

FISCAL YEAR
2019-2020
BUDGET

Letter of Transmittal

Honorable President and Members of the Board of Directors:

On behalf of District staff, the Fiscal Year (FY) 2019-20 Operations & Maintenance (O&M) and Capital Improvement Program (CIP) budgets are presented for your consideration. This budget document presents expense and revenue forecasts for FY 2019-20 from the District's Long-Range Financial Plan alongside the proposed budget, in order to show how the proposed budget fits within long-term policy and planning objectives. This document continues the District's practice of integrating its many long-term planning tools and studies with its guiding policies and documents. Last year's budget was awarded the Government Finance Officers Association Distinguished Budget Award, affirming the District's approach to developing and presenting its budgets is transparent and consistent with best practices in the industry. Each year, the budget process begins with a joint strategic planning session between the Board of Directors (Board) and District staff to identify priority initiatives for the upcoming fiscal year. At this year's strategic planning session on February 19, 2019, four areas were identified as consistent themes for each of the initiatives identified for the upcoming year:

- Proactive asset management,
- Enhanced customer service,
- Reliable service, and
- Cost control

The budget document identifies both the workplan for projects within the initiatives as well as the personnel and financial resources necessary to implement the Board's strategic initiatives and long-term policy objectives while continuing to enhance existing service levels.

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 governing policies.

The District's financial position remains strong and resilient following the recent historic drought. Over the five-year period of drought, the District thrived under the Board's leadership and emerged financially healthy due to the Board's sound financial planning and policies. These forward-thinking policies have directly benefitted customers, and the District is expected to maintain the lowest average customer bills in South Orange County. Additionally, District customers have responded resoundingly by taking comprehensive actions to increase their water use efficiency and avoid the rebounds in water demand that have been seen by many other water agencies across the state. The District is seen as a statewide innovator in demand management and looks to build upon the success of the water efficiency programs that were implemented last fiscal year by scaling up successful pilot projects based on their cost-effectiveness and potential water savings. Key initiatives for the Water Efficiency Fund include:

- Educational initiatives to local schools;
- Designing new programs to help the District's largest water users, such as Homeowner's Associations, be more efficient;
- Expanding Advanced Metering Infrastructure to all customers; and
- Updating the District's water reliability planning documents.

In August 2017, the District launched its Transparency, Access and Participation (TAP) Initiative. Designed after the District's long-standing commitment to serve the best interests of its customers and built upon the successful customer partnerships developed during the historic drought, the TAP Initiative has enabled the District to further engage with its customers through expanded communications and provides a platform for members of the community to remain informed and to actively participate in shaping District programs. In FY 2018-19 alone, the District participated in over 70 workshops and community events. The ongoing TAP Initiative remains a priority for the upcoming year as the District continues to focus on increasing transparency, expanding community participation and strengthening relationships with all of our stakeholders.

Consistent with both the TAP initiative and its emphasis on providing the highest level of customer service, the District regularly evaluates the deployment of new technologies to streamline and reduce the cost of providing high-level service. The District has been utilizing cloud-based software to provide resources and tools to customers such as potential bill changes from proposed rate adjustments, a live picture of the variation in watering needs across the District, as well as for moving many of its past paper-based service requests to web-based forms, saving both time and money. Additionally, MyWater MNWD, the District's customer portal with Smart Energy Water (SEW), has seen over 26,200 customers login to get access to water usage information, pay their bill, and learn about water conservation programs all through a single sign-on experience. Having seen the cost-savings and increased customer engagement that these solutions have made possible, the District will continue to dedicate resources for evaluating new technologies, pilot those with potential value, and then scale proven pilot programs to meet the best interest of the District's customers.

The District has seen enormous value from investments in skills such as data science and interdisciplinary collaboration, as these in-house resources have since developed innovative solutions that have improved the District's finances, water reliability, and customer engagement. The District recognizes the need for the water industry as a whole to invest in these new skillsets to plan for the future. On February 21, 2019, the Board of Directors adopted a new Future Leaders Of Water Initiative (FLOW), which codifies the District's ongoing efforts to:

- engage the next generation of water professionals and community leaders through educational partnerships,
- train the next workforce through internships, and
- share our innovation efforts to help others learn from the District.

In the spirit of innovation and regional collaboration, the District signed a historic Memorandum of Understanding (MOU) with the County of Orange, City of Laguna Niguel, City of Mission Viejo, City of Laguna Hills, City of Aliso Viejo, City of Dana Point, Laguna Bluebelt Coalition, and OC Coastkeeper to reduce urban runoff in order to protect local creek water quality, and ultimately, our ocean. District staff has already presented early results of this partnership at workshops hosted by the State Water Resources Control Board (SWRCB), the Association of California Water Agencies (ACWA), and the American Water Works Association (AWWA). The District looks to build on this early momentum to further collaborate with both local governmental and non-governmental organizations over the next several fiscal years. The MOU's potential local, regional, and state-wide impact have already begun to receive recognition, with its first major project, the Smart Watershed Network, having recently been awarded funding from the Metropolitan Water District of Southern California based on its innovative use of technology to address development of new water supplies. Additionally, the District was

awarded the Governor's Economic and Environmental Leadership Award, the State's highest environmental award.

Over the next one and a half years, the District will continue to work with world-renowned scientists and engineers at UC Davis' Center for Water and Energy Efficiency to identify strategies to optimize the District's energy use and reduce operating costs while continuing to meet each customer's water needs. The \$3.1M project, funded by a grant from the California Energy Commission, will use real-time energy analytics to develop an energy management system capable of adapting to changing energy demands and different energy rate structures for the District's potable and recycled water systems.

The District's success through innovation and partnerships has not gone unnoticed. The District's culture of innovation has been a key value-add in recruiting top talent to best serve our customers. In 2018, the District was the sole water agency in Orange County to be recognized as the #1 top workplace by the Orange County Register. Additionally, the District was the sole water agency to be recognized by Amazon Web Services as part of its City on a Cloud global award for best practices in utilizing cloud computing services. The District continues to support the California Data Collaborative, with the 4th Annual Data Summit to be hosted at the University of California at Davis. Data and transparency continue to be a priority for the District: by fostering a culture of innovation and collaboration, we have been able to utilize data to develop meaningful insights about our operations and create actionable recommendations for further improving efficiencies. The partnerships in data and engagement statewide has paid off with the District's rate structure acknowledged as a top three rate structure in the State of California by the SWRCB and the District's inclusion in the 2015 Urban Water Management Plan Guidebook as an example of best practices in drought response.

The success of the District's rate design and finances are also demonstrated from the fact that despite a 20 percent reduction in water sales from pre-drought levels, the District enters the new fiscal year in a financially strong position with a reaffirmed 'AAA' rating from Fitch Ratings and upgraded 'AAA' rating from S&P Global Ratings. 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. The refunding of the 2009 Build America Bonds saved ratepayers over \$11M in future liabilities and the District's financial resiliency was a key factor in the upgrade by S&P. 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 extend its practice of regular policy review even further: the District's Reserve, Investment, Purchasing, Capitalization and Surplus, Debt Management, and new Federal Grant Management policies are all incorporated into this budget document and included as part of the District's annual budget review process.

Given the significant annual financial contributions to wastewater treatment, there is a growing need to ensure the District's ratepayers continue to 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 District ratepayers. As the proposed budgets for regional wastewater treatment services 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 assumed operations of Plant 3A on March 1,

2019 and FY 2019-20 represents the first full year of operations of the plant by District staff. Staff have identified a number of early investments in the plant to maintain the reliability of its treatment systems and will continue to evaluate opportunities to put the plant to the highest and best use. Staff will also continue to ensure appropriate investments are made and utilize its internally developed forecasting and cross-departmental collaboration to ensure cost controls are maintained.

As stewards of the water, wastewater, and recycled water systems and supplies our ratepayers have invested in over the last 59 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 infrastructure remains a priority: more than half of the \$71.7M in capital expenses identified for FY 2019-20 and nearly 80 percent of the \$533M 10-Year CIP can be attributed to the replacement or refurbishment of existing infrastructure. The 10-year CIP invests in ongoing reservoir rehabilitation, improvements to the District's recycled water pump stations per the recently completed Recycled Water Master Plan, investment in future water reliability projects, and continued execution of the valve replacement programs that have been outlined in previous budgets. The 10-year CIP includes new projects to meet ongoing service level expectations. These include a pipeline replacement program to invest in the District's aging infrastructure and Recycled Water extension projects recommended by the Recycled Water Optimization Study. District staff have been engaged in a number of proactive asset management studies and initiatives including our GIS systems, developing an asset inventory, and Computerized Maintenance Management System deployment which have provided a wealth of data to inform a proactive asset management program proposed in this Budget document. The data investments have yielded new projects to invest in rehabilitating lift stations, ongoing valve replacements, electrical system enhancements, and pipeline replacements.

The District's operations yard at Plant 2A has not seen significant investment in many years. The CIP also includes several projects to ensure the maintenance facilities are able to support the operational requirements to provide water, recycled water, and wastewater collection and treatment services. The District has utilized many structures for more than 40 years to provide service to the community with very minor upgrades despite the growing infrastructure needs and increasing customer base. As we look to enhance the services to our customers, the District is investing in upgrades to its maintenance facilities to allow the District's staff to provide high levels of service into the future. The District has reviewed the costs of administrative facilities and determined the most cost-effective solution is to utilize existing land at Plant 2A.

Due to 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 cost-effective 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 to support the District's infrastructure. Though there are new initiatives and projects in the FY 2019-20 budgets, the District continues to adhere to the Long-Range Financial Plan established during the 2017 rate study. As part of that plan, the District will consider leveraging its strong financial position and credit ratings for a bond issuance this fiscal year to fund the District's CIP. Bonds are an essential financial tool that supports the District's long-term financial position, while maintaining the modest rate adjustments the District has communicated to customers.

Summary of Factors and Assumptions Guiding the Fiscal Year 2019-20 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 allocations of public funds.

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

- Asset Management Planning for the renewal and replacement of the District's infrastructure.
- Water supply and reliability investment and planning needs.
- 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."
- Total water purchases are budgeted at 25,287 AF, to provide a conservative estimate of water purchases for FY 2019-20.
- Potable water deliveries from the Baker Water Treatment Plant for FY 2019-20 are budgeted at 8,908 AF, reflecting a full year of water deliveries. The remaining 16,379 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.
- Recycled water production is budgeted at 7,086 AF, a slight increase from projected actuals for FY 2018-19 recycled water use.
- 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.
- Continue educational programs and resources for customers to maintain the District's investment in landscape transformation with over five million square feet of turf removed to date.
- FY 2019-20 represents the first full fiscal year of operating the Plant 3A wastewater treatment plant to ensure more direct involvement in the treatment of the District's wastewater as wastewater has been the primary cost driver for the 2017 Rate Study.
- 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.
- Water and wastewater rates are budgeted at scheduled levels adopted by the Board in December 2017 and consistent with the District's Long-Range Financial Plan.
- This budget covers year three of the recently adopted Memorandum of Understanding with employees.

The following shows a summary of sources and uses of all funds:

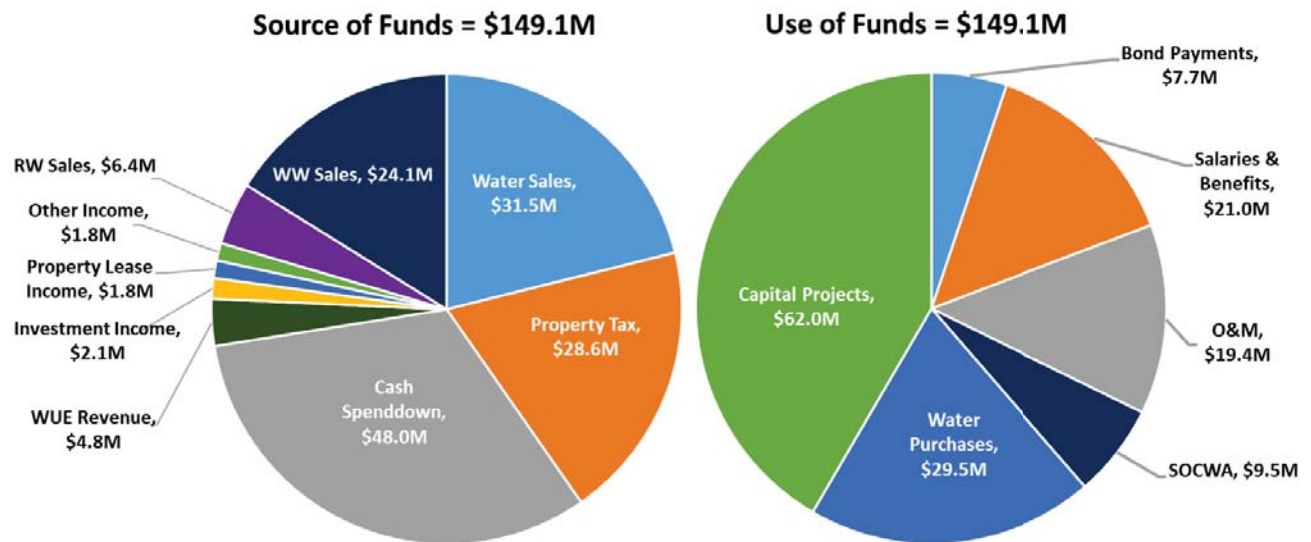


Figure LOT 1: FY 2019-20 Budget Summary

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, while at the same time enhancing service to our customers. 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 infrastructure. As conditions change from the assumptions laid out in the budget, the District provides monthly reports on financials and is both adaptive and nimble to meet unanticipated needs. The increased cost of wastewater treatment is a key priority for the District to monitor and look to apply our culture of innovation to develop solutions. The District's first full year of operation of Plant 3A is one such example of the District increasing its involvement in its primary cost drivers to ensure both high levels of service and appropriate investment in aging 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



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Moulton Niguel Water District
California**

For the Fiscal Year Beginning

July 1, 2018

Christopher P. Morill

Executive Director

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Glossary of Terms

Abbreviation	Definition
ACWA/JPIA	Association of California Water Agencies/Joint Powers Insurance Authority
AF	Acre-Foot
AFY	Acre-feet per Year
Allocation	Personalized Water Budget per Customer
AMI	Advanced Metering Infrastructure
AMP	Allen-McColloch Pipeline
AWS	Amazon Web Services
AWT	Advanced Wastewater Treatment
AWWA	American Water Works Association
BMP	Best Management Practices
Board	District Board of Directors
CAFR	Comprehensive Annual Financial Report
CCF (HCF)	Hundreds of Cubic Feet
CFS	Cubic Feet per Second
CIP	Capital Improvement Plan
CMMS	Computerized Maintenance Management System
COP	Certificates of Participation (debt instrument)
DOHS	Department of Health Services
DPR	Direct Potable Reuse
DWR	Department of Water Resources
EOCF #2	East Orange County Feeder No.2
ETM	Eastern Transmission Main
ETWD	El Toro Water District
FOG	Fats, Oils & Grease
FY	Fiscal Year Ending June 30
GAAP	Generally Accepted Accounting Principals
GASB	Governmental Accounting Standards Board
GFOA	Government Finance Officers Association
GIS	Geographic Information System Mapping
GO or GOB	General Obligation (bond type)
GPCD	Gallons Per Capita per Day
GPM	Gallons per Minute
GWRP	San Juan Groundwater Recovery Project
HCF (CCF)	Hundreds of Cubic Feet
IPR	Indirect Potable Reuse
IRP	Integrated Resources Plan
IRWD	Irvine Ranch Water District

Abbreviation	Definition
IT	Information Technology
JPA	Joint Powers Authority
JRTP	SOCWA's Joint Regional Treatment Plant
JRWSS	Joint Regional Water Supply System
LAFCO	Local Area Formation Commission
LRFP	Long-Range Financial Plan
MAF	Million Acre-Feet
MG	Million Gallons
MGD	Million Gallons per Day
MNWD	Moulton Niguel Water District
MOU	Memorandum of Understanding
MWDOC	Municipal Water District of Orange County
MWDSC	Metropolitan Water District of Southern California
O&M	Operations and Maintenance
OCWD	Orange County Water District
OPEB	Other Post-Employment Benefits
R&R	Replacement and Refurbishment
SCADA	Supervisory Control and Data Acquisition
SCP	South County Pipeline
SCWD	South Coast Water District
SJBA	San Juan Basin Authority
SJC	San Juan Capistrano
SMWD	Santa Margarita Water District
SOCWA	South Orange County Wastewater Authority
SWRCB	State Water Resources Control Board
USBR	U.S. Department of the Interior, Bureau of Reclamation
USEPA	U.S. Environmental Protection Agency
UWMP	Urban Water Management Plan
WBBRS	Water Budget Based Rate Structure
WBIC	Weather Based Irrigation Controller
WEF	Water Environment Federation
WUE	Water Use Efficiency

Executive Summary

Budget Overview

The Operating & Maintenance and Capital expenditures for the Fiscal Year 2019-20 Budget are included in the budget document and broken down by the fund in which expenditures are authorized. Fund 1 is the General Fund for the District, which is utilized for operating expenditures and capital outlays. Fund 6 is the Water Efficiency Fund which is utilized to fund water efficiency and reliability projects to offset inefficient water usage. Funds 7, 12 and 14 make up the Capital Improvement Program (CIP) 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 expenditures. The debt service funds are restricted bond accounts which, through transfers authorized through the budget resolution, are utilized to fund debt service payments. The District's total sources and use of funds for FY 2019-20 is shown in Figure ES 1.

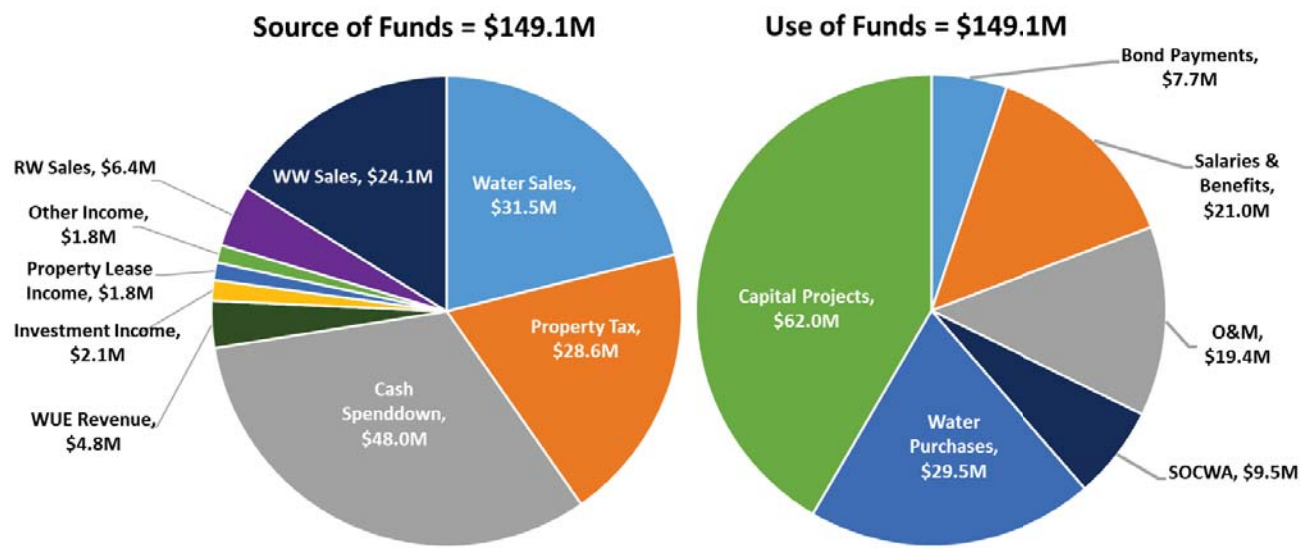


Figure ES 1: FY 2019-20 Budget Summary

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 2019-20 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 which ensure sufficient financial resources are available for the District to achieve its mission, and to ensure that those financial resources are utilized effectively. The plan projects the annual operating budget and incorporates the 10-Year CIP in order to determine the financial impact of future operating and capital needs and develops strategies to address

those needs. Hence, the District's annual budget serves as a key input into the long-range financial outlook for the District. Additionally, the District's ten-year cash flow summary serves to aid in making near-term financial decisions.

The long-range financial planning model (Ten-Year Cash Flow Model or Model) is District built, owned and operated. Updates are regularly 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 CIP and day-to-day 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 through internal reserves, grants, state loans, property tax and rate revenues, or proceeds from bond issuances. The Long-Range Financial Plan identifies the rate revenue adjustments and bond issuances 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 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 upgraded to 'AAA' by S&P Global Ratings, each 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 a \$533M CIP, 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. One such change in assumptions is the inclusion of the Capital Financing Plan. The District's Operations and Engineering staff annually develop the 10-Year CIP based on prioritization of needed projects and potential replacement costs for large projects over the ten-year planning horizon. Potential future projects are identified by remaining useful asset life; however, actual costs can vary based on condition assessments or better data. Recognizing that these actual costs will differ from their projected costs, the District's Finance staff and Engineering staff worked collaboratively to develop a Capital Financing Plan which identifies funding amounts for future years based on historical trends of capital budgets to actuals and expectations of future project costs. The \$448M Capital Financing Plan can be seen below in the shaded blue area plot in the lower left quadrant of Figure ES 2.

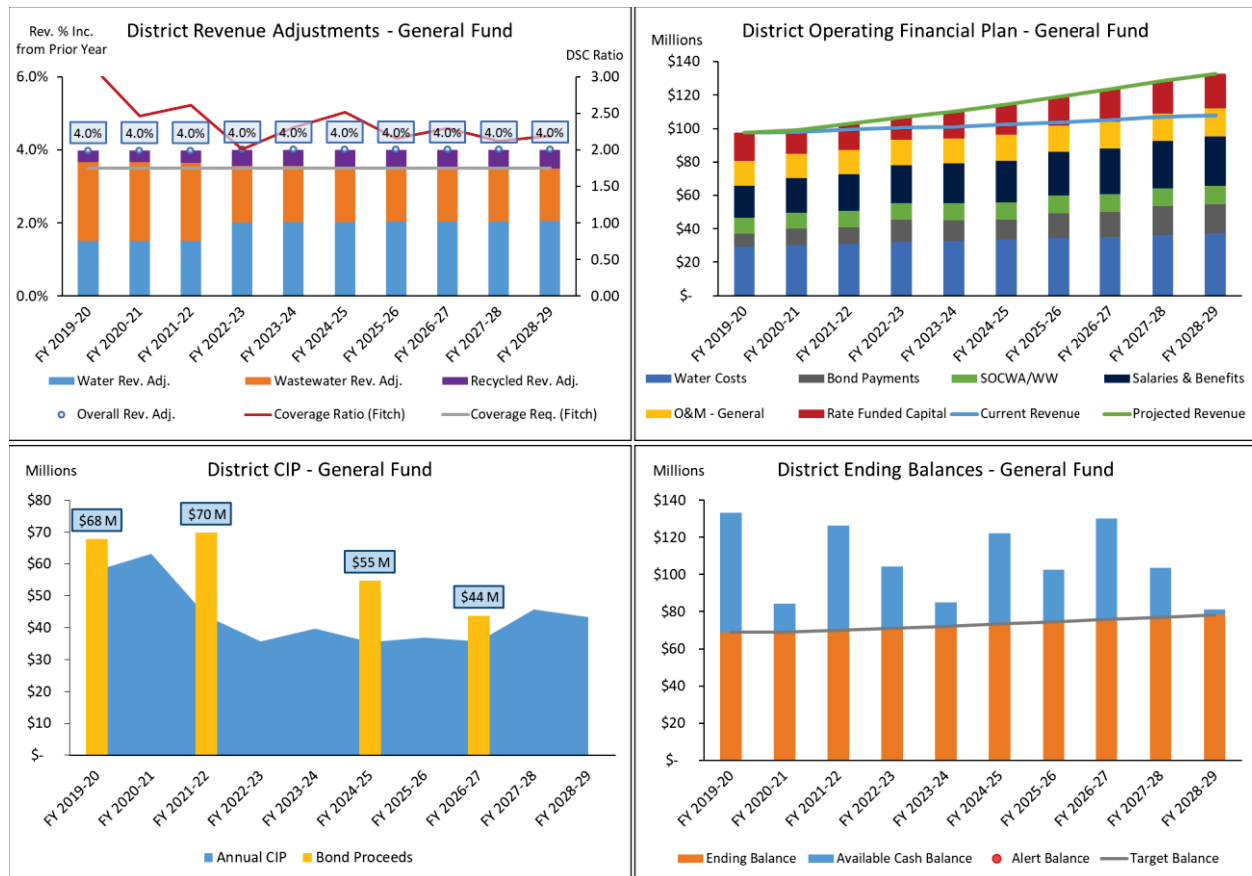


Figure ES 2: Ten-Year Cashflow with Proposed Budget

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. As shown in Figure ES 2, the proposed FY 2019-20 budgets provide for investment in infrastructure while maintaining forecasted rates and ensuring that reserves are fully funded in all years.

