



FISCAL YEAR 2017-2018 BUDGET

The Moulton Niguel Water District (MNWD) elected Board of Directors is dedicated to providing our community with safe and reliable water services and wastewater treatment, along with the latest water efficiency and conservation programs. The MNWD Board actively encourages the local community to participate in the ongoing conversation about water policy and programs in our area.



Mr. Don Froelich has served on the MNWD Board of Directors' since 2008. He currently serves as the President of the Board. Mr. Froelich also serves on the Orange County Waste Management and Recycling Commission, and is an alternate representative on the South Orange County Wastewater Authority (SOCWA). He represents Division 3 which covers the City of Laguna Hills.



Mr. Brian Probolsky has served on the MNWD Board of Directors' since 2008. He currently serves as Vice President of the Board and Chairman of the Finance and Technology Committee. He serves as the MNWD representative on the South Orange County Watershed Management Area. He represents Division 5 which covers portions of the City of Laguna Niguel.



Mr. Scott Colton has served on the MNWD Board of Directors' since 2010. He currently serves as Vice President of the Board and Chairman of the Engineering & Operations Committee. He serves as the MNWD representative for the Santiago Aqueduct Committee (SAC) and on the San Juan Basin Authority (SJBA) and as an alternate for the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA) Boards. He represents Division 2 which covers southern Mission Viejo and portions of Laguna Niguel.



Mr. Duane Cave has served on the MNWD Board of Directors' since 2014. He currently serves as chair of the Community Relations/Citizens Advisory Committee. He represents Division 6 which covers the northern portion of the City of Aliso Viejo.



Mr. Richard Fiore has served on the MNWD Board of Directors' since 1977. He currently serves as the chair of the Outreach ad hoc committee. He represents Division 1 which covers the central and northern portions of the City of Mission of Viejo.



Mr. Gary Kurtz's has served on the MNWD Board of Directors' since 1992. He currently serves as the delegate for Moulton Niguel on the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA). He represents Division 7 which covers portions of Laguna Niguel and the southern area of Aliso Viejo.



Mr. Larry Lizotte is the senior member of the MNWD Board of Directors', having served since 1960. He currently serves as the chair of the Operations Center ad hoc committee. He represents Division 4 which covers the southern area of Laguna Niguel and portions of Dana Point.

Letter of Transmittal

Honorable President and Members of the Board of Directors:

On behalf of District staff, the Fiscal Year (FY) 2017-18 Operations & Maintenance (O&M) and Capital Improvement Program (CIP) budgets are presented for your consideration. The budget document before you presents expense and revenue forecasts for FY 2017-18 from the Long-Range Financial Plan alongside the proposed budget, in order to show how the proposed budget fits within long-term policy objectives. Significant strides have been made to integrate the District's many long-term planning tools and studies with its guiding policies and documents. In February, the Board of Directors and District staff participated in a strategic planning session to outline the upcoming fiscal year priority initiatives, which are further discussed in the budget document. The budget document identifies the financial and personnel resources necessary to fulfill the immediate operating needs required for the continued implementation of the District's strategic initiatives and long-term policy objectives.

As a public document, the budget serves as a means to disclose the financial plans and management of the District to its customers, as well 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 as we exit the emergency stage of the worst drought in California in over 500 years. Over the five year period of drought, the District thrived under the Board's leadership and emerged financially healthy due to sound financial planning and policies. Additionally, District customers have responded resoundingly by taking comprehensive actions to increase their water use efficiency. The Governor has issued a new executive order and proposed legislation to implement long term water use efficiency throughout the state. As part of its response to the Governor's renewed executive order and changes to statewide water efficiency policy, the District looks to build upon the success of the water efficiency programs that were implemented last fiscal year by scaling up successful pilot projects, such as the direct install smart timer program and the direct install turf replacement program, based on their cost effectiveness and value in improving reliability.

Despite a 20 percent reduction in water sales from 2013 levels, the District enters the new fiscal year in a financially strong position with a reaffirmed 'AAA' rating from Fitch Ratings and 'AA+' rating 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 from staff are critical to the Board's ability to make fully-informed decisions based on defined and prioritized objectives that ensure financial responsibility and accountability. This year the District will continue its regular update and review even further: the District's Reserve, Investment, Purchasing and Capital Financing as well as new Debt Management policies are all incorporated into this budget document and included as part of the District's annual budget review process.

As stewards of the water, wastewater, and recycled water systems and supplies our ratepayers have invested in over the last 57 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 \$44 million in capital expenses budgeted for FY 2017-18 and more than 80 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 valve replacement programs that have been outlined in previous budgets, the 10-year CIP presented in this budget document includes improvements to the District's recycled water pump stations per the recently completed Recycled Water Master Plan and investment in future water reliability projects.

Because of the District's strong financial health, the programs, projects, and resources presented for your consideration in this budget document continue the District's focus on infrastructure investments and enhanced service to our customers. In a time when many utilities have been forced to increase rates due to lost revenue or postpone needed infrastructure investments as they adapt to declining water sales, the District is able to focus on water efficiency programs to improve reliability and new capital projects that maintain infrastructure. Though there are new initiatives and projects in the FY 2017-18 budgets, the District continues to adhere to the Long-Range Financial Plan established during the 2015 rate study. As part of that plan, the District will consider a bond issuance this fiscal year with a strong financial position due to the prudent actions and policies in place to fund the District's CIP. Bonds are a critical financial tool that supports the District's long term financial position, while adhering to the modest rate increases the District has communicated to customers. Additionally, the District looks to continue to refine the rate plan from 2015 with the finalization of the 2017 rate study and consideration for an updated rate plan as identified in the District's Long Range Financial Plan.

[Summary of Factors and Assumptions Guiding the Fiscal Year 2017-18 Budget](#)

The integrated planning efforts and cross-departmental collaboration required to continue cost-effectively implementing and executing the District's strategic initiatives and 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 as contemplated in the Governor's Executive Order in April of 2017 on "Making Conservation a Way of Life."
- The budget proposes new water efficiency activities, such as commercial site assessments and incentives, and both continuing and scaling existing successful programs such as the direct install smart timer program, turf removal program, and customer portal to make efficient water use easier and actionable with timely information for customers.
- 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 4-year Memorandum of Understanding (MOU) with the employees. This budget covers year one of the recently adopted MOU.
- The resources needed to address District needs and growing challenges consistent with Board policy priorities and strategic initiatives.

Summary of Budget Assumptions

There are a number of assumptions that affect the fiscal year 2017-18 budget. Some of the key assumptions are listed here:

- Total water purchases are budgeted at 25,600 acre-feet, a 2.4 percent increase above FY 2016-17 budgeted purchases. This increase reflects continued below average sales projections due to increasingly efficient water use by customers, but considers a slight relaxation from FY 2016-17 conservation levels in place during the drought emergency.
- Potable water deliveries from the Baker Water Treatment Plant for FY 2017-18 are budgeted at 9,400 AF, reflecting a full year of water deliveries. The remaining 16,200 AF of potable water deliveries will be supplied from imported sources via Metropolitan Water District of Southern California through purchases furnished by the District's wholesaler, the Municipal Water District of Orange County (MWDOC).
- Recycled water production is budgeted at 6,500 acre-feet, a slight increase from projected actuals for FY 2016-17 recycled water use.
- Based on property tax data from the Orange County Tax Assessors' office and the District's tax consultant, property tax revenue is expected to increase 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 rate revenue.
- Water and sewer rates are budgeted at scheduled levels adopted by the Board in February 2015 and consistent with the District's Long Range Financial Plan. The District will finalize a new rate study for the continued implementation of the District's Long Range Financial Plan for implementation in January 2018.

The following is a summary of the overall financial position of the District including all funds, highlighting the main expense categories as well as the source of funds:

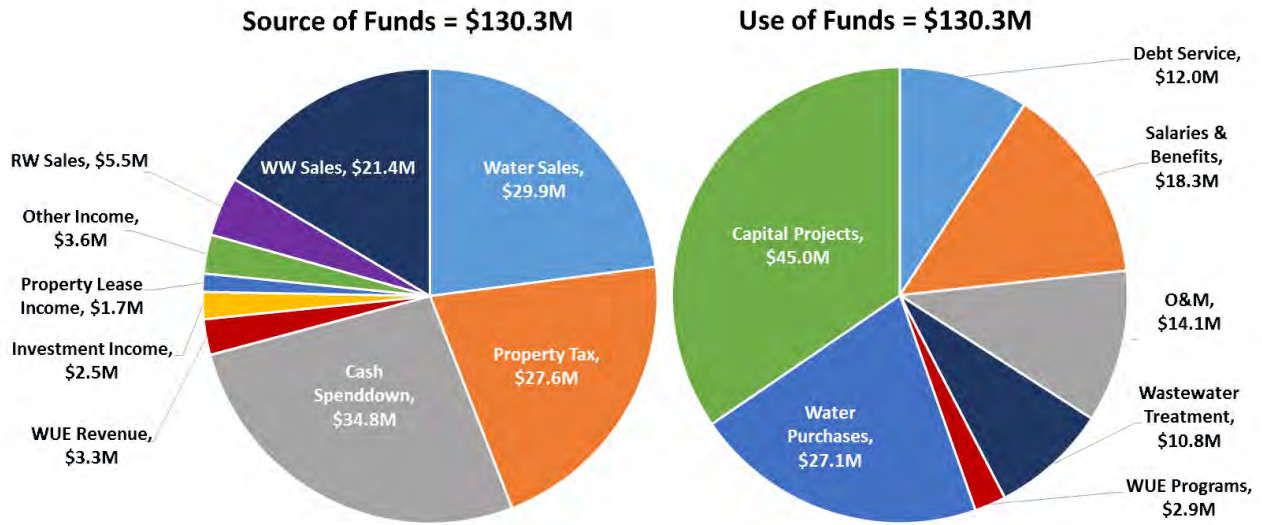


Figure LOT 1: FY 2017-18 Budget Summary

In a time of increased scrutiny and financial stress, the District has proven its ability to mitigate risk and adapt to changing conditions, whether from drought or legislation. 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, increasing water reliability, and allowing for reinvestment in critical infrastructure. 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, as well as provide timely communication and education materials to our customers. 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 2017-18 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 replenished at the beginning of each fiscal year through budget transfers authorized through the budget resolution and will be drawn down throughout the year to meet capital expenses. The debt service funds are restricted bond accounts which, through transfers authorized through the budget resolution, are utilized to fund debt service payments. The total District financial flow of funds for FY 2017-18 is shown in Figure ES 1.

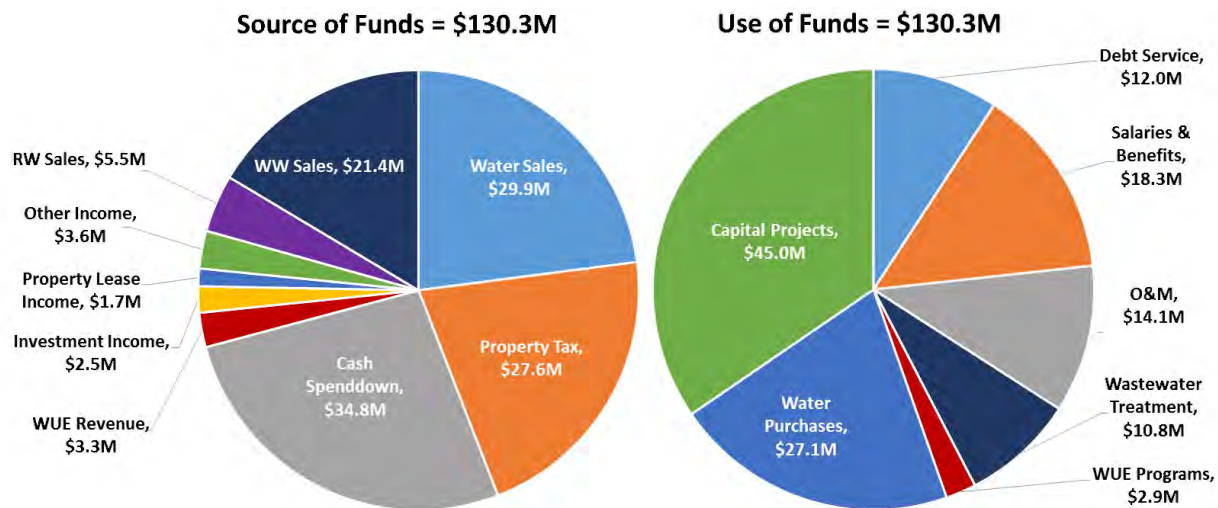


Figure ES 1: FY 2017-18 District Flow of Funds Summary

The largest portion of the District’s budget reflects spending down of existing cash reserves to fund investments in Capital Improvements, per the Long-Range Financial Plan (“LRFP”). The following budget sections will detail the components that make up each of the expenditures for the FY 2017-18 budget. As stated in the Letter of Transmittal, this budget continues the practice of evaluating the long-term implications of annual budget decisions by utilizing 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 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 LRFP 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 reaffirmed 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 LRFP 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 water 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:

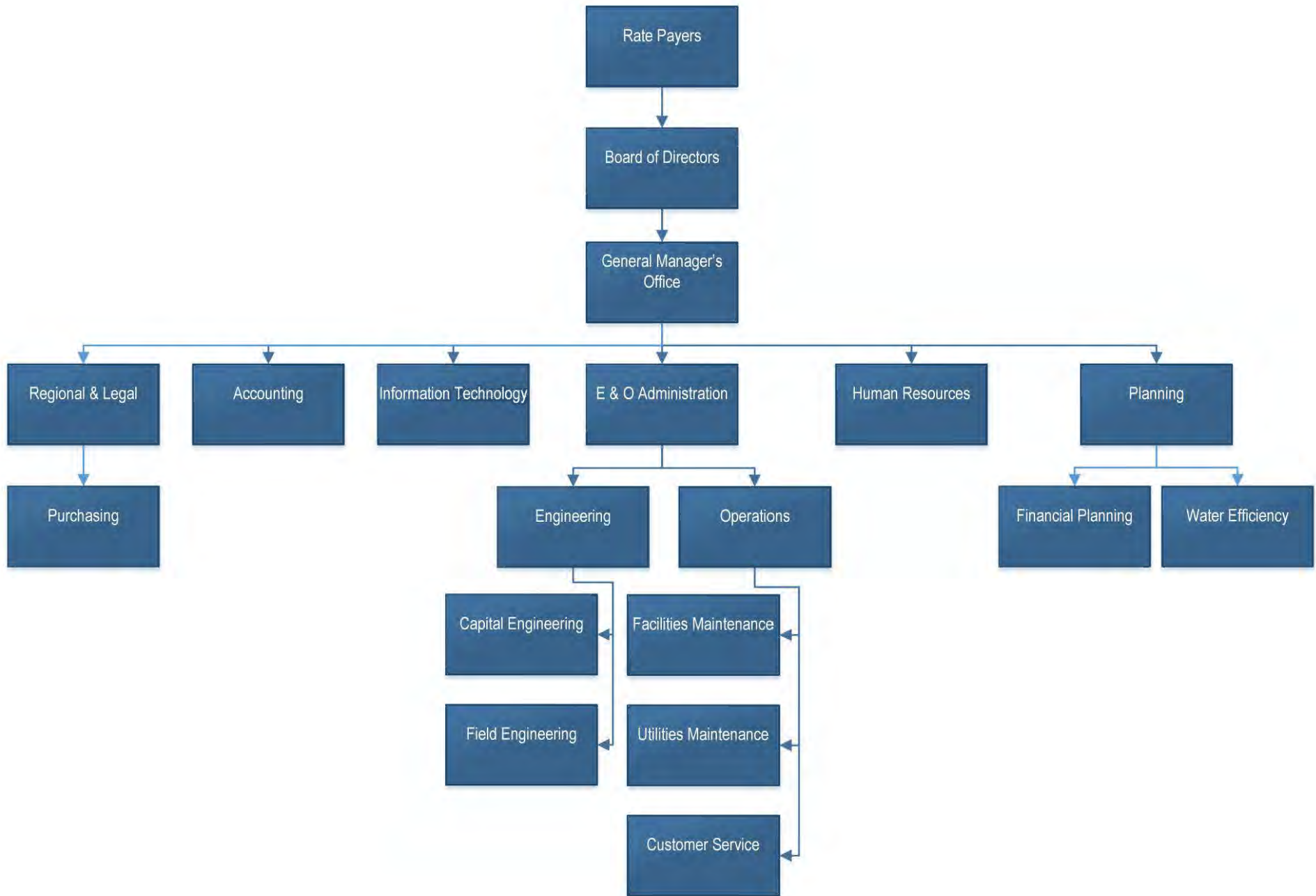
Table ES 1: Ten-Year Cashflow Model Outputs Comparison

LRFP Update	Projected Rate Adjustment				Projected Bond Issuance	
	2017 18	2018 19	2019 20	2020 21	Fiscal Year	Amount
May 2016	4.0%	4.0%	4.0%	4.0%	2017-18, 2021-22	May 2016
December 2016	4.0%	4.0%	4.0%	4.0%	2017-18, 2021-22	December 2016
March 2017	4.0%	4.0%	4.0%	4.0%	2017-18, 2021-22	March 2017
May 2017	4.0%*	4.0%*	4.0%*	4.0%*	2017-18, 2021-22	May 2017

*Projected rate adjustments do not include SOCWA Facilities Plan Costs.

Overall, the District’s ten-year financial outlook for rate increases has remained consistent across updates to the Long Range Financial Plan. The bond-issuance increase between May and December of 2016 was primarily driven by changes to the 10-Year CIP. The District’s bond issuances have increased lately as updated information on asset needs are refined. 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 future issuances to mitigate volatile rate increases and maintain a consistent financial plan.

Functional Organization Chart



FY 2017-18 Proposed Staffing Plan

Division, Department and Position Title	Adopted FY 2016-17	Proposed FY 2017-18	Notes
<u>Board of Directors</u>			
BOARD MEMBERS	7	7	
	<u>7</u>	<u>7</u>	
Board of Directors Total	7	7	
<u>Administration</u>			
<i>General Manager</i>			
ADMINISTRATIVE ANALYST	1	1	
ASSISTANT GENERAL MANAGER	1	1	
ASSISTANT TO THE GENERAL MANAGER	1	0	
BOARD SECRETARY/EXECUTIVE ASSISTANT	1	1	
COMMUNICATIONS COORDINATOR	1	1	
DIRECTOR OF REGIONAL & LEGAL AFFAIRS	0	1	
GENERAL MANAGER	1	1	
	<u>6</u>	<u>6</u>	
<i>Human Resources</i>			
DIRECTOR OF HUMAN RESOURCES	1	1	
SENIOR HUMAN RESOURCES ANALYST	1	1	
	<u>2</u>	<u>2</u>	
<i>Information Technology</i>			
BUSINESS SYSTEMS ADMINISTRATOR	1	1	
INFORMATION SYSTEMS OFFICER	1	1	
INFORMATION TECHNOLOGY MANAGER	1	1	
OPERATIONS SYSTEMS ADMINISTRATOR	1	1	
SYSTEMS ANALYST	2	2	
	<u>6</u>	<u>6</u>	
<i>Contracts and Purchasing</i>			
BUYER	0	1	
CONTRACTS & PROCUREMENT MANAGER	1	1	
INVENTORY CLERK	0	1	
INVENTORY CONTROL WORKER	1	0	
PURCHASING AGENT	1	0	
PURCHASING CLERK	0	1	New Position Proposed for FY 2017/18
	<u>3</u>	<u>4</u>	
Administration Total	17	18	
<u>Engineering and Operations</u>			
<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	6	6	
CROSS CONNECTION SUPERVISOR	1	1	
GIS TECHNICIAN	2	1	
INSPECTION SUPERVISOR	1	1	
INSPECTOR	4	4	
PERMIT TECHNICIAN	1	1	
PRINCIPAL ENGINEER	3	3	
RECORDS AND MAPPING COORDINATOR	1	1	
RECORDS AND MAPPING TECHNICIAN	0	1	
SENIOR ENGINEER	2	2	
SENIOR GIS ANALYST	1	1	
SUPERINTENDENT OF ENGINEERING	1	1	
	<u>23</u>	<u>23</u>	

Division, Department and Position Title	Adopted FY 2016-17	Proposed FY 2017-18	Notes
Engineering and Operations			
<i>Facilities Maintenance</i>			
ELECTRICAL/INSTRUMENTATION SERVICES SUPERVISOR	1	1	
ELECTRICAL/INSTRUMENTATION SYSTEMS TECHNICIAN	0	1	
FACILITIES COORDINATOR	1	0	
MAINTENANCE WORKER - FACILITIES	7	7	
SR. ELECT/INSTRUMENTATION SYSTEMS PROGRAMMER	2	1	
STATION MAINTENANCE SUPERVISOR	1	1	
SUPERINTENDENT OF OPERATIONS	1	1	
WATER DISTRIBUTION SUPERVISOR	1	1	
WATER SYSTEMS OPERATOR	4	4	
	<u>18</u>	<u>17</u>	
<i>Utilities Maintenance</i>			
COLLECTION SYSTEM SUPERVISOR	1	1	
MAINTENANCE WORKER - COLLECTION SYSTEM	7	6	
MAINTENANCE WORKER - STREETS	14	14	
MECHANIC	2	3	
STREET CREW SUPERVISOR	2	2	
SUPERINTENDENT OF OPERATIONS	1	1	
SUPPORT SERVICES SUPERVISOR	1	1	
	<u>28</u>	<u>28</u>	
<i>Customer Service</i>			
CUSTOMER ACCOUNT REPRESENTATIVES	13	12	
CUSTOMER ACCOUNT SUPERVISOR	1	1	
CUSTOMER SERVICE FIELD TECHNICIAN	13	14	
CUSTOMER SERVICE SUPERVISOR	2	2	
SUPERINTENDENT OF CUSTOMER SERVICE	1	1	
	<u>30</u>	<u>30</u>	
Engineering and Operations Total	105	104	
Planning			
<i>Administrative Services</i>			
DIRECTOR OF PLANNING	0	1	
	<u>0</u>	<u>1</u>	
<i>Water Efficiency</i>			
POLICY & OUTREACH ANALYST	1	1	
SENIOR FINANCE & RESOURCES ANALYST	1	0	
WATER EFFICIENCY ANALYST	1	1	
WATER EFFICIENCY MANAGER	1	1	
WATER EFFICIENCY REPRESENTATIVE	3	3	
WATER EFFICIENCY SUPERVISOR	1	1	
WATER RESOURCES ANALYST	1	1	
	<u>9</u>	<u>8</u>	
<i>Finance</i>			
DIRECTOR OF FINANCE & TREASURER	1	0	
FINANCIAL DATA ANALYST	0	1	
MANAGER OF FINANCIAL PLANNING	0	1	
	<u>1</u>	<u>2</u>	
Planning Total	10	11	
<i>Accounting</i>			
ACCOUNTANT	4	4	
ACCOUNTING SUPERVISOR	1	1	
CONTROLLER	1	1	
	<u>6</u>	<u>6</u>	
Accounting Total	6	6	
Full Time Staff	138	139	
Board Members	7	7	
Total	145	146	

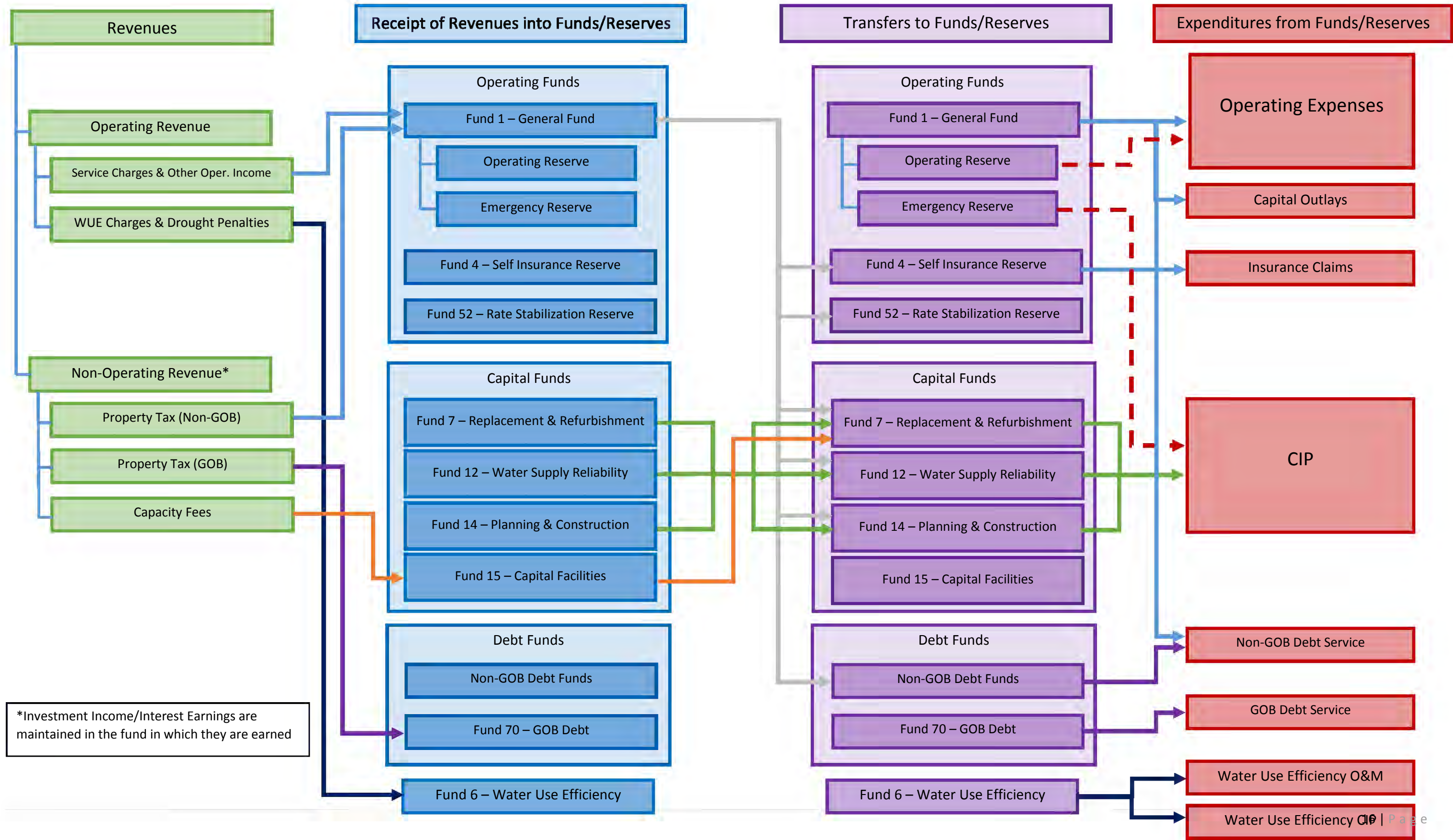
Account Category Breakdown

Account Category	Category Components
<u>Operating Revenues:</u>	
Water Sales	Potable Water Usage Charges, Wholesale and Service Charges
Recycled Water Sales	Recycled Water Usage Charges and Service Charges
Sewer Sales	Sewer Usage Charges (FY 2015-16 only) and 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 (WBBRS Penalties and Drought Penalties)
<u>Non-Operating Revenues:</u>	
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, InterGovernmental Revenue, Secured, Unsecured, Supplemental, Miscellaneous I/R Taxes
Capacity Fees	Connection Fees
Demand Offset Fees	Demand Offset Fees
<u>Operating Expenses:</u>	
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	Financial Audit and other AUPs

Account Category	Category Components
<u>Operating Expenses:</u>	
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	Govt. Affairs, Outreach, Finance Consultants, Rate Study, Finance MSR, Information Technology, Engineering Support, Electrical Services 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, Employee Dishonesty, UST Pollution Liability
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, Wellness
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, Promotional, Advertising, Sales Tax Expense, Freight Expense, Conservation Supplies, Live Smart - Comm. Relations
District Operating Supplies	Chemicals, Warehouse Stock
Repairs & Maint. - Equipment	Computer Support Contracts, Field Equipment, Office Equipment, Infrastructure Technology Hardware, Vehicle Maintenance and Repair, Hardware/Software Equipment, AutoCad/Drafting Equip Maint, GIS Software, HP 9000/Mainframe Maintenance, Server/Network Maintenance, Scada System Maintenance, GIS Database Maintenance
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, Trash Pick-Up & Tipping Fees, System Maintenance, USA's
Safety & Compliance	Regulatory Compliance, Safety Equipment and Supplies, Safety Shoes, Safety Training
Wastewater Treatment	PC 2 - JB Latham Treatment Plant, 3A Treatment Plant, PC 5 - San Juan Creek Ocean Outfall, PC 250 - 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

Account Category	Category Components
<u>Operating Expenses:</u>	
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 earned

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 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 February, the District held a long range planning session to discuss in detail District goals and strategic objectives 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 budgets on an annual basis in order 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 public Board Workshop on May 3, 2017 and May 17, 2017, District Staff presented the remaining portions of the District Fiscal Year 2017-18 budget. District staff integrated feedback and discussed the proposed budget at the May and June Board and committee meetings. The final Fiscal Year 2017-18 budget is scheduled for adoption on June 15, 2017.

Table BP 1: Budget Process & Schedule

Budget Process	Date
Financial Planning Workshop	December 14, 2016
Finance Overview	February 15, 2017
Presentation of Proposed FY 2017-18 Ten-Year CIP	April 19, 2017
Budget Workshop	May 3, 2017
Detailed Budget Tables Discussion	May 17, 2017
FY 2017-18 Budget Adoption	June 15, 2017

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 \$68.0M in operating and capital outlay expenses budgeted for FY 2017-18 and \$57.3M 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 contribution of \$24.2M to its General Fund, prior to any transfers to other funds for capital project and debt service related costs or as needed to replenish reserves to meet bond covenant and financial policy requirements.

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

MOULTON NIGUEL WATER DISTRICT - GENERAL FUND								
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION								
	FY 2015-16 Approved Budget	FY 2015-16 Actuals	FY 2015-16 Difference	FY 2016-17 Approved Budget	FY 2017-18 Forecasted Budget	FY 2017-18 Proposed Budget	FY 2017-18 Difference	%Δ
Operating Revenues:								
Water Sales	25,449,137	25,277,296	(171,841)	28,338,290	29,084,866	29,909,274	824,407	3%
Recycled Water Sales	5,249,795	4,850,326	(399,469)	5,489,814	5,609,801	5,462,967	(146,834)	-3%
Sewer Sales	18,053,647	18,963,978	910,331	18,911,865	19,643,200	21,413,568	1,770,368	9%
Other Operating Income	483,500	425,340	(58,160)	491,585	661,865	516,900	(144,965)	-22%
Total Operating Revenues	49,236,079	49,516,940	280,861	53,231,554	54,999,733	57,302,709	2,302,976	4%
Non-Operating Revenues:								
Property Tax Revenue	26,501,190	25,298,065	(1,203,125)	27,069,573	28,017,008	27,581,361	(435,648)	-2%
Investment Income	1,867,913	2,462,625	594,712	2,242,424	2,115,687	2,256,279	140,592	7%
Property Lease Income	1,660,096	1,623,544	(36,552)	1,569,878	1,696,570	1,723,533	26,962	2%
Misc. Non-Operating Income	68,000	257,980	189,980	3,249,646	2,997,947	3,004,247	6,300	0%
Capacity Fees	-	1,046,335	1,046,335	468,818	761,161	340,198	(420,963)	-55%
Total Non-Operating Revenues	30,097,199	30,688,549	591,350	34,600,339	35,588,373	34,905,618	(682,755)	-2%
Total Revenues	79,333,278	80,205,490	872,212	87,831,893	90,588,105	92,208,326	1,620,221	2%
Operating Expenses:								
Salaries	10,307,516	10,129,113	(178,403)	11,181,396	11,712,413	12,205,909	493,496	4%
PERS Employer Contributions	1,306,049	1,259,761	(46,288)	1,480,783	1,562,226	1,804,882	242,656	16%
PERS Employee Contributions	149,890	118,573	(31,317)	-	-	-	-	-
PERS Other (Side Fund, 401A)	250,770	152,228	(98,541)	267,653	282,374	213,638	(68,736)	-24%
Educational Courses	44,270	25,975	(18,295)	51,580	70,902	69,753	(1,149)	-2%
Travel & Meetings	238,644	192,367	(46,277)	253,320	261,443	304,451	43,008	16%
Employee Relations	15,000	19,753	4,753	78,397	79,802	81,250	1,448	2%
General Services	458,095	639,709	181,614	394,750	401,824	517,820	115,996	29%
Annual Audit	48,080	61,139	13,059	53,000	53,950	50,000	(3,950)	-7%
Member Agencies O&M	1,542,495	1,496,078	(46,417)	692,224	717,230	793,341	76,111	11%
Dues & Memberships	96,510	109,033	12,523	101,245	104,259	124,675	20,416	20%
Election Expenses	-	-	-	83,000	84,487	-	(84,487)	-100%
Consulting Services	2,248,900	1,800,711	(448,189)	1,315,400	1,431,837	1,425,400	(6,437)	0%
Equipment Rental	65,000	58,111	(6,889)	69,000	70,236	62,000	(8,236)	-12%
District Fuel	340,000	200,596	(139,404)	340,000	346,093	270,000	(76,093)	-22%
Insurance - District	561,275	378,516	(182,759)	443,170	460,388	402,420	(57,967)	-13%
Insurance - Personnel	438,275	351,771	(86,504)	460,266	485,922	370,102	(115,820)	-24%
Insurance - Benefits	2,587,061	2,333,748	(253,313)	2,924,924	3,093,008	2,836,557	(256,450)	-8%
Legal Services - Personnel	50,000	6,841	(43,160)	50,000	50,896	50,000	(896)	-2%
Legal Services - General	200,000	247,239	47,239	420,000	427,526	300,000	(127,526)	-30%
District Office Supplies	475,400	331,577	(143,823)	473,250	481,730	446,951	(34,780)	-7%
District Operating Supplies	392,967	389,323	(3,644)	390,450	401,635	444,788	43,154	11%
Repairs & Maint. - Equipment	738,469	669,041	(69,428)	626,269	647,709	693,169	45,460	7%
Repairs & Maint. - Facilities	4,135,970	3,539,852	(596,118)	3,447,205	3,699,267	3,725,857	26,590	1%
Safety & Compliance	309,450	332,064	22,614	191,650	197,568	280,415	82,847	42%
Wastewater Treatment	9,204,735	9,504,261	299,526	9,480,876	9,650,770	10,752,352	1,101,582	11%
Special Outside Assessments	225,000	188,136	(36,864)	240,000	245,442	251,641	6,199	3%
Utilities	2,258,900	2,104,023	(154,877)	2,373,260	2,579,329	2,281,900	(297,429)	-12%
Water Purchases	23,697,841	23,729,595	31,754	25,826,808	25,969,469	26,336,456	366,987	1%
Meter Purchases	906,000	723,310	(182,690)	615,000	626,021	440,000	(186,021)	-30%
Total Operating Expenses	63,292,562	61,092,444	(2,200,118)	64,324,876	66,195,756	67,535,728	1,339,973	2%
Change in Operating Position	16,040,716	19,113,046		23,507,017	24,392,350	24,672,598		1%
Capital Expenses:								
Capital Outlay Expense	1,075,652	1,045,572	30,080	1,962,017	1,000,000	495,765	(504,235)	-50%
Projected Change in Fund	14,965,064	18,067,474		21,545,000	23,392,350	24,176,833		3%

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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Revenue	Proposed Revenue	Difference	% Change
Operating Revenue								
Water Sales	25,449,137	25,277,296	(171,841)	28,338,290	29,084,866	29,909,274	824,407	3%
Recycled Water Sales	5,249,795	4,850,326	(399,469)	5,489,814	5,609,801	5,462,967	(146,834)	-3%
Sewer Sales	18,053,647	18,963,978	910,331	18,911,865	19,643,200	21,413,568	1,770,368	9%
Other Operating Income	483,500	425,340	(58,160)	491,585	661,865	516,900	(144,965)	-22%
Total Operating Revenue Budget	49,236,079	49,516,940	280,861	53,231,554	54,999,733	57,302,709	2,302,976	4%
Non-Operating Revenue								
Property Tax Summary								
Secured Property Taxes	25,289,990	23,837,208	(1,452,782)	25,589,376	26,485,004	26,101,164	(383,841)	-1%
Unsecured Taxes	811,200	800,130	(11,070)	860,007	890,107	860,007	(30,100)	-3%
Supplemental and Miscellaneous Taxes	700,000	979,947	279,947	930,375	962,938	930,375	(32,563)	-3%
Secured Taxes paid to SCWD	(300,000)	(319,219)	(19,219)	(310,185)	(321,041)	(310,185)	10,856	-3%
Total Property Tax Summary Budget	26,501,190	25,298,065	(1,203,125)	27,069,573	28,017,008	27,581,361	(435,648)	-2%
Other Non-Operating Revenue								
Investment Income	1,867,913	2,462,625	594,712	2,242,424	2,115,687	2,256,279	140,592	7%
Property Lease Income	1,660,096	1,623,544	(36,552)	1,569,878	1,696,570	1,723,533	26,962	2%
Misc. Non-Operating Income	68,000	6,900,287	6,832,287	3,249,646	2,997,947	3,004,247	6,300	0%
Capacity Fees	-	1,046,335	1,046,335	468,818	761,161	340,198	(420,963)	-55%
Total Other Non-Operating Revenue	3,596,009	12,032,791	8,436,782	7,530,766	7,571,365	7,324,257	(247,108)	-3%
Total Revenue Budget	79,333,278	86,847,797	7,514,519	87,831,893	90,588,105	92,208,326	1,620,221	2%

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 2017-18 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 \$29.9M for FY 2017-18, three percent above forecasted values. Potable water usage is projected at 25,600 AF for FY 2017-18. 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 2017-18 includes a projected four percent rate increase that would become effective January 1, 2018.

Recycled Water Sales

Recycled water sales are projected at \$5.5M, three percent below forecasted sales and consistent with the FY 2016-17 projected values. Conservation remained strong among recycled water customers last year and the proposed FY 2017-18 recycled water sales are projected to remain below historical averages. Recycled water usage is budgeted at 6,500 AF, below budgeted FY 2016-17 recycled water use but above FY 2016-17 projected actuals. Projected recycled water sales revenue for FY 2017-18 includes a projected four percent rate increase that become effective January 1, 2018.

Sewer Sales

Sewer sales are projected at \$21.4M, nine percent above forecasted sales and five percent above FY 2016-17 projected sales. As part of the rate structure change in April 2015, sewer charges are now collected on an entirely fixed basis. Projected sewer sales revenue for FY 2017-18 includes a projected four percent rate increase that become effective January 1, 2018.

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 2017-18 represents about a two percent increase over the budget for FY 2016-17. Local South Orange County property tax forecasts suggest about a four percent increase year over year but actuals are coming in under the budgeted FY 2016-17 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 2017-18 is approximately two percent which yields the budgeted \$2.3M based on the 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, the 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 license 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. However, due to the changes to the license fees, revenues are projected above historical levels at \$1.7 M for the FY 2017-18 Budget.

Misc. Non-Operating Income

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

Capacity 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 2017-18 of \$340,198. Much of the forecasted activity is for in-fill projects as the District is largely built-out. The previous two Fiscal Year budgets did not include a budget for capacity fees as the budget was largely focused on expenditures; however, as part of the District's overall efforts to align its governing documents, capacity fees have been incorporated into the FY 2017-18 proposed budget.

Fund 1 – Detailed Budget – Expenses

Operating Expenses

Salaries and Benefits

Table F1 - 3: Salaries and Benefits

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Salaries								
Full-Time Salaries	9,403,091	9,233,848	(169,243)	10,183,739	10,669,723	11,178,694	508,971	5%
Directors Fees	175,963	133,722	(42,242)	180,600	188,727	184,800	(3,927)	-2%
Overtime	572,462	601,380	28,918	654,157	683,862	629,140	(54,722)	-8%
Standby	156,000	155,400	(600)	158,100	165,215	209,475	44,261	27%
Compensatory Time Expense	-	4,764	4,764	4,800	4,886	3,800	(1,086)	-22%
Total Salaries Budget	10,307,516	10,129,113	(178,403)	11,181,396	11,712,413	12,205,909	493,496	4%
CalPERS Budget								
PERs Employer Contributions	1,306,049	1,259,761	(46,288)	1,480,783	1,562,226	1,804,882	242,656	16%
PERs Employee Contributions	149,890	118,573	(31,317)	-	-	-	-	-
PERs Other (Side Fund, 401A)	250,770	152,228	(98,541)	267,653	282,374	213,638	(68,736)	-24%
Total CalPERS Budget	1,706,709	1,530,563	(176,146)	1,748,436	1,844,600	2,018,520	173,920	9%
Insurance - Benefits Budget								
Life and Health Insurance	1,903,124	1,678,661	(224,463)	2,308,771	2,435,753	2,177,541	(258,213)	-11%
Dental Insurance	170,488	146,950	(23,538)	203,153	214,326	218,989	4,662	2%
Vision Insurance	27,880	24,263	(3,617)	28,787	30,370	31,033	663	2%
Disability Insurance	74,111	72,416	(1,695)	78,966	83,309	80,236	(3,073)	-4%
OPEB Costs	388,058	388,058	-	281,847	297,349	249,459	(47,890)	-16%
Auto Allowance	23,400	23,400	-	23,400	31,900	39,700	7,800	24%
Wellness	-	-	-	-	-	39,600	39,600	-
Total Insurance - Benefits Budget	2,587,061	2,333,748	(253,313)	2,924,924	3,093,008	2,836,557	(256,450)	-8%
Total Salaries and Benefits Budget	14,601,286	13,993,424	(607,861)	15,854,756	16,650,020	17,060,987	410,966	2%

Total salary and benefits costs for Fund 1 are budgeted at \$17.1M: a 7.6 percent increase above FY 2016-17 budget, but only a two percent increase above the forecasted FY 2017-18 expenses. Relative to all fund expenditures, salaries and benefits makes up little more than 13 percent of District FY 2017-18 proposed budgeted expenses. The proposed budget includes the addition of one full time staff member, a Purchasing Clerk, who was not previously assumed in the forecasted FY 2017-18 budget. Two major factors account for the majority of the differences between forecasted and proposed budgets: terms of the newly implemented four-year Memorandum of Understanding (MOU) and revisions to actuarial assumptions used by CalPERS to determine the District's long-term medical and retirement benefit obligations.

Building upon the trust and success that has been established over the last four year MOU in 2013 between the District and the employees association, the District and its employees were once again able to develop a four-year MOU that ensures both the financial health of the District through mitigating long term liabilities and invests in a quality workforce to meet the public's expectations on performance and transparency as directed by the Board. The proposed budget reflects the salary and benefits adjustments that were negotiated between the District's employees and the labor negotiation team as part of the four year MOU. The differences between the forecasted FY 2017-18 budgeted salary expenses shown in Table F1 - 3 are due to the terms of the MOU, which included providing a three percent compensation structure adjustment and a two percent Cost of Living Adjustment during year one of the four year MOU, and the additional staffing position. With these changes, the General Fund salaries and benefits costs only increased two percent above forecasted levels. However, the District

was able to mitigate many long term liabilities through the MOU by eliminating employee retirement healthcare for new employees, equal cost-sharing of any increases to healthcare premiums between the District and employees and maintaining the employee contribution to paying the employee share of CalPERS retirement costs.

The total proposed General Fund budget for retirement related expenses has been increased by nine percent above forecast due to the December 2016 decision by the CalPERS Board of Administration to reduce the discount rate used by CalPERS actuaries from 7.5 percent to 7 percent over the next three years. Retirement costs represent less than one percent of the District's total budget. The relatively minor impact that these major assumption changes have had on the proposed FY 2017-18 budget and the District's overall financial outlook illustrates the importance of robust analysis and pragmatic policies in determining how to best mitigate financial risk and control costs while continuing to provide for the staff who provide essential services to the community.

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 2017-18 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.

The proposed staffing plan for FY 2017-18 was developed cooperatively by the District's supervisory and management staff and presented to the District's Board of Directors for approval to ensure a consensus was reached as to which positions represented both an immediate and on-going resource need for the continued operation of the District.

Though only a relatively small increase in headcount compared to those of prior fiscal years, the proposed FY 2017-18 Staffing Plan was subject to the same level of scrutiny and analysis expected of more expansive staffing plans. As the volume and complexity of contracts and purchase orders have continued to increase as District operations have evolved, a need for additional dedicated purchasing staff has been identified. The requested Purchasing Clerk is expected to address immediate resource needs met through temporary staffing as well as the long-term resource needs required to implement and execute the fiscal controls expected of the District or any other capital-intensive enterprise.

Specific Factors

- **Salaries:** As part of the new MOU, salary schedules are to be adjusted in each year over the term. The year one adjustment is comprised of a three percent compensation structure adjustment and a two percent cost of living adjustment, the sum of which amount to a five percent wage adjustment.
- **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 second 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 over 80 percent of the present-value of its projected benefits. Because of this partnership, the District has been able to mitigate against retirement expense increases as a result of the changed discount rate assumptions reducing the rate from 7.5 to 7 percent.

- 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, dental plan premiums will not increase, vision plan premium increases are limited to three percent and health care premiums will increase nine percent above the rates for FY 2016-17.
- 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 2017-18. 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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<u>Educational Courses</u>								
Educational Courses	31,400	13,471	(17,929)	32,950	33,540	52,650	19,110	57%
Certifications	12,870	12,504	(366)	18,630	37,361	17,103	(20,258)	-54%
Total Educational Courses Budget	44,270	25,975	(18,295)	51,580	70,902	69,753	(1,149)	-2%
<u>Travel & Meetings</u>								
Travel and Expenses	88,867	68,915	(19,952)	89,900	91,511	117,400	25,889	28%
Seminars, Conferences, and Meetings	149,777	123,452	(26,325)	163,420	169,932	187,051	17,119	10%
Total Travel & Meetings Budget	238,644	192,367	(46,277)	253,320	261,443	304,451	43,008	16%
<u>Employee Relations</u>								
Pre-Employment Costs	15,000	19,753	4,753	29,197	29,720	24,600	(5,120)	-17%
Employee Relations (Recognition, Medical, Safety)	53,200	43,978	(9,222)	49,200	50,082	56,650	6,568	13%
Total Employee Relations Budget	68,200	63,730	(4,470)	78,397	79,802	81,250	1,448	2%

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 2017-18 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. The increase above forecast for the proposed *Travel & Meetings* line item is due both to the increased number of staff that were hired onto the District over the last fiscal year as well as an increased regional and statewide presence.

Reflected in *Pre-Employment*, the District’s Human Resources Department continues to improve upon the early successes of Neo-Gov Insight, an automated application processing and online job posting system that was implemented in the beginning of FY 2015-16. Since implementation, application processing times have been reduced dramatically, which has facilitated more competitive recruitments that have resulted in 35 new hires in FY 2016-17. The proposed FY 2017-18 budget assumes continued utilization of Neo-Gov and other service platforms that have streamlined the recruitment and on-boarding process. The 17 percent reduction from forecasted FY 2017-18 expenses is due to reduced advertising costs for job postings.

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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<u>Election Expenses</u>								
Registrar of Voters	-	-	-	83,000	84,487	-	(84,487)	-100%
<u>Annual Audit</u>								
Annual Financial Records Audit	48,080	61,139	13,059	53,000	53,950	50,000	(3,950)	-7%
<u>General Services</u>								
<u>Financial Services</u>								
Billing Services	106,000	115,404	9,404	106,000	107,899	167,000	59,101	55%
Accounting Services	89,175	88,345	(830)	82,750	84,233	100,000	15,767	19%
Tax Collection Charges	63,000	63,031	31	68,000	69,219	70,720	1,501	2%
Unpaid Accounts Write-Off	104,320	284,100	179,780	91,100	92,732	104,600	11,868	13%
<u>Engineering Services</u>								
Mapping Updates	7,400	4,672	(2,728)	11,900	12,113	38,000	25,887	214%
<u>Overall Services</u>								
Uniform Service	35,000	40,180	5,180	35,000	35,627	37,500	1,873	5%
Total General Services Budget	404,895	595,731	190,836	394,750	401,824	517,820	115,996	29%

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. Of note are the increases in the *Billing Services* and *Mapping Updates* line items.

Proposed costs for *Billing Services* have been increased above forecast to reflect potential implementation costs from revisions to the District’s existing bill printing and payment processing

platforms. Proposed costs for *Mapping Updates* have been increased above forecast to reflect the cost of updating aerial imaging of the District once every four years. Future year forecasts have been updated to reflect the infrequent nature of these expenses.

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 forecasts have been removed and expenses are updated as the budget for that year is developed. As there is no regular election in FY 2017-18, no funds have been budgeted.

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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Potable Water Facilities								
San Juan Basin Authority (SJBA)	200,000	218,160	18,160	200,000	207,222	203,580	(3,642)	-2%
Upper Chiquita Reservoir (UCR)	80,000	71,726	(8,274)	70,000	72,528	208,429	135,900	187%
5B Reservoir	6,000	-	(6,000)	6,000	6,217	6,000	(217)	-3%
R6 Reservoir	16,000	10,419	(5,581)	20,000	20,722	20,000	(722)	-3%
IRWD Emergency Interconnection	-	27,560	27,560	20,000	20,722	20,000	(722)	-3%
Total Potable Water Facilities	302,000	327,865	25,865	316,000	327,412	458,008	130,596	40%
Recycled Water Facilities								
Upper Oso Reservoir System	364,000	363,320	(680)	376,228	389,818	335,333	(54,485)	-14%
Total Recycled Water Facilities	364,000	363,320	(680)	376,228	389,818	335,333	(54,485)	-14%
Total Member Agencies O&M	666,000	691,185	25,185	692,228	717,230	793,341	76,111	11%

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 District’s budgeted expenses for FY 2017-18 include the District’s share of the administration of the SJBA and salinity management for the Basin to support the continued use of recycled water.

The District has an emergency interconnection agreement with Irvine Ranch Water District (“IRWD”) to supply treated 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 Interconnection 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 2017-18 expenses are for the operation and maintenance of the interconnection. Upper Chiquita Reservoir is operated by SMWD and the budgeted expenses for FY 2017-18 are for the operations and maintenance of the joint facilities. The large increase over forecast shown in the Upper Chiquita Reservoir line item are due to emergency repairs made to the reservoir as a result of significant storm damage during the prior fiscal year.

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 and 5B Reservoir facilities operated by El Toro Water District and SCWD, respectively. The budgeted expenses for FY 2017-18 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 rise. The proposed budget for FY 2017-18 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 2017-18 Proposed Budget
<u>District Dues and Memberships</u>	
Association of California Cities - Orange County (ACC-OC)	5,000
Association of California Water Agencies (ACWA)	25,500
Building Industry Association - Orange County	500
CalDesal	6,000
California Association of Sanitary Agencies (CASA)	19,100
California Urban Water Conservation Council (CUWCC)	6,500
Independent Special Districts of Orange County (ISDOC)	500
Laguna Niguel Chamber of Commerce	3,500
Mission Viejo Chamber of Commerce	550
Orange County Business Council	2,500
South Orange County Economic Coalition	5,000
South Orange County Regional Chambers of Commerce	1,500
South Orange County Watershed Management Area (SOCWMA)	6,500
Southern California Water Alliance of POTW (SCAP)	750
Southern California Water Committee (SCWC)	1,000
Subscriptions	1,800
Urban Land Institute	800
Urban Water Institute, Inc.	2,000
WaterReuse Association of California	6,000
Total District Dues and Memberships Budget	95,000
<u>Staff Dues and Memberships</u>	
Individual Memberships for Staff	29,675
Total Staff Dues and Memberships Budget	29,675
Total Dues and Memberships Budget	124,675

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 2017-18 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 2017-18 Proposed Budget
Fund 1 Consulting	
Outreach	200,000
Govt. Affairs	200,000
Finance Consultants	60,400
Rate Study	55,000
Finance MSR	150,000
Information Technology	135,000
Engineering Support	595,000
Electrical Services	30,000
Total Fund 1 Overall Consulting Expenses	1,425,400

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 2017-18 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 2017-18 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

- Outreach:** The District has expanded the outreach function of its operations significantly over recent years and established itself as a trusted and customer service-oriented industry leader through communications tools such as newsletters, promotional events, website, news media, and social media. Recognizing the need for on-going customer communication and community involvement as the state moves out of the drought emergency, the District’s Outreach Department has begun to develop a comprehensive communications plan and, as part of that plan, has identified a need for marketing materials that are specific to the local service area and District activities. The proposed *Consulting Services* budget includes provisions for as-needed graphic design and development of District videos and other media.
- Government Affairs:** Discussed in greater detail in the Government Affairs section of the District Goals for FY 2017-18, there has been a dramatic increase in the volume of proposed federal legislative initiatives, as well as local and regional activities that potentially impact the District and its customers. The Board has expressed the need to be more engaged in local, regional, and statewide issues that impact its communities, and District staff have echoed these concerns. The proposed *Consulting Services* budget includes provisions for local advocacy services to maintain awareness of regional opportunities as well as for grant funding and administration

services to ensure that the District is able to secure as much funding for its projects as is possible.

- Finance Consultants, Rate Study, and Finance MSR:** The District’s Finance Department began a comprehensive in-house cost of service rate study during FY 2016-17 and has retained 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. In addition to the rate study, bond issuance, and regular financing activity, the proposed *Consulting Services* budget includes provisions for as-needed analysis and review of financial and technical studies as the Local Area Formation Commission begins its county-wide municipal services review in FY 2017-18.
- 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 with all consulting contracts, the District will re-evaluate the use of consultants for these services as staffing resources are developed.
- Engineering Support and Electrical Services 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 well as for electrical repairs at several District sites that were identified from the Arc Flash Analysis performed in FY 2016-17. As discussed in the Salaries and Benefits section, because of the one-time or project specific nature of these costs, staff has recommended that these resource needs be fulfilled by consultants.

Equipment Rental and District Fuel

Table F1 - 9: Equipment Rental and District Fuel

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Equipment Rental								
Office Equipment	59,000	55,453	(3,547)	67,000	68,201	60,000	(8,201)	-12%
Misc. Field Equipment	6,000	2,659	(3,342)	2,000	2,036	2,000	(36)	-2%
Total Equipment Rental Budget	65,000	58,111	(6,889)	69,000	70,236	62,000	(8,236)	-12%
District Fuel								
Unleaded Fuel	230,000	123,740	(106,260)	215,000	218,853	170,000	(48,853)	-22%
Diesel Fuel	110,000	70,612	(39,388)	110,000	111,971	90,000	(21,971)	-20%
Vehicle Oil	-	6,244	6,244	15,000	15,269	10,000	(5,269)	-35%
Total District Fuel Budget	340,000	200,596	(139,404)	340,000	346,093	270,000	(76,093)	-22%

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 decrease slightly below forecasts for FY 2017-18.

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 2017-18 at or below FY 2016-17 budgeted rates.

Insurance

Table F1 - 10: District Insurance

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Insurance - District								
Property Insurance	103,000	71,468	(31,532)	112,000	114,007	115,000	993	1%
Automobile and General Liability	450,500	297,748	(152,752)	280,000	285,018	280,000	(5,018)	-2%
Misc. Insurance General	7,775	9,300	1,525	51,170	61,363	7,420	(53,943)	-88%
Total Insurance - District Budget	561,275	378,516	(182,759)	443,170	460,388	402,420	(57,967)	-13%
Insurance - Personnel								
State Unemployment	25,000	7,222	(17,778)	25,000	26,375	25,000	(1,375)	-5%
Workers Comp	260,929	202,437	(58,492)	269,417	284,235	162,113	(122,122)	-43%
Medicare Insurance	138,817	131,161	(7,656)	150,107	158,363	160,264	1,901	1%
Employer FICA	13,529	10,952	(2,577)	15,742	16,949	22,725	5,776	34%
Total Insurance - Personnel Budget	438,275	351,771	(86,504)	460,266	485,922	370,102	(115,820)	-24%

The District maintains several broad insurance policies through its membership with Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA). District related insurance costs have been reduced by 13 percent from forecasted levels to reflect updated liability assumptions and historical trends. Budgeted Property Insurance and Automobile and General Liability costs are in line with forecasted levels for FY 2017-18, while Misc. Insurance General costs have been reduced from forecasted levels and have been brought in line with historical costs.

Proposed *Insurance – Personnel* costs have been reduced 24 percent from forecasted levels for FY 2017-18. The reduction is due to decreased premiums for Workers Comp, which are budgeted at 43 percent of forecasted values for FY 2017-18. Workers Comp premiums for District employees are based on a formula that accounts for a number of operational factors that are intended to capture the relative claim risk among the ACWA/JPIA member agencies and allocates the total pool premium accordingly. The “Experience Modification Factor” or “E-Mod” reflects an agencies overall level of safety and is adjusted up or down annually based on the number and severity of claims. As the District has increased its emphasis on worksite safety and training for field staff, the number of claims the District has made have gone down and as a result the District’s E-Mod has been reduced from 1.03 to 0.6 (i.e. from paying three percent more than the standard premium to paying only 60 percent of the standard premium). It is important to note the insurance cost savings when evaluating the proposed Safety Programs and Regulatory Compliance budget presented later in the document.

Legal Services

Table F1 - 11: Legal Services

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Legal Services								
Legal Service - General	200,000	247,239	47,239	420,000	427,526	300,000*	(127,526)	-30%
Legal Services - Personnel	50,000	6,841	(43,160)	50,000	50,896	50,000	(896)	-2%
Total Legal Services	250,000	254,080	4,080	470,000	478,422	350,000*	(128,422)	-27%

*Proposed FY 2017-18 budget assumes no legal action is taken against the District

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 part of an overall effort to better understand major components of its operating budget, the District 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 was the primary driving factor for the increased FY 2016-17 approved budget and has not represented sustained increase to on-going legal costs in future years. The FY 2017-18 proposed budget for *Legal Services* has been reduced below forecast to reflect moving out of the period of extensive review. As noted, the proposed FY 2017-18 budget assumes no legal action is taken against the District and any legal expenses beyond the normal on-going legal activity of the District would require additional expenses.

District Supplies

Table F1 - 12: District Supplies

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
<u>District Office Supplies</u>								
General Office	114,500	132,331	17,831	136,750	139,201	145,451	6,250	4%
Billing Supplies	183,000	146,366	(36,634)	196,000	199,512	196,000	(3,512)	-2%
Community Relations	143,900	28,757	(115,143)	100,000	101,792	85,000	(16,792)	-16%
Shipping	34,000	24,122	(9,878)	40,500	41,226	20,500	(20,726)	-50%
Total District Office Supplies Budget	475,400	331,577	(143,823)	473,250	481,730	446,951	(34,780)	-7%
<u>District Operating Supplies</u>								
Operating Supplies	309,267	328,882	19,615	309,950	318,476	348,045	29,569	9%
Chemicals	83,700	60,441	(23,259)	80,500	83,159	96,744	13,585	16%
Total District Operating Supplies Budget	392,967	389,323	(3,644)	390,450	401,635	444,788	43,154	11%

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, postage for monthly bills, keys, small tools, and cleaning supplies, the FY 2017-18 proposed budget for District Supplies includes provisions for community education materials and other promotional items. *Community Relations* expenses for FY 2017-18 are budgeted approximately 16 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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Repairs and Maintenance - Equipment								
Office Equipment	6,200	700	(5,500)	11,550	11,757	11,900	143	1%
Field Equipment	60,000	13,988	(46,012)	15,000	25,167	29,488	4,320	17%
Infrastructure Technology Hardware	117,600	131,652	14,052	83,300	84,793	98,000	13,207	16%
Computer Support Contracts	344,669	263,491	(81,178)	301,419	306,820	323,463	16,643	5%
Vehicle Maintenance and Repair	210,000	259,209	49,209	215,000	219,171	230,319	11,147	5%
Total Repairs and Maintenance - Equipment Budget	738,469	669,041	(69,428)	626,269	647,709	693,169	45,460	7%
Repairs and Maintenance - Facilities								
System Maintenance	678,700	532,455	(146,245)	595,250	662,593	624,250	(38,343)	-6%
System Repairs	1,459,000	1,238,243	(220,757)	927,300	945,449	843,532	(101,917)	-11%
Janitorial Services	20,000	11,800	(8,200)	20,000	20,358	15,000	(5,358)	-26%
Landscape and Tree Maintenance	255,000	194,870	(60,130)	272,732	277,619	270,000	(7,619)	-3%
Hazardous Materials Removal	20,000	19,996	(4)	22,000	22,394	22,000	(394)	-2%
Underground Service Alert	5,000	3,720	(1,280)	5,000	5,090	5,000	(90)	-2%
Contract & Maintenance Agreements	284,850	287,425	2,575	414,033	553,067	377,899	(175,167)	-32%
Pest Control	38,420	22,340	(16,080)	28,890	29,408	31,779	2,371	8%
Paving Repairs	900,000	744,823	(155,177)	725,000	737,992	1,100,000	362,008	49%
Electrical & Instrumentation	66,000	81,844	15,844	71,000	72,669	70,397	(2,272)	-3%
Raising Valves and Manholes	370,000	322,030	(47,970)	300,000	305,376	300,000	(5,376)	-2%
Permits	39,000	80,306	41,306	66,000	67,252	66,000	(1,252)	-2%
Total Repairs and Maintenance - Facilities Budget	4,135,970	3,539,852	(596,118)	3,447,205	3,699,267	3,725,857	26,590	1%
Meter/Vault Purchases								
Meter/Vault Replacement	906,000	723,310	(182,690)	615,000	626,021	440,000	(186,021)	-30%
Total Meter/Vault Purchases Budget	906,000	723,310	(182,690)	615,000	626,021	440,000	(186,021)	-30%

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, annual expense estimates continue to remain below the FY 2015-16 approved budget. Realistically, cost savings are even greater as the useful life of equipment and assets is extended and facilities remain safe while lasting longer. With limited exception, repair and maintenance costs continue to be near or well below forecast assumptions as staff across departments continually inspect and monitor the District’s existing assets and equipment for either routine or emergency repair and replacement needs.

Specific Factors

- **Repairs and Maintenance – Equipment**
 - In addition to general office equipment, the FY 2017-18 proposed budget for *Repairs and Maintenance – Equipment* includes provisions for: the IT Department’s continued maintenance of the District’s servers, SCADA system, enterprise billing, technology support services contracts, computer hardware, and existing software licenses, as well as planned operating system upgrades to many of the District’s workstations and laptops; and the now fully-staffed Support Services Department for increased

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 identify outside support needs. 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 2017-18 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. Though the District continues to benefit from the improved timing of system repairs and increased coordination between District staff and their City counterparts, budgeted paving related costs have been increased 49 percent above forecast due to additional pipeline repairs that became necessary after the heavy rains during FY 2016-17.
- **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 has seen the number of requisitions, purchase orders, requests for proposals, and agreements issued double over the previous three years. With the addition of the proposed Purchasing Clerk, it is expected that the Contracts and Purchasing Department will continue to identify and implement procedural improvements related to inventory and warehouse tracking as well as contract and agreement tracking. The proposed budget for FY 2017-18 has been reduced below forecast to reflect anticipated cost savings from improved procedures.

- **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 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Safety Program and Regulatory Compliance								
Safety Equipment and Supplies	201,950	227,529	25,579	71,300	74,447	130,685	56,238	76%
Safety Shoes	27,500	28,016	516	28,350	29,322	33,490	4,168	14%
Safety Training	15,000	15,544	544	22,000	22,545	36,151	13,606	60%
Regulatory Compliance	65,000	60,975	(4,025)	70,000	71,254	80,090	8,835	12%
Total Safety Program and Regulatory Compliance Budget	309,450	332,064	22,614	191,650	197,568	280,415	82,847	42%

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 proposed *Safety Program and Regulatory Compliance* budget for FY 2017-18 has been increased above forecast by 42 percent. As was the case in prior fiscal years, proposed budgets for *Safety Program and Regulatory Compliance* costs are driven almost entirely by safety equipment and supply purchases. The proposed budget for equipment and supply purchases reflects maintaining well-stocked inventory as well as the replacement of equipment for confined space entry training. Though total costs have increased significantly compared to forecasted amounts for this fiscal year, the proposed budget for FY 2017-18 is still 25 percent lower than FY 2015-16 actuals. Going forward, annual safety and compliance related costs are expected to be maintained at the proposed level, as the Safety and Compliance Department has developed a multi-year schedule of anticipated equipment replacement in order to begin staggering large equipment replacements across years to reduce variability in future budgets.

The District has placed an increased emphasis on the safety of its employees in recent years, and the proposed FY 2017-18 budget for *Safety Program and Regulatory Compliance* continues that practice. The District also recognizes that increased worksite safety reduces the number and severity of medical claims, which ultimately lowers liability premiums. When considered together, the combined *Insurance* and *Safety Programs and Regulatory Compliance* budgets are more than \$90,000 below the forecasted budget for those categories.

Assessments

Table F1 - 15: Assessments

Description	FY 2015-16			FY 2016-17	FY 2017-18			
	Approved Budget	Actuals	Difference	Approved Budget	Forecasted Budget	Proposed Budget	Difference	% Change
Special Outside Assessments								
Department of Health Services (DOHS)	-	1,187	1,187	5,000	6,231	6,141	(90)	-1%
LAFCO Fees	25,000	23,190	(1,810)	25,000	25,448	25,000	(448)	-2%
Property Tax Assessment	200,000	163,759	(36,241)	210,000	213,763	220,500	6,737	3%
Total Special Outside Assessments	225,000	188,136	(36,864)	240,000	245,442	251,641	6,199	3%

The District pays fees to other government 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 2015-16			FY 2016-17	FY 2017-18			
	Approved Budget	Actuals	Difference	Approved Budget	Forecasted Budget	Proposed Budget	Difference	% Change
Utilities								
Electric Utilities (SCE and SDG&E)	2,048,000	1,898,227	(149,773)	2,191,360	2,387,590	2,100,000	(287,590)	-12%
Gas Utility (Southern CA Gas)	6,900	6,209	(691)	6,900	10,418	6,900	(3,518)	-34%
Overall Telephone	150,000	134,551	(15,449)	120,000	124,335	120,000	(4,335)	-3%
Mobile Communication	54,000	65,036	11,036	55,000	56,987	55,000	(1,987)	-3%
Total Utilities Budget	2,258,900	2,104,023	(154,877)	2,373,260	2,579,329	2,281,900	(297,429)	-12%

The proposed decrease to the utilities budget is driven largely by lower than anticipated increases in electricity prices by the District's electricity providers and continued operational efficiency improvements by District staff. 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 the District over one million dollars per year in electricity costs, which would otherwise have to be recovered through higher rates to customers. The proposed decrease in the utilities budget also reflects the District IT Department's ongoing review of District IT assets which has kept *Overall Telephone* costs to FY 2016-17 budget levels by appropriately sizing the District's telephony system for current District needs.

