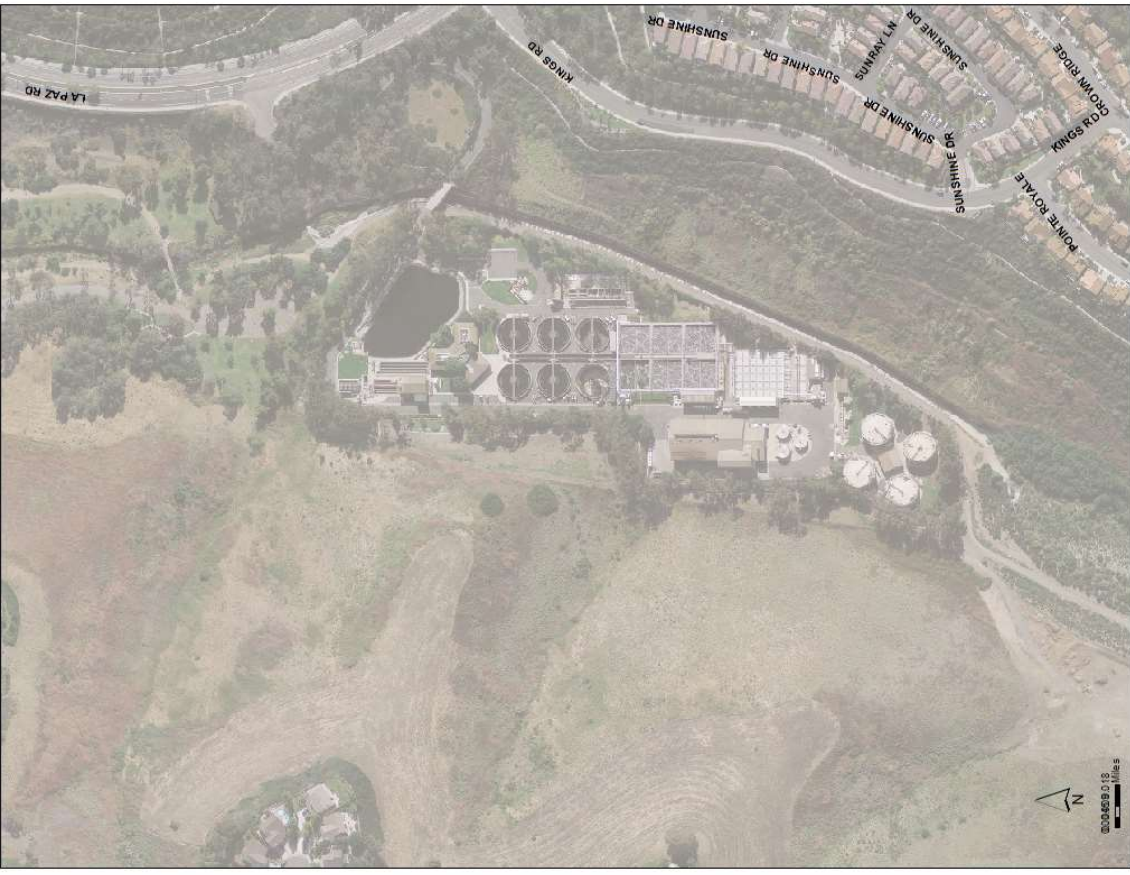
**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** South Orange County Wastewater Authority (SOCWA) provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$34,474,090</b>



## **Capital Improvement Program – Project Description**

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**Project No:** SOCWA118

**System:** Regional (Wastewater)

**Fund:** 7

**Project Name:** 2016/2017 SOCWA Capital Project Committee 24

**Project Location:** Aliso Creek Ocean Outfall

**Project Description:** Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

**Project Need:** South Orange County Wastewater Authority (SOCWA) provides wastewater treatment to the District's service area. SOCWA develops a capital improvement program (CIP) for all of the facilities through various project committees (PC).

**Project Status:** Annual as provided by SOCWA. Funds are paid to SOCWA upon receipt of and review of CIP associated invoices. The total project budget is a 10-year budget projection.

**Estimated Project Amount:**

<b>Item</b>	<b>Estimated Cost</b>
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$3,931,848</b>

## Capital Improvement Program – Project Description

**Project No:** UP1617RR

**System:** Potable, Recycled, Wastewater, District Overall

**Fund:** 7

**Project Name:** *Unanticipated Projects – Fund 7*

**Project Location:** District-wide

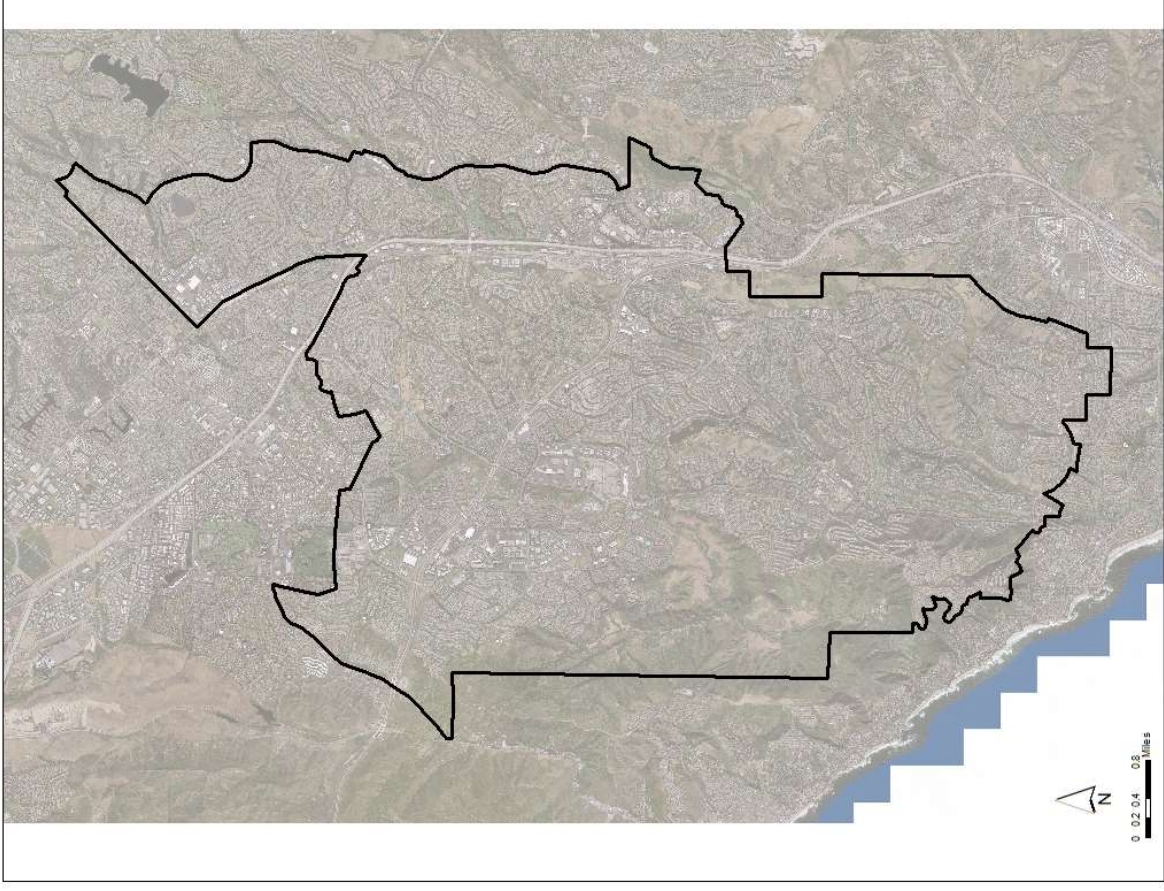
**Project Description:** Construct various replacement and refurbishment projects.