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	Approved Rate Adjustment				Projected Bond Issuance	
	2017-18	2018-19	2019-20	2020-21	Fiscal Year	Amount
May 2017	4.0%	4.0%	4.0%	4.0%	2017-18, 2021-22	\$64 million, \$48 million
May 2018	4.0%	4.0%	4.0%	4.0%	2018-19, 2021-22, 2024-25	\$64 million, \$45 million, \$25 million
May 2019	4.0%	4.0%	4.0%	4.0%	2019-20, 2021-22, 2024-25, 2026-27	\$68 million, \$70 million, \$55 million, \$44 million

Overall, the District’s ten-year financial outlook for rate increases has remained consistent across updates to the Long-Range Financial Plan. The increased bond issuances shown between May of 2017 and May of 2019 are primarily driven by changes to the 10-Year CIP, resulting in a fourth issuance proposed in FY 2026-27. The District’s projected bond issuances have increased lately as updated information on asset needs are refined, in particular: updated regional wastewater capital plans, improvements to the District’s Plant 3A, and updates to the District’s pipeline replacement program. The District’s 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.

Board of Directors

The District's elected Board of Directors (Board) 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 Board of Directors is responsible for providing policy guidance to meet the District's mission and provide a forum for stakeholders to provide input. The Board actively encourages the local community to participate in the ongoing conversation about water policy and programs in our area.

The District is governed by a seven-member Board, who are publicly elected by registered voters within the District's service area for staggered four-year terms. Each Director is elected through an at-large voting process.

Policy-making and legislative authority are vested with the Board. The Board has the authority to set rates and charges for water, recycled water, and wastewater services. The Board is responsible for, among other things, adopting resolutions, adopting the budget, appointing committees, and hiring the General Manager. The General Manager is responsible for carrying out the policies of the Board, for overseeing the day-to-day operations of the District, and for hiring staff for the various divisions (e.g. Finance and Water Resources, Human Resources, Engineering, and Operations).



Director Brian S. Probolsky has served on the Board since 2008. He currently serves as President of the Board and as a representative on the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA), and the California Association of Sanitation Agencies (CASA).

Current term through 2020



Director Duane D. Cave joined the Board in 2014 and has lived in Aliso Viejo since 2002. He currently serves as Vice President and chairs the Board Technical Committee. He is the delegate for the San Juan Basin Authority (SJBA).

Current term through 2020



Director Donald R. Froelich has served on the MNWD Board of Directors since 2008 and is currently the second Vice President of the Board. Mr. Froelich also serves on the Orange County Waste Management and Recycling Commission, and is an alternate representative to the Independent Special Districts of Orange County (ISDOC) and the South Orange County Wastewater Authority (SOCWA).

Current term through 2022



Director Richard S. Fiore has served on the Board of Directors of Moulton Niguel Water District since 1977. He has been President of the MNWD Board of Directors, and Chairman of its Finance, Legal, Engineering, Personnel, and Community Relations Committees. Currently, he chairs the Administrative Committee.

Current term through 2020



Director Kelly A. Jennings was elected to the Board in November 2018. She has two decades of experience working at Moulton Niguel dealing with all aspects of its operations and customer relations. She is dedicating to providing excellent water at the lowest possible rates. She currently is the representative for the Santiago Aqueduct Commission (SAC).

Current term through 2022



On the Board since 1992, Director Gary R. Kurtz has chaired the Moulton Niguel Community Relations, Investment, Personnel and Salary, Audit and Financial Committees. He is an alternate delegate for Moulton Niguel on the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA).

Current term through 2020



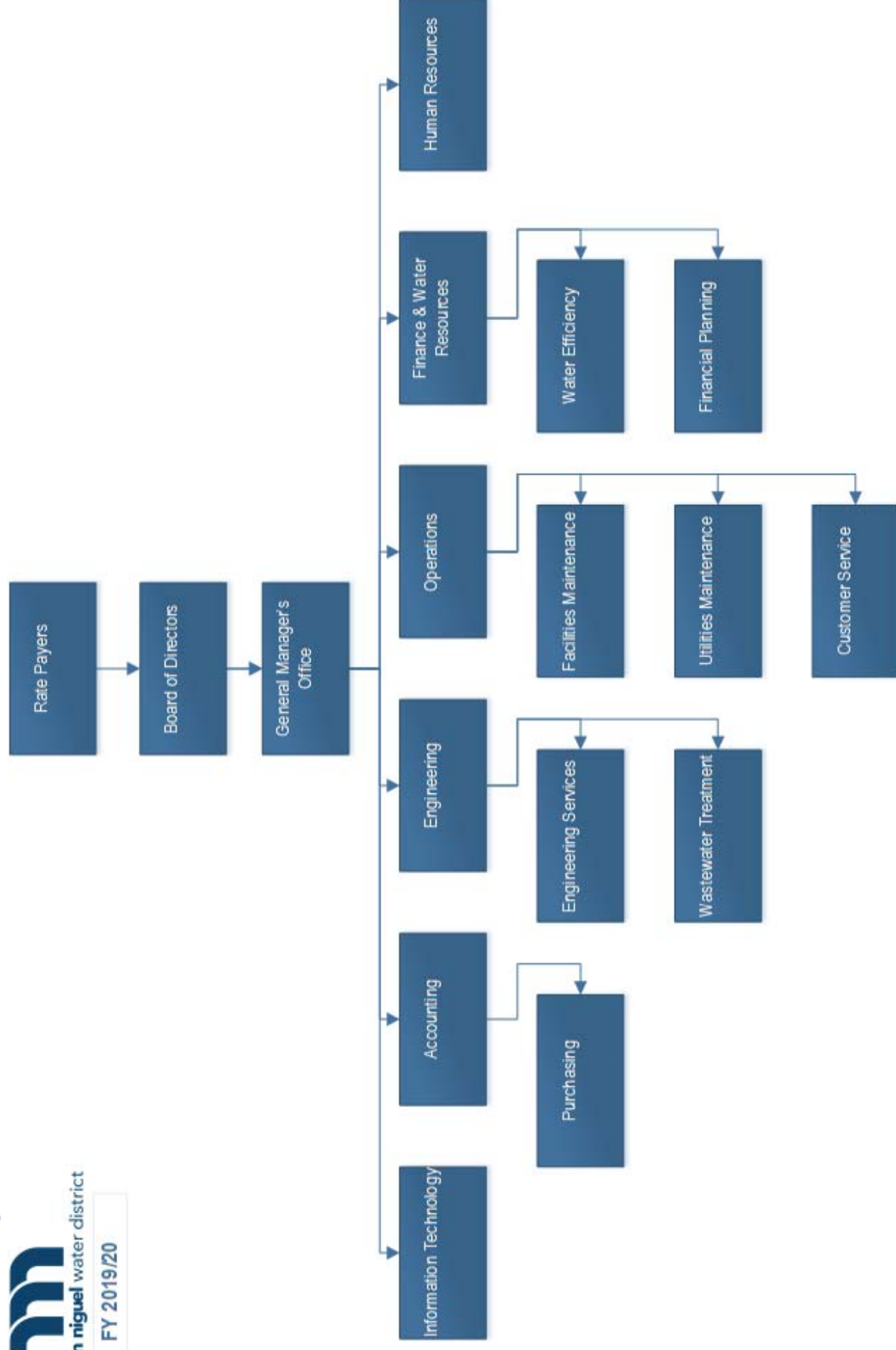
Director Bill B. Moorhead was elected to the Board in 2018. He currently serves as Moulton Niguel's representative on the South Orange County Watershed Management Area (SOCWMA) and an alternate for the California Association of Sanitation Agencies (CASA).

Current term through 2022

Functional Organization Chart



FY 2019/20



Organizational Division Descriptions

The District is organized in the overall structure shown in the functional organization chart above. However, the District prides itself on cross departmental collaboration and each employee is taught to be a Moulton H.E.R.O. which stands for Honesty, Effort, Respect and One team. These guiding principles create a number of efficiencies as crews and departments cross-train, share resources and provide support to one another.

Accounting Department

The Accounting department works collaboratively with the Finance and Water Resources Division in support of the District's financial functions. The department oversees payroll, accounts receivable, accounts payable, capital expenses, purchasing/ warehouse inventory and the Comprehensive Annual Financial Report.

Engineering Division

The Engineering Division consists of the Capital Engineering and Field Engineering Departments. The Capital Engineering Department manages the day to day implementation of the District's 10-Year CIP and works collaboratively with the Finance and Water Resources group in the development of the CIP Budget. The Field Engineering Department oversees the construction management, recycled water program, cross-connection program, and private development functions of the District. The Division also executes the District's wastewater treatment functions, including operations of the District's Plant 3A and coordination with the District's regional contract wastewater treatment provider.

General Managers Office

The General Manager's office oversees the other Divisions and Departments of the District and includes administrative support for the District's operations as well as government affairs and outreach.

Human Resources Division

The Human Resources Division works to maintain strong employee morale and enhance organizational performance through recruiting top talent, enhancing the existing labor force's skillsets, complying with all labor regulations and enforcement of District labor policies and MOUs.

Information Technology Department

The Information Technology Department oversees the telemetry, business information systems and technology needs of the District.

Operations Division

The Operations Division consists of the Utilities Maintenance Department, the Facilities Maintenance Department and the Customer Service Department. The Operations Division is responsible for the day to day operation of the water, wastewater, and recycled water systems to meet service to the District's approximately 55,000 customers. Additionally, staff provide best in class customer service to the public and oversee the monthly billing of all customers.

Finance and Water Resources Division

The Finance and Water Resources division consists of the Financial Planning Department and the Water Efficiency Department. The Financial Planning Department oversees the management of the District's

existing debt and planning to support potential future issuances, setting rates, oversight of the District's investment portfolio as well as analytical support to all departments through planning and decision support. The Water Efficiency Department manages the District's water efficiency programs, provides customer service to customers with questions related to water efficiency programs and inefficient water usage, the analysis of program effectiveness and water usage/ water loss reporting to the State.

FY 2019-20 Proposed Staffing Plan

Moulton Niguel Water District Proposed Fiscal Year 2019-20 Budget

Division, Department and Position Title	Staffing Plan Adopted FY 2017-18	Adopted FY 2018-19	Proposed FY 2019-20	Notes
<u>Board of Directors</u>				
BOARD MEMBERS	7	7	7	
	7	7	7	
Board of Directors Total	7	7	7	
<u>Administration</u>				
<i>General Manager</i>				
ADMINISTRATIVE ANALYST	1	1	1	
ASSISTANT GENERAL MANAGER	1	1	1	
BOARD SECRETARY/EXECUTIVE ASSISTANT	1	1	1	
COMMUNICATIONS COORDINATOR	1	2	1	
DIRECTOR OF REGIONAL & LEGAL AFFAIRS	1	1	1	
GENERAL MANAGER	1	1	1	
GOVERNMENT AFFAIRS OFFICER	0	1	1	
	6	8	7	
<i>Human Resources</i>				
DIRECTOR OF HUMAN RESOURCES	1	1	1	
HUMAN RESOURCES ANALYST	0	0	1	New Position Proposed
SENIOR HUMAN RESOURCES ANALYST	1	1	1	
	2	2	3	
<i>Information Technology</i>				
INFORMATION SYSTEMS ADMINISTRATOR	1	3	3	
INFORMATION SYSTEMS ANALYST	2	1	2	
INFORMATION SYSTEMS MANAGER	1	1	1	
INFORMATION SYSTEMS OFFICER	1	1	1	
OPERATIONS SYSTEMS ADMINISTRATOR	1	0	0	
SCADA ANALYST	0	1	0	
	6	7	7	
Administration Total	14	17	17	
<u>Engineering</u>				
<i>Administrative Services</i>				
ADMINISTRATIVE ANALYST	0	1	1	
ADMINISTRATIVE ASSISTANT	2	1	1	
CONTRACTS ANALYST	1	1	1	
DIRECTOR OF ENGINEERING	1	1	1	
DIRECTOR OF ENGINEERING & OPERATIONS	1	0	0	
	5	4	4	
<i>Engineering Services</i>				
CROSS CONNECTION INSPECTOR	6	3	3	
CROSS CONNECTION SUPERVISOR	1	1	1	
DEVELOPMENT SERVICES SPECIALIST	0	1	1	
ENGINEERING MANAGER	0	1	1	
GIS ADMINISTRATOR	1	1	1	
GIS ANALYST	0	1	1	
GIS TECHNICIAN	1	1	1	
INSPECTION SUPERVISOR	1	1	1	
INSPECTOR	4	4	5	New Position Proposed
PERMIT TECHNICIAN	1	0	0	
PRINCIPAL ENGINEER	3	3	4	
RECORDS AND MAPPING COORDINATOR	1	1	0	
RECORDS AND MAPPING TECHNICIAN	1	1	1	
RECYCLED WATER INSPECTOR	0	3	3	
SENIOR ENGINEER	2	2	2	
SUPERINTENDENT OF ENGINEERING	1	1	1	
	23	25	26	
<i>Wastewater Treatment Plant Operations</i>				
SENIOR MAINTENANCE WORKER-FACILITIES	0	1	1	
SUPERINTENDENT OF WASTEWATER OPERATIONS	0	1	1	
WASTEWATER TREATMENT PLANT OPERATOR	0	4	4	
WASTEWATER TREATMENT PLANT OPERATOR IN TRAINING	0	0	1	New Position Proposed
	0	6	7	
Engineering Total	28	35	37	

<u>Operations</u>			
<i>Administrative Services</i>			
DIRECTOR OF OPERATIONS	1	1	1
SAFETY AND COMPLIANCE COORDINATOR	1	1	1
	2	2	2
<i>Facilities Maintenance</i>			
ELECTRICAL/INSTRUMENTATION SERVICES SUPERVISOR	1	1	1
ELECTRICAL/INSTRUMENTATION TECHNICIAN	2	4	4
MAINTENANCE WORKER - FACILITIES	7	7	7
STATION MAINTENANCE SUPERVISOR	1	1	1
SUPERINTENDENT OF OPERATIONS	1	1	1
WATER DISTRIBUTION SUPERVISOR	1	1	1
WATER SYSTEMS OPERATOR	4	4	4
	17	19	19
<i>Utilities Maintenance</i>			
COLLECTION SYSTEM SUPERVISOR	1	1	1
MAINTENANCE WORKER - COLLECTION SYSTEM	6	6	6
MAINTENANCE WORKER - STREETS	14	14	16
MECHANIC	3	3	3
STREET CREW SUPERVISOR	2	2	2
SUPERINTENDENT OF OPERATIONS	1	1	1
SUPPORT SERVICES SUPERVISOR	1	1	1
	28	28	30
<i>Customer Service</i>			
CUSTOMER ACCOUNT REPRESENTATIVES	12	13	13
CUSTOMER ACCOUNT SUPERVISOR	1	1	1
CUSTOMER SERVICE FIELD TECHNICIAN	14	14	14
CUSTOMER SERVICE SUPERVISOR	2	2	2
SUPERINTENDENT OF CUSTOMER SERVICE	1	1	1
	30	31	31
Operations Total	77	80	82
<u>Finance and Water Resources</u>			
<i>Administrative Services</i>			
DIRECTOR OF FINANCE & WATER RESOURCES	1	1	1
MARKETING & SOCIAL MEDIA COORDINATOR	0	0	1
	1	1	2
<i>Water Efficiency</i>			
POLICY & OUTREACH ANALYST	1	0	0
SENIOR WATER EFFICIENCY SPECIALIST	0	1	1
SENIOR WATER RESOURCES ANALYST	1	1	1
SENIOR WATER RESOURCES PLANNER	0	0	1
WATER EFFICIENCY ANALYST	1	1	1
WATER EFFICIENCY MANAGER	1	1	1
WATER EFFICIENCY REPRESENTATIVE	3	3	3
WATER EFFICIENCY SUPERVISOR	1	1	1
	8	8	9
<i>Finance</i>			
CUSTOMER ENGAGEMENT COORDINATOR	0	1	1
FINANCIAL DATA ANALYST	1	1	1
MANAGER OF FINANCIAL PLANNING	1	1	1
	2	3	3
Finance and Water Resources Total	11	12	14
<u>Accounting and Purchasing</u>			
<i>Administrative Services</i>			
CONTROLLER	1	1	1
	1	1	1
<i>Accounting</i>			
ACCOUNTANT	4	4	4
ACCOUNTING SUPERVISOR	1	1	1
	5	5	5
<i>Purchasing</i>			
BUYER	1	1	1
INVENTORY CLERK	1	1	1
PURCHASING CLERK	1	0	0
	3	2	2
Accounting and Purchasing Total	9	8	8
Full Time Total	146	159	165

Proposed Leak Detection Team

New Position Proposed

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	Wastewater Service Charges
Other Operating Income	Meter Sales, User Fees (Reconnect, Tag, Back Flow Notice, Service Installation, Site Visit, Meter Removal/Re-Set, Returned Check), FOG Fees, Plan Check & Inspection Fee, Reimbursements for operating costs at jointly owned facilities
Water Efficiency Revenue	Charges for inefficient potable and recycled water usage
<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, General Obligation Property Tax, AMP RPOI, Tax Credit Subsidy (Historical), InterGovernmental Revenue, Secured, Unsecured, Supplemental, Miscellaneous I/R Taxes
Capacity Fees	Charges on new development to buy-in to existing assets
Demand Offset Fees	Capacity fees collected to offset impacts to existing supply reliability from new potable irrigation
Bond Proceeds	Proceeds received from anticipated bond issuance
<u>Operating Expenses:</u>	
Salaries	Directors Fees, Full Time, Part Time, Overtime, Compensatory Time Expense, Standby, Merit
PERS Employer Contributions	District share of annual CalPERS contribution requirements
Defined Contribution 401A	401A Employer Contribution
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 Write-Offs, Mapping Updates, Uniform Service, Employee Support Services
Annual Audit	Financial Audit and other AUPs
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	Costs related to consultants and contractors needed to support District initiatives
Equipment Rental	Office Equipment Rentals (multifunction printers), Overall Tools & Equipment Rentals (forklifts, generators, equipment, etc.)

Account Category	Category Components
<u>Operating Expenses:</u>	
District Fuel	Unleaded Fuel - Vehicles, Diesel Fuel - Generators, Diesel Fuel - Vehicles, Vehicle Oil
Insurance - District	Automobile and General Liability, Property Insurance
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 Benefit, Sick Accrual, Vacation Accrual
Legal Services - Personnel	Personnel-related legislation and other HR policy inquiries
Legal Services - General	Legal counsel, contract and agreement review
District Office Supplies	Billing Supplies, Community Relations, General Office Supplies, Shipping Costs, Advertising, Sales Tax Expense, Freight Expense
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
Repairs & Maint. - Facilities	Contract & Maintenance Agreements, Waste Disposal, Electrical & Instrumentation, Landscape and Tree Maintenance, Paving Repairs, Pest Control, System Maintenance, System Repairs, Janitorial Services, Underground Service Alert, Permits, Raising Valves and Manholes
Safety & Compliance	Regulatory Compliance, Safety Equipment and Supplies, Safety Shoes, Safety Training
SOCWA	PC 2 - JB Latham Treatment Plant, 3A Treatment Plant (Historical), PC 5 - San Juan Creek Ocean Outfall, PC 2SO - Recycled Water Permit, PC 15 - Coastal Treatment Plant, PC 17 - Regional Treatment Plant, PC 21 - Effluent Transmission Main, PC 24 - Aliso Creek Ocean Outfall, Pretreatment Program
Special Outside Assessments	Department of Health Services (DOHS) Fees, LAFCO Fees, Property Tax Assessment (Historical)
Utilities	Electric Utilities (SCE and SDG&E), Gas Utility (Southern CA Gas), Water Utility, 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 (Historical)
Labor (Fund 6 Only)	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

Fund Descriptions and Fund Structure

The overall flow of funds is shown in the Flow of Funds chart in Figure 1, below. The section is divided by the primary purpose of each fund into operating funds used for operating and small capital expenses where appropriate, capital funds utilized entirely for capital expenses, and debt service funds to pay annual debt payments as well as fund restricted debt service reserves. Classification of expenditures into operating or capital expenses provided in more detail in Capital Management – Infrastructure Capitalization.

Operating Funds

Fund 1 – General Fund

The General Fund balance includes both the Operating Reserves and Emergency Reserves used to meet the differences in cashflow timing of the District and unplanned operating repairs that may be necessary due to natural disaster. Expenses from the annual operating budget and small capital expenses for capital outlays are paid from the General Fund.

Fund 4 – Self Insurance Fund

The Self Insurance Fund consists of the Self-Insurance Reserve used to meet the insurance claims by the District.

Fund 52 – Rate Stabilization Fund

The District maintains 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. This helps to mitigate the risk and impact on rates in case of the loss of property tax revenues and helps avoid large fluctuations in customer water and wastewater rates caused by the timing of property tax receipts. The target balance of the Rate Stabilization Reserve is equal to fifty percent of the District's budgeted one percent ad valorem property tax revenue. The Rate Stabilization Reserve will be maintained in the Rate Stabilization Fund.

Fund 6 – Water Efficiency Fund

The Water Efficiency Fund holds funds collected by customers who use water in excess of their individually calculated water budget. Expenses for water supply reliability projects and planning as well as programs to improve water efficiency are paid for from the Water Efficiency Fund. Both capital expenses as well as operating expenses that meet the test of improving water supply reliability for the District are budgeted and expended from the fund.