Wastewater Treatment

Table F1 - 17: Wastewater Treatments Operations and Maintenance

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Wastewater Treatment								
General Fund	998,008	248,100	(749,908)	1,027,948	1,046,369	-	(1,046,369)	-100%
PC 2 - JB Latham Treatment Plant	960,802	1,136,040	175,238	989,626	1,007,360	1,150,501	143,141	14.2%
3A Treatment Plant	1,880,197	1,829,129	(51,068)	1,936,603	1,971,306	2,004,384	33,078	1.7%
PC 5 - San Juan Creek Ocean Outfall	91,213	101,007	9,794	93,949	95,633	81,730	(13,902)	-14.5%
PC 2SO - Recycled Water Permit	78,915	87,401	8,486	81,282	82,739	69,678	(13,060)	-15.8%
PC 15 - Coastal Treatment Plant	217,213	481,734	264,521	223,729	227,738	304,215	76,477	33.6%
PC 17 - Regional Treatment Plant	5,279,324	5,845,264	565,940	5,437,704	5,535,146	6,908,121	1,372,975	24.8%
PC 21 - Effluent Transmission Main	15,143	16,773	1,630	15,597	15,876	12,334	(3,542)	-22.3%
PC 24 - Aliso Creek Ocean Outfall	160,485	177,766	17,281	165,300	168,262	175,634	7,372	4.4%
Pretreatment Program	43,435	48,122	4,687	44,738	45,540	45,754	214	0.5%
Use Audit Refund	(520,000)	(467,075)	52,925	(535,600)	(545,198)	-	545,198	-100%
Total Wastewater Treatment Budget	9,204,735	9,504,261	299,526	9,480,876	9,650,770	10,752,352	1,101,582	11.4%

Given the significant annual financial contributions to wastewater treatment (approximately \$25M annually for both operating and capital expenses) there is a growing need to ensure the District's ratepayers receive high-quality and cost-effective wastewater treatment services from its contract service providers. It is imperative that the treatment of wastewater be closely monitored to ensure compliance with all regulations, protection of public health and the local environment, and financial accountability and transparency for the benefit of all of the District's ratepayers. As the proposed budgets for wastewater treatment continue to increase at unprecedented rates, the District intends to review opportunities to identify the most effective ways to treat wastewater and managing costs to do so.

The District will continue to evaluate options for increasing recycled water production, primarily from operational and site improvements at the District's Plant 3A, while ensuring that any expansion of the recycled water program is cost-effective for the District's ratepayers. Recycled water production is a critical component of the District's water reliability strategies. As such, the District will continue to review the available recycled water production opportunities, available treatment technologies, and recycled water needs of its ratepayers.

Table F1 - 18: Water Purchases

Description	FY 2015-16			FY 2016-17 Approved Budget	FY 2017-18			
	Approved Budget	Actuals	Difference		Forecasted Budget	Proposed Budget	Difference	% Change
Variable Water Purchase Cost								
MWD Full Service - Tier 1 Treated	21,708,139	21,830,194	122,055	18,560,649	15,230,923	16,120,192	889,269	6%
MWD Full Service - Tier 1 Untreated	-	-	-	3,622,234	6,390,442	6,382,113	(8,329)	0%
Baker Variable Cost	-	-	-	745,555	1,292,295	857,393	(434,902)	-34%
Total Variable Water Cost	21,708,139	21,830,194	122,055	22,928,438	22,913,660	23,359,698	446,038	2%
Fixed Water Purchase Cost								
MWDOC Ready-to-Serve Charge	1,897,716	1,688,457	(209,259)	1,471,369	1,525,864	1,342,027	(183,837)	-12%
MWDOC Capacity Charge	500,000	472,767	(27,233)	418,448	455,062	493,385	38,322	8%
MWDOC Connection Charge	597,640	570,916	(26,724)	577,142	592,064	626,999	34,935	6%
Reclaimed Water Rebate	(1,005,653)	(832,740)	172,914	(1,005,653)	(995,937)	(930,314)	65,623	-7%
Joint Regional Water Supply System	454,495	563,261	108,766	460,000	468,280	462,207	(6,073)	-1%
Santiago Aqueduct Commission (SAC)	20,000	21,030	1,030	36,210	36,859	14,820	(22,039)	-60%
East Orange County Feeder #2 (EOCF2)	80,000	122,893	42,893	75,000	76,344	75,000	(1,344)	-2%
South County Pipeline (SCP)	172,000	97,709	(74,291)	144,000	146,580	138,281	(8,299)	-6%
Baker Fixed Cost	150,000	-	(150,000)	721,854	750,728	754,353	3,625	0%
Total Fixed Water Cost	2,866,197	2,704,294	(161,904)	2,898,370	3,055,846	2,976,758	(79,088)	-3%
Total Water Purchase Cost	24,574,336	24,534,488	(39,848)	25,826,808	25,969,506	26,336,456	366,950	1%

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 water banking/transfers are also being closely monitored to determine the District’s and South County interest.

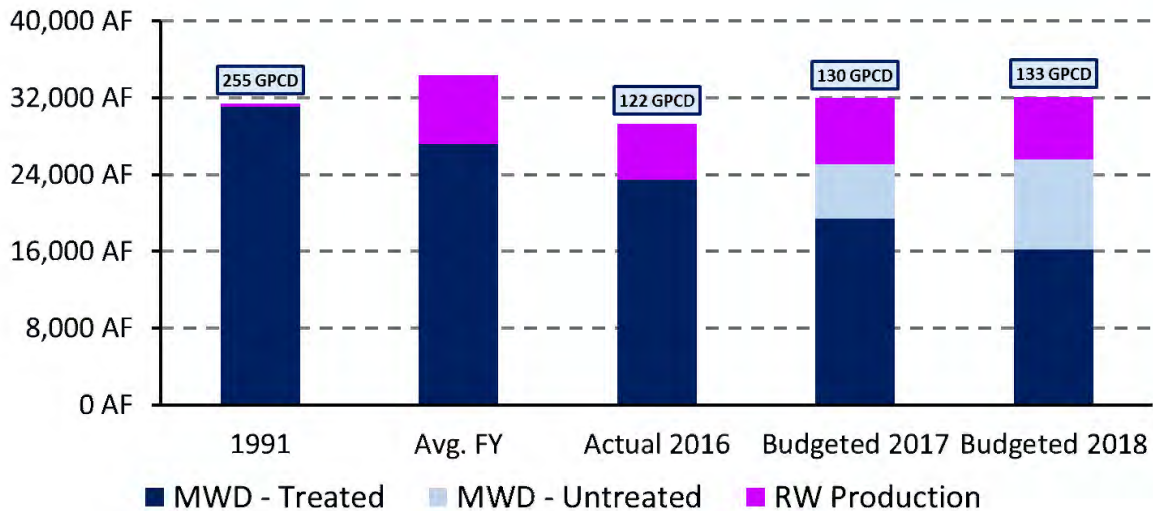


Figure F1 - 1: Water Deliveries and Recycled Water Production

Total water purchases for FY 2017-18 are budgeted at 25,600 AF based on a water loss factor of 7 percent, which represents a 1.24 percent increase from FY 2016-17 budgeted water 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. The plant came online in January 2017 and provides increased water supply reliability to southern Orange County as well as provides 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 owns 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 2017-18 are budgeted at 9,400 AF, reflecting a full year of full deliveries. The remaining 16,200 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, 2018 by 4.3 percent and 3.6 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 implemented 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, which went into effect starting for the FY 2016-17 Budget. 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 broken out separately to track the costs of treated water from the Deimer Water Treatment Plant against the Baker Water Treatment Plant. 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.

Capital Expenses

Capital Outlays

Table F1 - 19: Capital Outlays

Description	FY 2015-16	FY 2016-17	FY 2017-18
Requested Capital Outlays			
Electronics	\$55,123	\$31,000	\$35,000
Trucks	\$544,954	\$254,000	\$255,500
Heavy Equipment	\$391,575	\$343,592	\$141,000
Pumps & Equipment	\$84,000	\$363,425	\$45,000
Subtotal - Requested Capital Outlays	\$1,075,652	\$992,017	\$476,500
Proposed - Valve Program Related			
Trucks	\$0	\$420,000	\$0
Technology	\$0	\$0	\$19,265
Heavy Equipment	\$0	\$550,000	\$0
Subtotal - Valve Program Related	\$0	\$970,000	\$19,265
Total FY 2017-18 Capital Outlays	\$1,075,652	\$1,962,017	\$495,765

Requested Capital Outlays for FY 2017-18 are substantially lower than in FY 2015-16 and FY 2016-17. The same “needs-based” budgeting used to develop the non-capital components of the Fund 1 budget are used when developing annual capital outlay requests. As part of the FY 2016-17 budget, requested capital outlays were broken out to account for the initial equipment and truck purchases related to the proposed valve team. The format has been maintained for the FY 2017-18 budget to more clearly illustrate the annual trends and change from prior years. Though the total expense has been reduced, the proposed FY 2017-18 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.

Pumps and Equipment

Table F1 - 20: Capital Outlays-Pumps and Equipment

Description	FY 2017-18
Pumps & Equipment	
Golden Lantern Pumps #4 and #5 Replacement	\$30,000
20' x 6' By-Pass Pump Trailer	\$15,000
Subtotal - Pumps & Equipment	\$45,000

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.

Heavy Equipment

Table F1 - 21: Capital Outlays-Heavy Equipment

Description	FY 2017-18
Heavy Equipment	
106 Upper Oso return valve replacement	\$11,000
Hydra-Stop Insertion Valves size 6"-16"	\$40,000
CAT 908M Loader for Plant 3A / Galivan yard	\$90,000
Subtotal - Heavy Equipment	\$141,000

Requested Heavy Equipment for FY 2017-18 consists of: a 10 inch hydraulically controlled globe valve to replace the existing 106 Upper Oso return valve; insertion valves to keep in stock for needed replacements outside of the valve-turning program; and a yard loader that is necessary to allow the unused area at Plant 3A to be used for materials storage.

Trucks

Table F1 - 22: Capital Outlays-Trucks

Description	FY 2017-18
Trucks	
Replacement of Truck unit #16	\$58,000
Replacement of Truck unit #21	\$35,500
Replacement of Truck unit #26	\$58,000
Replacement of Truck unit #63	\$35,500
Replacement of Truck unit #23	\$68,500
Subtotal - Trucks	\$255,500

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 and are experiencing maintenance and reliability issues. Truck unit #26 has useful life remaining, but does not meet the reliability standards for its current use as first response vehicle. Unit #26 will be repurposed for a more appropriate use for the remainder of its useful life.

Valve Program - Technology

Table F1 - 23: Valve Program Capital Outlays-Technology

Description	FY 2017-18
Valve Program - Technology	
Tough book tablets for valve turning crew	\$19,265
Subtotal - Valve Program - Technology	\$19,265

The proposed Toughbook tablets are to provide logistic and mapping support to the District's valve replacement crew and include necessary ArcGIS software.

Fund 6 – Water Efficiency Fund

Fund 6 – Overview and Purpose of the Water Efficiency Fund

The District's rate structure allocates a water budget to each customer based on individual needs and certain parameters to promote the efficient use of water. Customers who use water inefficiently (i.e. in excess of their calculated water budgets) place greater demands on the District's water and recycled water systems and supplies. Inefficient customers 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 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, 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 2016-17 Successes

- Reduced backlog of turf removal pre/post inspections from 8 weeks to 2-3 days
- Received over 1,200 account sign-ups through the Smart Utility Systems Customer Portal
- Continued to successfully implement the Water Shortage Contingency Plan and transitioned out of the Water Shortage Contingency Plan with the rescinding of the drought emergency from the Governor
- Met our target from the SWRCB of 20 percent reduction from 2013 water usage
- Customer communication - ongoing
 - Targeted marketing to all Tier 3 residential customers
 - Targeted marketing to all Tier 4 and 5 residential customers
 - Conservation Program and workshop marketing
- Engaged the state on proposed additional regulations and submitted comment letters
- Initiated the Case de Oso Water Loss Study
- Partnerships with regional agencies and academic institutions to improve and evolve our water efficiency programs
- Successfully implemented the Residential Smart Timer program with more customers applying in two weeks than a full year of the rebate smart timer program
- Completion of two large-scale commercial site assessments – program ongoing
- Piloted Direct Install Turf Replacement program to promote watershed-wise, regionally native plant installations to residential customers
- Record attendance of 336 participants at Residential Landscape Workshops

- Commenced residential Pressure Reduction Pilot to increase outdoor efficiency
- Streamlined administrative processes through use of new form builder & workflow tool
- Completion of Phase 2 of UC Riverside Demand Management Study

Fund 6 – Summary Statement

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

MOULTON NIGUEL WATER DISTRICT - WATER EFFICIENCY FUND								
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION								
	FY 2015-16 Approved Budget	FY 2015-16 Actuals	FY 2015-16 Difference	FY 2016-17 Approved Budget	FY 2017-18 Forecasted Budget	FY 2017-18 Proposed Budget	FY 2017-18 Difference	%Δ
Operating Revenues:								
Water Efficiency Revenue	3,398,873	4,534,832	1,135,959	3,303,844	3,258,336	3,335,112	76,776	2%
Non-Operating Revenues:								
Investment Income	159,792	157,992	(1,800)	106,436	59,001	97,937	38,937	66%
Demand Offset Fees	-	-	-	-	-	50,000	50,000	-
Operating Expenses:								
Labor	668,156	828,408	(160,252)	1,068,279	1,119,339	1,300,574	181,235	16%
Educational Courses	500	1,224	(724)	2,500	2,545	2,500	(45)	-2%
Travel & Meetings	14,700	14,725	(25)	24,700	25,143	25,200	57	0%
General Services	5,000	-	5,000	-	-	-	-	-
Dues & Memberships	500	-	500	500	509	500	(9)	-2%
Consulting Services	850,000	826,373	23,627	1,300,000	1,323,296	1,100,000	(223,296)	-17%
Legal Services	-	17,314	(17,314)	10,000	10,179	50,000	39,821	391%
Conservation Supplies	489,751	320,403	169,348	380,500	387,318	278,200	(109,118)	-28%
Repairs & Maint. - Equipment	3,500	3,949	(449)	2,500	2,545	2,500	(45)	-2%
Water Efficiency	4,849,624	4,737,268	112,356	2,898,457	2,948,615	2,885,000	(63,615)	-2%
Total Operating Expenses	6,881,731	6,749,664	132,066	5,687,436	5,819,488	5,644,474	(175,014)	-3%
Change in Operating Position	(3,323,066)	(2,056,840)		(2,277,156)	(2,502,152)	(2,211,425)		-12%
Capital Expenses:								
RW Retrofits	100,000	115,935	(15,935)	-	50,000	50,000	-	0%
RW System Extension	1,500,000	1,699,187	(199,187)	-	-	-	-	-
Aliso Village RW Extension	95,611	104,583	(8,972)	-	-	-	-	-
AMI Phase I - Potable Irrigation	-	-	-	475,495	-	-	-	-
AMI Phase I - RW Meters	-	-	-	475,495	-	-	-	-
Total Capital Expenses	1,695,611	1,919,705	(224,094)	950,990	50,000	50,000	-	0%
Projected Change in Fund	(5,018,677)	(3,976,546)		(3,228,146)	(2,552,152)	(2,261,425)		-11%

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 2017-18 is presented in the above table that includes the projects and programs discussed below.

Direct install Turf Replacement and Smart Timer programs are proposed in the Overall Consulting line item in the FY 2017-18 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 2017-18	
		Proposed Budget
Fund 6 Consulting		
Turf Inspections		114,000
Landscape Transformation Cloud-based Services		60,000
Customer Portal (SUS)		60,000
Direct Install Smart Timers		200,000
Direct Install Turf		300,000
Commercial Audit Program		150,000
Form Builder		30,000
Landscape Workshops		6,000
UC Riverside Study		20,000
Misc. Consulting Services		160,000
Total Fund 6 Overall Consulting Expenses		1,100,000

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 8-12 weeks currently to get a check from the time of applying and as program interest has spiked in 2015, took up to 6 months. Additionally, the UC Riverside Study is wrapping up its 3rd Phase in FY 2017-18 to integrate Phase 2 survey results and household preferences into the model from Phase 1. 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 Turf Inspections consulting support.

The District successfully implemented Advanced Metering Infrastructure (AMI) for all dedicated landscape meters (both potable and recycled water) within the District (about 2,650 meters) as well as a residential pilot program on a legacy AMI system (about 1,800 meters) Customers can log into the now deployed SUS Customer Portal to get access to near real time water usage information. Other key initiatives for the FY 2017-18 Budget include:

- Evaluate refinements to the water budget rate structure including changing the current tier widths
- Pursue state/federal funding opportunities
- Expand the Commercial Assessment program and implement new incentives through MWD’s Water Saving Incentive Program
- Work with the California Data Collaborative to evaluate impacts of proposed long term efficiency regulations
- In depth analysis of higher tier usage to target inefficient use potable irrigation customers
- Utilize the pilot recycled water and potable irrigation AMI project towards evaluating 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 57 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 ID 6 portion of the GOBs is paid off in full moving into FY 2017-18. 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 24 days on average, when coupled with the District's demand management programs. 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 2017-18 for each of the District's existing bonds, certificates, and loans.

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

Description	FY 2017-18			
	Principal	Interest	Fees	Total
2009 Certificate of Participation (Build America Bonds)	\$ -	\$ 4,098,976	-	\$ 4,098,976
State Water Resources Control Board				
Phase III-A Revised Expansion Project (SRF 110)	\$ 488,835	\$ 8,507	-	\$ 497,342
Phase IV Reclaimed Water Distribution System Expansion (SRF 120)	\$ 1,066,751	\$ 117,844	-	\$ 1,184,595
Phase III-B Revised Expansion Project (SRF 130)	\$ 307,876	\$ 11,345	-	\$ 319,221
Subtotal - SWRCB SRF Debt	\$ 1,863,462	\$ 137,696	-	\$ 2,001,158
California Infrastructure and Economic Development Bank				
2002 On-Site Hypochlorite Generation-Reservoir Mgmt. System, Phase II (CIEDB 01-020)	\$ 14,599	\$ 101,267	\$ 1,604	\$ 117,469
2002 Sewer Rehabilitation (CIEDB 02-026)	\$ 11,379	\$ 67,381	\$ 1,077	\$ 79,836
Subtotal - CIEDB Debt	\$ 25,977	\$ 168,647	\$ 2,681	\$ 197,305
2014 Consolidated Refunding (General Obligation) Bonds				
GOB Debt ID #7	\$ 1,275,000	\$ 144,500	-	\$ 1,419,500
Subtotal - 2014 GOB Debt	\$ 1,275,000	\$ 144,500	-	\$ 1,419,500
2010 Refunding Certificates of Participation (Refunding of 1993 COPs)	\$ 1,925,000	\$ 38,500	-	\$ 1,963,500
2015 Revenue Bonds (Refunding of 2003 COPs)	\$ -	\$ 613,250	-	\$ 613,250
Total FY 2017-18 Debt Service Expense	\$ 5,089,439	\$ 5,201,569	\$ 2,681	\$ 10,293,689

The District currently holds a reaffirmed AAA rating from Fitch effective April 2017 and a AA+ rating from Standard and Poor's, which enables the District to go to the public finance markets 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 over the next ten years. 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.

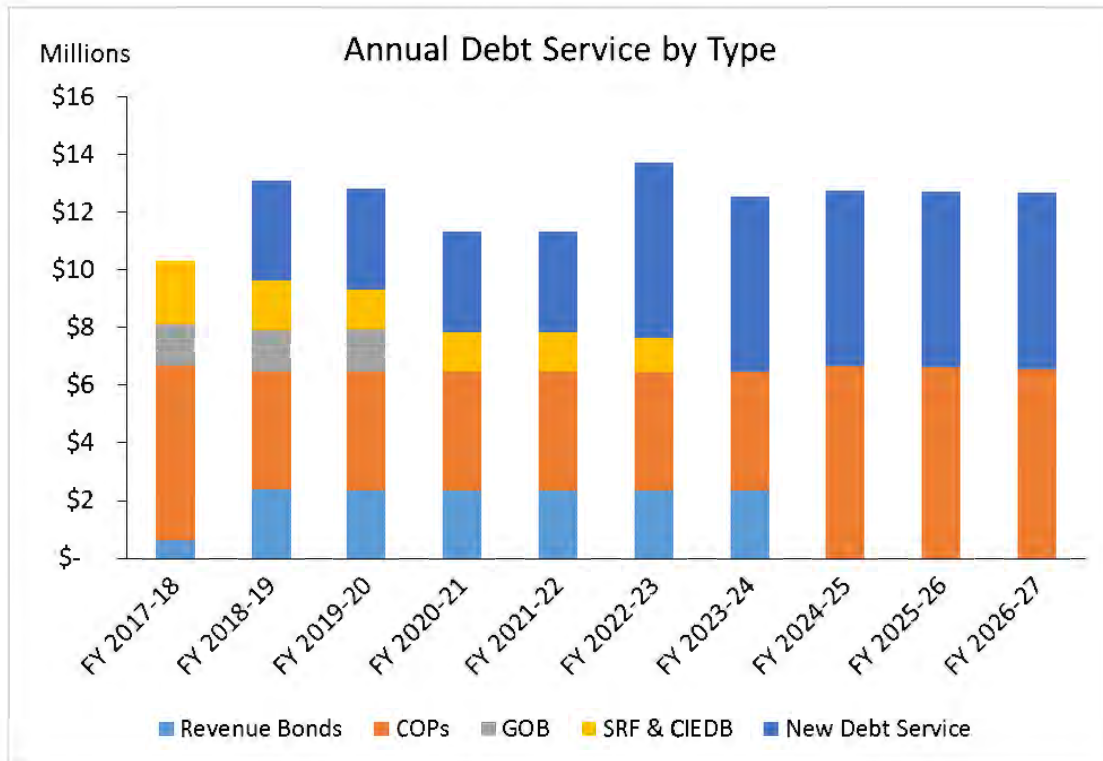


Figure Debt-1: Ten-Year Summary of Forecasted Debt Service

District Goals for FY 2017-18

The Board of Directors, with the support of District staff, 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 2017-18 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 and agency officials to further advance District policy issues or and 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 and fluid 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 Financial Planning 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, are all now prepared in-house, and both the financial audit and single audit were completed without receiving findings or internal control comments regarding financial reporting or Governmental Accounting Standards Board (“GASB”) compliance.

Financial management continues to 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 District’s engineers, accountants, and financial planning staff has allowed for the timing of its investment maturities to be matched with liquidity needs for monthly capital and operating expenses. The active oversight of the District’s cashflows has decreased accounting costs and maximized investment earnings. The Financial Planning 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, Cross Connection and Accounting for Fats, Oils, and Grease (“FOG”) fees, Purchasing for monthly vendor invoices and receipts, and Customer Accounts for service charge revenue projections and collections. The Financial Planning department looks to build upon the work that has been done to date as part of the 2017 cost of service

study. A critical component of the rate study is the administrative record that details the development and calculation of rates and charges. As a result of the extensive communication and coordination among departments, the cost of service study will possess an administrative record with a level of rigor that is unprecedented in the industry.

The District's proactive planning efforts, which were built around bringing on staff with sophisticated financial analysis/rate design/forecasting capabilities, have paid off in dividends. Many agencies are following MNWD's example. Having internal staff expertise, who are invested in the District, has proven to be essential in maintaining the strong financial health of the organization. As the District is investing more resources into its infrastructure, and we emerge with a long-term efficiency framework, it is imperative that we continue to evaluate and assess the financial condition of the District, and to use the internally developed tools to plan for both our short term and long-term financial goals. MNWD will continue to be nimble, able, innovative and conservative in our financial management and plan aggressively to ensure limited financial impact to our customers.

Labor Relations

From an operational standpoint, the District's most valuable asset 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 investing in employees. 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. Leveraging the power 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 while reducing advertising costs when compared to the past two fiscal years. The District has since extended this and other platforms 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 and FY 2016-17 towards FY 2017-18.

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 2017-18 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.

Labor relations remain, and will always be, the largest contributing factor to the success of any organization, and the District's experience confirms this. Over the last four years, the District has made great strides to improve labor relations and change the way the agency is regarded by not only its employees, but also labor associations across the region and State. The successful development of a new multi-year MOU, which was again developed over the course of a single day, would not have been possible had it not been for the respect and trust established between the District and employees over

the prior four years. An exceptional Human Resources Department has proven invaluable in building that trust: and their care, credibility, and tenacious negotiation on behalf of staff have fostered a supportive yet performance driven ethos that can only be described as “Moulton Magic”. Regardless of the District’s emphasis on upward mobility and employee well-being, recruitment and retention remain a priority as many agencies have indicated interest, both implicitly and explicitly, in the District’s highly skilled employees and have continued to increase compensation and benefits to attract talent.

Operations Center Consolidation

The construction of a centralized headquarters for the efficient operation and administration of the District has been a priority of both staff and the Board for the past several years. After extensive work to identify the appropriate site for the new Operations Center, the District elected to move forward with plans to construct new and redevelop existing facilities at its Plant 2A site in Laguna Hills.

Working with the Board appointed ad-hoc committee, significant progress has been made and the District looks to break ground in FY 2017-18. Regular community meetings with the neighboring residents have been held to ensure communication and coordination among stakeholders. Beginning last fiscal year, the District has begun extending communications about this project and its benefits to all customers in the District service area. Customers have been made aware for some time about this project and its associated costs, which have been identified in planning documents and CIP budgets for the past several years. To date, District customers and the cities remain very supportive and understanding of the need to develop an improved 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 appropriate departments. 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 worsening drought and impending regulation, the Board appointed an outreach ad-hoc committee and directed staff to commit additional resources to customer education and marketing campaigns. As a result of these efforts, the District has been recognized by both the SWRCB and DWR as an example of industry best practices in multiple categories. However, more important than the accolades of agencies, is the appreciation that customers have expressed as a result of increased communication from the District. The value of outreach has been made clear by the record number of customers living within their budgets, continued positive media coverage, ongoing involvement in policy making at the state level, and continued recognition for innovation from local agencies, Fortune 500 companies, and the White House.

The District learned during the 2009 drought that even short-term conservation efforts can be difficult at best without buy-in from customers. To date, feedback from customers and the cities has been

positive: they appreciate the increased communication and would like to see more. The District has taken that feedback and responded by significantly expanding its communication with 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 utilized targeted digital marketing through Facebook and LinkedIn to more cost effectively reach its customers.

The drought crisis presented a unique opportunity for the District in demonstrating our innovative and resourceful approach to many major challenges. We work closely with agencies throughout the State to drive decisions and policies that will have immediate and long-term effects on the public. Our contribution and impact to the statewide discussions as a District have been recognized by the State and our peers in the water community. 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.

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 past 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 2017-18. 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 2017-18 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 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.

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 end to the drought emergency and changes to the status of some of the local supply projects. Staff has evaluated opportunities to expand recycled water, build seasonal storage and considered indirect potable reuse for the project in the San Juan Basin. The District held a detailed workshop with the Board in April 2016 with the key recommendation to focus on

assessing and potentially expanding direct recycled water use as it is the most cost effective strategy. However, based on the results of the 2017 RW Masterplan, less cost effective opportunities exist than initially thought. The District is looking to identify opportunities to refine the results and target 500 to 1,300 AF/ Year of direct recycled water use in FY 2017-18. As further regulations develop by the State, staff will monitor the potential for direct potable reuse. Other local efforts such as ocean desalination and banking/transfers are also being closely monitored to determine the District's and South County interest.

Wastewater Treatment

Over the years, the District has relied on SOCWA for administration and management of wastewater treatment issues. Given the significant annual financial contribution to SOCWA, cost sharing allocations, and representation issues, there is a growing need to focus additional resources and expertise towards wastewater treatment and recycled water production. Plant 3A operations by SMWD and potential facility expansion has highlighted the need for close monitoring and assessment of current and future wastewater treatment capacity, along with recycled water production. Regional partnering to optimize wastewater treatment and maximize recycled water production will continue to be a primary focus of the District and will require critical decisions be made in the immediate future.

Government Affairs

The District has made great strides in establishing local, regional and statewide relationships. This is an ongoing effort that must be continuously renewed. Prior to 2012, there were no government affairs or outreach functions. Federal and State legislative and regulatory initiatives, as well as local and regional activities, impact the District and its customers. The District has utilized regular staff to lead these efforts, drawing on the information and resources of the District's civic and industry associations. The Board has identified the need to be informed and engaged in local, regional, state, and federal issues that impact our communities. Staff will continue to evaluate opportunities to match the District's resources with opportunities to influence government affairs at every level.



moulton niguel water district

Capital Improvement Program Budget for Fiscal Year 2017-18

June 2017

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Appendices

Appendix A –	10-year Capital Improvement Program
Appendix B –	Proposed 2017-18 Budget
Appendix C –	Project Descriptions for the 10-year CIP

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 and refining 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, operational efficiency, liability, and probability of failure. 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 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 planning 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, and both local and regional water reliability needs identified through various planning efforts.

The 10-year CIP contains proposed expenditures totaling \$282.2 million for FY 2017-18 through FY 2026-27. About 25% (\$70 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.

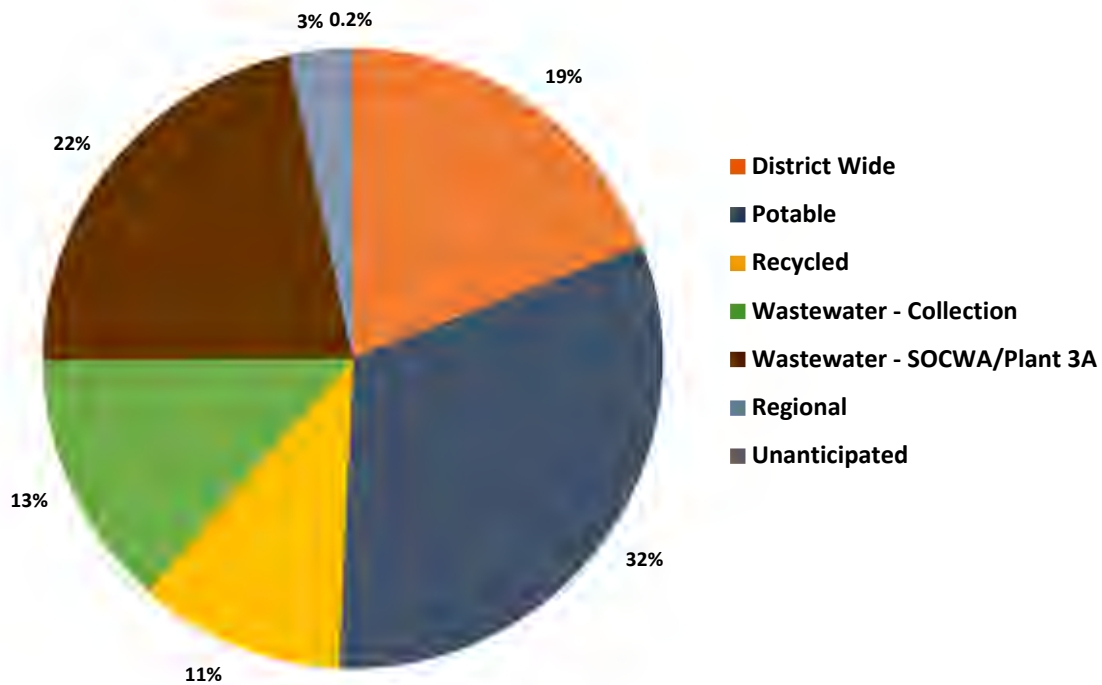


Figure 2: Distribution of the 10-Year Capital Improvement Program

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

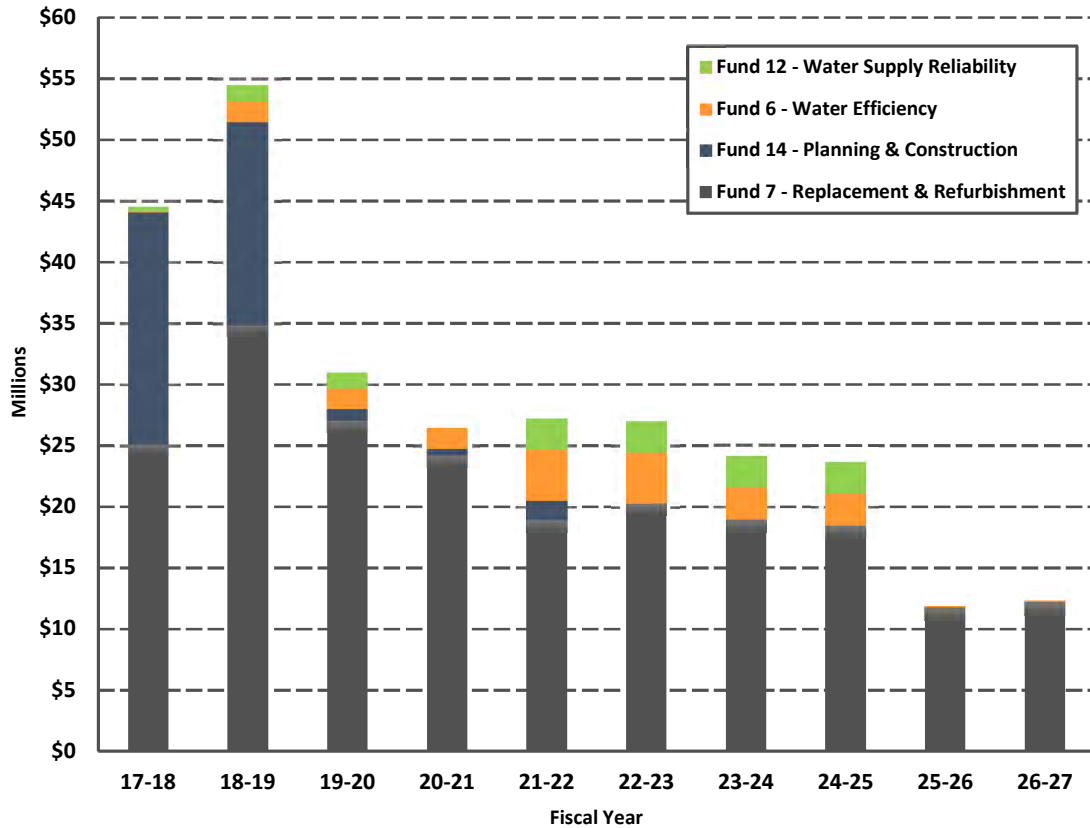


Figure 3: Proposed Budget Distribution over 10-Year Planning Horizon

Fiscal Year 2016-17 Adopted Budget

The CIP for the FY 2016-17 as adopted by the Board of Directors in June of 2016 had a budget of \$46.6 million. The FY 2016-17 budget contained 62 individual projects and two unanticipated project line items. At the end of the fiscal year, 21 projects will be completed, 20 projects will be in construction and 21 projects will be in various stages of design. During the fiscal year, \$35 million or 75% of the budget was contracted with approximately \$21 million forecasted to be expended.

Table 1 summarizes the FY 2016-17 adopted budget.

Table 1: FY 2016-17 Adopted Capital Improvement Program Budget

Item/Fund	FY 2016-17 Adopted Budget
Water Efficiency - Fund 6	\$950,990
Replacement and Refurbishment - Fund 7	\$13,257,897
SOCWA, JRWSS & SMWD – Fund 7	\$13,886,529
Water Supply Reliability - Fund 12	\$8,861,074
Planning and Construction - Fund 14	\$9,613,031
Total	\$46,569,520
Projected Expenditures for FY2016-17 ⁽¹⁾	\$20,603,929
Construction in Progress or Completed	\$34,603,143

Note 1. Projected expenditures based on data through March 31, 2017 and expenditures projected through the end of the fiscal year

Fiscal Year 2017-18 Proposed Budget

The FY 2017-18 CIP outlines \$44.5 million in appropriations to continue funding of existing projects and provide funding for new projects. Projects carried forward from FY 2016-17 account for about \$23.8 million of the FY 2017-18 CIP budget - \$1.2 million is currently in construction and \$22.6 million is in various design phases. Appropriations for new projects are about \$8.9 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 \$11.4 million, include projects proposed by South Coast Water District (SCWD) for the JRWSS; SMWD for jointly-owned facilities such as Upper Oso and Upper Chiquita Reservoirs and Plant 3A; and SOCWA for wastewater treatment. Appendix B lists the projects proposed for the 2017-18 budget. The projects are described individually in Appendix C.

Table 2 summarizes the proposed budget for each of the various Funds while Figure 3 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 4 displays the percentage distribution across systems. The District Wide classification, at 39%, is the biggest component of the next fiscal year budget due in large part to the proposed Operations Center Consolidation and Improvement project. The next biggest component of the next fiscal year budget is the wastewater system, at 31%.

Table 2: Proposed Budget for FY 2017-18 by Fund

Item/Fund	FY 2017-18 Proposed Budget
Water Efficiency – Fund 6	\$50,000
Replacement and Refurbishment - Fund 7	\$13,789,167
SOCWA, JRWSS & SMWD - Fund 7	\$11,350,941
Water Supply Reliability - Fund 12	\$350,000
Planning and Construction - Fund 14	\$18,957,000
Total FY 2017-18 Proposed Budget	\$44,497,108

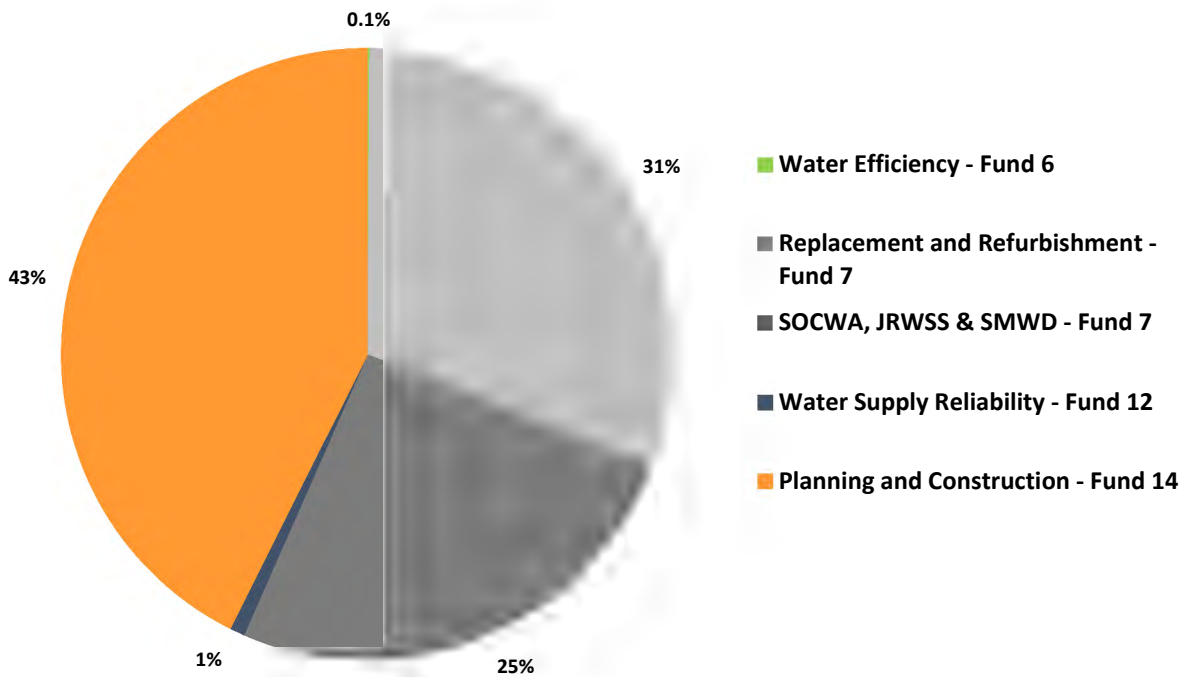


Figure 4: Percent Distribution of Proposed Budget for FY 2017-18 by Fund

Table 3: Proposed Budget for FY 2017-18 by System

System	FY 2017-18 Proposed Budget
District Wide	\$17,174,000
Potable Water	\$10,550,000
Recycled Water	\$618,667
Wastewater	
Collection	\$4,253,500
Treatment (SOCWA & Plant 3A)	\$9,485,912
Regional (i.e. Baker, JRWSS, Upper Oso, etc.)	\$1,965,029
Unanticipated Projects	\$450,000
Total	\$44,497,108

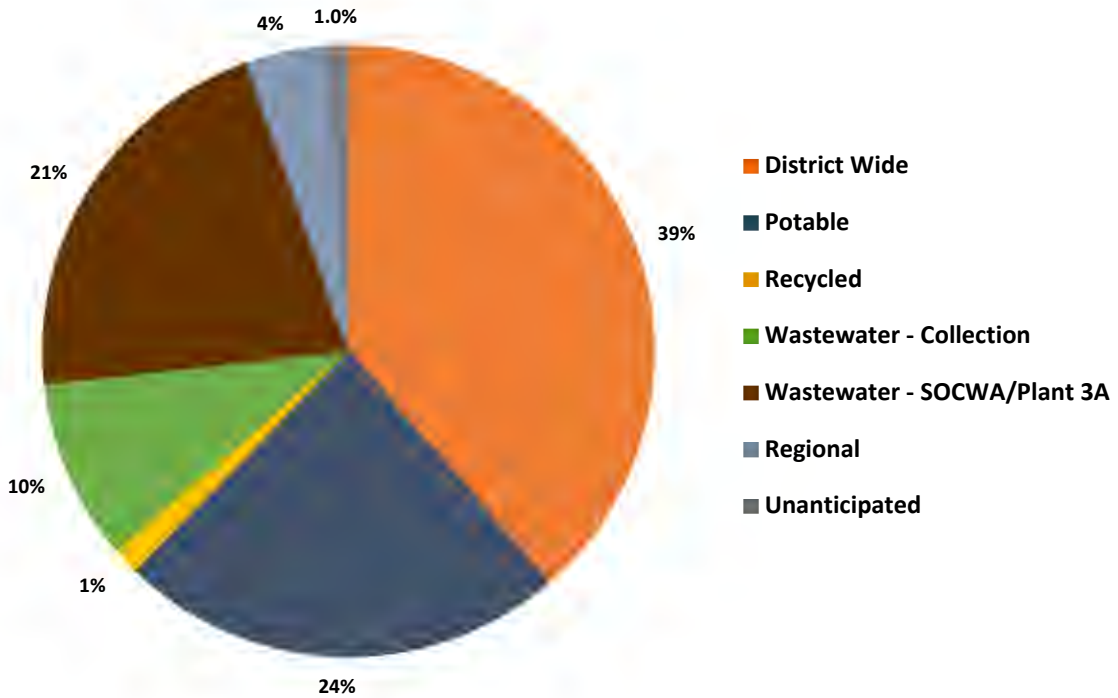


Figure 5: Percent Distribution of Proposed Budget for FY 2017-18 by System

Appendix A
10-year Capital Improvement Program

APPENDIX A
FY 17-18 | 10-YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 to FY 2026-27	
DISTRICTWIDE									
2006038	7	REPLACE DIGITAL LINES WITH WIRELESS NETWORK	CLOSED	\$2,020,630				\$0	
2011034	7	GIS VIEWER AND CONFIGURATION	CLOSED	\$60,000				\$0	
2011024	7	DOCUMENT MANAGEMENT	DESIGN	\$389,000	\$25,000	\$75,000	\$289,000	\$0	
2011033	7	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	DESIGN	\$500,000	\$25,000	\$275,000	\$200,000	\$0	
2011077	14	MOULTON PEAK RADIO TOWER IMPROVEMENTS	DESIGN	\$235,000	\$25,000	\$210,000		\$0	
2014015	14	DISTRICT HEADQUARTERS	DESIGN	\$32,000,000	\$16,134,000	\$14,438,500		\$0	
2016022	14	CAMINO CAPISTRANO OPERATIONS YARD IMPROVEMENTS	NEW	\$775,000	\$665,000			\$0	
	14	DISTRICT VEHICLE RADIO COMMUNICATION SYSTEM	NEW	\$200,000	\$200,000			\$0	
	7	REPLACEMENT OF POINT TO MULTI-POINT RADIOS FOR SCADA SYSTEM	NEW	\$800,000	\$100,000	\$700,000		\$0	
	14	VIDEO SITE SURVEILLANCE SYSTEM	NEW	\$500,000		\$500,000		\$0	
	6	SUPPLY RELIABILITY ENHANCEMENTS - FUND 6	NEW	\$10,000,000				\$10,000,000	
	12	SUPPLY RELIABILITY ENHANCEMENTS - FUND 12	NEW	\$10,000,000				\$10,000,000	
Subtotal - Districtwide Projects						\$17,174,000	\$16,198,500	\$489,000	\$20,000,000
POTABLE									
2014001	7	BEAR BRAND RESERVOIR RECOATING & SAFETY IMPROVEMENTS	CLOSED	\$778,100				\$0	
2014013	14	PRADERA 850 ZONE LOOP	CLOSED	\$812,000				\$0	
2015002	7	2015-16 VALVE REPLACEMENT	CLOSED	\$1,470,000				\$0	
2015019	6	AMI PHASE I - POTABLE IRRIG METERS	CLOSED	\$484,190				\$0	
2016013	14	2016-17 NEW SYSTEM VALVES	CLOSED	\$100,000				\$0	
2011010	7	HILLARY PRS REPLACEMENT	CONSTRUCTION	\$332,144	\$25,000			\$0	
2011012	7	LARGO PRS REPLACEMENT	CONSTRUCTION	\$385,652	\$25,000			\$0	
2011015	7	WILKES PRS REPLACEMENT	CONSTRUCTION	\$334,953	\$25,000			\$0	
2015011	7	PALMS APTS EASEMENT PW LINE REPLACEMENTS	CONSTRUCTION	\$410,833	\$150,000			\$0	
2015012	7	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	CONSTRUCTION	\$128,440	\$10,000			\$0	
2015017	14	FALL PROTECTION SYSTEM - PW RESERVOIRS	CONSTRUCTION	\$173,229	\$10,000			\$0	
2015022	7	CROWN VALLEY PW RESERVOIR 3 RECOATING	CONSTRUCTION	\$284,310	\$25,000			\$0	
2016005	7	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - PW	CONSTRUCTION	\$117,000	\$25,000			\$0	
	7	NACCOMBE DRIVE POTABLE EASEMENT PIPELINE ABANDONMENT	CONSTRUCTION	\$30,000	\$25,000			\$0	
2009010	14	MISSION HOSPITAL 750-ZONE SERVICE	DESIGN	\$1,200,000	\$1,125,000			\$0	
2009010	14	MISSION HOSPITAL 750-ZONE SERVICE - MISSION HOSPITAL REIMBURSEMENT	REIMBURSEMENT	-\$150,000	-\$150,000			\$0	
2014012	7	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	DESIGN	\$600,000	\$550,000			\$0	
2015013	7	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	DESIGN	\$2,250,000	\$1,700,000			\$0	
2015015	7	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	DESIGN	\$2,450,000	\$450,000	\$2,000,000		\$0	
2016002	7	2016-17 VALVE REPLACEMENT	DESIGN	\$1,710,000	\$1,250,000			\$0	
2016007	7	54-INCH CIP IMPROVEMENTS	DESIGN	\$2,600,000	\$450,000	\$2,100,000		\$0	
2016009	7	HIGHLAND PUMP STATION PRESSURE RELIEF TO 650 ZONE	DESIGN	\$75,000	\$50,000			\$0	
2016014	14	SADDLEBACK PS GENERATOR EMERGENCY CONNECTION	DESIGN	\$60,000		\$60,000		\$0	
2016015	14	920 ZONE LOOP PIPELINE	DESIGN	\$180,000	\$130,000			\$0	
2016021	7	VAULT REMOVALS	DESIGN	\$750,000	\$700,000			\$0	
	7	EASEMENT REHABILITATION PROGRAM - PHASE 1	PROGRAM	\$7,850,000				\$2,500,000	
	7	EASEMENT REHABILITATION PROGRAM - PHASE 2	PROGRAM	\$6,000,000				\$0	
	7	ELECTRICAL SYSTEM IMPROVEMENTS PROGRAM - PW	PROGRAM	\$2,200,000		\$440,000	\$440,000	\$1,320,000	
	7	RESERVOIR MANAGEMENT SYSTEM REPLACEMENT PROGRAM	PROGRAM	\$8,550,000		\$300,000	\$4,125,000	\$4,125,000	
	7	RESERVOIR RECOATING PROGRAM - PW	PROGRAM	\$11,250,000		\$1,250,000	\$1,250,000	\$8,750,000	
	7	STEEL TANKS SEISMIC & STRUCTURAL RETROFITS PROGRAM - PW	PROGRAM	\$5,000,000		\$250,000	\$250,000	\$4,200,000	
	7	VALVE REPLACEMENT PROGRAM - PW	PROGRAM	\$19,375,000			\$2,495,000	\$16,880,000	
2010001	14	650-ZONE NIGUEL ROAD INTERTIE		\$320,000			\$80,000	\$240,000	
2011032	7	OLD RANCH ROAD EASEMENT PIPELINE REFURBISHMENT		\$200,000	\$25,000	\$175,000		\$0	
2011037	7	MISSION VIEJO HIGH SCHOOL LINE/VAULT REFURBISHMENT		\$200,000	\$200,000			\$0	

APPENDIX A
FY 17-18 | 10-YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 to FY 2026-27
2015006	7	I.D. 1 MASTER METER RELOCATION		\$650,000				\$650,000
2015023	7	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ		\$500,000				\$250,000
	7	BEAR BRAND PS PUMP REPLACEMENT		\$410,000		\$50,000	\$360,000	\$0
	7	LITTLE NIGUEL PS PUMP REPLACEMENT		\$275,000		\$40,000	\$235,000	\$0
	12	MARGUERITE/OSO CIP TAKEOUT FACILITY		\$2,500,000				\$0
	7	PACIFIC PARK PS PUMP & ENGINE REPLACEMENT		\$600,000		\$80,000	\$520,000	\$0
	7	PZ450 ALISO CREEK POTABLE LINE RELOCATION		\$300,000			\$50,000	\$250,000
	7	ROLLING HILLS PS PUMP & ENGINE REPLACEMENT		\$675,000		\$80,000	\$595,000	\$0
	14	SECONDARY FEED FOR 1050 ZONE		\$600,000	\$100,000	\$500,000		\$0
	7	SHEEP HILLS PS PUMP & ENGINE REPLACEMENT		\$1,040,000		\$110,000	\$930,000	\$0
	12	SOUTH COUNTY PIPELINE TAKEOUT FACILITY		\$2,400,000	\$50,000	\$1,100,000	\$1,250,000	\$0
2016020	7	ELECTRICAL SERVICE ENTRANCE REPLACEMENTS AT THREE SITES	NEW	\$1,050,000	\$975,000			\$0
	7	2017-18 ELECTRICAL SYSTEM IMPROVEMENTS - PW	NEW	\$900,000	\$250,000	\$650,000		\$0
	7	2017-18 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	NEW	\$3,900,000	\$300,000	\$3,600,000		\$0
	7	2017-18 UTILITY SERVICE ENTRANCE REPLACEMENTS - PW	NEW	\$750,000	\$200,000	\$550,000		\$0
	7	2017-18 VALVE REPLACEMENT	NEW	\$2,700,000	\$75,000	\$2,625,000		\$0
	6	AMI PHASE 2	NEW	\$8,000,000		\$1,600,000	\$1,600,000	\$4,800,000
	7	CROWN VALLEY RESERVOIR NO. 3 ROOF PLATE REPAIR AND INTERIOR RECOATING	NEW	\$1,000,000				\$1,000,000
	7	LAGUNA HILLS DR 650 LINE INTERTIE	NEW	\$135,000			\$50,000	\$85,000
	7	PIPELINE ADJUSTMENTS FOR I-5 FREEWAY WIDENING	NEW	\$750,000	\$150,000	\$200,000	\$250,000	\$150,000
	7	PW MAIN REPLACEMENT AT I-5 OSO CREEK CROSSING	NEW	\$1,500,000	\$150,000	\$675,000	\$675,000	\$0
	7	REHABILITATION OF THE ALISO HILLS RESERVOIR	NEW	\$700,000	\$700,000			\$0
	7	REHABILITATION OF THE MARGUERITE RESERVOIR	NEW	\$800,000	\$800,000			\$0
Subtotal - Potable Projects					\$10,550,000	\$18,435,000	\$15,155,000	\$45,200,000
RECYCLED								
2013002	7	MATHIS RW RESERVOIR RECOATING & SAFETY IMPROVEMENTS	CLOSED	\$1,036,415				\$0
2014010	12	ALISO VILLAGE RW EXTENSION	CLOSED	\$227,175				\$0
2014011	12	RECYCLED WATER SYSTEM EXTENSION PROJECT	CLOSED	\$2,146,552				\$0
2015020	6	AMI PHASE I - RW IRRIG METERS	CLOSED	\$484,190				\$0
2016010	12	FY 2016-17 RW RETROFITS	CLOSED	\$50,000				\$0
2015004	7	CROWN VALLEY RW RESERVOIRS 1 AND 2 RECOATING & SAFETY IMPROVEMENTS	CONSTRUCTION	\$1,845,435	\$25,000			\$0
2015018	14	FALL PROTECTION SYSTEM - RW RESERVOIRS	CONSTRUCTION	\$32,516	\$2,000			\$0
2016004	7	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - RW	CONSTRUCTION	\$208,000	\$25,000			\$0
2010013	12	LA PAZ BRIDGE CROSSING RW PIPELINE	DESIGN	\$435,000	\$200,000	\$235,000		\$0
	7	ELECTRICAL SYSTEM IMPROVEMENTS PROGRAM - RW	PROGRAM	\$1,350,000		\$270,000	\$270,000	\$810,000
	6	RECYCLED WATER RETROFITS	PROGRAM	\$450,000		\$50,000	\$50,000	\$350,000
	7	RESERVOIR RECOATING PROGRAM - RW	PROGRAM	\$2,970,000		\$330,000	\$330,000	\$2,310,000
	7	STEEL TANKS SEISMIC & STRUCTURAL RETROFITS PROGRAM - RW	PROGRAM	\$200,000		\$10,000	\$15,000	\$175,000
	7	VALVE REPLACEMENT PROGRAM - RW	PROGRAM	\$1,600,000			\$200,000	\$1,400,000
	7	VERTICAL ASSET IMPROVEMENTS PROGRAM- RW	PROGRAM	\$17,860,000		\$315,000	\$1,000,000	\$10,750,000
	14	GALIVAN BYPASS IMPROVEMENTS		\$175,000				\$175,000
	7	LN REG PARK RW VAULT RECONFIGURATION		\$150,000			\$50,000	\$100,000
	7	OAKGROVE DRIVE RW PIPELINE REPLACEMENT		\$525,000			\$50,000	\$475,000
	6	2017-18 RW RETROFITS	NEW	\$50,000	\$50,000			\$0
2016023	7	GOLDEN LANTERN RESERVOIR ROOF-WALL JOINT SEAL	NEW	\$340,000	\$250,000			\$0
2016023	7	GOLDEN LANTERN RESERVOIR ROOF-WALL JOINT SEAL - SCWD REIMBURSEMENT	REIMBURSEMENT	-\$113,333	-\$83,333			\$0
	7	RW MAIN INSTALLATION AT I-5 OSO CREEK CROSSING	NEW	\$1,500,000	\$150,000	\$675,000	\$675,000	\$0
	7	RW MAIN REPLACEMENT FROM GALIVAN PS TO LA PAZ PS	NEW	\$8,400,000				\$8,400,000
	7	RW RESERVOIR DRAINAGE IMPROVEMENTS AT 3 SITES	NEW	\$725,000			\$65,000	\$285,000
Subtotal - Recycled Projects					\$618,667	\$1,885,000	\$2,705,000	\$25,230,000

APPENDIX A
FY 17-18 | 10-YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 to FY 2026-27
WASTEWATER								
2009115	7	SAN JUAN CREEK 30 EFFLUENT TM	CLOSED	\$4,226,054				\$0
2009115	7	SAN JUAN CREEK 30 EFFLUENT TM - SMWD REIMBURSEMENT	CLOSED	-\$1,213,027				\$0
2015008	7	LINDA VISTA DR SEWER LINING	CLOSED	\$105,348				\$0
2015010	7	NATIONAL PARK AND OTHER MISC SEWER LINING	CLOSED	\$94,423				\$0
2016003	7	FY2016-17 MH REHABILITATION	CLOSED	\$350,000				\$0
2014002	7	DEL AVION LS AUX GENERATOR REPLACEMENT	CONSTRUCTION	\$576,090	\$100,000			\$0
2014005	7	UTILITY MAIN BREAKERS REPLACEMENTS	CONSTRUCTION	\$216,700	\$10,000			\$0
2015003	7	ALISO CREEK LS REHABILITATION	CONSTRUCTION	\$131,800	\$10,000			\$0
2015009	7	LOWER BOUNDARY OAK LS UPGRADE	CONSTRUCTION	\$396,420	\$200,000			\$0
2016012	14	DEL AVION LIFT STATION GRINDERS	CONSTRUCTION	\$180,000	\$150,000			\$0
2016016	14	PLANT 3A FLOOD PROTECTION	CONSTRUCTION	\$500,000	\$300,000			\$0
2016016	14	PLANT 3A FLOOD PROTECTION - SMWD REIMBURSEMENT	REIMBURSEMENT	-\$140,000	-\$84,000			\$0
2016019	7	SAN JUAN CAPISTRANO RAILROAD PASSING SIDING AIR-VAC RELOCATIONS	CONSTRUCTION	\$100,000	\$5,000			\$0
2011028	7	VALENCIA LS REFURBISHMENT	DESIGN	\$800,000	\$200,000	\$550,000		\$0
2012024	7	UPPER SALADA LS AUX GENERATOR REPLACEMENT	DESIGN	\$950,000	\$200,000	\$650,000		\$0
2013004	7	REGIONAL LS FORCE MAIN REPLACEMENT	DESIGN	\$10,000,000	\$300,000	\$350,000	\$4,675,000	\$4,675,000
2016001	7	30-IN ETM SAN JUAN CREEK CROSSING REMOVAL	DESIGN	\$250,000	\$200,000			\$0
2016001	7	30-IN ETM SAN JUAN CREEK CROSSING REMOVAL - SMWD REIMBURSEMENT	REIMBURSEMENT	-\$125,000	-\$100,000			\$0
2016006	7	UPPER SALADA ELECTRICAL SWITCHGEAR REPLACEMENT	DESIGN	\$700,000	\$650,000			\$0
2016008	7	NORTH ALISO CREEK LS BYPASS REPLACEMENT	DESIGN	\$325,000	\$275,000			\$0
	7	ELECTRICAL SYSTEM IMPROVEMENTS PROGRAM - WW	PROGRAM	\$1,075,000		\$215,000	\$215,000	\$645,000
	7	MH REHABILITATION PROGRAM	PROGRAM	\$3,150,000		\$350,000	\$350,000	\$2,450,000
	7	SEWER LINING PROGRAM	PROGRAM	\$2,400,000		\$300,000	\$300,000	\$1,800,000
2011043	14	3A OUTFALL LINE VALVES		\$450,000				\$450,000
2011043	14	3A OUTFALL LINE VALVES - SMWD REIMBURSEMENT	REIMBURSEMENT	-\$225,000				-\$225,000
2013005	7	LOWER SALADA LS FORCE MAIN REPLACEMENT		\$5,900,000				\$5,860,000
	7	3A ETM CREEK BANK STABILIZATION		\$2,000,000				\$2,000,000
	7	3A ETM REPLACEMENT - AVE DE LA VISTA		\$2,475,000				\$2,475,000
	7	3A ETM REPLACEMENT - CAMINO CAPO		\$3,500,000				\$3,500,000
	7	3A ETM SJ CREEK-COUNTY OF ORANGE PHASE VIII		\$900,000				\$900,000
	7	3A ETM IMPROVEMENTS - SMWD REIMBURSEMENT	REIMBURSEMENT	-\$4,437,500				-\$4,437,500
	7	ALISO CREEK LS AUXILIARY GENERATOR REPLACEMENT		\$530,000	\$30,000	\$500,000		\$0
	14	LS GENERATOR EMERGENCY CONNECTIONS		\$200,000				\$200,000
	14	OSO CREEK SEWER PARALLEL PIPELINE		\$2,000,000	\$200,000	\$900,000	\$900,000	\$0
	7	SOUTHWING LS AUXILIARY GENERATOR REPLACEMENT		\$580,000		\$30,000	\$550,000	\$0
	7	2017-18 MH REHABILITATION	NEW	\$350,000	\$350,000			\$0
	7	2017-18 SEWER LINING	NEW	\$225,000	\$200,000			\$0
	7	DRYDOCK AND WESTGREEN SEWER REPAIRS	NEW	\$80,000		\$15,000	\$65,000	\$0
	14	LOWER SALADA LIFT STATION OVERFLOW WETWELL	NEW	\$1,250,000				\$1,250,000
	7	OSO TRABUCO AND ETM ADJUSTMENTS FOR RAILROAD EXPANSION	NEW	\$4,700,000	\$2,350,000	\$2,350,000		\$0
	7	OSO TRABUCO AND ETM ADJUSTMENTS FOR RAILROAD EXPANSION - SMWD REIMBURSEMENT	REIMBURSEMENT	-\$2,585,000	-\$1,292,500	-\$1,292,500		\$0
Subtotal - Wastewater Projects					\$4,253,500	\$4,917,500	\$7,055,000	\$21,542,500
REGIONAL								
2008049	12	SOUTH ORANGE COUNTY COASTAL OCEAN DESALINATION	CLOSED	\$700,000				\$0
SOCWA129	7	2016/2017 SOCWA CAPITAL PC OTH	CLOSED	\$0				\$0
2006071	12	BAKER PIPELINE REGIONAL TREATMENT PLANT	CONSTRUCTION	\$37,300,000	\$100,000			\$0
JRWSS	7	SCWD/JRWSS CAPITAL PROJECT	PROGRAM	\$8,641,990	\$1,665,029	\$2,519,511	\$115,175	\$4,342,275
SMWD	7	SMWD CAPITAL PROJECTS-JOINT FACILITIES	PROGRAM	\$200,000	\$200,000			\$0
SMWD	7	PLANT 3A IMPROVEMENTS	PROGRAM	\$12,609,000	\$5,015,000	\$2,339,000	\$924,000	\$4,331,000

APPENDIX A
FY 17-18 | 10-YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 to FY 2026-27
SOCWA	7	SOCWA CAPITAL PC 2	PROGRAM	\$14,793,776	\$1,029,280	\$3,624,149	\$2,522,290	\$7,618,057
SOCWA	7	SOCWA CAPITAL PC 5	PROGRAM	\$275,835	\$32,756	\$77,672	\$6,942	\$158,465
SOCWA	7	SOCWA CAPITAL PC 17	PROGRAM	\$29,597,005	\$3,376,803	\$4,426,610	\$1,957,125	\$19,836,467
SOCWA	7	SOCWA CAPITAL PC 21	PROGRAM	\$21,111	\$21,111	\$0	\$0	\$0
SOCWA	7	SOCWA CAPITAL PC 24	PROGRAM	\$4,139,220	\$10,962	\$56,691	\$0	\$4,071,567
Subtotal - Regional Projects					\$11,450,941	\$13,043,633	\$5,525,532	\$40,357,831
UNANTICIPATED								
UP1617RR	7	UNANTICIPATED PROJECTS FUND 7	CLOSED	\$300,000				\$0
UP1617PC	14	UNANTICIPATED PROJECTS FUND 14	CLOSED	\$150,000				\$0
UP1718RR	7	UNANTICIPATED PROJECTS FUND 7	PROGRAM	\$300,000	\$300,000			\$0
UP1718PC	14	UNANTICIPATED PROJECTS FUND 14	PROGRAM	\$150,000	\$150,000			\$0
Subtotal - Unanticipated Projects					\$450,000	\$0	\$0	\$0
TOTAL					\$44,497,108	\$54,479,633	\$30,929,532	\$152,330,331

NOTE: TOTAL PROPOSED 10-YEAR CIP BUDGET (FY 2017-18 THROUGH FY 2026-27) = \$282,236,604

Appendix B
Proposed 2017-18 Budget

APPENDIX B
PROPOSED FY 2017-18 PROJECTS

PROJECT NO.	PROJECT NAME	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO FY DATE	FY 2017-18 PROPOSED BUDGET	ESTIMATED COMPLETION DATE
WATER EFFICIENCY FUND (FUND 06)					
	2017-18 RW RETROFITS	\$50,000	\$0	\$50,000	6/30/18
Fund 6 Total		\$50,000	\$0	\$50,000	
REPLACEMENT & REFURBISHMENT FUND (R&R) (FUND 07)					
2011010	HILLARY PRS REPLACEMENT	\$332,144	\$217,289	\$25,000	9/30/17
2011012	LARGO PRS REPLACEMENT	\$385,652	\$216,356	\$25,000	9/30/17
2011015	WILKES PRS REPLACEMENT	\$334,953	\$217,865	\$25,000	9/30/17
2011024	DOCUMENT MANAGEMENT	\$389,000	\$108,092	\$25,000	6/30/20
2011028	VALENCIA LS REFURBISHMENT	\$800,000	\$650	\$200,000	6/30/19
2011032	OLD RANCH ROAD EASEMENT PIPELINE REFURBISHMENT	\$200,000	\$0	\$25,000	12/31/17
2011033	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	\$500,000	\$0	\$25,000	6/30/20
2011037	MISSION VIEJO HIGH SCHOOL LINE/VAULT REFURBISHMENT	\$200,000	\$0	\$200,000	6/30/18
2012024	UPPER SALADA LS AUX GENERATOR REPLACEMENT	\$950,000	\$65,161	\$200,000	12/31/18
2013004	REGIONAL LS FORCE MAIN REPLACEMENT	\$10,000,000	\$59,990	\$300,000	6/30/21
2014002	DEL AVION LS AUX GENERATOR REPLACEMENT	\$576,090	\$128,319	\$100,000	12/31/17
2014005	UTILITY MAIN BREAKERS REPLACEMENTS	\$216,700	\$182,692	\$10,000	9/30/17
2014012	HIDDEN HILLS VILLAGE EASEMENT PIPELINE REHABILITATION	\$600,000	\$43,739	\$550,000	6/30/18
2015003	ALISO CREEK LS REHABILITATION	\$131,800	\$16,475	\$10,000	9/30/17
2015004	CROWN VALLEY RW RESERVOIRS 1 AND 2 RECOATING & SAFETY IMPROVEMENTS	\$1,845,435	\$1,203,596	\$25,000	9/30/17
2015009	LOWER BOUNDARY OAK LS UPGRADE	\$396,420	\$53,421	\$200,000	12/31/17
2015011	PALMS APTS EASEMENT PW LINE REPLACEMENTS	\$410,833	\$22,995	\$150,000	9/30/17
2015012	PASEO DE VALENCIA 24" RAILROAD CROSSING ABANDONMENT	\$128,440	\$25,540	\$10,000	9/30/17
2015013	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$2,250,000	\$95,207	\$1,700,000	6/30/18
2015015	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	\$2,450,000	\$34,057	\$450,000	6/30/19
2015022	CROWN VALLEY PW RESERVOIR 3 RECOATING	\$284,310	\$160,834	\$25,000	9/30/17
2016001	30-IN ETM SAN JUAN CREEK CROSSING REMOVAL	\$250,000	\$15,058	\$200,000	12/31/17
2016001	30-IN ETM SAN JUAN CREEK CROSSING REMOVAL - SMWD REIMBURSEMENT	-\$125,000	\$15,058	-\$100,000	12/31/17
2016002	2016-17 VALVE REPLACEMENT	\$1,710,000	\$258,476	\$1,250,000	6/30/18
2016004	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - RW	\$208,000	\$0	\$25,000	9/30/17
2016005	CROWN VALLEY COMM. PARK RELO FOR LAGUNA NIGUEL - PW	\$117,000	\$0	\$25,000	9/30/17
2016006	UPPER SALADA ELECTRICAL SWITCHGEAR REPLACEMENT	\$700,000	\$64,819	\$650,000	12/31/18
2016007	54-INCH CIP IMPROVEMENTS	\$2,600,000	\$134	\$450,000	6/30/19
2016008	NORTH ALISO CREEK LS BYPASS REPLACEMENT	\$325,000	\$0	\$275,000	6/30/18
2016009	HIGHLAND PUMP STATION PRESSURE RELIEF TO 650 ZONE	\$75,000	\$3,150	\$50,000	12/31/17
2016019	SAN JUAN CAPISTRANO RAILROAD PASSING SIDING AIR-VAC RELOCATIONS	\$100,000	\$26,076	\$5,000	9/30/17
2016020	ELECTRICAL SERVICE ENTRANCE REPLACEMENTS AT THREE SITES	\$1,050,000	\$64,941	\$975,000	6/30/18
2016021	VAULT REMOVALS	\$750,000	\$0	\$700,000	6/30/18
2016023	GOLDEN LANTERN RESERVOIR ROOF-WALL JOINT SEAL	\$340,000	\$0	\$250,000	12/31/17
2016023	GOLDEN LANTERN RESERVOIR ROOF-WALL JOINT SEAL - SCWD REIMBURSEMENT	-\$113,333	\$0	-\$83,333	12/31/17
	2017-18 ELECTRICAL SYSTEM IMPROVEMENTS - PW	\$900,000	\$0	\$250,000	6/30/19
	2017-18 MH REHABILITATION	\$350,000	\$0	\$350,000	6/30/18
	2017-18 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$3,900,000	\$0	\$300,000	6/30/19
	2017-18 SEWER LINING	\$225,000	\$0	\$200,000	6/30/18
	2017-18 UTILITY SERVICE ENTRANCE REPLACEMENTS - PW	\$750,000	\$0	\$200,000	6/30/19
	2017-18 VALVE REPLACEMENT	\$2,700,000	\$0	\$75,000	6/30/19
	ALISO CREEK LS AUXILIARY GENERATOR REPLACEMENT	\$530,000	\$0	\$30,000	12/31/18
	NACCOMME DRIVE POTABLE EASEMENT PIPELINE ABANDONMENT	\$30,000	\$0	\$25,000	12/31/17
	OSO TRABUCO AND ETM ADJUSTMENTS FOR RAILROAD EXPANSION	\$4,700,000	\$0	\$2,350,000	12/31/18