**Project Need:** The District owns, maintains, and operates 138 major facilities and over 1,300 pipelines and sewers. Through the year, facilities and pipes fail requiring replacement or refurbishment. This project provides for replacement and refurbishment of facilities/pipes that have not previously been identified in the Capital Improvement Program.

**Project Status:** Annual, as projects are defined and created funds are deducted from this program through the year.

### Estimated Project Amount:

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$300,000</b>



## Capital Improvement Program – Project Description

**Project No:** UP1617PC

**System:** Potable, Recycled, Wastewater, District Overall

**Fund:** 14

**Project Name:** *Unanticipated Projects – Fund 14*

**Project Location:** District-wide

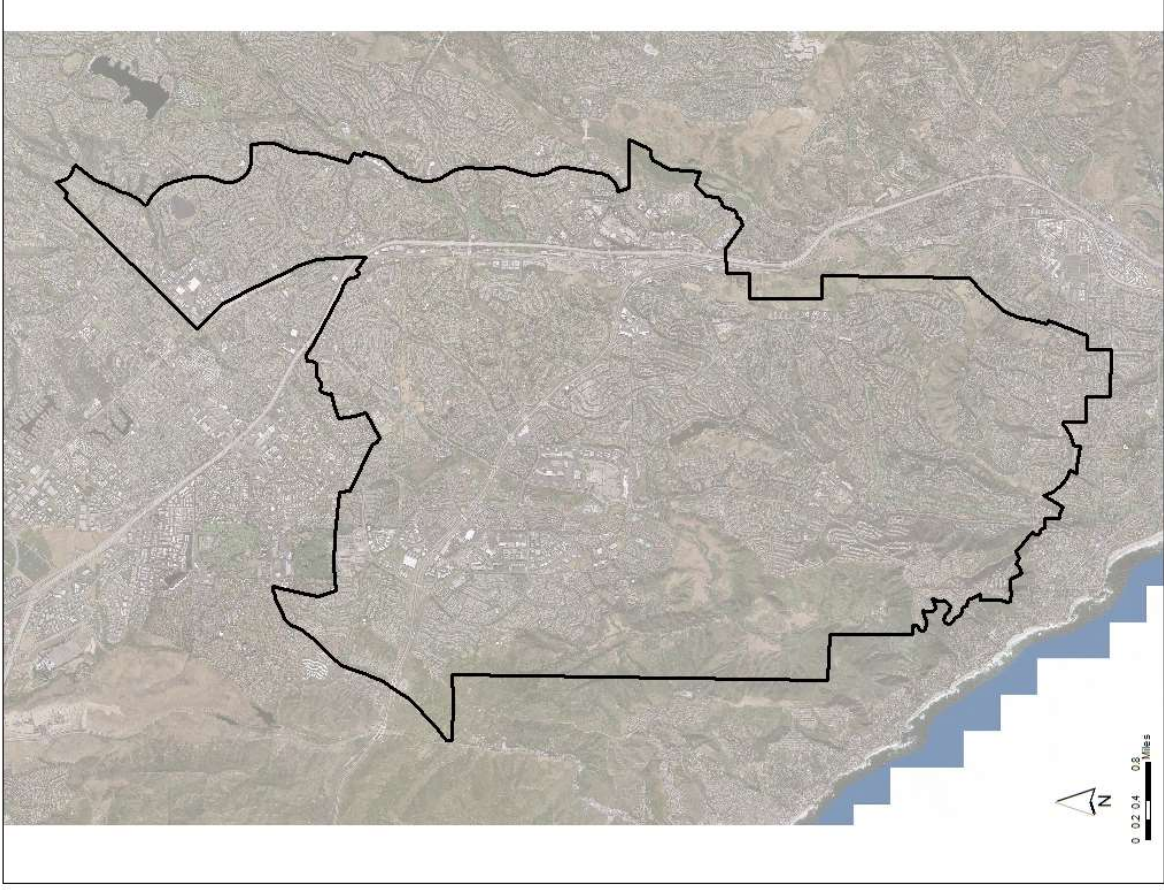
**Project Description:** Construct various new District-owned facilities.

**Project Need:** New facilities to improve or provide service may be identified throughout the year. This program is a contingency budget to fund these facilities that not in the current Capital Improvement Program.

**Project Status:** Annual, as projects are defined and created funds are deducted from this program through the year.

**Estimated Project Amount:**

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	TBD
Construction Contract	\$TBD
Inspection	\$TBD
<b>Total Project Budget</b>	<b>\$150,000</b>



## Capital Financing Policy

*Purpose: The capital financing policy sets forth guidelines for the financing of capital projects. It is the District's policy to obtain financing when appropriate to:*

- *Achieve an equitable allocation of capital costs/charges between current and future system users*
- *To provide more manageable rates in the near and medium term*
- *To minimize rate volatility*
- *Expedite critical infrastructure project*

### **USE OF CAPITAL FINANCING**

Capital financing shall include funding from capital reserves, general obligation bonds, revenue bonds, certificates of participation, lease/purchase agreements, and other financing obligations permitted to be issued or incurred under California law. Proceeds shall be used only to purchase or construct major infrastructure, facilities and real property.