Capital Funds

Fund 7 – Replacement and Refurbishment Fund

The purpose of the Replacement and Refurbishment Fund is to fund 1) capital expenditures to replace existing assets, 2) expenditures that refurbish or materially extend the useful life of existing assets and 3) expenditures that upgrade assets. 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. Funding for the R&R Reserve will be from new debt issuances or fund transfers as part of the budget process.

Fund 12 – Water Supply Reliability Fund

The Water Supply Reliability Fund is used to pay for expenditures associated with projects which enhance the system reliability of the water and recycled water systems as identified in the District Capital Improvement Plan. Funding for the Water Supply Reliability Fund will be from bond proceeds or fund transfers as part of the budget process.

Fund 14 – Planning and Construction Fund

The Planning and Construction Fund 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. Funding for the Planning and Construction Fund will be from new debt issuances or fund transfers as part of the budget process.

Fund 15 – Capital Facilities Fund

The Capital Facilities Fund serves as a restricted fund to collect capacity fees paid by developers for connecting to the water and wastewater systems. Annually as part of the budget process, deposited funds are deposited into Fund 7 to pay for capital projects in the upcoming year.

Debt Service Reserve Funds

The District has established debt service funds to ensure the timely payment of debt and to hold as restricted debt service reserve funds consistent with each issuance's covenants.

Fund 12 – 2019 Revenue Bond ('09 Refunding) Fund

On March 1, 2019, the District issued the 2019 Revenue Refunding Bonds (2019 Refunding Bonds) to refinance \$60M in outstanding principal of the 2009 Certificates of Participation (COP) federally taxable "Build America Bonds" and pay the cost of issuing the Bonds. The refunded COPs were originally issued to construct projects that provide greater water system reliability for the distribution of potable and recycled water.

Fund 68 – 1998 SRF Loans Fund

The District obtained three State Revolving Fund loans totaling \$36,053,400 with the State Water Resources Control Board. They were used to finance the Phase III Revised Expansion Project, consisting of expanding the District's reclamation system to serve an additional 500 irrigated landscape sites with 4,502 AF per year of reclaimed water and Phase 4 Expansion of the Reclaimed Water Distribution System.

Fund 69 – CIEDB Loans Fund

The District obtained two loans from the California Infrastructure and Economic Development Bank to finance the construction of certain capital projects related to water and wastewater infrastructure. The loan was obtained for the on-site sodium hypochlorite generation-reservoir management system; phase II - installation of ClorTec chlorination tank recirculation systems, which include on-site sodium hypochlorite generation and ammonia injection units on 16 reservoirs at 14 sites in the District service area.

Fund 70 – 2014 GOB ('03 Refunding) Fund

On February 4, 2014, the District refinanced \$21,315,000 of 2014 Consolidated Refunding Bonds (2014 Refunding Bonds) General Obligation Bonds. Proceeds from the issuance were used to refund the 2003 Consolidated Refunding Bonds and to pay costs of issuing the Bonds. The refunded Bonds constitute the

consolidated obligations of Improvement District Number 6 (ID 6) and Improvement District Number 7 (ID 7). A voter approved tax assessment is levied each year to pay the debt service on these bonds. The 2014 GOB obligations will be fully paid off after the final payment in September 2019.

Fund 71 – 2015 Revenue Bond ('03 Refunding) Fund

On June 1, 2015, the District issued \$12,265,000 of 2015 Revenue Refunding Bonds. Proceeds from the issuance were used to refund the 2003 Refunding Certificates of Participation, fund a debt service reserve fund for the Bonds, and pay the costs of issuing the Bonds. The Bonds are special obligations of the District and are payable exclusively from Tax Revenues and Net Revenues of the District, and from amounts on deposit in certain funds and accounts established under the Indenture. As of June 30, 2017, the refunded 2003 Certificates were redeemed in full.

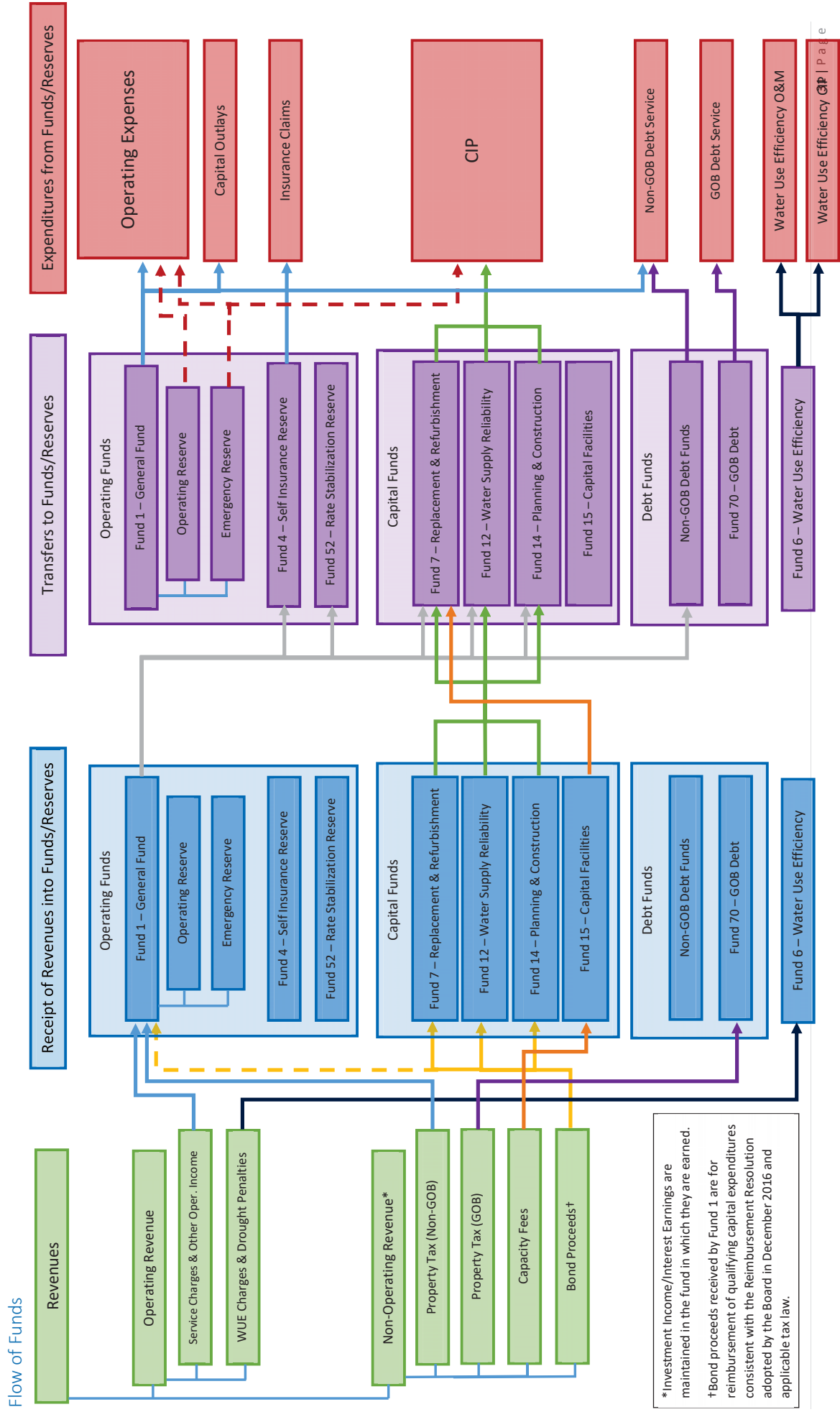


Figure 1: Flow of Funds

Financial Policies

All Financial Policies are set by the Board of Directors with the General Manager authorized to implement the following Financial Policies to ensure the financial goals are being achieved in the District's day-to-day operations. Financial Policies are reviewed annually by the Board and as needed to provide timely updates as public agency laws or conditions change. The below are included as a high-level synopsis of the relevant Financial Policies and Plans. The full financial policies are provided for Board and public review as appendices in Financial Policies for Fiscal Year 2019-20.

Financial Reporting

All District accounting and financial reporting systems will be maintained in conformance with all state and federal laws, Generally Accepted Accounting Principles (GAAP), standards of the Governmental Account Standards Board (GASB), and strive to meet the stringent requirements of the Government Finance Officers Association (GFOA) Award for Excellence in Financial Reporting requirements.

An Annual Audit will be performed by an independent public accounting firm; with an Audit Opinion to be included with the District's published Comprehensive Annual Financial Report (CAFR). The District has over ten years of continued receipt of the GFOA Award for Excellence in Financial Reporting.

Financial Plans

The District will continue to utilize internally developed short-term financial planning tools, while continuing to emphasize long-range planning and ongoing effective District management.

District staff maintains a monthly cashflow model to forecast temporal distributions of cash inflows and outflows and ensure sufficient liquid funds are available for anticipated expenses as they are needed throughout the year. District Financial Planning staff receive monthly capital expense projections from the Engineering department and update the monthly cashflow model to identify anticipated cashflow shortfalls and coordinate portfolio restructurings with the District's Investment Advisor as needed. This regular and proactive communication between departments has allowed the District to maximize its investment earnings as cash reserves are drawn down between planned bond issuances.

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 CIP 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 a dynamic model that is regularly updated 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.

Budget Appropriations

The District maintains a balanced operating budget for all funds, with total ongoing revenues equal to or greater than total ongoing expenditures, such that at year-end the funds have a positive fund balance and the General Fund reserve balance is maintained as required.

Enterprise Funds - Rates

The District will set water, recycled water, and wastewater rates at levels which, in addition to other revenues and available cash balances, fully cover the total direct and indirect costs of providing service – including operations and maintenance, capital outlay, reserve requirements, and cash flow and debt service requirements.

The District will review and adjust enterprise fees and rate structures as required to ensure that they remain appropriate, equitable and reflect the cost of service.

Article XIII D of Proposition 218 requires that fees for water and wastewater services meet strict cost of service requirements including:

1. Revenues for the fee cannot exceed the cost to provide the service
2. Revenues for the fee cannot be used for something other than what the fee was imposed for
3. Property owner must be able to use or have service immediately available to them

In addition to meeting the requirements of Prop. 218, the District's water budget-based rate structure is designed to encourage the beneficial uses of water and prevent the unreasonable use of water, consistent with California Constitution Article X Section 2.

California Constitution Article X Section 2: *"It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. [...]."*

Debt Management

The District maintains debt as a tool to provide intergenerational equity between past, present and future customers as well as to smooth out future rate adjustments to provide customers with predictable and incremental adjustments. The District maintains a strong financial position and a key strategy is maintaining a policy to have a debt service coverage ratio above 1.75. The District's Debt Management Policy was last updated in June 2018 and is attached as Appendix FP - A for Board consideration in June 2019.

Capital Management – Infrastructure Capitalization

The District will maintain a long-range fiscal perspective through the use of its Capital Improvement Plan to ensure the quality of its water and wastewater infrastructure. The purpose of a long-term CIP is to systematically plan, schedule, and finance capital projects to ensure cost-effectiveness, as well as conformance to established District policies. The CIP will be updated annually in conjunction with the District's budget preparation, including anticipated funding sources. Proposed updates to the District's Capitalization & Surplus Policy include the inclusion of Regulated Assets, consistent with GASB 62, as well as a revision to the capitalization threshold for assets. The proposed threshold will be changed to

expenses that have an initial estimated useful life of five years or more and at least \$3,000. The Policy is attached as Appendix FP - D for Board consideration in June 2019.

Risk Management

The District will identify and quantify all areas of financial and operating risk, and prepare contingencies for those risks, including legal liabilities, infrastructure maintenance, refurbishment and replacement, emergency response, contract and employee obligations.

Investments

Investments and cash management are the responsibility of the District Treasurer or designee. The District's primary investment objective is to achieve a reasonable rate of return while minimizing the potential for capital losses arising from market changes or issuer default. Accordingly, the following factors will be considered in determining individual investment placements: 1.) Safety, 2.) Liquidity, and 3.) Yield. The priorities of these factors are further established by the adopted Statement of Investment Policy. The Policy was last updated in June 2018 and is attached as Appendix FP - B for Board consideration in June 2019.

Procurement

The purchasing and procurement system will encourage transparency and sufficient fiscal controls on all purchases and sales to the extent required by law for Special Districts or by District policy. The District's Purchasing Policy was last updated in June of 2018 and is attached as Appendix FP - C for Board consideration in June 2019.

Federal Grant Management

In December 2014, the Federal Office of Management and Budget issued guidance regarding the procurement procedures for local agencies that receive federal grants and funds. This was a major initiative intended to streamline and consolidate government requirements related to the use, monitoring, and auditing of federal funds. Though the District was not required to adjust any internal procedures or controls while creating this policy, the District is required to formally record those procedures in a policy to be compliant with the guidance and maintain eligibility for federal grant funding. The proposed Federal Grant Management policy is attached as Appendix FP - F for Board consideration in June 2019.

Reserves

The District has adopted reserves in order to mitigate potential revenue and expense volatility and reduce the risk of requiring unplanned, large rate adjustments. The reserve policies help to maintain the District's creditworthiness by adequately providing for:

- Economic uncertainties, extraordinary costs, and other financial impacts;
- Revenue uncertainties, such as loss of property tax receipts and connection fees or water sales;
- Disasters or catastrophic events;
- Losses not covered by insurance;
- Compliance with debt obligations; and
- Funding designated infrastructure replacement and refurbishment.

The District currently maintains four types of reserves: a General Operating Reserve, a Self-Insurance Reserve, a Rate Stabilization Reserve, and an Emergency Reserve.

General Operating Reserve - The District maintains a General Operating Reserve in order to provide sufficient liquidity for funding the day-to-day operating expenses and District cashflow needs during normal operations due to normal delays between the payment of expenses and the receipt of revenues. The target balance in the General Operating Reserve is equal to three months of operating expenses, consistent with best practices in the industry for agencies with monthly rate revenue.

Self-Insurance Reserve – The District maintains a Self-Insurance Reserve to provide for expenses incurred to the District for the deductible amounts on insurance claims for repairs to facilities by outside contractors and expenses related to the State Unemployment Insurance for unemployment claims made against the District. The target level of the Self-Insurance Reserve is equal to five times the current Joint Powers Insurance Authority (JPIA) property insurance deductible (the current deductible is up to \$50,000). The Self-Insurance Reserve is maintained in the Self-Insurance Fund (Fund 4).

Rate Stabilization Reserve - The Rate Stabilization Reserve was established to provide funds to be used to smooth out potential fluctuations in water service rates of the District that may result from changes in wholesale water rates. The Rate Stabilization Reserve target level is set equal to fifty (50) percent of the District's property tax revenue. The Rate Stabilization Reserve is maintained in the Rate Stabilization Fund.

Emergency Reserve - The Emergency Reserve was created to provide funds to enable the District quickly to repair critical assets in the event of a natural disaster or facility failure. The target balance of the Emergency Reserve is equal to two percent of the replacement costs of the District's assets as outlined in current guidelines from the Federal Emergency Management Agency.

The District's Reserve Policy was last updated in June of 2018 and is attached in Appendix FP - E, for Board consideration in June 2019.

Budget Process & Schedule

Budget Development, Review, and Adoption

The annual 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 10-Year Capital Improvement Program.

In February, the District held a long-range planning session to discuss District initiatives and strategic objectives that drive resource needs in order to best serve ratepayers. The District Initiatives for FY 2019-20 section, found later in the budget document, identifies the initiatives 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 10-Year CIP.

At a public Board Workshop on May 1, 2019, staff presented the proposed 10-Year CIP, Capital Financing Plan, and Operations & Maintenance Budget for FY 2019-20. Opportunities for Board discussion and public comment are an integral part of the budget process and as such the proposed budgets were agendaized for discussion at each Board meeting prior to the budget's adoption. District staff integrated feedback and have presented the final Fiscal Year 2019-20 budget, which is scheduled for Board consideration and action on June 13, 2019.

Table BP 1: Budget Process & Schedule

Budget Process	Date
FY 2019-20 Budget Development Plan Review	January 16, 2019
FY 2019-20 MWDSC Budget & Rates Review	February 21, 2019
FY 2019-20 MWDOC Budget Review	March 21, 2019
Budget Workshop	May 1, 2019
FY 2019-20 Proposed Budget Review	May 9, 2019
FY 2019-20 Proposed Budget Review	May 23, 2019
FY 2019-20 Proposed Budget Review	June 3, 2019
FY 2019-20 Proposed Budget Review	June 5, 2019
FY 2019-20 Budget Adoption	June 13, 2019

Budget Amendments and Transfers between Funds

Through adoption of the annual budget resolution, the District's Board of Directors authorize the expenditure and appropriation of funds for the fiscal year and place fiscal controls on the use and transfer of budgeted funds.

As outlined in Sections 4 and 5 of the annual budget resolution, attached as Appendix FP - G, any unexpected expenses that require additional funding beyond the annual authorized budgeted expenses and fund transfers requires a budget amendment via resolution by the District's Board of Directors.

The budget resolution also outlines the fiscal controls placed on the use and transfer of budgeted funds. All transfers of amounts between categories within the same fund may be authorized by the General

Manager, who may subsequently delegate authority to Director level staff, the Assistant General Manager and/or Controller to transfer amounts between categories as necessary. The transfer and expenditure of amounts between the Funds may be authorized by the General Manager, or her designee, only to the extent of the specific Funds and maximum amounts set forth in the budget resolution. 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 identified in the budget resolution.

All Funds – Budget Summary

The All Funds Budget section presents the annual flow of funds consolidated across all District functions. The expenses and revenues are presented consistent with the Monthly Financials presented by the Accounting department at each Administrative Board Committee meeting.

All Funds – Consolidated Financial Schedules

The All Funds presentation breaks out the overall annual operating revenues, operating expenses, non-operating revenues, non-operating expenses, capital expenses, and bond expenses.

Budgeted totals for each fund are reported on a modified accrual basis and have been developed so that the use of funds is carefully balanced with identified funding sources, consistent with the District's definition of a balanced budget. Revenues and expenses are recognized in the period they are earned and incurred. Depreciation and amortization are not included; payment of debt service is included. The modified-accrual basis of accounting provides a better match of revenues and expenses for budgeting and reporting.

As shown in Table AF 1, the District is projecting a net contribution of \$20.2M to its fund balances for FY 2019-20. It should be noted that the increase in ending fund balance is consistent with forecasts developed as part of the 2017 Long Range Financial Plan and is largely driven by receipt of proceeds from an anticipated \$68M bond issuance. In total, the difference between the \$149.1M in budgeted expenses and \$101.6M in projected income for FY 2019-20 represents a planned \$47.5M spenddown of available fund balances.

Table AF 1: Budgetary Statement of Revenues, Expenses, and Changes in Net Position for All Funds

MOULTON NIGUEL WATER DISTRICT - ALL FUNDS								
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION								
	FY 2017-18 Approved Budget	FY 2017-18 Actuals	FY 2017-18 Difference	FY 2018-19 Approved Budget	FY 2019-20 Proposed Budget	FY 2019-20 Forecasted Budget*	Proposed vs Approved Difference	%Δ
Operating Revenues:								
Water Sales	29,909,274	29,084,629	(824,644)	29,719,565	31,512,227	30,532,662	1,792,662	6%
Recycled Water Sales	5,462,967	5,597,493	134,525	6,126,568	6,438,316	6,391,952	311,748	5%
Sewer Sales	21,413,568	22,623,626	1,210,058	22,677,534	24,065,352	23,962,676	1,387,818	6%
Water Efficiency Revenue	3,335,112	3,233,359	(101,753)	3,835,379	4,764,604	3,924,516	929,226	24%
Other Operating Income	516,900	468,673	(48,227)	643,065	911,436	529,464	268,371	42%
Total Operating Revenues	60,637,821	61,007,781	369,960	63,002,110	67,691,936	65,341,270	4,689,826	7%
Non-Operating Revenues:								
Property Tax Revenue	27,581,361	27,926,233	344,873	28,194,179	28,599,883	29,276,923	405,704	1%
Investment Income	2,354,217	2,230,371	(123,846)	1,758,346	2,108,233	2,086,758	349,887	20%
Property Lease Income	1,723,533	1,897,765	174,232	1,732,671	1,800,265	1,800,265	67,594	4%
Misc. Non-Operating Income	3,004,247	3,987,751	983,504	3,034,711	933,435	3,069,385	(2,101,276)	-69%
Capacity Fees	340,198	580,329	240,131	614,970	384,339	262,684	(230,631)	-38%
Demand Offset Fees	50,000	69,199	19,199	65,000	36,000	36,000	(29,000)	-45%
Bond Proceeds	-	-	-	63,750,000	67,750,000	-	4,000,000	6%
Total Non-Operating Revenues	35,053,555	36,691,648	1,638,093	99,149,877	101,612,154	36,532,015	2,462,278	2%
Total Revenues	95,691,376	97,699,428	2,008,053	162,151,987	169,304,091	101,873,285	7,152,104	4%
Operating Expenses:								
Salaries	13,181,187	12,171,721	(1,009,467)	14,190,862	14,413,800	14,888,167	222,938	2%
PERS Employer Contributions	1,903,162	1,430,412	(472,750)	2,259,904	2,547,924	2,703,027	288,020	13%
Defined Contribution 401A	230,127	207,000	(23,127)	251,587	265,601	274,480	14,014	6%
Educational Courses	72,253	40,519	(31,734)	78,920	80,934	80,893	2,014	3%
Travel & Meetings	329,651	280,577	(49,074)	328,210	387,140	336,415	58,930	18%
Employee Relations	81,250	79,375	(1,875)	93,343	93,813	95,676	470	1%
General Services	517,820	369,316	(148,504)	488,149	490,292	496,178	2,143	0%
Annual Audit	50,000	38,085	(11,915)	54,000	62,500	55,350	8,500	16%
Member Agencies O&M	458,341	376,164	(82,177)	319,266	541,714	327,248	222,448	70%
Dues & Memberships	125,175	149,322	24,147	160,899	203,082	164,922	42,182	26%
Election Expenses	-	-	-	135,000	-	-	(135,000)	-100%
Consulting Services	2,045,400	1,912,103	(133,297)	2,217,200	3,543,300	2,441,980	1,326,100	60%
Equipment Rental	62,000	56,032	(5,968)	61,500	66,500	63,038	5,000	8%
District Fuel	235,000	257,771	22,771	260,000	315,000	266,500	55,000	21%
Insurance - District	402,420	431,446	29,026	507,850	532,850	520,546	25,000	5%
Insurance - Personnel	394,324	339,990	(54,335)	395,425	369,692	438,874	(25,733)	-7%
Insurance - Benefits	3,023,764	3,279,036	255,272	3,941,106	3,799,415	3,921,369	(141,691)	-4%
Legal Services - Personnel	50,000	11,470	(38,530)	50,000	50,000	51,250	-	0%
Legal Services - General	1,500,000	1,470,392	(29,608)	1,520,000	1,020,000	1,020,500	(500,000)	-33%
District Office Supplies	725,151	674,339	(50,812)	703,975	840,305	716,674	136,330	19%
District Operating Supplies	444,788	386,652	(58,136)	522,904	1,045,269	520,702	522,365	100%
Repairs & Maint. - Equipment	695,669	812,898	117,228	756,362	1,074,550	775,271	318,188	42%
Repairs & Maint. - Facilities	3,725,857	4,033,209	307,352	4,170,831	3,950,249	4,079,623	(220,582)	-5%
Safety & Compliance	282,165	290,875	8,710	324,725	366,898	332,843	42,173	13%
SOCWA†	10,502,352	10,483,221	(19,131)	11,454,088	9,471,915	11,571,915	(1,982,173)	-17%
Special Outside Assessments	201,641	177,048	(24,594)	114,500	33,600	117,363	(80,900)	-71%
Utilities	2,281,900	2,386,405	104,505	2,359,573	2,992,102	2,418,562	632,529	27%
Water Purchases	26,710,799	26,866,197	155,398	27,333,491	28,997,811	28,156,023	1,664,320	6%
Meter Purchases	440,000	395,365	(44,635)	441,000	-	452,025	(441,000)	-100%
Water Efficiency	2,782,524	893,931	(1,888,593)	2,750,000	1,883,000	2,758,000	(867,000)	-32%
Total Operating Expenses	73,454,721	70,300,869	(3,153,851)	78,244,670	79,439,255	80,045,412	1,194,585	1.5%
Change in Operating Position	22,236,655	27,398,559		83,907,317	89,864,836	21,827,873		7%
Debt Service Expense	10,293,689	10,293,689	-	9,622,591	7,672,124	9,340,850	(1,950,468)	-20%
Capital Expenses:								
General Fund	495,765	250,236	245,529	429,189	1,652,552	500,000	1,223,363	285%
R&R Fund	25,140,108	8,610,253	16,529,855	43,107,654	37,711,841	33,249,002	(5,395,813)	-13%
Water Supply Reliability Fund	350,000	1,899,115	(1,549,115)	-	-	-	-	-
Planning & Construction Fund	18,957,000	219,030	18,737,970	4,900,382	18,626,834	23,655,000	13,726,452	280%
WUE Fund	50,000	102,476	(52,476)	950,000	4,019,915	2,495,000	3,069,915	323%
Total Capital Expenses	44,992,873	11,081,110	33,911,763	49,387,225	62,011,142	59,899,002	12,623,917	26%
Projected Change in Funds	(33,049,907)	6,023,760		24,897,501	20,181,570	(47,411,978)		-19%

*Forecasted values based on projections developed for 2017 Long Range Financial Plan and Cost of Service Study

†Proposed FY 2019-20 wastewater treatment costs for Plant 3A are now accounted for in their respective cost categories

A detailed summary of the revenues and expenses that comprise each of the line items presented in Table AF 1 is 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*, *SOCWA*, and *Water Purchases* will differ from those reported above. The totals shown in Table AF 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.