APPENDIX B
PROPOSED FY 2017-18 PROJECTS

PROJECT NO.	PROJECT NAME	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO FY DATE	FY 2017-18 PROPOSED BUDGET	ESTIMATED COMPLETION DATE
	OSO TRABUCO AND ETM ADJUSTMENTS FOR RAILROAD EXPANSION - SMWD REIMBURSEMENT	-\$2,585,000	\$0	-\$1,292,500	12/31/18
	PIPELINE ADJUSTMENTS FOR I-5 FREEWAY WIDENING	\$750,000	\$0	\$150,000	6/30/22
	PW MAIN REPLACEMENT AT I-5 OSO CREEK CROSSING	\$1,500,000	\$0	\$150,000	6/30/20
	REHABILITATION OF THE ALISO HILLS RESERVOIR	\$700,000	\$0	\$700,000	6/30/18
	REHABILITATION OF THE MARGUERITE RESERVOIR	\$800,000	\$0	\$800,000	6/30/18
	REPLACEMENT OF POINT TO MULTI-POINT RADIOS FOR SCADA SYSTEM	\$800,000	\$0	\$100,000	6/30/19
	RW MAIN INSTALLATION AT I-5 OSO CREEK CROSSING	\$1,500,000	\$0	\$150,000	6/30/20
JRWSS	SCWD/JRWSS CAPITAL PROJECT	\$8,641,990	NA	\$1,665,029	6/30/18
SMWD	SMWD CAPITAL PROJECTS-JOINT FACILITIES	\$200,000	NA	\$200,000	6/30/18
SMWD	PLANT 3A IMPROVEMENTS	\$12,609,000	NA	\$5,015,000	6/30/18
SOCWA	SOCWA CAPITAL PC 17	\$29,597,005	NA	\$3,376,803	6/30/18
SOCWA	SOCWA CAPITAL PC 2	\$14,793,776	NA	\$1,029,280	6/30/18
SOCWA	SOCWA CAPITAL PC 21	\$21,111	NA	\$21,111	6/30/18
SOCWA	SOCWA CAPITAL PC 24	\$4,139,220	NA	\$10,962	6/30/18
SOCWA	SOCWA CAPITAL PC 5	\$275,835	NA	\$32,756	6/30/18
UP1718RR	UNANTICIPATED PROJECTS FUND 7	\$300,000	\$0	\$300,000	6/30/18
Fund 7 Total		\$119,496,381	\$3,299,990	\$25,140,108	
WATER SUPPLY RELIABILITY FUND (WSR) (FUND 12)					
2006071	BAKER PIPELINE REGIONAL TREATMENT PLANT	\$37,300,000	\$36,270,467	\$100,000	9/30/17
2010013	LA PAZ BRIDGE CROSSING RW PIPELINE	\$435,000	\$56,880	\$200,000	12/31/18
	SOUTH COUNTY PIPELINE TAKEOUT FACILITY	\$2,400,000	\$0	\$50,000	6/30/20
Fund 12 Total		\$40,135,000	\$36,327,347	\$350,000	
PLANNING & CONSTRUCTION FUND (P&C) (FUND 14)					
2009010	MISSION HOSPITAL 750-ZONE SERVICE	\$1,200,000	\$61,352	\$1,125,000	6/30/18
2009010	MISSION HOSPITAL 750-ZONE SERVICE - MISSION HOSPITAL REIMBURSEMENT	-\$150,000	\$61,352	-\$150,000	6/30/18
2011077	MOULTON PEAK RADIO TOWER IMPROVEMENTS	\$235,000	\$1,500	\$25,000	12/31/18
2014015	DISTRICT HEADQUARTERS	\$32,000,000	\$966,698	\$16,134,000	12/31/18
2015017	FALL PROTECTION SYSTEM - PW RESERVOIRS	\$173,229	\$133,372	\$10,000	9/30/17
2015018	FALL PROTECTION SYSTEM - RW RESERVOIRS	\$32,516	\$13,965	\$2,000	9/30/17
2016012	DEL AVION LIFT STATION GRINDERS	\$180,000	\$12,688	\$150,000	12/31/17
2016015	920 ZONE LOOP PIPELINE	\$180,000	\$12,180	\$130,000	12/31/17
2016016	PLANT 3A FLOOD PROTECTION	\$500,000	\$105,415	\$300,000	6/30/18
2016016	PLANT 3A FLOOD PROTECTION - SMWD REIMBURSEMENT	-\$140,000	\$105,415	-\$84,000	6/30/18
2016022	CAMINO CAPISTRANO OPERATIONS YARD IMPROVEMENTS	\$775,000	\$0	\$665,000	12/31/17
	DISTRICT VEHICLE RADIO COMMUNICATION SYSTEM	\$200,000	\$0	\$200,000	6/30/18
	OSO CREEK SEWER PARALLEL PIPELINE	\$2,000,000	\$0	\$200,000	6/30/20
	SECONDARY FEED FOR 1050 ZONE	\$600,000	\$0	\$100,000	6/30/19
UP1718PC	UNANTICIPATED PROJECTS FUND 14	\$150,000	\$0	\$150,000	6/30/18
Fund 14 Total		\$37,935,745	\$1,473,937	\$18,957,000	
TOTAL		\$197,617,126	\$41,101,274	\$44,497,108	

Appendix C
Project Descriptions

Capital Improvement Program – Project Description

Project No: 2011.024

System: Districtwide

Fund: 7

Project Name: *Document Management*

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: In Design

Estimated Project Amount:

Item	Estimated Cost
Implementation	\$389,000
CEQA Compliance	Exempt
Total Project Budget	\$389,000



Capital Improvement Program – Project Description

Project No: 2011.033

System: Districtwide

Fund: 7

Project Name: *Asset Management Program / CMMS Implementation*

Project Location: District-wide

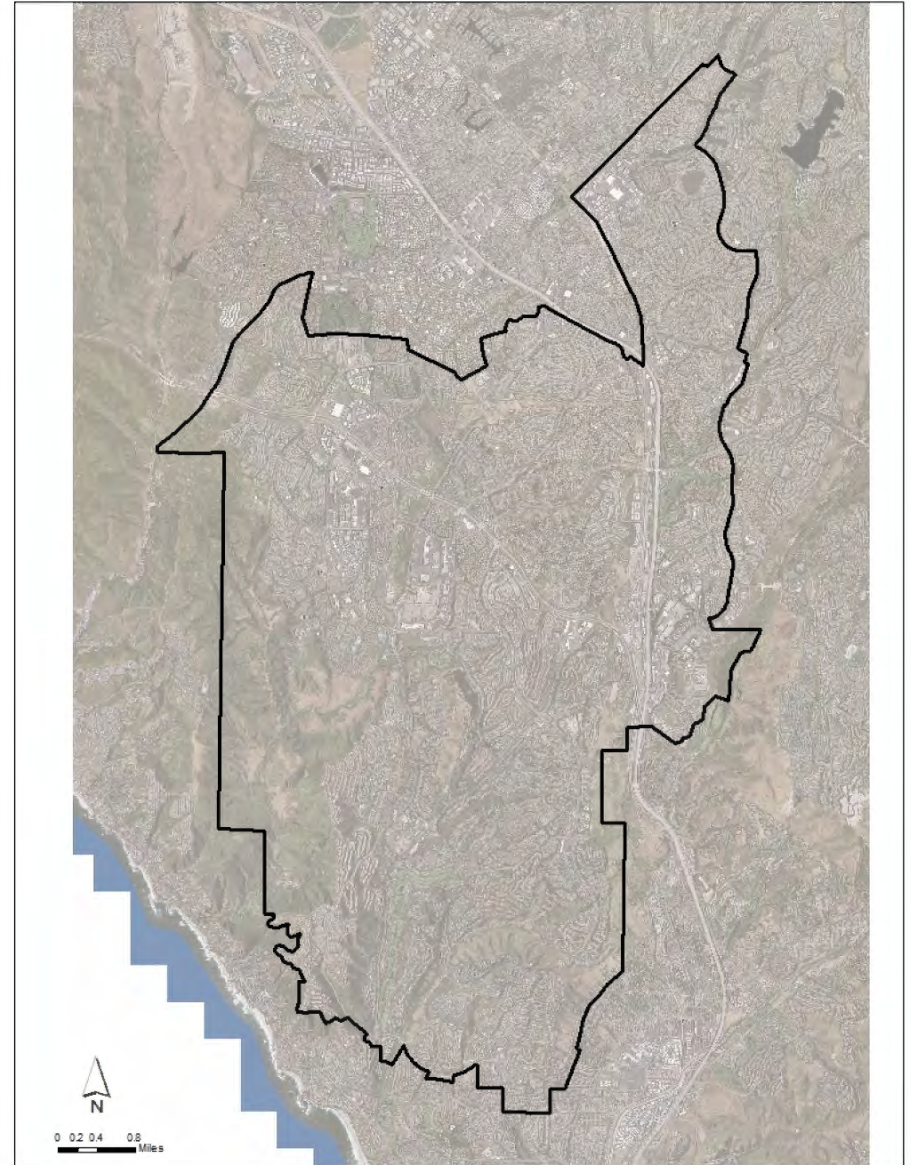
Project Description: Review existing Asset Management database – both structure and data – for accuracy and completeness. Identify and implement changes to software program, database, and data, to support advanced analysis for Replacement and Refurbishment (Fund 7) projects prioritization, Master Planning,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

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: 2011.077

System: Districtwide

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 Design

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: 2014.015

System: Districtwide

Fund: 14

Project Name: District Headquarters

Project Location: Plant 2A

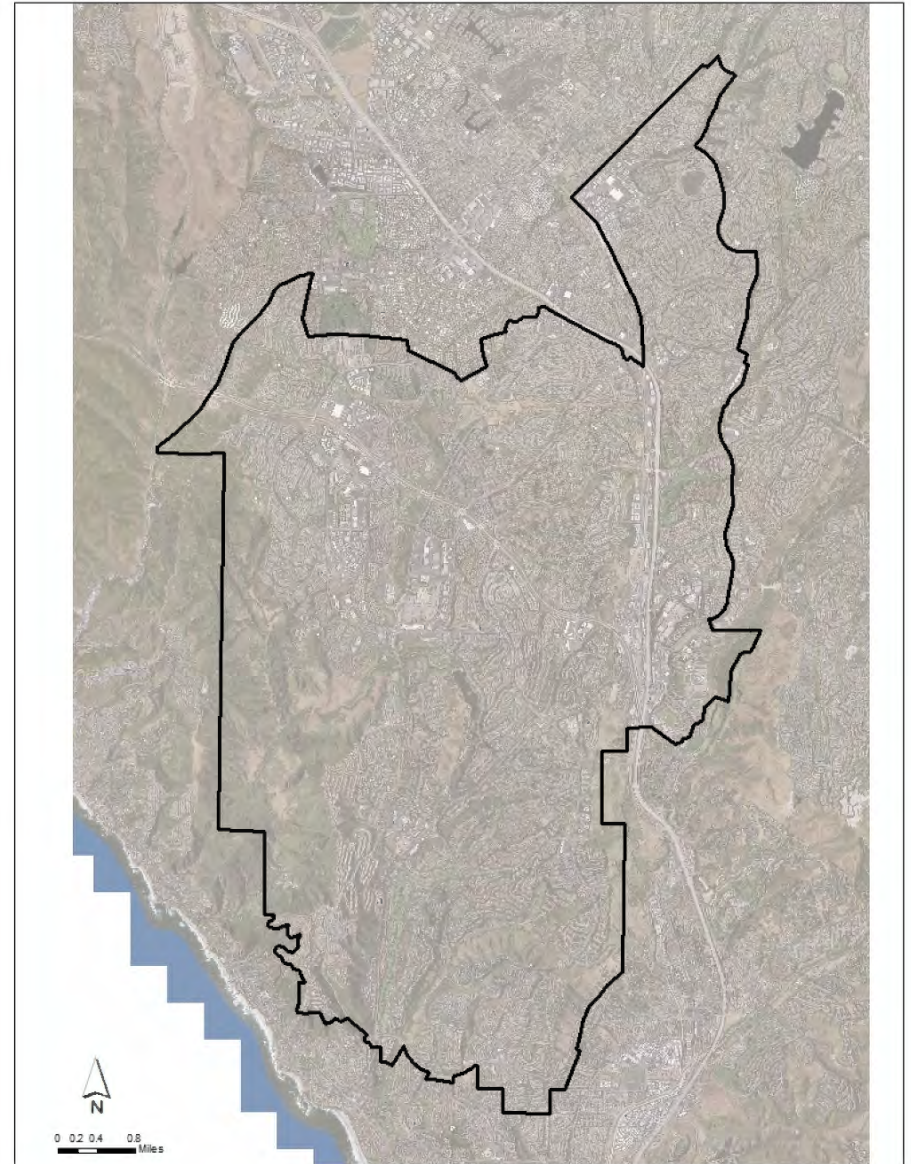
Project Description: Construct new District administrative and operational facilities to support the needs and requirements for all District Departments. All facilities will be constructed at Plant 2A.

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	\$1,650,000
CEQA Compliance	\$350,000
Construction	\$29,050,000
Permits / Legal / Utilities	\$950,000
Total Project Budget	\$32,000,000



Capital Improvement Program – Project Description

Project No: 2016.022

System: District Wide

Fund: 14

Project Name: Camino Capistrano Operations Yard Improvements

Project Location: North of Plant 3A / South of Galivan Reservoir

Project Description: Install site improvements, paving, soil bays, drainage improvements, striping and fencing at area south of Galivan Reservoir and north of Plant 3A.

Project Need: The development of the new District Headquarters at the Plant 2A site, particularly during construction, necessitates additional improved site areas for the Operations personnel.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	\$45,000
Construction Contract	\$650,000
Inspection / Legal / Other	\$15,000
Total Project Budget	\$775,000



Capital Improvement Program – Project Description

Project No: TBD

System: Districtwide

Fund: 14

Project Name: *District Vehicle Radio Communication System*

Project Location: District-wide

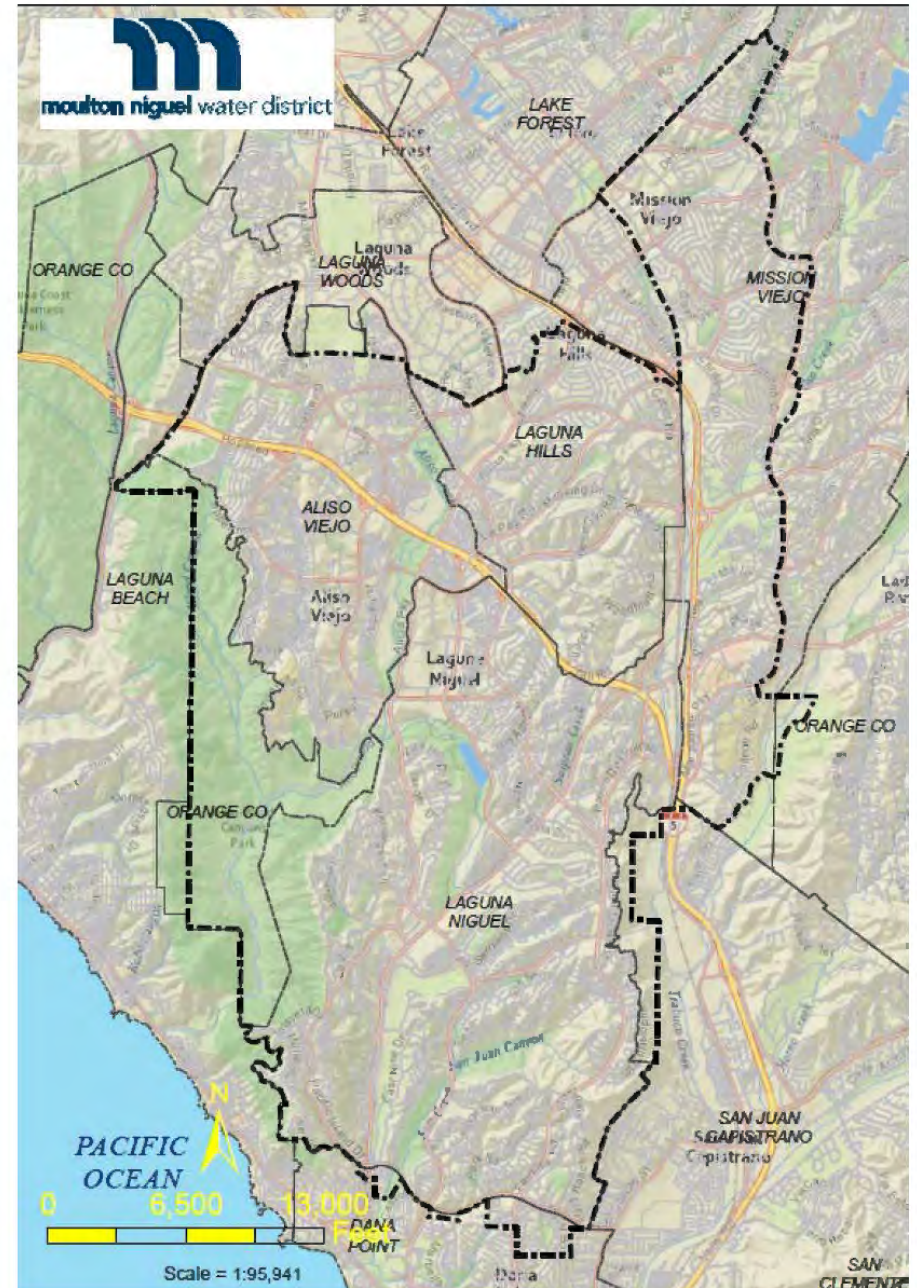
Project Description: The installation of a low band radio communications system to be installed in District vehicles, reservoir sites and Plant 2A.

Project Need: Currently the District communicates with District field personnel through third party cellular systems. This proposed project will allow the District vehicles to communicate during emergency situations, via the District’s private radio frequency, when either the cellular towers are down or the cellular system is congested.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	N/A
CEQA Compliance	Exempt
Construction Contract	\$200,000
Inspection/Other	N/A
Total Project Budget	\$200,000



Capital Improvement Program – Project Description

Project No: TBD

System: Districtwide

Fund: 7

Project Name: *Replacement of Point to Multi-Point Radios for SCADA System*

Project Location: District-wide

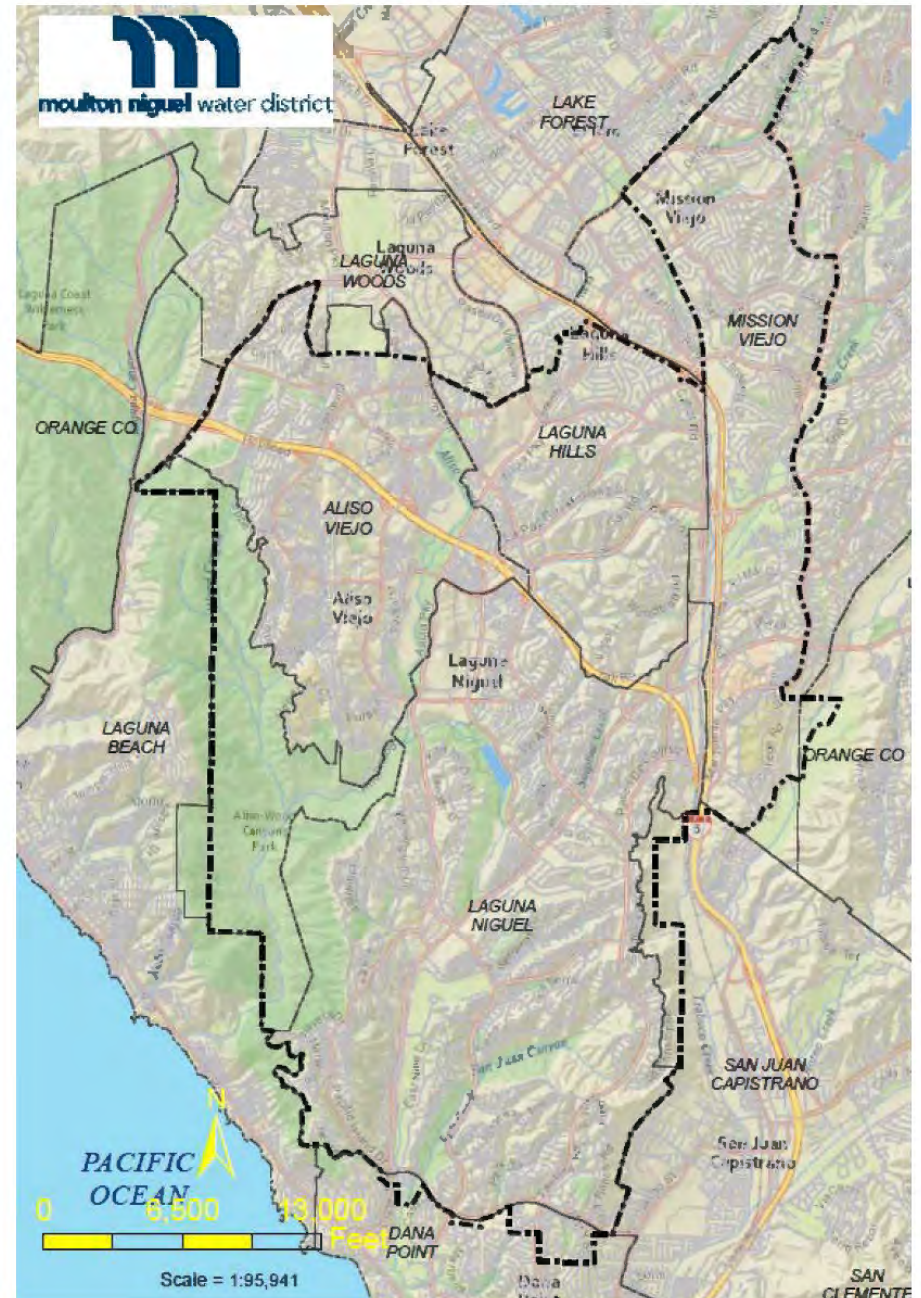
Project Description: The replacement of about 75 Skypilot antennas and their corresponding radios with either flat panel or sector antennas and their corresponding radios. The work will also consist of establishing new transmission paths to cater to the capabilities of the new antennas and radio systems.

Project Need: The District currently utilizes 75 Skypilot antennas and radios for SCADA communications at various District facilities. These Skypilot radios became obsolete in 2015, eliminating any available technical support or spare parts. Therefore, the District needs to change to a more maintainable communications system.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design/Engineering Services	\$50,000
CEQA Compliance	Exempt
Installation Services/Equipment	\$700,000
Inspection/Other	\$50,000
Total Project Budget	\$800,000



Capital Improvement Program – Project Description

Project No: TBD

System: Districtwide

Fund: 14

Project Name: *Video Site Surveillance System*

Project Location: District-wide

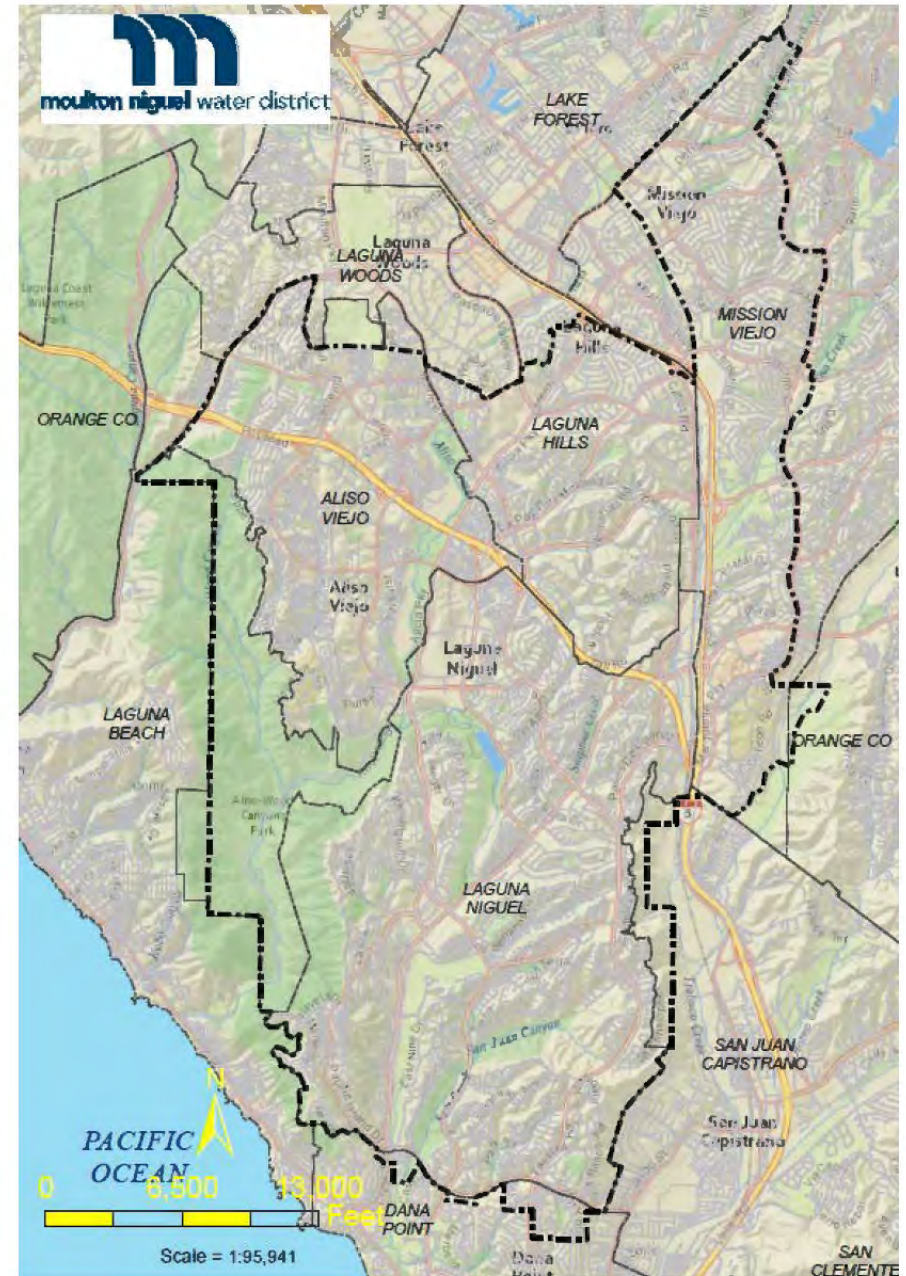
Project Description: The installation of video surveillance at various district facilities and the installation of additional data storage capacity at Plant 2a.

Project Need: The District does not have any video surveillance at district facilities. The video surveillance will be primarily used for site security reasons but will also be installed at critical facilities such as sewer lift stations to monitor for overflows.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	N/A
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection/Other	N/A
Total Project Budget	\$500,000



Capital Improvement Program – Project Description

Project No: 2011.010

System: Potable

Fund: 7

Project Name: Hillary Pressure Reducing Station Replacement

Project Location: Barents Street in Laguna Hills

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 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 construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$38,333
CEQA Compliance	exempt
Geotechnical	\$8,333
Construction	\$270,478
Construction Engineering	\$8,333
Inspection/Other	\$6,667
Total Project Budget	\$332,144



Note: Budget Items based on Board Approval of Construction Staff Report

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.

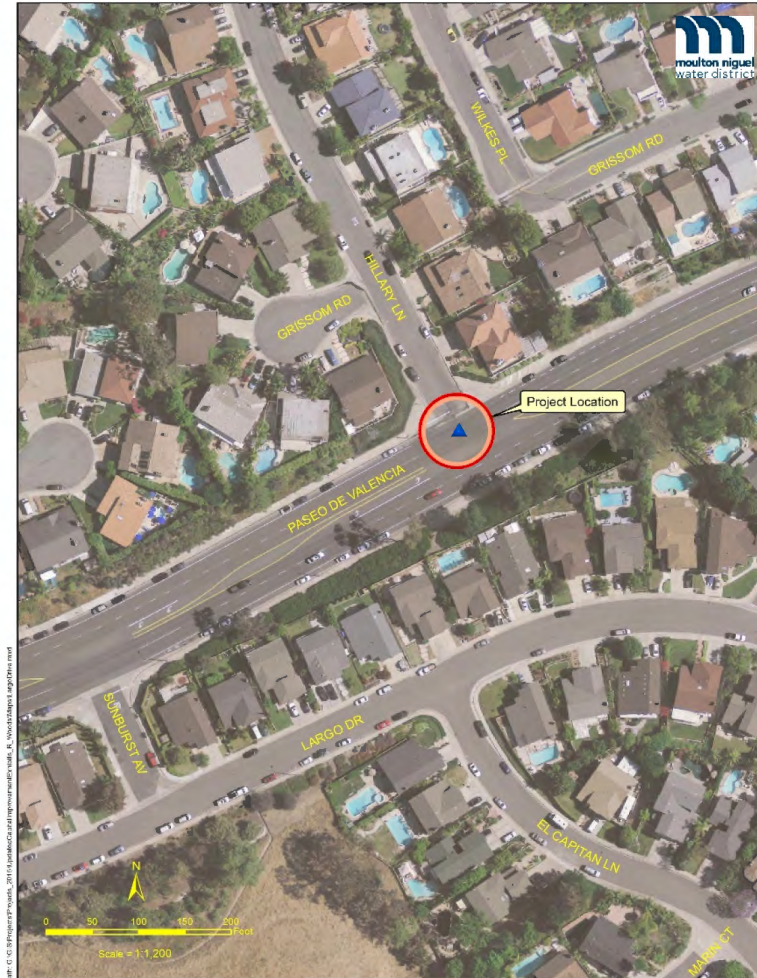
Project Need: The facility is approaching its useful life and is in a hard- to access location with a substandard design that makes it difficult and dangerous to access and maintain. It needs to be relocated for easier and safer access and to replace aging equipment.

Project Status: In construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$38,333
CEQA Compliance	exempt
Geotechnical	\$8,334
Construction	\$323,985
Construction Engineering	\$8,333
Inspection/Other	\$6,667
Total Project Budget	\$385,652

Note: Budget Items based on Board Approval of Construction Staff Report



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 to 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 construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$38,333
CEQA Compliance	exempt
Geotechnical	\$8,334
Construction Contract	\$273,286
Construction Engineering	\$8,333
Inspection/Other	\$6,667
Total Project Budget	\$334,953

Note: Budget Items based on Board Approval of Construction Staff Report



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.

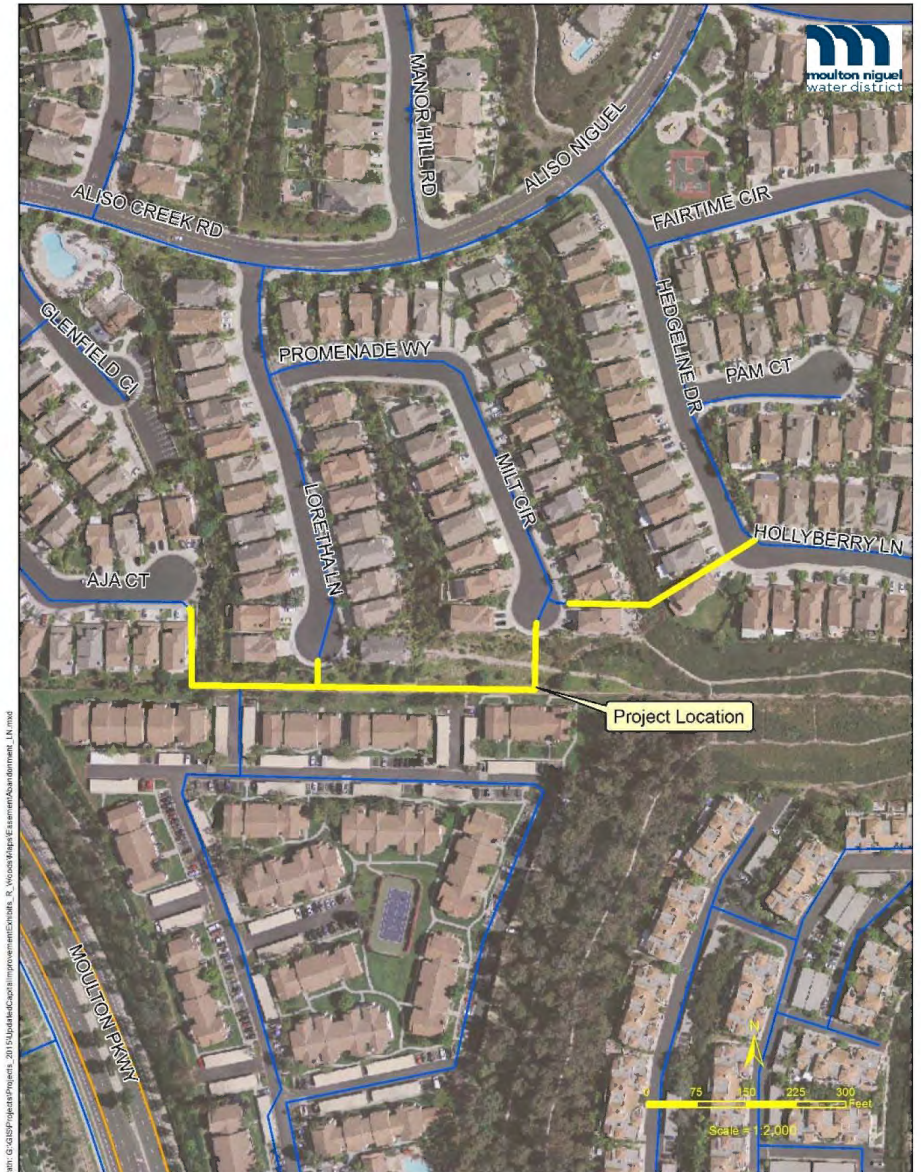
Project Need: This area has been under investigation since 2010, having received multiple customer complaints due to highly saturated soil within these easement areas. The existing isolation valves in this area also fail to close water tight. Staff evaluated whether or not these easements were candidates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

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract*	\$330,833
Inspection/Other	\$40,000
Total Project Budget	\$410,833

*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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$88,440
Inspection/Other	\$15,000
Total Project Budget	\$128,440



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

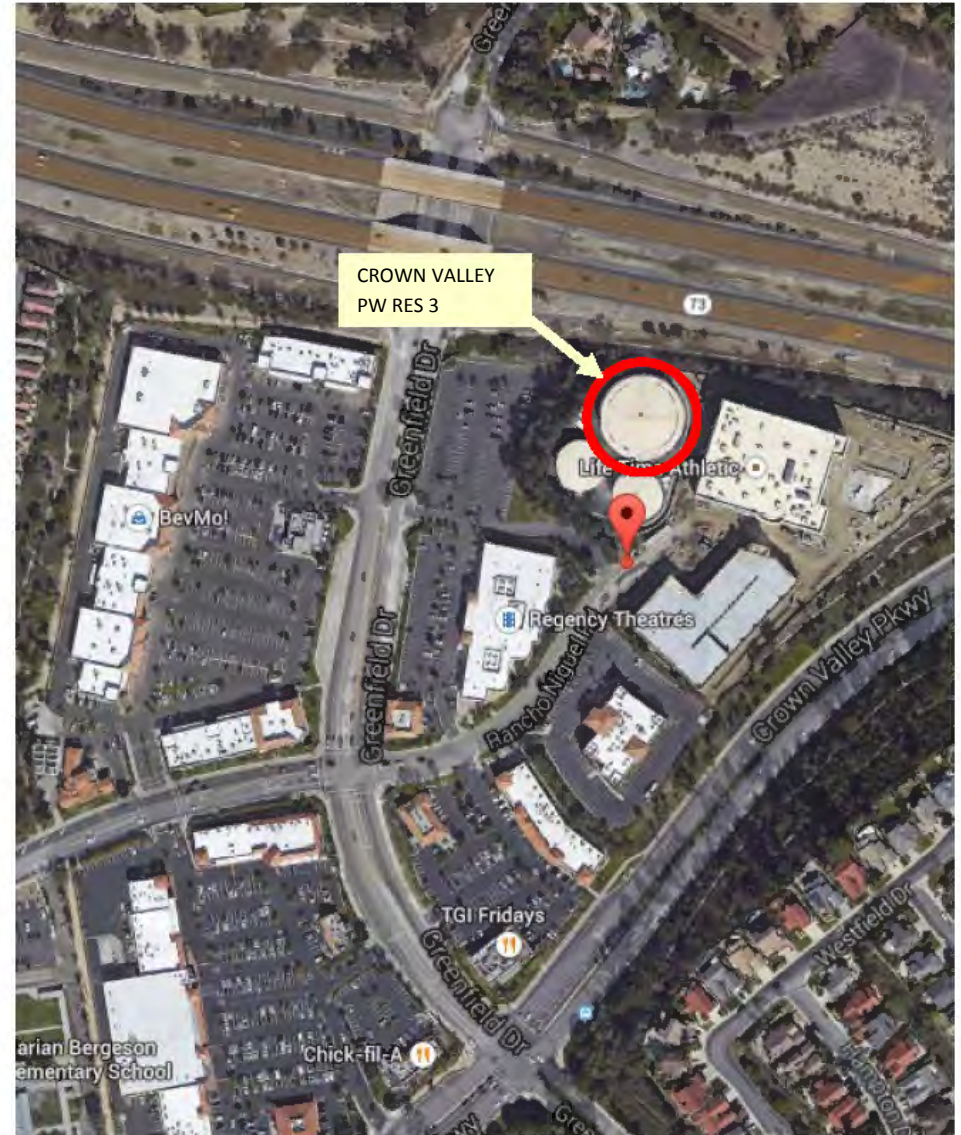
Project Description: Re-coat the exterior of steel reservoir as recommended in Harper & Associates' assessment report. Project will also add isolation valves on the inlet and outlet piping and replace deteriorated LLI parts.

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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$9,000
CEQA Compliance	Exempt
Construction Contract	\$244,310
Inspection/Other	\$31,000
Total Project Budget	\$284,310



Capital Improvement Program – Project Description

Project No: 2016.004, 2016.005

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: In Construction

Estimated Project Amount:

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



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: TBD

System: Potable

Fund: 7

Project Name: *Naccome Drive Potable Easement Pipeline Abandonment*

Project Location: Easement line connecting Naccome Drive and Escala Drive, Mission Viejo

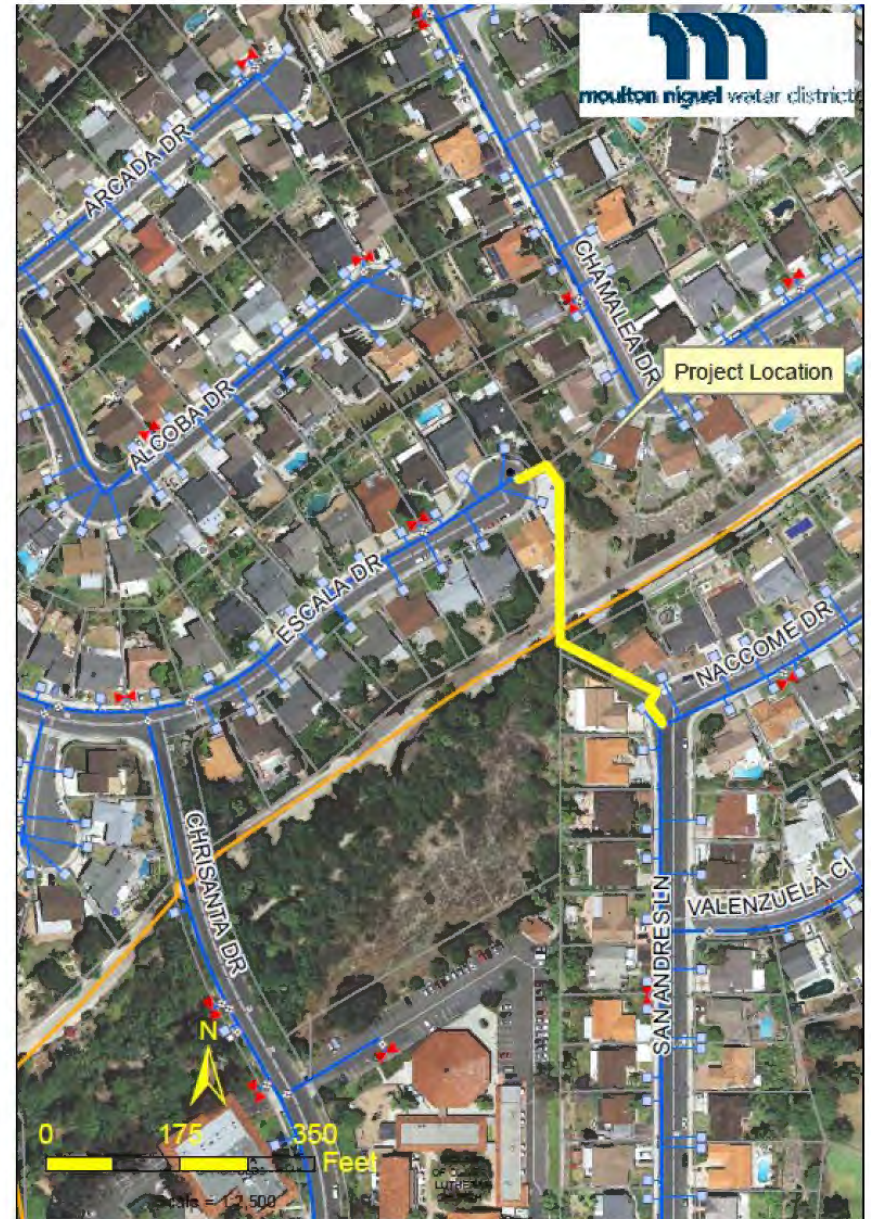
Project Description: The abandonment of approximately 465 linear feet of deteriorated 6-inch ductile iron pipe. The work will consist of removing the connection points of the 6-inch easement main from both the Naccome Drive and the Escala Drive potable water mains and filling the main with slurry to properly abandon-in-place.

Project Need: The isolation valves to the 6-inch easement main on both Naccome Drive and Escala Drive have been closed for years however the 6-inch easement main is still connected the potable water distribution system. This poses a water quality threat as the 6-inch easement main likely contains stagnated water unsuitable for drinking water standards. Staff has evaluated various criteria requirements (i.e. system reliability, water quality and fire-flow) for abandoning the 6-inch DIP easement main and has concluded that all criteria has been met to abandon said main.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	N/A
CEQA Compliance	Exempt
Construction Contract	\$24,000
Inspection/Other	\$6,000
Total Project Budget	\$30,000



Capital Improvement Program – Project Description

Project No: 2009.010

System: Potable

Fund: 14

Project Name: Mission Hospital 750-Zone Service

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

Project Description: Install approximately 1,000 linear feet of new 12” potable water main with PRV in underground vault and a zone interconnection between the 750 and 650 zones to provide a secondary feed to Mission Hospital.

Project Need: In the event that the primary 650 zone feed was compromised, a secondary feed from the 750 zone would provide an additional source of water for this critical District customer.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction	\$1,100,000
Inspection	\$25,000
Total Project Budget	\$1,200,000

*Mission Hospital will reimburse the cost of improvements to their system. Estimated to be \$150,000.



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

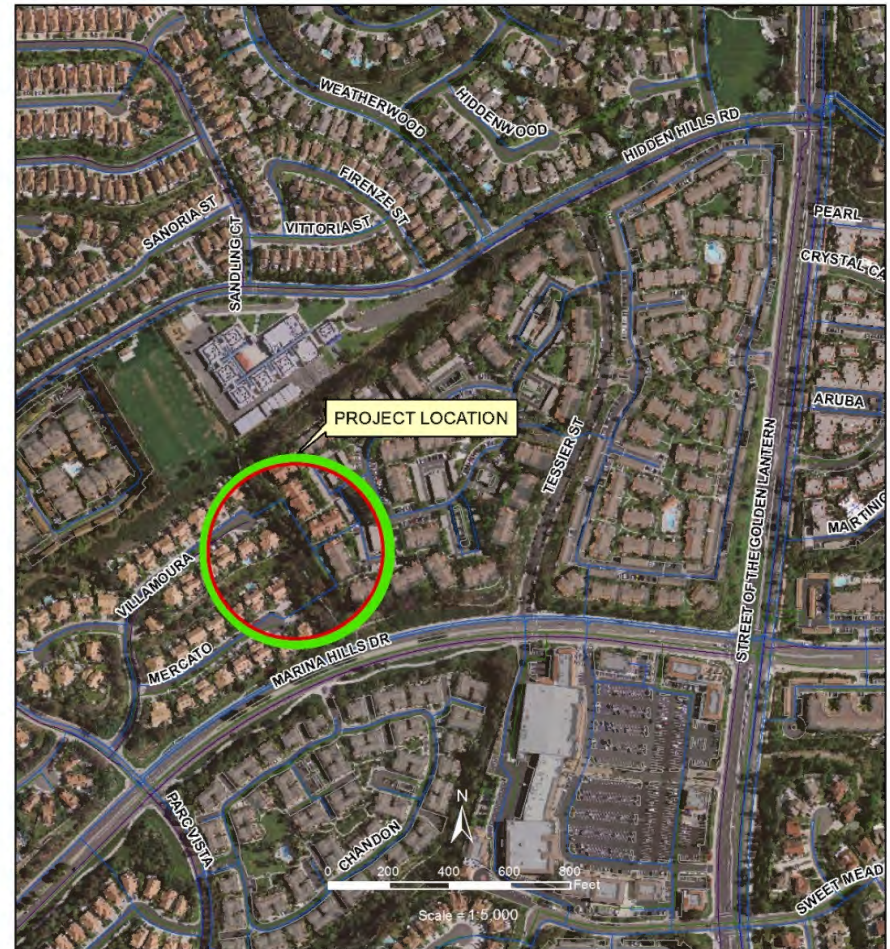
Project Description: Perform an analysis to determine the best method for rehabilitating two failed easement pipelines. Rehabilitate the pipelines based on the result of the analysis.

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	\$500,000
Specialty Inspection	\$25,000
Easement/Legal/Other	\$15,000
Total Project Budget	\$600,000



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

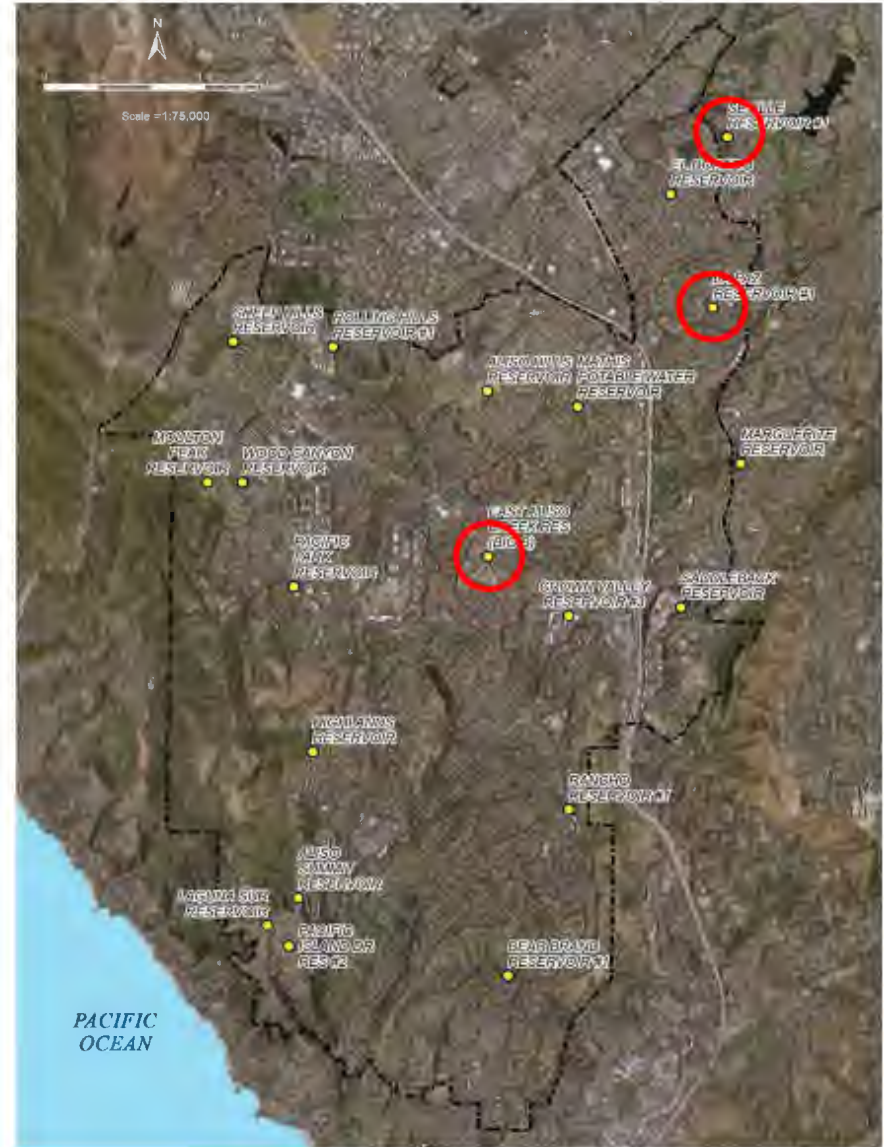
Project Description: Remove existing on-site generation water quality reservoir management systems and protective structures and replace with new water quality reservoir management systems and permanent style buildings. A systemwide reservoir disinfection technology study was completed in July 2015. 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/ Other	\$50,000
Special Inspection	\$200,000
Total Project Budget	\$2,250,000



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

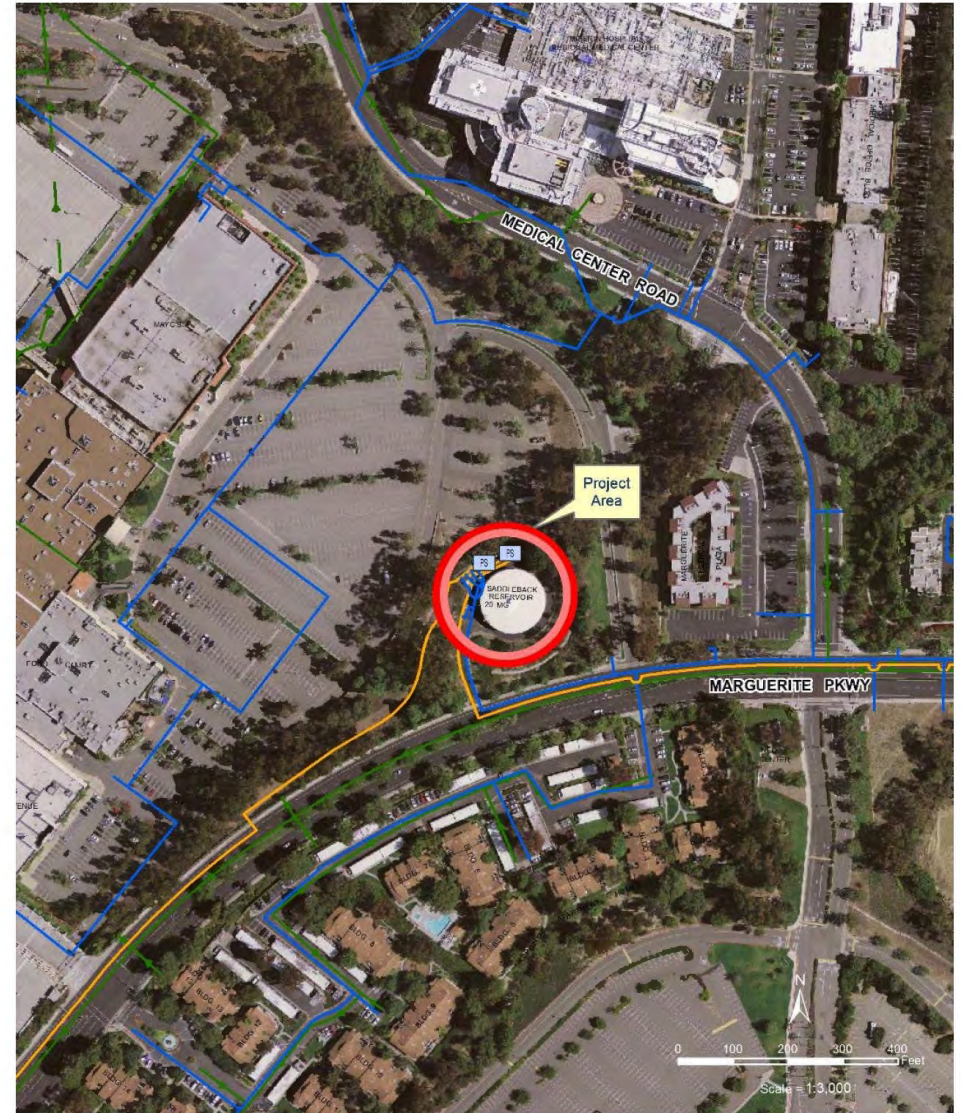
Project Description: Replace 1987 Waukesha Propane 550 Hp backup Auxiliary Pump, switchgear and associated piping and valves.

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	\$300,000
CEQA Compliance	Exempt
Construction Contract	\$2,125,000
Inspection/Other	\$25,000
Total Project Budget	\$2,450,000



Saddleback PS-Auxiliary Pump Engine Replacement

Capital Improvement Program – Project Description

Project No: 2016.002

System: Potable

Fund: 7

Project Name: 2016-17 Valve Replacements

Project Location: District-wide

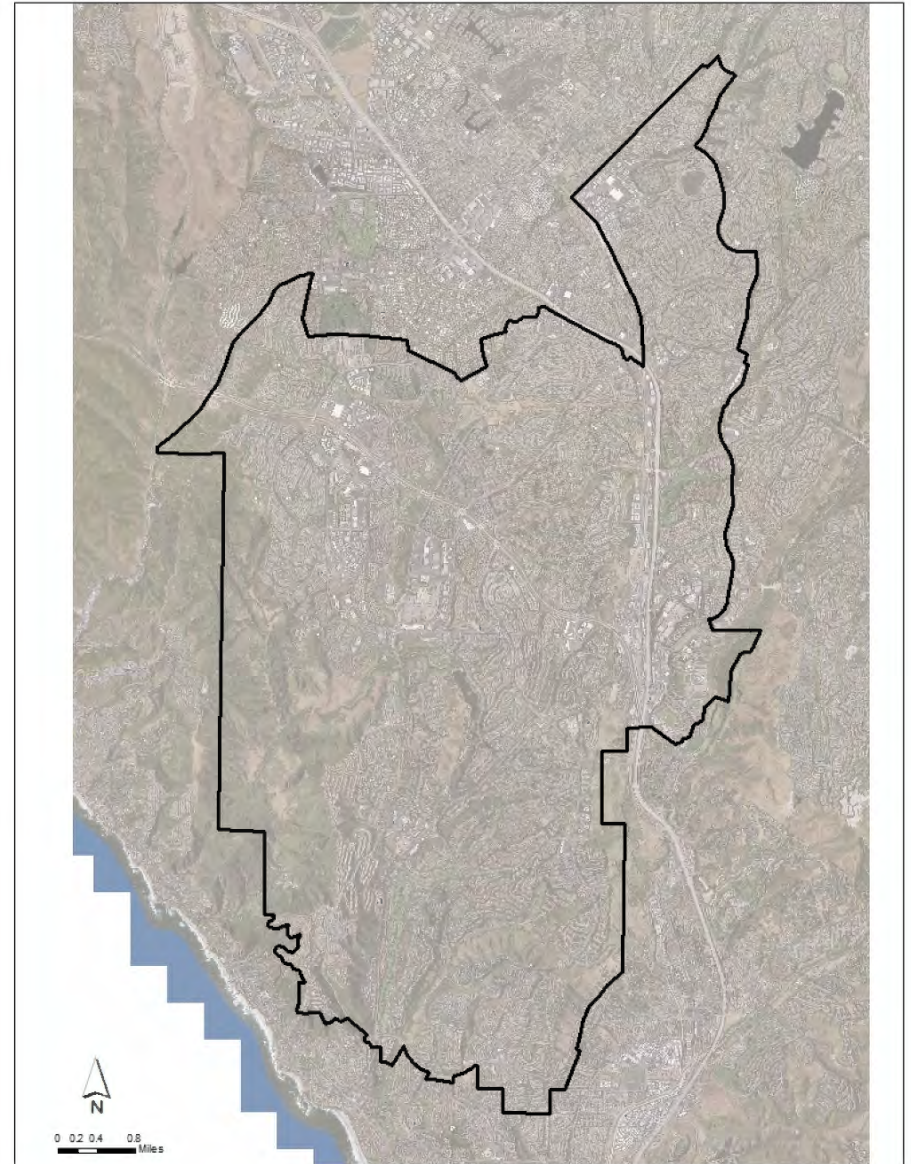
Project Description: Replace failed in-line valves.

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
Construction Contract	\$900,000
Inspection/Other	\$20,000
Construction by District	\$740,000
Total Project Budget	\$1,710,000



Capital Improvement Program – Project Description

Project No: 2016-007

System: Potable

Fund: 7

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

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

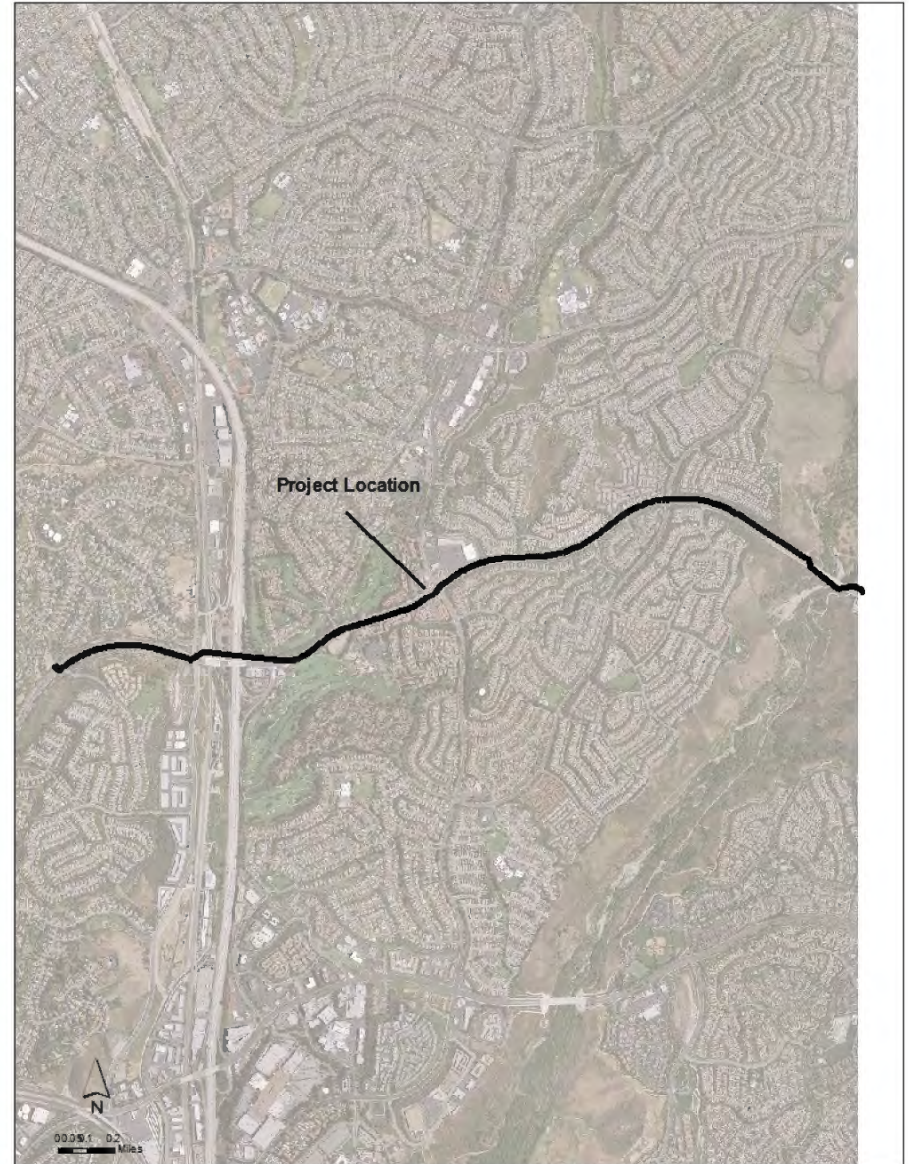
Project Description: Inspection of the CIP was completed in August 2012. A summary report was prepared to describe details of the inspection and recommend immediate, near-term (2 year), and long-term capital improvements. This project provides funds to construct proposed improvements including, but not 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: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	Exempt
Geotechnical	\$100,000
Construction Contracts	\$2,000,000
Inspection/Other	\$200,000
Total Project Budget	\$2,600,000



Capital Improvement Program – Project Description

Project No: 2016-009

System: Potable

Fund: 7

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

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

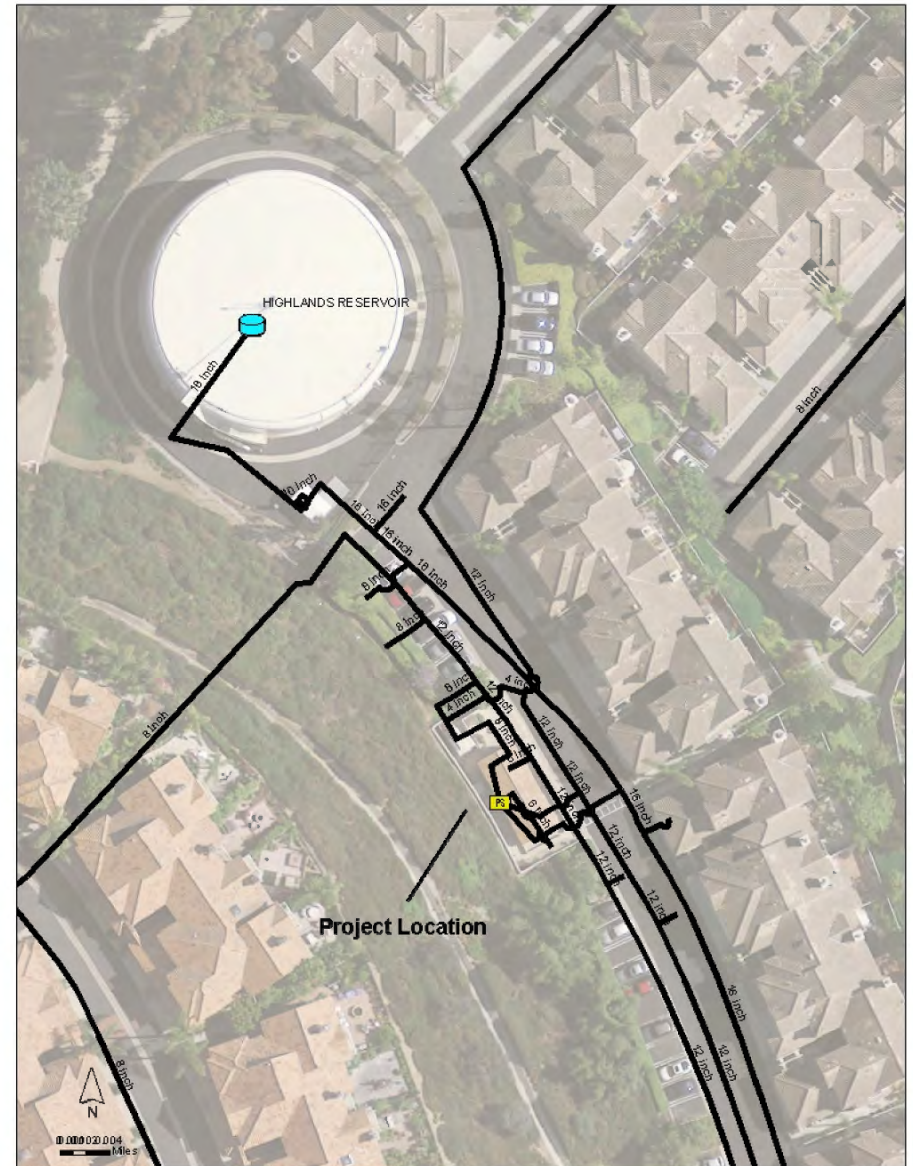
Project Description: Reconstruct a connection between the 920 and 650 pressure zones.