Repayment of the obligation will not exceed the useful life of the projects financed. The District will seek to minimize the repayment period when feasible. Generally repayment period range from 20 to 30 years subject to market conditions.

To minimize interest rates the District will seek to issue financing with parity to existing obligations. Financial conditions specified in existing agreements must be met in order to issue parity financings.

Existing obligations require revenues net of all expenses shall be a minimum of 125 percent of the maximum annual debt service (as defined in the agreements). Revenues net of all expenses should be maintained at a minimum 175 percent of the maximum annual debt service for financial planning purposes. Annual adjustments to the District's rates will be made as necessary to maintain a minimum 175 percent coverage factor.

### **RESPONSIBILITY**

The primary responsibility for developing financing recommendations rests with the Director of Finance/Treasurer. In conjunction with updates to the 10-Year Financial Plan the Director of Finance/Treasurer will make recommendations to the Board of Directors for capital financing. To initiate capital financing the Director of Finance/Treasurer shall present a resolution of intent for approval of the Board of Directors.

MOULTON NIGUEL WATER DISTRICT  
STATEMENT OF INVESTMENT POLICY

ADOPTED: June 16, 2016

I. BACKGROUND

A. Prudent management of the District includes the adoption of appropriate goals, objectives, policies and guidelines for the investment of available funds.

B. The District's cash management system is designed to monitor and forecast accurately expenditures and revenues, thus enabling the District to invest funds to the fullest extent possible.

C. This policy serves to organize and formalize the District's investment-related activities, while complying with all applicable statutes governing the investment of public funds.

D. This policy supersedes any previous Investment Policies of the Moulton Niguel Water District.

II. PURPOSE

A. This statement is set forth by the District for the following purposes:

1. To establish a clear understanding for the Board, District management, responsible employees and third parties of the objectives, policies, and guidelines for the investment of District funds.

2. To offer guidance to any investment adviser on the investment of District funds.

3. To establish a basis for evaluating investment results.

B. The general purpose of this Investment Policy is to outline a philosophy and attitude, which will guide the investment of District funds toward the desired investment goals. It is intended to be sufficiently specific to be meaningful, yet adequately flexible to be practical.

### III. INVESTMENT AUTHORITY

A. In accordance with Section 53600 et seq. of the Government Code of the state of California, the authority to invest public funds is expressly delegated to the Board of Directors for subsequent delegation to the Treasurer. Investments are limited to those instruments specified by this Investment Policy.

B. The Moulton Niguel Water District may engage the services of one or more external investment advisers who are registered under the Investment Advisers Act of 1940 to assist in the management of the District's investment portfolio in a manner consistent with the District's objectives. External investment advisers may be granted discretion to purchase and sell investment securities in accordance with this investment policy.

### IV. PRUDENCE

A. Pursuant to California Government Code, Section 53600.3, all persons authorized to make investment decisions on behalf of the Agency are trustees and therefore fiduciaries subject to the Prudent Investor Standard:

“...all governing bodies of local agencies or persons authorized to make investment decisions on behalf of those local agencies investing public funds pursuant to this chapter are trustees and therefore fiduciaries subject to the prudent investor standard. When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the Agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the Agency. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law.”

B. The Treasurer or designated investment advisor and other authorized persons responsible for managing District funds acting in accordance with written procedures and this investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes provided that the Treasurer or other authorized persons acted in good faith. Deviations from expectations of a security's credit or market risk should be reported to the governing body in a timely fashion and appropriate action should be taken to control adverse developments.

## V. STATEMENT OF OBJECTIVES

A. The District's investment program is based first upon the principals of safety and liquidity. The expected return on investments is considered only after the first two criteria are met.

B. In order of priority, three fundamental criteria shall be followed:

1. SAFETY. Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, the District will diversify its investments by investing funds among a variety of securities with independent returns.

2. LIQUIDITY. The investment portfolio will remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

3. RETURN ON INVESTMENTS. The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints for safety and liquidity needs.

C. Funds are divided into six categories:

1. Funds needed for current operating expenses and capital requirements, known as the "Liquid Fund,"

2. Funds needed over the next one to five years known as the "Limited Maturity Fund", and

3. Funds not currently needed, known as the "Operating Reserve Fund."

4. Funds required per bond trust indentures of the 2009 COPs, known as the "Debt Service Restricted 2009 COP Reserve Fund."

5. Funds required per bond trust indentures of the 2010 COPs, known as the "Debt Service Restricted 2010 COP Reserve Fund."

6. Funds required per bond trust indentures of the 2015 Revenue Refunding Bond, known as the "Debt Service Restricted 2015 Revenue Refunding Reserve Fund."

D. The District shall inform the investment adviser from time to time of amounts to be allocated to each of the six categories.

E. The investment goals of the Liquid Fund shall be:

1. To preserve principal,

2. To provide liquidity for operating and maintenance expenses, debt service payments, and capital requirements, and

3. To earn a total rate of return commensurate with the first two goals.

F. The investment goals of the Limited Maturity Fund shall be:

1. To preserve principal,

2. To provide liquidity for operating and maintenance expenses, debt service payments, and capital requirements within the next one to five years, and

3. To earn a total rate of return commensurate with the first two goals.

G. The investment goal of the Operating Reserve Fund shall be:

1. To preserve principal and

2. To provide growth over the long term by earning the rate of return available from the longer-term investments permitted under the California Government Code.

H. The investment goal of the Debt Service Restricted 2009 COP Reserve Fund shall be:

1. To preserve principal

2. To provide liquidity for debt service payments in the event of defaulting, and

3. To earn a total rate of return commensurate with the first two goals.

I. The investment goal of the Debt Service Restricted 2010 COP Reserve Fund shall be:

1. To preserve principal
2. To provide liquidity for debt service payments in the event of defaulting, and
3. To earn a total rate of return commensurate with the first two goals.

J. The investment goal of the Debt Service Restricted 2015 Revenue Refunding Reserve Fund shall be:

1. To preserve principal
2. To provide liquidity for debt service payments in the event of defaulting, and
3. To earn a total rate of return commensurate with the first two goals.