Operating Revenues

Rate Revenue

In December 2017, the Board adopted a four-year rate schedule for potable, recycled, and wastewater service charges based on recommendations from the 2017 Cost of Service Study. The FY 2019-20 projected rate revenue for *Water Sales*, *Recycled Water Sales*, and *Sewer Sales* shown in Table AF 1 includes a three percent rate revenue increase for the potable and recycled water rates and a 5.5 percent increase for wastewater service rates. The projected increase in water efficiency revenue is a conservative projection of usage by customers outside their water budget. Any revenue collected in these tiers is accounted for and dedicated to resources and programs to help customers get back in budget and develop new water supplies to improve water reliability.

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. Revenues from permitting related activities such as the Fat, Oils, and Grease (FOG) program and Plan Check and Inspection (PCI) process are also captured here. Newly added to this category are payments for wastewater treatment services at the District's Wastewater Treatment Plant 3A. The 42 percent increase in budgeted revenues for FY 2019-20 reflects the newly added wastewater treatment service payments and decreased revenues from PCI fees.

The District assumed operations of Plant 3A in FY 2018-19 and the 42 percent increase in budgeted revenues for FY 2019-20 reflect payments from Santa Margarita Water District for wastewater flows it sends to the Plant for treatment. Though not previously captured in this line item, the proposed FY 2019-20 costs for Santa Margarita Water District are in line with forecasts and comparable to costs from the prior fiscal year.

Discussed in detail in Capacity Fees, the District's private development group works closely with local cities to develop forecasts of planned building activity. The decrease in PCI fees proposed for FY 2019-20 reflects an anticipated decrease in planned development.

The remaining revenue sources that comprise *Other Operating Income* are not proposed to increase above FY 2018-19 levels.

Non-Operating Revenues

Property Tax Revenue

The District receives an apportionment of Ad Valorem property taxes from the County of Orange. Property tax revenue has accounted for more than 25 percent of the District's total revenue over the past four years. This has been a key component of the District's revenue base and provided customers with the lowest average monthly bills in South Orange County. Property tax revenue budgeted for FY

2019-20 represents an approximate one percent increase over the budget for FY 2018-19. This is consistent with local South Orange County property tax forecasts.

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, SCWD continues to provide wastewater service to the area. Consistent with the terms of the annexation, the District maintains the SCWD procedure of collecting wastewater service charges on the property tax bill as supplementary tax collected by the County and remits payment to SCWD. The increases are reflective of the rate increases passed through from South Coast Water District.

Investment Income

The District currently holds a diverse portfolio of investments to meet both short term liquidity, mid-term cash funded CIP, 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 2019-20 is 1.75 percent which yields the budgeted \$2.1M based on the expected level of capital invested throughout the fiscal year. The District continues to adhere to the financial plan and policies outlined initially in the 2015 Long Range Financial Plan, and updated in the 2017 Long Range Financial Plan, and has effectively leveraged its available unrestricted cash balances to minimize rate impacts to customers during the transition to regular rate revenue adjustments. The planned spenddown of unrestricted cash balances has necessarily reduced the District's investment income; however, increased coordination between the District's Financial Planning, Accounting, and Engineering departments has increased the accuracy of short-term and long-term cashflow forecasts, which has allowed the District's Investment Advisor to confidently restructure the District's investment portfolio to meet short-term liquidity needs and mid-term cash funded CIP costs, while maintaining long-term earnings. The assumed 1.75 percent factor was developed in coordination with the District's Investment Advisor and reflects realistic expectations of portfolio performance over 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 carriers to place cell towers and equipment on reservoirs and other District locations. In the 1990s, the 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 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 47 agreements with various amendments on several of those agreements. These communications facilities are distributed among approximately 20 District sites. Revenues are projected above historical levels at \$1.8M for the FY 2019-20 Budget.

Misc. Non-Operating Income

The line item for *Miscellaneous Non-Operating Income* includes Board Room rental fees, sale of scrap, GOB property tax revenue, 2009 COP tax credit (historical), and other revenues sources that are not directly related to the operations of the District. The 43 percent decrease from FY 2018-19 is attributable to the refinancing of the District's 2009 COPs. The taxable 2009 COPs were refunded by the tax-exempt 2019 Revenue Refunding Bonds, and the 2009 COPs' tax credit has been removed from the budgeted total for FY 2019-20 to reflect the refinancing. This revision can be clearly seen by comparing the forecasted values for FY 2019-20, in which only a 1.1 percent increase from FY 2018-19 was expected. A similar effect is seen in the *Debt Service Expense* which decreases 20 percent from the FY 2018-19 total due to the refinancing's cash flow savings.

Capacity Fees

The District assesses charges on new development to buy into the system 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 which is regularly updated to reflect changes in planned development. This forecast is utilized to inform the District's long-range supply planning efforts, in particular the Urban Water Management Plan (UWMP). The proposed budget for FY 2019-20 of \$384,339 represents a 38 percent decrease from FY 2018-19 budget, which has been revised slightly upward from projections developed in the UWMP that assumed a greater decrease in planned development from FY 2018-19 to FY 2019-20.

Demand Offset Fees

In FY 2016-17, the Board of Directors amended the existing Water and Wastewater Capacity Charges to include Demand Offset Fees, consistent with California Government Code Section 66000 et. seq., to fund as-yet unknown, future water reliability and water use efficiency projects, programs, and capital improvement projects, in order to offset additional potable outdoor demand from new development that would otherwise impact existing supply reliability.

Consistent with the rationale used to establish the District's Water Efficiency Fund (Fund 6), revenues from *Demand Offset Fees* are received and maintained in Fund 6 as the fees are intended to offset the impact of incremental increases in potable water demands associated with new demands. As the new demands are highly correlated with new development, budgeted revenues from *Demand Offset Fees* are expected to decrease 45 percent, consistent with anticipated decreases in planned development that were used to develop FY 2019-20 forecasted totals.

Operating Expenses

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. Though presented in the aggregate in Table AF 1, operating expenses are classified according to these two categories with the costs of conservation and water efficiency efforts reported and budgeted in Fund 6 – Water Efficiency Fund while the remaining costs of providing continued

services are reported and budgeted in Fund 1 – General Fund. Operating expenses for each of the funds are described in detail in the Fund 1 – General Fund and Fund 6 – Water Efficiency Fund sections.

Capital Expenditures

Discussed in detail in the Capital Improvement Program Budget for Fiscal Year 2019-20 budget, capital expenses represent the largest cost category for the proposed FY 2019-20 budget, accounting for more than one third of total District expenses.

Table AF 2: Change in Fund Balances – Summary of Revenues, Expenditures, and Transfers

Moulton Niguel Water District FY 2019-2020												
Change in Fund Balances - Summary of Revenues, Expenditures, and Transfers												
Fund No.	Fund	Projected Cash/Fund Balance 6/30/2019	Designated/Reserved	Net Available	Increases		Total Available	Decreases			Projected Ending Balance 6/30/2020	Fund Balance Change
					Revenue ³	Transfer		Expense	Transfer	Total Decreases		
1	General ¹	62,066,157	53,533,928	8,532,229	111,310,335	122,828	119,965,392	74,588,263	41,955,139	116,543,402	56,955,918	-8.23%
6	Water Efficiency	6,874,616	-	6,874,616	4,832,166	-	11,706,782	10,523,459	-	10,523,459	1,183,323	-82.79%
	Capital Improvement Funds											
7	Replacement & Refurbishment	1,613,709	-	1,613,709	35,479,060	36,098,132	73,190,901	37,711,841	-	37,711,841	35,479,060	2098.60%
12	Water Supply Reliability ²	349,449	-	349,449	-	-	349,449	-	-	-	349,449	-
14	Planning and Construction	18,610,854	-	18,610,854	16,615,568	15,980	35,242,401	18,626,834	-	18,626,834	16,615,568	-10.72%
	Miscellaneous Funds											
15	Capital Facilities	297,728	-	297,728	384,339	-	682,067	-	297,728	297,728	384,339	29.09%
4	Self Insurance	251,312	250,000	1,312	-	1,638	2,949	2,949	-	2,949	250,000	-0.52%
52	Rate Stabilization	14,422,770	14,299,941	122,828	-	-	122,828	-	122,828	122,828	14,299,941	-0.85%
	Debt Service Funds											
69	CIEDB Loan	-	-	-	-	196,279	196,279	196,279	-	196,279	-	-
68	1998 SRF Loan	-	-	-	-	1,184,595	1,184,595	1,184,595	-	1,184,595	-	-
12	2019 Revenue Bonds ²	4,433,875	4,433,875	-	-	2,430,250	2,430,250	2,430,250	-	2,430,250	4,433,875	-
70	2014 GOB ('03 Refunding)	922,062	-	922,062	685,572	-	1,607,634	1,607,634	-	1,607,634	-	-100.00%
71	2015 COPS ('03 Refunding)	1,271,131	1,226,500	44,631	-	2,325,995	2,370,625	2,370,625	-	2,370,625	1,226,500	-3.51%

¹ Operating Reserves and Emergency Reserves are included in General Fund Designated/Reserved in the amounts of 35,300,000 and 18,233,928 respectively

² Though Water Supply Reliability and 2019 Revenue Bonds comprise Fund 12, the are shown separately to differentiate debt service payments from Capital Improvement Funds

³ Revenues for Funds 1, 7, and 14 include proceeds from the anticipated FY 2019-20 bond issuance. Proceeds allocated to each fund are consistent with planned CIP and anticipated reimbursements.

Changes in Fund Balance

Table AF 2 summarizes anticipated cashflow activity for each of the District's major funds for FY 2019-20. The below discussion provides rationale for changes in each fund greater than positive or negative 10 percent.

General Fund – Fund 1

The projected increase in General Fund balance at the end of FY 2019-20 is attributable to the receipt of proceeds from anticipated bond issuance this fiscal year. The individual revenues and expenses that make up the aggregate totals reported in Table AF 2 are presented in detail in Fund 1 – General Fund. In addition to the \$74.6M budgeted operating and capital outlay expenses, total use of funds for the General Fund includes \$42.0M in transfers to the Capital and Debt Service Funds for total annual expenditures of \$116.5M in FY 2019-20.

Total source of funds for the General Fund includes additional revenue from scheduled rate adjustments that were approved by the Board in December 2017 as well as an estimated \$15.7M reimbursement from bond proceeds for qualifying capital expenses paid from the General Fund prior to the issuance. It should be noted that actual reimbursements to the General Fund will be determined at the time of issuance in accordance with applicable tax law and may differ from estimates reported in Table AF 2.

Water Efficiency – Fund 6

The District's Water Efficiency Fund receives revenue from the customers who use water in excess of their individually calculated water budgets. Expenditures fund investments to improve customer water efficiency and water supply reliability. The District has identified a spenddown of the Water Efficiency Fund with the rollout of Advanced Metering Infrastructure, investments in new water supply and developing new water efficiency programs as detailed in Fund 6 – Water Efficiency Fund. The spenddown in the fund balance is consistent with the overall plan.

Capital Improvement Funds

A detailed account of the capital projects that make up the expenses shown in Table AF 2 can be found in the Capital Improvement Program Budget for Fiscal Year 2019-20. The discussion below will instead provide a high-level summary of major project categories and highlight significant non-recurring capital expenses within the context of their impact on operating costs and the development of the FY 2019-20 budget.

Replacement and Refurbishment – Fund 7

As noted in the Capital Funds section, annual funding for the Replacement and Refurbishment Fund consists of bond issuance proceeds and transfers in from the General Fund and Capital Facilities Fund that are identified as part of the budget process. The large increase in fund balance shown for fiscal year end is driven by \$35.5M in bond proceeds for anticipated project expenses that are budgeted through FY 2022-23 in Fund 7. It should be noted that the actual proceeds received by Fund 7 will be determined at the time of issuance based on updated project costs and projected execution rates.

The Fund 7 budget for FY 2019-20 proposes: \$3.8M in funding for improvements to several District sites including meter replacements, asset management program, vault removals and hatch replacements, replacements and refurbishments at its pump and lift stations; \$1.6M for its ongoing valve program; \$1.4M for safety and efficiency related electrical improvements; \$6.4M for reservoirs including continued upgrades to the reservoir management system, rehabilitation of several tanks, seismic and

structural retrofits; and \$6.7M for main and pipeline improvements including improvements to the 54-inch Central Intertie Pipeline. Wastewater treatment related expenses continue to account for a large share of total Fund 7 costs: SOCWA PC 2 and PC 17 are budgeted at \$2M and \$8.3M, respectively, while \$2.5M is budgeted for improvements to Plant 3A. The FY 2019-20 budget also includes provisions for deploying a new asset management program/computerized maintenance management system.

[Planning and Construction – Fund 14](#)

Annual funding for the Planning and Construction Fund consists of bond issuance proceeds and transfers in from the General Fund that are identified as part of the budget process. The large increase in fund balance shown for fiscal year end is driven by \$16.6M in bond proceeds for anticipated project expenses that are budgeted in Fund 14 through FY 2022-23. It should be noted that the actual proceeds received by Fund 14 will be determined at the time of issuance based on updated project costs and projected execution rates.

The proposed \$18.6M FY 2019-20 budget for Fund 14 is aligned with the anticipated expenses for future fiscal years when construction of long-lasting assets begins to ramp up. The FY 2019-20 budget includes \$16.2M in funding for the upgrades to its operations facility, Plant 2A, as well as \$2.5M for improvements at several sites, including the Camino Capistrano Operations Yard improvements, and Regional Lift Station enhancements.

[Capital Facilities – Fund 15](#)

The Capital Facilities Fund serves as a restricted fund to collect capacity fees paid by developers for connecting to the water and wastewater systems. Activity for the fund is projected based on private development activity provided through coordination from the Cities within the District's service area. The increase in the fund balance reflects increased infill projects as areas within the District are primarily built-out but are increasing in density which is consistent with the ten-year projected activity in the District's 2015 Urban Water Management Plan.

[Debt Service Funds](#)

The District has established debt service funds to ensure the timely payment of debt and to hold as restricted debt service reserve funds consistent with each issuance's covenants.

[2014 GOB – Fund 70](#)

As noted in Debt Service Reserve Funds, a voter approved tax assessment is levied each year to pay the annual debt service associated with this fund. The levy rates are determined annually based on the upcoming year's debt service payment and any remaining balances in the fund. The fund is projected to be completely spent down as the final debt service payment is made in FY 2019-20.

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 maintain the lowest average bill in South Orange County. 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 collection and treatment systems.

Fund 1 – Summary Statement

The General Fund budget is reported on a modified accrual basis and is prepared such that the use of District funds is balanced with identified funding sources, consistent with the District's definition of a balanced budget. Revenues and expenses are recognized in the period they are earned and incurred. Depreciation and amortization are not included; payment of debt service is included. The modified-accrual basis of accounting provides a better match of revenues and expenses for budgeting and reporting.

The difference between the \$74.6M in operating and capital outlay expenses budgeted for FY 2019-20 and \$62.9M 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 increase of \$21M 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: Budgetary 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 2017-18 Approved Budget	FY 2017-18 Actuals	FY 2017-18 Difference	FY 2018-19 Approved Budget	FY 2019-20 Proposed Budget	FY 2019-20 Forecasted Budget*	Proposed vs Approved Difference	%Δ
Operating Revenues:								
Water Sales	29,909,274	29,084,629	(824,644)	29,719,565	31,512,227	30,532,662	1,792,662	6%
Recycled Water Sales	5,462,967	5,597,493	134,525	6,126,568	6,438,316	6,391,952	311,748	5%
Sewer Sales	21,413,568	22,623,626	1,210,058	22,677,534	24,065,352	23,962,676	1,387,819	6%
Other Operating Income	516,900	468,673	(48,227)	643,065	911,436	529,464	268,371	42%
Total Operating Revenues	57,302,709	57,774,421	471,712	59,166,731	62,927,332	61,416,754	3,760,600	6%
Non-Operating Revenues:								
Property Tax Revenue	27,581,361	27,926,233	344,873	28,194,179	28,599,883	29,276,923	405,704	1%
Investment Income	2,256,279	2,026,368	(229,911)	1,667,272	2,076,671	2,052,245	409,399	25%
Property Lease Income	1,723,533	1,897,765	174,232	1,732,671	1,800,265	1,800,265	67,594	4%
Misc. Non-Operating Income	3,004,247	3,987,751	983,504	250,812	250,812	250,812	-	0%
Total Non-Operating Revenues	34,565,420	35,838,117	1,272,697	31,844,934	32,727,631	33,380,246	882,697	3%
Total Revenues	91,868,129	93,612,538	1,744,410	91,011,665	95,654,963	94,797,000	4,643,298	5%
Operating Expenses:								
Salaries	12,205,909	11,316,886	(889,023)	13,164,836	13,073,384	13,774,429	(91,452)	-1%
PERS Employer Contributions	1,804,883	1,089,782	(715,101)	2,204,117	2,374,048	2,550,503	169,931	8%
Defined Contribution 401A	213,638	191,825	(21,813)	240,620	240,739	253,846	119	0%
Educational Courses	69,753	39,865	(29,888)	76,420	79,934	78,331	3,514	5%
Travel & Meetings	304,451	246,608	(57,843)	299,710	347,140	307,203	47,430	16%
Employee Relations	81,250	19,223	(62,027)	93,343	93,813	95,676	470	1%
General Services	517,820	429,468	(88,352)	488,149	490,292	496,178	2,143	0%
Annual Audit	50,000	38,085	(11,915)	54,000	62,500	55,350	8,500	16%
Member Agencies O&M	458,341	376,164	(82,177)	319,266	541,714	327,248	222,448	70%
Dues & Memberships	124,675	138,581	13,906	134,415	139,857	137,775	5,442	4%
Election Expenses	-	-	-	135,000	-	-	(135,000)	-100%
Consulting Services	945,400	1,026,947	81,547	1,317,200	1,603,300	1,519,480	286,100	22%
Equipment Rental	62,000	56,032	(5,968)	61,500	66,500	63,038	5,000	8%
District Fuel	235,000	257,771	22,771	260,000	315,000	266,500	55,000	21%
Insurance - District	402,420	431,446	29,026	507,850	532,850	520,546	25,000	5%
Insurance - Personnel	370,102	323,784	(46,318)	373,746	339,306	415,041	(34,440)	-9%
Insurance - Benefits	2,836,557	3,045,766	209,209	3,433,156	3,267,475	3,584,933	(165,681)	-5%
Legal Services - Personnel	50,000	11,470	(38,530)	50,000	50,000	51,250	-	0%
Legal Services - General	1,450,000	1,448,128	(1,872)	1,500,000	1,000,000	1,000,000	(500,000)	-33%
District Office Supplies	446,951	507,559	60,608	511,475	493,680	519,362	(17,795)	-3%
District Operating Supplies	444,788	386,652	(58,136)	522,304	1,044,654	520,087	522,350	100%
Repairs & Maint. - Equipment	693,169	807,771	114,601	743,362	969,300	761,946	225,938	30%
Repairs & Maint. - Facilities	3,725,857	4,033,209	307,352	4,170,831	3,950,249	4,079,623	(220,582)	-5%
Safety & Compliance	280,415	289,749	9,334	322,975	364,548	331,049	41,573	13%
SOCWA†	10,502,352	10,483,221	(19,131)	11,454,088	9,471,915	11,571,915	(1,982,173)	-17%
Special Outside Assessments	201,641	177,048	(24,594)	114,500	33,600	117,363	(80,900)	-71%
Utilities	2,281,900	2,386,405	104,505	2,359,573	2,992,102	2,418,562	632,529	27%
Water Purchases	26,336,456	26,866,197	529,741	27,333,491	28,997,811	28,156,023	1,664,320	6%
Meter Purchases	440,000	395,365	(44,635)	441,000	-	452,025	(441,000)	-100%
Total Operating Expenses	67,535,728	66,821,003	(714,725)	72,686,927	72,935,711	74,425,280	248,784	0%
Change in Operating Position	24,332,401	26,791,536		18,324,739	22,719,252	20,371,720		24%
Capital Expenses:								
Capital Outlay Expense	495,765	250,236	245,529	429,189	1,652,552	500,000	1,223,363	285%
Projected Change in Fund	23,836,636	26,541,300		17,895,550	21,066,700	19,871,720		18%

*Forecasted values based on projections developed for 2017 Long Range Financial Plan and Cost of Service Study

†Proposed FY 2019-20 wastewater treatment costs for Plant 3A are now accounted for in their respective cost categories

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.