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

Project Status: In Design

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: 2016-014

System: Potable

Fund: 14

Project Name: *Saddleback PS Generator Emergency Connection*

Project Location: Saddleback Pump Station

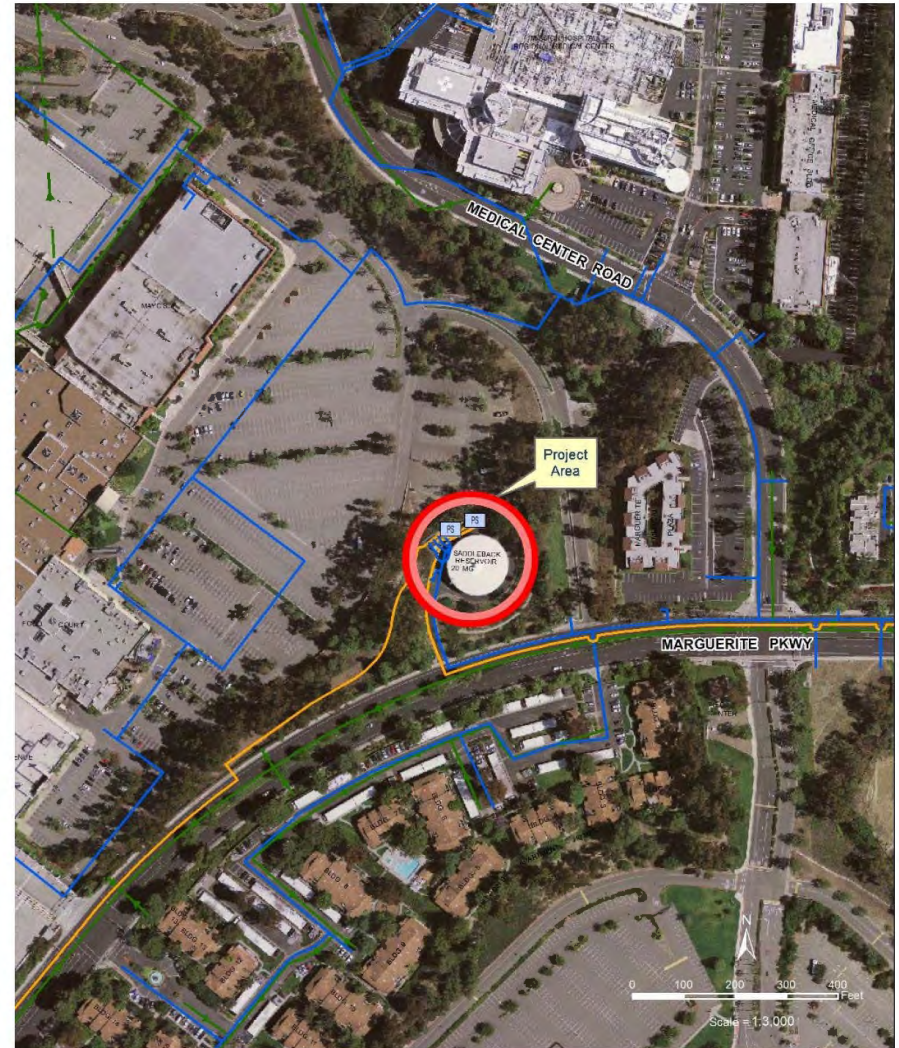
Project Description: Install new emergency generator connection.

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: In Design

Estimated Project Amount:

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



Saddleback PS-Emergency Connections

Capital Improvement Program – Project Description

Project No: 2016-015

System: Potable

Fund: 14

Project Name: 920 Zone Loop Pipeline

Project Location: Pacific Island Drive, Laguna Niguel

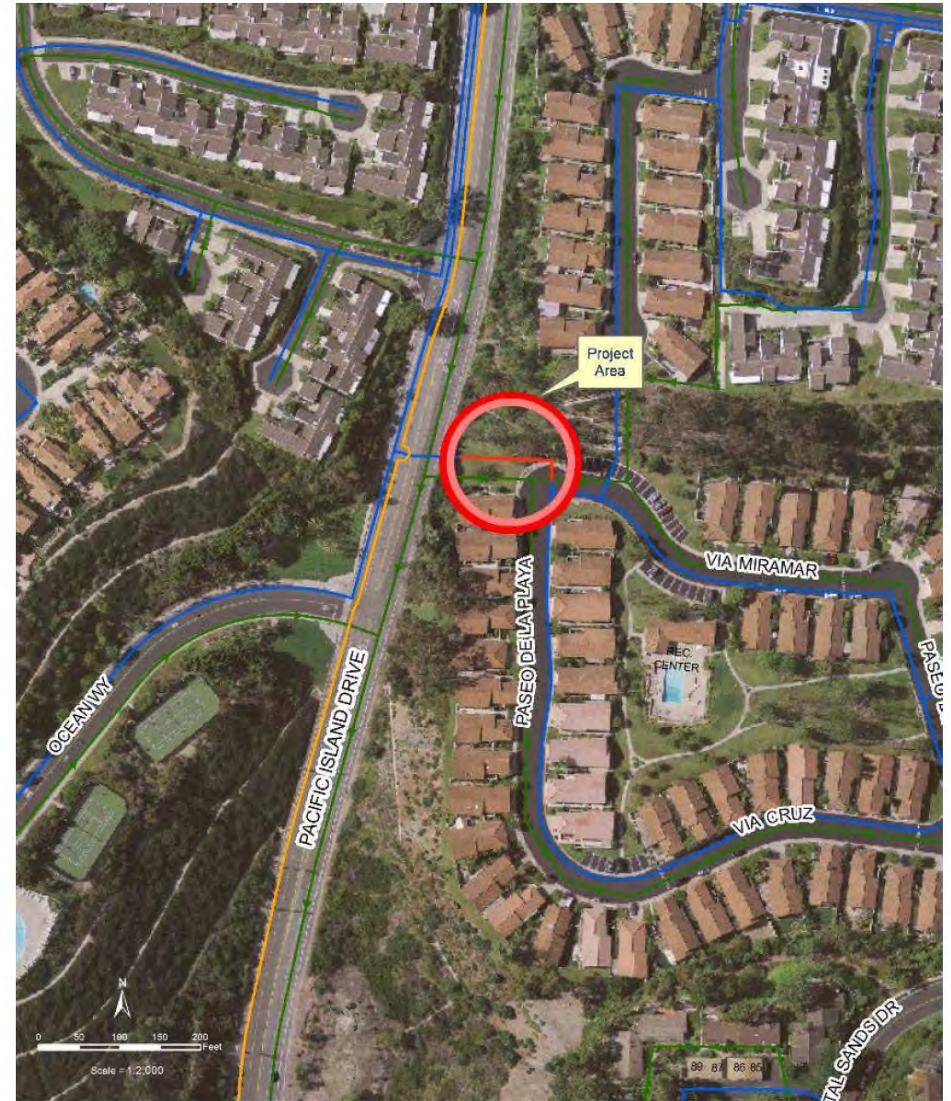
Project Description: Install new easement pipeline, approximately 300' linear feet of 8", from Pacific Island Drive to Via Miramar on the 920 zone to provide a second feed and loop the system.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$130,000
Inspection/Other	\$10,000
Total Project Budget	\$180,000



Capital Improvement Program – Project Description

Project No: 2016-021

System: Potable

Fund: 7

Project Name: Vault Removals

Project Location: 14 Sites – see table

Project Description: Remove existing appurtenances, reconnect piping and abandon concrete vaults per City requirements.

Project Need: The existing vaults have significant corrosion, are in need of maintenance, and are no longer required for system operation.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$55,000
CEQA Compliance	Exempt
Construction Contract	\$690,000
Inspection/Other	\$5,000
Total Project Budget	\$750,000

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
450 Zone Metering Vault at Oso Pky	Moulton Parkway and Oso Parkway in front of Church Lift Station
Starview PR Vault	Intersection of Flying Cloud and Starview
Old Ranch Road PR Vault	Near intersection of Point Catalina and Old Ranch Road
Potable Water CalTrans Vault	North of the intersection of Alicia Pkwy and Paseo de Alicia

Capital Improvement Program – Project Description

Project No: Annual Program

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.

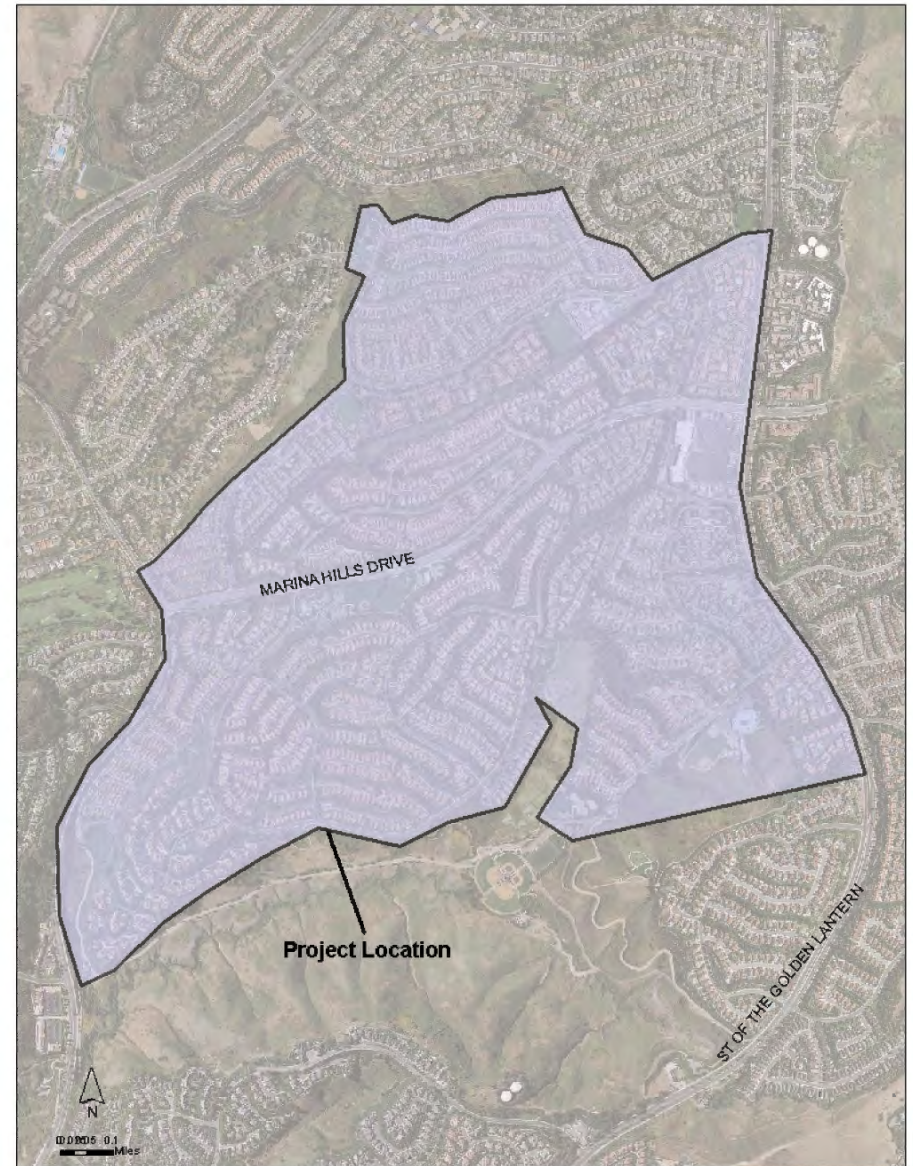
Project Description: This project implements the findings from Project 2010.023 – Easement Lining Program. This project evaluated and identified risks associated with the ductile iron pipes (DIP) in the project area. Based on the finding of the analysis, various improvement recommendations were proposed.

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

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Easement Rehabilitation Program – Phase 2

Project Location: District-wide

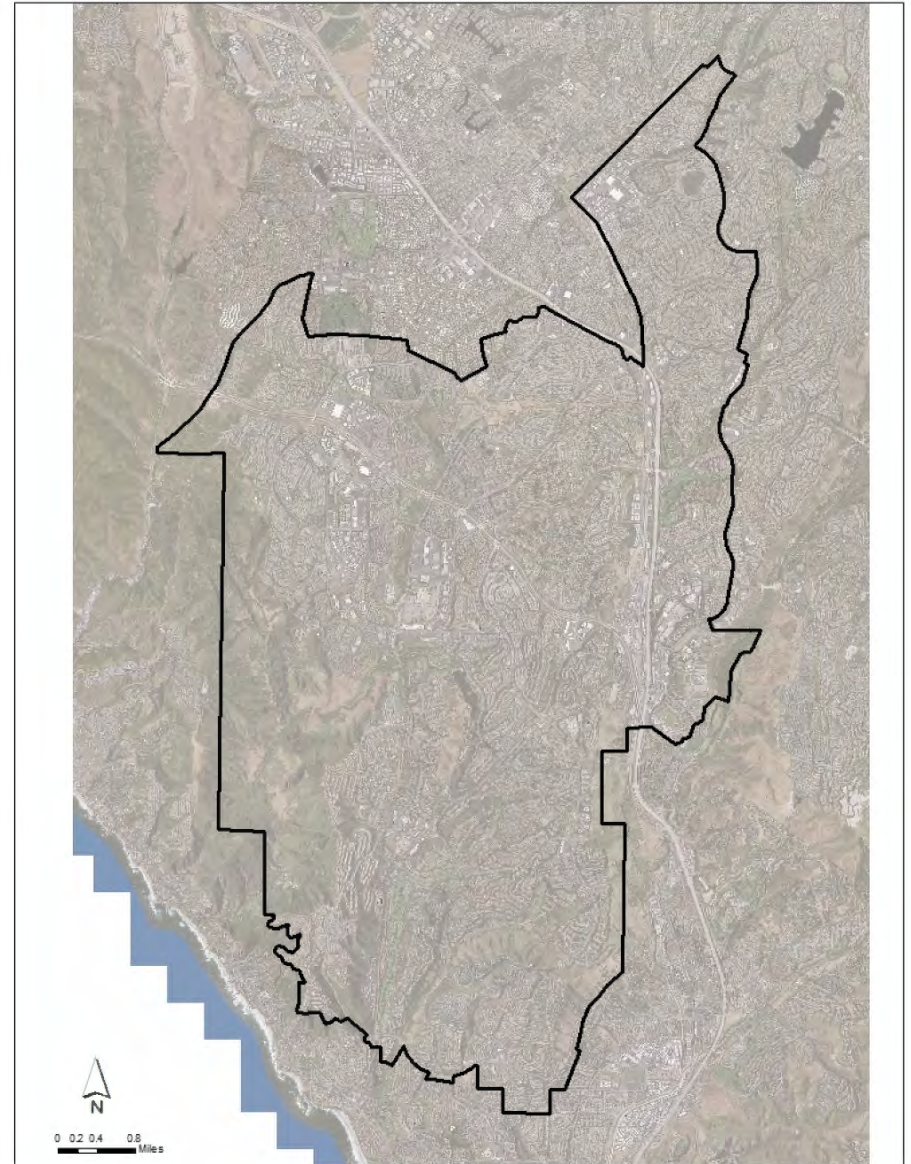
Project Description: This project is a continuation of an Easement Rehabilitation Program. Based on the outcome of the Phase 1, other areas where metallic pipes are in easements will be evaluated. Based on the finding of the analysis, additional improvements to easement pipes will be performed.

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, 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	\$20,000
Construction Contract	\$5,280,000
Inspection	\$200,000
Total Project Budget	\$6,000,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: *Electrical System Improvements Program - Potable*

Project Location: District-wide

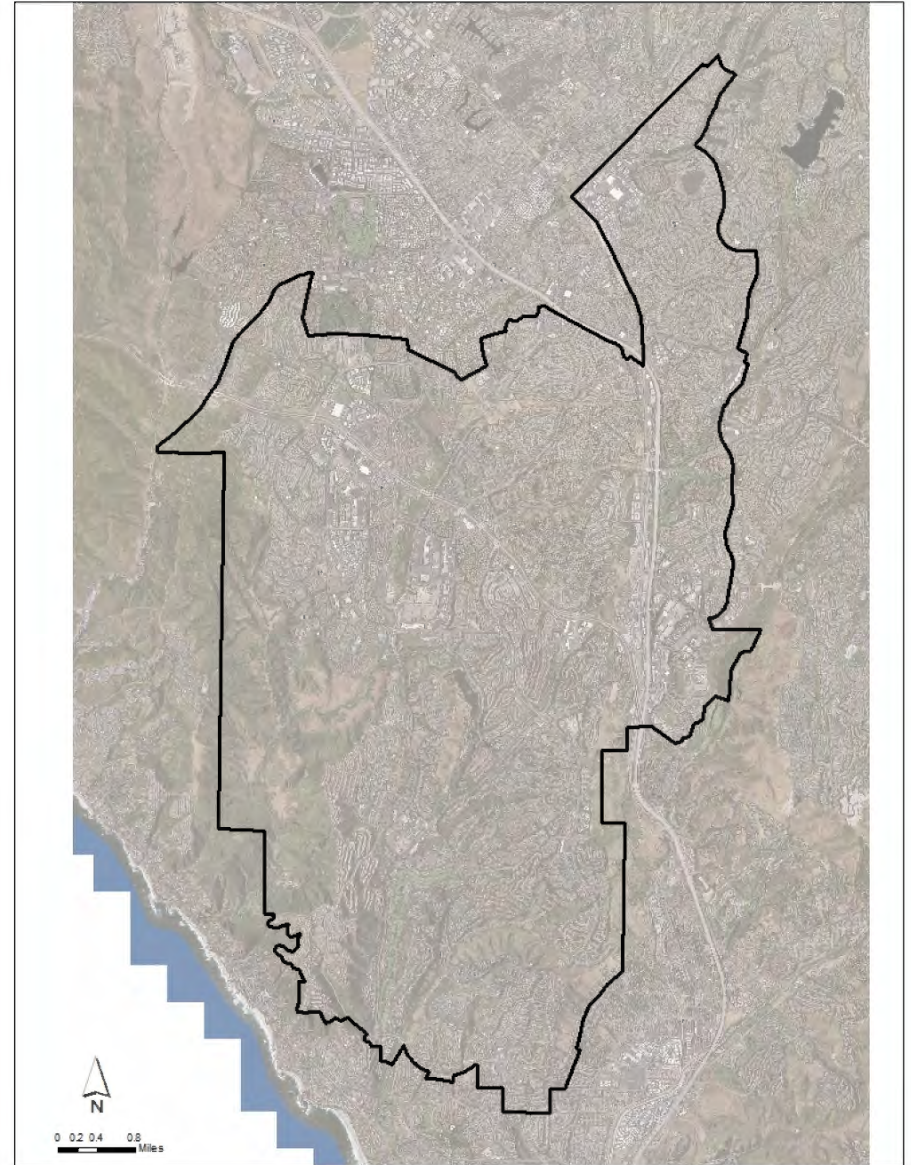
Project Description: Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

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 water stations, 3 related to recycled water stations and 3 related to wastewater 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	\$350,000
CEQA Compliance	Exempt
Construction Contract	\$1,550,000
Inspection/Fees/Overtime	\$300,000
Total Project Budget	\$2,200,000



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	\$900,000
CEQA Compliance	Exempt
Construction Contract	\$6,750,000
Legal/Permits/Other	\$100,000
Special Inspection	\$800,000
Total Project Budget	\$8,550,000



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

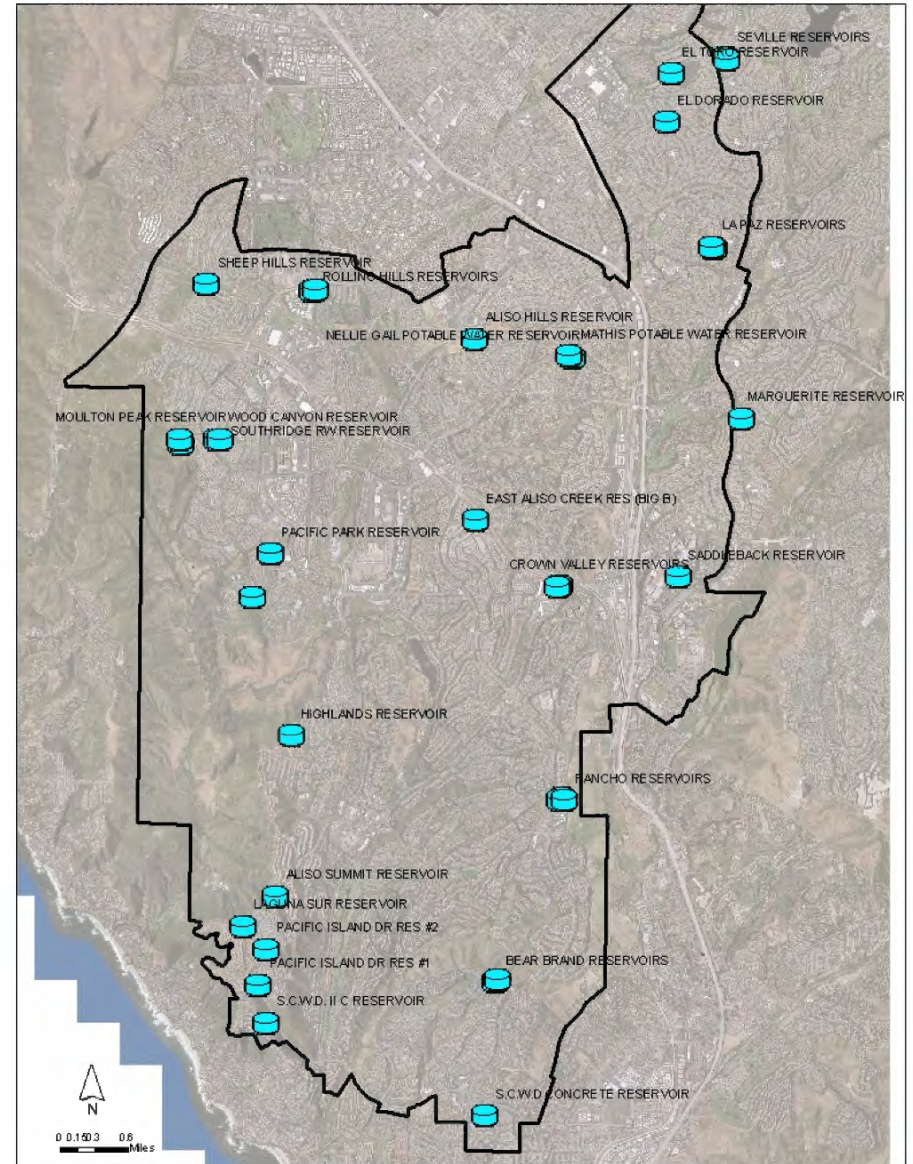
Project Description: Recoat the interior and exterior of steel reservoirs in the potable system.

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	\$250,000
CEQA Compliance	Exempt
Construction Contract	\$10,000,000
Inspection	\$1,000,000
Total Project Budget	\$11,250,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Steel Tanks Seismic and Structural Retrofit Program - PW

Project Location: District-Wide

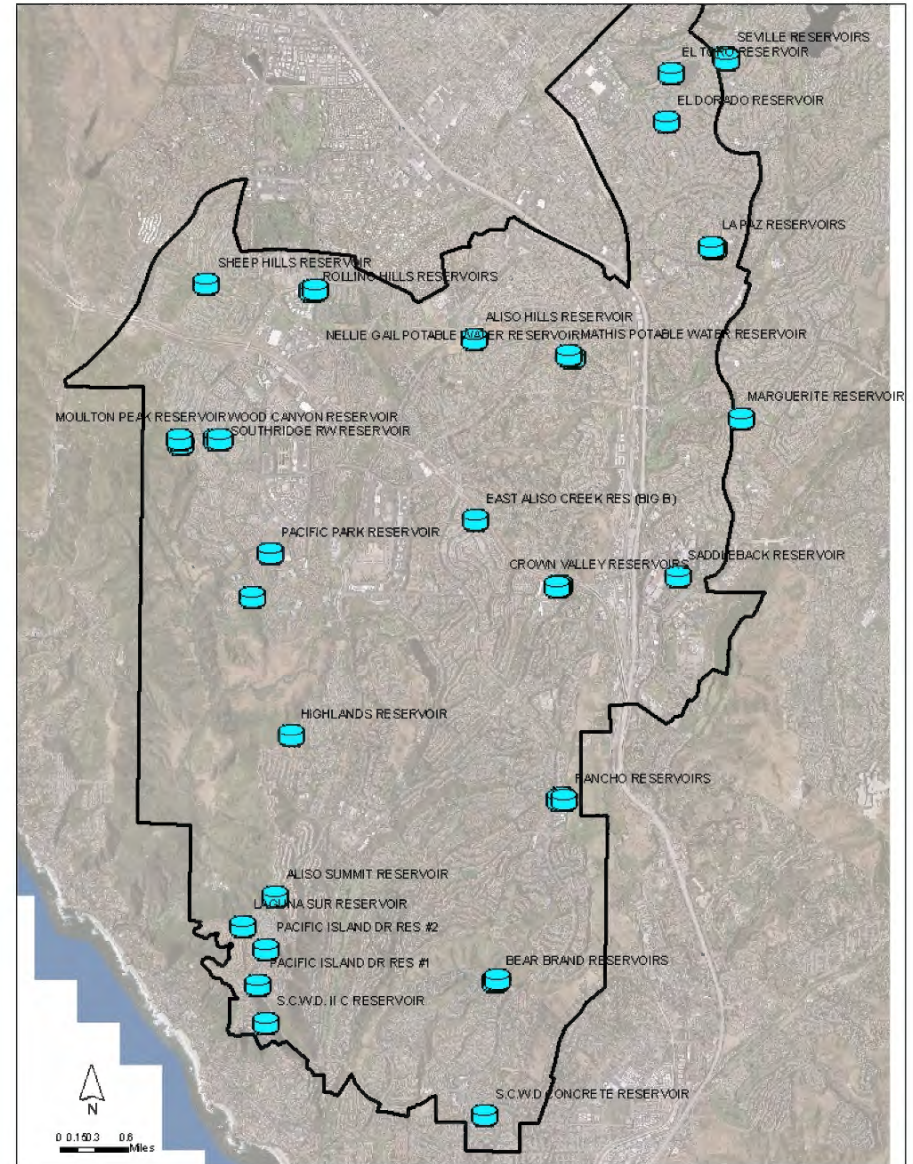
Project Description: Construct the recommendations from Project No. 2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

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, 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	\$4,300,000
Inspection	\$200,000
Total Project Budget	\$5,000,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Valve Replacement Program – PW

Project Location: District-wide

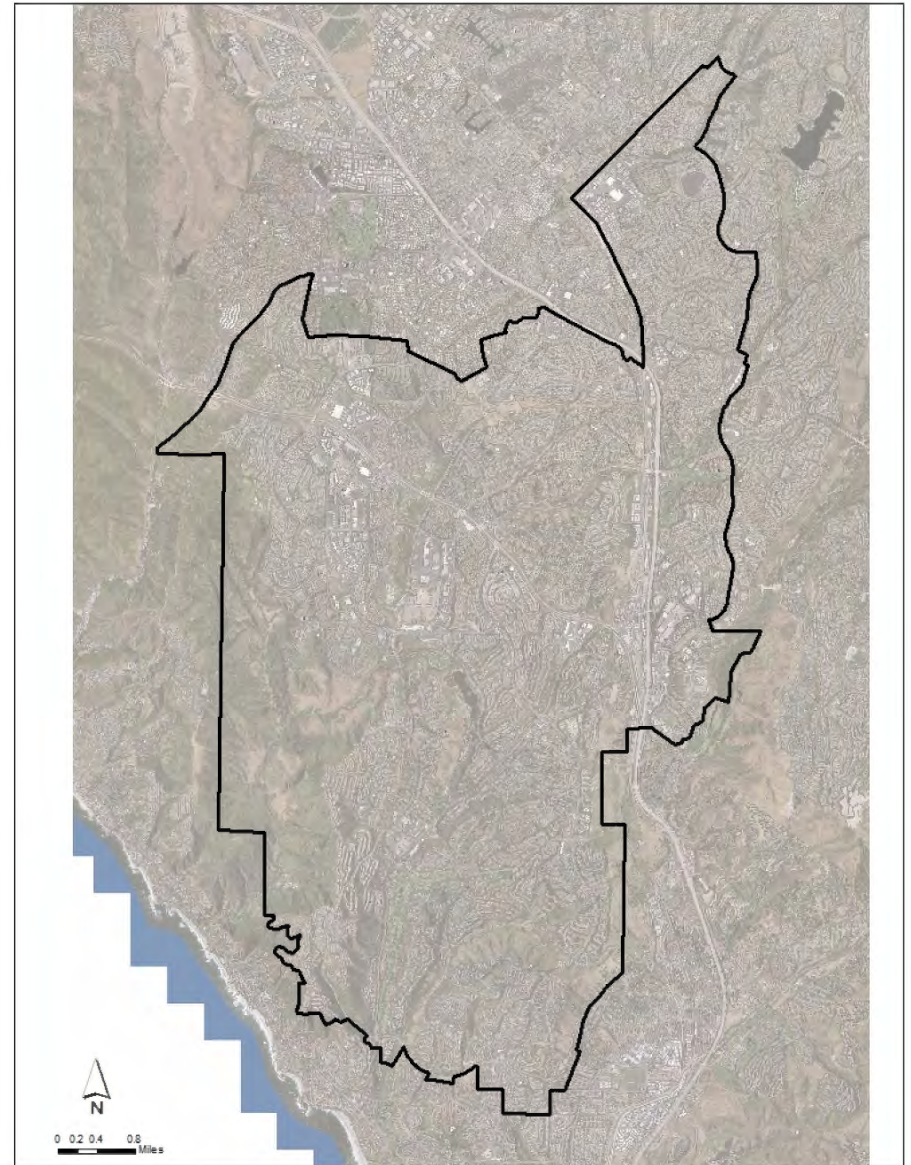
Project Description: Replace failed valves.

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	\$12,800,000
Inspection/Other	\$600,000
Construction by District	\$5,475,000
Total Project Budget	\$19,375,000



Capital Improvement Program – Project Description

Project No: 2011.032

System: Potable

Fund: 7

Project Name: Old Ranch Road Easement Pipeline Refurbishment

Project Location: Off of Old Ranch Road, Laguna Niguel

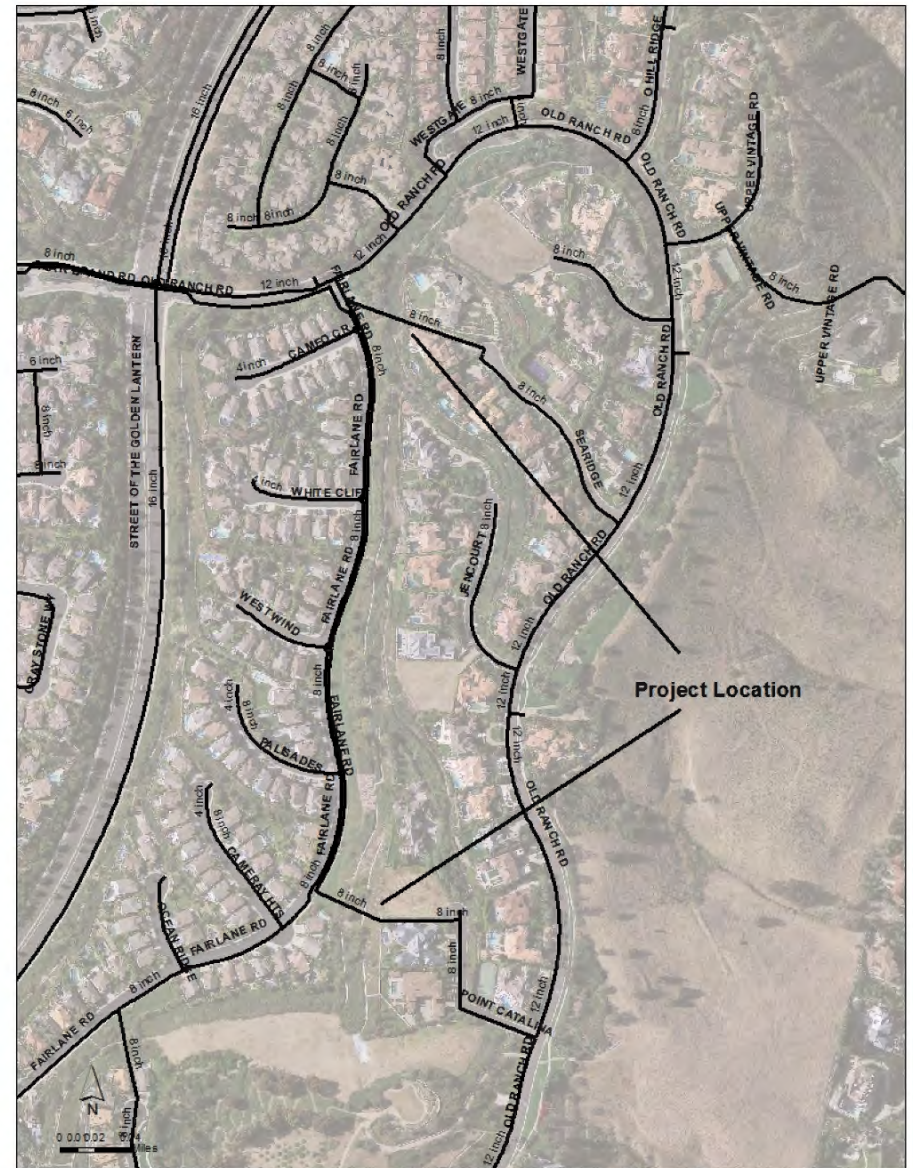
Project Description: Rehabilitate easement line from Point Catalina to Fairlane Road and abandon easement line in from Searidge to Fairlane Road.

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
Total Project Budget	\$200,000



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
Total Project Budget	\$200,000



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.

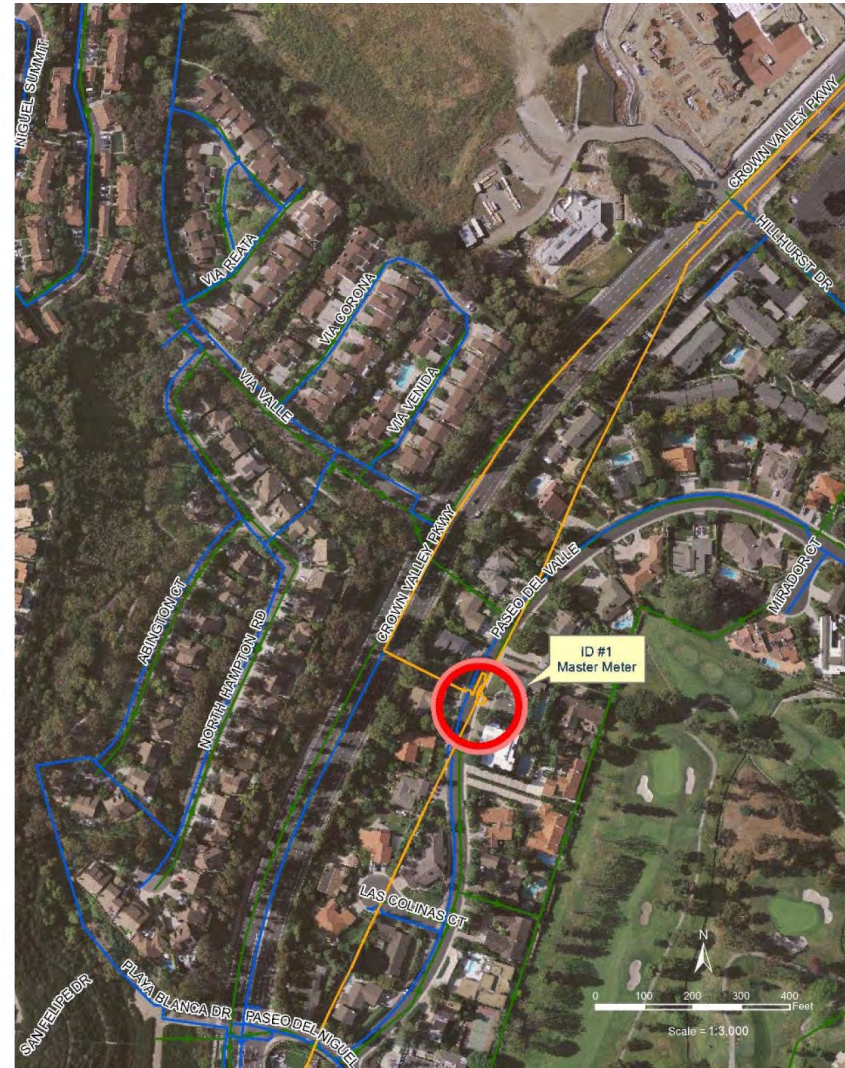
Project Need: JRWSS will be relocating the JTM out of the housing track on Paseo Del Valle and into Crown Valley Parkway. I.D. Master Meter will need to be relocated and connected to the new part of the JTM or at a different location, depending on site availability. The JRWSS project has been deferred.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

Add communication pole and system to relocated meter.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection/Other	\$90,000
Total Project Budget	\$650,000



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: Phase 1 – Completed; Phase 2 – Proposed Project

Estimated Project Amount:

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



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

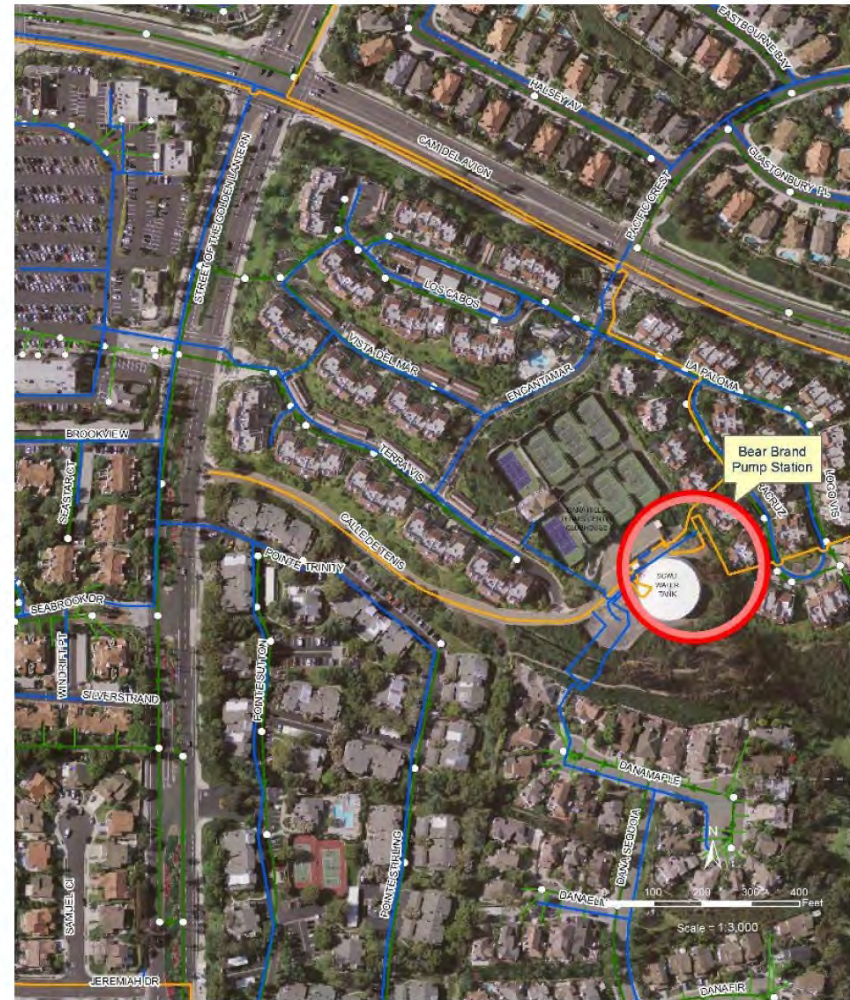
Project Description: Replace existing two pumps and 100 HP and 150 HP motors, and select piping and valves.

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
Total Project Budget	\$410,000



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

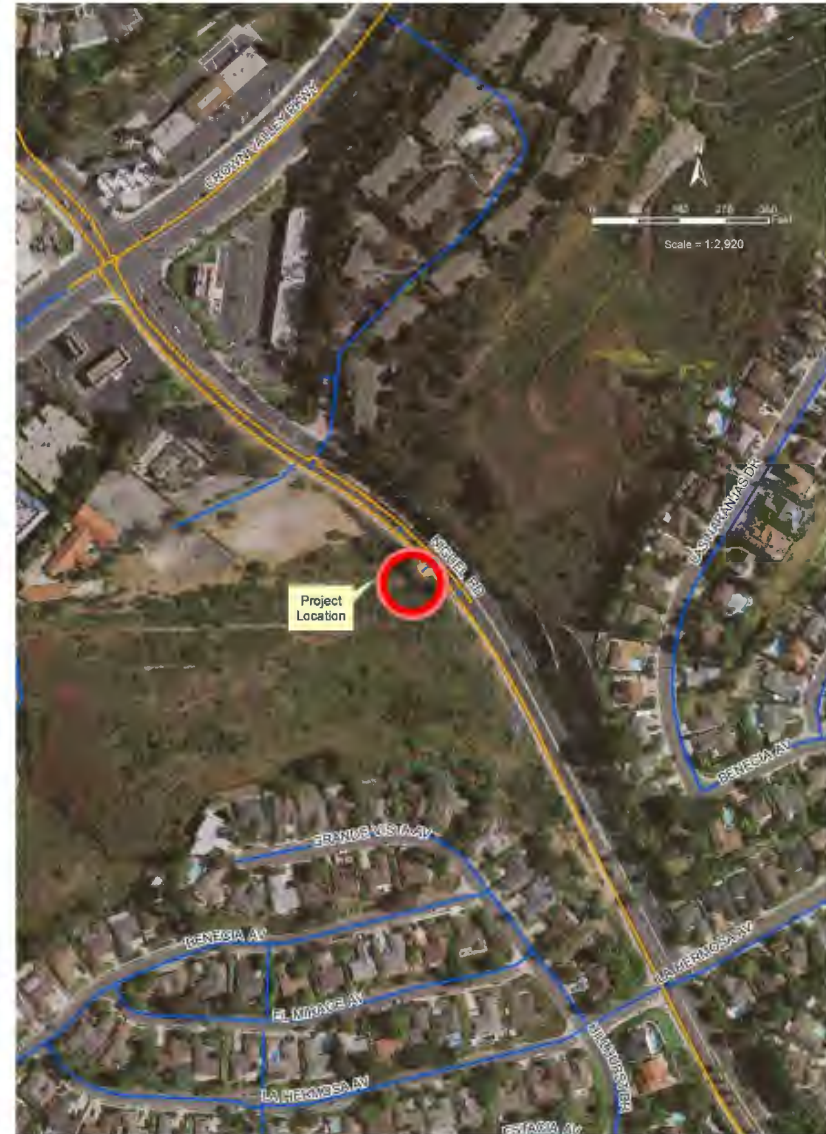
Project Description: Replace existing 125 HP pump, motor, and select piping and valves. The work will also including replacing the packing glands with mechanical seals and fixing the drain line.

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	\$225,000
Inspection/Other	\$10,000
Total Project Budget	\$275,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 12

Project Name: *Marguerite/Oso CIP Takeout Facility*

Project Location: Oso Parkway & Marguerite Parkway, Mission Viejo

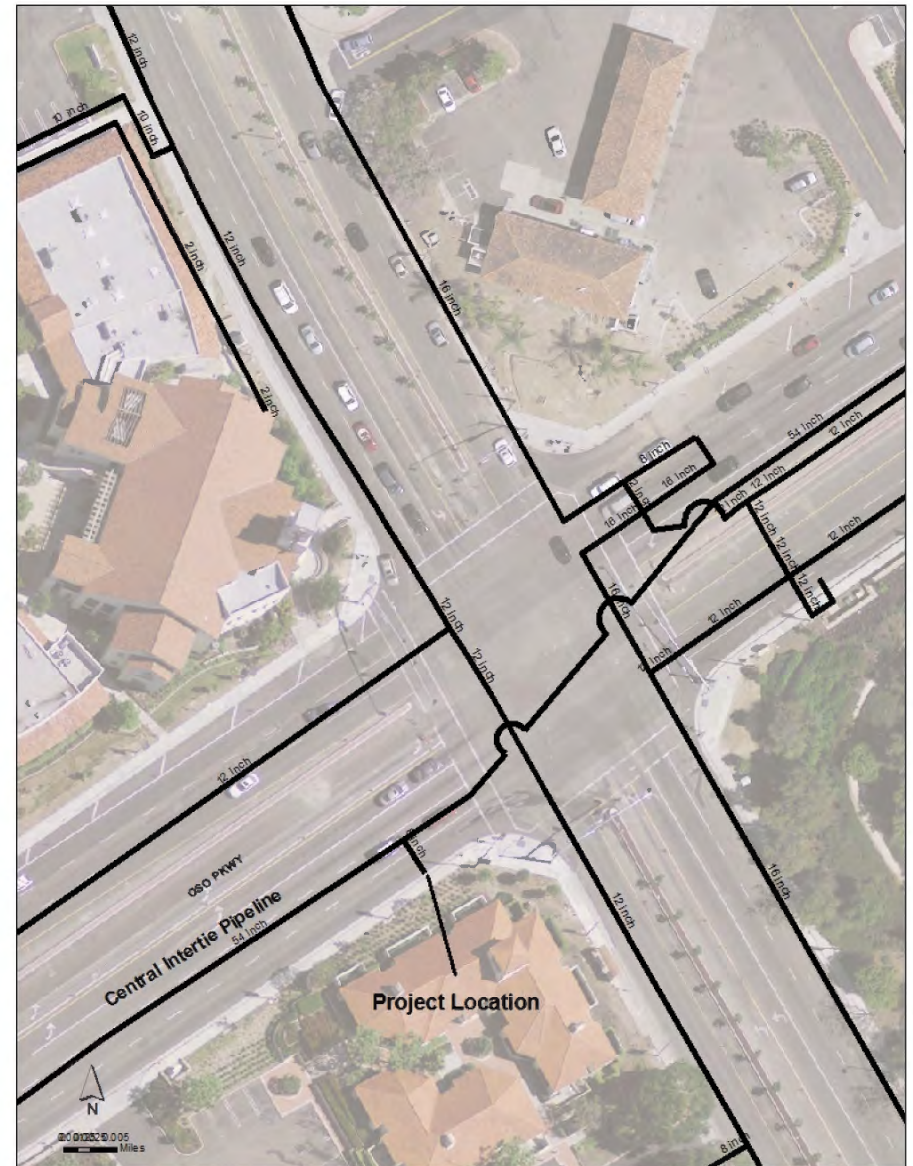
Project Description: Design and construct a flow control facility from the Central Intertie Pipeline (CIP) to the 650 & 750 pressure zones via Marguerite Reservoir.

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
Total Project Budget	\$2,500,000



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

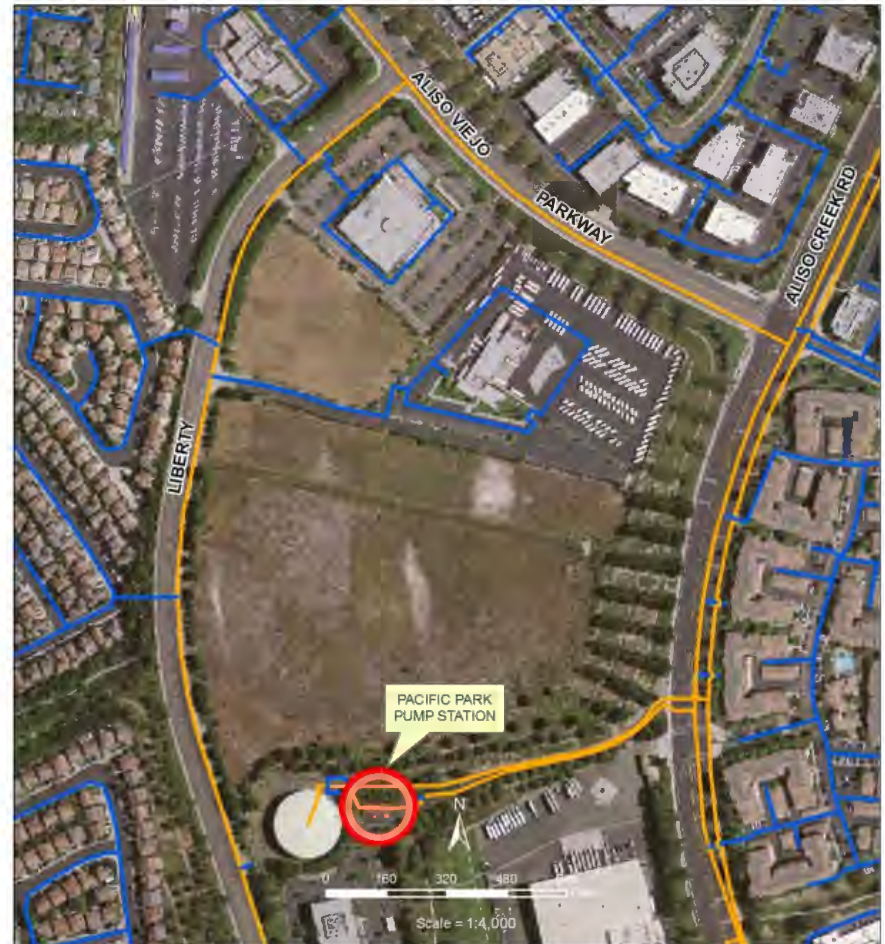
Project Description: Remove and replace the fire pump and natural gas engine with diesel and motor driven pumps, the pump control valve, suction and discharge valves, and associated piping.

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
Total Project Budget	\$600,000



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

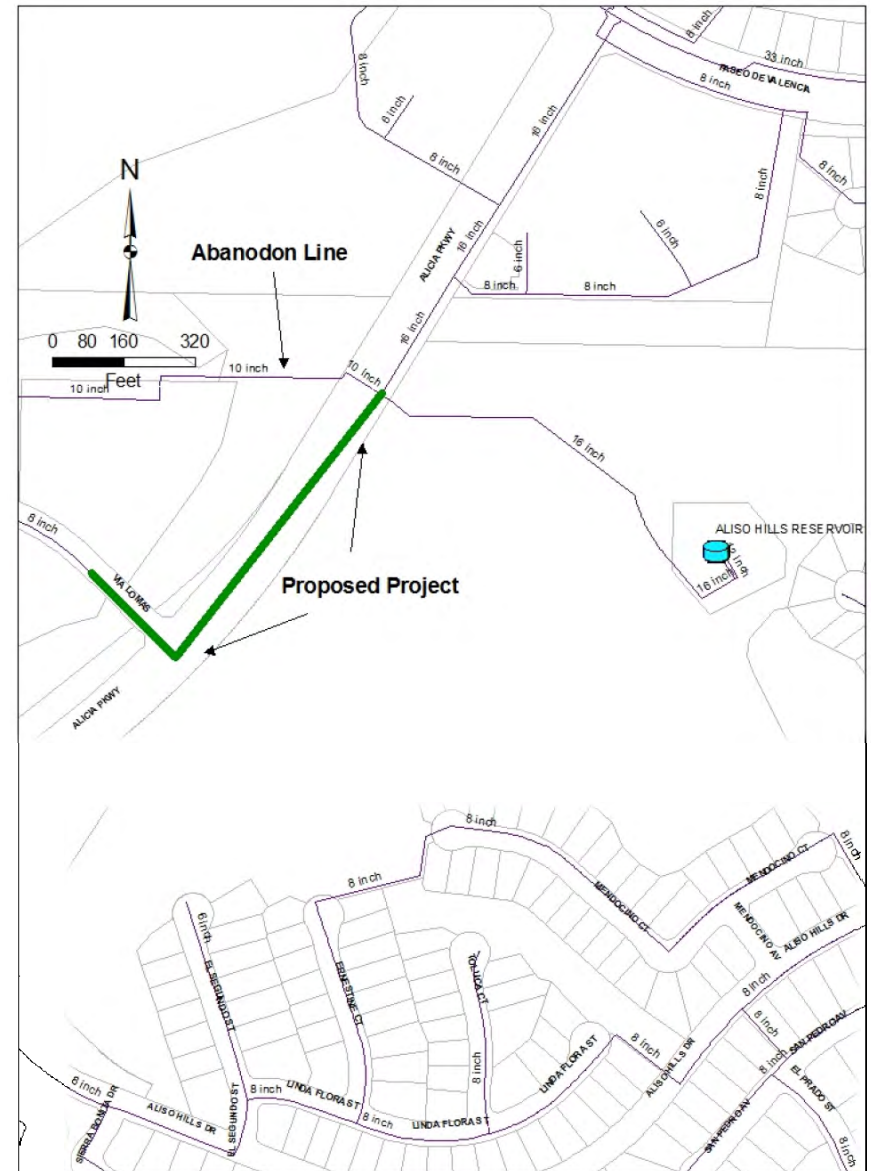
Project Description: Install about 1,000 feet of 10-inch diameter pipe and abandon about 500 feet under Aliso Creek.

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
Total Project Budget	\$300,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

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

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

Project Description: Replace existing auxiliary engine with diesel and motor driven pump, pump assembly, cla-val, 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
Total Project Budget	\$675,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Secondary feed for 1050 Zone*

Project Location: PID Pump Station No. 2, Pacific Island Drive, Laguna Niguel.

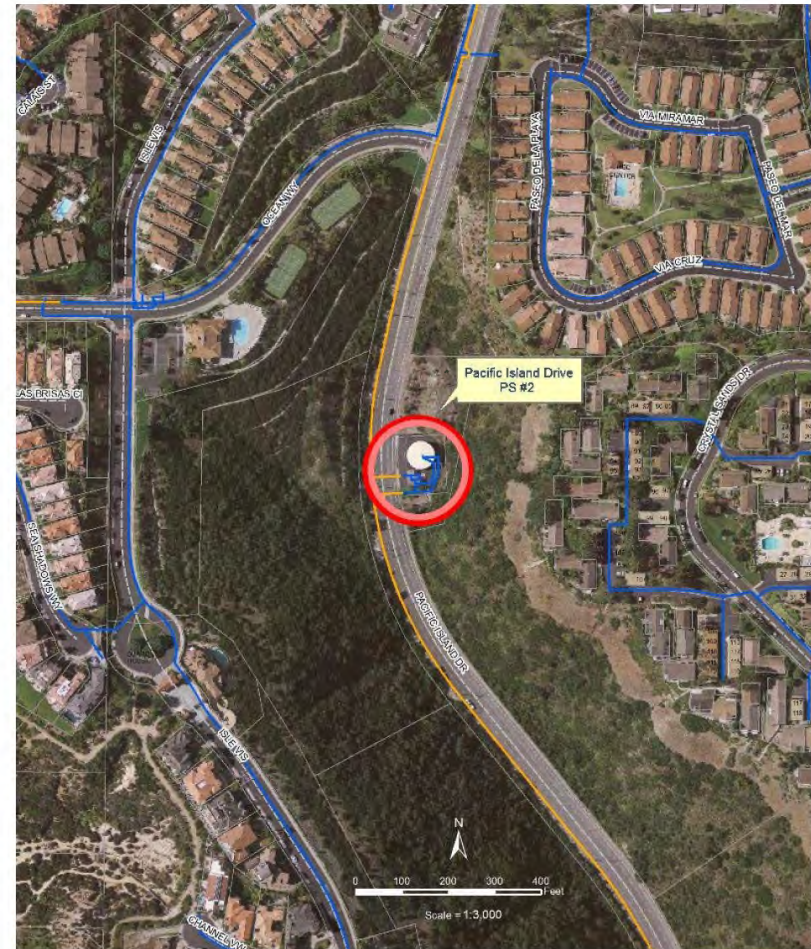
Project Description: Install approximately 1000 linear feet of 12-inch pipe. Replace existing pump and motor and up size as needed.

Project Need: Provide a secondary feed for the 1050 closed system. Feed should preferably come from a site other than PID#3 Pump Station. A hydraulic analysis of the PID system (three pump stations and two reservoirs) will need to be performed.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Analysis/Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection, Other	\$0
Total Project Budget	\$600,000



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.

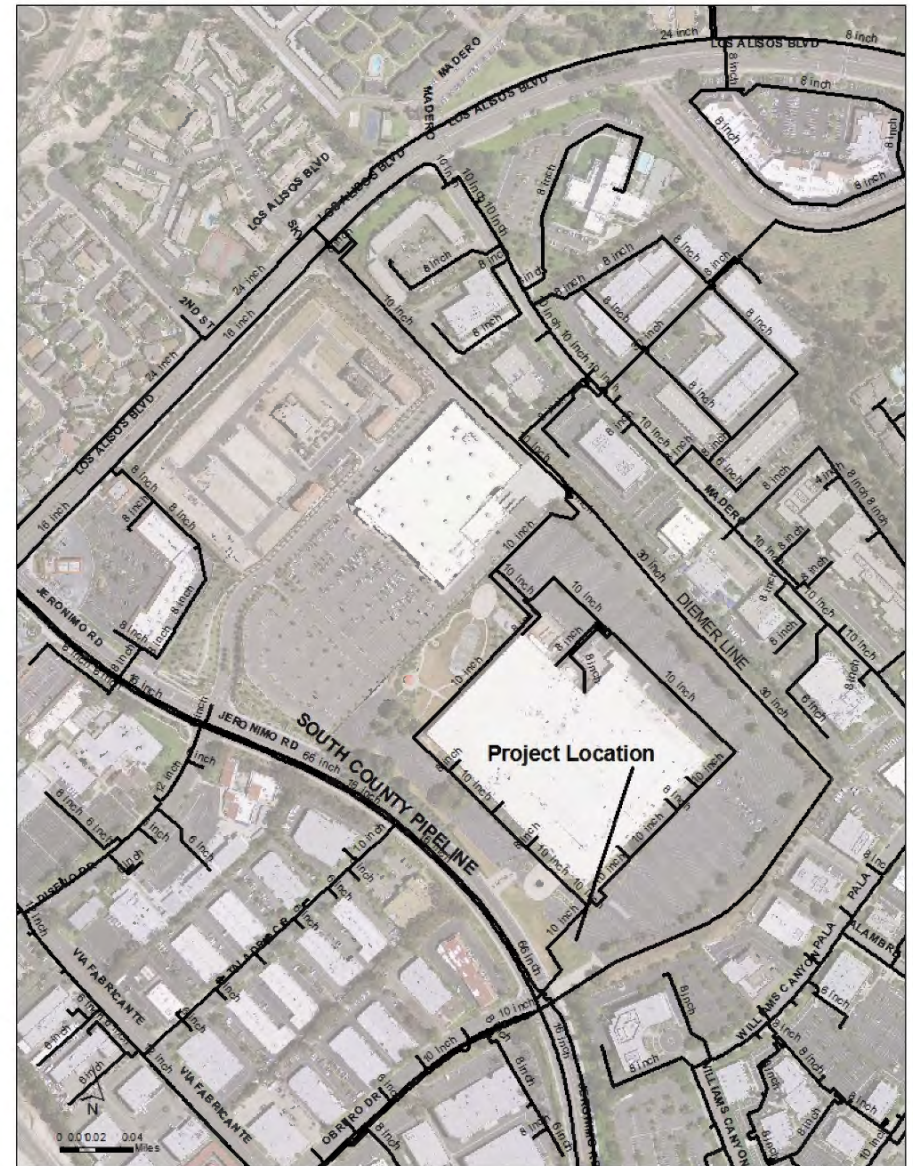
Project Description: Identify site, acquire property, design and construct a flow control facility.

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	\$50,000
Construction Contract	\$1,900,000
Inspection	\$200,000
Total Project Budget	\$2,400,000



Capital Improvement Program – Project Description

Project No: 2016.020

System: Potable

Fund: 7

Project Name: Electrical Service Entrance Replacements at 3 Sites

Project Location: La Paz Underground Pump Station, Laguna Hills; Crown Point Recycled Water Pump Station & Regional Lift Station, Laguna Niguel

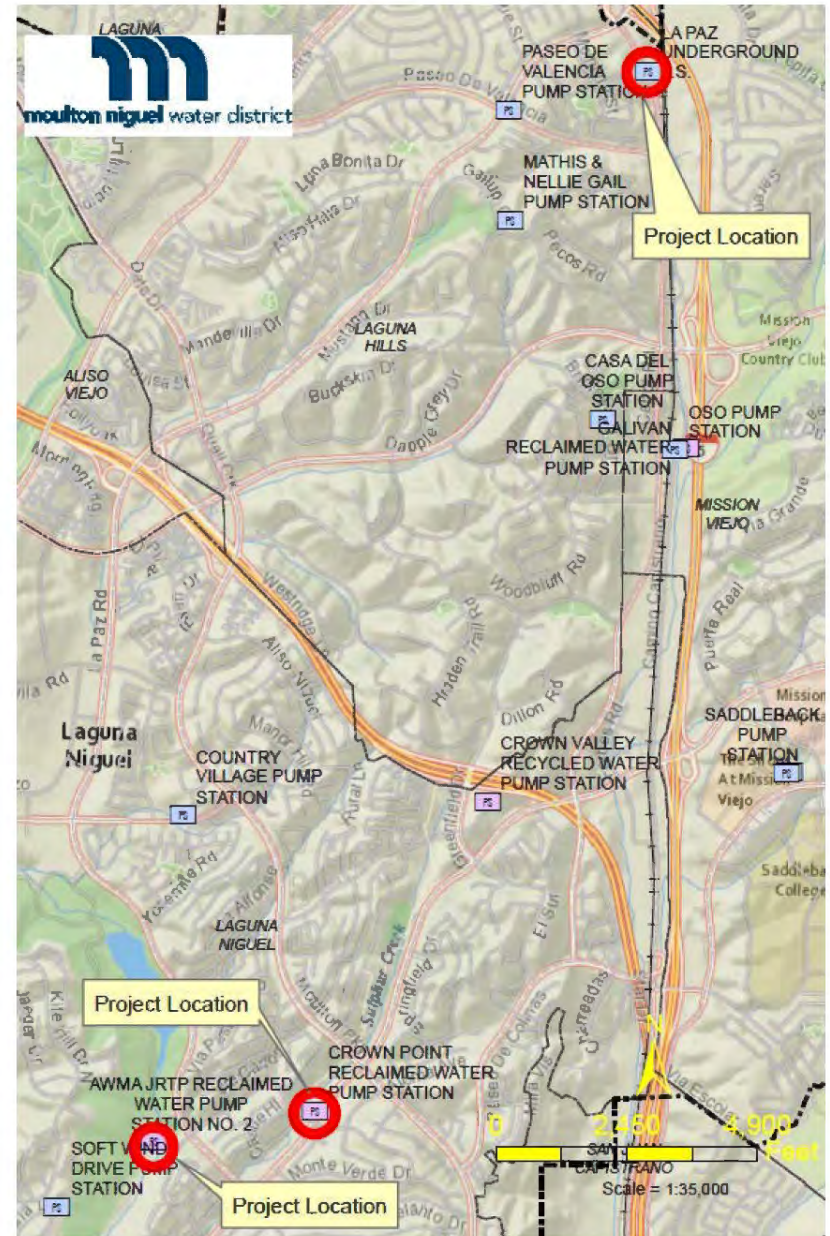
Project Description: Replace utility service sections at three (3) sites that have reached the end of their useful life. The project will require bypass pumping at several sites.

Project Need: These service sections and associated main circuit breakers range from 35 to 50 years old (beyond useful life).

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$900,000
Inspection/Utility Fees/Other	\$75,000
Total Project Budget	\$1,050,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2017-18 Electrical System Improvements - PW

Project Location: Pacific Island Drive Pump Station #3 & Highlands Pump Station, Laguna Niguel; La Paz Reservoir Pump Station, Mission Viejo

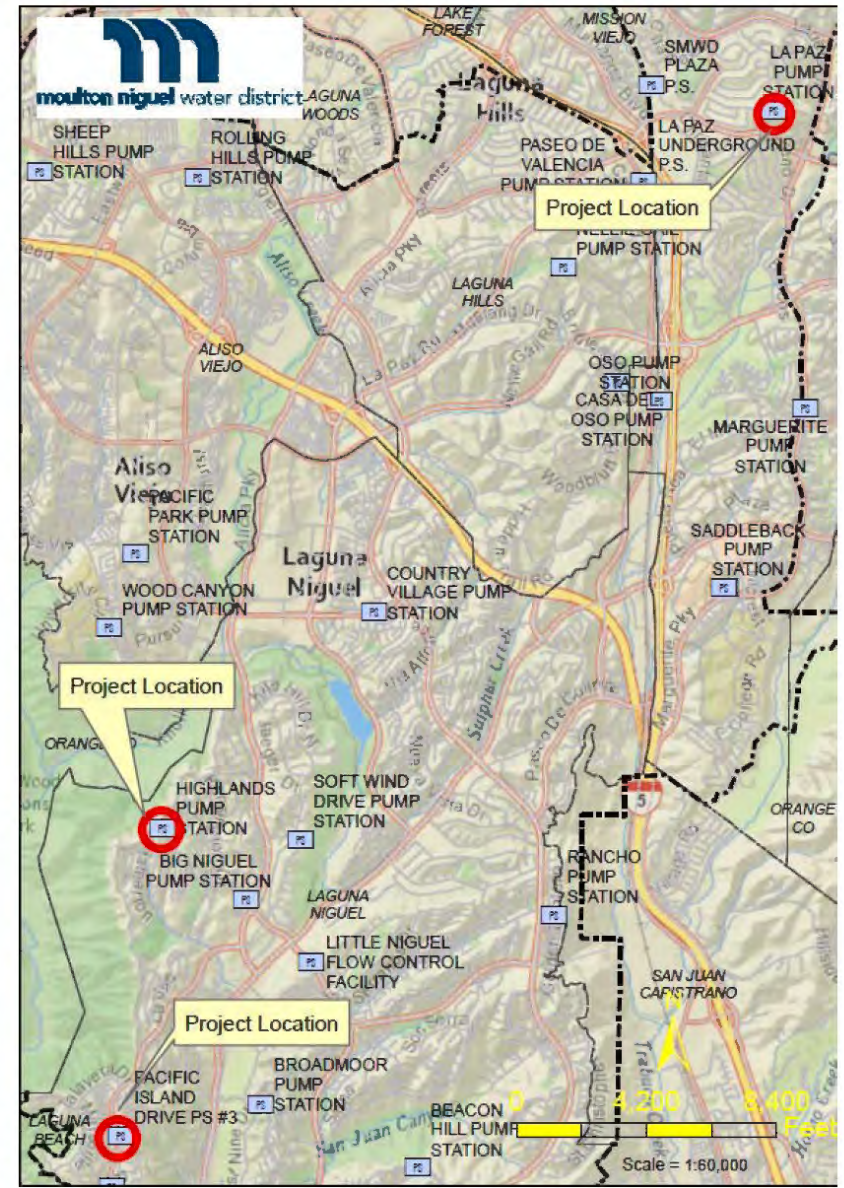
Project Description: Replace main Switchboard, Main Circuit Breaker, VFDs and related electrical equipment at PID PS #3. Replace Main Circuit Breaker and Load Bank at La Paz Reservoir PS. Replace Load Bank at Highlands Pump Station.

Project Need: These service sections and associated main circuit breakers are old and beyond their useful lives. 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	\$140,000
CEQA Compliance	Exempt
Construction Contract	\$650,000
Inspection/Utility Fees/Other	\$110,000
Total Project Budget	\$900,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2017-18 Reservoir Management System Replacement

Project Location: 5 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. The work will include the installation of liquid sodium hypochlorite and ammonia water quality reservoir management systems.