## VI. INVESTMENT PERFORMANCE OBJECTIVES AND GUIDELINES

### A. Liquid Fund

1. The investment performance objectives for the Liquid Fund shall be to earn a return over a market cycle, which equals or exceeds the return on 90-day Treasury Bills.
2. The average maturity of the Liquid Fund shall not exceed 90 days, and the maximum final stated maturity of individual securities in the Liquid Fund may not exceed one year.
3. The District's Finance Director/Treasurer shall communicate periodically with the investment adviser in order to keep the adviser informed as to the District's specific short-term liquidity requirements.
4. The Liquid Fund shall maintain a minimum fund balance sufficient to provide adequate cash reserves to pay current operating expenses.

B. Limited Maturity Fund

1. The investment performance objective of the Limited Maturity Fund is to earn a return that equals or exceeds the return of the Bank of America Merrill Lynch 0-3 Year Treasury Index.

C. Operating Reserve Fund

1. The investment performance objective for the Operating Reserve Fund shall be to earn a rate of return over a market cycle, which exceeds the return on the Merrill Lynch 1-10 Year US Corporate and Government Index, or an equivalent index determined by the District.

2. The maximum stated final maturity of individual investments in the Operating Reserve Fund is ten years.

D. Debt Service Restricted 2009 COP Reserve Fund

1. The investment performance objectives for the Debt Service Restricted Reserve Fund shall be to earn a return over a market cycle, which equals or exceeds the return on Bank of America Merrill Lynch 3-5 Year US Treasury & Agency Index.

E. Debt Service Restricted 2010 COP Reserve Fund

1. The investment performance objectives for the Debt Service Restricted Reserve Fund shall be to earn a return over a market cycle, which equals or exceeds the return on Bank of America Merrill Lynch 3-month US Treasury Bill Index.

F. Debt Service Restricted 2015 Revenue Refunding Reserve Fund

1. The investment performance objectives for the Debt Service Restricted Reserve Fund shall be to earn a return over a market cycle, which equals or exceeds the return on Bank of America Merrill Lynch 3-5 Year US Treasury & Agency Index.

## VII. INVESTMENT POLICIES

- A. Investment of District funds is governed by California Government Code Section 53601 et seq., a copy of which is attached to this policy as Exhibit B. A Summary of Permitted Investments, prepared by District's current investment adviser is attached as Exhibit A.
- B. The District manages its investments under the prudent investor standard.
- C. The District's Finance Director/Treasurer is designated by the Board of Directors as the officer responsible for the investment of District funds; provided, the Board may designate such responsibility to investment advisers pursuant to Section VII.D. below. The investment function shall be overseen by the Finance and Information Technology Committee of the Board of Directors.
- D. Because the Operating Reserve Fund has the specific purpose of providing for long-term growth, and because cash flow requirements of the District are met through other investments, the Board of Directors hereby grants authority for the purchase of securities with maturities in excess of five years in the Operating Reserve Fund only.
- E. The maximum stated final maturity of individual investments in the Operating Reserve Fund is be ten years.
- F. No more than 40% of the Operating Reserve Fund may be invested in securities with maturities in excess of five years.
- G. Investment securities and cash shall be held in a bank custody account in the name of the District
- H. All investments shall be made as "delivery vs. payment" transactions.
- I. The Debt Service Restricted 2009 COP Reserve Fund, Debt Service Restricted 2010 COP Reserve Fund, and Debt Service Restricted 2015 Revenue Refunding Reserve Fund will be compliant with each of their respective bond trust indenture investment requirements.

VIII. Authorized Financial Institutions, Broker/Dealers, Depositories

A. The District shall work with financial institutions that are reputable and trustworthy, knowledgeable and experienced in Public Agency investing and able to meet all of their financial obligations. These institutions may include "primary" dealers or regional dealers that qualify under Securities and Exchange Commission (SEC) Rule 15c3-1 (uniform net capital rule).

B. In accordance with Section 53601.5, institutions eligible to transact investment business with the District include:

1. Primary government dealers as designated by the Federal Reserve Bank and non-primary government dealers.
2. Nationally or state-chartered banks.
3. The Federal Reserve Bank.
4. Direct issuers of securities eligible for purchase.

C. Selection of financial institutions and broker/dealers authorized to engage in transactions will be at the sole discretion of the District, except where the District utilizes an external investment adviser in which case the District may rely on the adviser for selection.

D. Public deposits will be made only in qualified public depositories as established by State law. Deposits will be insured by the Federal Deposit Insurance Corporation, or, to the extent the amount exceeds the insured maximum, will be collateralized in accordance with State law.

E. Selection of broker/dealers used by an external investment adviser retained by the District will be at the sole discretion of the adviser. Where possible, transactions with broker/dealers shall be selected on a competitive basis and their bid or offering prices shall be recorded. If there is no other readily available competitive offering, best efforts will be made to document quotations for comparable or alternative securities. When purchasing original issue instrumentality securities, no competitive offerings will be required as all dealers in the selling group offer those securities at the same original issue price.

## IX. AUTHORIZED INVESTMENTS

A. The District's investments are governed by California Government Code, Sections 53600 et seq. Within the investments permitted by the Code, the District seeks to further restrict eligible investments to the guidelines listed below. In the event a discrepancy is found between this policy and the Code, the more restrictive parameters will take precedence. Percentage holding limits listed in this section apply at the time the security is purchased.

B. Any investment currently held at the time the policy is adopted which does not meet the new policy guidelines can be held until maturity, and shall be exempt from the current policy (with the exception of credit quality). At the time of the investment's maturity or liquidation, such funds shall be reinvested only as provided in the current policy.

C. An appropriate risk level shall be maintained by purchasing securities that are of high quality, liquid, and marketable. The portfolio shall be diversified by security type and institution to avoid incurring unreasonable and avoidable risks regarding specific security types or individual issuers.