Fund 1 – Detailed Budget – Revenues

Table F1 - 2: District Revenues

Description	FY 2017-18			FY 2018-19	FY 2019-20			
	Approved Budget	Actuals	Difference		Proposed Revenue	Forecasted Revenue	Difference	% Change
Operating Revenue								
Water Sales	29,909,274	29,084,629	(824,644)	29,719,565	31,512,227	30,532,662	1,792,662	6%
Recycled Water Sales	5,462,967	5,597,493	134,525	6,126,568	6,438,316	6,391,952	311,748	5%
Sewer Sales	21,413,568	22,623,626	1,210,058	22,677,534	24,065,352	23,962,676	1,387,819	6%
Other Operating Income	516,900	468,673	(48,227)	643,065	911,436	529,464	268,371	42%
Total Operating Revenue Budget	57,302,709	57,774,421	471,712	59,166,731	62,927,332	61,416,754	3,760,600	6%
Non-Operating Revenue								
Property Tax Summary								
Secured Property Taxes	26,101,164	26,241,511	140,348	26,678,993	27,083,230	27,703,549	404,237	2%
Unsecured Taxes	860,007	838,892	(21,115)	860,007	805,485	893,034	(54,522)	-6%
Supplemental and Miscellaneous Taxes	930,375	1,192,321	261,946	965,364	1,069,911	1,002,437	104,547	11%
Secured Taxes paid to SCWD	(310,185)	(346,490)	(36,305)	(310,185)	(358,743)	(322,097)	(48,558)	16%
Total Property Tax Summary Budget	27,581,361	27,926,233	344,873	28,194,179	28,599,883	29,276,923	405,704	1%
Other Non-Operating Revenue								
Investment Income	2,256,279	2,026,368	(229,911)	1,667,272	2,076,671	2,052,245	409,399	25%
Property Lease Income	1,723,533	1,897,765	174,232	1,732,671	1,800,265	1,800,265	67,594	4%
Misc. Non-Operating Income	3,004,247	3,987,751	983,504	250,812	250,812	250,812	-	0%
Total Other Non-Operating Revenue Budget	6,984,059	7,911,884	927,825	3,650,755	4,127,749	4,103,323	476,993	13%
Total Revenue Budget	91,868,129	93,612,538	1,744,410	91,011,665	95,654,963	94,797,000	4,643,298	5%

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 State Water Resources Control Board (SWRCB), water sales have declined 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. As part of the 2015 Long Range Financial Plan and update in the 2017 Long Range Financial Plan, an analysis of demand reduction was conducted to determine what financial impact the District could expect from increased conservation and efficiency. The District's rates are structured so that any incremental revenue collected from the higher tiers is allocated to the Water Efficiency Fund for water efficiency and water reliability expenditures. As a result, the decrease in higher tiered water sales does not affect the District's General Fund or daily operating revenues. This result was validated empirically during the last drought, as the District's financial position improved while meeting the 20 percent reduction target implemented by the SWRCB. This flexibility in financial structure allows the District to focus water efficiency efforts without concern for the financial impacts of decreased water sales; however, the success of a marginal cost-based price structure depends on maintaining alignment between fixed and variable revenues and fixed and variable costs.

In December 2017, the Board adopted a four-year rate schedule for potable, recycled, and wastewater service charges based on recommendations from the 2017 Cost of Service Study. The approved rate schedules incorporated a realignment of the District's rate revenue structure with underlying costs by decreasing water service charges and increasing volumetric rates. To reduce potential financial impact on customers, the adjustment will be phased in over four years by gradually shifting the allocation of Ad

Valorem property tax revenues between volumetric rates and water services charges. This will improve revenue stability and provide the additional benefit of giving customers more control over their bills. The proposed FY 2019-20 revenue projections for *Water Sales* represent the second year of the phase-in as well as annual rate revenue adjustments.

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 2019-20 General Fund operating budget; however, the success of a marginal cost-based price structure is dependent on accurate projections of the underlying operating costs. The District's Finance and Water Resources Division 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 \$31.5M for FY 2019-20, a six percent increase from FY 2018-19 projected revenues. Potable water sales usage is projected at 25,287 AF for FY 2019-20, a two percent increase from projected sales usage for FY 2018-19. 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 2019-20 includes an approved three percent rate increase that becomes effective January 1, 2020.

Recycled Water Sales

Recycled Water Sales are projected at \$6.4M, one percent above forecasted sales and five percent above FY 2018-19 projected values. Conservation remained strong among recycled water customers last year and the proposed FY 2019-20 recycled water sales are projected to remain below historical averages. Recycled water usage is budgeted at 7,086 AF, slightly below budgeted FY 2018-19 recycled water use. Projected recycled water sales revenue for FY 2019-20 includes an approved three percent rate adjustment that becomes effective January 1, 2020.

Sewer Sales

Wastewater service revenues are projected at \$24.1M, less than one percent above forecasted sales and six percent above FY 2018-19 projected revenues. Projections for FY 2019-20 include an approved 5.5 percent rate revenue adjustment that becomes effective January 1, 2020.

Discussed further in the *Wastewater Treatment* section of Operating Expenses, continued escalation of administration and operating costs from the District's regional wastewater treatment provider is a major reason for the Wastewater System rate increases needed to meet revenue requirements being much higher than the increases needed for the Potable and Recycled Water Systems. As part of the rate structure change approved in December 2017, the previous fixed wastewater service charge for Residential and Multi-Family customers was split into a reduced fixed service charge, representing the share of the District's fixed costs associated with providing ongoing wastewater service to the property, and a per-person charge, representing the share of variable costs associated with providing wastewater service to a household of your size to accurately capture the cost of wastewater treatment.

Other Operating Income

As noted in All Funds – Consolidated Financial Schedules, *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. Revenues from permitting related activities such as the Fat, Oils, and Grease program and Plan Check and Inspection (PCI) process are also captured here. Newly added to this category are payments for wastewater treatment services at the District's Wastewater Treatment Plant 3A. The 42 percent increase in budgeted revenues for FY 2019-20 reflects the newly added wastewater treatment service payments and decreased revenues from PCI fees.

The District assumed operations of Plant 3A in FY 2018-19 and the 42 percent increase in budgeted revenues for FY 2019-20 reflect payments from Santa Margarita Water District for wastewater flows it sends to the Plant for treatment. Though not previously captured in this line item, the proposed FY 2019-20 costs for Santa Margarita Water District are in line with forecasts and comparable to costs from the prior fiscal year.

Discussed in detail in Capacity Fees, the District's private development group works closely with local cities to develop forecasts of planned building activity. The decrease in PCI fees proposed for FY 2019-20 reflects an anticipated decrease in planned development.

The remaining revenue sources that comprise Other Operating Income are not proposed to increase above FY 2018-19 levels.

Non-Operating Revenues

Property Tax

The District receives an apportionment of Ad Valorem property taxes from the County of Orange. Property tax revenue has accounted for more than 25 percent of the District's total revenue over the past four years. This has been a key component of the District's revenue base and provided customers with the lowest average monthly bills in South Orange County. Property tax revenue budgeted for FY 2019-20 represents an approximate one percent increase over the budget for FY 2018-19.

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, SCWD continues to provide wastewater service to the area. Consistent with the terms of the annexation, the District maintains the SCWD procedure of collecting wastewater service 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 2019-20 is 1.75 percent which yields the budgeted \$2.1M of investment income for Fund 1 based on the expected level of capital invested throughout the fiscal year. Though projected *Investment Income* revenue for FY 2019-20 is in-line with forecasted amounts, the 25 percent increase above FY 2018-19 is attributable to the higher than forecasted available cash in the General Fund that no longer needs to be transferred out to fund debt service payments due to the cashflow savings of the 2009 COP refinancing. The District continues to

adhere to the financial plan and policies outlined in the 2015 Long Range Financial Plan and has effectively leveraged its available unrestricted cash balances to minimize rate impacts to customers during the transition to regular rate revenue adjustments. The planned spenddown of unrestricted cash balances has necessarily reduced the District's investment income; however, increased coordination between the District's Financial Planning, Accounting, and Engineering departments has increased the accuracy of short-term and long-term cashflow forecasts, which has allowed the District's Investment Advisor to confidently restructure its investment portfolio to meet short-term liquidity needs and mid-term cash funded CIP costs, while maintaining long-term earnings. The assumed 1.75 percent factor was developed in coordination with the District's Investment Advisor and reflects realistic expectations of portfolio performance over 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 carriers to place cell towers and equipment on reservoirs and other District locations. In the 1990s, the 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 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 47 agreements with various amendments on several of those agreements. These communications facilities are distributed among approximately 20 District sites. Revenues are projected above historical levels at \$1.8M for the FY 2019-20 Budget.

Misc. Non-Operating Income

The line item for Miscellaneous Non-Operating Income includes Board Room rental fees, sale of scrap, and other revenues sources that are not directly related to the operations of the District. As seen in a comparison to the FY 2018-19 budget and FY 2019-20 forecast, revenues for Misc. Non-Operating Income are conservatively held fixed. Revenue sources shown in Table AF 1 such as the GOB property tax revenues and 2009 COP tax credit are received in other funds, and do not impact this line item for Fund 1.

Fund 1 – Detailed Budget – Expenses

Operating Expenses

Salaries and Benefits

Table F1 - 3: Salaries and Benefits

Description	FY 2017-18			FY 2018-19 Approved Budget		FY 2019-20			
	Approved Budget	Actuals	Difference			Proposed Budget	Forecasted Budget	Difference	% Change
Salaries									
Full-Time Salaries	11,178,694	10,347,621	(831,073)	12,020,762		11,972,130	12,515,551	(48,632)	0%
Part-Time Salaries	-	-	-	144,427		26,208	152,942	(118,219)	-82%
Directors Fees	184,800	150,273	(34,527)	189,930		194,040	197,921	4,110	2%
Overtime	629,140	594,676	(34,464)	620,178		690,802	697,025	70,624	11%
Standby	209,475	205,703	(3,772)	184,615		185,704	206,017	1,088	1%
Compensatory Time Expense	3,800	18,613	14,813	4,923		4,500	4,973	(423)	-9%
Total Salaries Budget	12,205,909	11,316,886	(889,023)	13,164,836		13,073,384	13,774,429	(91,452)	-1%
CalPERS Budget									
PERs Employer Contributions	1,804,882	1,089,782	(715,100)	2,204,117		2,374,048	2,550,503	169,931	8%
Defined Contribution 401A	213,638	191,825	(21,814)	240,620		240,739	253,846	119	0%
Total CalPERS Budget	2,018,520	1,281,606	(736,914)	2,444,737		2,614,788	2,804,349	170,051	7%
Insurance - Benefits Budget									
Life and Health Insurance	2,177,541	1,795,318	(382,223)	2,386,860		2,267,126	2,439,189	(119,734)	-5%
Dental Insurance	218,989	143,708	(75,280)	248,051		196,351	252,657	(51,700)	-21%
Vision Insurance	31,033	24,854	(6,179)	35,151		27,825	35,804	(7,327)	-21%
Disability Insurance	80,236	72,095	(8,141)	90,443		87,827	92,827	(2,617)	-3%
OPEB Costs	249,459	211,201	(38,258)	250,278		253,441	310,878	3,163	1%
Auto Allowance	39,700	37,985	(1,714)	46,954		54,975	47,970	8,021	17%
Wellness	39,600	22,722	(16,878)	44,983		41,295	42,750	(3,688)	-8%
Sick Leave Accrual	-	239,452	239,452	182,096		186,374	196,660	4,278	2%
Vacation Accrual	-	498,430	498,430	148,340		152,261	166,197	3,921	3%
Total Insurance - Benefits Budget	2,836,557	3,045,766	209,209	3,433,156		3,267,475	3,584,933	(165,681)	-5%
Total Salaries and Benefits Budget	17,060,987	15,644,258	(1,416,728)	19,042,729		18,955,646	20,163,711	(87,083)	0%

Total *Salaries and Benefits* costs for Fund 1 are budgeted at \$19.0M: a less than one percent decrease from FY 2018-19 budget and a six percent decrease below the forecasted total for FY 2019-20. Relative to all fund expenditures, salaries and benefits makes up less than 13 percent of District FY 2019-20 proposed budgeted expenses. The proposed budget includes the addition of six full time staff members, three of which are budgeted in Fund 1: a Human Resources Analyst, an Inspector, and a Wastewater Treatment Plant Operator in Training. Forecasted totals for FY 2019-20 were developed as part of the FY 2018-19 approved budget and did not consider these new positions. As part of this budget, staff reviewed the functional allocation of labor and through the efforts to evaluate a new Computerized Maintenance Management System and collaboration across departments, staff identified approximately \$2.2 M in labor costs associated with capital projects that are proposed for FY 2019-20. The proposed budget has enhanced our time and expense tracking to move those labor costs into the Capital Budgets for the associated projects. Including the capitalized labor costs, the total FY 2019-20 budget for *Salaries and Benefits* would have increased to \$21.1M. It is important to note that this change in reporting does not reduce actual personnel costs and that proposed staffing increases consider the full long-term cash impacts to the District.

In March 2017, the District and its employees developed a four-year Memorandum of Understanding (MOU) that protects the financial health of the District by mitigating long-term liabilities while investing in a quality workforce in order to meet the public's expectations on performance and transparency as directed by the Board. The proposed budget reflects the year three 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 FY 2019-20 forecasted and budgeted salary expenses shown in Table F1 - 3 are due to the terms of the MOU, which include a three percent compensation structure adjustment and a two percent Cost of Living Adjustment during year three of the four-year MOU, and the additional staffing positions. Despite these changes, the General Fund salaries and benefits costs decreased more than six percent below forecasted levels for FY 2019-20. It should also be noted that the FY 2019-20 proposed budget for the *Full-Time Salaries* line item incorporates changes to the District's reporting of salary and benefits costs that were initiated during the FY 2018-19 budget development: vacation and sick leave accruals are now reported in the *Vacation Accrual* and *Sick Leave Accrual* line items and salaries for part-time staff are now reported in the *Part-Time Salaries* line item. As was the case in FY 2018-19, this change in reporting does not impact the total proposed budget for salaries and benefits related costs.

In December 2016, the CalPERS Board of Administration elected to reduce the discount rate used by CalPERS actuaries from 7.5 percent to seven percent over a period of three years. District staff developed conservative estimates of the potential impacts this methodology change could cause into the FY 2019-20 budget totals and forecasts of future year costs. Retirement costs represent roughly only two percent of the District's total FY 2019-20 budget. The relatively minor impact that these major assumption changes have had on the proposed FY 2019-20 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 2019-20 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 FY 2019-20 Proposed Staffing Plan 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.

Specific Factors

- **Salaries:** As part of the new MOU, salary schedules are to be adjusted in each year over the term. The FY 2019-20 Budget is year three of the latest MOU. The salary adjustment is comprised of a three percent compensation structure adjustment and a two percent cost of living 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 fourth year of full cost-sharing between the District and its employees.

- **Medical Insurance:** Historically, the District has done an exemplary job of controlling medical insurance costs. However, health care premiums have continued to increase over the last three fiscal years: four percent, nine percent, and six percent, respectively. Initial medical rate increases proposed for the HMO plan were 11.7 percent and 22 percent for the PPO plan. As it has done in the past, the District responded to rising premiums by issuing a Request for Proposals to ensure its medical plan costs remain competitive. As a result of this process, plan premiums for dental, vision, and medical care **will not** increase above current rates. Employees share any medical plan cost increases with the District 50/50 as part of the four-year MOU.
- **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 employees to work in unison with Medicare benefits and began making annual payments to the California Employer's Retiree Benefit Trust to prefund health benefits and reduce outstanding liabilities. This plan has had a significant impact on budgeted OPEB costs for FY 2019-20. 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 have not been increased from FY 2018-19 budget totals. It should be noted that zero OPEB related costs were capitalized.

Education and Training, Travel and Meetings, and Employee Relations

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

Description	FY 2017-18			FY 2018-19	FY 2019-20			
	Approved Budget	Actuals	Difference		Approved Budget	Proposed Budget	Forecasted Budget	Difference
<u>Educational Courses</u>								
Educational Courses	52,650	24,769	(27,881)	56,380	54,280	57,790	(2,100)	-4%
Certifications	17,103	15,095	(2,008)	20,040	25,654	20,541	5,614	28%
Total Educational Courses Budget	69,753	39,865	(29,888)	76,420	79,934	78,331	3,514	5%
<u>Travel & Meetings</u>								
Travel and Expenses	117,400	95,690	(21,710)	122,250	132,200	125,306	9,950	8%
Seminars, Conferences, and Meetings	187,051	150,917	(36,134)	177,460	214,940	181,897	37,480	21%
Total Travel & Meetings Budget	304,451	246,608	(57,843)	299,710	347,140	307,203	47,430	16%
<u>Employee Relations</u>								
Pre-Employment Costs	24,600	19,223	(5,377)	24,660	25,343	25,277	683	3%
Employee Relations (Recognition, Medical, Safety)	56,650	60,152	3,502	68,683	68,470	70,400	(213)	0%
Total Employee Relations Budget	81,250	79,375	(1,875)	93,343	93,813	95,676	471	1%

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 2019-20 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. These costs vary from year to year with certification and license cycles and are adjusted annually as the upcoming year's budget is developed. As a result, the proposed Certifications budget for FY 2019-20 has been increased by 28 percent above FY 2018-19 budget amounts. 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 of potential legislation that could affect operations or management practices. As part of its TAP and FLOW initiatives, the District has also recently begun hosting many of its own regional workshops and meetings on a variety of topics from water reliability to smart watershed planning. As a result, the proposed Seminars, Conferences, and Meetings budget for FY 2019-20 has been increased 21 percent above FY 2018-19 budgeted amounts.

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 and enabled the District to maintain near-full employment despite multiple retirements and other normal turnover. The proposed FY 2019-20 budget assumes continued utilization of Neo-Gov and other service platforms that have streamlined the recruitment and on-boarding process. Only a minimal increase in annual cost is expected for the upcoming year and the proposed budget for FY 2019-20 is below the forecasted amount.

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 2017-18			FY 2018-19 Approved Budget		FY 2019-20			
	Approved Budget	Actuals	Difference			Proposed Budget	Forecasted Budget	Difference	% Change
Election Expenses									
Registrar of Voters	-	-	-	135,000		-	-	(135,000)	-100%
Annual Audit									
Annual Financial Records Audit	50,000	38,085	(11,915)	54,000		62,500	55,350	8,500	16%
General Services									
Financial Services									
Billing Services	167,000	97,623	(69,377)	167,000		167,000	167,000	-	0%
Accounting Services	100,000	81,187	(18,813)	90,000		92,500	92,250	2,500	3%
Tax Collection Charges	70,720	68,459	(2,261)	73,549		73,192	75,388	(356)	0%
Unpaid Accounts Write-Off	104,600	71,117	(33,483)	105,100		95,100	107,728	(10,000)	-10%
Engineering Services									
Mapping Updates	38,000	21,767	(16,233)	12,500		17,500	12,813	5,000	40%
Overall Services									
Uniform Service	37,500	29,163	(8,337)	40,000		45,000	41,000	5,000	13%
Total General Services Budget	517,820	369,316	(148,504)	488,149		490,292	496,178	2,144	0%

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 2019-20 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.

Proposed costs for *Mapping Updates* have been increased 40 percent above FY 2018-19 to reflect increases in printing costs as well as new front ends for all of the field sectional map books.

Cost estimates for election expenses are provided to the District by the Registrar of Voters. The proposed FY 2019-20 budget for election costs has been reduced 100 percent from FY 2018-19 amounts as there are no elections scheduled for FY 2019-20.

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 2017-18			FY 2018-19 Approved Budget		FY 2019-20			
	Approved Budget	Actuals	Difference			Proposed Budget	Forecasted Budget	Difference	% Change
Potable Water Facilities									
San Juan Basin Authority (SJBA)	117,615	-	(117,615)	144,089		141,714	147,691	(2,375)	-2%
Upper Chiquita Reservoir (UCR)	120,417	72,052	(48,365)	42,158		47,821	43,212	5,663	13%
5B Reservoir	3,466	-	(3,466)	6,000		6,806	6,150	806	13%
R6 Reservoir	11,555	13,071	1,516	20,000		22,687	20,500	2,687	13%
IRWD Emergency Interconnection	11,555	-	(11,555)	20,000		22,687	20,500	2,687	13%
Total Potable Water Facilities	264,608	85,122	(179,485)	232,247		241,714	238,053	9,467	4%
Recycled Water Facilities									
Upper Oso Reservoir System	193,733	291,041	(71,624)	87,019		300,000	89,194	212,981	245%
Total Recycled Water Facilities	193,733	291,041	(71,624)	87,019		300,000	89,194	212,981	245%
Total Member Agencies O&M	458,341	376,164	(82,177)	319,266		541,714	327,248	222,448	70%

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 (SJBA), a joint powers authority created in 1971 for the purpose of carrying out water resources development of the San Juan Basin. The SJBA members 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 2019-20 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. It should be noted that with the exception of SJBA costs, proposed budgets for the remaining shared regional facilities had not been received and placeholder estimates developed by MNWD staff are shown.

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 \$70M 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 emergency storage and capacity up to nearly 15 days of average day demand. The District has capacity rights of 55 percent in the IRWD Interconnection and is responsible for the same percentage of project costs and ongoing operations and maintenance. As noted, the budgeted FY 2019-20 expenses are based on MNWD staff's estimates of costs for the operation and maintenance of the

interconnection. Upper Chiquita Reservoir is operated by SMWD and the budgeted expenses for FY 2019-20 are based on MNWD staff's estimates of costs for the operations and maintenance of the joint facilities.

In an effort to expand emergency storage in South Orange County, the District entered into an 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 are based on MNWD staff's estimates of costs for FY 2019-20 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.

Lastly, the District owns a 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 Upper Oso Reservoir will continue to increase as the cost of water purchased from the MWDSC continues to rise. The proposed budget for FY 2019-20 is for the District's 25 percent share of the operations and maintenance costs of the reservoir. Not having received a proposed budget from SMWD with sufficient time for inclusion in the proposed budget, the large increase from FY 2018-19 budgeted amounts and forecasted FY 2019-20 amounts shown in the Upper Oso Reservoir line item is intended to capture the large potential swings in annual costs that have been seen historically. Staff will continue to closely monitor this line item and adjust forecasts for future years as appropriate.

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 the current tracking of expenses.

Table F1 - 7: Dues and Memberships

Description	FY 2019-20 Proposed Budget
<u>District Dues and Memberships - Fund 1</u>	
Aliso Viejo Chamber of Commerce	250
Association of California Cities Orange County (ACC-OC)	5,150
Association of California Water Agencies (ACWA)	30,750
California Association Sanitation Agencies (CASA)	16,500
California Special Districts Association (CSDA)	6,660
Independent Special Districts of Orange County (ISDOC)	100
LA Times	450
Laguna Hills Chamber of Commerce	300
Laguna Niguel Chamber of Commerce	2,600
Mission Viejo Chamber of Commerce	1,050
Orange County Register	650
Orange County Water Association (OCWA)	150
South Orange County Economic Coalition (SOCEC)	5,150
South Orange County Watershed Management Area (SOCWMA)	9,250
Southern California Water Coalition (SCWC)	10,250
Technology Approval Group (TAG)	10,000
Urban Water Institute, Inc.	1,300
WaterReuse Association of California	4,700
Southern California Water Alliance of POTW (SCAP)	600
Total District Dues and Memberships Budget	105,860
<u>Staff Dues and Memberships</u>	
Staff Development Memberships	33,997
Total Staff Dues and Memberships Budget	33,997
Total Dues and Memberships Budget	139,857

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 2019-20 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, provide insight into opportunities for technological innovation or provide opportunities for regional coordination.