Project Need: Existing facilities are approaching their useful life and require increased maintenance. A system wide reservoir disinfection technology study was completed in July 2015 that identified various sites for system improvements.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	Exempt
Construction Contract	\$3,250,000
Legal/Permits/Other	\$50,000
Special Inspection	\$300,000
Total Project Budget	\$3,900,000



Sites for Clor-Tec Facilities

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2017-18 Utility Service Entrance Replacements - PW

Project Location: Pacific Island Drive 1 and 2, Big Niguel, and Beacon Hill Pump Stations, Laguna Niguel; Bear Brand Pump Station, Dana Point

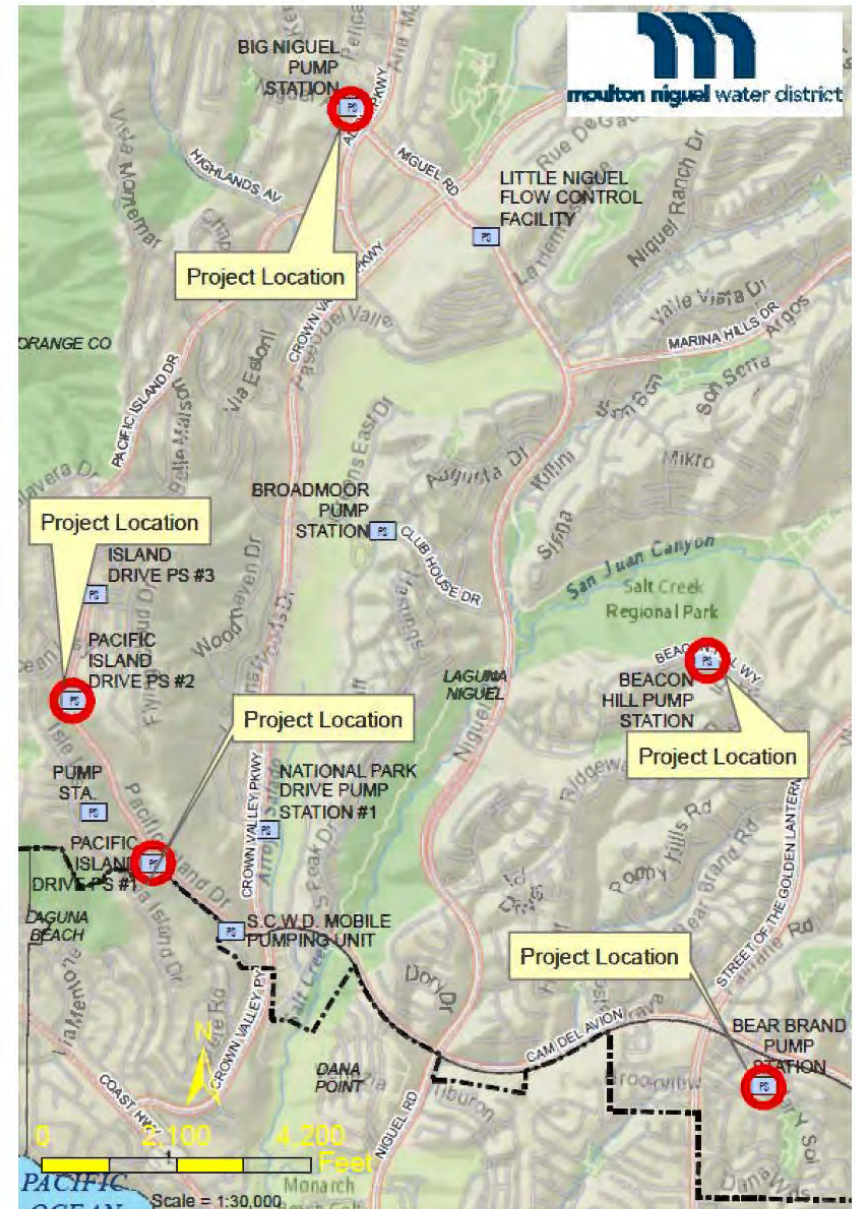
Project Description: Replace utility service sections at five (5) sites that have reached the end of their useful life. The project will require bypass pumping at several sites.

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	\$125,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection/Utility Fees/Other	\$75,000
Total Project Budget	\$750,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2017-18 Valve Replacements

Project Location: District-wide

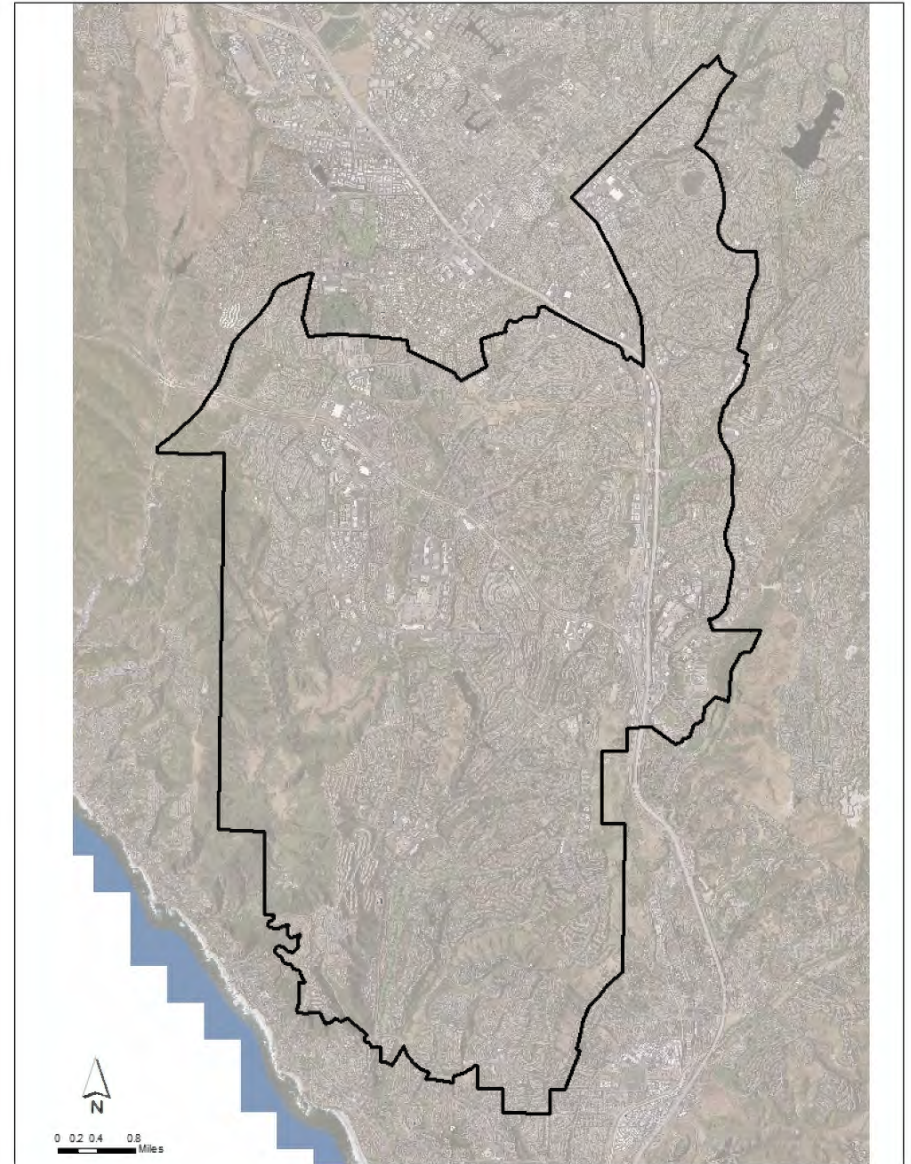
Project Description: Replace failed in-line valves.

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	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$1,900,000
Inspection/Other	\$50,000
Construction by District	\$675,000
Total Project Budget	\$2,700,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 6

Project Name: *AMI Phase 2*

Project Location: District-wide

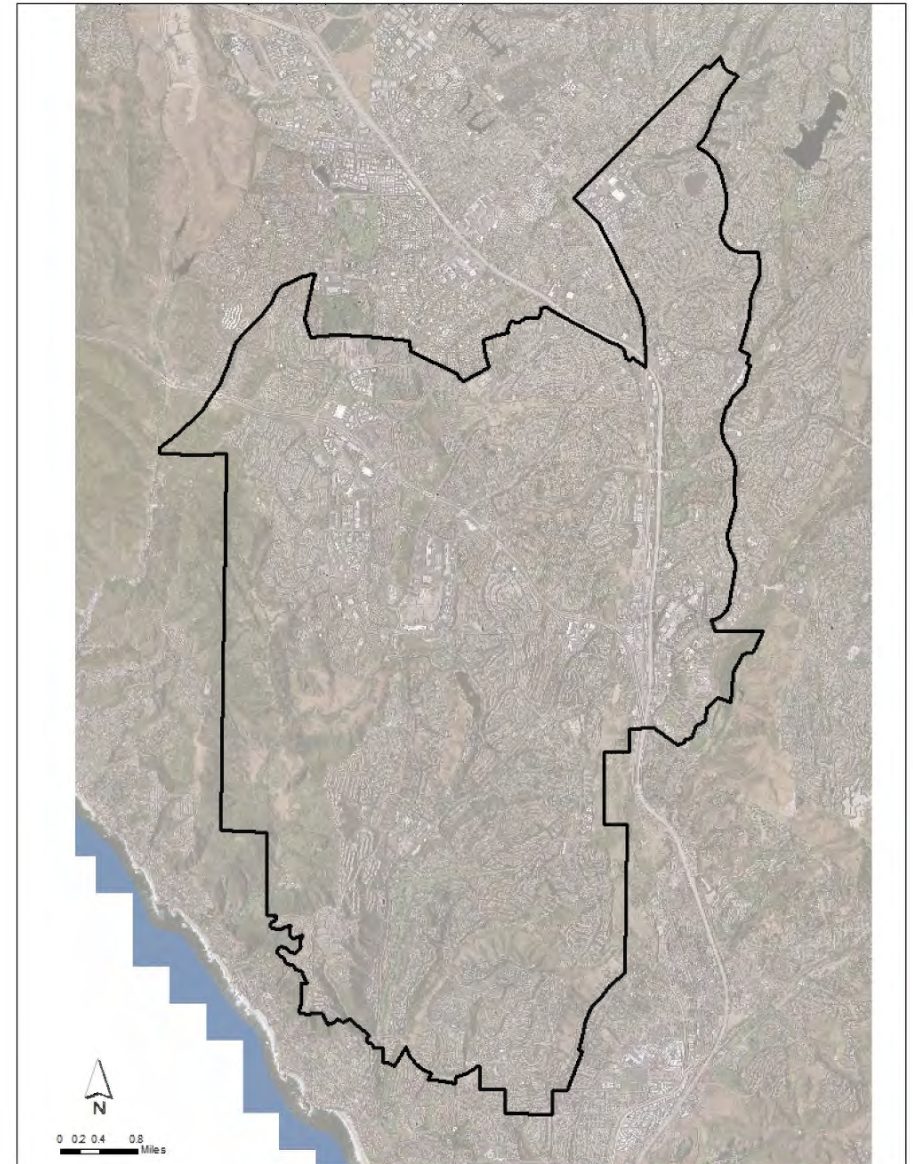
Project Description: In Phase I of the AMI Implementation Program, the District established a remote reading and communication network with coverage of the entire service area and implemented a customer portal for the District's Potable and Recycled Water Irrigation as well as 1,800 residential customers with hourly data as well as a portal deployed for all remaining customers. Phase 2 of the AMI Implementation Program will expand the program to install an AMI radio for all remaining customers' meters to be read remotely and provide hourly water usage reads.

Project Need: 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.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Equipment & Installation	\$8,000,000
Total Project Budget	\$8,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Crown Valley Reservoir No. 3 Roof Plate Repair and Interior Recoating*

Project Location: Crown Valley Reservoir, Laguna Niguel

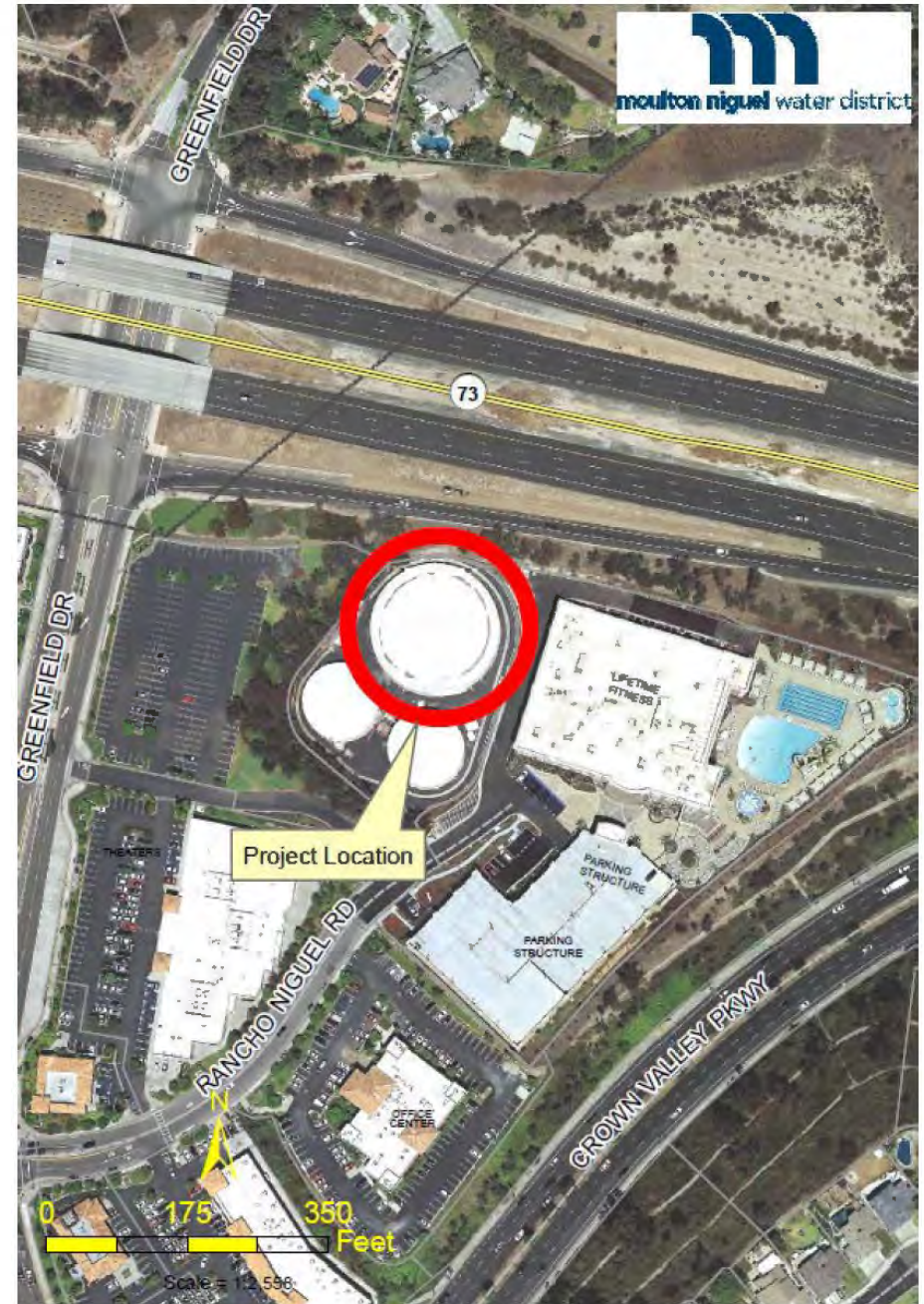
Project Description: The Crown Valley Reservoir No. 3 requires roof plate replacements, interior recoating and exterior roof paint.

Project Need: The roof plates of the Crown Valley Reservoir were damaged due to an overflow event in 1990. The structure is stable but the deformation of the roof plates are causing water ponding. The interior recoating for Crown Valley Reservoir No. 3 is required to be done as well. The life expectancy of a coating system is between 15 to 20 years.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$900,000
Inspection/Other	\$80,000
Total Project Budget	\$1,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Laguna Hills Drive 650 Line Intertie*

Project Location: Laguna Hills Drive between Paseo de Valencia Road and Indian Hill Lane, Laguna Hills

Project Description: Option 1: Abandon about 1,900 linear feet of 8-inch pvc pipe. The work will consist of terminating two connection points to the main and filling the pipe with slurry to properly abandon-in-place. Option 2: Reconfigure zones 450, 470, and 650 to include the installation of various valves.

Project Need: The 8-inch pvc 650 intertie line connects the 650 pressure zone to the 450 pressure zone, however this line is about 1,900 linear feet long with no service connections to circulate water in a pipeline containing about 5,000 gallons of stagnated water. This causes a water quality liability to the potable water distribution system. Option 1 would be to abandon this line and Option 2 would be to reconfigure zones 450, 470 and 650 to be able to maintain this pipeline with circulating water flow.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$75,000
Inspection/Other	\$10,000
Total Project Budget	\$135,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Pipeline Adjustments for I-5 Freeway Widening*

Project Location: Various pipeline locations along the I-5 Freeway between Avery Pkwy and El Toro Rd within the Cities of Mission Viejo, Laguna Hills and Laguna Niguel

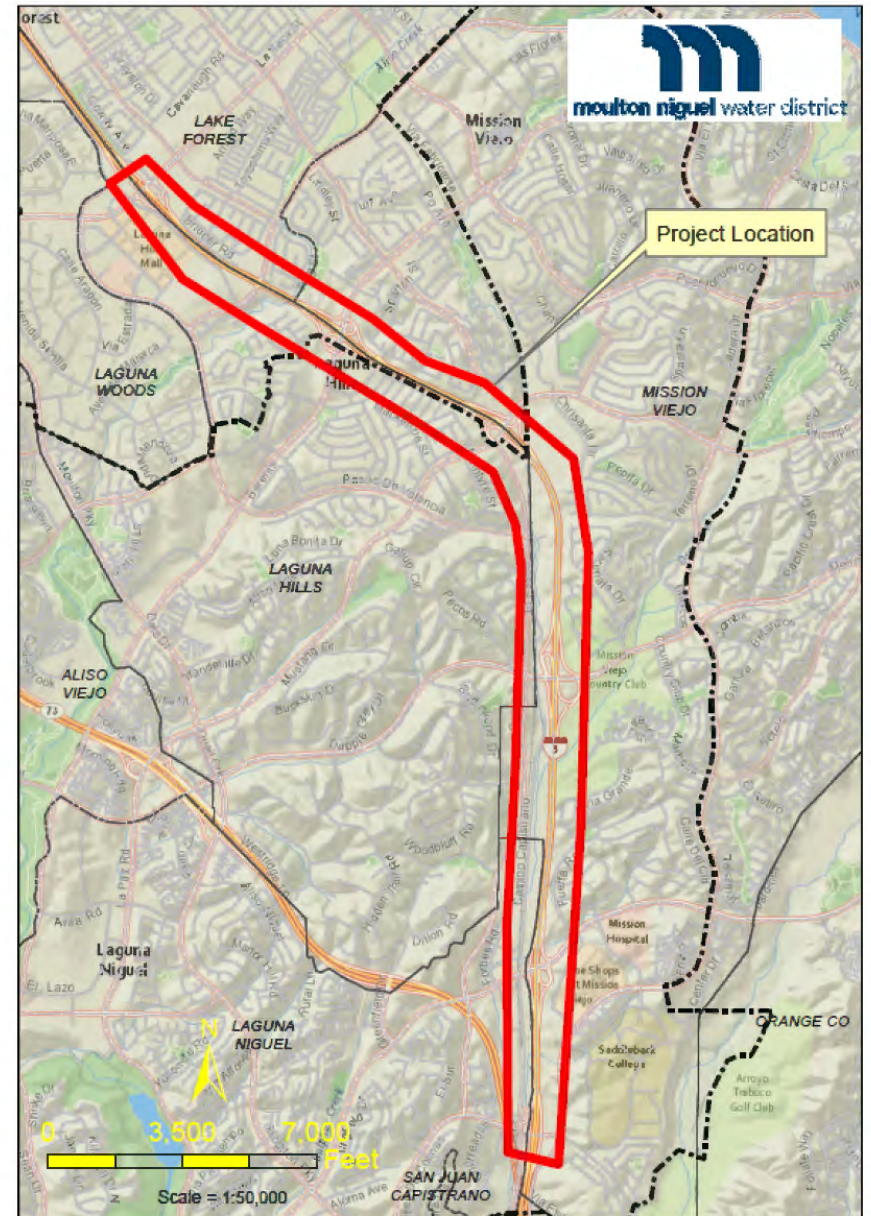
Project Description: The work involves the remediation of MNWD infrastructure affected by the I-5 widening project including: the relocation of hydrants and meters; raising valves and manhole covers to grade; extending pipe casings; and building retaining walls.

Project Need: The Caltrans freeway widening project will require MNWD to adjust its infrastructure to accommodate to the proposed transportation improvements.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$120,000
CEQA Compliance	Exempt
Construction Contract	\$600,000
Inspection/Other	\$30,000
Total Project Budget	\$750,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: PW Main Replacement at I-5 / Oso Creek Crossing

Project Location: San Juan Creek, Mission Viejo, CA

Project Description: Install a new ~30" steel casing for a ~20" welded steel potable water pipe utilizing a jack-and-bore method for the replacement of the existing 14" potable water pipeline.

This project to be completed simultaneously with 2017.tbd, RW Main Installation at I-5 / Oso Creek Crossing.

Project Need: Numerous pipeline failures within the creek at the existing crossing necessitate the replacement of this pipeline within the Creek.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$175,000
CEQA Compliance	\$50,000
Construction Contract	\$1,200,000
CM/Inspection/Permits/Other	\$75,000
Total Project Budget	\$1,500,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Rehabilitation of the Aliso Hills Reservoir*

Project Location: Laguna Hills

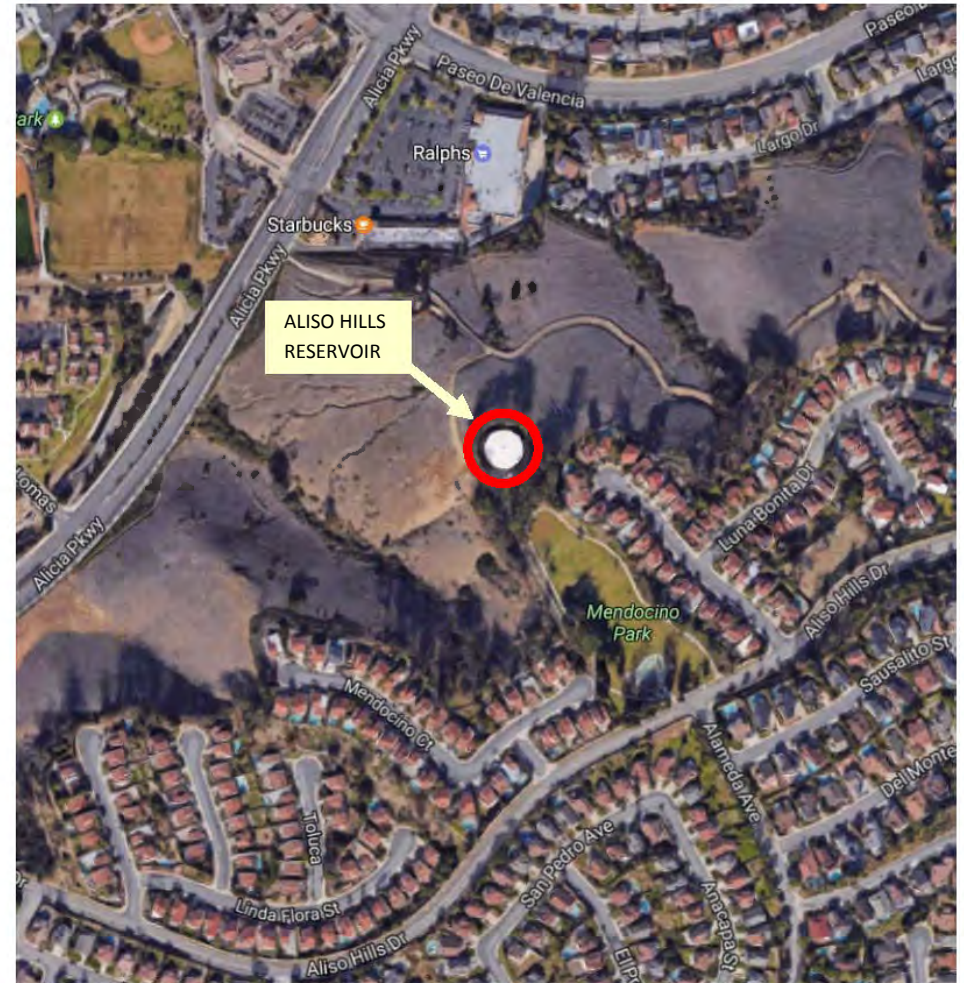
Project Description: Re-coat the interior and exterior of 1.75 million gallon (MG) Aliso Hills Reservoir, construct structural and corrosion repairs, tank operation and safety improvements, and a cathodic protection system.

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: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$600,000
Specialty Inspection	\$75,000
Legal & District Labor	\$5,000
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Rehabilitation of the Marguerite Reservoir*

Project Location: Mission Viejo

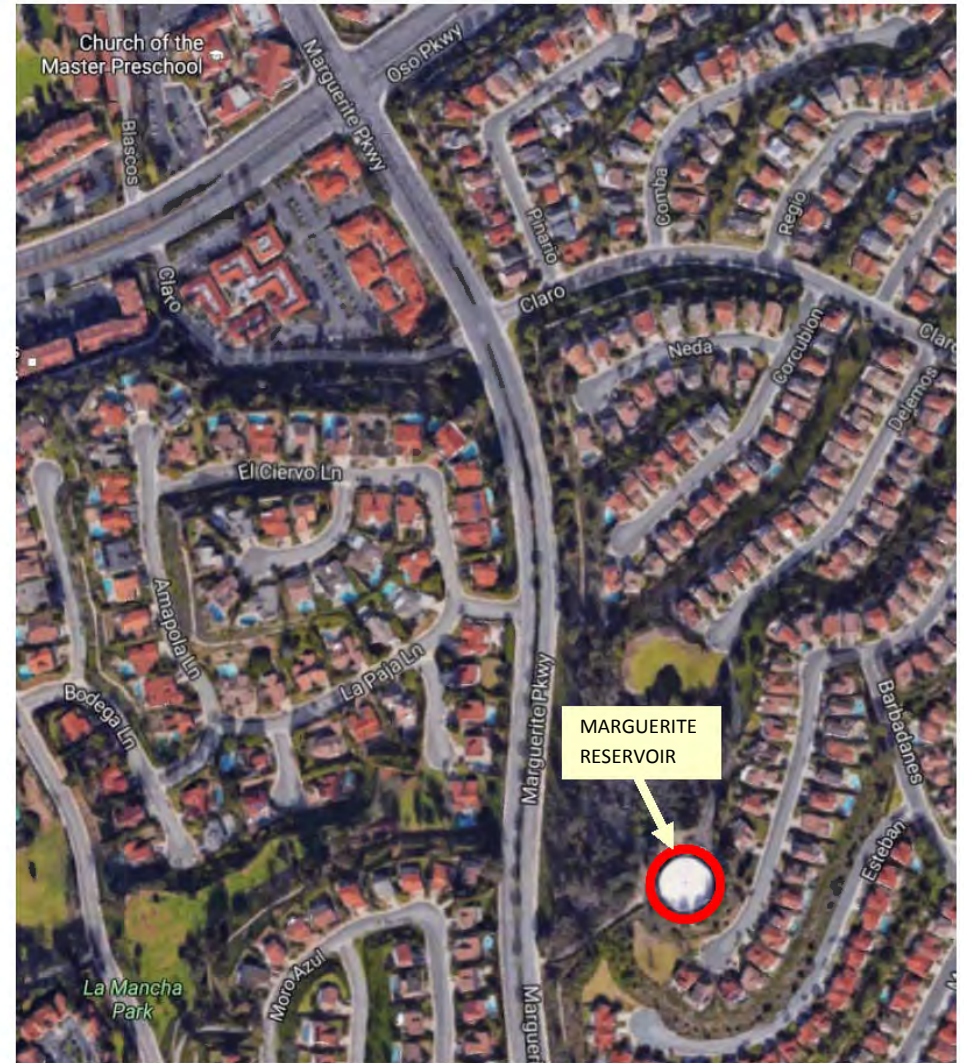
Project Description: Re-coat the interior and exterior of 2.5 million gallon (MG) Marguerite Reservoir, construct structural and corrosion repairs, tank operation and safety improvements, and a cathodic protection system.

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: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$700,000
Specialty Inspection	\$75,000
Legal & District Labor	\$5,000
Total Project Budget	\$800,000



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

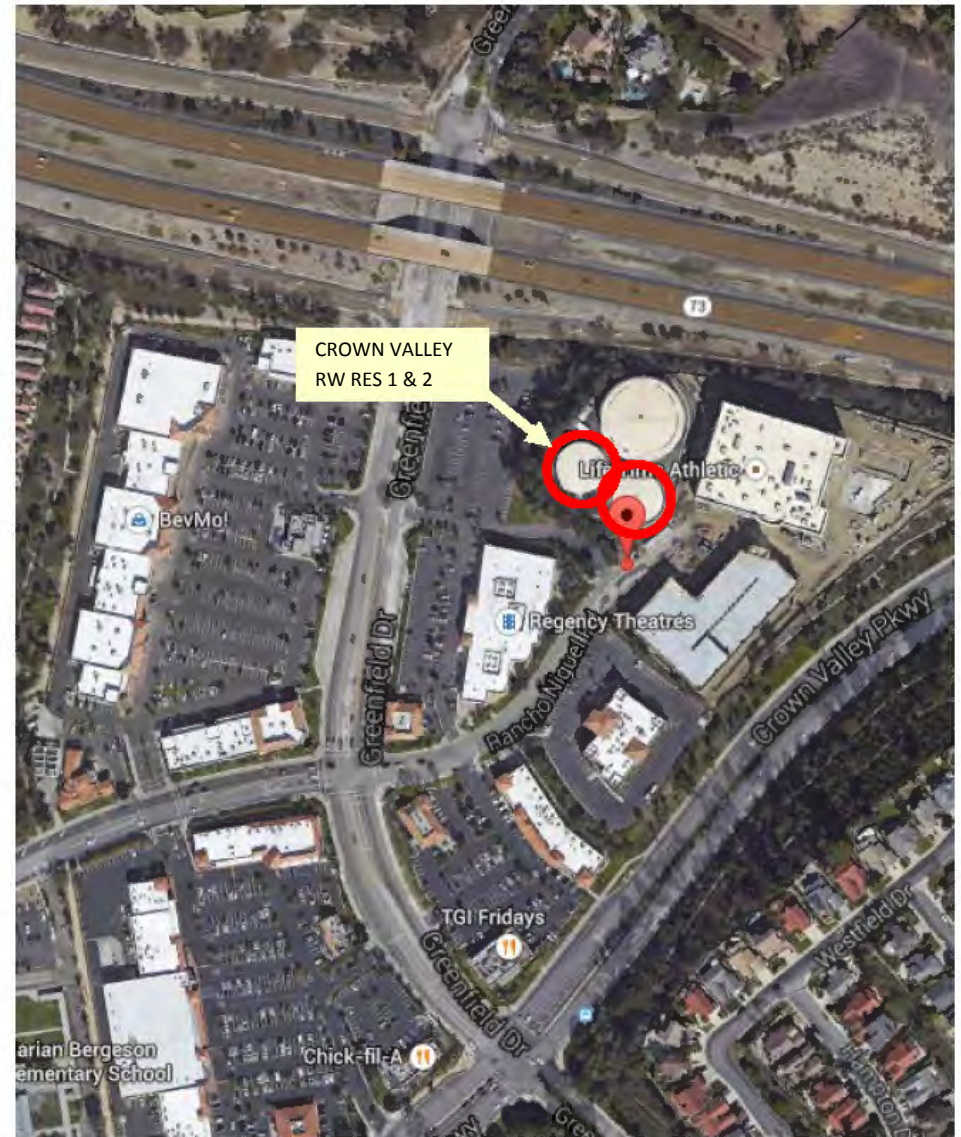
Project Description: Re-coat the interior and exterior of steel reservoirs and construct safety improvements as recommended in Harper & Associates' assessment report and the Steel Tank assessment Final Report.

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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$36,000
CEQA Compliance	Exempt
Construction Contract	\$1,660,435
Inspection/Other	\$149,000
Total Project Budget	\$1,845,435



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.

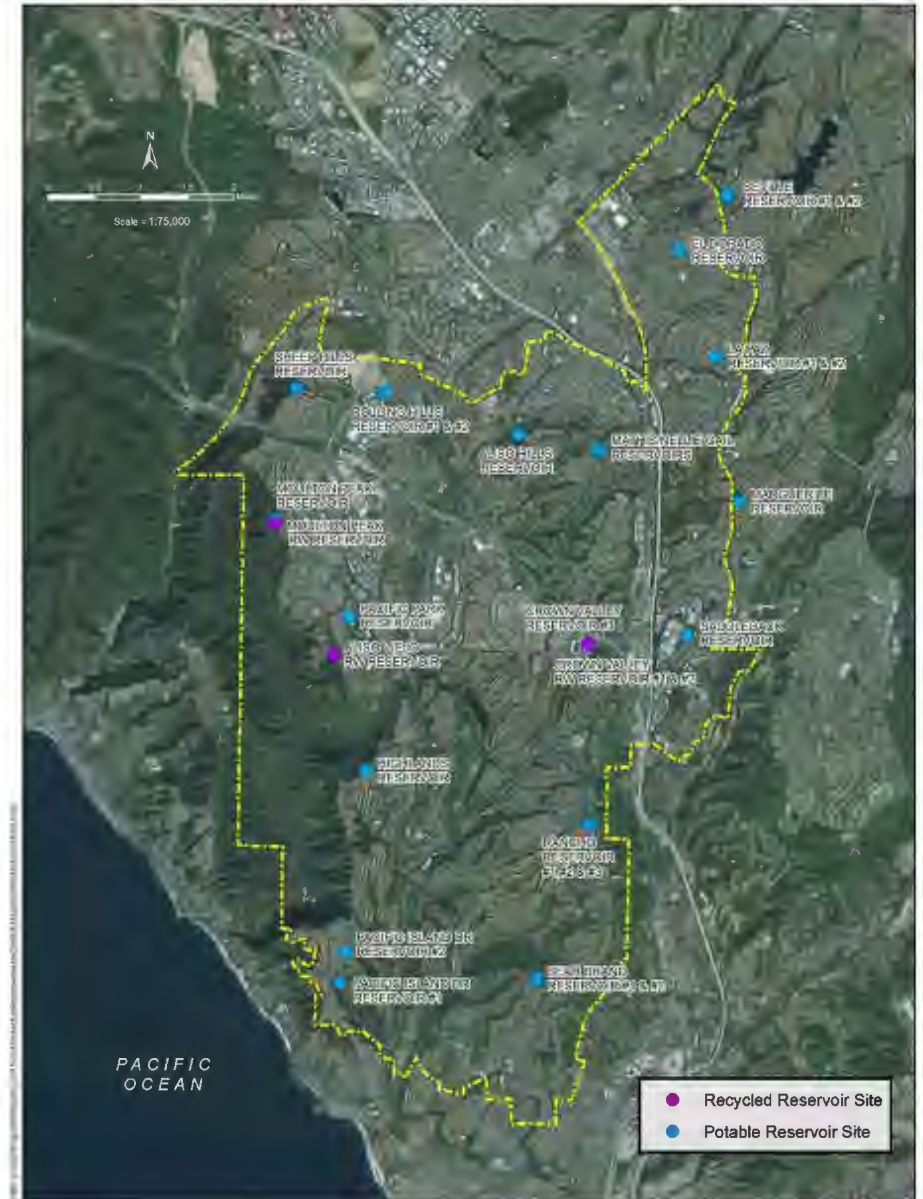
Project Need: A fall protection system is required per Cal/OSHA to walk on top of the reservoirs in areas without guardrails. District staff require access to these areas to perform maintenance activities. The 23 potable water and 3 recycled water reservoirs do not currently have full perimeter guardrails 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	\$0
CEQA Compliance	Exempt
Construction Contract	\$190,745
Legal, District Labor	\$15,000
Total Project Budget*	\$205,745

*Note: **\$173,229** related to potable and **\$32,516** related to recycled



Capital Improvement Program – Project Description

Project No: 2016.004, 2016.005

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: In Construction

Estimated Project Amount:

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



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: 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: In Design

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: *Electrical System Improvements - RW*

Project Location: District-wide

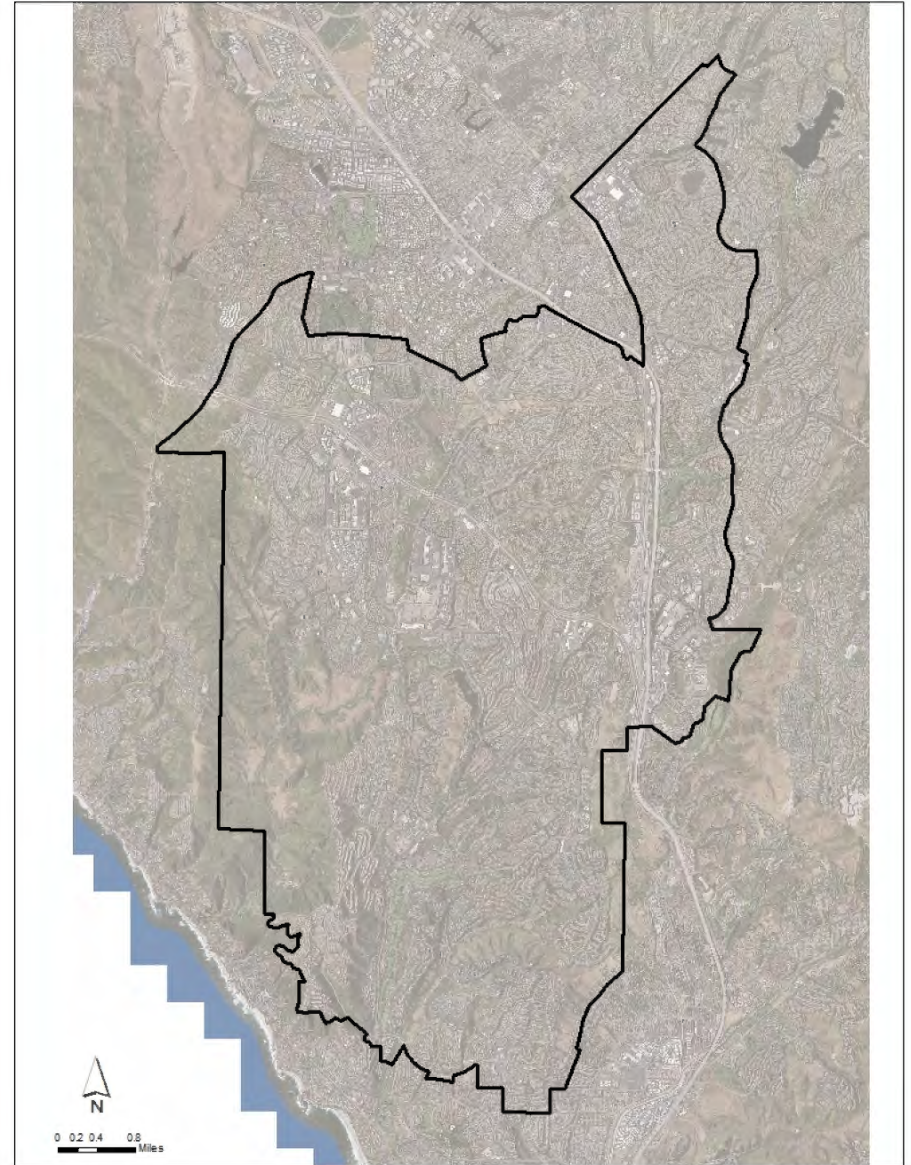
Project Description: Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

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 water stations, 3 related to recycled water stations and 3 related to wastewater 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	\$225,000
CEQA Compliance	Exempt
Construction Contract	\$950,000
Inspection/Fees/Overtime	\$175,000
Total Project Budget	\$1,350,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 6

Project Name: *Recycled Water Retrofits*

Project Location: District-wide

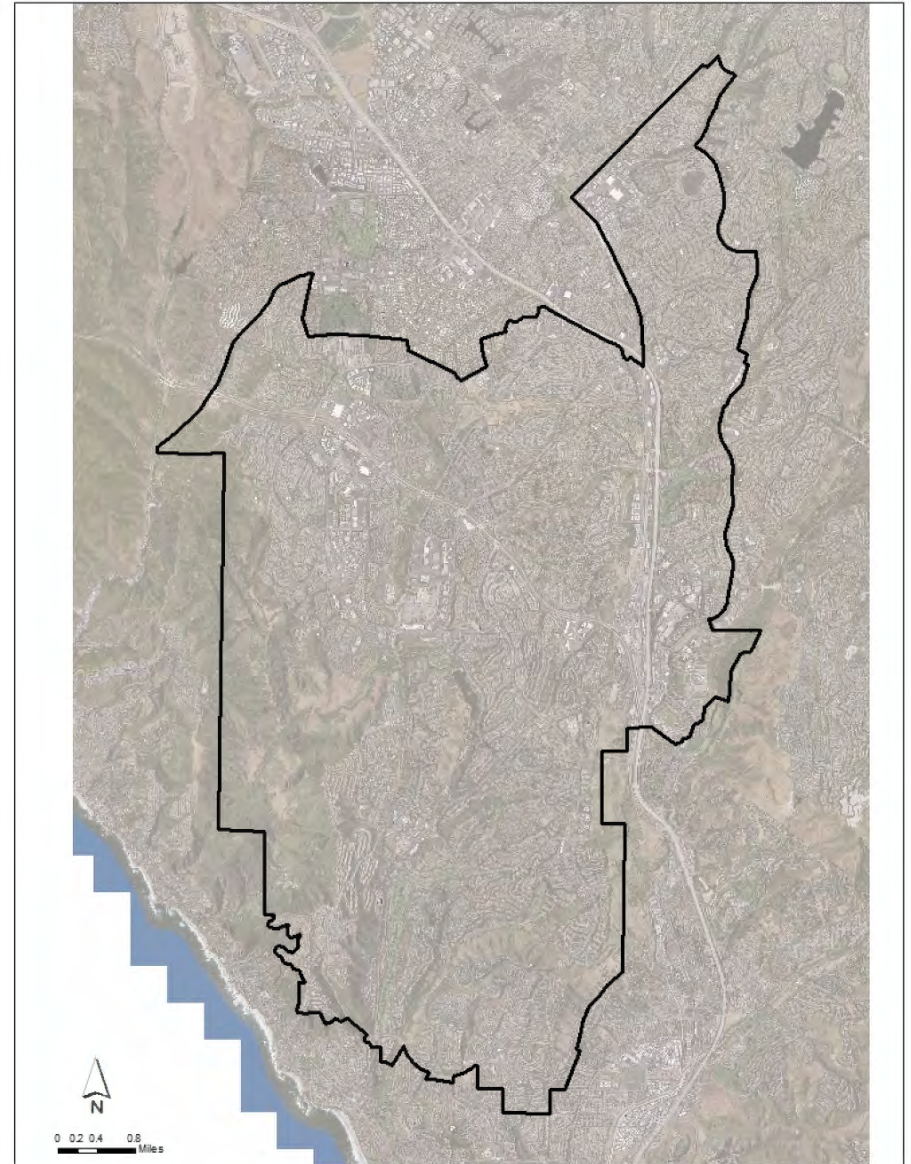
Project Description: Install recycled water service connection and irrigation pumps.

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
Total Project Budget	\$450,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: Reservoir Recoating Program – RW

Project Location: District-wide

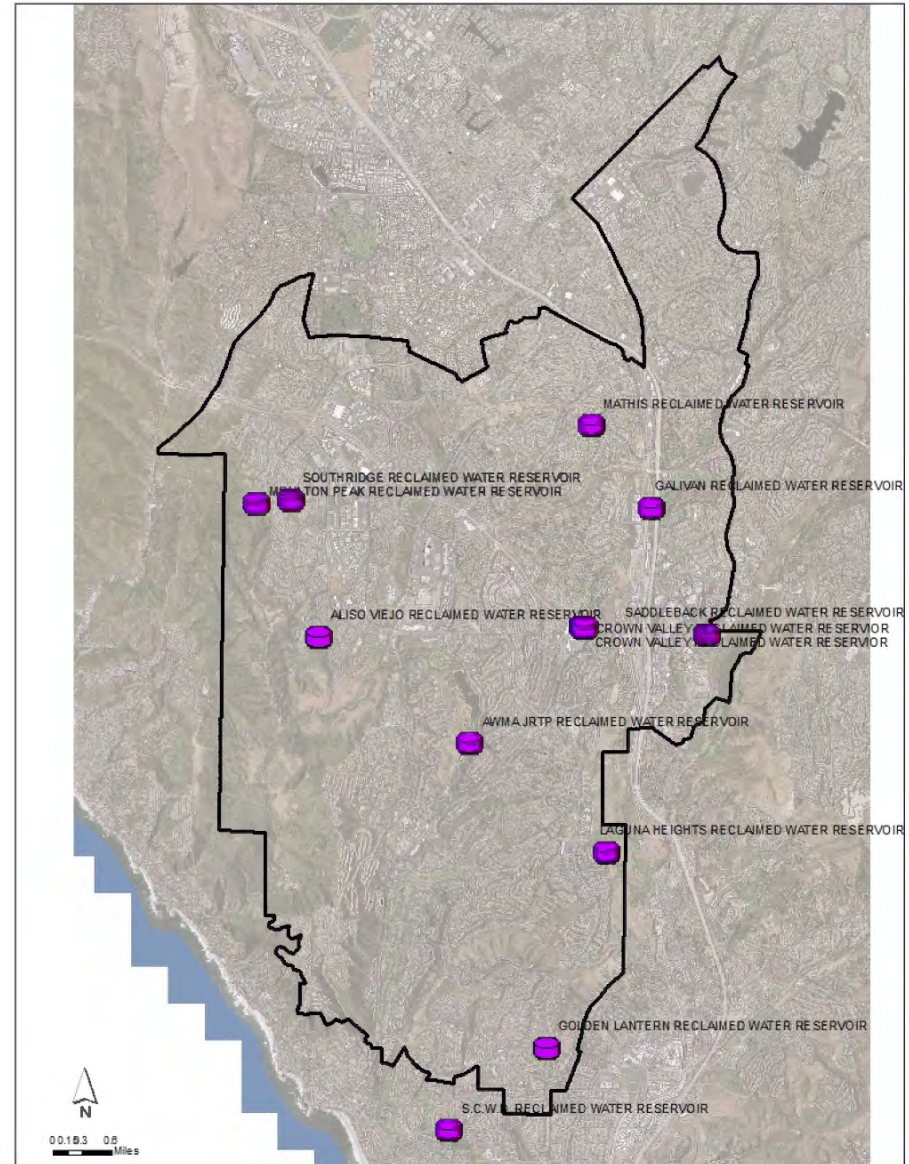
Project Description: Recoat the interior and exterior of steel reservoirs in the recycled system.

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
Total Project Budget	\$2,970,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: Steel Tanks Seismic and Structural Retrofit Program - RW

Project Location: District-Wide

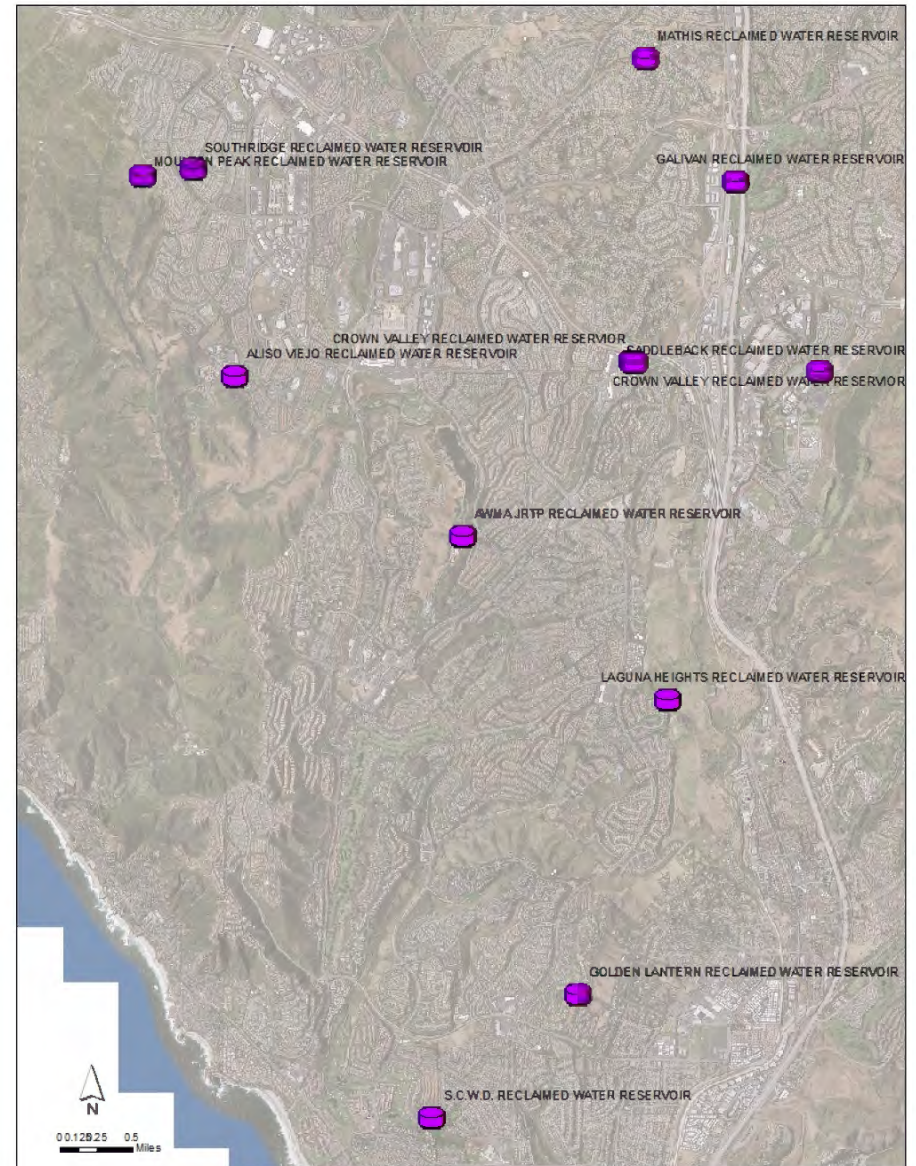
Project Description: Construct the recommendations from Project No. 2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

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, annual program – when individual projects are identified, funds are transferred to the specific project.

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: Valve Replacement Program – RW

Project Location: District-wide

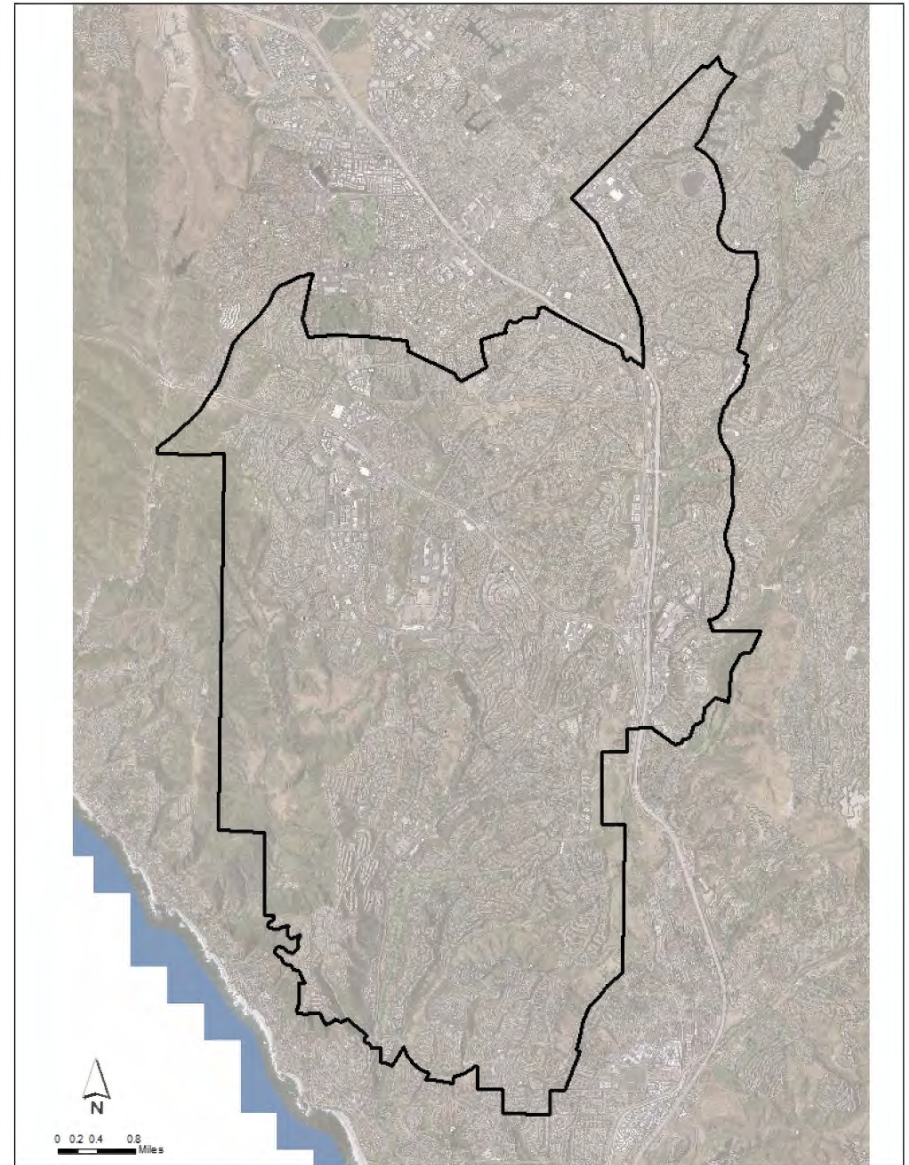
Project Description: Replace failed valves.

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
Total Project Budget	\$1,600,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: Vertical Asset Improvements Program - RW

Project Location: District-wide

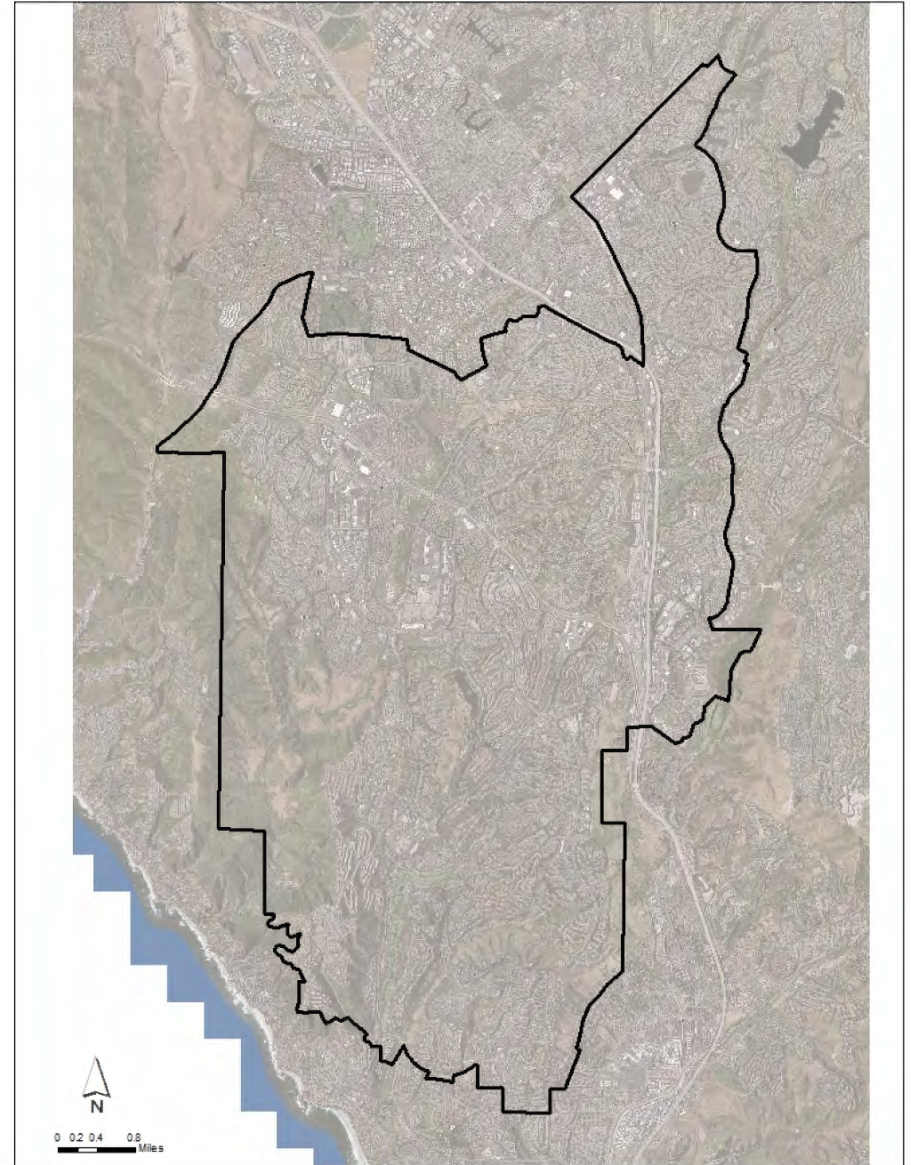
Project Description: In 2015 as part of the Recycled Water Master Plan study, a condition assessment was completed for the vertical assets in the recycled water system, including pump stations and reservoirs. This program incorporates the improvements needed to the vertical assets of the recycled water system as identified for pump stations and concrete reservoirs.

Project Need: The District has ten (10) booster pump stations and five (5) concrete storage reservoirs within the recycled water system. As the equipment and structures age, repairs and replacements are necessary to maintain the system operation.

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

Estimated Project Amount:

Item	Estimated Cost
Design	\$2,679,000
CEQA Compliance	Exempt
Construction Contract	\$12,502,000
Inspection/Fees/Overtime	\$2,679,000
Total Project Budget	\$17,860,000



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	\$145,000
Inspection/Other	\$10,000
Total Project Budget	\$175,000



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
Total Project Budget	\$150,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: Oakgrove Drive RW Pipeline Replacement

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

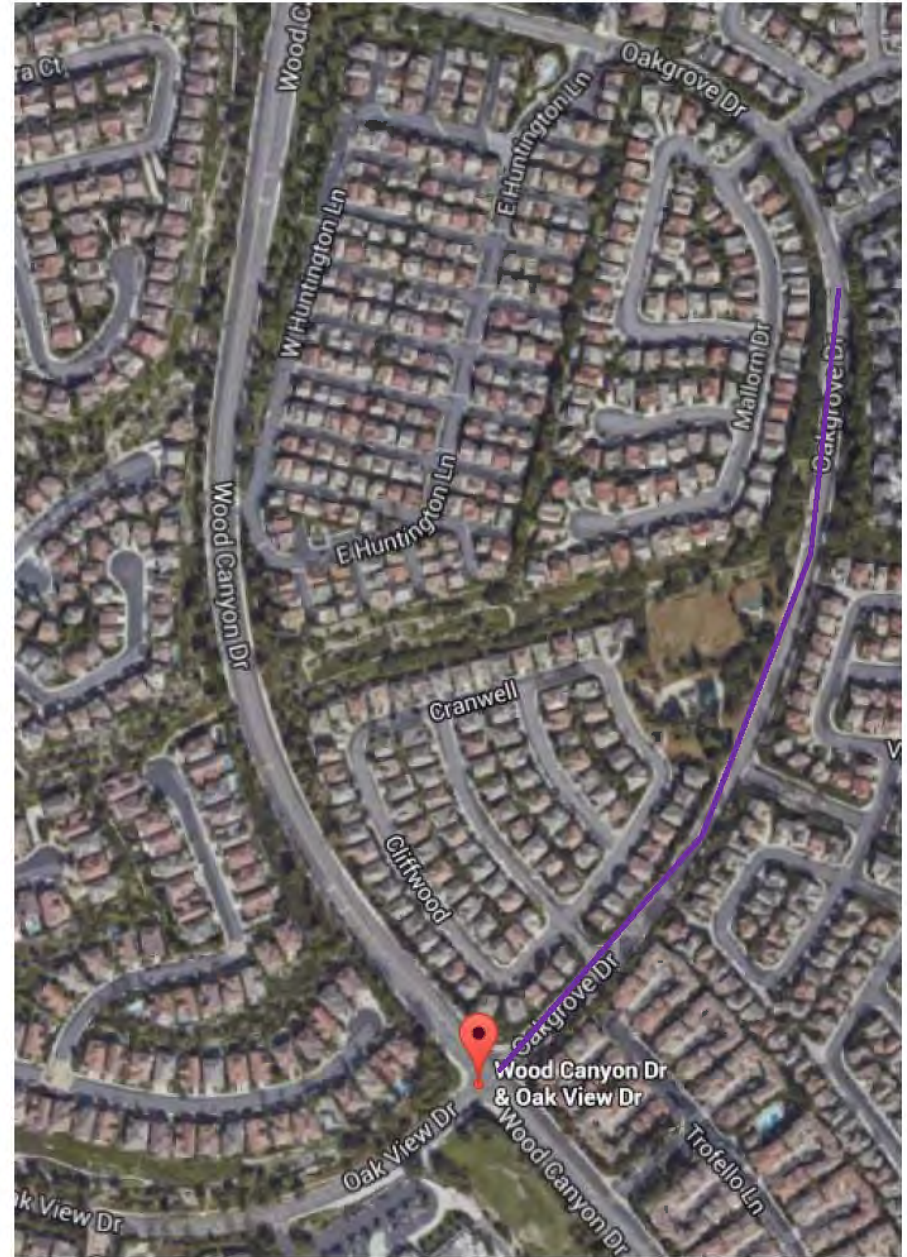
Project Description: Remove and replace approximately 1,500 linear feet of 8-inch DIP recycled water main. Replace all valves along the main.

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
Total Project Budget	\$525,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 6

Project Name: 2017-18 Recycled Water Retrofits

Project Location: District-wide

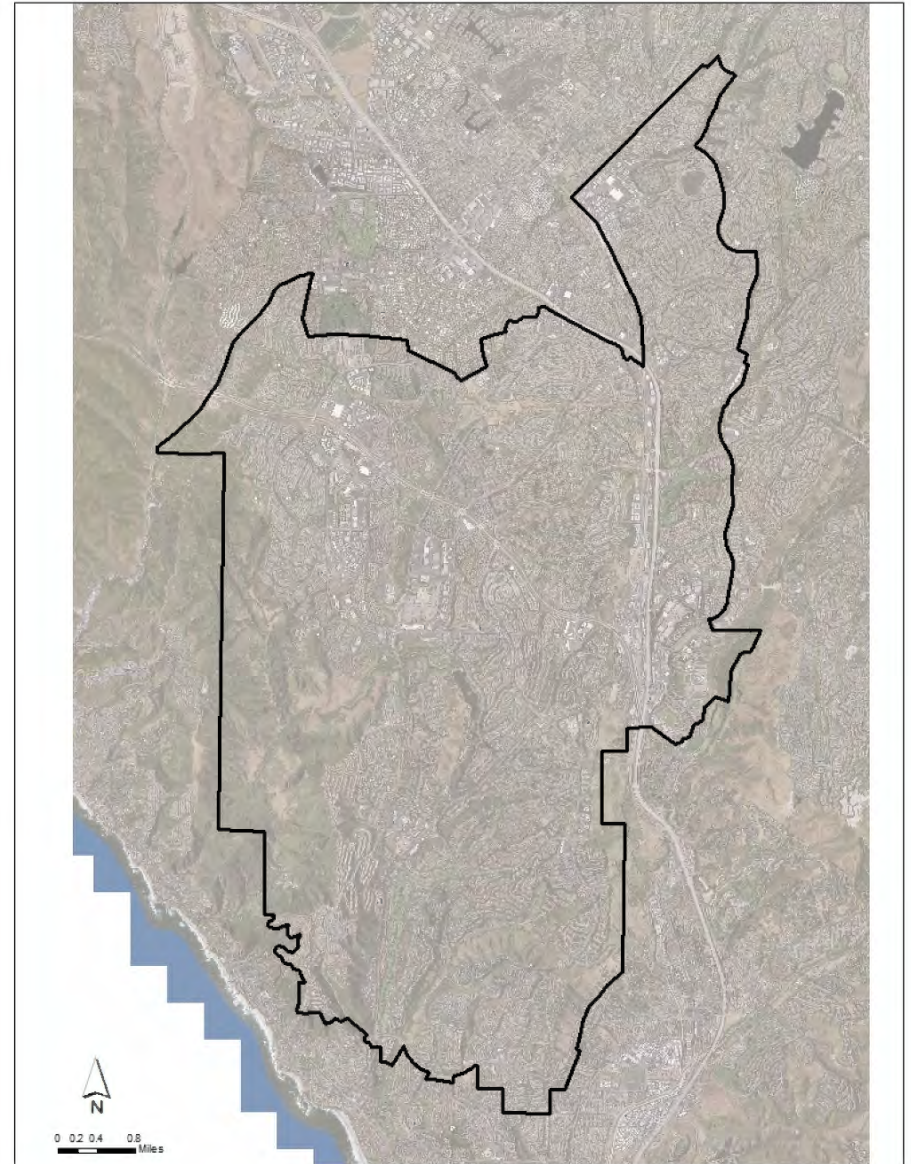
Project Description: Install recycled water service connection and irrigation pumps.

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

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: 2016.023

System: Recycled

Fund: 7

Project Name: *Golden Lantern Reservoir Roof-Wall Joint Seal*

Project Description: Excavate, clean and install sealant measures around the perimeter of the exterior of the reservoir to prevent future root intrusion at the joint. 138' diameter → 445' of joint.

Project Need: During the inspection and cleaning of the reservoir in 2016, significant root intrusion into the reservoir at the joint between the wall and the roof was observed. The roots were removed at that time, but permanent provisions are required to prevent future root intrusion into the reservoir.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	Exempt
Construction Contract	\$300,000
Inspection/Other	\$10,000
Total Project Budget	\$340,000

*Golden Lantern Reservoir ownership is shared with South Coast Water District on a 2-MG / 1-MG basis. Cost reimbursement for this project will occur accordingly.



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: RW Main Installation at I-5 / Oso Creek Crossing

Project Location: San Juan Creek, Mission Viejo, CA

Project Description: Install a new 36" steel casing for a 24" welded steel reclaimed water pipe using a jack-and-bore / tunneling method for the future expansion of the reclaimed water system between the Galivan Pump Station to the Upper Oso Reservoir.

This project to be completed simultaneously with 2017.tbd, PW Main Replacement at I-5 / Oso Creek Crossing.