D. The authorized investments are as listed below:

1. MUNICIPAL SECURITIES include obligations of the District, the State of California, any of the other 49 states, and any local District within the State of California, provided that:

- a) *The securities are rated “A” or higher by at least one nationally recognized statistical rating organization (“NRSRO”).*
- b) *No more than 5% of the portfolio may be invested in any single issuer.*
- c) *No more than 30% of the portfolio may be in Municipal Securities.*
- d) *The maximum stated maturity does not exceed five (5) years, with the exception of securities that have a “put” feature of five years or less.*

2. U.S. TREASURIES and other government obligations for which the full faith and credit of the United States are pledged for the payment of principal and interest. There are no limits on the dollar amount or percentage of the portfolio that the District may invest in U.S. Treasuries, provided that:

- a) *The maximum maturity is five (5) years, with the exception of securities held in the Operating Reserve, which can have a stated maturity of 10 years.*

3. FEDERAL AGENCIES or United States Government-Sponsored Enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. There are no limits on the dollar amount or percentage of the portfolio that the District may invest in Federal District or Government-Sponsored Enterprises (GSEs), provided that:

- a) *No more than 25% of the portfolio may be invested in any single District/GSE issuer.*
- b) *The maximum maturity does not exceed five (5) years, with the exception of securities held in the Operating Reserve, which may have a stated maturity of 10 years.*

4. **BANKER'S ACCEPTANCES**, provided that:
  - a) *They are issued by institutions which have short-term debt obligations rated "A-1" or higher by at least one NRSRO; or long-term debt obligations which are rated "A" or higher by at least one NRSRO.*
  - b) *No more than 40% of the portfolio may be invested in Banker's Acceptances.*
  - c) *No more than 5% of the portfolio may be invested in any single issuer.*
  - d) *The maximum maturity does not exceed 180 days.*
  
5. **COMMERCIAL PAPER**, provided that:
  - a) *The issuer is a corporation organized and operating in the United States with assets in excess of \$500 million.*
  - b) *The securities are rated "A-1" or higher by at least one NRSRO.*
  - c) *The securities are issued by corporations which have long-term obligations rated "A" or higher by at least one NRSRO.*
  - d) *The District may purchase no more than 10% of the outstanding commercial paper of any single issuer.*
  - e) *No more than 25% of the portfolio may be invested in Commercial Paper.*
  - f) *No more than 5% of the portfolio may be invested in any single issuer.*
  - g) *The maximum maturity does not exceed 270 days.*
  
6. **NEGOTIABLE CERTIFICATES OF DEPOSIT (NCDS)**, issued by a nationally or state-chartered bank, a savings association or a federal association, a state or federal credit union, or by a federally licensed or state-licensed branch of a foreign bank, provided that:

- a) *The amount of the NCD insured up to the FDIC limit does not require any credit ratings.*
- b) *Any amount above the FDIC insured limit must be issued by institutions which have short-term debt obligations rated "A-1" or higher by at least one NRSRO; or long-term obligations rated "A" or higher by at least one NRSRO.*
- c) *No more than 30% of the total portfolio may be invested in NCDs*
- d) *No more than 5% of the portfolio may be invested in any single issuer.*
- e) *The maximum maturity does not exceed five (5) years.*

7. **FEDERALLY INSURED TIME DEPOSITS (Non-Negotiable Certificates of Deposit)** in state or federally chartered banks, savings and loans, or credit unions, provided that:

- a) *The amount per institution is limited to the maximum covered under federal insurance.*
- b) *No more than 20% of the portfolio will be invested in a combination of federally insured and collateralized time deposits.*
- c) *The maximum maturity does not exceed five (5) years.*

8. **COLLATERALIZED TIME DEPOSITS (Non-Negotiable Certificates of Deposit)** in state or federally chartered banks, savings and loans, or credit unions in excess of insured amounts which are fully collateralized with securities in accordance with California law, provided that:

- a) *No more than 20% of the portfolio will be invested in a combination of federally insured and collateralized time deposits.*
- b) *The maximum maturity does not exceed five (5) years.*

9. **COLLATERALIZED BANK DEPOSITS.** District deposits with financial institutions will be collateralized with pledged securities per California Government Code, Section 53651.

10. REPURCHASE AGREEMENTS collateralized with securities authorized under California Government Code, maintained at a level of at least 102% of the market value of the Repurchase Agreement. There are no limits on the dollar amount or percentage that the District may invest, provided that:

- a) *Securities used as collateral for Repurchase Agreements will be delivered to an acceptable third party custodian.*
- b) *Repurchase Agreements are subject to a Master Repurchase Agreement between the District and the provider of the repurchase agreement. The Master Repurchase Agreement will be substantially in the form developed by the Securities Industry and Financial Markets Association (SIFMA).*
- c) *The maximum maturity does not exceed one (1) year.*

11. STATE OF CALIFORNIA LOCAL DISTRICT INVESTMENT FUND (LAIF), provided that:

- a) *The District may invest up to the maximum amount permitted by LAIF.*
- b) *LAIF's investments in instruments prohibited by or not specified in the District's policy do not exclude the investment in LAIF itself from the District's list of allowable investments, provided LAIF's reports allow the Treasurer and the outside investment adviser to adequately judge the risk inherent in LAIF's portfolio.*

12. LOCAL GOVERNMENT INVESTMENT POOLS

- a) *The District may invest up to the maximum amount permitted by the following respective Local Government Investment Pools:*
  - (1) CALTRUST
  - (2) California Asset Management Program (CAMP)
- b) *Local Government Investment Pool investments in instruments prohibited by or not specified in the District's policy do not exclude the investment in LGIPs itself from the District's list of allowable investments, provided the specific LGIP's reports allow the Treasurer and the outside investment adviser to adequately judge the risk inherent in LGIP's portfolio.*

13. CORPORATE MEDIUM TERM NOTES (MTNS), provided that:

- a) *The issuer is a corporation organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.*
- b) *The securities are rated "A" or higher by at least one NRSRO.*
- c) *No more than 30% of the total portfolio may be invested in MTNs.*
- d) *No more than 5% of the portfolio may be invested in any single issuer.*
- e) *The maximum maturity does not exceed five (5) years.*

14. MONEY MARKET MUTUAL FUNDS that are registered with the Securities and Exchange Commission under the Investment Company Act of 1940, provided that:

- a) *Such Funds meet either of the following criteria:*
  - (1) Have attained the highest ranking or the highest letter and numerical rating provided by not less than two (2) NRSROs; or
  - (2) Have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years' experience investing in the securities and obligations authorized by California Government Code, Section 53601 and with assets under management in excess of \$500 million.
  - (3) No more than 20% of the total portfolio may be invested in Money Market Mutual Funds.
  - (4) No more than 10% of the portfolio may be invested in any one Fund.