Table F1 - 8: Consulting Services

Description	FY 2019-20 Proposed Budget
Fund 1 Consulting	
Outreach	340,000
Govt. Affairs	325,000
Finance Consultants	95,300
Contract Management Software	8,600
IT Support	75,000
Engineering Support	440,000
Inspection Services	20,000
Cell Site Management	100,000
FOG Program	130,000
GIS Support	24,400
Deferred Comp Review	20,000
Electrical Services	25,000
Total Fund 1 Overall Consulting Expenses	1,603,300

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 2019-20 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 met with additional staff, see Table F1 - 1 for a comparison of historical budgets and actual expenses.

The proposed *Consulting Services* budget for FY 2019-20 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 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, website maintenance, a customer satisfaction survey, and development of District videos and other media.
- Government Affairs:** Discussed in greater detail in the Government Affairs section of District Initiatives for FY 2019-20, 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 has supported that effort. The proposed *Consulting Services* budget includes provisions for local advocacy services to maintain

awareness of regional opportunities as well as for grant applications and administration services to ensure that the District is able to secure as much funding for its projects as is possible.

- **Finance Consultants:** The Financial Planning 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.
- **Contract Management Software:** Consistent with the approach outlined in the Salaries and Benefits section, 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 external vendors to supply the equipment and materials it needs when repairs are handled in-house. As a result, the number of contractual vehicles that are issued and tracked by staff continue to remain above historical averages. The selection of vendors and services occurs through a competitive and transparent procurement process as outlined in the District's Purchasing Policy. The proposed *Consulting Services* budget includes provisions for a contract management software to support both the selection of vendors and the management of contracts after they are awarded. Additionally, the proposed budget includes provisions for E-Sign software and other document management services
- **IT Support:** The proposed *Consulting Services* budget includes provisions for the District to retain consultants to assist with cloud hosting of its enterprise system, as well as other services, such as AWS and SharePoint, as the District continues to pursue cloud-based software solutions as appropriate. As with all consulting contracts, the District will re-evaluate the use of consultants for these services as staffing resources are developed and based on continued utilization of these services.
- **Engineering Support:** The proposed *Consulting Services* budget includes provisions for the District to support the planning needs of its Engineering department. 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 needs be fulfilled by consultants.
- **Inspection Services:** The proposed *Consulting Services* budget includes provisions for the District to support the inspection needs of its Engineering department. 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 needs be fulfilled by consultants.
- **Cell Site Management:** The proposed *Consulting Services* budget includes provisions to support the management of the District's cell site carriers that generate approximately \$1.8M in annual revenue.
- **FOG Program:** The proposed *Consulting Services* budget includes provisions to support the regular inspection of over 400 restaurants throughout the District to ensure their compliance with maintaining grease interceptors or other devices as part of the District's FOG program.
- **GIS Support:** The GIS Department has dedicated significant staff time and resources to cataloguing the District's assets and developing a comprehensive asset registry as part of the planned deployment of a Computerized Maintenance Management System (CMMS). The proposed *Consulting Services* budget includes provisions for the District to support enhancements to its Geocortex platform and GIS data modifications to support the CMMS implementation.

- **Electrical Services Support:** The proposed *Consulting Services* budget includes provisions for the District to support electrical repairs at several District sites that were identified from the Arc Flash Analysis performed in FY 2017-18. 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 needs be fulfilled by consultants.

Equipment Rental and District Fuel

Table F1 - 9: *Equipment Rental and District Fuel*

Description	FY 2017-18			FY 2018-19		FY 2019-20			
	Approved Budget	Actuals	Difference			Approved Budget	Proposed Budget	Forecasted Budget	Difference
<u>Equipment Rental</u>									
Office Equipment	60,000	56,032	(3,968)	60,012		65,000	61,500	4,988	8%
Misc. Field Equipment	2,000	-	(2,000)	1,488		1,500	1,538	12	1%
Total Equipment Rental Budget	62,000	56,032	(5,968)	61,500		66,500	63,038	5,000	8%
<u>District Fuel</u>									
Unleaded Fuel	147,963	124,632	(23,331)	150,000		185,000	153,750	35,000	23%
Diesel Fuel	78,333	124,706	46,373	100,000		120,000	102,500	20,000	20%
Vehicle Oil	8,704	8,432	(271)	10,000		10,000	10,250	-	0%
Total District Fuel Budget	235,000	257,771	22,771	260,000		315,000	266,500	55,000	21%

Equipment Rental costs consist of leases for multifunction printers and other as needed field equipment. Costs are determined on a contract basis and are expected to increase slightly above budgeted amounts for FY 2018-19 and forecasts for FY 2019-20.

Though costs have been declining historically due to improved fleet and fuel storage management by the Utilities Maintenance Department, *District Fuel* costs for FY 2019-20 are expected to increase between 20 and 23 percent from budget FY 2018-19 amounts due to increases in gasoline taxes.

Insurance

Table F1 - 10: District Insurance

Description	FY 2017-18			FY 2018-19 Approved Budget	Proposed Budget	FY 2019-20		
	Approved Budget	Actuals	Difference			Forecasted Budget	Difference	% Change
Insurance - District								
Property Insurance	115,000	80,919	(34,081)	100,000	100,000	102,500	-	0%
Automobile and General Liability	280,000	342,933	62,933	400,000	425,000	410,000	25,000	6%
Misc. Insurance General	7,420	7,594	174	7,850	7,850	8,046	-	0%
Total Insurance - District Budget	402,420	431,446	29,026	507,850	532,850	520,546	25,000	5%
Insurance - Personnel								
State Unemployment	25,000	2,525	(22,475)	25,000	25,000	27,463	-	0%
Workers Comp	162,113	154,537	(7,575)	163,178	125,084	187,095	(38,094)	-23%
Medicare Insurance	160,264	156,720	(3,544)	170,998	175,567	185,184	4,569	3%
Employer FICA	22,725	10,002	(12,724)	14,570	13,655	15,299	(915)	-6%
Total Insurance - Personnel Budget	370,102	323,784	(46,318)	373,746	339,306	415,041	(34,440)	-9%

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 increased by slightly more than two percent from forecasted levels to reflect updated liability assumptions and historical trends. Budgeted *Property Insurance* and *Misc. Insurance General* costs are below forecasted levels for FY 2019-20, while *Automobile and General Liability* costs have been increased to accommodate a potential increase in premiums. Safety is a key priority of the District, and staff will continue to evaluate opportunities to reduce these costs.

Proposed *Insurance – Personnel* costs have been reduced 18 percent from forecasted levels for FY 2019-20, representing more than nine percent decrease below the FY 2018-19 approved budget. The reduction is due to continued low premiums for Workers Compensation, which are budgeted at 23 percent below budgeted values for FY 2018-19. As discussed in Salaries and Benefits, cost reductions in this category are attributable to reclassification of costs as part of the District implementing capitalization of costs. Workers Compensation 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 agency’s 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 prior years so that instead of the District paying more than the standard premium the District instead pays only a percentage 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 2017-18			FY 2018-19 Approved Budget		FY 2019-20			
	Approved Budget	Actuals	Difference			Proposed Budget	Forecasted Budget	Difference	% Change
Legal Services									
Legal Service - General	1,450,000	1,448,128	(1,872)	1,500,000		1,000,000	1,000,000	(500,000)	-33%
Legal Services - Personnel	50,000	11,470	(38,530)	50,000		50,000	51,250	-	0%
Total Legal Services	1,500,000	1,459,598	(40,402)	1,550,000		1,050,000	1,051,250	(500,000)	-32%

The District separately accounts for its general and personnel related legal expenses to more accurately account for costs. The District has retained Best, Best, and Krieger for its general legal services, Alvarado Smith as special counsel and Liebert Cassidy Whitmore for its personnel related legal services. The proposed budget for FY 2019-20 for *Legal Services-General* has been decreased below FY 2017-18 and FY 2018-19 budgeted amounts to reflect resolution of existing litigation against the District.

District Supplies

Table F1 - 12: District Supplies

Description	FY 2017-18			FY 2018-19 Approved Budget		FY 2019-20			
	Approved Budget	Actuals	Difference			Proposed Budget	Forecasted Budget	Difference	% Change
District Office Supplies									
General Office	145,451	141,213	(4,238)	151,150		139,680	154,929	(11,470)	-8%
Billing Supplies	196,000	199,851	3,851	196,000		196,000	196,000	-	0%
Community Relations	85,000	134,875	49,875	143,825		135,000	147,421	(8,825)	-6%
Shipping	20,500	31,620	11,120	20,500		23,000	21,013	2,500	12%
Total District Office Supplies Budget	446,951	507,559	60,608	511,475		493,680	519,362	(17,795)	-3%
District Operating Supplies									
Operating Supplies	348,044	341,852	(6,192)	416,554		387,188	411,693	(29,367)	-7%
Chemicals	96,744	44,799	(51,944)	105,750		657,467	108,394	551,717	522%
Total District Operating Supplies Budget	444,788	386,652	(58,136)	522,304		1,044,654	520,087	522,350	100%

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 2019-20 proposed budget for District Supplies includes provisions for community education materials and other promotional items. With the exception of *Chemicals*, the costs accounted for in the proposed budget for District Supplies are in-line with forecasted amounts as expenses in this category are expected to remain consistent with historical trends with the negligible changes reflecting projection refinements based on updated assumptions. The FY 2019-20 proposed budget for *Chemicals* has been increased above forecast and FY 2018-19 budgeted amounts to reflect costs from operating Plant 3A. The expected chemical costs are in line with past levels at the Plant; however, these costs were previously captured in the Wastewater Treatment line item.

Repairs and Maintenance, and Meter/Vault Purchases

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

Description	FY 2017-18			FY 2018-19	FY 2019-20					
	Approved Budget	Actuals	Difference		Approved Budget	Proposed Budget	Forecasted Budget	Difference	% Change	
Repairs and Maintenance - Equipment										
Office Equipment	11,900	3,856	(8,044)		14,300		12,050	14,658	(2,250)	-16%
Field Equipment	29,488	34,504	5,016		22,000		28,250	22,550	6,250	28%
Infrastructure Technology Hardware	98,000	143,732	45,732		85,500		114,700	87,638	29,200	34%
Computer Support Contracts	323,463	325,681	2,218		391,562		584,300	401,351	192,738	49%
Vehicle Maintenance and Repair	230,319	299,998	69,680		230,000		230,000	235,750	-	0%
Total Repairs and Maintenance - Equipment Budget	693,169	807,771	114,601		743,362		969,300	761,946	225,938	30%
Repairs and Maintenance - Facilities										
System Maintenance	624,250	558,056	(66,194)		733,000		809,744	751,325	76,744	10%
System Repairs	843,532	1,402,261	558,729		1,158,000		944,500	991,471	(213,500)	-18%
Janitorial Services	15,000	11,880	(3,120)		15,000		29,460	15,375	14,460	96%
Landscape and Tree Maintenance	270,000	251,073	(18,927)		326,760		341,742	334,929	14,982	5%
Waste Disposal	22,000	17,152	(4,848)		30,000		361,814	30,750	331,814	1106%
Underground Service Alert	5,000	3,850	(1,150)		5,000		8,000	5,125	3,000	60%
Contract & Maintenance Agreements	377,899	387,604	9,705		195,532		315,307	200,420	119,775	61%
Pest Control	31,779	24,092	(7,687)		32,539		34,682	33,352	2,143	7%
Paving Repairs	1,100,000	1,068,054	(31,946)		1,150,000		650,000	1,178,750	(500,000)	-43%
Electrical & Instrumentation	70,397	88,572	18,175		105,000		115,000	107,625	10,000	10%
Raising Valves and Manholes	300,000	72,507	(227,493)		300,000		220,000	307,500	(80,000)	-27%
Permits	66,000	148,107	82,107		120,000		120,000	123,000	-	0%
Total Repairs and Maintenance - Facilities Budget	3,725,857	4,033,209	307,352		4,170,831		3,950,249	4,079,623	(220,582)	-5%
Meter/Vault Purchases										
Meter/Vault Replacement	440,000	395,365	(44,635)		441,000		-	452,025	(441,000)	-100%
Total Meter/Vault Purchases Budget	440,000	395,365	(44,635)		441,000		-	452,025	(441,000)	-100%

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. It is important to note two accounting changes that have significant impacts to the totals presented in this table: cost capitalization and costs for Plant 3A. Discussed in greater detail in their respective sections below, capitalization offsets \$1.1M in costs while including the line item costs from Plant 3A add \$332K. As noted throughout the budget document, these presentment changes do not change the cash liabilities of the District and are in line with prior year amounts or approved contracts.

Specific Factors

- **Repairs and Maintenance – Equipment**
 - In addition to general office equipment, the FY 2019-20 proposed budget for *Repairs and Maintenance – Equipment* includes provisions for: the IT Department's continued maintenance of the District's on-site and cloud servers, SCADA system, enterprise billing, technology support services contracts, computer hardware, and existing software licenses, as well as planned upgrades of many of the District's workstations and laptops; and the Support Services Department for regular maintenance and refurbishment of stationary auxiliary generators at critical wastewater and potable

water stations, as well as scheduled fleet maintenance and repair. The prices and rates for the equipment, infrastructure, hardware, and software are largely determined through contracts with individual vendors. The increase in *Computer Support Contracts* reflects an evolving approach to the District's utilization of cloud-based services for supplementing its daily operations and long-range planning efforts.

- The FY 2019-20 proposed budget for *Infrastructure Technology Hardware* includes provisions for additional licenses for GIS software and field data collection support.
- The FY 2019-20 proposed budget for *Computer Support Contracts* includes provisions for: the District's Microsoft Office 365 licenses; managed services for the District's ERP system, which include technical services, cloud hosting, and proactive monitoring; annual support for the new CMMS; and expanded utilization of AWS cloud services.

- **Repairs and Maintenance – Facilities**

- The proposed budget for FY 2019-20 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. As noted above, the proposed FY 2019-20 budget for *Repairs and Maintenance – Facilities* is not completely captured by in Table F1 - 13 due to changes in cost accounting.
- **System Maintenance and System Repairs**
 - *System Maintenance* costs include the maintenance and upkeep of District facilities and pump refurbishments, while *System Repairs* costs include planned reservoir cleaning, reservoir or pipeline repair, and manhole repairs, 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. The 18 percent decrease shown in *System Repairs* is attributable to \$150K of costs for service line replacements that have been capitalized. Without capitalization, the total budget for *System Repairs* is \$1.1M, a 5.5 percent decrease from FY 2018-19 budget.
- **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 by the District. The District continues to benefit from the improved timing of system repairs and increased coordination between District staff and their City counterparts. The 43 percent decrease shown in *Paving Repairs* is attributable to \$950K of costs for service line replacements that have been capitalized. Without capitalization the total budget for *Paving Repairs* is \$1.6M, a 39 percent increase above FY 2018-19 budget. The increase in budget reflects anticipated construction and repairs during next fiscal year.
- **Janitorial Services, Landscape and Tree Maintenance, and Waste Disposal**

- The District maintains approximately 50 facilities between its potable and recycled pump stations, reservoirs, and wastewater lift stations throughout the service area. Over the past year, the District has increased expenditures on irrigation repairs due to system age and vandalism. This trend is expected to continue due to the age of the irrigation systems and proximity to public access points. The proposed budgets for *Janitorial Services, Landscape and Tree Maintenance, and Waste Disposal* now include costs associated with maintaining the facilities at the District's Plant 3A that were previously captured in Wastewater Treatment.
 - **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 vendors to supply the equipment and materials it needs when repairs are handled in-house. Annual budget expenses are determined based on contract or agreement terms with vendors that have been selected through a competitive procurement process.
- **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, under which an average of 3,000 of the District's approximately 55,000 meters are replaced each year. The meters that are to be replaced are determined on the basis of meter route age, with routes aged between 20-25 years budgeted for replacement in a given year. The 100 percent decrease shown in *Meter/Vault Replacement* is attributable to \$1.2M of costs for meter replacements that are now classified as Regulated Assets per GASB 62. Without capitalization, the total budget for *Meter/Vault Replacement* is \$1.2M, a 181 percent increase from FY 2019-20 budget. The increase reflects the targeted replacement of the District's commercial meters, which are being upgraded to ultrasonic smart water meters which more accurately capture low-volume water flows. The decision to upgrade these meters is based on both analysis of potential sources of the District's water loss and the age of the meters.

Safety Programs and Regulatory Compliance

Table F1 - 14: Safety Programs and Regulatory Compliance

Description	FY 2017-18			FY 2018-19 Approved Budget	Proposed Budget	FY 2019-20		
	Approved Budget	Actuals	Difference			Forecasted Budget	Difference	% Change
Safety Program and Regulatory Compliance								
Safety Equipment and Supplies	130,685	111,358	(19,326)	77,000	100,600	78,925	23,600	31%
Safety Shoes	33,490	25,508	(7,982)	34,975	38,323	35,849	3,348	10%
Safety Training	36,151	6,494	(29,657)	31,000	35,000	31,775	4,000	13%
Regulatory Compliance	80,090	146,389	66,299	180,000	190,625	184,500	10,625	6%
Total Safety Program and Regulatory Compliance Budget	280,415	289,749	9,334	322,975	364,548	331,049	41,573	13%

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 2019-20 has increased 13 percent above FY 2018-19 budget and above forecasted budget for FY 2019-20 by 10 percent. The proposed budget for equipment and supply purchases reflects maintaining well-stocked inventory as well as the replacement of existing or purchase of new training equipment based on a multi-year schedule maintained by the Safety and Compliance department. The 31 percent increase in *Safety Equipment and Supplies* is attributable to the purchase of new gas detectors used for confined space entry and new fall protection equipment.

Assessments

Table F1 - 15: Assessments

Description	FY 2017-18			FY 2018-19 Approved Budget	Proposed Budget	FY 2019-20		
	Approved Budget	Actuals	Difference			Forecasted Budget	Difference	% Change
Special Outside Assessments								
Department of Health Services (DOHS) Fees	4,921	1,503	(3,418)	5,000	5,000	5,125	-	0%
LAFCO Fees	20,033	26,473	6,441	27,500	28,600	28,188	1,100	4%
Property Tax Assessment	176,688	149,071	(27,616)	82,000	-	84,050	(82,000)	-100%
Total Special Outside Assessments Budget	201,641	177,048	(24,594)	114,500	33,600	117,363	(80,900)	-71%

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 relatively flat into the next Fiscal Year. Property Tax Assessment costs consist of fees paid to the County of Orange for collection of specific charges, such as GO bond payments, via the property tax roll. The proposed Property Tax Assessment budget for FY 2019-20 has been removed as those costs are now captured in Fund 70 where the GOB property tax revenues and bond payments are budgeted.

Utilities

Table F1 - 16: Utilities

Description	FY 2017-18			FY 2018-19 Approved Budget	FY 2019-20			
	Approved Budget	Actuals	Difference		Proposed Budget	Forecasted Budget	Difference	% Change
Utilities								
Electric Utilities (SCE and SDG&E)	2,100,000	2,178,770	78,770	2,152,500	2,753,033	2,206,313	600,533	28%
Gas Utility (Southern CA Gas)	6,900	6,237	(663)	7,073	10,069	7,249	2,997	42%
Water Utility	-	-	-	-	9,000	-	9,000	-
Overall Telephone	120,000	185,498	65,498	120,000	140,000	123,000	20,000	17%
Mobile Communication	55,000	15,900	(39,100)	80,000	80,000	82,000	-	0%
Total Utilities Budget	2,281,900	2,386,405	104,505	2,359,573	2,992,102	2,418,562	632,529	27%

The proposed FY 2019-20 budget for *Utilities* now includes costs associated with operating the District's Plant 3A that were previously captured in Wastewater Treatment. The inclusion of these costs in the *Utilities* line item is the major driver of the 27 percent increase in costs above FY 2018-19. Had these costs not been included the proposed FY 2019-20 budget for *Utilities* would have been \$2.4M, which represents only a three percent increase above FY 2018-19 budgeted amounts. The non-Plant 3A costs that comprise the *Utilities* line item are expected to increase slightly based on general inflation for utilities. The continued trend of minimal year-over-year increases reflect recent 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 daytime 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. Though only a small component of the overall *Utilities* costs, the proposed increase in *Mobile Communication* costs reflects the District's increasing utilization of connected devices in the field.

Wastewater Treatment

Table F1 - 17: Wastewater Treatments Operations and Maintenance

Description	FY 2017-18			FY 2018-19		FY 2019-20			
	Approved Budget	Actuals	Difference	Approved Budget		Proposed Budget	Forecasted Budget	Difference	% Change
Wastewater Treatment									
PC 2 - JB Latham Treatment Plant	1,123,751	1,157,972	34,221	1,417,106		1,427,491	1,427,491	10,385	0.7%
Plant 3A*	1,957,781	1,553,685	(404,096)	2,051,079		1,996,671	2,100,000	(54,407)	-2.7%
PC 5 - San Juan Creek Ocean Outfall	79,830	84,644	4,814	116,534		117,388	117,388	854	0.7%
PC 2SO - Recycled Water Permit	68,058	75,876	7,818	28,256		28,463	28,463	207	0.7%
PC 15 - Coastal Treatment Plant	297,142	307,984	10,842	316,339		318,657	318,657	2,318	0.7%
PC 17 - Regional Treatment Plant	6,747,502	7,048,748	301,246	7,247,912		7,301,025	7,301,025	53,113	0.7%
PC 21 - Effluent Transmission Main	12,047	12,472	425	13,305		13,402	13,402	97	0.7%
PC 24 - Aliso Creek Ocean Outfall	171,550	195,208	23,658	211,499		213,049	213,049	1,550	0.7%
Pretreatment Program	44,690	46,632	1,942	52,058		52,439	52,439	381	0.7%
Total Wastewater Treatment Budget	10,502,352	10,483,221	(19,131)	11,454,088		11,468,586	11,571,915	14,498	0.1%

*Historical costs, budgets, and the proposed FY 2019-20 budget for Plant 3A are presented here for the purpose of comparison to other wastewater treatment costs paid by the District. The proposed FY 2019-20 budget for Plant 3A is not reflected in the SOCWA line item shown in the Statement of Revenues, Expenses and Changes in Net Position tables presented elsewhere in the budget document.

Given the significant annual financial contributions to regional wastewater treatment (approximately \$26.0M 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.

FY 2019-20 represents the first full year of operations of Plant 3A by District Staff. Budgeted expenses for Plant 3A are in line with historical trends with the line item in the table above representing the net expenses after accounting for reimbursable expenses from SMWD.