Project Need: Expansion of RW Main system is required to maximize use of the Upper Oso Reservoir for seasonal RW storage. Existing 8" and 12" pipelines limit ability to send recycled water to Upper Oso.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$175,000
CEQA Compliance	\$50,000
Construction Contract	\$1,200,000
CM/Inspection/Permits/Other	\$75,000
Total Project Budget	\$1,500,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: RW Main Replacement from Galivan PS to La Paz PS

Project Location: Mission Viejo, CA

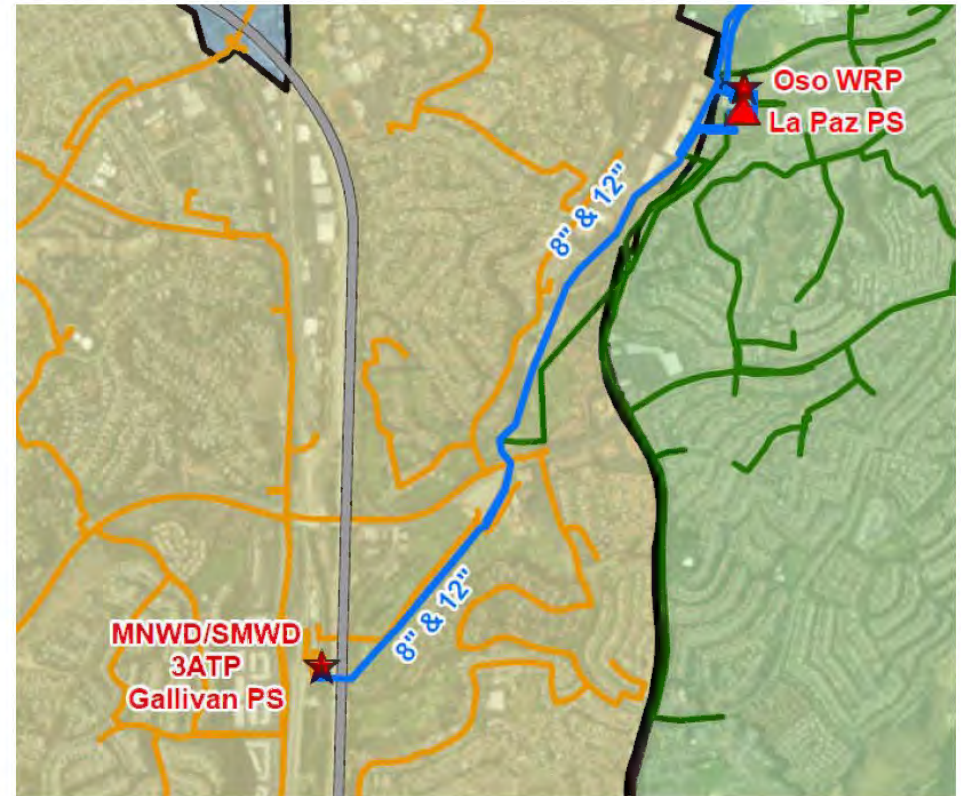
Project Description: Replace existing 8" and 12" RW Main Pipelines with new 24" RW Pipeline.

Project Need: Existing 8" and 12" pipelines have failed repeatedly and are becoming maintenance intensive. Pipelines are also undersized for current RW system demands.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$1,260,000
CEQA Compliance/Legal	\$420,000
Construction Contract	\$5,460,000
CM/Inspection/Permits/Other	\$1,260,000
Total Project Budget	\$8,400,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: *RW Reservoir Drainage Improvements at 3 Sites*

Project Location: Golden Lantern RW Reservoir; Laguna Heights RW Reservoir; Saddleback RW Reservoir

Project Description: Golden Lantern: Construct approximately 500 linear feet of 8-inch drain pipe to an 8-inch sanitary sewer main on Point Catalina.

Laguna Heights: Construct approximately 200 linear feet of 12-inch drain pipe to a sanitary sewer manhole on Knob Hill Rd.

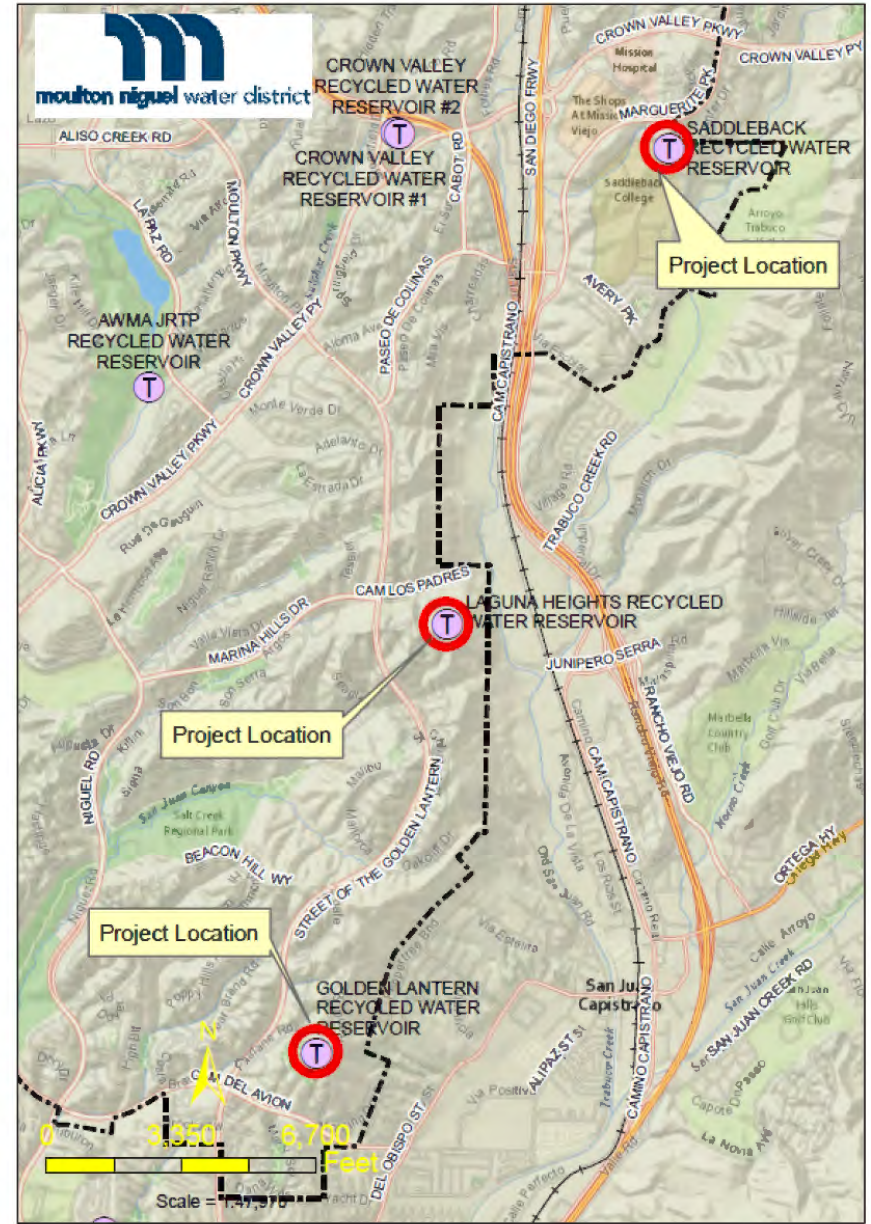
Saddleback: Acquire new easements and construct approximately 550 linear feet of 6-inch drain pipe to a SMWD sewer manhole on Hillcrest.

Project Need: The drains for the Golden Lantern, Laguna Heights RW and Saddleback RW Reservoirs were originally designed and constructed to be connected to the storm drain systems. Since the time of construction, regulations have changed such that reclaimed water is to be drained to the sanitary sewer system. The drainage improvements would allow for the reclaimed water to be drained to the sewer system as required by current regulations for reservoir cleaning operations.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$125,000
CEQA Compliance	Exempt
Construction Contract	\$560,000
Inspection/Other	\$40,000
Total Project Budget	\$725,000



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

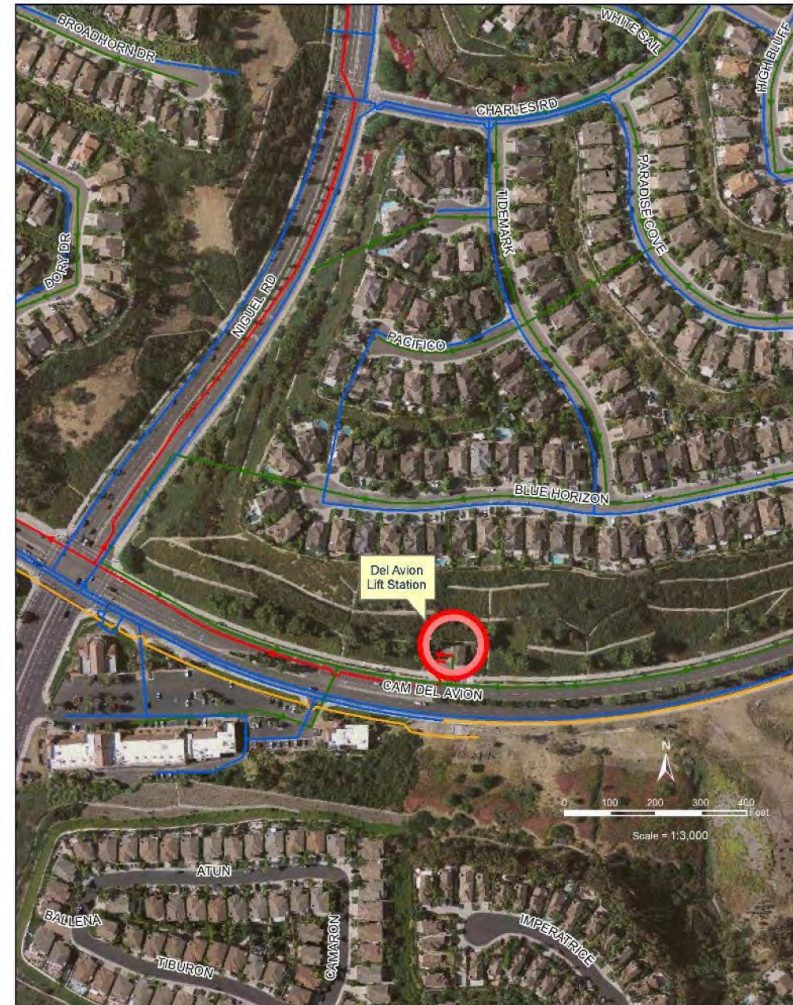
Project Description: Replace 1990 Cummins Natural Gas-Propane 250 KW backup generator.

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

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$486,090
Inspection/Other	\$15,000
Total Project Budget	\$576,090



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

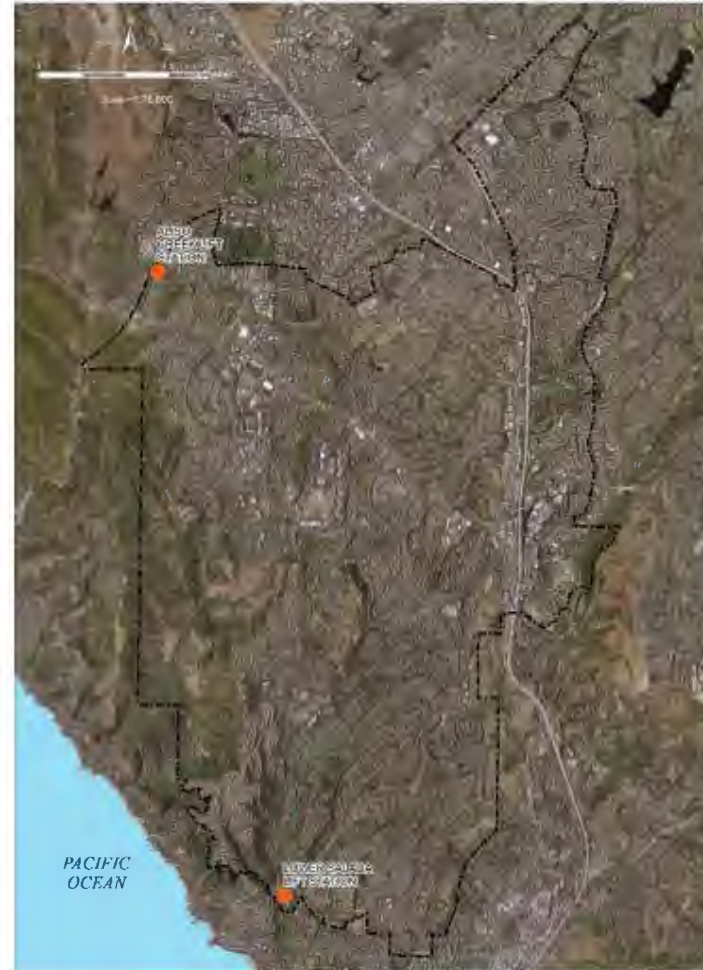
Project Description: Replace obsolete utility service sections. Perform miscellaneous code updates and extended maintenance on switchgear. Replacement sections will have Thermal Magnetic Breakers in lieu of fused disconnects. This project will require approximately 1 week of bypass pumping.

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
Total Project Budget	\$216,700



Lower Salada and Aliso Creek LS

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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$20,000
CEQA Compliance	Exempt
Construction Contract	\$96,800
Inspection/Other	\$15,000
Total Project Budget	\$131,800



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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	Exempt
Construction Contract	\$321,420
Inspection/Other	\$10,000
Total Project Budget	\$396,420



Lower Boundary Oak LS Upgrade

Capital Improvement Program – Project Description

Project No: 2016.012

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

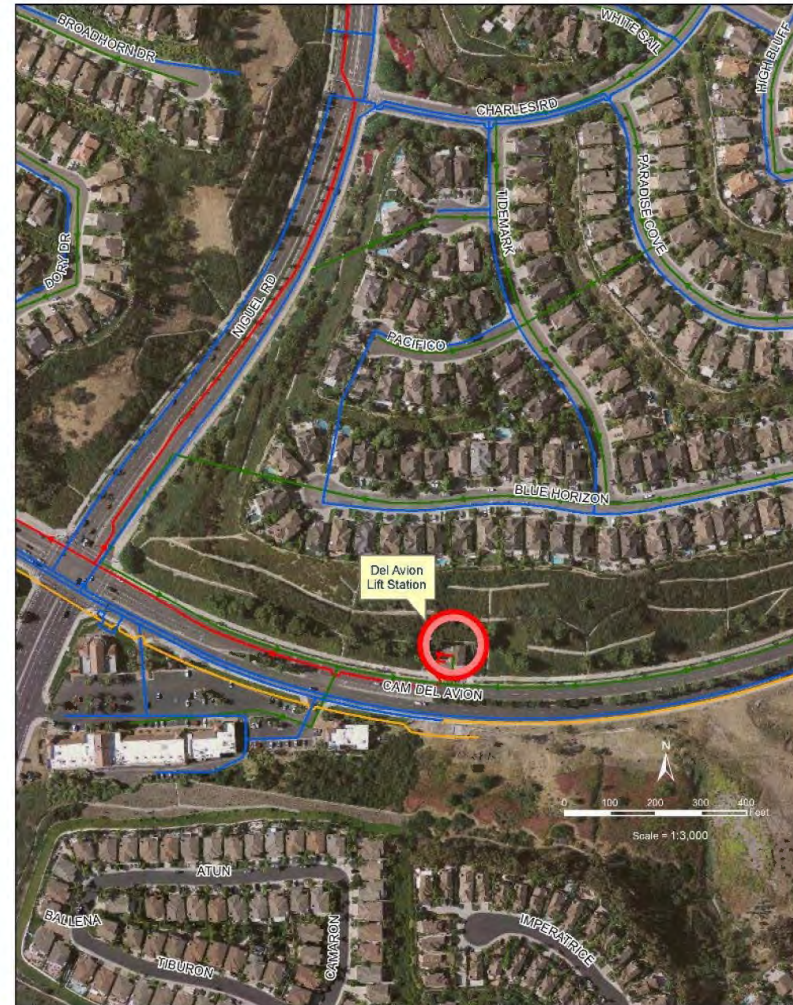
Project Description: Add “Muffin Monster” style grinders to the suction piping of Pumping Units 1 and 2.

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: In construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$150,000
Inspection/Other	\$5,000
Total Project Budget	\$180,000



Capital Improvement Program – Project Description

Project No: 2016.016

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: In Construction

Estimated Project Amount:

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

*Santa Margarita Water District owns ~28% of the capacity in Plant 3A. Cost reimbursement for this project will occur accordingly.



Capital Improvement Program – Project Description

Project No: 2016.019

System: Wastewater

Fund: 7

Project Name: *San Juan Capistrano Railroad Passing Siding Air-Vac Relocations*

Project Location: Metrolink Railroad (San Juan Capistrano)

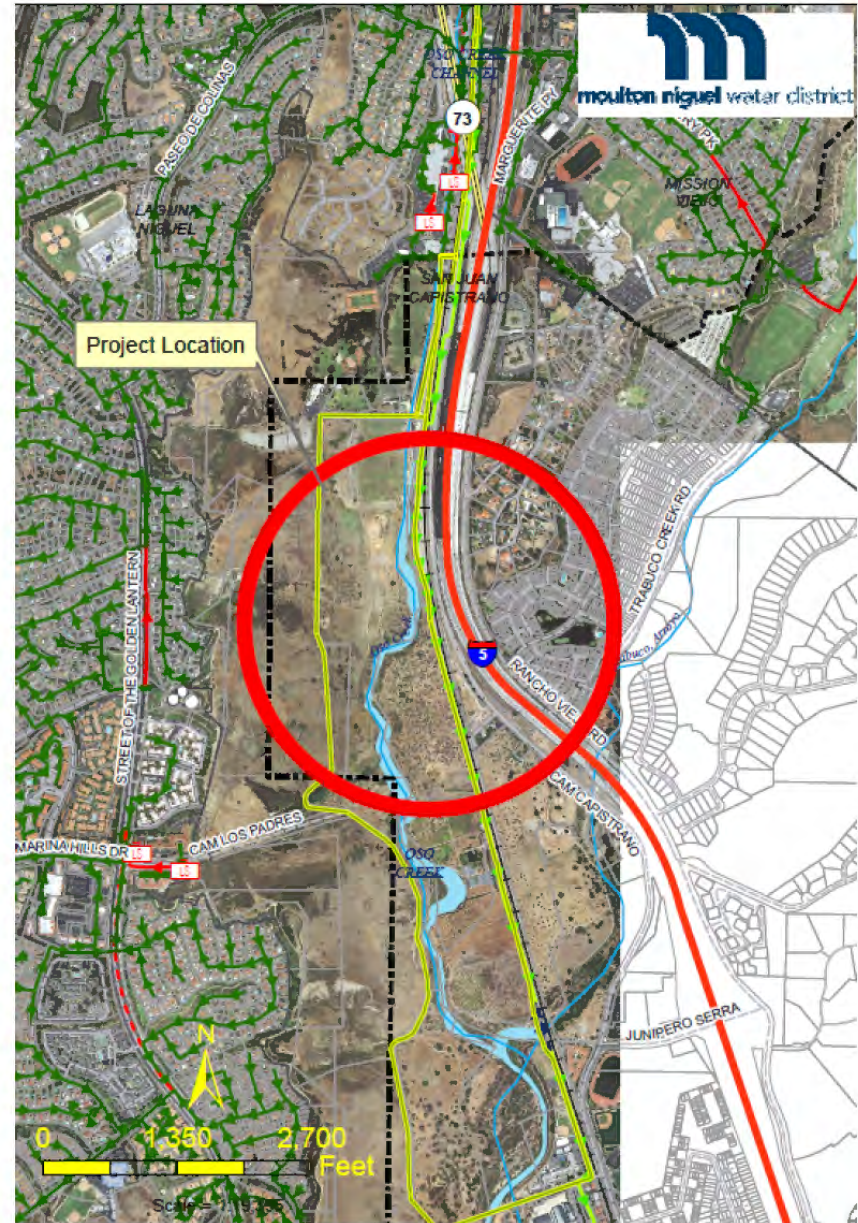
Project Description: Relocation of 3 Air-Vacs and CP test stations and miscellaneous potholing to locate the line. The work will also include potholing to locate the exact locations of the line.

Project Need: Metrolink is planning to construct a passing siding railroad track which impacts the location of 3 Air-Vacs and CP test stations.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$75,000
Inspection/Other	\$25,000
Total Project Budget	\$100,000



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: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$132,000
CEQA Compliance	Exempt
Construction Contract	\$660,000
Inspection/Other	\$8,000
Total Project Budget	\$800,000



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	\$800,000
Inspection/Other	\$20,000
Total Project Budget	\$950,000



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 force mains. Approximate length of new force mains is 9,200 linear feet each. Rehabilitate and repurpose existing force mains to become supplemental effluent transmission mains for Regional Treatment Plant, including connection to existing ETM at Alicia Pkwy.

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	\$700,000
CEQA Compliance	\$500,000
Construction Contract	\$8,200,000
Inspection/Other	\$600,000
Total Project Budget	\$10,000,000



Capital Improvement Program – Project Description

Project No: 2016.001

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.

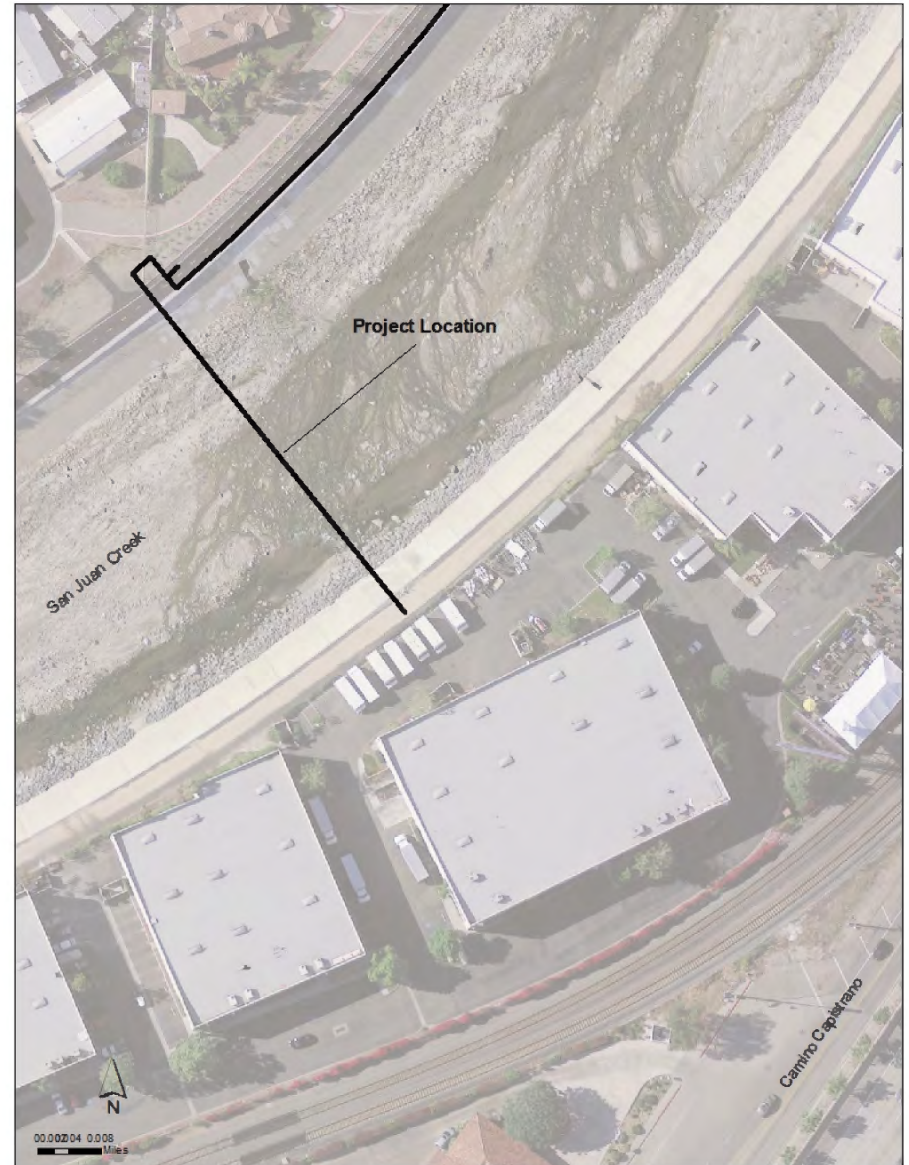
Project Need: The County is requiring removal of this pipeline prior to closing out the encroachment permit for the ETM Replacement Project.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	\$50,000
Construction Contract	\$125,000
Inspection/Permits/Other	\$50,000
Total Project Budget	\$250,000

*Santa Margarita Water District owns 50% of the capacity of the 30-inch ETM. Cost reimbursement for this project will occur accordingly.



Capital Improvement Program – Project Description

Project No: 2016.006

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: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Geotechnical	\$0
Construction Contract	\$525,000
Other	\$20,000
Special Inspection	\$80,000
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: 2016.008

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: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection/Other	\$25,000
Total Project Budget	\$325,000



North Aliso LS By-pass Replacement

Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: *Electrical System Improvements - Wastewater*

Project Location: District-wide

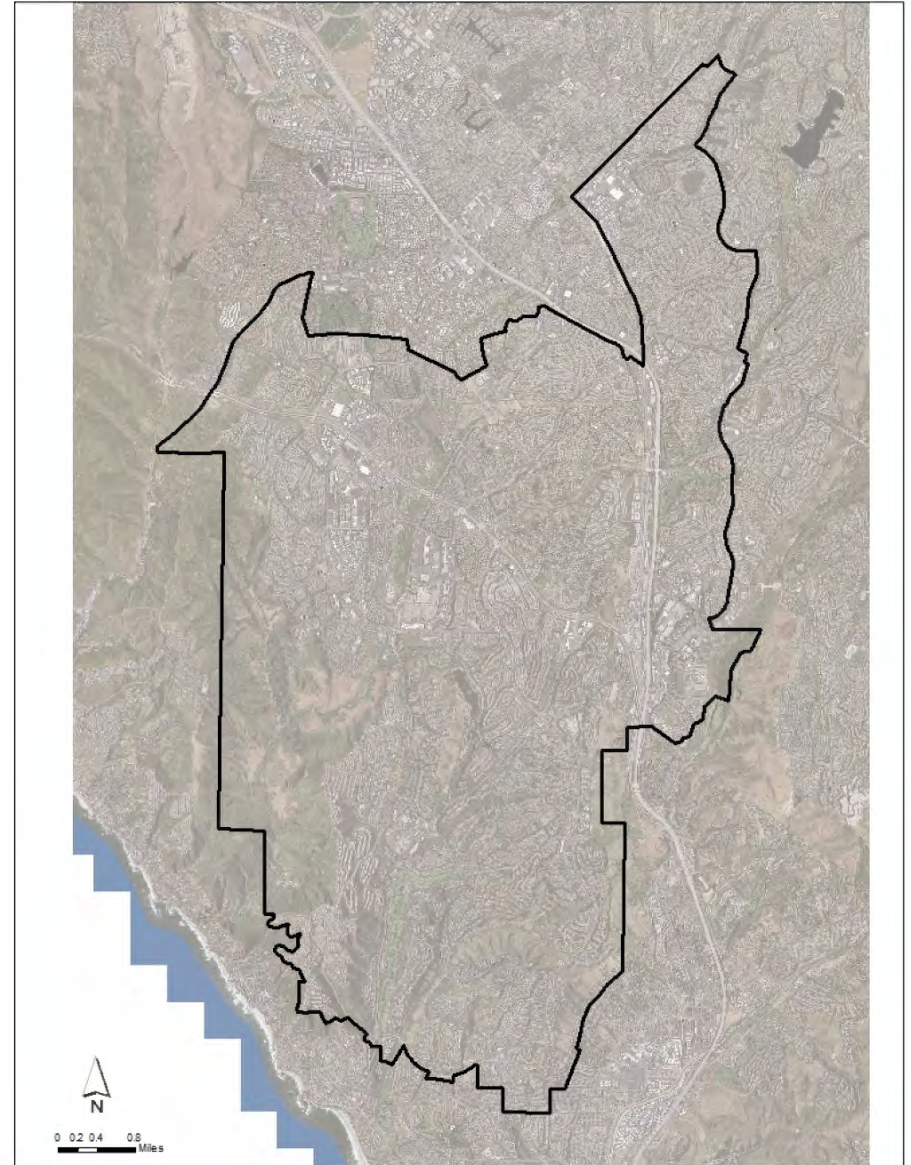
Project Description: Replace utility service sections, motor control centers, and related electrical equipment that have reached the end of their useful life. The projects will often require bypass pumping.

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 water stations, 3 related to recycled water stations and 3 related to wastewater 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	\$175,000
CEQA Compliance	Exempt
Construction Contract	\$725,000
Inspection/Fees/Overtime	\$175,000
Total Project Budget	\$1,075,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: Manhole Rehabilitation Program

Project Location: District-wide

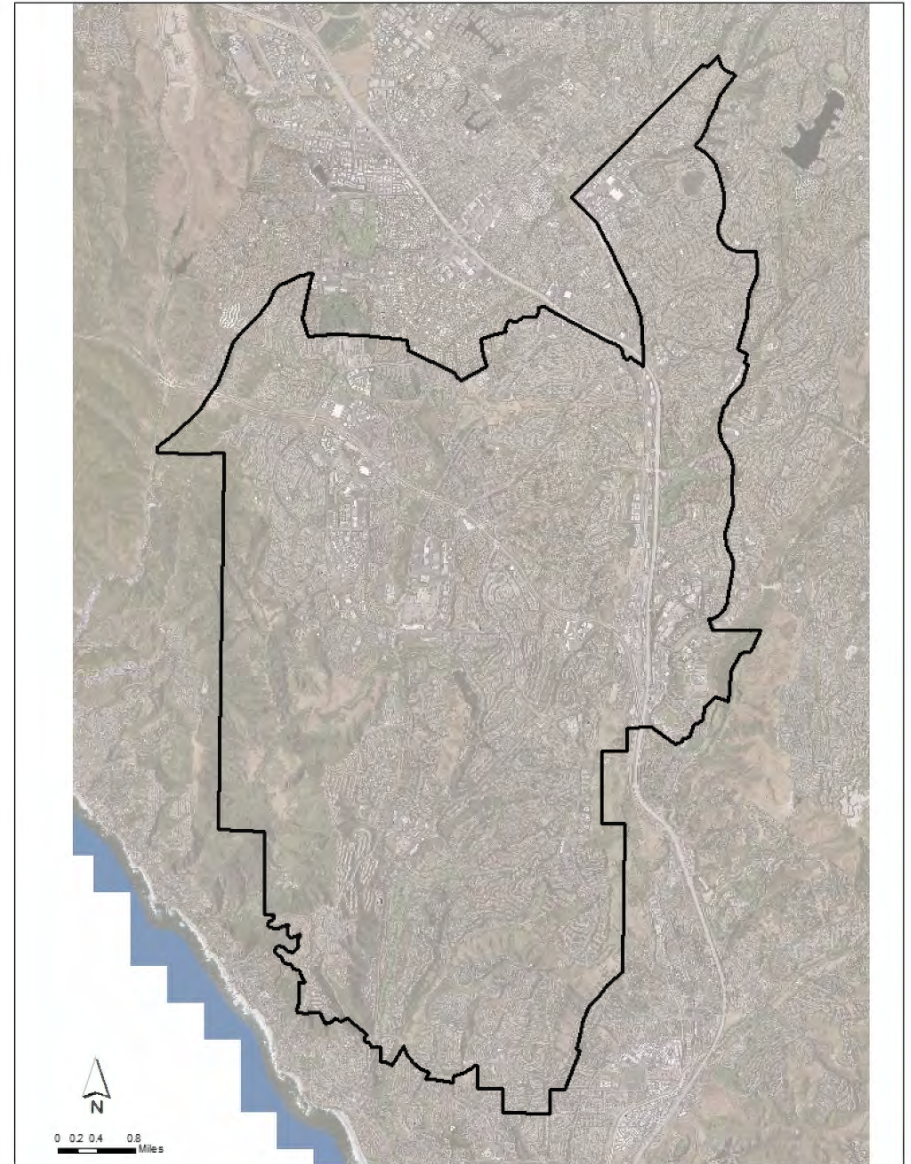
Project Description: Rehabilitate existing sewer manholes.

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	\$3,150,000
Inspection	\$0
Total Project Budget	\$3,150,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: Sewer Lining Program

Project Location: District-wide

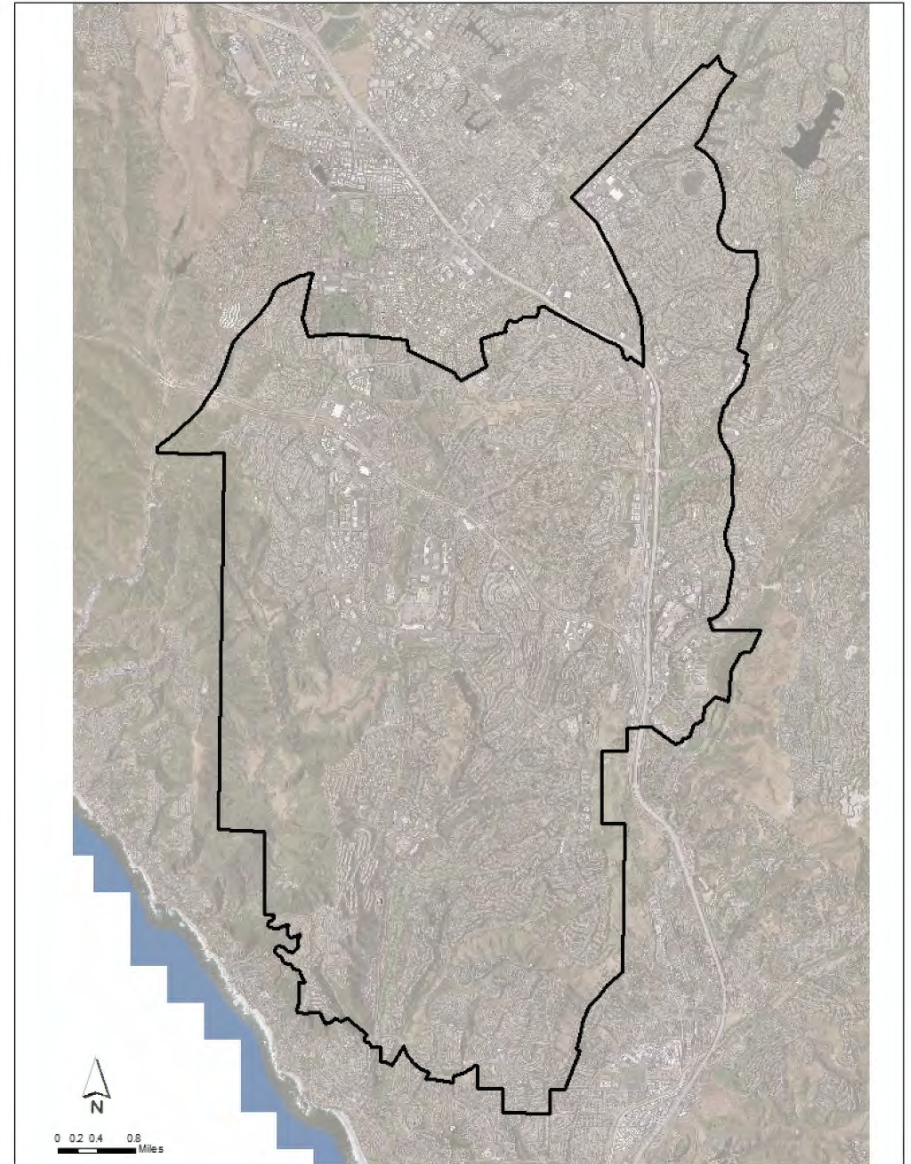
Project Description: Lining of sewer lines to extend useful life.

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
Total Project Budget	\$2,400,000



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 outlining areas by Oso Creek, City of San Juan Capistrano.

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

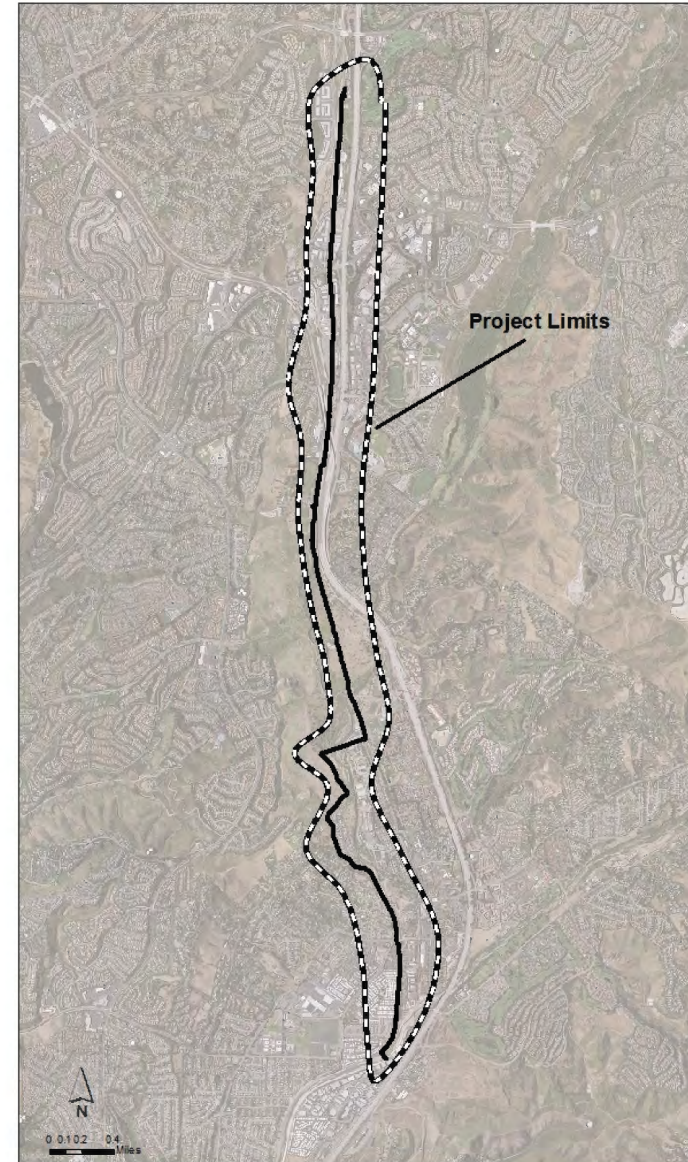
Project Need: The 3A outfall line was constructed as a feed line from San Juan Capistrano to Mission Viejo Lake. The District purchased the facility and changed its use from the intended design. There is an insufficient number of isolation valves along a five mile reach. If there is a failure along this 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
Total Project Budget	\$450,000

*Santa Margarita Water District owns 50% of the capacity of the Plant 3A Outfall Line. Cost reimbursement for this project will occur accordingly.



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

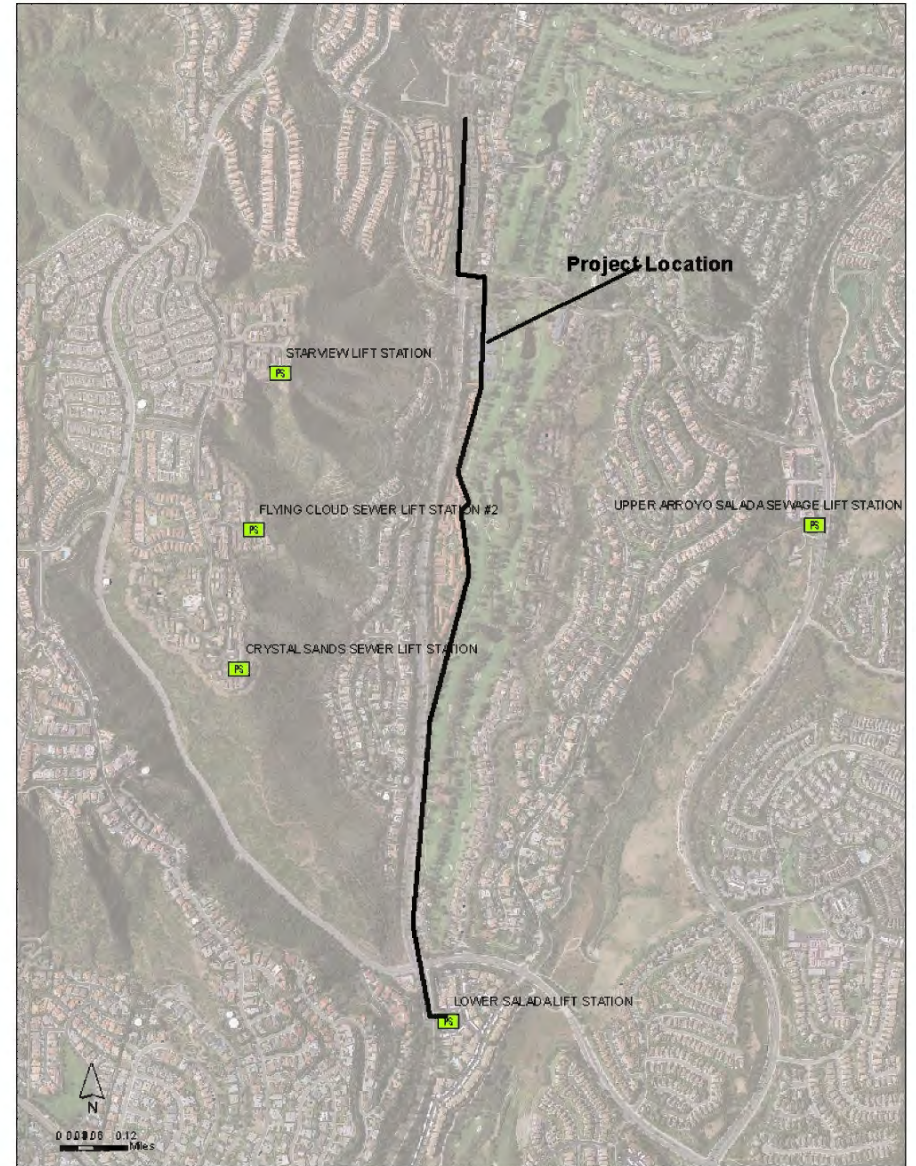
Project Description: Abandon existing 12" class 100 ACP force main and construct new force main in Crown Valley Parkway. Approximate length of new force main is 9,000 linear feet. A moratorium is in effect along this part of Crown Valley Parkway until 2020.

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
Total Project Budget	\$5,900,000



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
Total Project Budget	\$2,000,000

*Santa Margarita Water District owns 50% of the capacity of the Plant 3A ETM. Cost reimbursement for this project will occur accordingly.



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

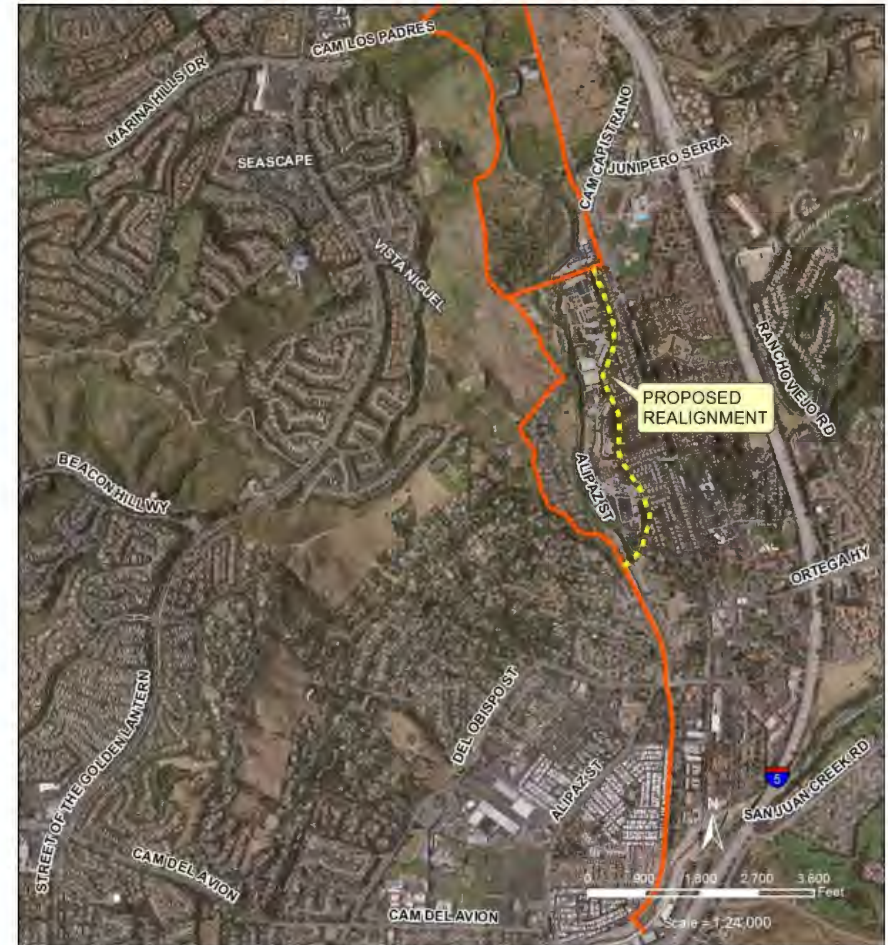
Project Description: Abandon the existing ETM from Station 221+00 to Station 298+00 and construct a 30-inch ductile iron pipe along Avenida De La Vista, approximately 4,700 feet from Oso Road to the cul-de-sac. The alignment will proceed 1,000 feet on Trabuco Creek Trail until it is jacked and bored 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
Total Project Budget	\$2,475,000



*Santa Margarita Water District owns 50% of the capacity of the Plant 3A Outfall Line. Cost reimbursement for this project will occur accordingly.

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
Total Project Budget	\$3,500,000

*Santa Margarita Water District owns 50% of the capacity of the Plant 3A Outfall Line. Cost reimbursement for this project will occur accordingly.



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: *Plant 3A Effluent Transmission Main (ETM) – Pipeline Replacement along the San Juan and Trabuco Creek Channel Levee Protection Project Phase VIII*

Project Location: San Juan Capistrano

Project Description: Replacement of the existing 20-inch ETM pipeline with a new 30-inch along the San Juan and Trabuco Creek Channel Levees.

Project Need: The need for this project will be determined during construction of sheet piles along the creek levees. Replacement of the pipeline is contingent on construction the need for relocation of the existing pipeline or repair of the existing pipeline that may be damaged during construction of sheet piles as part of the Orange County Flood Control Phase VIII project

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$900,000
Inspection	\$0
Total Project Budget	\$900,000



*Santa Margarita Water District owns 50% of the capacity of the Plant 3A Outfall Line. Cost reimbursement for this project will occur accordingly.

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
Total Project Budget	\$530,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 14

Project Name: *Lift Stations Generator Emergency Connections*

Project Location: 7 Lift Stations: Regional, Lower Salada, Aliso Creek, Southwing, San Joaquin, Boundary Oak, North Aliso.

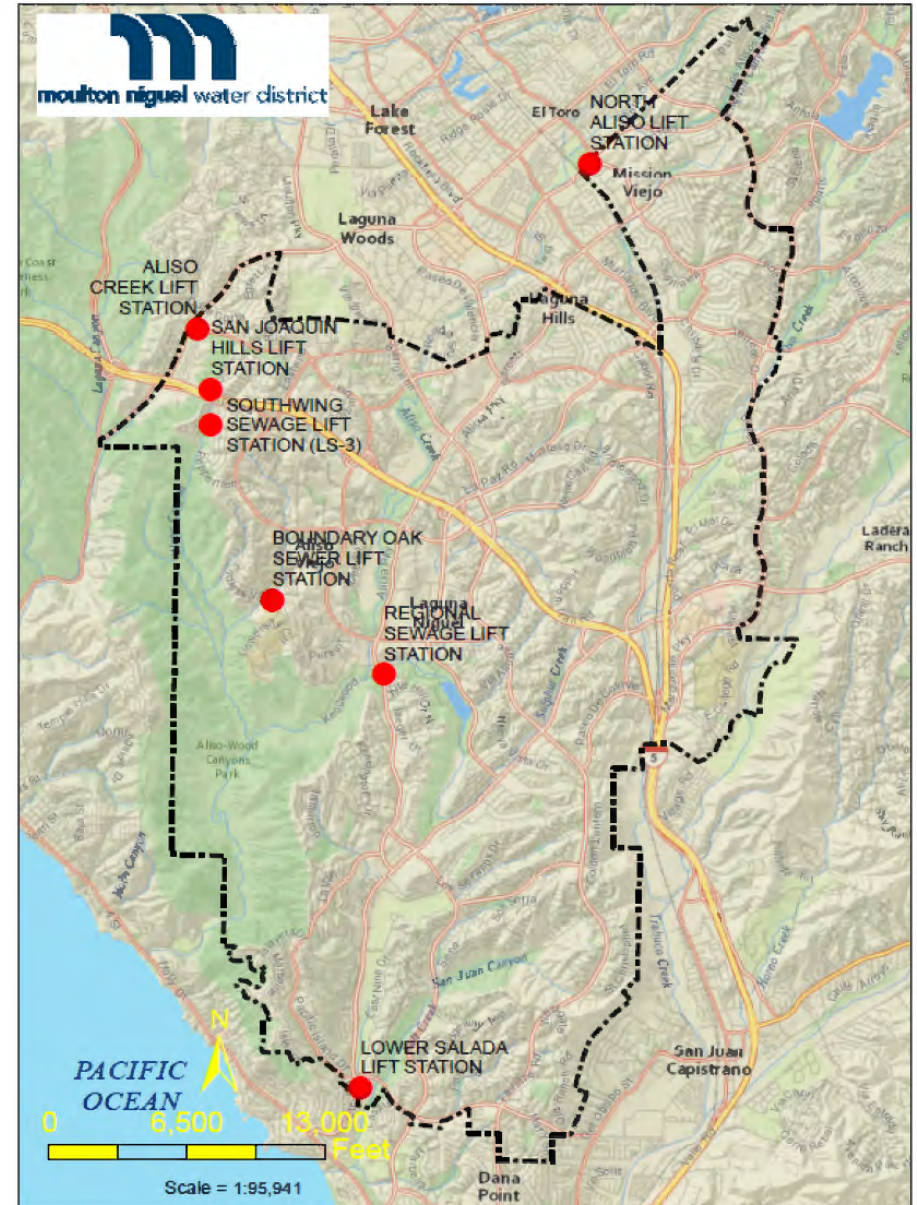
Project Description: Install new emergency generator connections at nine facilities.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$170,000
Inspection/Other	\$5,000
Total Project Budget	\$200,000



Lift Station Location Map

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*

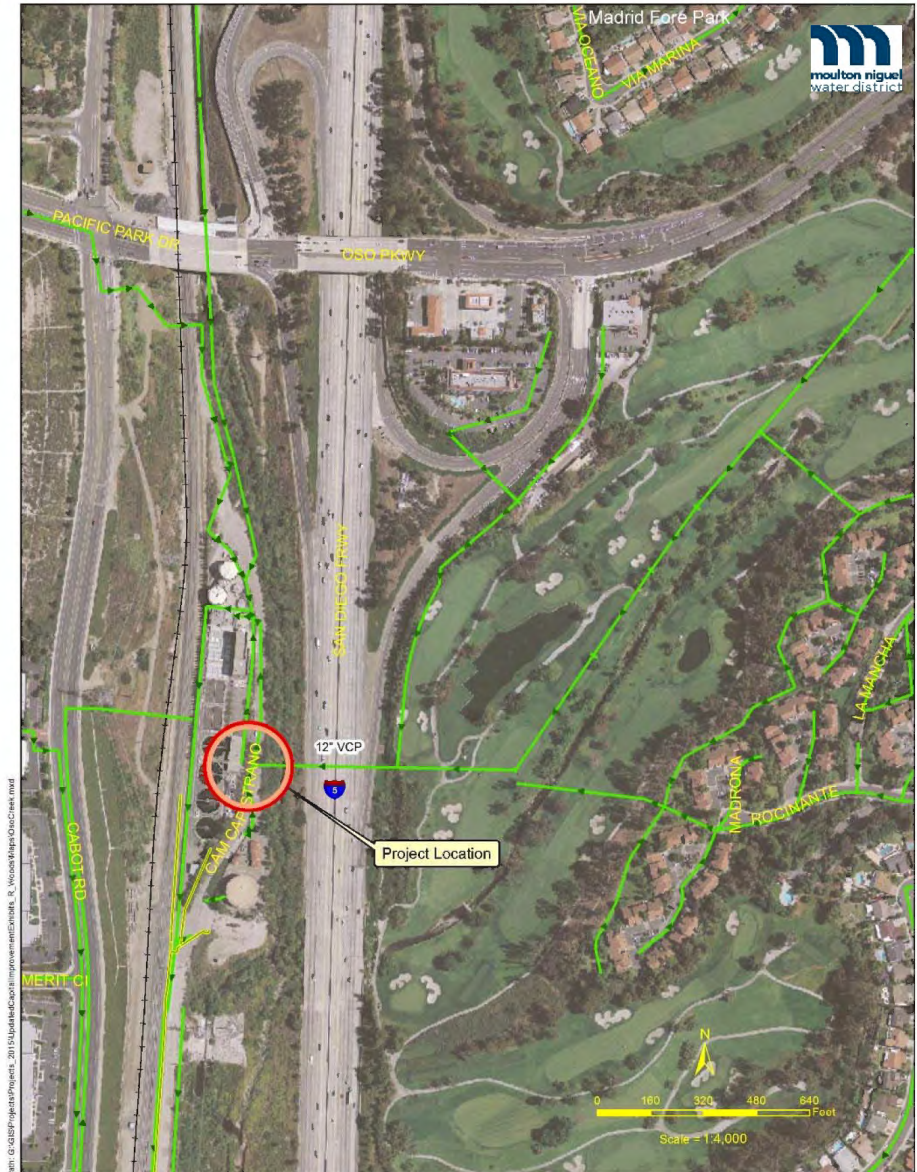
Project Description: Construct approximately 3,400 feet of new sewer line. This project will involve conventionally installed sewer through a heavily landscaped golf course in addition to a bore and jack under Interstate 5.

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	\$100,000
Total Project Budget	\$2,000,000



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

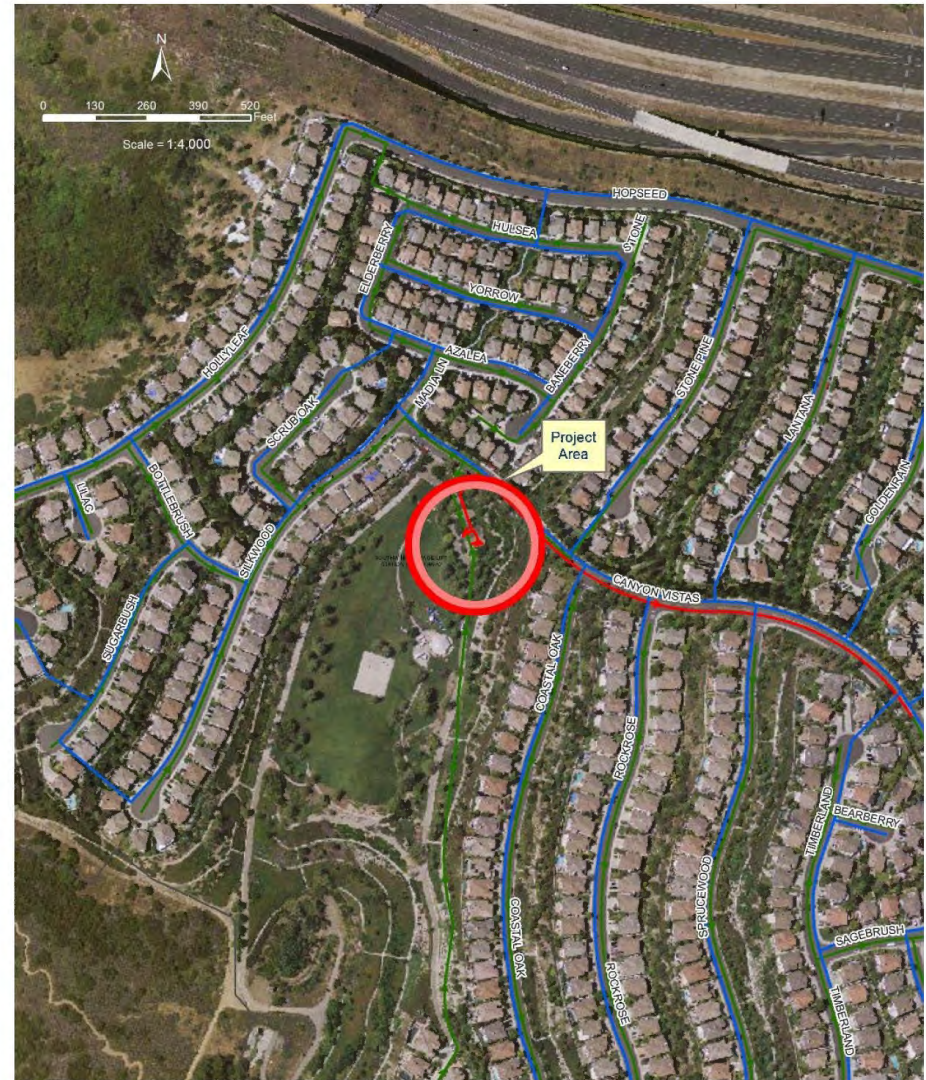
Project Description: Replace 1994 Cummins Propane 264 KW backup generator.

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
Total Project Budget	\$580,000



Southwing LS-Auxiliary Generator Replacement

Capital Improvement Program – Project Description

Project No: 2016.003

System: Wastewater

Fund: 7

Project Name: 2017-18 Manhole Rehabilitations

Project Location: District-wide

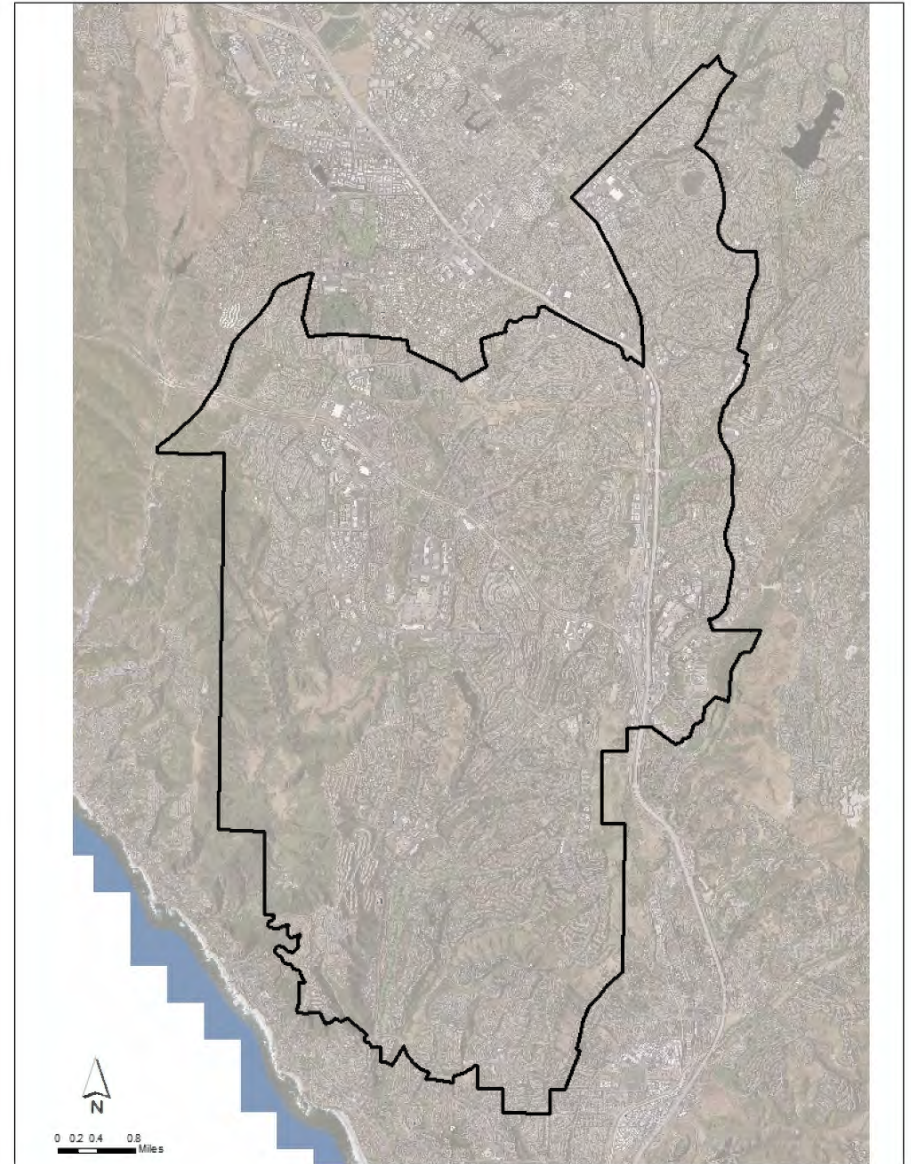
Project Description: Rehabilitate existing sewer manholes.

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 project

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$350,000
Total Project Budget	\$350,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: 2017-18 Sewer Lining

Project Location: Fairgreens Easement (Laguna Niguel), Canterbury Easement (Laguna Niguel), Chester Drive (Laguna Hills), La Mancha Easement (Mission Viejo), Luna Bonita Easement (Laguna Hills), Moro Azul Easement (Mission Viejo), Paseo Del Campo Easement (Laguna Niguel), and Roccinante Easement (Mission Viejo)

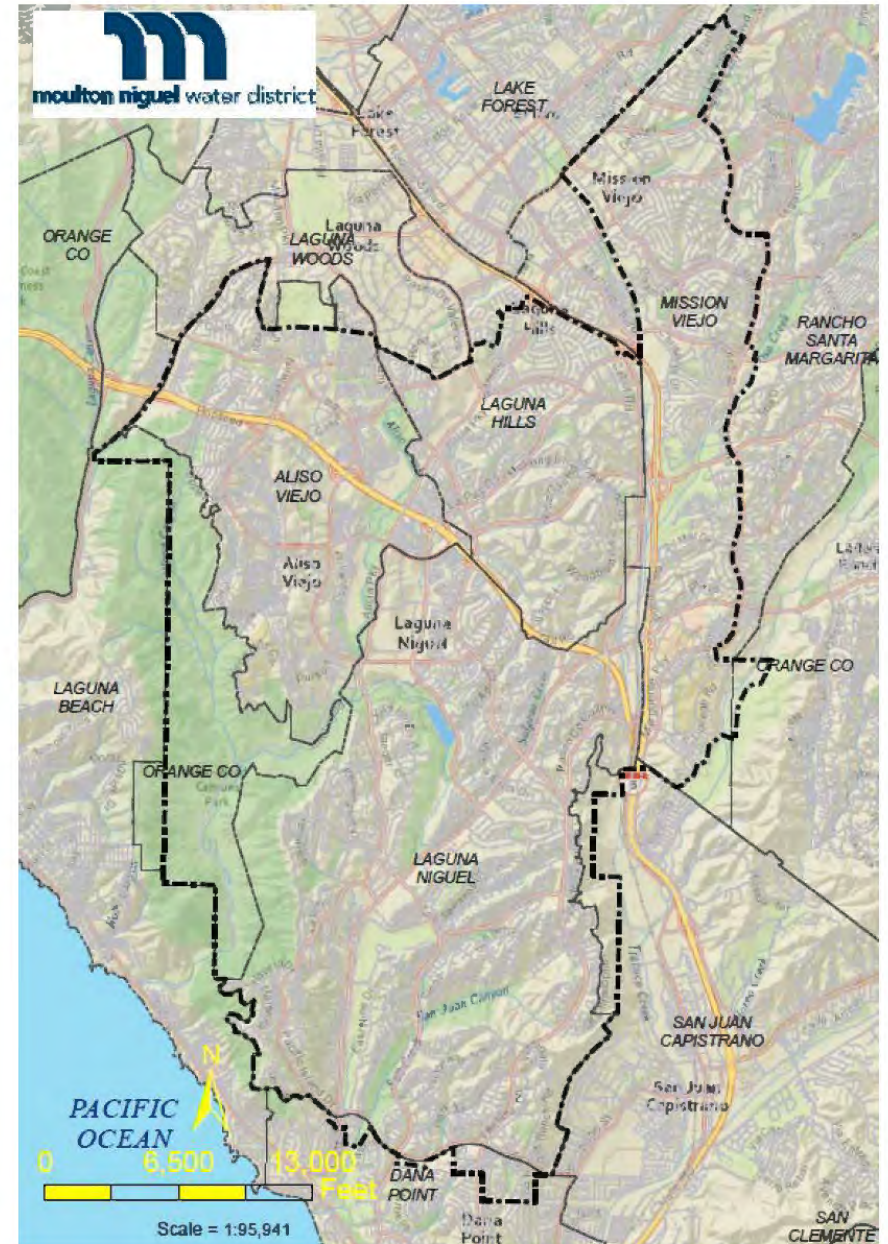
Project Description: Perform heavy root cutting and cleaning and install approximately 3,300 feet of 8-inch cured-in-place pipe (CIPP) liner.

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

Project Status: Proposed project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$150,000
Inspection/Other	\$25,000
Total Project Budget	\$225,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: *Drydock Cove and Westgreen Sewer Repair*

Project Location: Drydock Cove & Westgreen Sewer Repair

Project Description: Drydock Cove requires two 10 linear feet replacements of 6-inch sewer main and Westgreen requires one 10 liner feet replacement of 8-inch sewer main.

Project Need: Both sewer mains have large offsets that interrupt wastewater flow and make it difficult to CCTV and clean the sewer mains.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$60,000
Inspection/Other	\$5,000
Total Project Budget	\$80,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 14

Project Name: Lower Salada Lift Station Overflow Wetwell

Project Location: Lower Salada Lift Station, Laguna Niguel

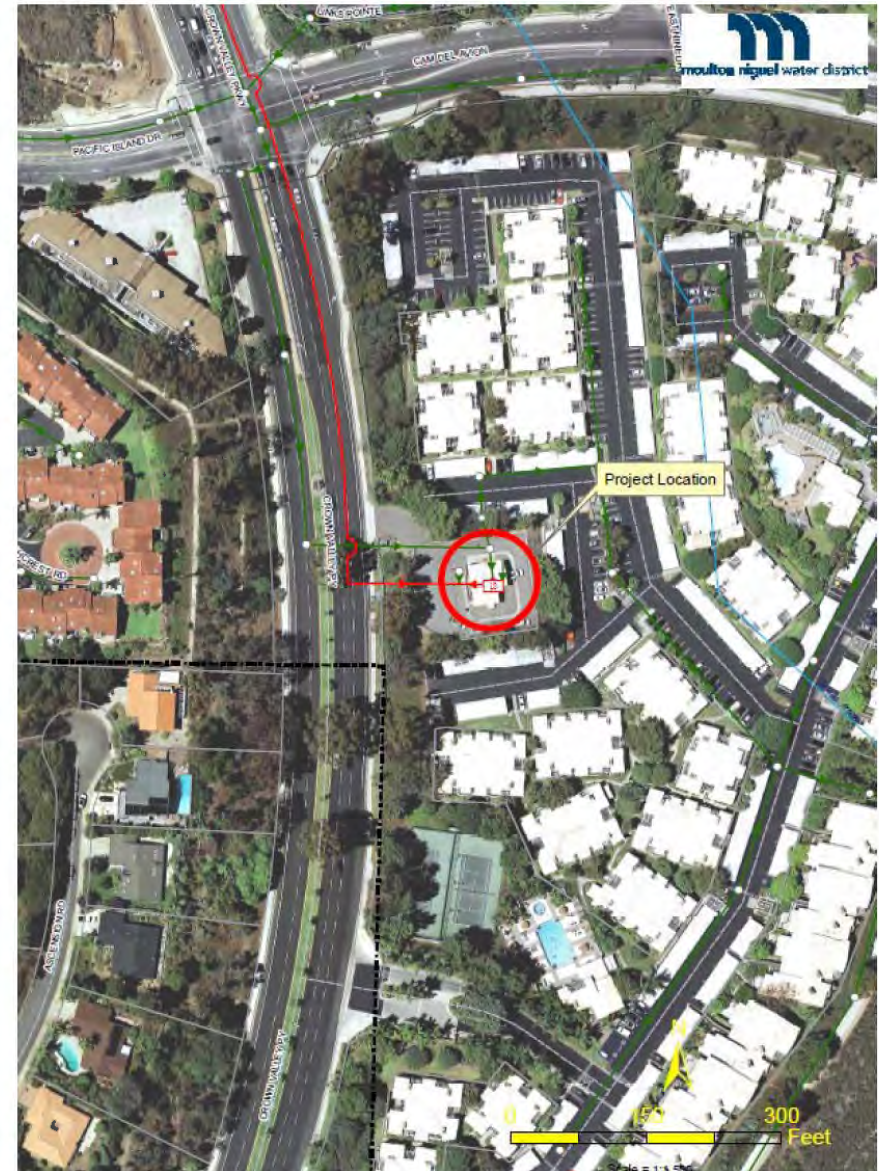
Project Description: The construction of a new overflow wetwell at the Lower Salada lift station.