15. SUPRANATIONALS, provided that:
  - a) *Issues are US dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank.*
  - b) *The securities are rated "AA" or higher by a NRSRO.*
  - c) *No more than 30% of the total portfolio may be invested in these securities.*
  - d) *No more than 10% of the portfolio may be invested in any single issuer.*
  - e) *The maximum stated maturity does not exceed five (5) years.*
  
16. Prohibited Investment Vehicles and Practices
  - a) *State law notwithstanding, any investments not specifically described herein are prohibited, including, but not limited to futures and options.*
  - b) *In accordance with Government Code, Section 53601.6, investment in inverse floaters, range notes, or mortgage derived interest-only strips is prohibited.*
  - c) *Investment in any security that could result in a zero interest accrual if held to maturity is prohibited.*
  - d) *Trading securities for the sole purpose of speculating on the future direction of interest rates is prohibited.*
  - e) *Purchasing or selling securities on margin is prohibited.*
  - f) *The use of reverse repurchase agreements, securities lending or any other form of borrowing or leverage is prohibited.*
  - g) *The purchase of foreign currency denominated securities is prohibited.*

X. Collateralization

A. CERTIFICATES OF DEPOSIT (CDs). The District shall require any commercial bank or savings and loan association to deposit eligible securities with an Agency of a depository approved by the State Banking Department to secure any uninsured portion of a Non-Negotiable Certificate of Deposit. The value of eligible securities as defined pursuant to California Government Code, Section 53651, pledged against a Certificate of Deposit shall be equal to 150% of the face value of the CD if the securities are classified as mortgages and 110% of the face value of the CD for all other classes of security.

B. COLLATERALIZATION OF BANK DEPOSITS. This is the process by which a bank or financial institution pledges securities, or other deposits for the purpose of securing repayment of deposited funds. The District shall require any bank or financial institution to comply with the collateralization criteria defined in California Government Code, Section 53651.

C. REPURCHASE AGREEMENTS. The District requires that Repurchase Agreements be collateralized only by securities authorized in accordance with California Government Code:

1. The securities which collateralize the repurchase agreement shall be priced at Market Value, including any Accrued Interest plus a margin. The Market Value of the securities that underlie a repurchase agreement shall be valued at 102% or greater of the funds borrowed against those securities.
2. Financial institutions shall mark the value of the collateral to market at least monthly and increase or decrease the collateral to satisfy the ratio requirement described above.
3. The District and its investment adviser shall receive monthly statements of collateral.

XI. Delivery, Safekeeping and Custody

A. DELIVERY-VERSUS-PAYMENT (DVP). All investment transactions shall be conducted on a delivery-versus-payment basis.

B. **SAFEKEEPING AND CUSTODY.** To protect against potential losses due to failure of individual securities dealers, and to enhance access to securities, interest payments and maturity proceeds, all cash and securities in the District's portfolio shall be held in safekeeping in the District's name by a third party custodian, acting as agent for the District under the terms of a custody agreement executed by the bank and the District. All investment transactions will require a safekeeping receipt or acknowledgment generated from the trade. A monthly report will be received by the District from the custodian listing all securities held in safekeeping with current market data and other information.

C. The only exceptions to the foregoing shall be depository accounts and securities purchases made with: (i) local government investment pools; (ii) time certificates of deposit, and, (iii) money market mutual funds, since the purchased securities are not deliverable.

## XII. Maximum Maturity

A. To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities.

## XIII. REPORTING AND REVIEWS

### A. Transactions and portfolio holdings

1. The bank custodian and the investment adviser shall each provide monthly statements of holdings and account activity to the District's Director of Finance/Treasurer. The bank custodian shall also provide such information to the District's Investment Adviser(s).

2. Confirmations of all transactions and movement of funds shall be forwarded promptly to the District by the investment adviser. The investment adviser shall ensure a duplicate confirmation is provided to the District by the broker.

### B. Investment performance

1. The investment adviser shall meet at least quarterly with District management and/or with the Finance & Information Technology Committee of the Board of Directors to review account activity, economic conditions and investment performance.

#### XIV. AMENDMENTS

- A. This Investment Policy is subject to amendment from time to time by the Board of Directors. Any changes must be approved by the Board of Directors and communicated in writing to the Director of Finance/Treasurer and other responsible employees, appropriate third parties and investment advisers.
- B. It shall be the responsibility of the investment adviser to inform the District of changes to the California Government Code, which affect the investment of District funds. Such changes shall be considered promptly by the Board of Directors.
- C. The Investment Policy shall be reviewed and approved annually each fiscal year during the budget process.

# MOULTON NIGUEL WATER DISTRICT RESERVE POLICY

## **PURPOSE**

This policy outlines the funding, utilization, and replenishment of the District's reserves consistent with the financial controls established as part of its annual budget process. Additionally, this policy establishes the target reserve balances necessary for maintaining the District's credit worthiness and for adequately providing for:

- Funding infrastructure replacement and refurbishment
- Economic uncertainties, extraordinary costs, and other financial impacts
- Loss of significant revenue sources such as property tax receipts or connection fees
- Local disasters or catastrophic events
- Losses not covered by insurance
- Future debt or capital obligations
- Cash flow requirements

## **POLICY**

### **A. GENERAL RESERVES**

#### **1. General Operating Reserve (Fund 1)**

The District will maintain a General Operating Reserve in order to provide sufficient liquidity for funding the day-to-day operating expenses and support of the District's cash flow needs during normal operations. There is often a delay between the receipt of revenues and the payment of expenses and the establishment of a reserve to mitigate or eliminate the risk of monthly negative cash positions represents prudent financial planning. The target balance of the General Operating Reserve will equal three months of operating expenses consistent with best practices in the industry for agencies with monthly rate revenue. Sufficient funding for the General Operating Reserve shall be identified at the beginning of each fiscal year and maintained within Fund 1.

#### **2. Self-Insurance Reserve (Fund 4)**

The District will maintain a Self-Insurance Reserve in order to fund property and liability insurance deductibles, losses exceeding insurance limits, and unemployment benefit payments in the event that a claim is made. The target amount of the Self-Insurance Reserve will equal five times the current JPIA property insurance deductible (current deductible is up to \$50,000). Sufficient funding for the Self-Insurance Reserve shall be provided at the beginning of each fiscal year via budget transfers and maintained in the Self-Insurance Fund (Fund 4).