Water Purchases

Table F1 - 18: Water Purchases

Description	FY 2017-18			FY 2018-19 Approved Budget	FY 2019-20			
	Approved Budget	Actuals	Difference		Proposed Budget	Forecasted Budget	Difference	% Change
Variable Water Purchase Cost								
MWD Full Service - Tier 1 Treated	16,120,192	17,244,183	1,123,991	16,368,110	17,416,845	16,804,452	1,048,735	6%
MWD Full Service - Tier 1 Untreated	6,382,113	5,733,359	(648,754)	6,344,042	6,613,736	6,613,736	269,694	4%
Baker Variable Cost	857,393	1,134,260	276,867	917,129	940,057	940,057	22,928	2%
Total Variable Water Cost	23,359,698	24,111,802	752,103	23,629,281	24,970,638	24,358,245	1,341,357	6%
Fixed Water Purchase Cost								
MWDOC Ready-to-Serve Charge	1,342,027	1,289,804	(52,223)	1,274,926	1,303,683	1,303,683	28,758	2%
MWDOC Capacity Charge	493,385	381,236	(112,149)	487,713	499,056	499,056	11,342	2%
MWDOC Connection Charge	626,999	624,742	(2,257)	645,064	648,956	661,206	3,892	1%
Reclaimed Water Rebate	(930,314)	(962,902)	(32,588)	(196,504)	-	(196,504)	196,504	-100%
Joint Regional Water Supply System	462,207	460,548	(1,659)	448,092	500,570	459,294	52,478	12%
Santiago Aqueduct Commission (SAC)	14,820	26,381	11,561	20,820	26,051	21,341	5,231	25%
East Orange County Feeder #2 (EOCF2)	75,000	180,751	105,751	76,875	119,893	78,797	43,018	56%
South County Pipeline (SCP)	138,281	101,203	(37,078)	141,738	103,340	145,281	(38,398)	-27%
Baker Fixed Cost	754,353	652,633	(101,720)	805,487	825,624	825,624	20,137	2%
Total Fixed Water Cost	2,976,758	2,754,396	(222,362)	3,704,211	4,027,173	3,797,778	322,962	9%
Total Water Purchase Cost	26,336,456	26,866,197	529,741	27,333,491	28,997,811	28,156,023	1,664,320	6%

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 changes in customer demands and changes to the status of some of the local supply projects. Opportunities to expand recycled water, participate in groundwater exchange programs as well as potential for direct potable reuse are being evaluated by staff. Other local efforts such as ocean desalination are also being closely monitored to determine the District's and South County interest.

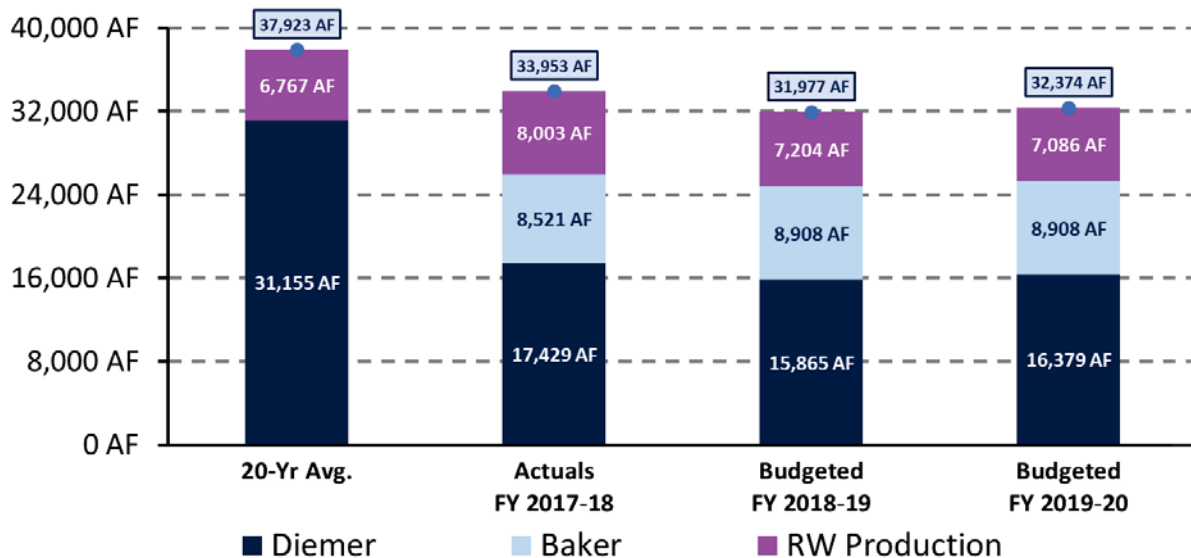


Figure F1 - 1: Water Deliveries and Recycled Water Production

Total water purchases for FY 2019-20 are budgeted at 25,287 AF based on a water loss factor of approximately 7.5 percent, which represents a two percent increase from FY 2018-19 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 as customers continue to use water efficiently.

As part of the Board policy to improve water supply reliability for the service area, the District participated 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 2019-20 are budgeted below full-capacity volumes at 8,908 AF, reflecting planned downtime for maintenance and repairs at the treatment plant. The remaining 16,379 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, 2019 by 3.3 percent and 2.7 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.

Beginning with the FY 2017-18 Budget, 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. Consistent with the presentation in the FY 2017-18 Budget, the additional line items in *Water Purchases* that were previously in the Member Agency Operations and Maintenance 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 reported separately to track the costs of treated water from the Diemer Water Treatment Plant against the Baker Water Treatment Plant. Accurately compiling the full cost to bring water into the District from its multiple 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 2017-18	FY 2018-19	FY 2019-20
<u>Requested Capital Outlays</u>			
Technology	\$35,000	\$30,000	\$16,000
Trucks	\$255,500	\$232,180	\$870,000
Heavy Equipment	\$141,000	\$100,000	\$326,101
Pumps & Equipment	\$45,000	\$67,009	\$737,500
Total FY 2019-20 Capital Outlays	\$476,500	\$429,189	\$1,949,601

Requested Capital Outlays for FY 2019-20 have increased compared to the amounts in FY 2018-19 and FY 2017-18. 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. The proposed FY 2019-20 *Capital Outlays* budget includes provisions for the replacement of a number of trucks, pumps, and pieces of heavy equipment that have reached the end of their useful lives.

Pumps and Equipment

Table F1 - 20: Capital Outlays-Pumps and Equipment

Description	FY 2019-20
<u>Pumps & Equipment</u>	
Aliso Creek PLC	\$22,000
Aliso Creek VFD	\$17,000
AV CIP Valve Parts	\$20,000
Bridlewood Valve Parts	\$30,000
Cabot CIP Valve Parts	\$10,000
Crown Point SMC Repl.	\$16,000
Crown Valley SMC Repl.	\$15,000
Highlands PLC Panel	\$25,000
Little Niguel Valve Parts	\$10,000
Regional Valve Parts	\$50,000
Regional VFD	\$43,000
Southridge PLC Panel	\$25,000
EOC Trailer (2)	\$140,000
Fountains Pump Repl.	\$70,000
ADS Flow Monitors	\$12,500
Push Camera	\$15,000
Chain Cutter Nozzle	\$10,000
Wireless Video System	\$6,000
Message Boards	\$51,000
Emergency Bypass Pump	\$150,000
Subtotal - Pumps & Equipment	\$737,500

The District’s Operations staff reviews all pumps and distribution equipment to provide contingencies for emergency backup needs at critical facilities 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 customers have come to expect.

Heavy Equipment

Table F1 - 21: Capital Outlays-Heavy Equipment

Description	FY 2019-20
<u>Heavy Equipment</u>	
Valve Truck	\$150,000
Vac Excavator Trailer	\$176,101
Subtotal - Heavy Equipment	\$326,101

Requested Heavy Equipment for FY 2019-20 consists of two items. The proposed budget includes provisions for a valve turning truck for the District's Distribution Crew and potentially for the backfill needs of the District's Valve Crew. Also included is a Vac Excavator Trailer for Customer Service that is necessary to safely and effectively perform routine maintenance, replace meters, install AMI and AMR radios, replace angle stops, and a variety of clean-up applications.

Trucks

Table F1 - 22: Capital Outlays-Trucks

Description	FY 2019-20
<u>Trucks</u>	
Electrician Vehicle	\$54,000
Replacement of Truck #62	\$45,000
Replacement of Truck #39	\$55,500
Replacement of Truck #99	\$85,000
Replacement of Truck #25	\$500,000
Replacement of Truck #30	\$68,500
Engr. Inspector Vehicle	\$35,500
Safety Coordinator Vehicle	\$26,500
Subtotal - Trucks	\$870,000

The District actively monitors the age and mileage of the fleet. Five of the proposed trucks are to replace trucks that have reached the end of their useful lives and are beginning to experience maintenance and reliability issues. The remaining three vehicles are for the Electrical and Safety Departments as well as for the proposed Engineering Inspector.

Technology

Table F1 - 23: Capital Outlays-Technology

Description	FY 2019-20
<u>Technology</u>	
Field Laptops	\$10,000
Infrared Field License	\$6,000
Subtotal - Technology	\$16,000

Technology capital outlays for FY 2019-20 have decreased roughly 50 percent from the average of the FY 2018-19 and FY 2017-18 capital outlay budgets. The "needs-based" approach to budgeting and Staff's efforts to reduce costs through the "needs-based" approach to budgeting by the reduction from historical average costs. The requested *Technology* budget for FY 2019-20 includes provisions for: field laptops for valve turners with chargers, additional batteries and accessories, and an additional Infrared Field License are proposed for ease of operator use and reliability out in the field.

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 the efficient use of water and offset their demand.

The drought crisis presented a unique opportunity for the District to demonstrate an innovative and resourceful approach to addressing 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 the District has 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 California Data Collaborative, and budget-based rate structure are just some of the reasons why we have been successful. Developing strategies and tools to further achieve efficiency and conservation while ensuring reliable service and economic health of our communities will be paramount going forward. Additionally, with water demands trending much lower than existing and historical water use levels, and new opportunities projected to be available in potable reuse and stormwater capture in the next few years, it is timely to update the District's long-range water reliability planning.

Highlighted FY 2018-19 Successes

- Direct Install Smart Timer Program received 2,000 applications in two years resulting in over 1,300 residential smart timer installations, making it the most successful rebate program the District has ever implemented.
- District achieves a major milestone of having adoption of outdoor water savings devices consistently outpace that of indoor water savings devices.
- NatureScape Turf-to-Native Garden Program received 100 applications in its first year as a full-scale turf replacement and education program.
- 500 participants attended the District's first-ever NatureScape Garden Tour, which showcased the beauty and multiple benefits of watershed-friendly, California native plant gardens.
- Continued monthly targeted marketing campaigns using seasonal messaging to connect customers with higher tier usage to resources, tools, and water efficiency programs
- Developed comprehensive Water Loss Control Program
 - Annual Update of Water Loss Control Program Potable Water System Audit

- Completed real loss and apparent loss component analyses of the Potable Water System
 - Completed two hands-on leak detection trainings
 - Launched pilot program leveraging AMI metering to evaluate water loss in the recycled water distribution system
- Continued to offer commercial assessments and water efficiency programming to help businesses and institutions
- Completed the first retrofit at Mission Viejo High School under the School Device Retrofit Program, which provides free site assessments and high efficiency device retrofits to local schools
- Provided two Project WET (Water Education for Teachers) Workshops to elementary school teachers for two local school districts.
- Awarded 2nd Bureau of Reclamation award for Phase II expansion of AMI.
- Awarded the Future Supply Actions grant from Metropolitan Water District to explore resource recovery potential in Aliso Creek.
- Conducted the second H2O for HOA workshops and expanded participation from local cities and water agencies across South Orange County.
- Launched HOA Coordination Services pilot program to assist HOAs with outdoor efficiency improvements.
- Hosted two 10-week professional landscape training programs for professional landscapers in Spanish through the Bilingual Training Institute
- Tracked legislation on “Making Conservation a California Way of Life” and provided regular updates to the Board on significant changes.
- Utilized AMI smart meter data and the Recycled Water Masterplan to target customers to shift their peak recycled water usage.
- Identified opportunities for energy and water integrated efficiency from the awarded California Energy Commission grant in coordination with UC Davis.
- Implemented San Diego Gas and Electric Energy Savings Assistance Program to provide low-income customers with direct install high efficiency water and energy devices.
- Implemented San Diego Gas and Electric Business Energy Solutions program to provide commercial kitchens with direct install of high efficiency water and energy devices.
- Expanded watershed education to local schools through integrated field trips and classroom instruction
- Updated Quarterly Board report on water efficiency and water resources to include program activity and upcoming key initiatives

- Participated in the 2018 MWD OC Orange County Reliability Study Update
- Increased days of system reliability to 24 from 1.5 over past ten years through \$70M infrastructure investment and comprehensive demand management strategies, including rate structure refinement and water efficiency programs
- Completed the Recycled Water Master Plan
- Substantially completed the Recycled Water Optimization Study
- Substantially completed study of local wells for recycled water makeup use
- Added 32 new recycled water service connections over the last two years
- Continued Urban Runoff Reduction Partnership (URRP) to engage local cities, the County of Orange, and local non-governmental organizations in efforts to reduce urban runoff through data sharing and collaboration
- In collaboration with URRP partners, began implementing the “Smart Watershed Project” to minimize stormwater runoff towards aiding our mutual ratepayers by evaluating potential use of stranded wastewater assets and demand management strategies through data driven approaches.
- Initiated study of potential conversion of Sulfur Creek for seasonal recycled water storage and evaluation of potential IPR/ DPR project
- Initiated historic partnership with OCWD to study potential exchange program costs and infrastructure to meet District water reliability objectives
- Support of San Juan Basin Authority actions
- Staff presented at several conferences on multiple topics including:
 - WaterSmart Innovations 2018 Conference
 - Urban Runoff Reduction Partnership
 - Breaking the Rebate Mold
 - Watershed Education Field Trips
 - Direct Install Smart Timer Program poster
 - AWWA Sustainable Water Conference
 - Urban Runoff Reduction Partnership
 - Customer Engagement Tools and Water Efficiency Programming
 - AWWA ACE Conference
 - Urban Runoff Reduction Partnership
 - Sustain OC

- Urban Runoff Reduction Partnership
- Imagine H2O
 - Workforce & Innovation
- WaterNow Conference
 - Presentation on District's successful rate study outreach
- 2018 American Water Resources Association Conference
 - Presentation on Innovative Watershed Solutions
- CalWEP Peer to Peer
 - Water-Energy Efficiency Project with UC Davis
 - Water Savings Analysis Tools with CaDC
- Digital Efficiency Forum
 - Data-Driven Water Efficiency Programming
- ACWA Panel on Urban Runoff Collaboration and Smart Watershed Network Project
- California State Association of Counties
 - Presentation on Innovative Stormwater Collaborations
- Orange County WaterReuse Chapter
 - Data Driven Recycled Water Efficiency
- Ongoing presentations at MWD and MWDOC's Water Efficiency monthly meetings

Fund 6 – Summary Statement

Table F6 - 1: Budgetary 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 2017-18 Approved Budget	FY 2017-18 Actuals	FY 2017-18 Difference	FY 2018-19 Approved Budget	FY 2019-20 Proposed Budget	FY 2019-20 Forecasted Budget*	Proposed vs Approved Difference	%Δ
Operating Revenues:								
Projected Water Efficiency Revenue	3,335,112	3,233,359	(101,753)	3,835,379	4,764,604	3,924,516	929,226	24%
Non-Operating Revenues:								
Investment Income	97,937	204,003	106,066	91,074	31,562	34,513	(59,512)	-65%
Demand Offset Fees	50,000	69,199	19,199	65,000	36,000	36,000	(29,000)	-45%
Operating Expenses:								
Labor	1,300,574	1,215,494	85,080	1,514,774	2,101,479	1,647,164	586,705	39%
Educational Courses	2,500	655	1,845	2,500	1,000	2,563	(1,500)	-60%
Travel & Meetings	25,200	33,970	(8,770)	28,500	40,000	29,213	11,500	40%
General Services	-	-	-	-	-	-	-	-
Dues & Memberships	500	10,741	(10,241)	26,484	63,225	27,146	36,741	139%
Consulting Services	1,100,000	885,156	214,844	900,000	1,940,000	922,500	1,040,000	116%
Legal Services	50,000	22,264	27,736	20,000	20,000	20,500	-	0%
Conservation Supplies	278,200	166,781	111,419	193,100	347,240	197,928	154,140	80%
Repairs & Maint. - Equipment	2,500	6,254	(3,754)	13,000	105,250	13,325	92,250	710%
Water Efficiency	2,885,000	893,931	1,991,069	2,750,000	1,883,000	2,758,000	(867,000)	-32%
Total Operating Expenses	5,644,474	3,235,246	2,409,228	5,448,358	6,501,194	5,618,338	1,052,836	19%
Change in Operating Position	(2,161,425)	271,315		(1,456,906)	(1,669,028)	(1,623,309)		15%
Capital Expenses:								
Capital Outlays	-	-	-	-	36,025	-	36,025	-
RW Retrofits	50,000	-	50,000	50,000	8,476	50,000	(41,524)	-83%
AMI - Potable	-	51,238	(51,238)	600,000	3,585,501	1,850,000	2,985,501	498%
AMI - RW Meters	-	51,238	(51,238)	-	-	-	-	-
RWOS - System Improvements	-	-	-	300,000	389,913	595,000	89,913	30%
Total Capital Expenses	50,000	102,476	(52,476)	950,000	4,019,915	2,495,000	3,069,915	323%
Projected Change in Fund	(2,211,425)	168,839		(2,406,906)	(5,688,943)	(4,118,309)		136%

*Forecasted values based on projections developed for 2017 Long Range Financial Plan and Cost of Service Study

The budget presented for Fund 6 includes programs and projects continuing the District's success in demand management and planning for future water reliability investments. The proposed budget for FY 2019-20 is presented in the above table and includes the projects and programs discussed below.

NatureScope Turf-to-Native Garden and Smart Timer Direct Installation programs are proposed in the Water Efficiency line item in the FY 2019-20 Budget as key efforts to make water efficiency programs easier for the District's customers as well as to streamline the administrative process to make the programs more cost effective.

Table F6 - 2: Consulting Services

Description	FY 2019-20 Proposed Budget
Fund 6 Consulting	
Turf Inspections	45,000
Landscape Assessments	60,000
Customer Portal	60,000
HOA Program Support	120,000
Customer Landscape Resources	35,000
Commercial Assessments Program	60,000
Web Form Builder	20,000
Sulphur Creek Study	400,000
OCWD Study	250,000
Water Reliability Study Support	300,000
Smart Watershed Project	100,000
Water Loss Training and Start Up	100,000
Conservation Outreach	125,000
Data Analytics	50,000
CA Data Collaborative	45,000
Water Loss Consultant Support	100,000
Marketing Support	30,000
Misc. Consulting Services	40,000
Total Fund 6 Overall Consulting Expenses	1,940,000

These programs are based on the final results from the UC Riverside study, which highlighted the need to simplify or modify the rebate process, as it takes approximately 8-12 weeks currently to receive a rebate check from the time of applying and took as long as six months when program interest spiked in 2015. A key priority for FY 2019-20 is to expand education resources and tools to customers to help in maintaining the District's investment in landscape transformation and assist additional customers in converting their landscapes. The key result from the final UC Riverside study was to make programs easy and providing information and resources to customers in a simple and accessible way is paramount to implementing that recommendation. The continuation of the District's landscape workshops, providing customers with more landscaping and design resources, and the form builder all provide support for educational resources and make participation easier.

To support the District's rebate programs and to ensure consistent program implementation as 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. With the addition of the new leak detection program, the District is proposing two positions in Fund 6 to inspect the 850 miles of District pipelines and service connections to proactively find leaks. This builds on the leadership efforts by the District in piloting projects in water loss control. Additionally, as the District moves forward in the evaluation, planning and regulatory issues associated with the development of new water supplies, staff are proposing a Senior Water Resources Planner to support the momentum of projects including the Smart Watershed Network, Orange County Water District studies and the Sulphur Creek Study.

The District successfully implemented Advanced Metering Infrastructure (AMI) for all dedicated landscape meters (about 2,650 potable and recycled water meters) within the District as well as a residential pilot program on a legacy AMI system (about 1,800 meters). The District is in the process of installing 4,500 multi-family and commercial meters onto AMI. Once on AMI, customers can gain access to near real time water usage information and receive alerts for potential leaks through the District's customer portal, MyWater MNWD. For FY 2019-20, the District is looking to expand AMI to all commercial and multi-family customers in Phase II and begin the full rollout for the remaining 46,300 single family residential customers. Other key initiatives for the FY 2019-20 Budget include:

- Update 2008 Board Policy on Water Reliability Goals to include both system reliability in the event of an emergency and Board policy for drought supply reliability
- Update Long Range Water Reliability Plan as a component of an Integrated Resources Plan
- Evaluate potential pilot program to provide water storage with the Orange County Water District
- Complete the Recycled Water Optimization Study and commence implementation
- Complete a new MWDC Local Resources Program application for expansion of the recycled water system
- Complete study of potential conversion of Sulfur Creek for seasonal recycled water storage and continue engagement with regulatory agencies to support a pathway to direct potable reuse for the District's remaining wastewater
- Implement the "Smart Watershed Project" through our MOU with cities, the County of Orange and neighboring agencies to minimize urban runoff and storm flows utilizing data-driven approaches to evaluate mutually beneficial demand management strategies and potential use of wastewater assets
- Finalize the Aliso Creek well evaluation
- Continue to monitor and review local water supply options, i.e. ocean desalination and storm water capture
- Implement an acoustic leak detection program to reduce real system water losses
 - Three FTEs proposed: two working full-time on system inspection and leak detection and an Inspector to manage the repair of the leaks identified. The proposed Inspector is budgeted in Fund 1 as repairing or replacing assets are part of the District's regular operations, while the two leak detection staff are budgeted in Fund 6 as proactive leak detection has a clear water reliability nexus
 - Develop procedures for the leak detection program
- Initiate evaluation of potable water system pressure to identify opportunities to reduce real system water losses, and update the water loss graphics
- Pursue additional state/federal funding opportunities for demand management and recycled water program expansion
- Engage with the Board on positions (support or opposition) regarding any statewide water loss policy issues
- Develop a Drought Action Plan as a component of an Integrated Resources Plan
- Adopt updated Water Shortage Contingency Plan ordinance consistent with 2017 Prop 218 Notice and updates to California Water Code

- Continue expanding AMI in Phase II to all commercial and multi-family customers (about 4,000 more AMI meters in addition to the current 4,500)
- Evaluate expedited AMI to all customers utilizing outside consultant support, and present an implementation plan to the Board
- Incorporate internal recycled water system water loss audit to evaluate benefits of full distribution system AMI
- Develop regular metrics and analysis based on the UC Riverside study to track new water efficiency programs' effectiveness
- Further develop water efficiency programs and marketing in support of Homeowners' Associations water use efficiency
- Host 2nd NatureScape garden tour in coordination with the California Native Plant Society annual tour in South Orange County

The upcoming fiscal year budget provides a portfolio of resources for customers and initiatives to cost effectively expand the District's water reliability into the future.

Debt Service Summary

As the District has developed over the past 59 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 2014 GOBs will be completely paid off after the final debt service payment is made in FY 2019-20. The District currently has one outstanding loan from the State Water Resources Control Board which was used to expand the recycled water system, as well as two loans from the California Infrastructure and Economic Development Bank that were issued for the replacement and development of water and sewer infrastructure. In 2009, the District issued Certificates of Participation (2009 COPs) 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. In March 2019, the District refinanced the 2009 COPs with the issuance of the 2019 Revenue Bonds. 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. The 2014 GOBs and 2015 Revenue bonds were all refinanced in the last six years to save ratepayers on debt service payments. Table Debt - 1 presents the scheduled debt service payments for FY 2019-20 for each of the District's existing bonds and loans.