Project Need: The Lower Salada Lift Station flows the second most wastewater flow in the District. Currently, the lift station does not have an overflow wetwell as protection from a sewage spill occurrence should the lift station fail to pump out the rising levels of wastewater from the existing wetwell. The lift station's wetwell does have an 8-inch overflow outlet that gravity feeds to a South Coast Water District sewer main. However, this 8-inch outlet is undersized and cannot accommodate the entire flow entering the station. The construction of a new overflow wetwell will allow the district more time to mobilize in the event of a pumping failure in the station before a sewage spill occurs.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$175,000
CEQA Compliance	\$50,000
Construction Contract	\$825,000
Inspection/Other	\$200,000
Total Project Budget	\$1,250,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: *Oso Trabuco and ETM Adjustments for Railroad Expansion*

Project Location: Metrolink Railroad (San Juan Capistrano)

Project Description: The relocation and/or encasement of portions of the Oso Trabuco and ETM Lines that are too close to the proposed siding railroad.

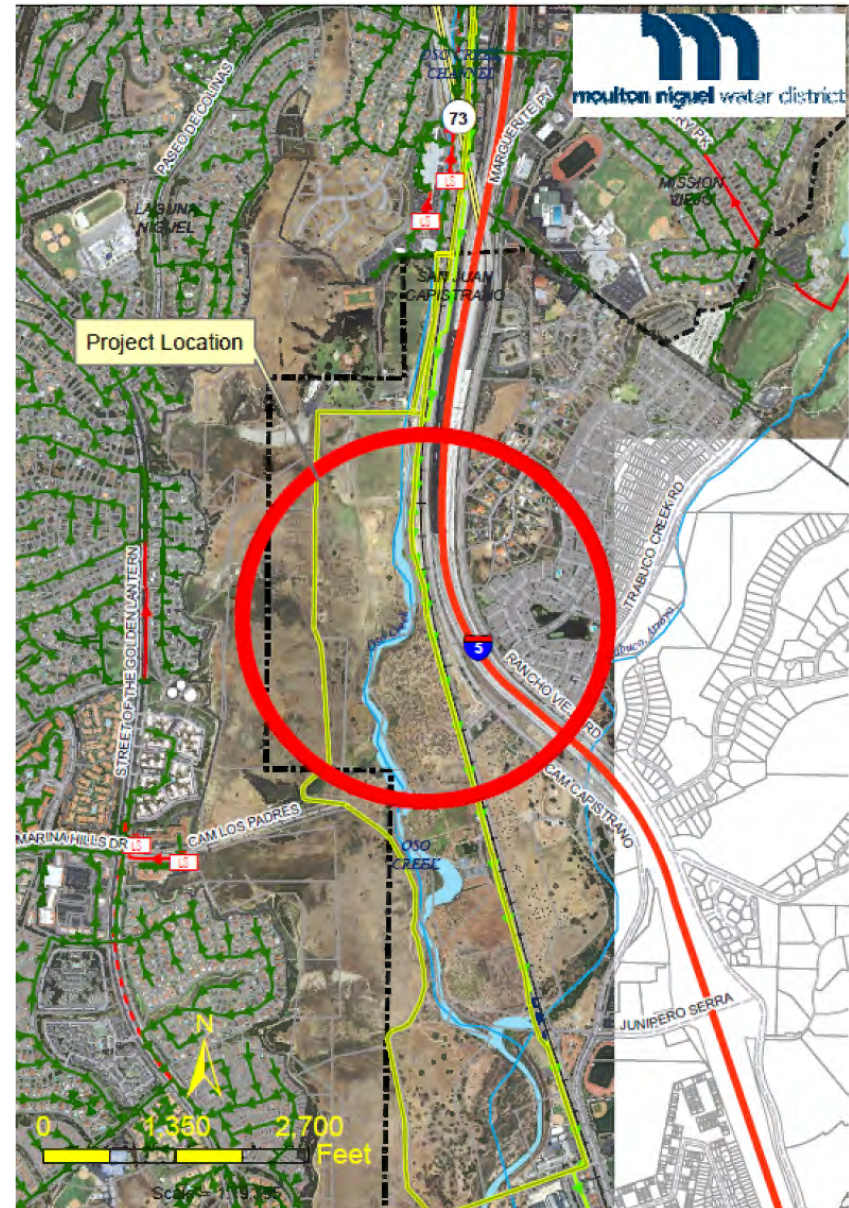
Project Need: Metrolink is planning to construct a passing siding railroad track in close proximity to the Oso Trabuco and ETM lines. The proposed railroad track may be constructed too close to these lines resulting in structural vulnerability to these lines.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$4,300,000
Inspection/Other	\$200,000
Total Project Budget	\$4,700,000

*Santa Margarita Water District owns 59.57% of the capacity for the Oso Trabuco line and 50% of the capacity for the ETM line. Cost reimbursement for this project will occur accordingly.



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
Total Project Budget	\$37,300,000



Capital Improvement Program – Project Description

Project No: JRWSS

System: Regional (Potable)

Fund: 7

Project Name: SCWD/JRWSS Capital Projects

Project Location: Joint Transmission Main

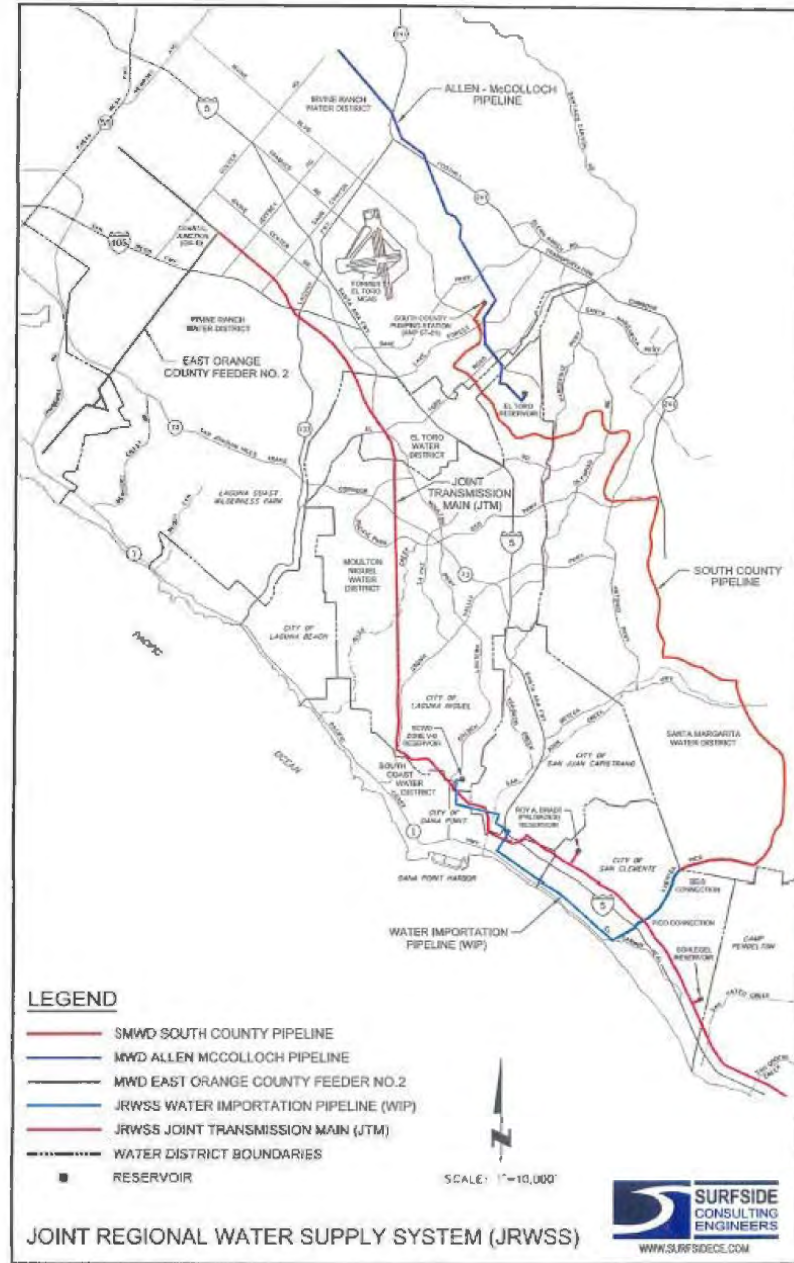
Project Description: Perform capital improvements to the Joint Transmission Main (JTM).

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
Total Project Budget	\$8,641,990



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
Total Project Budget	\$200,000



Capital Improvement Program – Project Description

Project No: SMWD

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 Santa Margarita Water District (SMWD).

Project Need: SMWD provides contract operation and maintenance services for the District's Plant 3A wastewater treatment plant. SMWD develops a capital improvement program (CIP) for the facility.

Project Status: Annual as provided by SMWD. Funds are paid to SMWD 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
Total Project Budget	\$12,609,000



Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *SOCWA Capital Project Committee 2*

Project Location: J.B. Latham Wastewater Treatment Plant, Dana Point

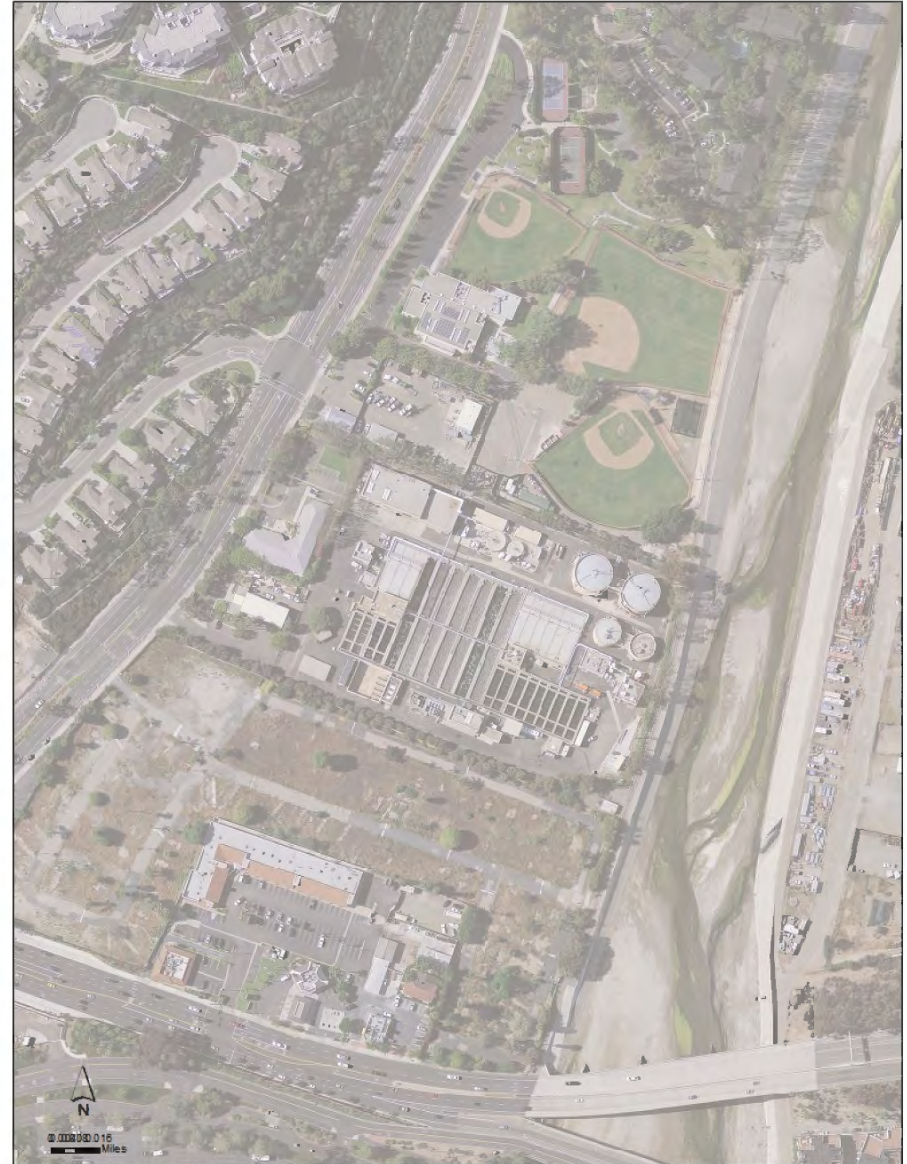
Project Description: Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

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
Total Project Budget	\$14,793,776



Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *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:

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
Total Project Budget	\$275,835

Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *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
Total Project Budget	\$29,597,005



Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *SOCWA Capital Project Committee 21*

Project Location: Effluent Transmission Main in Aliso Creek

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
Total Project Budget	\$21,111

Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *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:

Item	Estimated Cost
Design	\$TBD
CEQA Compliance	Exempt
Construction Contract	\$TBD
Inspection	\$TBD
Total Project Budget	\$4,139,220

Capital Improvement Program – Project Description

Project No: UP1718RR

System: Potable, Recycled, Wastewater, District Overall

Fund: 7

Project Name: 2017-18 Unanticipated Projects – Fund 7

Project Location: District-wide

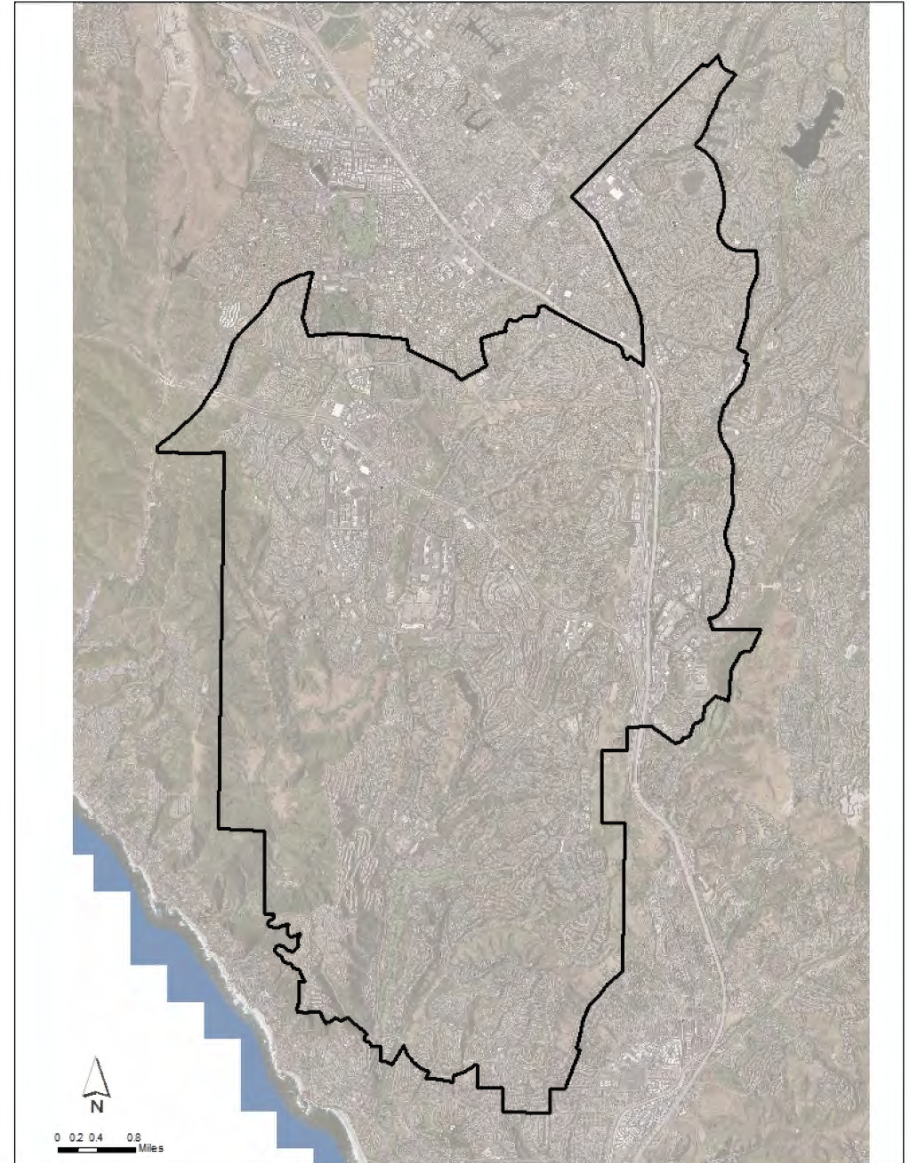
Project Description: Construct various replacement and refurbishment projects.

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
Total Project Budget	\$300,000



Capital Improvement Program – Project Description

Project No: UP1718PC

System: Potable, Recycled, Wastewater, District Overall

Fund: 14

Project Name: 2017-18 Unanticipated Projects – Fund 14

Project Location: District-wide

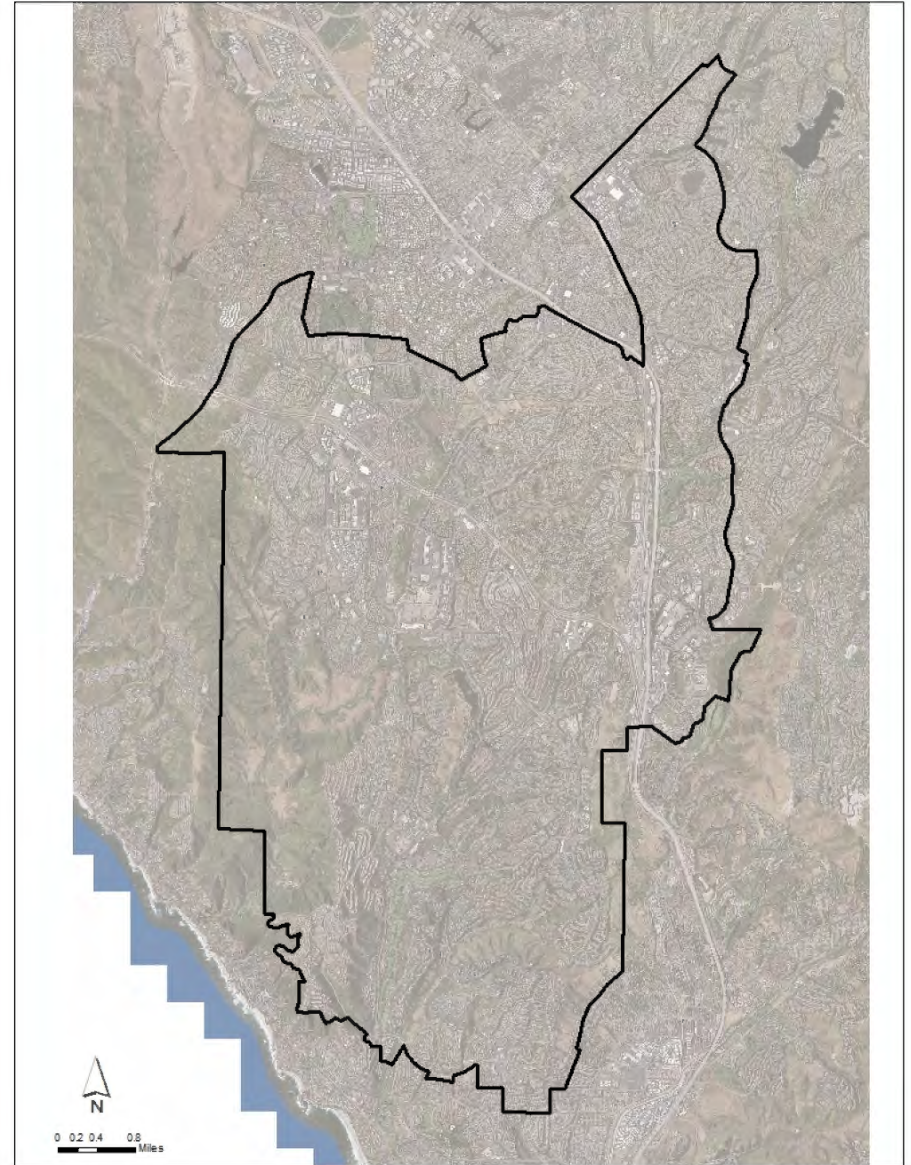
Project Description: Construct various new District-owned facilities.

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
Total Project Budget	\$150,000



MOULTON NIGUEL WATER DISTRICT DEBT MANAGEMENT POLICY

Effective: July 1, 2017

Policy Statement

This policy documents Moulton Niguel Water District's (the "District" or "MNWD") goals and guidelines for the use of debt instruments for financing District water, recycled water, and wastewater infrastructure, projects, and other financing needs. The District recognizes the need to invest in ongoing capital replacement and rehabilitation of its facilities as well as new infrastructure to ensure future viability of services, and that the appropriate use of debt can facilitate the timely construction of such facilities.

The District expects to pay for infrastructure and other projects (e.g., water supply) from a combination of current revenues, available reserves, and prudently issued debt. MNWD recognizes that debt can provide an equitable means of financing projects for its customers and provide access to new capital needed for infrastructure and project needs. Debt will be used to meet financing needs (i) if it meets the goals of equitable treatment of all customers, both current and future; (ii) if it is cost-effective and fiscally prudent, responsible, and diligent under the prevailing economic conditions; and (iii) if there are other important policy reasons therefor. All District debt must be approved by the Board of Directors ("Board").

To endorse prudent financial management and achieve the highest practical credit ratings, the District is committed to systematic capital planning, and long-term financial planning. Evidence of this commitment to long term capital planning is demonstrated through adoption and periodic adjustment of the District's Capital Improvement Plan (CIP) identifying the benefits, costs and method of funding capital improvement projects over the planning horizon.

Purpose of Policy

The purpose of this debt management policy is to:

- To establish parameters for issuing debt, including the purposes for which debt can be issued
- Describe how debt and debt proceeds will be managed
- Provide guidance as to the type of debt to be issued
- Provide guidance as to the relationship between the capital improvement plan and debt issuance

Purpose and Use of Debt

The District will utilize reasonable debt financing to fund long-term improvements and thus ensure equitable allocation of costs. Long-term improvements may include the acquisition of land, facilities, infrastructure, and supplies of water; and enhancements or expansions to existing water, recycled water, and wastewater capacity and facilities. Debt can be issued to fund the planning,

MOULTON NIGUEL WATER DISTRICT DEBT MANAGEMENT POLICY

Effective: July 1, 2017

pre-design, design, land and/or easement acquisition, construction, and related fixtures, equipment and other costs as permitted by law. The District will not issue debt to cover operating needs.

The District may utilize short term financing (including leases) to finance certain essential equipment and vehicles. These assets can range from service vehicles to equipment. The underlying asset must have a minimum useful life of one year or more. Short-term financings, including loans, on bill financing and capital lease purchase agreements, are executed to meet such needs.

The Treasurer, Director of Planning and Financial Planning Manager will periodically evaluate the District's existing debt and recommend re-financings or prepayment (refunding) when economically beneficial. A refinancing may include the issuance of bonds to refund existing bonds or the issuance of bonds in order to refund other obligations, such as commercial paper or loans.

The General Manager, Treasurer, Director of Planning and Financial Planning Manager and District Financial Advisor as appropriate shall be responsible for analyzing any debt financing proposal to determine if it is beneficial to the District and if it complies with the District's long-term financial planning objectives, including maintaining or improving the current credit ratings assigned to outstanding debt by the major credit rating agencies.

The proceeds of any debt obligation shall be expended only for the purpose for which it was authorized. Debt may only be issued upon Board authorization. No debt shall be issued with a maturity date greater than the expected weighted average useful life of the facilities or improvements being financed. The final maturity of bonds or state or federal loan debt shall be limited to 30 years after the date of issuance.

Debt Management

The District will provide for a periodic review of its financial performance and review its performance relative to the financial policies outlined herein. These financial policies will be taken into account during the capital planning, budgeting, and rate setting process. Necessary appropriations for annual debt service requirements will be routinely included in the District's annual budget. The District will maintain proactive communication with the investment community, including rating agencies, credit enhancers and investors, to ensure future capital market access at the lowest possible interest rates.

The District's Debt Management Policy, Reserve Policy and Investment Policy are integrated into the decision-making framework utilized in the budgeting and capital improvement planning process. As such, the following principles outline the District's approach to debt management:

- The District will issue debt only in the case where there is an identified source of repayment. Debt will be issued to the extent that (i) projected existing revenues are sufficient to pay for the proposed debt service together with existing debt service

MOULTON NIGUEL WATER DISTRICT DEBT MANAGEMENT POLICY

Effective: July 1, 2017

covered by such existing revenues, (ii) additional revenues, as necessary, have been identified as a source of repayment in an amount sufficient to pay for the proposed debt, and (iii) bond covenants will be maintained.

- Debt will be structured for the shortest period possible, consistent with an equitable allocation of costs to current and future users. Borrowings by the District should be of a duration that does not exceed the useful life of the improvement that it finances and where feasible, should be shorter than the projected economic life. The standard term of long-term borrowing is typically 20-30 years.
- The District may issue bonds on a fixed or variable interest rate basis. Fixed rate securities ensure budget certainty through the life of the securities and can be advantageous in a low interest rate environment. When appropriate, the District may choose to issue securities that pay a rate of interest that varies according to a pre-determined formula or results from a periodic remarketing of the securities. Such variable rate bonds will be limited to no more than 20% of outstanding debt.

The proceeds of the bond sales will be invested until used for the intended project(s) in order to maximize utilization of the public funds. The investments will be made to obtain the highest level of safety. The District's Investment Policy and the specific bond indentures govern objectives and criteria for investment of bond proceeds. The Treasurer, Director of Planning and Financial Planning Manager will oversee the investment of bond proceeds in a manner to avoid, if possible, and minimize any potential negative arbitrage over the life of the bond issuance, while complying with arbitrage and tax provisions.

Bond proceeds will be deposited and recorded in separate accounts to ensure funds are not comingled with other forms of District cash and investments. The District's trustee will administer the disbursement of bond proceeds pursuant to an Indenture of Trust. Requisition for the disbursement of bonds funds must be approved by the District's General Manager or Treasurer.

The Financial Planning Manager and Controller will monitor dedicated debt reserve fund balances and periodically review the advisability of prepayment or refunding of related debt. The financial advantages of a current refunding must outweigh the cost of reissuing new debt. A potential refunding will be assessed in combination with any new capital projects requiring financing, and the benefits of the refunding will be evaluated in relation to its costs and risks.

Debt can be refunded to achieve one or more of the following objectives:

- Reduce future interest costs;
- Restructure future debt service in response to evolving conditions regarding anticipated revenue sources;
 - Current refundings (that is, refinancings within 90 days of the call date) must meet a minimum net present value savings target of 3% of refunded bonds, while advance refundings (those refinancings executed more than 90 days prior to the call

MOULTON NIGUEL WATER DISTRICT
DEBT MANAGEMENT POLICY
Effective: July 1, 2017

date) must meet a net present value savings target of at least 5% of refunded bonds and an escrow efficiency of 70%:

- Restructure the legal requirements, termed covenants of the original issue to reflect more closely the changing conditions of the District or the type of debt.

Debt Service Coverage Target

The District will not engage in debt financing unless the proposed obligation, when combined with all existing debts, will result in acceptable debt service coverage ratios. In determining the affordability of proposed revenue bonds, the District will perform an analysis comparing projected annual net revenues (after payment of operating and maintenance (O&M expense) to estimated annual debt service and estimated debt service coverage ratio (DCR). DCR is the amount of cash flow available to meet annual interest and principal payment on debt.

The District's objective is to maintain a DCR at or above 1.75 times to maintain its high quality credit rating.

Debt Instrument Rating

The General Manager, Director of Planning and Financial Planning Manager, with the District's Financial Advisor if appropriate, will assess whether a credit rating should be obtained for an issuance and make a recommendation to the Board. If it is determined that a credit rating is desirable, the probable rating of the proposed debt issuance is assessed before its issuance, and necessary steps are taken in structuring the debt issuance to ensure that the best possible rating is achieved.

Debt Structuring

In structuring a debt issuance, the district will manage the amortization of debt, and to the extent possible, match its cash flow to the anticipated debt service payments. The District will seek to structure debt with aggregate level principal and interest payments over the life of the borrowing. "Backloading" of debt service will be considered only when such structuring is beneficial to the District's aggregate overall debt payment schedule.

The Financial Planning Manager, Director of Planning and General Manager, with the advice of the District's Financial Advisor, will evaluate and recommend to the Board the use of a call option, if any, and call protection period for each issuance. A call option, or optional redemption provision, gives the District the right to prepay or retire debt prior to its stated maturity. This option may permit the District to achieve interest savings in the future through refunding of the bonds. Because the cost of call options can vary widely, depending on market conditions, an evaluation of factors,

MOULTON NIGUEL WATER DISTRICT DEBT MANAGEMENT POLICY

Effective: July 1, 2017

such as the call premium, time until the bonds may be called at a premium or at par, and interest rate volatility will guide the decision to issue bonds with a call option. Generally, 30-year tax exempt municipal borrowings are structured with a 10-year call. From time to time, shorter call options (5-9 years) may also be used.

Types of Debt

Revenue bonds, Certificates of Participation (COPs), variable rate bonds, state revolving fund (SRF) loans, federal loans, bank loans, notes, commercial paper, direct placements, capital leases, lease-purchase financing, and on bill financing. The weighted average useful life of the asset(s) or project shall exceed the payout schedule of any debt the District assumes. A definition on each type of debt is provided in Appendix A.

In addition to the aforementioned long and short term financing instruments, the District may also consider joint arrangements with other governmental agencies. Communication and coordination will be made with local governments regarding cost sharing in potential joint projects, including leveraging grants and funding sources.

The District is authorized to join with other special districts and/or municipal agencies to create a separate entity, a Joint Powers Authority (JPA), to issue debt on behalf of the District, the special district or municipality. The District will only be liable for its share of debt service, as specified in a contract executed in connection with the joint venture debt.

Credit Enhancement

Credit enhancement may be used to improve or establish a credit rating on District debt obligation. Types of credit enhancement include Letters of Credit, bond insurance or surety policies. The Treasurer and General Manager will recommend to the Board the use of credit enhancement if it reduces the overall cost of the proposed financing or if, in the opinion of the General Manager and/or Treasurer (with the advice of counsel and the District's Financial Advisor), the use of such credit enhancement furthers the District's overall financial objectives.

Debt Service Reserve Fund/Surety Policy

Unless there are market requirements or it is important to increase credit ratings, the District will not fund a debt service reserve fund as part of its debt issuance. To the extent the Treasurer, and/or Financial Planning Manager determine that a debt service reserve fund is advantageous, the debt reserves will be maintained in accordance with the District's Reserve Policy.

Capitalized Interest

MOULTON NIGUEL WATER DISTRICT
DEBT MANAGEMENT POLICY
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Generally, interest shall be capitalized for the construction period of a revenue-producing project, that debt service expense does not begin until the project is expected to be operational and producing revenues. In addition, for lease back arrangements, such as those used for lease revenue bond transactions interest may be capitalized for the construction period, until the asset is operational. Only under extraordinary circumstances, interest may be capitalized for a period longer than the construction period.

Credit Ratings

The District will seek to maintain the highest possible credit ratings that can be achieved for debt instruments without compromising the District's policy objectives. Ratings are a reflection of the general fiscal health of the District. By maintaining the highest possible credit ratings, the District can issue its debt at a lower interest cost. To enhance creditworthiness, the District is committed to prudent financial management, systematic capital planning, and long-term financial planning.

The District recognizes that external economic, natural, or other events may from time to time affect the creditworthiness of its debt. Each proposal for additional debt will be analyzed for its impact upon the District's debt rating on outstanding debt.

Rating Agency Relationships

The District may seek credit ratings from any or all of the major credit rating agencies - Standard & Poor's, Moody's Investors Service, and Fitch Investors Service, as appropriate. In addition, the District will evaluate the value of additional ratings on a case by case basis (e.g., Kroll Rating Services). District staff will provide periodic updates to the rating agencies, both formal and informal, on the District's general financial condition and coordinate meetings and presentations in conjunction with a new debt issuance when determined necessary.

The retention of a rating agency relationship will be based on a determination of the potential for more favorable interest costs as compared to the direct and indirect cost of maintaining that relationship.

Bond Ratings

The General Manager, Director of Planning, and Financial Planning Manager, working with the District's Financial Advisor, shall be responsible for determining whether a rating shall be requested on a particular financing, and which of the major rating agencies shall be asked to provide such a rating.

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Method of Sale

The District will select the method of sale, which best fits the type of bonds being sold, market conditions, and the desire to structure bond maturities to enhance the overall performance of the entire debt portfolio. Three general methods exist for the sale of municipal bonds:

- I. Competitive sale. Bonds will be marketed to a wide audience of investment banking (underwriting) firms. The underwriter is selected based on its best bid for its securities. The District will award the sale of the competitively sold bonds on a true interest cost (TIC) basis. Pursuant to this policy, the General Manager is hereby authorized to sign the bid form on behalf of the District fixing the interest rates on bonds sold on a competitive basis.

- II. Negotiated sale. The General Manager, Director of Planning and Financial Planning Manager select the underwriter, or team of underwriters, of its securities in advance of the bond sale, subject to Board approval. The District works with the underwriter to bring the issue to market and negotiates all rates and terms of the sale. In advance of the sale, the General Manager after approval from the Board of Directors, with advice from the District's Financial Advisor, will determine compensation for and liability of each underwriter employed and the designation rules and priority of orders under which the sale itself will be conducted. Pursuant to this policy, the General Manager is hereby authorized to sign the bond purchase agreement on behalf of the District fixing the interest rates on bonds sold on a negotiated basis.

- III. Private placement. The District may elect to issue debt on a private placement bases. Such method shall be considered if it is demonstrated to result in cost savings or provide other advantages relative to other methods of debt issuance, or of it is determined that access to the public market is unavailable and timing considerations require that a financing be completed.

Roles and Responsibility

The primary responsibility for developing debt financing recommendations rests with the Financial Planning Manager. In developing such recommendations, the Financial Planning Manager shall consider the need for debt financing and assess progress on the current capital improvement program or plan (CIP) and any other program/improvement deemed necessary by the District. The Board authorizes and approves debt financing and/or debt service related recommendations and proposals.

All proposed debt financings shall be approved by the Board.

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Debt is to be issued pursuant to the authority of and in full compliance with provisions, restrictions and limitations of the Constitution and laws of the State of California Government Code (CGC) §54300 et seq.

Bond Counsel

The District will retain external bond counsel for all debt issues. As part of its responsibility to oversee and coordinate the marketing of all District indebtedness, the General Manager, Director of Planning, and Financial Planning Manager shall make recommendations for approval by the Board on the retention of bond counsel.

Bond counsel will prepare the necessary authorizing resolutions, agreements and other documents necessary to execute the financing. All debt issued by the District will include a written opinion by bond counsel affirming that the District is authorized to issue the debt, stating that the District has met all state constitutional and statutory requirements necessary for issuance, and determining the debt's federal income tax status.

District Financial Advisors

The District will select independent registered municipal advisors (District Financial Advisor) who may assist in planning and executing all bond and debt transactions. To avoid any appearance of conflict of interest, a District Financial Advisor may not also engage in the underwriting of the District's bonds. District Financial Advisors shall be selected through a competitive process after a review of proposals by the staff and approved by the Board.

The District Financial Advisor will advise the District on refunding opportunities for current outstanding debt, as well as assist in evaluating the merits of competitive, negotiated or private placement of new debt, and determining the most appropriate structure to ensure effective pricing that meets the District's near-term and long term cash flow needs. The District Financial Advisor will work with all parties involved in the financing transaction, including the District's bond counsel, trustee, underwriters, credit liquidity providers, to develop and monitor the financing schedule and preparation of the Official Statement. The District Financial Advisor will assist the District in developing and distributing bid specifications for desired services as, trustee and paying agents, printing, remarketing and credit liquidity service providers, and assist the District in its review process. The District also expects that its District Financial Advisor will provide objective advice and analysis, maintain confidentiality of the District's financial plans, and be free from any conflict of interest.

Underwriters

For negotiated sales, the District will generally select or pre-qualify underwriters through a competitive process. This process may include a request for proposal or qualifications to all firms considered appropriate for the underwriting of a particular issue or type of bonds. The Financial Planning Manager, in consultation with the District's Financial Advisor, will determine the appropriate method to evaluate the underwriter submittals and then recommend or qualify firms

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on that basis. The District will not be bound by the terms and conditions of any underwriting agreement; oral or written, to which it was not a party.

Federal Arbitrage and Rebate Compliance

The District will fully comply with federal arbitrage and rebate regulations. Concurrent with this policy, the Financial Planning Manager and Controller will take all permitted steps to minimize any rebate liability through proactive management in the structuring and oversight of its individual debt issues. All of the District's tax-exempt issues, including lease purchase agreements, are subject to arbitrage compliance regulations.

The Controller and Financial Planning Manager shall be responsible for the following:

- I. Monitoring the expenditure of bond proceeds to ensure they are used only for the purpose and authority for which the bonds were issued and exercising best efforts to spend bond proceeds in such a manner that the District shall meet one of the spend-down exemptions from arbitrage rebate. Tax-exempt bonds will not be issued unless it can be reasonably expected that 85% of the proceeds will be expended within the three-year temporary period.
- II. Monitoring the investment of bond proceeds with awareness of rules pertaining to yield restrictions. Maintaining detailed investment records, including purchase prices, sale prices and comparable market prices for all securities.
- III. Contracting the services of outside arbitrage consultants to establish and maintain a system of record keeping and reporting to meet the arbitrage rebate compliance requirements of federal tax code.

To the extent any arbitrage rebate liability exists, the District will report such liability in its annual Comprehensive Annual Financial Report (CAFR).

Continuing Disclosure

The District will meet secondary disclosure requirements in a timely and comprehensive manner, as stipulated by the Securities Exchange Commission (SEC) Rule 15c2-12 and consistent with the District's Disclosure Procedures Policy. The Financial Planning Manager shall be responsible for providing ongoing disclosure information to the Municipal Securities Rulemaking Board's (MSRB's) Electronic Municipal Market Access (EMMA) system, the central depository designated by the SEC for ongoing disclosures by municipal issuers. The District will provide financial information and operating data no later than 270 days following the end of the District's

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fiscal year each year, and will provide notice of certain enumerated events with respect to the bonds, if material, as defined in the District's bond covenants and as required by the SEC.

The District will keep current with any changes in both the administrative aspects of its filing requirements and the national repositories responsible for ensuring issuer compliance with the continuing disclosure regulations. In the event a 'material event' occurs requiring immediate disclosure, the Financial Planning Manager and Controller will ensure information flows to the appropriate disclosure notification parties.

Compliance with Bond Covenants

In addition to financial disclosure and arbitrage compliance, once the bonds are issued, the District is responsible for verifying compliance with all undertakings, covenants, and agreements of each bond issuance on an ongoing basis. This typically includes ensuring:

- Annual appropriation of revenues to meet debt service payments
- Timely transfer of debt service payments to the trustee or paying agent
- Compliance with insurance requirements
- Compliance with rate covenants where applicable
- Compliance with all other bond covenants

On an annual basis, the Controller will prepare all required debt related schedules and footnotes for inclusion in the District's CAFR. The CAFR shall describe in detail all funds and fund balances established as part of any direct debt financing of the District.

The CAFR may also contain a report detailing any material or rate covenants contained in any direct offering of the District and whether or not such covenants have been satisfied.

Policy Review

On an as needed basis, the General Manager will be responsible for updating and revising this Policy which shall be reviewed at the Board meeting and adopted by the Board of Directors.

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APPENDIX “A”

Definitions of Types of Debt

Bank Loans and Notes

Use of short-term borrowing, such as bank loans and notes, will be undertaken only if available cash or reserves are insufficient to meet both project needs and current obligations.

Capital Lease

Capital lease debt may be considered to finance capital improvements, including vehicles and equipment with an expected useful life of less than ten years. A capital lease is a lease in which the lessor finances the lease and all other rights of ownership transfer to the District.

Derivatives

The District may choose to enter into contracts and financing agreements involving interest rate swaps, floating/fixed rate auction or reset securities, or other forms of debt bearing synthetically determined interest rates as authorized under the applicable statutes. The District will only consider the use of derivative products on a case-by-case basis and consistent with state statute and financial prudence. Before entering into such contracts or agreements, the District will review the risks and benefits of such financing techniques and expected impacts on the District’s long-term financial operations and credit ratings. The District shall not execute derivative contracts with terms exceeding 10 years.

Lease-Purchase Financing

The use of lease-purchase agreements in the acquisition of vehicles, equipment and other capital assets shall be considered carefully relative to any other financing option. The lifetime cost of a lease may be higher than other financing options or pay-go purchases. Nevertheless, lease-purchase agreements may be used by the District as funding options for capital acquisitions if circumstances warrant.

On Bill Financing

The District may choose to enter into low or zero interest financing agreements with utility providers who offer On Bill Financing. This type of financing offers financing of business improvements at little to no interest and no fees or costs to the District. Repayment amounts will be based on projected savings associated with the project and will be part of the monthly bill received from the issuer. Financing terms can range from three to ten years depending on the project to be financed.

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Revenue Bonds

Revenue bonds issued by the District are long term obligations issued to fund a specific project or purpose. The District will generally issue revenue bonds on a fixed interest rate basis, wherein at the time of the bond sale all interest rates are known and do not change while those bonds are outstanding. Particular conditions may arise where the District would consider the use of variable interest rate bonds. Variable interest rate bonds have interest rates that reset on a periodic basis (e.g. daily, weekly, monthly, etc.). Revenue bonds are payable solely from District revenues in accordance with the agreed upon bond covenants.

Variable Rate Debt

Variable rate debt is an alternative to fixed rate debt. It may be appropriate to issue short-term or long-term variable rate debt to diversify the District's debt portfolio, reduce interest costs, provide interim funding for capital projects and improve the match of assets to liabilities.

Variable rate debt typically has a lower cost of borrowing than fixed rate financing and shorter maturities in the range of 7 to 35 days. The District may consider variable rate debt in certain instances. The District will maintain a conservative level of outstanding variable debt not exceeding 20% of outstanding debt. Under no circumstances will the District issue variable rate debt solely for the purpose of earning arbitrage.

Short Term Debt

Pending the issuance of bonds the Board may authorize the issuance of short term debt. The Financial Planning Manager will determine and utilize the least costly method for short-term borrowing. Such debt shall be authorized by resolution of the Board.

These short term notes may be structured as:

- Bond Anticipation Notes (BANs) - BANs are short term obligations that will be repaid by proceeds of a subsequent long-term bond issue. The District may choose to issue Bond Anticipation Notes as a source of interim construction financing. Before issuing such notes, financing for such notes must be planned for and determined to be feasible by the General Manager and Financial Planning Manager, in consultation with the District's Financial Advisor.
- Commercial Paper (CP) - CP is a form of debt that has maturities up to 270 days although it may be rolled to a subsequent maturity date. Tax Exempt Commercial Paper shall not be issued for District for capital programs unless it is of sufficient economic size, as determined by the General Manager and Financial Planning Manager, in consultation with the District's Financial Advisor.

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- Tax and Revenue Anticipation Notes (TRANs) - TRANs are short term notes secured by a pledge of taxes and other revenues in the current fiscal year. TRANs, if issued, will constitute direct obligations of the District. All TRANs will be redeemed in the same fiscal year in which they are issued.

State Revolving Funds

A State Revolving Fund (SRF) loan is a low or zero interest loan program for the construction of wastewater treatment and sewage collection systems, water recycling facilities, storm water projects, implementation of nonpoint source and storm drainage pollution control management programs, and for the development and implementation of estuary conservation and management programs. SRF debt service payments are factored into debt service coverage ratios as defined by applicable water and wastewater indentures.

SRF loans are generally structured such that the District is required to contribute a percentage of the total project cost and receives loan proceeds from the State for the balance. The SRF loan interest rate is calculated by taking half of the True Interest Cost (TIC) of the most recent State of California General Obligation Bonds sale. The term of the loans can be 20 to 30 years. When compared to traditional bond financing, the District may realize substantial savings through the use of SRF loans.

SRF Loans may provide additional assistance in the form of principal forgiveness. Principal forgiveness must be specified at the execution of the loan agreement for the amount forgiven to be counted against the total loan required to be provided by the SRF.

Letters of Credit

The District shall have the ability to enter into a letter-of-credit agreement when such an agreement is deemed prudent and advantageous. Only those financial institutions with short-term credit ratings of VMIG 1/A-1, F1 by Moody's Investor Services, Standard & Poor's and Fitch IBCA, may participate in the District's letter of credit agreements.

MOULTON NIGUEL WATER DISTRICT
STATEMENT OF INVESTMENT POLICY

Effective: July 1, 2017

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 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 Bank of America Merrill Lynch 1-10 Year US Treasury and Agency 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 2009 COP 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 2010 COP 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 2015 Revenue Refunding 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 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. RISK MANAGEMENT AND DIVERSIFICATION

A. Mitigating Credit Risk in the Portfolio

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. The District will mitigate credit risk by adopting the following strategies:

- a) The diversification requirements included in the “Authorized Investments” section of this policy are designed to mitigate credit risk in the portfolio.
- b) No more than 5% of the total portfolio may be invested in securities of any single issuer, except where the issuer is the US Government, its Agencies and Government-Sponsored Enterprises (GSEs), an authorized Supranational issuer or where the security is a Money Market Mutual Fund, Local Agency Investment Fund (LAIF) or other Local Government Investment Pool.
- c) The District may elect to sell a security prior to its maturity and record a capital gain or loss in order to manage the quality, liquidity or yield of the portfolio in response to market conditions or District’s risk preferences.
- d) If securities owned by the District are downgraded by a nationally recognized statistical rating organization (NRSRO) to a level below the quality required by this investment policy, it will be the District’s policy to review the credit situation and make a determination as to whether to sell or retain such securities in the portfolio.
 - (i) If a security is downgraded, the Treasurer will use discretion in determining whether to sell or hold the security based on its current maturity, the economic outlook for the issuer, and other relevant factors.
 - (ii) If a decision is made to retain a downgraded security in the portfolio, its presence in the portfolio will be monitored and reported monthly to the Board of Directors.

B. Mitigating Market Risk in the Portfolio

Market risk is the risk that the portfolio value will fluctuate due to changes in the general level of interest rates. The District recognizes that, over time, longer-term portfolios have the potential to achieve higher returns. On the other hand, longer-term portfolios have higher volatility of return. The

District will mitigate market risk by providing adequate liquidity for short-term cash needs, and by making longer-term investments only with funds that are not needed for current cash flow purposes.

The District further recognizes that certain types of securities, including variable rate securities, securities with principal paydowns prior to maturity, and securities with embedded options, will affect the market risk profile of the portfolio differently in different interest rate environments. The District, therefore, adopts the following strategies to control and mitigate its exposure to market risk:

- a) The District will maintain a minimum of six months of budgeted operating expenditures in short term investments to provide sufficient liquidity for expected disbursements.
- b) The maximum percent of callable securities (does not include “make whole call” securities as defined in the Glossary) in the portfolio will be 20%.
- c) The maximum stated final maturity of individual securities in the portfolio will be five (5) years, except as otherwise stated in this policy.
- d) The duration of the portfolio will generally be approximately equal to the duration (typically, plus or minus 20%) of a Market Benchmark, an index selected by the District based on the District’s investment objectives, constraints and risk tolerances.

X. 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 in a rating category of "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 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 in a rating category of "A-1" or higher by at least one NRSRO; or long-term debt obligations which are rated in a rating category of "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 in a rating category of "A-1" or higher by at least one NRSRO.*
 - c) *The securities are issued by corporations which have long-term obligations rated in a rating category of "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 in a rating category of "A-1" or higher by at least one NRSRO; or long-term obligations rated in a rating category of "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 in a rating category of "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. Mutual Funds that are registered with the Securities and Exchange Commission under the Investment Company Act of 1940 that invest in the securities and obligations as authorized under California Government Code, Section 53601 (a) to (k) and (m) to (q) inclusive and that meet either of the following criteria:

- (1) *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 10% of the total portfolio may be invested in shares of any one mutual fund.*
- (4) *No more than 20% of the total portfolio may be invested in a combination of Mutual Funds and Money Market Mutual Funds.*

15. 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 a combination of Mutual Funds and Money Market Mutual Funds.*
16. 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 in a rating category of "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.*

17. ASSET-BACKED, MORTGAGE-BACKED. MORTGAGE PASS-THROUGH SECURITIES, AND COLLATERALIZED MORTGAGE OBLIGATIONS, provided that:

- a) *The securities are rated in a rating category of “AA” or its equivalent or better by a NRSRO.*
- b) *They are issued by an issuer having long-term debt obligations rated in a rating category of “A” or its equivalent or better by at least one NRSRO.*
- c) *No more than 20% of the total portfolio may be invested in these securities.*
- d) *No more than 5% of the portfolio may be invested in any single Asset-Backed or Commercial Mortgage security issuer. There is no issuer limitation on any Mortgage security where the issuer is the US Treasury or a Federal Agency/GSE.*
- e) *The maximum legal final maturity does not exceed five (5) years.*

18. 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.*

XI. 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.

XII. 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.

XIII. Maximum Maturity

A. To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities.

XIV. 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 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.

XV. 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 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.

XVI. GLOSSARY

AGENCIES. Shorthand market terminology for any obligation issued by a *government-sponsored entity (GSE)*, or a *federally related institution*. Most obligations of GSEs are not guaranteed by the full faith and credit of the US government. Examples are:

FFCB. The Federal Farm Credit Bank System provides credit and liquidity in the agricultural industry. FFCB issues discount notes and bonds.

FHLB. The Federal Home Loan Bank provides credit and liquidity in the housing market. FHLB issues discount notes and bonds.

FHLMC. Like FHLB, the Federal Home Loan Mortgage Corporation provides credit and liquidity in the housing market. FHLMC, also called "FreddieMac" issues discount notes, bonds and mortgage pass-through securities.

FNMA. Like FHLB and FreddieMac, the Federal National Mortgage Association was established to provide credit and liquidity in the housing market. FNMA, also known as “FannieMae,” issues discount notes, bonds and mortgage pass-through securities.

GNMA. The Government National Mortgage Association, known as “GinnieMae,” issues mortgage pass-through securities, which are guaranteed by the full faith and credit of the US Government.

PEFCO. The Private Export Funding Corporation assists exporters. Obligations of PEFCO are not guaranteed by the full faith and credit of the US government.

TVA. The Tennessee Valley Authority provides flood control and power and promotes development in portions of the Tennessee, Ohio, and Mississippi River valleys. TVA currently issues discount notes and bonds.

ASSET BACKED SECURITIES. Securities supported by pools of installment loans or leases or by pools of revolving lines of credit.

AVERAGE LIFE. In mortgage-related investments, including CMOs, the average time to expected receipt of principal payments, weighted by the amount of principal expected.

BANKER’S ACCEPTANCE. A money market instrument created to facilitate international trade transactions. It is highly liquid and safe because the risk of the trade transaction is transferred to the bank which “accepts” the obligation to pay the investor.

BENCHMARK. A comparison security or portfolio. A performance benchmark is a partial market index, which reflects the mix of securities allowed under a specific investment policy.

BID. The price at which a buyer offers to buy a security.

BROKER. A broker brings buyers and sellers together for a transaction for which the broker receives a commission. A broker does not sell securities from his own position.

CALLABLE. A callable security gives the issuer the option to call it from the investor prior to its maturity. The main cause of a call is a decline in interest rates. If interest rates decline since an issuer issues securities, it will likely call its current securities and reissue them at a lower rate of interest. Callable securities have reinvestment risk as the investor may receive its principal back when interest rates are lower than when the investment was initially made.

CERTIFICATE OF DEPOSIT (CD). A time deposit with a specific maturity evidenced by a certificate. Large denomination CDs may be marketable.

CERTIFICATE OF DEPOSIT ACCOUNT REGISTRY SYSTEM (CDARS). A private placement service that allows local agencies to purchase more than \$250,000 in CDs from a single financial institution (must be a participating institution of CDARS) while still maintaining FDIC insurance coverage. CDARS is currently the only entity providing this service. CDARS facilitates the trading of deposits between the California institution and other participating institutions in amounts that are less than \$250,000 each, so that FDIC coverage is maintained.

COLLATERAL. Securities or cash pledged by a borrower to secure repayment of a loan or repurchase agreement. Also, securities pledged by a financial institution to secure deposits of public monies.

COLLATERALIZED MORTGAGE OBLIGATIONS (CMO). Classes of bonds that redistribute the cash flows of mortgage securities (and whole loans) to create securities that have different levels of prepayment risk, as compared to the underlying mortgage securities.

COMMERCIAL PAPER. The short-term unsecured debt of corporations.

COUPON. The rate of return at which interest is paid on a bond.

CREDIT RISK. The risk that principal and/or interest on an investment will not be paid in a timely manner due to changes in the condition of the issuer.

CURRENT YIELD. The annual income from an investment divided by the current market value. Since the mathematical calculation relies on the current market value rather than the investor's cost, current yield is unrelated to the actual return the investor will earn if the security is held to maturity.

DEALER. A dealer acts as a principal in security transactions, selling securities from and buying securities for his own position.

DEBENTURE. A bond secured only by the general credit of the issuer.

DELIVERY VS. PAYMENT (DVP). A securities industry procedure whereby payment for a security must be made at the time the security is delivered to the purchaser's agent.

DERIVATIVE. Any security that has principal and/or interest payments which are subject to uncertainty (but not for reasons of default or credit risk) as to timing and/or amount, or any security which represents a component of another security which has been separated from other components ("Stripped" coupons and principal). A derivative is also defined as a financial instrument the value of which is totally or partially derived from the value of another instrument, interest rate, or index.

DISCOUNT. The difference between the par value of a bond and the cost of the bond, when the cost is below par. Some short-term securities, such as T-bills and

banker's acceptances, are known as discount securities. They sell at a discount from par, and return the par value to the investor at maturity without additional interest. Other securities, which have fixed coupons, trade at a discount when the coupon rate is lower than the current market rate for securities of that maturity and/or quality.

DIVERSIFICATION. Dividing investment funds among a variety of investments to avoid excessive exposure to any one source of risk.

DURATION. The weighted average time to maturity of a bond where the weights are the present values of the future cash flows. Duration measures the price sensitivity of a bond to changes in interest rates. (See modified duration).

FEDERAL FUNDS RATE. The rate of interest charged by banks for short-term loans to other banks. The Federal Reserve Bank through open-market operations establishes it.

FEDERAL OPEN MARKET COMMITTEE. A committee of the Federal Reserve Board that establishes monetary policy and executes it through temporary and permanent changes to the supply of bank reserves.

LIQUIDITY. The speed and ease with which an asset can be converted to cash.

LOCAL AGENCY INVESTMENT FUND (LAIF). A voluntary investment fund open to government entities and certain non-profit organizations in California that is managed by the State Treasurer's Office.

LOCAL GOVERNMENT INVESTMENT POOL. Investment pools that range from the State Treasurer's Office Local Agency Investment Fund (LAIF) to county pools, to Joint Powers Authorities (JPAs). These funds are not subject to the same SEC rules applicable to money market mutual funds.

MAKE WHOLE CALL. A type of call provision on a bond that allows the issuer to pay off the remaining debt early. Unlike a call option, with a make whole call provision, the issuer makes a lump sum payment that equals the net present value (NPV) of future coupon payments that will not be paid because of the call. With this type of call, an investor is compensated, or "made whole."

MARGIN. The difference between the market value of a security and the loan a broker makes using that security as collateral.

MARKET RISK. The risk that the value of securities will fluctuate with changes in overall market conditions or interest rates.

MARKET VALUE. The price at which a security can be traded.

MARKING TO MARKET. The process of posting current market values for securities in a portfolio.

MATURITY. The final date upon which the principal of a security becomes due and payable.

MEDIUM TERM NOTES. Unsecured, investment-grade senior debt securities of major corporations which are sold in relatively small amounts on either a continuous or an intermittent basis. MTNs are highly flexible debt instruments that can be structured to respond to market opportunities or to investor preferences.

MODIFIED DURATION. The percent change in price for a 100 basis point change in yields. Modified duration is the best single measure of a portfolio's or security's exposure to market risk.

MONEY MARKET. The market in which short-term debt instruments (T-bills, discount notes, commercial paper, and banker's acceptances) are issued and traded.

MORTGAGE PASS-THROUGH SECURITIES. A securitized participation in the interest and principal cash flows from a specified pool of mortgages. Principal and interest payments made on the mortgages are passed through to the holder of the security.

MUNICIPAL SECURITIES. Securities issued by state and local agencies to finance capital and operating expenses.

MUTUAL FUNDS. An entity which pools the funds of investors and invests those funds in a set of securities which is specifically defined in the fund's prospectus. Mutual funds can be invested in various types of domestic and/or international stocks, bonds, and money market instruments, as set forth in the individual fund's prospectus. For most large, institutional investors, the costs associated with investing in mutual funds are higher than the investor can obtain through an individually managed portfolio.

NATIONALLY RECOGNIZED STATISTICAL RATINGS ORGANIZATION (NRSRO). A credit rating agency that the Securities and Exchange Commission in the United States uses for regulatory purposes. Credit rating agencies provide assessments of an investment's risk. The issuers of investments, especially debt securities, pay credit rating agencies to provide them with ratings. The three most prominent NRSROs are Fitch, S&P, and Moody's.

NEGOTIABLE CD. A short-term debt instrument that pays interest and is issued by a bank, savings or federal association, state or federal credit union, or state-licensed branch of a foreign bank. Negotiable CDs are traded in a secondary market and are payable upon order to the bearer or initial depositor (investor).

PREMIUM. The difference between the par value of a bond and the cost of the bond, when the cost is above par.

PREPAYMENT SPEED. A measure of how quickly principal is repaid to investors in mortgage securities.

PREPAYMENT WINDOW. The time period over which principal repayments will be received on mortgage securities at a specified prepayment speed.

PRIMARY DEALER. A financial institution (1) that is a trading counterparty with the Federal Reserve in its execution of market operations to carry out U.S. monetary policy, and (2) that participates for statistical reporting purposes in compiling data on activity in the U.S. Government securities market.

PRUDENT PERSON (PRUDENT INVESTOR) RULE. A standard of responsibility which applies to fiduciaries. In California, the rule is stated as "Investments shall be managed with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of like character and with like aims to accomplish similar purposes."

REALIZED YIELD. The change in value of the portfolio due to interest received and interest earned and realized gains and losses. It does not give effect to changes in market value on securities, which have not been sold from the portfolio.

REGIONAL DEALER. A financial intermediary that buys and sells securities for the benefit of its customers without maintaining substantial inventories of securities and that is not a primary dealer.

REPURCHASE AGREEMENT. Short-term purchases of securities with a simultaneous agreement to sell the securities back at a higher price. From the seller's point of view, the same transaction is a reverse repurchase agreement.

SAFEKEEPING. A service to bank customers whereby securities are held by the bank in the customer's name.

STRUCTURED NOTE. A complex, fixed income instrument, which pays interest, based on a formula tied to other interest rates, commodities or indices. Examples include inverse floating rate notes which have coupons that increase when other interest rates are falling, and which fall when other interest rates are rising, and "dual index floaters," which pay interest based on the relationship between two other interest rates - for example, the yield on the ten-year Treasury note minus the Libor rate. Issuers of such notes lock in a reduced cost of borrowing by purchasing interest rate swap agreements.

SUPRANATIONAL. A Supranational is a multi-national organization whereby member states transcend national boundaries or interests to share in the decision making to promote economic development in the member countries.

TOTAL RATE OF RETURN. A measure of a portfolio's performance over time. It is the internal rate of return, which equates the beginning value of the portfolio with the ending value; it includes interest earnings, realized and unrealized gains, and losses in the portfolio.

U.S. TREASURY OBLIGATIONS. Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States. Treasuries are considered to have no credit risk, and are the benchmark for interest rates on all other securities in the US and overseas. The Treasury issues both discounted securities and fixed coupon notes and bonds.

TREASURY BILLS. All securities issued with initial maturities of one year or less are issued as discounted instruments, and are called Treasury bills. The Treasury currently issues three- and six-month T-bills at regular weekly auctions. It also issues "cash management" bills as needed to smooth out cash flows.

TREASURY NOTES. All securities issued with initial maturities of two to ten years are called Treasury notes, and pay interest semi-annually.

TREASURY BONDS. All securities issued with initial maturities greater than ten years are called Treasury bonds. Like Treasury notes, they pay interest semi-annually.

VOLATILITY. The rate at which security prices change with changes in general economic conditions or the general level of interest rates.

YIELD TO MATURITY. The annualized internal rate of return on an investment which equates the expected cash flows from the investment to its cost.

Moulton Niguel Water District **Purchasing Policy (Effective July 1, 2017)**

I. PURPOSE OF POLICY

1.1 The Moulton Niguel Water District Purchasing Policy (this “Policy”) establishes policies and procedures for acquiring services and materials, equipment and supplies (referred to collectively as “materials”), and for public works projects, for the Moulton Niguel Water District (the “District”), pursuant to Government Code Section 54201 *et seq.*

California Government Code Section 54202: requires every local agency to adopt policies and procedures, including bidding regulations, governing purchases of supplies, materials and equipment and that said purchases shall be in accordance with said duly adopted policies and procedures.

California Government Code Section 54204: requires that if the local agency is other than a city or county, policies provided for in *Section 54202* shall be adopted by means of a written rule or regulation, copies of which shall be available for public distribution.

1.2 This Policy establishes the Board of Directors’ (the “Board”) approved policies with respect to the procurement of services and materials and for public works projects, including expenditure authorization and limits, competitive proposal and bidding requirements, and general procurement procedures. All purchases of services or materials and public works projects to be paid for by the District must adhere to the authority level and dollar limits of this Policy as set forth in Section 2, except as otherwise provided by specific terms and exceptions set forth in this Policy.

II. AUTHORIZATION

2.1 By adoption of this Policy, the Board is authorizing the General Manager, or his/her designated representatives to exercise certain duties and responsibilities that are essential for the day-to-day operation of the District.

2.2 The General Manager may delegate the procurement of services and materials and the provision of public works projects to those staff members given specific authority, consistent with the terms of this Policy.

2.3 Delegation of purchasing authority may be through the authorized use of purchasing cards, purchase orders, check requests, or other written authorization. All such purchases will be made in conformity with the policies and procedures prescribed within this Policy.

2.4 The Board-established procurement limits and contract signatory authority are listed in Table 1 below. These limits are applicable on a per-expenditure/per-contract basis, not on an aggregated basis, for unrelated activities.

Table 1

Procurement Limits and Contract Signature Authority		
Title	Expenditures	Contract Signature Authority
<i>General Manager</i>	up to \$75,000	\$75,001 and over with Board authorization Up to \$75,000 without Board authorization
<i>Assistant General Manager</i>	up to \$50,000	Up to \$50,000
<i>Staff Directors, Assistant Directors</i>	up to \$25,000	Up to \$25,000
<i>Board Secretary</i>	up to \$20,000	None
<i>Superintendents, Managers, Controller, Principal Engineers</i>	up to \$10,000	None
<i>Supervisors, Coordinators, Administrative Personnel</i>	up to \$5,000	None

III. DEFINITIONS

The terms referenced in this Policy shall have the meanings as defined below.

Administrative Personnel – District administrative employees authorized by the General Manager to purchase miscellaneous items, food and travel in support of District functions; includes Administrative Assistant, Administrative Analyst, Human Resources Analyst and any other administrative position as authorized by the General Manager.

Amendment – A written change or addition to a legal document which, when properly executed, has the same legal validity of the original document.

Board – The Board of Directors of Moulton Niguel Water District.

Change Order – A written Amendment modifying the terms of an existing Contract or Purchase Order.

Consultant – An individual, firm or entity that provides or offers to provide Professional Services to the District.

Contingency - A predetermined amount or percentage of a Contract held for changes in a Public Works project.

Contract - Written agreement authorizing a contractor, Consultant, supplier or service provider to provide materials or services, or Public Works, in accordance with the material requirements, conditions or scope of work stated in the Contract.

Cooperative Purchasing – Participation with other agencies in cooperative purchasing arrangements and programs to leverage the benefits of volume purchases, delivery and supply chain advantages, best practices, and the reduction of administrative time and expenses.

District –Moulton Niguel Water District.

Emergency – A situation in which unforeseen circumstances present an immediate risk of harm or hazard to the public health, safety, and welfare, or to the District property, or threaten serious interruption of District operations.

General Manager – General Manager of the District or the person appointed by the Board to act in the capacity of the General Manager and authorized to administer this Policy on his/her behalf.

Invitation for Bids - A formal process for soliciting sealed bids from qualified prospective suppliers or Public Works contractors. Typically involves a formal bid opening, and the awarding of a Contract to a responsive and responsible supplier or contractor based on price and other specified factors, and as otherwise required by law.

Multiple Year Contract - A Contract for the purchase of services or materials, or for Public Works for a multiple year term or that may contain provisions to extend performance by exercising optional renewal periods. A Multiple Year Contract does not obligate the District beyond the initial award period and shall not provide for a cancellation payment to the contractor if options are not exercised.

Non-Discretionary Purchases – Payments to utilities, license renewals for software and cloud-based services that support critical business services, temporary employment services, insurance providers, healthcare providers and national, state or local agencies that relate to routine obligations and expenses essential to the District’s ability to provide service to customers and that have been approved in fiscal year operating or capital budgets.

Non-Professional Services – Services other than Professional Services, including supply and maintenance services.

Procurement - The purchase or lease of materials, supplies, equipment or services, or Public Works.

Professional Services – Any type of special service or advice in financial, economic, accounting, engineering, legal or administrative matters by persons specially trained and experienced and competent to perform the special services required. (Gov’t Code § 53060.) Such services include but are not limited to architectural; engineering; environmental; financial; land surveying; construction management; audits; training services; legal services; preparation of planning or studies; technology application development; and personnel, job classification and benefit studies.

Public Works – As defined by California Public Code Section 22002, public projects include construction, reconstruction, alteration, renovation, improvement, demolition, and repair work involving any publicly owned, leased or operated facility. Maintenance work is not considered a public project for purposes of this definition.