**3. Rate Stabilization Reserve (Fund 52)**

Since one of the biggest risks and impacts on rates would be a loss of property tax revenues and due to the timing in the receipt of property tax, to avoid large fluctuations in customer water and sewer rates, the District will fund a Rate Stabilization Reserve to provide for losses of revenue, significant increases in water purchase costs, and other extraordinary financial impacts to revenues and expenses. The target balance of the Rate Stabilization Reserve will be set equal to fifty percent of the District's budgeted 1% ad valorem property tax revenue. The Rate Stabilization Reserve will be maintained in the Rate Stabilization Fund.

**B. CAPITAL IMPROVEMENT RESERVES**

The Replacement and Refurbishment (R&R) Reserve, the Emergency Reserve, the Water Supply Reliability Reserve, the Planning and Construction Reserve, and the Capital Facilities Restricted Reserve will constitute the District's Capital Reserves. Key objectives for accumulating these Reserves are to fund projects identified in the Long Range Financial Plan and the Ten-Year Capital Improvement Plan, to reduce the volatility of water and sewer rate increases and to quickly repair critical assets in the event of a natural disaster or facility failure.

**1. Replacement and Refurbishment (R&R) Reserve (Fund 7)**

The R&R Reserve will fund the ongoing costs related to the replacement and refurbishment of existing assets in conjunction with the District's Capital Improvement Plan. All amounts will be maintained in a separate R&R Fund. Funding for the R&R Reserve will be from new debt issuances or fund transfers as part of the budget process.

**2. Emergency Reserve (Fund 1)**

The Emergency Reserve will provide funds to enable the District to quickly repair critical assets in the event of a natural disaster or facility failure. The target balance of the Emergency Reserve will equal 2% of the replacement costs of the District's assets, as outlined in current guidelines from the Federal Emergency Management Agency (FEMA).

**3. Water Supply Reliability Reserve (Fund 12)**

The Water Supply Reliability Reserve will fund the development of new water or recycled water supplies as identified in the District Capital Improvement Plan. All amounts will be maintained in a separate Water Supply Reliability Fund. Funding for the Water Supply Reliability Reserve will be from new debt issuances or fund transfers as part of the budget process.

**4. Planning and Construction Reserve (Fund 14)**

The Planning and Construction Reserve will fund the development of new capital facilities that do not result in new water or recycled water supplies as identified in the District Capital Improvement Plan. All amounts will be maintained in a separate Planning and Construction Fund. Funding for the Planning and Construction Reserve will be from new debt issuances or fund transfers as part of the budget process.

**5. Capital Facilities Restricted Reserve (Fund 15)**

The Capital Facilities Restricted Reserve will fund the development of new district-wide capital facilities or replacement or refurbishment. All amounts will be maintained in a separate Capital Facilities Restricted Reserve Fund and transferred to Funds 7, 12, or 14 as part of the annual budget process. Funding for the Capital Facilities Restricted Reserve will be from capacity fees charged to new developments to buy into existing assets.

**C. DEBT SERVICE RESERVE**

**1. Debt Service Reserve**

The District will fund Debt Service Reserves, which are held in trust with a third party trustee as provided for in bond covenants. Increases and decreases to these reserves will be consistent with bond covenants. The District's accounting records show these amounts in various debt funds.

**D. PROCEDURE FOR USING RESERVE FUNDS**

**1. General Operating, and Self-Insurance**

General Operating, and Self-Insurance Reserves can be used at any time to meet cash flow requirements of District operations. Authority to use the funds will be consistent with the District's Purchasing Policy.

**2. Rate Stabilization Reserve**

The Rate Stabilization Reserve can be used at any time to meet cash flow requirements of District operations. The use of the Rate Stabilization Reserve will require Board authorization.

**3. Capital Improvement Reserves**

The Board of Directors will authorize the use of the Replacement and Refurbishment, Planning and Construction and Water Supply Reliability Reserves during the budget process. The Capital Facilities Restricted Reserve is transferred to the R&R, Planning and Construction and/or Water Supply Reliability Reserves as part of the budget process. The Emergency Reserve is also available for unplanned (unbudgeted) capital replacement and emergency expenditures in the event of a natural disaster or facility failure. When appropriate, the Board may adopt Reimbursement Resolutions as necessary to advance reserves prior to obtaining external capital financing. Authorization for the use of Capital

Improvement Reserves for unplanned capital replacement will be consistent with the District's Purchasing Policy.

**E. PROCEDURE FOR REPLENISHING RESERVE FUNDS**

**1. General Operating, Self-Insurance and Rate Stabilization Reserves**

General Reserves are replenished from the District's revenues with the General Operating and Self-Insurance Reserves taking precedence to the Rate Stabilization Reserve. General Operating and Self Insurance Reserves will be replenished by the end of each fiscal year. The Rate Stabilization Reserve will be replenished as soon as possible with replenishment to commence within 12 months of any Rate Stabilization Reserve draw to bringing the reserve in line with targets.

**2. Capital Improvement Reserves**

The R&R, Planning and Construction and Water Supply Reliability Reserves are replenished at year end as part of the budget process via transfers or through debt issuances. The Emergency Reserve is replenished from the District's revenue as quickly as possible after an emergency outside of the budgeting process. The Capital Facilities Restricted Reserve is funded by developer's capacity fees throughout the year and transferred to the R&R, Planning and Construction and Water Supply Reliability Reserves as part of the budget process. The District's General Manager or Director of Finance/Treasurer will do a full review of the District's Long Range Financial Plan and cash flow models to determine if corrective actions are needed to replenish the funds in the event of a draw on the Emergency Reserve.

**F. PROCEDURE FOR MONITORING RESERVE LEVELS**

The General Manager or Director of Finance/Treasurer will submit a reserve analysis to the Board of Directors upon the occurrence of the following events:

- Board of Directors' consideration of the annual budget;
- Board of Directors' consideration of a water and sewer rate increase; and
- When a major change in conditions threatens the reserve levels established within this Policy.

If the analysis indicates projected or actual individual reserve levels would fall 10% or more below the target levels outlined in this Policy, at least one of the following actions shall be included with the analysis:

- An explanation of why the reserve levels are not at the targeted level; and/ or

- Actions needed to bring reserve levels within the target levels prescribed.