Purchasing Card - A form of charge card that allows materials and services to be purchased without using a Purchase Order. The District participates in the Cal Card, Home Depot, and Costco credit card programs.

Purchasing Department – The District employees assigned the duties of identifying vendors, obtaining competitive bids, issuing and processing Purchase Order Requisitions, maintaining office inventory, and assisting the General Manager in the application of Policy procedures within the District.

Purchase Order (PO) – – An authorization, under a standardized form in which the party designated as the “provider” is to provide materials and/or services for which the District agrees to pay.

Request for Proposal (RFP) - A solicitation used for the procurement of Professional Services and Non-Professional Services. Prospective suppliers or Consultants submit requested information and are evaluated/awarded based on pre-established criteria.

Request for Quotes (RFQ) - A solicitation used for procurement of supplies, materials, or equipment.

Requisition (REQ) - The procedural method by which departments may request a PO for the purchase of materials, supplies or equipment. Requisitions are entered into the District's ERP system application.

Single Source Purchase - Procurement where: (1) there is a compelling reason for only one source, a preferred brand, like material, etc., to be procured; or (2) the commodity is unique, including, but not limited to, acquisition of data processing, telecommunications and word processing equipment, goods and services; or (3) the purchase of a specific brand name, make or model is necessary to match existing District equipment or facilitate effective maintenance and support; or (4) when it is in the best interest of the District to extend or renew a Contract from a previous contract period, based on satisfactory service, reasonable prices, avoidance of start-up costs, avoidance of interruptions to District business, or good business practices.

Sole Source Purchase - Procurement where only one viable source exists. This is usually due to legal restrictions of patent rights, a proprietary process, warranty issues, original equipment, copyrights, etc.

Staff Directors – District employees with the title of “Director.”

IV. GENERAL PROCUREMENT POLICIES

4.1 Procurement practices shall comply with laws, regulations and guidelines of the State and any other applicable law, and the provisions of grant or funding contracts, if applicable.

4.2 Any employee/individual effecting any procurement action outside of the policies and procedures established by this Policy and without General Manager or Board authorization to do so, shall be subject to disciplinary action and/or termination in accordance with District policies.

4.3 Expenditures and Contract awards must be authorized by the appropriate authorization level indicated in Table 1.

4.3.1 Separating or dividing Contracts into smaller components for the purpose of bringing the cost of one or more Contracts below any specified sum to avoid a requirement in any section of this Policy or any policy incorporated herein is strictly prohibited. Contracts may be divided only to meet unique scheduling of a project or to accommodate necessary time frames. In addition, no specifications shall be drafted in such a manner as to limit competitive bidding or solicitation directly or indirectly to any one specific vendor, or any specific brand, product, thing, or service, except for those items that are approved as exempt from competitive bidding or solicitation requirements as provided in Section 7.1.3.

4.4 Purchase amounts include taxes and the cost of shipping, freight fees and any other charges billed by the supplier or contractor for purposes of the authorization limits under this Policy.

4.5 Purchase authorization and expenditure limits in Table 1, and competitive solicitation requirements in Table 2 and as further set forth in this Policy, are on a per purchase/per contract basis and shall not be applied as an aggregate limit to any vendor, supplier, contractor or Consultant.

4.6 With the exception of the General Manager, in the absence of an authorized signatory for a given request, authorization will be obtained from the next highest authority in Table 1.

4.7 The District may use electronic commerce whenever practicable or cost-effective. The District may accept electronic signatures and records in connection with District procurement, as permitted by applicable law.

V. PROCUREMENT METHODS

The following methods are available to initiate a purchase request or to pay for materials, services or Public Works:

5.1 Requisition/Purchase Order: Staff that require materials or services to carry out the defined duties of their positions shall submit Requisitions, in advance, for purchases in accordance with this Policy and other applicable procedures and policies of the District. The Purchasing Department will generate a PO from the Requisition.

5.2 Check Request: A check request can be used to initiate payment for certain limited materials or services without a PO. Check requests can be used to request payment for Non-Discretionary Purchases, services rendered, subscriptions, membership dues, workshop/seminar/conference registrations, use of facilities, etc.

5.3 Cal Card and Other Purchasing Cards: Designated staff may be assigned a Cal Card for miscellaneous purchases that fall within the authorization limits in Table 1. Purchases using the Cal Card are subject to the terms and conditions of the District Cardholder Acceptance Agreement and any other applicable District Cal Card policies or procedures. Services are not to be acquired on Cal Cards due to lack of insurance and indemnification language associated with these purchases. Use of all other Purchasing Cards are subject to the terms of this Policy and to any usage terms provided at the time of card issuance to the designated staff and any subsequent amendments to such terms, and other applicable District policies. Use of the Cal Card is not to be used in lieu of situations where a Purchase Order or other Procurement methods would be appropriate.

5.4 Blanket Purchase Order: A Blanket Purchase Order is used for payment to the same supplier/contractor/Consultant multiple times, or for ongoing monthly purchases/expenses. A Blanket Purchase Order is issued to cover all amounts anticipated to be paid to the supplier/contractor/Consultant for the fiscal year or through a contract term and typically expires at the end of the fiscal year or at the expiration or termination of a Contract.

5.5 Contracts: Provisions shall be made, either through specifications or procedures established by the District, for verification of the references and financial responsibility of the contracting parties prior to the award of a Contract. After award, all Contracts shall be executed on behalf of the District by the appropriate authorized signatory indicated in Table 1. In no case shall any Contract be made if sufficient funds are not budgeted and appropriated and not available to make payment promptly upon delivery or completion, or in accordance with a progress payment schedule, unless otherwise authorized and approved by the Board or approved by the General Manager as provided for in Section 6.2 (Emergency).

5.5.1 Contracts for Non-Professional Services, Professional Services and Public Works shall be executed when an expenditure exceeds \$5,000 (except in the event of an Emergency).

5.5.2 Multiple Year Contracts are allowed when in the best interests of the District as determined, and executed by the General Manager.

a. For purposes of procurement authorization, the dollar value of a Multiple Year Contract shall be the total contract value, including optional renewal periods. Once initially approved in

accordance with the Policy requirements, any optional renewals may then be authorized by the General Manager at the time of renewal, regardless of the dollar amount, provided the pre-priced option is consistent with the terms of the contract as initially approved.

VI. EXCEPTIONS TO PRE-AUTHORIZATION

6.1 Non-Discretionary Purchases do not require Board approval for payment, including those that exceed the General Manager limit of \$75,000. Initial engagement in all software license agreements and cloud-based service agreements are subject to the purchasing limitations as set forth in Table 1. Purchase Orders are not required for Non-Discretionary Purchases.

6.2 Emergency Work/Services: The General Manager, Assistant General Manager or the assigned Emergency Operations Director may authorize Emergency expenditures for work, services, and/or supplies where the cost exceeds \$75,000 without prior Board approval. The Board shall be notified of any expenditures for Emergency work, services and/or supplies exceeding the General Manager’s authorization limit at the next regularly scheduled Board meeting.

6.3 Purchase requests to replenish the District’s warehouse inventory within established inventory re-order levels require no prior authorization or signatory approval under Table 1.

VII. COMPETITIVE SELECTION PROCESS

7.1 General. A competitive selection process for procurement of services and materials, and for Public Works projects, is required in accordance with the limits as set forth in Table 2 below (subject to certain exceptions, qualifications or limitations as further set forth below).

Table 2

Competitive Solicitation Process - Requirements	
Purchase Amount	Solicitation Requirement
\$10,000 and under	<i>One Quote</i>
\$10,001-\$75,000	<i>Three Quotes</i>
\$75,001 and over	<i>RFP or RFQ or Invitation to Bid Process Required</i>

7.1.2 Competitive Solicitation - Submission.

- i) All quotes, bids and proposals must be in writing. Email is acceptable for expenditures under \$75,000.
- ii) RFP, RFQ, and Invitation to Bid submissions must be in writing and be in substantial compliance with terms in the solicitation, or as otherwise required by law, or may be disqualified.
- iii) Quotes, bids and proposal documentation shall be retained pursuant to the District’s record retention policy.

7.1.3 Exceptions from Competitive Solicitation Process - Generally. Solicitation of bids or proposals is preferable whenever practicable. In addition, to the exceptions stated under Section 7.3.2, the competitive solicitation requirements set forth under Table 2 may be waived when any of the following is applicable:

- Sole Source Purchases.
- Single Source Purchases.
- Emergency expenditures.
- Supplies, materials or equipment procured through a Cooperative Purchasing program with federal, state, county, or other public agencies.
- After a reasonable attempt has been made to obtain competitive quotes/ responses and it has been determined that no additional suppliers/providers/contractors/Consultants can be located; the District has a lack of response from suppliers/providers/contractors/Consultants to a competitive solicitation; or, when sufficient, satisfactory bids/proposals are not received, based on the District's sole discretion.
- Purchases to replenish the District's warehouse inventory within established inventory re-order levels.
- As dictated by law.

7.1.4 It shall be at the discretion of the General Manager, Assistant General Manager or the Purchasing Manager to determine whether an expenditure meets the qualifications listed herein to be exempt from a competitive solicitation, subject to any Board authorization.

7.2 Public Works. Contracts for Public Works projects shall conform to applicable requirements for Public Works contracts under State law, including but not limited to requirements relating to listing of subcontractors, posting of a payment bond in an amount not less than 100% of the total contract amount (for all Public Works contracts over \$25,000) and payment of prevailing wages (for all contracts for Public Works exceeding \$1,000), or as otherwise required by statute. Unless specifically waived by the District with the approval of the General Manager and District's legal counsel, the District shall require performance bonds for all Public Works Contracts in an amount not less than 100% of the total contract amount. Public Works Contracts let by an Invitation to Bid shall be awarded to the lowest responsive, responsible bidder in accordance with State law and the District's standard Public Works contract documents.

7.3 Professional Services (over \$75,000). RFPs will be initiated pursuant to the limits set forth in Table 2 when the Contract is anticipated to exceed \$75,000, unless the District's needs mandate uniquely qualified services, in which case only one proposal from a qualified firm may be solicited. Professional Services shall be engaged in accordance with California Government Code §4525 et seq., on the basis of demonstrated competence and qualifications for the types of services to be performed and at fair and reasonable prices to the District.

7.3.1 Professional Engineering Services. The District may request proposals for engineering services when the contract amount is anticipated to exceed \$25,000, and up to \$75,000. For engineering services anticipated to exceed \$75,000, RFPs will be initiated pursuant to the limits set forth in Table 2.

7.3.2 Exceptions from Competitive Solicitation Process – Professional Services. In addition to the exception for "uniquely qualified services" set forth under Section 7.3, the following criteria shall apply as exceptions to the competitive solicitation requirements set forth under Table 2 for Professional Services where such requirements would otherwise apply:

- For Professional Services estimated to cost \$25,000 or less, staff may request a proposal from one (1) qualified Consultant selecting from the list of qualified Consultants on file with the District.
- For Public Works projects where the project design is scheduled in phases, the related Professional Services may be negotiated with the Consultant that performed the work for a prior phase, if the Consultant performed satisfactory work on the prior phase(s) in terms of quality, schedule and estimated design costs and a satisfactory Contract can be negotiated.
- For Professional Services in which it is impracticable to comply with the selection process because of the unique, exploratory or experimental nature of the project, staff may request a proposal from one (1) qualified Consultant selecting from a list of qualified Consultants on file with the District.

7.4 Rejecting Competitive Responses - In response to an Invitation to Bid, RFQ, or RFP, the District may reject a bid or other response which is in any way incomplete, irregular, amplified, unqualified, conditional or otherwise not in compliance with the solicitation documents in all material respects, and in accordance with law. The District may waive any informality, irregularity, immaterial defects or technicalities in any bids or other responses received; and/or cancel an invitation for bids or RFP/RFQ, or reject all bids or responses for any other reason, which indicates the cancellation or rejection of all bids or responses is in the best interest of the District, and in accordance with law. Rejection of all bids or responses or cancellation of competitive solicitations, including determinations to re-bid, or re-solicit are subject to the same level of authority which is required to award a Contract as provided under Table 1, and as required by law.

7.5 In the case of RFPs and RFQs, the General Manager and the Board reserve the right to award Contracts based upon the best interests of the District, as determined by the District in its sole discretion.

VIII. CHANGE ORDERS

8.1 Change Orders may be issued from time to time as required by changes in the specifications or conditions of a project, services performed or materials issued.

8.1.1 Change Orders – PO Only. Change Orders up to 10% (to a maximum additional \$1,000) of the original PO amount may be issued by the Purchasing Department without further approvals. A revised Purchase Order Requisition must be completed and approved at the appropriate authorization levels under Table 1 for any Change Order request exceeding the original amount by more than 10% or the \$1,000 limit.

8.1.2 Change Orders – Formal Contracts and Amendments.

(1) For Contracts and Amendments under \$75,000:

- a. Change Orders up to 10% of the original Contract amount can be approved by the appropriate authorization levels as outlined in Table 1 up to a maximum total Contract amount of \$75,000 without Board approval.
- b. Board approval is required for Change Order requests exceeding the original Contract amount by more than 10%, or resulting in a total Contract amount over \$75,000.

(2) For Contracts and Amendments \$75,001 and over:

- a. Change Orders up to 10% (to a maximum additional \$75,000) of the original Contract amount can be approved by the appropriate authorization levels as outlined in Table 1 without Board approval.
- b. Board approval is required for Change Order requests exceeding the original Contract amount by more than 10%, or resulting in a \$75,000 increase.

8.1.3 A Change Order exceeding the Change Order limits set forth in this article may be authorized by the General Manager prior to Board approval if, in the General Manager's determination, any of the following circumstances exist:

- (1) A delay in Change Order authorization could result in a negative financial impact to the District.
- (2) A delay in Change Order authorization could result in damage to or impairment of the operations of a District facility.
- (3) An Emergency exists which requires immediate work/services.

The Board shall be notified of any Change Order authorization exceeding the General Manager's authorization limit at the next regularly scheduled Board meeting.

IX. ETHICAL PROCUREMENT- CONFLICT OF INTEREST

9.1 Board members, and District officers and employees shall not be financially interested in any contract made by them in their official capacity. (Government Code Section 1090). Board Members, officers and employees shall not participate in any way to influence a governmental decision in which he/she knows or has reason to know that he/she has a financial interest. (Government Code Section 87100)

9.2 Any District employee (other than Administrative Personnel not under Designated Positions in the District's Conflict of Interest Code) authorized under this Policy to make or enter into purchases on behalf of the District will complete a Statement of Economic Interests (Form 700) and comply with the District's Conflict of Interest Code.

9.3 Confidential or proprietary information must be handled with due care and proper consideration of ethical and legal ramifications and governmental regulations.

9.4 Purchasing activities must be performed in accordance with all applicable laws and District policies.

9.5 Any employee/individual who violates the standards set forth in this Section shall be subject to disciplinary action consistent with District personnel policies.

X. CALIFORNIA WATER DISTRICT STATUS

Notwithstanding anything to the contrary in this Policy, the District is a California Water District and therefore is not mandated by State law to competitively bid any purchases, including those for Public Works projects and/or capital expenditures. The District is free to enter into non-bid contracts for Public Works, to purchase materials, services and supplies, to contract for design-build work, to utilize job-order contracting and to enter into Cooperative Purchasing arrangements for the design, construction and maintenance of Public Works, or undertake any other form of contracting determined to be in the District's best interest, except as otherwise expressly restricted by law.

XI. POLICY REVISIONS

This document will be maintained and revised by the General Manager with his/her designated representatives in consultation with the District's legal counsel, subject to approval by the Board. Revisions will occur whenever applicable Federal, State or local regulations change or otherwise as the need arises and in the discretion of the Board.

XII. POLICY APPROVAL AND ADOPTION

This Policy has been reviewed by the Moulton Niguel Water District Board of Directors and adopted by Resolution No. __-__ on June __, 2017.

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 supporting 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. Funds from the Capital Facilities Restricted Reserve are 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. 17-15

**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 2017-18**

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 a 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 2017-18 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 15, 2017 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 2017-18 Budget,” is hereby made part of this Resolution.

SECTION 2. Said Operating and Maintenance Budget and Capital Improvement Budget is hereby adopted for the Fiscal Year beginning July 1, 2017, and ending June 30, 2018, 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 Director level staff, the Assistant General Manager and/or Controller 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 \$44,497,108.

 - 2. The maximum amount which may be transferred by the General Manager between and among Funds 7, 12, and 14 shall be \$44,497,108.

 - 3. The maximum amount which may be transferred by the General Manager from the Capacity Fee Fund 15 to Fund 7 shall be \$267,368 to be spent on the identified projects in Table 1.

Table 1.

Project No.	Description	FY 2017-18 Budget
2016002	2016-17 VALVE REPLACEMENT	\$1,250,000
JRWSS	SCWD/JRWSS CAPITAL PROJECT	\$1,665,029
2015013	2016-17 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$1,700,000
SOCWA124	2016/2017 SOCWA CAPITAL PC 2(R)	\$1,029,280
2009115	SAN JUAN CREEK 30 EFFLUENT TM	\$2,211,063
SOCWA128	2016/2017 SOCWA CAPITAL PC 17(R)	\$3,376,803
Total		\$11,232,175

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 \$10,293,690 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.

SECTION 6. All appropriations for the Capital Improvement Projects remaining unexpended on June 30, 2017, are hereby appropriated for such Capital Projects for the 2017-18 Fiscal Year.

SECTION 7. All appropriations and outstanding encumbrances for non-Capital Projects as of June 30, 2017, 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 24, 2017, for Fiscal Year 2017-2018.

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 15th day of June, 2017.

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

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
GENERAL MANAGER**

JOB CLASSIFICATION	FREQUENCY	RATE
General Manager	Annually	\$ 282,322.00

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
GENERAL UNIT

Exhibit 2

JOB CLASSIFICATION	RANGE
Accountant	G30
Accounting Assistant I	G2
Accounting Assistant II	G7
Accounting Assistant III	G17
Administrative Assistant I	G9
Administrative Assistant II	G19
Buyer	G29
Cross Connection Inspector I	G12
Cross Connection Inspector II	G24
Cross Connection Inspector III	G34
Customer Account Representative I	G1
Customer Account Representative II	G4
Customer Account Representative III	G14
Customer Service Field Technician I	G3
Customer Service Field Technician II	G8
Customer Service Field Technician III	G18
Electrical/Instrumentation Technician	G36
Facilities Coordinator	G32
GIS Analyst	G39
GIS Technician	G20
Inspector I	G12
Inspector II	G23
Inspector III	G34
Inventory Clerk	G3
Maintenance Worker I - Collections	G6
Maintenance Worker I - Facilities	G10
Maintenance Worker I - Streets	G5
Maintenance Worker II - Collections	G16
Maintenance Worker II - Facilities	G21
Maintenance Worker II - Streets	G15
Maintenance Worker III - Collections	G28
Maintenance Worker III - Facilities	G32
Maintenance Worker III - Streets	G27
Mechanic I	G11
Mechanic II	G22
Mechanic III	G33
Permit Technician	G20
Purchasing Agent	G47

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
GENERAL UNIT

Exhibit 2

JOB CLASSIFICATION	RANGE
Records & Mapping Technician	G20
Senior Cross Connection Inspector	G42
Senior Customer Account Representative	G26
Senior Customer Service Field Technician	G31
Senior Electrical/Instrumentation Systems Programmer	G46
Senior Inspector	G42
Senior Maintenance Worker - Collections	G38
Senior Maintenance Worker - Facilities	G40
Senior Maintenance Worker - Streets	G37
Senior Mechanic	G41
Senior Water Efficiency Representative	G31
Senior Water Systems Operator	G45
Systems Analyst I	G44
Systems Analyst II	G48
Systems Analyst III	G49
Water Efficiency Analyst	G39
Water Efficiency Representative I	G3
Water Efficiency Representative II	G8
Water Efficiency Representative III	G18
Water Systems Operator I	G13
Water Systems Operator II	G25
Water Systems Operator III	G35

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
GENERAL UNIT**

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2.5% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11
Customer Account Representative I	G1	Monthly	3,497.87	3,584.53	3,674.67	3,766.53	3,860.13	3,957.20	4,056.00	4,158.27	4,262.27	4,368.00	4,477.20
		Hourly	20.18	20.68	21.20	21.73	22.27	22.83	23.40	23.99	24.59	25.20	25.83
		Annually	41,974.40	43,014.40	44,096.00	45,198.40	46,321.60	47,486.40	48,672.00	49,899.20	51,147.20	52,416.00	53,726.40
Accounting Assistant I	G2	Monthly	3,707.60	3,799.47	3,894.80	3,991.87	4,092.40	4,194.67	4,300.40	4,407.87	4,517.07	4,629.73	4,745.87
		Hourly	21.39	21.92	22.47	23.03	23.61	24.20	24.81	25.43	26.06	26.71	27.38
		Annually	44,491.20	45,593.60	46,737.60	47,902.40	49,108.80	50,336.00	51,604.80	52,894.40	54,204.80	55,556.80	56,950.40
Customer Service Field Technician I Inventory Clerk Water Efficiency Representative I	G3	Monthly	3,711.07	3,804.67	3,898.27	3,997.07	4,095.87	4,198.13	4,303.87	4,411.33	4,522.27	4,634.93	4,751.07
		Hourly	21.41	21.95	22.49	23.06	23.63	24.22	24.83	25.45	26.09	26.74	27.41
		Annually	44,532.80	45,656.00	46,779.20	47,964.80	49,150.40	50,377.60	51,646.40	52,936.00	54,267.20	55,619.20	57,012.80
Customer Account Representative II	G4	Monthly	3,932.93	4,031.73	4,132.27	4,234.53	4,342.00	4,449.47	4,560.40	4,674.80	4,792.67	4,912.27	5,035.33
		Hourly	22.69	23.26	23.84	24.43	25.05	25.67	26.31	26.97	27.65	28.34	29.05
		Annually	47,195.20	48,380.80	49,587.20	50,814.40	52,104.00	53,393.60	54,724.80	56,097.60	57,512.00	58,947.20	60,424.00
Maintenance Worker I - Streets	G5	Monthly	3,993.60	4,094.13	4,196.40	4,300.40	4,407.87	4,518.80	4,631.47	4,747.60	4,865.47	4,986.80	5,111.60
		Hourly	23.04	23.62	24.21	24.81	25.43	26.07	26.72	27.39	28.07	28.77	29.49
		Annually	47,923.20	49,129.60	50,356.80	51,604.80	52,894.40	54,225.60	55,577.60	56,971.20	58,385.60	59,841.60	61,339.20
Maintenance Worker I - Collections	G6	Monthly	4,002.27	4,102.80	4,205.07	4,310.80	4,418.27	4,527.47	4,641.87	4,758.00	4,875.87	4,998.93	5,123.73
		Hourly	23.09	23.67	24.26	24.87	25.49	26.12	26.78	27.45	28.13	28.84	29.56
		Annually	48,027.20	49,233.60	50,460.80	51,729.60	53,019.20	54,329.60	55,702.40	57,096.00	58,510.40	59,987.20	61,484.80
Accounting Assistant II	G7	Monthly	4,172.13	4,276.13	4,383.60	4,492.80	4,605.47	4,719.87	4,837.73	4,959.07	5,083.87	5,210.40	5,340.40
		Hourly	24.07	24.67	25.29	25.92	26.57	27.23	27.91	28.61	29.33	30.06	30.81
		Annually	50,065.60	51,313.60	52,603.20	53,913.60	55,265.60	56,638.40	58,052.80	59,508.80	61,006.40	62,524.80	64,084.80
Customer Service Field Technician II Water Efficiency Representative II	G8	Monthly	4,175.60	4,279.60	4,387.07	4,496.27	4,608.93	4,725.07	4,842.93	4,964.27	5,087.33	5,215.60	5,345.60
		Hourly	24.09	24.69	25.31	25.94	26.59	27.26	27.94	28.64	29.35	30.09	30.84
		Annually	50,107.20	51,355.20	52,644.80	53,955.20	55,307.20	56,700.80	58,115.20	59,571.20	61,048.00	62,587.20	64,147.20
Administrative Assistant I	G9	Monthly	4,192.93	4,296.93	4,404.40	4,515.33	4,628.00	4,744.13	4,862.00	4,983.33	5,108.13	5,236.40	5,368.13
		Hourly	24.19	24.79	25.41	26.05	26.70	27.37	28.05	28.75	29.47	30.21	30.97
		Annually	50,315.20	51,563.20	52,852.80	54,184.00	55,536.00	56,929.60	58,344.00	59,800.00	61,297.60	62,836.80	64,417.60
Maintenance Worker I - Facilities	G10	Monthly	4,243.20	4,348.93	4,458.13	4,569.07	4,683.47	4,801.33	4,920.93	5,044.00	5,170.53	5,298.80	5,432.27
		Hourly	24.48	25.09	25.72	26.36	27.02	27.70	28.39	29.10	29.83	30.57	31.34
		Annually	50,918.40	52,187.20	53,497.60	54,828.80	56,201.60	57,616.00	59,051.20	60,528.00	62,046.40	63,585.60	65,187.20
Mechanic I	G11	Monthly	4,251.87	4,357.60	4,466.80	4,579.47	4,693.87	4,810.00	4,931.33	5,054.40	5,180.93	5,309.20	5,442.67
		Hourly	24.53	25.14	25.77	26.42	27.08	27.75	28.45	29.16	29.89	30.63	31.40
		Annually	51,022.40	52,291.20	53,601.60	54,953.60	56,326.40	57,720.00	59,176.00	60,652.80	62,171.20	63,710.40	65,312.00

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Cross Connection Inspector I Inspector I	G12	Monthly	4,322.93	4,430.40	4,541.33	4,655.73	4,771.87	4,891.47	5,012.80	5,139.33	5,267.60	5,399.33	5,534.53
		Hourly	24.94	25.56	26.20	26.86	27.53	28.22	28.92	29.65	30.39	31.15	31.93
		Annually	51,875.20	53,164.80	54,496.00	55,868.80	57,262.40	58,697.60	60,153.60	61,672.00	63,211.20	64,792.00	66,414.40
Water Systems Operator I	G13	Monthly	4,381.87	4,491.07	4,603.73	4,718.13	4,836.00	4,957.33	5,082.13	5,208.67	5,338.67	5,472.13	5,609.07
		Hourly	25.28	25.91	26.56	27.22	27.90	28.60	29.32	30.05	30.80	31.57	32.36
		Annually	52,582.40	53,892.80	55,244.80	56,617.60	58,032.00	59,488.00	60,985.60	62,504.00	64,064.00	65,665.60	67,308.80
Customer Account Representative III	G14	Monthly	4,426.93	4,537.87	4,650.53	4,766.67	4,886.27	5,009.33	5,134.13	5,262.40	5,394.13	5,529.33	5,666.27
		Hourly	25.54	26.18	26.83	27.50	28.19	28.90	29.62	30.36	31.12	31.90	32.69
		Annually	53,123.20	54,454.40	55,806.40	57,200.00	58,635.20	60,112.00	61,609.60	63,148.80	64,729.60	66,352.00	67,995.20
Maintenance Worker II - Streets	G15	Monthly	4,498.00	4,610.67	4,725.07	4,844.67	4,964.27	5,089.07	5,215.60	5,347.33	5,480.80	5,617.73	5,758.13
		Hourly	25.95	26.60	27.26	27.95	28.64	29.36	30.09	30.85	31.62	32.41	33.22
		Annually	53,976.00	55,328.00	56,700.80	58,136.00	59,571.20	61,068.80	62,587.20	64,168.00	65,769.60	67,412.80	69,097.60
Maintenance Worker II - Collections	G16	Monthly	4,504.93	4,617.60	4,733.73	4,851.60	4,972.93	5,097.73	5,224.27	5,354.27	5,489.47	5,626.40	5,766.80
		Hourly	25.99	26.64	27.31	27.99	28.69	29.41	30.14	30.89	31.67	32.46	33.27
		Annually	54,059.20	55,411.20	56,804.80	58,219.20	59,675.20	61,172.80	62,691.20	64,251.20	65,873.60	67,516.80	69,201.60
Accounting Assistant III	G17	Monthly	4,695.60	4,813.47	4,933.07	5,056.13	5,182.67	5,312.67	5,446.13	5,581.33	5,721.73	5,863.87	6,011.20
		Hourly	27.09	27.77	28.46	29.17	29.90	30.65	31.42	32.20	33.01	33.83	34.68
		Annually	56,347.20	57,761.60	59,196.80	60,673.60	62,192.00	63,752.00	65,353.60	66,976.00	68,660.80	70,366.40	72,134.40
Customer Service Field Technician III Water Efficiency Representative III	G18	Monthly	4,697.33	4,815.20	4,934.80	5,057.87	5,184.40	5,314.40	5,447.87	5,583.07	5,723.47	5,865.60	6,012.93
		Hourly	27.10	27.78	28.47	29.18	29.91	30.66	31.43	32.21	33.02	33.84	34.69
		Annually	56,368.00	57,782.40	59,217.60	60,694.40	62,212.80	63,772.80	65,374.40	66,996.80	68,681.60	70,387.20	72,155.20
Administrative Assistant II	G19	Monthly	4,730.27	4,848.13	4,969.47	5,094.27	5,220.80	5,352.53	5,486.00	5,622.93	5,763.33	5,907.20	6,054.53
		Hourly	27.29	27.97	28.67	29.39	30.12	30.88	31.65	32.44	33.25	34.08	34.93
		Annually	56,763.20	58,177.60	59,633.60	61,131.20	62,649.60	64,230.40	65,832.00	67,475.20	69,160.00	70,886.40	72,654.40
GIS Technician Permit Technician Records & Mapping Technician	G20	Monthly	4,761.47	4,881.07	5,002.40	5,127.20	5,255.47	5,387.20	5,522.40	5,659.33	5,801.47	5,947.07	6,094.40
		Hourly	27.47	28.16	28.86	29.58	30.32	31.08	31.86	32.65	33.47	34.31	35.16
		Annually	57,137.60	58,572.80	60,028.80	61,526.40	63,065.60	64,646.40	66,268.80	67,912.00	69,617.60	71,364.80	73,132.80
Maintenance Worker II - Facilities	G21	Monthly	4,770.13	4,889.73	5,011.07	5,137.60	5,265.87	5,397.60	5,531.07	5,669.73	5,811.87	5,957.47	6,106.53
		Hourly	27.52	28.21	28.91	29.64	30.38	31.14	31.91	32.71	33.53	34.37	35.23
		Annually	57,241.60	58,676.80	60,132.80	61,651.20	63,190.40	64,771.20	66,372.80	68,036.80	69,742.40	71,489.60	73,278.40
Mechanic II	G22	Monthly	4,784.00	4,903.60	5,026.67	5,151.47	5,281.47	5,413.20	5,548.40	5,687.07	5,829.20	5,974.80	6,123.87
		Hourly	27.60	28.29	29.00	29.72	30.47	31.23	32.01	32.81	33.63	34.47	35.33
		Annually	57,408.00	58,843.20	60,320.00	61,817.60	63,377.60	64,958.40	66,580.80	68,244.80	69,950.40	71,697.60	73,486.40

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JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11
Inspector II	G23	Monthly	4,862.00	4,983.33	5,108.13	5,236.40	5,366.40	5,501.60	5,638.53	5,778.93	5,924.53	6,071.87	6,224.40
		Hourly	28.05	28.75	29.47	30.21	30.96	31.74	32.53	33.34	34.18	35.03	35.91
		Annually	58,344.00	59,800.00	61,297.60	62,836.80	64,396.80	66,019.20	67,662.40	69,347.20	71,094.40	72,862.40	74,692.80
Cross Connection Inspector II	G24	Monthly	4,898.40	5,021.47	5,146.27	5,274.53	5,406.27	5,541.47	5,680.13	5,822.27	5,967.87	6,116.93	6,271.20
		Hourly	28.26	28.97	29.69	30.43	31.19	31.97	32.77	33.59	34.43	35.29	36.18
		Annually	58,780.80	60,257.60	61,755.20	63,294.40	64,875.20	66,497.60	68,161.60	69,867.20	71,614.40	73,403.20	75,254.40
Water Systems Operator II	G25	Monthly	4,929.60	5,052.67	5,179.20	5,309.20	5,440.93	5,577.87	5,716.53	5,860.40	6,006.00	6,156.80	6,311.07
		Hourly	28.44	29.15	29.88	30.63	31.39	32.18	32.98	33.81	34.65	35.52	36.41
		Annually	59,155.20	60,632.00	62,150.40	63,710.40	65,291.20	66,934.40	68,598.40	70,324.80	72,072.00	73,881.60	75,732.80
Senior Customer Account Representative	G26	Monthly	4,979.87	5,104.67	5,231.20	5,362.93	5,496.40	5,635.07	5,775.47	5,919.33	6,066.67	6,219.20	6,375.20
		Hourly	28.73	29.45	30.18	30.94	31.71	32.51	33.32	34.15	35.00	35.88	36.78
		Annually	59,758.40	61,256.00	62,774.40	64,355.20	65,956.80	67,620.80	69,305.60	71,032.00	72,800.00	74,630.40	76,502.40
Maintenance Worker III - Streets	G27	Monthly	5,052.67	5,179.20	5,309.20	5,440.93	5,577.87	5,716.53	5,860.40	6,006.00	6,156.80	6,309.33	6,467.07
		Hourly	29.15	29.88	30.63	31.39	32.18	32.98	33.81	34.65	35.52	36.40	37.31
		Annually	60,632.00	62,150.40	63,710.40	65,291.20	66,934.40	68,598.40	70,324.80	72,072.00	73,881.60	75,712.00	77,604.80
Maintenance Worker III - Collections	G28	Monthly	5,064.80	5,191.33	5,321.33	5,454.80	5,590.00	5,730.40	5,874.27	6,019.87	6,170.67	6,324.93	6,482.67
		Hourly	29.22	29.95	30.70	31.47	32.25	33.06	33.89	34.73	35.60	36.49	37.40
		Annually	60,777.60	62,296.00	63,856.00	65,457.60	67,080.00	68,764.80	70,491.20	72,238.40	74,048.00	75,899.20	77,792.00
Buyer	G29	Monthly	5,220.80	5,350.80	5,484.27	5,622.93	5,763.33	5,907.20	6,054.53	6,205.33	6,361.33	6,520.80	6,683.73
		Hourly	30.12	30.87	31.64	32.44	33.25	34.08	34.93	35.80	36.70	37.62	38.56
		Annually	62,649.60	64,209.60	65,811.20	67,475.20	69,160.00	70,886.40	72,654.40	74,464.00	76,336.00	78,249.60	80,204.80
Accountant	G30	Monthly	5,279.73	5,411.47	5,546.67	5,685.33	5,827.47	5,973.07	6,122.13	6,276.40	6,432.40	6,593.60	6,758.27
		Hourly	30.46	31.22	32.00	32.80	33.62	34.46	35.32	36.21	37.11	38.04	38.99
		Annually	63,356.80	64,937.60	66,560.00	68,224.00	69,929.60	71,676.80	73,465.60	75,316.80	77,188.80	79,123.20	81,099.20
Senior Customer Service Field Technician Senior Water Efficiency Representative	G31	Monthly	5,283.20	5,414.93	5,550.13	5,688.80	5,830.93	5,978.27	6,127.33	6,279.87	6,437.60	6,598.80	6,763.47
		Hourly	30.48	31.24	32.02	32.82	33.64	34.49	35.35	36.23	37.14	38.07	39.02
		Annually	63,398.40	64,979.20	66,601.60	68,265.60	69,971.20	71,739.20	73,528.00	75,358.40	77,251.20	79,185.60	81,161.60
Facilities Coordinator Maintenance Worker III - Facilities	G32	Monthly	5,366.40	5,499.87	5,638.53	5,778.93	5,922.80	6,071.87	6,222.67	6,378.67	6,538.13	6,701.07	6,869.20
		Hourly	30.96	31.73	32.53	33.34	34.17	35.03	35.90	36.80	37.72	38.66	39.63
		Annually	64,396.80	65,998.40	67,662.40	69,347.20	71,073.60	72,862.40	74,672.00	76,544.00	78,457.60	80,412.80	82,430.40
Mechanic III	G33	Monthly	5,382.00	5,517.20	5,654.13	5,796.27	5,940.13	6,089.20	6,241.73	6,397.73	6,557.20	6,721.87	6,890.00
		Hourly	31.05	31.83	32.62	33.44	34.27	35.13	36.01	36.91	37.83	38.78	39.75
		Annually	64,584.00	66,206.40	67,849.60	69,555.20	71,281.60	73,070.40	74,900.80	76,772.80	78,686.40	80,624.00	82,680.00

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Cross Connection Inspector III Inspector III	G34	Monthly	5,470.40	5,607.33	5,747.73	5,891.60	6,038.93	6,189.73	6,344.00	6,501.73	6,664.67	6,831.07	7,002.67
		Hourly	31.56	32.35	33.16	33.99	34.84	35.71	36.60	37.51	38.45	39.41	40.40
		Annually	65,644.80	67,288.00	68,972.80	70,699.20	72,467.20	74,276.80	76,128.00	78,020.80	79,976.00	81,972.80	84,032.00
Water Systems Operator III	G35	Monthly	5,546.67	5,685.33	5,827.47	5,973.07	6,122.13	6,276.40	6,432.40	6,593.60	6,758.27	6,926.40	7,099.73
		Hourly	32.00	32.80	33.62	34.46	35.32	36.21	37.11	38.04	38.99	39.96	40.96
		Annually	66,560.00	68,224.00	69,929.60	71,676.80	73,465.60	75,316.80	77,188.80	79,123.20	81,099.20	83,116.80	85,196.80
Electrical/Instrumentation Technician	G36	Monthly	5,642.00	5,782.40	5,928.00	6,075.33	6,227.87	6,383.87	6,543.33	6,706.27	6,874.40	7,046.00	7,222.80
		Hourly	32.55	33.36	34.20	35.05	35.93	36.83	37.75	38.69	39.66	40.65	41.67
		Annually	67,704.00	69,388.80	71,136.00	72,904.00	74,734.40	76,606.40	78,520.00	80,475.20	82,492.80	84,552.00	86,673.60
Senior Maintenance Worker - Streets	G37	Monthly	5,687.07	5,829.20	5,974.80	6,123.87	6,278.13	6,434.13	6,595.33	6,760.00	6,929.87	7,103.20	7,280.00
		Hourly	32.81	33.63	34.47	35.33	36.22	37.12	38.05	39.00	39.98	40.98	42.00
		Annually	68,244.80	69,950.40	71,697.60	73,486.40	75,337.60	77,209.60	79,144.00	81,120.00	83,156.40	85,238.40	87,360.00
Senior Maintenance Worker - Collections	G38	Monthly	5,697.47	5,839.60	5,985.20	6,136.00	6,288.53	6,446.27	6,607.47	6,772.13	6,942.00	7,115.33	7,293.87
		Hourly	32.87	33.69	34.53	35.40	36.28	37.19	38.12	39.07	40.05	41.05	42.08
		Annually	68,369.60	70,075.20	71,822.40	73,632.00	75,462.40	77,355.20	79,289.60	81,265.60	83,304.00	85,384.00	87,526.40
GIS Analyst Water Efficiency Analyst	G39	Monthly	6,026.80	6,177.60	6,331.87	6,489.60	6,652.53	6,818.93	6,988.80	7,163.87	7,342.40	7,526.13	7,715.07
		Hourly	34.77	35.64	36.53	37.44	38.38	39.34	40.32	41.33	42.36	43.42	44.51
		Annually	72,321.60	74,131.20	75,982.40	77,875.20	79,830.40	81,827.20	83,865.60	85,966.40	88,108.80	90,313.60	92,580.80
Senior Maintenance Worker - Facilities	G40	Monthly	6,037.20	6,188.00	6,342.27	6,501.73	6,664.67	6,831.07	7,000.93	7,176.00	7,356.27	7,540.00	7,728.93
		Hourly	34.83	35.70	36.59	37.51	38.45	39.41	40.39	41.40	42.44	43.50	44.59
		Annually	72,446.40	74,256.00	76,107.20	78,020.80	79,976.00	81,972.80	84,011.20	86,112.00	88,275.20	90,480.00	92,747.20
Senior Mechanic	G41	Monthly	6,052.80	6,203.60	6,359.60	6,519.07	6,682.00	6,848.40	7,020.00	7,195.07	7,375.33	7,559.07	7,748.00
		Hourly	34.92	35.79	36.69	37.61	38.55	39.51	40.50	41.51	42.55	43.61	44.70
		Annually	72,633.60	74,443.20	76,315.20	78,228.80	80,184.00	82,180.80	84,240.00	86,340.80	88,504.00	90,708.80	92,976.00
Senior Cross Connection Inspector Senior Inspector	G42	Monthly	6,153.33	6,307.60	6,465.33	6,626.53	6,792.93	6,961.07	7,136.13	7,314.67	7,496.67	7,683.87	7,876.27
		Hourly	35.50	36.39	37.30	38.23	39.19	40.16	41.17	42.20	43.25	44.33	45.44
		Annually	73,840.00	75,691.20	77,584.00	79,518.40	81,515.20	83,532.80	85,633.60	87,776.00	89,960.00	92,206.40	94,515.20
	G43	Monthly	6,170.67	6,324.93	6,482.67	6,645.60	6,812.00	6,981.87	7,156.93	7,335.47	7,519.20	7,706.40	7,898.80
		Hourly	35.60	36.49	37.40	38.34	39.30	40.28	41.29	42.32	43.38	44.46	45.57
		Annually	74,048.00	75,899.20	77,792.00	79,747.20	81,744.00	83,782.40	85,883.20	88,025.60	90,230.40	92,476.80	94,785.60
Systems Analyst I	G44	Monthly	6,227.87	6,383.87	6,543.33	6,706.27	6,874.40	7,046.00	7,222.80	7,403.07	7,588.53	7,777.47	7,971.60
		Hourly	35.93	36.83	37.75	38.69	39.66	40.65	41.67	42.71	43.78	44.87	45.99
		Annually	74,734.40	76,606.40	78,520.00	80,475.20	82,492.80	84,552.00	86,673.60	88,836.80	91,062.40	93,329.60	95,659.20

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
GENERAL UNIT**

These job classifications are Non-Exempt
2.5% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11
Senior Water Systems Operator	G45	Monthly	6,238.27	6,394.27	6,553.73	6,718.40	6,886.53	7,058.13	7,234.93	7,415.20	7,600.67	7,791.33	7,985.47
		Hourly	35.99	36.89	37.81	38.76	39.73	40.72	41.74	42.78	43.85	44.95	46.07
		Annually	74,859.20	76,731.20	78,644.80	80,620.80	82,638.40	84,697.60	86,819.20	88,982.40	91,208.00	93,496.00	95,825.60
Sr. Electrical/Instrumentation Systems Programmer	G46	Monthly	6,344.00	6,503.47	6,664.67	6,831.07	7,002.67	7,177.73	7,356.27	7,541.73	7,728.93	7,923.07	8,120.67
		Hourly	36.60	37.52	38.45	39.41	40.40	41.41	42.44	43.51	44.59	45.71	46.85
		Annually	76,128.00	78,041.60	79,976.00	81,972.80	84,032.00	86,132.80	88,275.20	90,500.80	92,747.20	95,076.80	97,448.00
Purchasing Agent	G47	Monthly	6,520.80	6,683.73	6,850.13	7,021.73	7,198.53	7,377.07	7,562.53	7,751.47	7,945.60	8,143.20	8,347.73
		Hourly	37.62	38.56	39.52	40.51	41.53	42.56	43.63	44.72	45.84	46.98	48.16
		Annually	78,249.60	80,204.80	82,201.60	84,260.80	86,382.40	88,524.80	90,750.40	93,017.60	95,347.20	97,718.40	100,172.80
Systems Analyst II	G48	Monthly	7,004.40	7,179.47	7,359.73	7,543.47	7,732.40	7,924.80	8,122.40	8,325.20	8,534.93	8,748.13	8,966.53
		Hourly	40.41	41.42	42.46	43.52	44.61	45.72	46.86	48.03	49.24	50.47	51.73
		Annually	84,052.80	86,153.60	88,316.80	90,521.60	92,788.80	95,097.60	97,468.80	99,902.40	102,419.20	104,977.60	107,598.40
Systems Analyst III	G49	Monthly	7,881.47	8,079.07	8,280.13	8,488.13	8,699.60	8,918.00	9,139.87	9,368.67	9,602.67	9,843.60	10,089.73
		Hourly	45.47	46.61	47.77	48.97	50.19	51.45	52.73	54.05	55.40	56.79	58.21
		Annually	94,577.60	96,948.80	99,361.60	101,857.60	104,395.20	107,016.00	109,678.40	112,424.00	115,232.00	118,123.20	121,076.80

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
SUPERVISORY UNIT

Exhibit 2

JOB CLASSIFICATION	RANGE
Accounting Supervisor	S6
Collection System Supervisor	S4
Cross Connection Supervisor	S10
Customer Account Supervisor	S13
Customer Service Field Supervisor	S5
Electrical/Instrumentation Services Supervisor	S12
Inspection Supervisor	S10
Records and Mapping Coordinator	S1
Senior Accountant	S2
Senior GIS Analyst	S7
Station Maintenance Supervisor	S8
Street Crew Supervisor	S3
Support Services Supervisor	S9
Water Efficiency Supervisor	S5
Water Distribution Supervisor	S11

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
SUPERVISORY UNIT**

These job classifications are Non-Exempt
2.5% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11
Records and Mapping Coordinator	S1	Monthly	5,356.00	5,489.47	5,626.40	5,768.53	5,912.40	6,059.73	6,210.53	6,366.53	6,526.00	6,688.93	6,855.33
		Hourly	30.90	31.67	32.46	33.28	34.11	34.96	35.83	36.73	37.65	38.59	39.55
		Annually	64,272.00	65,873.60	67,516.80	69,222.40	70,948.80	72,716.80	74,526.40	76,398.40	78,312.00	80,267.20	82,264.00
Senior Accountant	S2	Monthly	5,938.40	6,087.47	6,238.27	6,394.27	6,555.47	6,718.40	6,886.53	7,058.13	7,234.93	7,416.93	7,602.40
		Hourly	34.26	35.12	35.99	36.89	37.82	38.76	39.73	40.72	41.74	42.79	43.86
		Annually	71,260.80	73,049.60	74,859.20	76,731.20	78,665.60	80,620.80	82,638.40	84,697.60	86,819.20	89,003.20	91,228.80
Street Crew Supervisor	S3	Monthly	6,397.73	6,557.20	6,721.87	6,890.00	7,061.60	7,238.40	7,418.67	7,604.13	7,794.80	7,990.67	8,190.00
		Hourly	36.91	37.83	38.78	39.75	40.74	41.76	42.80	43.87	44.97	46.10	47.25
		Annually	76,772.80	78,686.40	80,662.40	82,680.00	84,739.20	86,860.80	89,024.00	91,249.60	93,537.60	95,888.00	98,280.00
Collection System Supervisor	S4	Monthly	6,409.87	6,569.33	6,734.00	6,902.13	7,075.47	7,252.27	7,434.27	7,619.73	7,810.40	8,004.53	8,205.60
		Hourly	36.98	37.90	38.85	39.82	40.82	41.84	42.89	43.96	45.06	46.18	47.34
		Annually	76,918.40	78,832.00	80,808.00	82,825.60	84,905.60	87,027.20	89,211.20	91,436.80	93,724.80	96,054.40	98,467.20
Customer Service Field Supervisor Water Efficiency Supervisor	S5	Monthly	6,531.20	6,694.13	6,862.27	7,033.87	7,208.93	7,389.20	7,574.67	7,763.60	7,957.73	8,157.07	8,359.87
		Hourly	37.68	38.62	39.59	40.58	41.59	42.63	43.70	44.79	45.91	47.06	48.23
		Annually	78,374.40	80,329.60	82,347.20	84,406.40	86,507.20	88,670.40	90,896.00	93,163.20	95,492.80	97,884.80	100,318.40
Accounting Supervisor	S6	Monthly	6,682.00	6,848.40	7,020.00	7,195.07	7,375.33	7,560.80	7,749.73	7,942.13	8,141.47	8,344.27	8,554.00
		Hourly	38.55	39.51	40.50	41.51	42.55	43.62	44.71	45.82	46.97	48.14	49.35
		Annually	80,184.00	82,180.80	84,240.00	86,340.80	88,504.00	90,729.60	92,996.80	95,305.60	97,697.60	100,131.20	102,648.00
Senior GIS Analyst	S7	Monthly	6,779.07	6,948.93	7,122.27	7,300.80	7,482.80	7,670.00	7,862.40	8,058.27	8,259.33	8,465.60	8,677.07
		Hourly	39.11	40.09	41.09	42.12	43.17	44.25	45.36	46.49	47.65	48.84	50.06
		Annually	81,348.80	83,387.20	85,467.20	87,609.60	89,793.60	92,040.00	94,348.80	96,699.20	99,112.00	101,587.20	104,124.80
Station Maintenance Supervisor	S8	Monthly	6,792.93	6,962.80	7,136.13	7,314.67	7,498.40	7,685.60	7,878.00	8,073.87	8,276.67	8,482.93	8,696.13
		Hourly	39.19	40.17	41.17	42.20	43.26	44.34	45.45	46.58	47.75	48.94	50.17
		Annually	81,515.20	83,553.60	85,633.60	87,776.00	89,980.80	92,227.20	94,536.00	96,886.40	99,320.00	101,795.20	104,353.60
Support Services Supervisor	S9	Monthly	6,810.27	6,980.13	7,155.20	7,333.73	7,517.47	7,704.67	7,897.07	8,094.67	8,297.47	8,505.47	8,716.93
		Hourly	39.29	40.27	41.28	42.31	43.37	44.45	45.56	46.70	47.87	49.07	50.29
		Annually	81,723.20	83,761.60	85,862.40	88,004.80	90,209.60	92,456.00	94,764.80	97,136.00	99,569.60	102,065.60	104,603.20
Cross Connection Supervisor Inspection Supervisor	S10	Monthly	6,924.67	7,098.00	7,274.80	7,456.80	7,644.00	7,834.67	8,030.53	8,231.60	8,437.87	8,647.60	8,864.27
		Hourly	39.95	40.95	41.97	43.02	44.10	45.20	46.33	47.49	48.68	49.89	51.14
		Annually	83,096.00	85,176.00	87,297.60	89,481.60	91,728.00	94,016.00	96,366.40	98,779.20	101,254.40	103,771.20	106,371.20

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
SUPERVISORY UNIT**

These job classifications are Non-Exempt
2.5% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11
Water Distribution Supervisor	S11	Monthly	7,020.00	7,195.07	7,375.33	7,559.07	7,748.00	7,942.13	8,141.47	8,344.27	8,554.00	8,767.20	8,985.60
		Hourly	40.50	41.51	42.55	43.61	44.70	45.82	46.97	48.14	49.35	50.58	51.84
		Annually	84,240.00	86,340.80	88,504.00	90,708.80	92,976.00	95,305.60	97,697.60	100,131.20	102,648.00	105,206.40	107,827.20
Electrical/Instrumentation Services Supervisor	S12	Monthly	7,139.60	7,318.13	7,501.87	7,689.07	7,881.47	8,077.33	8,280.13	8,486.40	8,699.60	8,916.27	9,139.87
		Hourly	41.19	42.22	43.28	44.36	45.47	46.60	47.77	48.96	50.19	51.44	52.73
		Annually	85,675.20	87,817.60	90,022.40	92,268.80	94,577.60	96,928.00	99,361.60	101,836.80	104,395.20	106,995.20	109,678.40
Customer Account Supervisor	S13	Monthly	7,169.07	7,347.60	7,531.33	7,720.27	7,912.67	8,112.00	8,313.07	8,521.07	8,734.27	8,952.67	9,176.27
		Hourly	41.36	42.39	43.45	44.54	45.65	46.80	47.96	49.16	50.39	51.65	52.94
		Annually	86,028.80	88,171.20	90,376.00	92,643.20	94,952.00	97,344.00	99,756.80	102,252.80	104,811.20	107,432.00	110,115.20

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
EXEMPT EMPLOYEES

Exhibit 1

JOB CLASSIFICATION	RANGE
Administrative Analyst	E1
Assistant Director of Engineering	E16
Assistant Director of Operations	E14
Assistant General Manager	E18
Board Secretary/Executive Assistant	E4
Business Systems Administrator	E5
Communications Coordinator	E4.1
Contracts & Procurement Manager	E5
Controller	E8
Director of Engineering & Operations	E17
Director of Finance/Treasurer	E17
Director of Human Resources	E16
Director of Planning	E15.1
Director of Regional & Legal Affairs	E17
Engineering Manager	E15
Financial Data Analyst	E2
Human Resources Analyst	E1
Information Systems Officer	E15
Information Technology Manager	E6
Manager of Financial Planning	E8
Operations Systems Administrator	E5
Policy and Outreach Analyst	E3
Principal Engineer	E13
Safety & Compliance Coordinator	E4.1
Senior Engineer	E8
Senior Human Resources Analyst	E3
Superintendent of Customer Service	E12
Superintendent of Engineering	E12
Superintendent of Operations	E12
Water Efficiency Manager	E8
Water Resources Analyst	E2

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
EXEMPT EMPLOYEES**

These job classifications are Exempt
2% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
Administrative Analyst Human Resources Analyst	E1	Monthly	5,466.93	5,576.13	5,687.07	5,801.47	5,917.60	6,035.47	6,156.80	6,279.87	6,404.67	6,532.93	6,664.67	6,798.13	6,933.33	7,072.00	7,214.13	7,358.00
		Hourly	31.54	32.17	32.81	33.47	34.14	34.82	35.52	36.23	36.95	37.69	38.45	39.22	40.00	40.80	41.62	42.45
		Annually	65,603.20	66,913.60	68,244.80	69,617.60	71,011.20	72,425.60	73,861.60	75,358.40	76,856.00	78,395.20	79,976.00	81,577.60	83,200.00	84,864.00	86,569.60	88,296.00
Water Resources Analyst Financial Data Analyst	E2	Monthly	5,846.53	5,962.67	6,082.27	6,203.60	6,328.40	6,454.93	6,584.93	6,716.67	6,850.13	6,987.07	7,127.47	7,269.60	7,415.20	7,562.53	7,715.07	7,869.47
		Hourly	33.73	34.40	35.09	35.79	36.51	37.24	37.99	38.75	39.52	40.31	41.12	41.94	42.78	43.63	44.51	45.40
		Annually	70,158.40	71,552.00	72,987.20	74,443.20	75,940.80	77,459.20	79,019.20	80,600.00	82,201.60	83,844.80	85,529.60	87,235.20	88,962.40	90,750.40	92,580.80	94,432.00
Policy and Outreach Analyst Sr. Human Resources Analyst	E3	Monthly	6,590.13	6,721.87	6,857.07	6,994.00	7,132.67	7,276.53	7,422.13	7,569.47	7,722.00	7,876.27	8,034.00	8,193.47	8,358.13	8,524.53	8,696.13	8,869.47
		Hourly	38.02	38.78	39.56	40.35	41.15	41.98	42.82	43.67	44.55	45.44	46.35	47.27	48.22	49.18	50.17	51.17
		Annually	79,081.60	80,662.40	82,284.80	83,928.00	85,592.00	87,318.40	89,065.60	90,833.60	92,664.00	94,515.20	96,408.00	98,321.60	100,297.60	102,294.40	104,353.60	106,433.60
Board Secretary/Executive Assistant	E4	Monthly	6,796.40	6,931.60	7,070.27	7,212.40	7,356.27	7,503.60	7,654.40	7,806.93	7,962.93	8,122.40	8,285.33	8,450.00	8,619.87	8,791.47	8,968.27	9,146.80
		Hourly	39.21	39.99	40.79	41.61	42.44	43.29	44.16	45.04	45.94	46.86	47.80	48.75	49.73	50.72	51.74	52.77
		Annually	81,556.80	83,179.20	84,843.20	86,548.80	88,275.20	90,043.20	91,852.80	93,683.20	95,555.20	97,468.80	99,424.00	101,400.00	103,438.40	105,497.60	107,619.20	109,761.60
Communications Coordinator Safety and Compliance Coordinator	E4.1	Monthly	7,439.47	7,588.53	7,739.33	7,895.33	8,053.07	8,214.27	8,377.20	8,545.33	8,716.93	8,890.27	9,068.80	9,250.80	9,434.53	9,623.47	9,815.87	10,011.73
		Hourly	42.92	43.78	44.65	45.55	46.46	47.39	48.33	49.30	50.29	51.29	52.32	53.37	54.43	55.52	56.63	57.76
		Annually	89,273.60	91,062.40	92,872.00	94,744.00	96,636.80	98,571.20	100,526.40	102,544.00	104,603.20	106,683.20	108,825.60	111,009.60	113,214.40	115,481.60	117,790.40	120,140.80
Business Systems Administrator Contracts and Procurement Manager Operations Systems Administrator	E5	Monthly	8,115.47	8,278.40	8,443.07	8,612.93	8,784.53	8,959.60	9,139.87	9,321.87	9,509.07	9,698.00	9,892.13	10,089.73	10,292.53	10,498.80	10,708.53	10,921.73
		Hourly	46.82	47.76	48.71	49.69	50.68	51.69	52.73	53.78	54.86	55.95	57.07	58.21	59.38	60.57	61.78	63.01
		Annually	97,385.60	99,340.80	101,316.80	103,355.20	105,414.40	107,515.20	109,678.40	111,862.40	114,108.80	116,376.00	118,705.60	121,076.80	123,510.40	125,965.60	128,502.40	131,060.80
Information Technology Manager	E6	Monthly	8,432.67	8,600.80	8,774.13	8,949.20	9,127.73	9,309.73	9,496.93	9,685.87	9,880.00	10,077.60	10,278.67	10,484.93	10,694.67	10,907.87	11,126.27	11,349.87
		Hourly	48.65	49.62	50.62	51.63	52.66	53.71	54.79	55.88	57.00	58.14	59.30	60.49	61.70	62.93	64.19	65.48
		Annually	101,192.00	103,209.60	105,289.60	107,390.40	109,532.80	111,716.80	113,936.20	116,230.40	118,560.00	120,931.20	123,344.00	125,819.20	128,336.00	130,894.40	133,515.20	136,198.40
	E7	Monthly	8,652.80	8,826.13	9,002.93	9,183.20	9,366.93	9,554.13	9,744.80	9,938.93	10,138.27	10,341.07	10,547.33	10,758.80	10,973.73	11,193.87	11,417.47	11,646.27
		Hourly	49.92	50.92	51.94	52.98	54.04	55.12	56.22	57.34	58.49	59.66	60.85	62.07	63.31	64.58	65.87	67.19
		Annually	103,833.60	105,913.60	108,035.20	110,198.40	112,403.20	114,649.60	116,937.60	119,267.20	121,659.20	124,092.80	126,568.00	129,105.60	131,684.80	134,326.40	137,009.60	139,755.20
Controller, Water Efficiency Manager Manager of Financial Planning Senior Engineer	E8	Monthly	8,730.80	8,905.87	9,082.67	9,264.67	9,450.13	9,639.07	9,831.47	10,029.07	10,230.13	10,434.67	10,642.67	10,855.87	11,072.53	11,294.40	11,519.73	11,750.27
		Hourly	50.37	51.38	52.40	53.45	54.52	55.61	56.72	57.86	59.02	60.20	61.40	62.63	63.88	65.16	66.46	67.79
		Annually	104,769.60	106,870.40	108,992.00	111,176.00	113,401.60	115,688.80	117,977.60	120,348.80	122,761.60	125,216.00	127,712.00	130,270.40	132,870.40	135,532.80	138,236.80	141,003.20
	E9	Monthly	9,027.20	9,207.47	9,391.20	9,580.13	9,770.80	9,966.67	10,166.00	10,368.80	10,576.80	10,788.27	11,004.93	11,223.33	11,448.67	11,677.47	11,911.47	12,148.93
		Hourly	52.08	53.12	54.18	55.27	56.37	57.50	58.65	59.82	61.02	62.24	63.49	64.75	66.05	67.37	68.72	70.09
		Annually	108,326.40	110,489.60	112,694.40	114,961.60	117,249.60	119,600.00	121,992.00	124,425.60	126,921.60	129,459.20	132,059.20	134,680.00	137,384.00	140,129.60	142,937.60	145,787.20
	E10	Monthly	9,048.00	9,228.27	9,413.73	9,602.67	9,793.33	9,989.20	10,190.27	10,393.07	10,601.07	10,812.53	11,029.20	11,249.33	11,474.67	11,705.20	11,939.20	12,176.67
		Hourly	52.20	53.24	54.31	55.40	56.50	57.63	58.79	59.96	61.16	62.38	63.63	64.90	66.20	67.53	68.88	70.25
		Annually	108,576.00	110,739.20	112,964.80	115,232.00	117,520.00	119,870.40	122,283.20	124,716.80	127,212.80	129,750.40	132,350.40	134,992.00	137,696.00	140,462.40	143,270.40	146,120.00
	E11	Monthly	9,075.73	9,257.73	9,443.20	9,630.40	9,824.53	10,020.40	10,221.47	10,426.00	10,634.00	10,847.20	11,063.87	11,284.00	11,511.07	11,739.87	11,975.60	12,214.80
		Hourly	52.36	53.41	54.48	55.56	56.68	57.81	58.97	60.15	61.35	62.58	63.83	65.10	66.41	67.73	69.09	70.47
		Annually	108,908.80	111,092.80	113,318.40	115,564.80	117,894.40	120,244.80	122,657.60	125,112.00	127,608.00	130,166.40	132,766.40	135,408.00	138,132.80	140,878.40	143,707.20	146,577.60
Superintendent of Customer Service Superintendent of Engineering Superintendent of Operations	E12	Monthly	9,264.67	9,450.13	9,639.07	9,831.47	10,029.07	10,228.40	10,432.93	10,642.67	10,855.87	11,072.53	11,294.40	11,519.73	11,750.27	11,984.27	12,225.20	12,469.60
		Hourly	53.45	54.52	55.61	56.72	57.86	59.01	60.19	61.40	62.63	63.88	65.16	66.46	67.79	69.14	70.53	71.94
		Annually	111,176.00	113,401.60	115,688.80	117,977.60	120,348.80	122,740.80	125,195.20	127,712.00	130,270.40	132,870.40	135,532.80	138,236.80	141,003.20	143,811.20	146,702.40	149,635.20

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 24, 2017
EXEMPT EMPLOYEES**

These job classifications are Exempt
2% Increase Between Each Step

JOB CLASSIFICATION	Range	Frequency	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
Principal Engineer	E13	Monthly	9,720.53	9,914.67	10,114.00	10,315.07	10,521.33	10,732.80	10,947.73	11,166.13	11,389.73	11,616.80	11,849.07	12,086.53	12,327.47	12,575.33	12,826.67	13,083.20
		Hourly	56.08	57.20	58.35	59.51	60.70	61.92	63.16	64.42	65.71	67.02	68.36	69.73	71.12	72.55	74.00	75.48
		Annually	116,646.40	118,976.00	121,368.00	123,780.80	126,256.00	128,793.60	131,372.80	133,993.60	136,676.80	139,401.60	142,188.80	145,038.40	147,929.60	150,904.00	153,920.00	156,998.40
Assistant Director of Operations	E14	Monthly	9,888.67	10,086.27	10,287.33	10,493.60	10,703.33	10,918.27	11,136.67	11,358.53	11,585.60	11,817.87	12,053.60	12,294.53	12,540.67	12,792.00	13,048.53	13,308.53
		Hourly	57.05	58.19	59.35	60.54	61.75	62.99	64.25	65.53	66.84	68.18	69.54	70.93	72.35	73.80	75.28	76.78
		Annually	116,664.00	121,035.20	123,448.00	125,923.20	128,440.00	131,019.20	133,640.00	136,302.40	139,027.20	141,814.40	144,643.20	147,534.40	150,488.00	153,504.00	156,582.40	159,702.40
Information Systems Officer Engineering Manager	E15	Monthly	10,472.80	10,682.53	10,895.73	11,114.13	11,336.00	11,563.07	11,793.60	12,029.33	12,270.27	12,516.40	12,766.00	13,020.80	13,282.53	13,547.73	13,818.13	14,095.47
		Hourly	60.42	61.83	62.86	64.12	65.40	66.71	68.04	69.40	70.79	72.21	73.65	75.12	76.63	78.16	79.72	81.32
		Annually	125,673.60	128,190.40	130,748.80	133,369.60	136,032.00	138,756.80	141,523.20	144,352.00	147,243.20	150,196.80	153,192.00	156,249.60	159,390.40	162,572.80	165,817.60	169,145.60
Director of Planning	E15.1	Monthly	11,171.33	11,394.93	11,622.00	11,854.27	12,091.73	12,334.40	12,580.53	12,831.87	13,088.40	13,350.13	13,617.07	13,890.93	14,168.27	14,450.80	14,740.27	15,034.93
		Hourly	64.45	65.74	67.05	68.39	69.76	71.16	72.58	74.03	75.51	77.02	78.56	80.14	81.74	83.37	85.04	86.74
		Annually	134,056.00	136,739.20	139,464.00	142,251.20	145,100.80	148,012.80	150,966.40	153,982.40	157,060.80	160,201.60	163,404.80	166,691.20	170,019.20	173,409.60	176,883.20	180,419.20
Assistant Director of Engineering Director of Human Resources	E16	Monthly	11,923.60	12,162.80	12,405.47	12,653.33	12,906.40	13,164.67	13,428.13	13,696.80	13,970.67	14,249.73	14,534.00	14,825.20	15,121.60	15,424.93	15,733.47	16,047.20
		Hourly	68.79	70.17	71.57	73.00	74.46	75.95	77.47	79.02	80.60	82.21	83.85	85.53	87.24	88.99	90.77	92.58
		Annually	143,083.20	145,953.60	148,865.60	151,840.00	154,876.80	157,976.00	161,137.60	164,361.60	167,648.00	170,996.80	174,408.00	177,902.40	181,459.20	185,099.20	188,801.60	192,566.40
Director of Engineering and Operations Director of Regional & Legal Affairs Director of Finance/Treasurer	E17	Monthly	12,828.40	13,084.93	13,346.67	13,613.60	13,885.73	14,163.07	14,447.33	14,735.07	15,029.73	15,331.33	15,638.13	15,950.13	16,269.07	16,594.93	16,926.00	17,265.73
		Hourly	74.01	75.49	77.00	78.54	80.11	81.71	83.35	85.01	86.71	88.45	90.22	92.02	93.86	95.74	97.65	99.61
		Annually	153,940.80	157,019.20	160,160.00	163,363.20	166,628.80	169,956.80	173,368.00	176,820.80	180,356.80	183,976.00	187,657.60	191,401.60	195,228.80	199,139.20	203,112.00	207,188.80
Assistant General Manager	E18	Monthly	14,391.87	14,679.60	14,972.53	15,272.40	15,577.47	15,889.47	16,208.40	16,532.53	16,861.87	17,199.87	17,543.07	17,894.93	18,252.00	18,617.73	18,990.40	19,370.00
		Hourly	83.03	84.69	86.38	88.11	89.87	91.67	93.51	95.38	97.28	99.23	101.21	103.24	105.30	107.41	109.56	111.75
		Annually	172,702.40	176,155.20	179,670.40	183,268.80	186,929.60	190,673.60	194,500.80	198,390.40	202,342.40	206,398.40	210,516.80	214,739.20	219,024.00	223,412.80	227,884.80	232,440.00