In addition, the district will utilize the internal Long Range Financial Plan and 10 year and monthly cash flow models to determine forecasted reserve target shortfalls and report on needed corrective actions.

**RESOLUTION NO. 16-\_\_**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
MOULTON NIGUEL WATER DISTRICT  
APPROVING A BUDGET APPROPRIATION AND ADOPTING THE OPERATING  
BUDGET AND CAPITAL IMPROVEMENT PROGRAM BUDGET  
FOR FISCAL YEAR 2016-17**

**WHEREAS**, the Financial Policies of the District provide that the Board shall hold public meetings and adopt the District’s budget and may modify appropriations with majority approval throughout the Fiscal Year. Said budget consists of the estimated and anticipated expenditures and revenues for the Fiscal Year for all funds; and

**WHEREAS**, the Capital Improvement Program (“CIP”) outlines the expenditure plan for future capital projects for the next decade and provides a CIP Budget for the upcoming Fiscal Year. CIP projects are funded from four sources: Water Efficiency (“WE”) Fund 6, Replenishment and Refurbishment (R&R) Fund 7, Water Supply Reliability (“WSR”) Fund 12, and Planning and Construction (“P&C”) Fund 14. All of the funds described herein and as further set forth in the budget adopted by this Resolution shall be referred to herein as “Funds;” and

**WHEREAS**, the Board held multiple public meetings to review and discuss the proposed Fiscal Year 2016-17 Operating Budget and Capital Improvement Budget. In addition, a public meeting of the Board was duly noticed and conducted under the Brown Act on June 16, 2016 during which this Resolution and the budget were considered; and

**NOW, THEREFORE** the Board of Directors of the Moulton Niguel Water District, does hereby **RESOLVE, DETERMINE** and **ORDER** as follows:

**SECTION 1.** A certain document now on file in the Finance Division of the Moulton Niguel Water District entitled, “Moulton Niguel Water District FY 2016-17 Budget,” is hereby made part of this Resolution.

**SECTION 2.** Said Operating and Capital Improvement Budget is hereby adopted for the Fiscal Year beginning July 1, 2016, and ending June 30, 2017, and consists of the estimated and anticipated expenditures and revenues for the Fiscal Year for all Funds.

**SECTION 3.** The expenditure amounts designated to each Fund for which they are designated and such appropriations shall not be increased except as provided herein.

**SECTION 4.** Except as provided for in SECTION 5, the appropriations for each Fund may only be increased or decreased by the Board during the Fiscal Year by passage of a resolution amending the Budget.

**SECTION 5.** The following controls are hereby placed on the use and transfers of budgeted Funds:

- A. No expenditure of Funds shall be authorized unless sufficient amounts have been appropriated by the Board or General Manager as described herein. The General Manager may authorize all transfers of amounts from category to category within the same Fund. The General Manager may delegate authority to transfer amounts between categories as necessary.
- B. The General Manager may authorize the transfer and expenditure of amounts between the Funds only to the extent of the specific Funds and maximum amounts set forth below. Said transfers may be made at one or more times during the Fiscal Year so long as the total amounts do not exceed the maximum amounts for the specific Funds set forth below. The General Manager may delegate authority to transfer amounts as necessary.
  - 1. The maximum amount which may be transferred by the General Manager from Fund 1 to Funds 7, 12, and/or 14 shall be \$43,958,065.
  - 2. The maximum amount which may be transferred by the General Manager between and among Funds 7, 12, and 14 shall be \$46,569,520.
  - 3. The maximum amount which may be transferred by the General Manager from the Capacity Fee Fund 15 to Fund 7 shall be \$2,611,455 to be spent on the identified projects in Table 1.

Table 1.

Project No.	Description	FY 2016-17 Budget
2015002	2015-16 VALVE REPLACEMENT	\$1,433,232
2006038	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	\$459,552
2015013	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$300,000
SOCWA124	2016/2017 SOCWA CAPITAL PC 2(R)	\$1,597,112
2009115	SAN JUAN CREEK 30 EFFLUENT TM	\$2,211,063
SOCWA128	2016/2017 SOCWA CAPITAL PC 17(R)	\$1,480,197
<b>Total</b>		<b>\$7,481,156</b>

- 4. The maximum amount which may be transferred by the General Manager from Fund 1 to Funds 12, 68, 69, 70, 71 and 72 shall be \$15,246,181 to be spent on debt service payments.

C. The General Manager is authorized to employ during the fiscal year(s) covered by this Budget, the number and classifications of such full time employees as are shown in the Budget, all subject to the total number of authorized positions. The General Manager may also authorize the hiring of temporary or part time staff provided that the total to be obligated and expended within all funds as set forth in said Budget for the category of "Salaries" does not exceed the budgeted and appropriated amount, as the same may be amended by the Board.

**SECTION 6.** All appropriations for the Capital Improvement Projects remaining unexpended on June 30, 2016, are hereby appropriated for such Capital Projects for the 2016-17 Fiscal Year.

**SECTION 7.** All appropriations and outstanding encumbrances for non-Capital Projects as of June 30, 2016, expire as of said date.

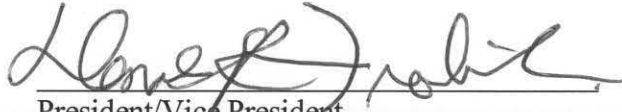
**SECTION 8.** The Board of Directors does hereby approve and adopt the General Manager, General Unit, Supervisory Unit and Exempt Employees' Job Classification Salary Schedules effective June 25, 2016, for Fiscal Year 2016-2017.

**SECTION 9.** If any section, subsection, clause or phrase in this Resolution is for any reason held invalid, the validity of the remainder of this Resolution shall not be affected thereby. The Board hereby declares that it would have passed this Resolution and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases or the application thereof be held invalid.

**SECTION 10.** The Recitals set forth above are incorporated herein and made an operative part of this Resolution.

**ADOPTED, SIGNED and APPROVED** this 16<sup>th</sup> day of June, 2016.

**MOULTON NIGUEL WATER DISTRICT**



President/Vice President

MOULTON NIGUEL WATER DISTRICT  
and of the Board of Directors thereof



Secretary/Assistant Secretary

MOULTON NIGUEL WATER DISTRICT  
and of the Board of Directors thereof