Table Debt - 1: Summary of Debt Service Payments for Fiscal Year 2019-20

Description	FY 2019-20			
	Principal	Interest	Fees	Total
2019 Revenue Bonds (Refunding of 2009 COPs) - Fund 12	\$ -	\$ 2,430,250	-	\$ 2,430,250
State Water Resources Control Board - Fund 68				
Phase IV Reclaimed Water Distribution System Expansion (SRF 120)	\$ 1,104,668	\$ 79,927	-	\$ 1,184,595
Subtotal - SWRCB SRF Debt	\$ 1,104,668	\$ 79,927	-	\$ 1,184,595
California Infrastructure and Economic Development Bank - Fund 69				
2002 On-Site Hypochlorite Generation-Reservoir Mgmt. System, Phase II (CIEDB 01-020)	\$ 106,871	\$ 8,994	\$ 988	\$ 116,853
2002 Sewer Rehabilitation (CIEDB 02-026)	\$ 71,720	\$ 7,039	\$ 666	\$ 79,425
Subtotal - CIEDB Debt	\$ 178,591	\$ 16,033	\$ 1,655	\$ 196,279
2014 Consolidated Refunding (General Obligation) Bonds - Fund 70				
GOB Debt ID #7	\$ 1,465,000	\$ 25,375	-	\$ 1,490,375
Subtotal - 2014 GOB Debt	\$ 1,465,000	\$ 25,375	-	\$ 1,490,375
2015 Revenue Bonds (Refunding of 2003 COPs) - Fund 71	\$ 1,895,000	\$ 475,625	-	\$ 2,370,625
Total FY 2019-20 Debt Service Expense	\$ 4,643,260	\$ 3,027,210	\$ 1,655	\$ 7,672,124

The District currently holds a 'AAA' rating from Fitch and a 'AAA' 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 10-Year Capital Improvement Program is to issue debt to smooth out rate increases. This is also presented in the District's Long-Range Financial Plan which is updated annually as part of the Budget process.

Figure Debt - 1 presents the expected debt service over the next ten years including four identified bond issuances: \$68M in FY 2019-20, \$70M in FY 2021-22, \$55M in FY 2024-25, and \$44M in FY 2026-27. This is to maintain a consistent four 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.

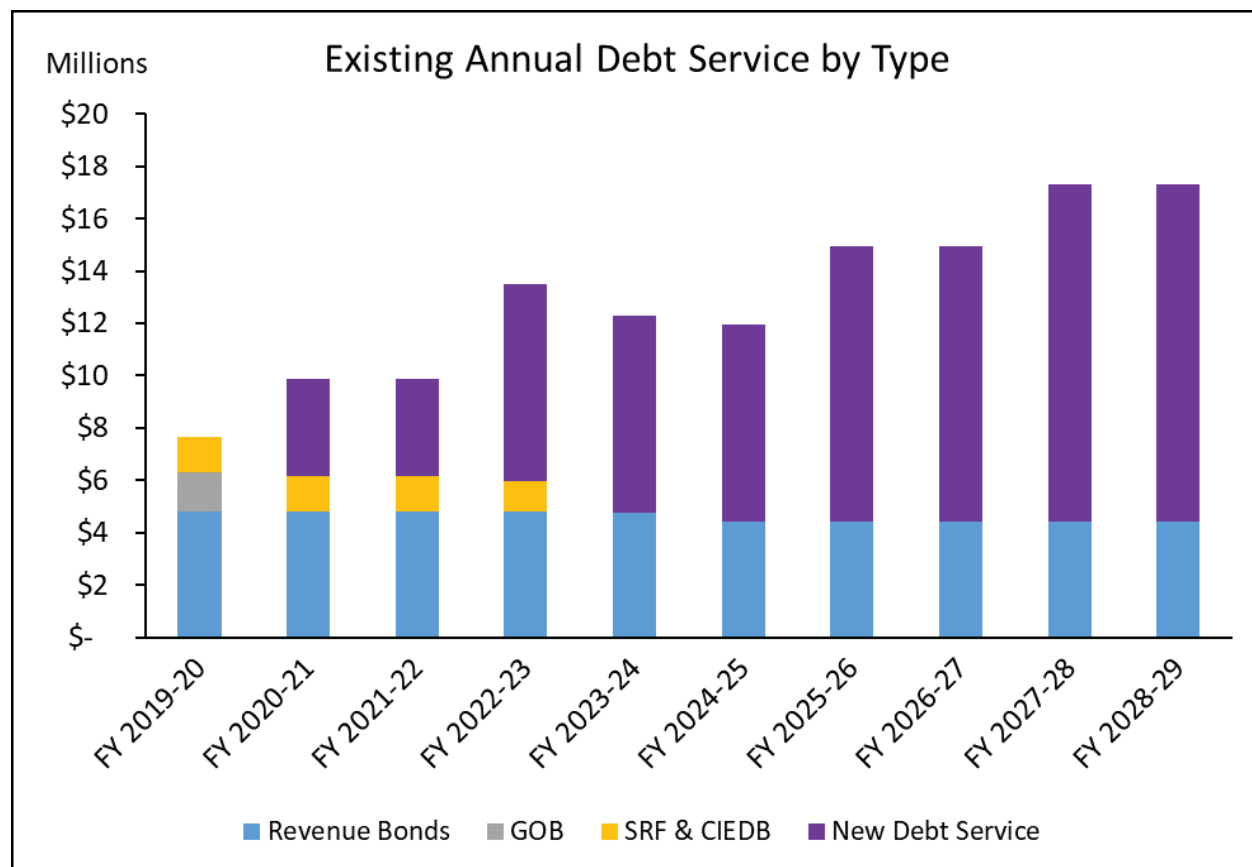


Figure Debt - 1: Ten-Year Summary of Forecasted Debt Service

Debt Limits

Pursuant to Section 18 of Article XVI of the California Constitution (Constitutional Debt Limit), no county, city, town, township, board of education, or school district may incur any indebtedness or liability for any purpose exceeding in any year the income and revenue provided for such a year without the consent of two-thirds of the voters voting at an election to be held for that purpose. Special districts, like the District, are not subject to the Constitutional Debt Limit because they are not one of the entities described in Section 18 of Article XVI.

Though not subject to the Constitutional Debt Limit, as a California water agency, the District is subject to certain restrictions relating to its debt under the Water Code and covenants governing the 2019 and 2015 Revenue Bonds relating to the District's ability to issue additional parity and other lien obligations. Summary discussion of these restrictions are provided below.

SUMMARY OF DEBT LIMITS APPLICABLE TO CALIFORNIA WATER DISTRICTS:

Revenue Bonds:

1. Discussion: Revenue bonds can be issued pursuant to the Water Code. They are not a general debt, liability or obligation of the district. The bonds may be subject to call and redemption before maturity, at the option of the District, at such price or prices as may be fixed in the resolution, not exceeding a premium of six percent of the par value of the revenue bonds so subject to redemption. Generally, revenue bonds shall bear interest at a rate not in excess of eight percent per annum. The maturity shall not be more than 40 years from the date of issuance.
2. Procedural Requirements: An estimate must be provided, including every expense of the district that may be incurred for and limited to the purpose of acquiring or constructing works for irrigation, domestic, municipal, and industrial water supply and more. This estimate is required by Water Code Section 35950 to determine the amount of money necessary to raise for the purpose for which bonds may be issued.
3. Statutory Law: Water Code Sections 35950 - 36064 (relating to all bonds) and Water Code Sections 36300 - 36393 (relating to revenue bonds specifically).

GO Bonds:

1. Discussion: GO bonds can be issued pursuant to the Water Code. They constitute a general obligation of the District. GO Bonds may not bear interest in excess of eight percent per annum. The maturity shall not be more than 40 years from the date of issuance. Under 36252, GO bonds may be issued for the purposes of acquiring or constructing works for irrigation, domestic, municipal and industrial water supply and to furnish facilities and services within or without the district to the extent provided for in Section 35500 for the collection, treatment and disposal of sewage, waste and storm water including the acquisition of necessary property for these works, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the district contained in contracts with other agencies, acquiring all or part of the operating funds for the district, the total amount of such funds so acquired not to exceed at any time an amount equal to the total operating costs of the district for a two-year period as estimated by its board, acquiring any property necessary for the purposes of the district, and otherwise carrying out the provisions of this division.
2. Procedural Requirements: If a general obligation bond issue is contemplated, there shall be included in the estimate required by Section 35950 every expense of the district that it is probable will be incurred and become payable before the expiration of one year from the completion of the irrigation works, including the interest on any bonds of the district due and payable prior to that date, for which the money of the district then in the treasury or thereafter to be received from an assessment previously levied is inadequate.
3. Statutory Law: Water Code Sections 35160 - 36215; 36251- 36262

Short Term Borrowings:

1. Discussion: A district may borrow money/incur indebtedness evidenced by warrants or negotiable notes by action of board without holding an election (except as provided in section 36402.1) for any purpose for which the district is authorized to expend funds, including provisions for payment of current expenses of the district and funding/refunding of outstanding warrants. Indebtedness must be evidenced by warrants or negotiable notes of district payable at

stated times fixed by the board and bearing interest at a rate not exceeding eight percent per annum, payable annually or semiannually. This debt must be paid back within five years (pursuant to section 36407.1)

36402.1 states that no warrants or negotiable notes issued pursuant to the code shall be valid unless their issuance is authorized by a majority of the voters voting at an election called by the board, except as provided in 36407.1 (warrants/negotiable notes payable in five years or less from date of issuance may be issued without approval of voters and shall constitute obligations of the district payable from annual max property tax rates contained in Rev and Taxation Code).

Warrants or negotiable notes payable at a future date or time may also be issued to obtain funds or property for any lawful purpose of the district; provided, the total amount of the warrants or negotiable notes payable in any one year shall not exceed one-fourth of one percent of the total valuation of the land in the district according to the last equalized assessment roll.

A district may additionally borrow money in anticipation of, but not in excess of the principal amount of, bonds authorized but not yet issued.

2. Procedural Requirements: Specified in sections 36403 - 35407 of the Water Code.
3. Statutory Law: Water Code Sections 36400 - 36509.

Lease and Installment Sale Financings:

1. Discussion: By statute, a district may acquire by purchase, condemnation, or other legal means all property or rights in property necessary or proper for the district works and to supply the land with sufficient water for all district purposes. A district may also lease, sell or contract for the sale of any property of the district whenever it may be necessary or for the best interests of the district.
2. Procedural Requirements: None specified.
3. Statutory Law: Water Code Sections 35600 - 35604.

SUMMARY OF COVENANTS GOVERNING FUTURE DEBT ISSUANCES:

2019 Refunding Bonds (2009 COP Refunding)

Prior Parity Obligations; Limitations on Additional Obligations and Superior Obligations

General. Under the Indenture, the District may issue “**Additional Obligations**” of the District payable from and secured by a pledge of and lien upon any of the Tax Revenues and/or the Net Revenues only in compliance with the conditions described below.

Superior Obligations. In order to further protect the availability of Tax Revenues and Net Revenues and the security for the Bonds and Parity Obligations, the District agrees in the Indenture that it will not, so long as any Bonds or Parity Obligations are outstanding, issue or incur any obligations payable from the Tax Revenues and/or Net Revenues which are superior to the Bonds or the Parity Obligations.

Prior Parity Obligations. Debt service on the Prior Parity Obligations is payable from Tax Revenues and Net Revenues on a parity with the payment of debt service on the Bonds and, with respect to Governmental Loan Pledged Revenues, the Prior Governmental Loans. See “INTRODUCTION – Prior Parity Obligations” and “– Prior Governmental Loans.”

Additional Obligations. The District covenants in the Indenture that, except for obligations

issued or incurred to refund the Bonds, or to otherwise prepay or refund Parity Obligations which are presently outstanding, the District will not issue or incur any Additional Obligations unless the following conditions are satisfied (except as set forth in “– Automatic Amendments”):

(1) The District is not in default under the terms of the Indenture or outstanding Parity Obligation Instruments;

(2) Either (i) the Net Revenues, as shown by the books and records of District for the latest Fiscal Year or for any 12 consecutive month period within the last complete 18-month period ended not more than one month before the issuance of or incurrence of such Additional Obligations, as set forth in a certificate of an Independent Consultant, together with the Tax Revenues, or (ii) the estimated Net Revenues for the first complete Fiscal Year when the improvements to the water, recycled water or wastewater system financed with the proceeds of the Additional Obligations will be in operation, as estimated by and set forth in a certificate of an Independent Consultant, together with the Tax Revenues, plus, at the option of District, any or all of the items set forth below, will have amounted to not less than 1.10 times Maximum Annual Debt Service (as defined below) in any Fiscal Year thereafter; provided, that in calculating Maximum Annual Debt Service, the District shall exclude (i) amounts on deposit in the Debt Service Fund under the Indenture and debt service funds created under Parity Debt Instruments for the Parity Obligations, and (ii) amounts on deposit in any debt service funds created under Governmental Loan Instruments for Governmental Loans; and

(3) A Parity Reserve is established for the proposed Additional Obligations which in the case of a cash reserve is equal to an amount calculated using the formula established for the Reserve Requirement, but with respect to the amount or debt service of the Additional Obligations, which shall be established as a reserve fund separate and apart from the Reserve Fund under the Trust Indenture and from Parity Reserves under any outstanding Parity Obligation Instruments. *This provision is deleted in the event of the circumstances set forth in “–Automatic Amendments.”*

For purposes of the calculations required in paragraph (2) above, Net Revenues may be adjusted to include: the estimated annual amount expected to be received from any increase in District rates or charges, calculated on the basis of any percentage or dollar increase authorized by the Board of Directors either during or subsequent to the reporting period, but in no event later than the date of the Parity Obligation Instrument authorizing the Additional Obligations for which the calculation is made; and

(1) to the extent not included in the previous paragraph, an amount equal to 75 percent of the anticipated Net Revenues expected to be derived from each addition, betterment, extension or improvement to the water, recycled water or wastewater system which may be acquired or constructed from proceeds of the Additional Obligations for which the calculation is made. Such estimates are required to be based upon rates and charges which are in effect on or prior to the date of the Parity Obligation Instrument authorizing the Additional Obligations for which the calculation is made.

The Indenture defines “**Maximum Annual Debt Service**” as follows: as of the date of calculation, the maximum amount of debt service on the Bonds, Governmental Loan Payments, and Parity Debt Service due in any Bond Year prior to the final maturity of the Bonds, and for purposes

of: (a) the issuance of Additional Obligations, includes the maximum amount of Debt Service due on any Additional Obligations subsequent to the issuance of such Additional Obligations; and (b) the issuance of Additional Governmental Loans, includes the maximum amount of Governmental Loan Payments due on any Additional Governmental Loans subsequent to the issuance of such Additional Governmental Loans.

Prior Governmental Loan; Limitations on Additional Government Loans

Existing Governmental Loan. The District has previously incurred the Prior Governmental Loan, which is secured by a pledge of the Governmental Loan Pledged Revenues. The Prior Governmental Loan is secured on a parity with the Parity Obligations with respect to Tax Revenues and those Net Revenues consisting of Governmental Loan Pledged Revenues.

Additional Governmental Loans. The District covenants in the Indenture that, except for obligations issued or incurred to prepay or refund Governmental Loans which are presently outstanding, the District will not issue or incur any Additional Governmental Loans unless, except as set forth in “– Automatic Amendments:”

(1) The District is not in default under the terms of the Indenture or outstanding Governmental Loan Instruments;

(2) Either: (a) the Governmental Loans Pledged Revenues, as shown by the books and records of the District for the latest Fiscal Year or for any 12 consecutive month period within the last complete 18-month period ended not more than one month before the issuance of or incurrence of such Additional Governmental Loan, as set forth in a certificate of an Independent Consultant; or (b) the estimated Governmental Loans Pledged Revenues for the first complete Fiscal Year when the improvements to the water, recycled water or wastewater system financed with the proceeds of the Additional Governmental Loan shall be in operation, as estimated by and set forth in a certificate of an Independent Consultant, plus, at the option of the District, any or all of the items set forth hereinafter in this covenant designated under “Adjustments to Governmental Loan Pledged Revenues” below, will have amounted to not less than 1.10 times Maximum Annual Debt Service in any Fiscal Year thereafter (for this purpose, Maximum Annual Debt Service may exclude (i) amounts on deposit in any debt service funds created under Governmental Loan Instruments for Governmental Loans and (ii) amounts on deposit in the Debt Service Fund under the Indenture and debt service funds created under Parity Debt Instruments for Parity Obligations); and

(3) A reserve is established for the proposed Additional Governmental Loan which in the case of a cash reserve is equal to an amount calculated using the formula established for the Reserve Requirement, but with respect to the amount or debt service of the Additional Governmental Loan, which shall be established as a reserve fund separate and apart from the Reserve Fund under the Trust Indenture and from reserves under any outstanding Governmental Loan Instruments. *This provision is deleted in the event of the circumstances set forth in “– Automatic Amendments.”*

Adjustments to Governmental Loan Pledged Revenues. For purposes of the calculations described in paragraph (2) under “Additional Governmental Loans” above, Governmental Loan Pledged Revenues may be adjusted to include:

(1) the estimated annual amount expected to be received from any increase in District rates or charges, calculated on the basis of any percentage or dollar increase authorized by the Board of Directors either during or subsequent to the reporting period, but in no event later than the date of the Governmental Loan Instrument authorizing the Additional Governmental Loan for which the calculation is made; and

(2) to the extent not included in the previous paragraph, an amount equal to 75 percent of the anticipated Governmental Loan Pledged Revenues expected to be derived from each addition, betterment, extension or improvement to the water, recycled water or wastewater system which may be acquired or constructed from proceeds of the Additional Governmental Loan for which the calculation is made. Such estimates are required to be based upon rates and charges which are in effect on or prior to the date of the Governmental Loan Instrument authorizing the Additional Governmental Loan for which the calculation is made.

Automatic Amendments

Under the Indenture, at such time as the Prior Governmental Loan and the CIEDB Agreements are no longer outstanding on their terms, then all amounts on deposit in the Reserve Fund will be transferred to the Debt Service Fund and the Reserve Fund will be closed, and the following provisions of the Indenture shall be automatically amended without any further consent or notice required except that the District shall provide notice to the Trustee that such amendments have taken effect:

(1) Automatic Amendments to the covenant allowing for the issuance of Parity Obligations.

(i) The requirement for a Parity Reserve described in “– Prior Parity Obligations; Limitations on Additional Obligations and Superior Obligations - Additional Obligations” above shall be eliminated and shall have no further force or effect.

(ii) All references to “Tax Revenues” described in “– Prior Parity Obligations; Limitations on Additional Obligations and Superior Obligations” above shall be deemed to have been deleted and shall have no further force or effect.

(2) Automatic Amendments to the covenant allowing for the issuance of Additional Governmental Loans. The requirement for a reserve set forth in “Prior Governmental Loans; Limitations on Additional Government Loans - Additional Governmental Loans” shall be eliminated.

(3) Automatic Amendments to Effect Release of Reserve Fund Amounts. All references to “Reserve Fund” and “Reserve Requirement” in the Indenture shall be deemed to have been deleted and shall have no further force or effect.

(4) Amendments to Defined Terms.

(i) The defined term “Tax Revenues” shall be deemed to have been deleted and shall have no further force or effect. *It is important to understand that the revenues currently defined as “Tax Revenues” will be added to a new clause (D) in the definition of “Non-Operating Revenues” described below; consequently, this amendment will have no substantive impact other than to cause Tax Revenues to become a component of Net Revenues and thereby cause the Bonds to be payable, in part, from Tax Revenues after deduction for Maintenance and Operation Expenses. See “SECURITY FOR THE BONDS – Payment of Debt Service.”*

(ii) The defined term “Non-Operating Revenues” shall be amended to mean (A) rents, insurance and condemnation proceeds, (B) amounts appropriated from the Rate Stabilization Fund, (C) the proceeds derived by the District directly or indirectly from the sale, lease or other disposition of any part of, or rights, in the District’s water, recycled water and wastewater systems, (D) the amount of property tax revenues (as defined in Section 95 of the Revenue and Taxation Code of the State of California) apportioned, allocated and paid by the Orange County Tax Collector to District pursuant to Section 75.70 and Chapter 6 (commencing with Section 95) of Part 0.5 of Division 1 of the Revenue and Taxation Code of the State of California, as amended from time to time) and (E) other moneys (other than Operating Revenues) received by the District in connection with the water, recycled water and wastewater systems.

(4) Deemed Deletion of Tax Revenues. The references to the term “Tax Revenues” that are in addition to those described in the preceding subsections above shall be deemed to have been deleted and shall have no further force or effect.

The final installment payments required to be made pursuant to the CIEDB Agreements are scheduled to occur on March 1, 2022. The Prior Governmental Loan has a final maturity of September 3, 2022. Accordingly, the District currently anticipates that the automatic amendments described above will occur upon the payment at final maturity on the Prior Governmental Loan on or about September 3, 2022.

2015 Refunding Bonds

SECTION 3.05. *Issuance of Parity Obligations.*

(a) No Superior Obligations. In order to further protect the availability of Tax Revenues and Net Revenues and the security for the Bonds and Parity Obligations, the District hereby agrees that the District shall not, so long as any Bonds or Parity Obligations are outstanding, issue or incur any obligations payable from the Tax Revenues and/or Net Revenues which are superior to the Bonds or Parity Obligations.

(b) Issuance of Parity Obligations. The District further covenants that, except for obligations issued or incurred to refund the Bonds, or to otherwise prepay or refund Parity Obligations which are presently outstanding, District shall not issue or incur any Additional Obligations unless, except as set forth in Section 3.07 below:

(i) The District is not in default under the terms of this Indenture or outstanding Parity Obligation Instruments;

(ii) Either (A) the Net Revenues, as shown by the books and records of the District for the latest Fiscal Year or for any 12 consecutive month period within the last complete 18-month period ended not more than one month before the issuance of or incurrence of such Additional Obligations, as set forth in a certificate of an Independent Consultant, together with the Tax Revenues, or (B) the estimated Net Revenues for the first complete Fiscal Year when the improvements to the water, recycled water or sewer system financed with the proceeds of the Additional Obligations shall be in operation, as estimated by and set forth in a certificate of an Independent Consultant, together with the Tax Revenues, plus, at the option of the District, any or all of the items set forth hereinafter in this covenant designated under subsection (c) below, shall have amounted to not less than 1.10 times Maximum Annual Debt Service in any Fiscal Year thereafter; and

(iii) A Parity Reserve is established for the proposed Additional Obligations which in the case of a cash reserve is equal to an amount calculated using the formula established for the Reserve Requirement, but with respect to the amount or debt service of the Additional Obligations, which shall be established as a reserve fund separate and apart from the Reserve Fund under the Trust Indenture and from Parity Reserves under any outstanding Parity Obligation Instruments. *This provision is deleted in the circumstances set forth in Section 3.07.*

(c) Adjustments to Net Revenues. For purposes of the calculations required in (b)(ii) above, Net Revenues may be adjusted to include:

(i) the estimated annual amount expected to be received from any increase in District rates or charges, calculated on the basis of any percentage or dollar increase authorized by the Board of Directors either during or subsequent to the reporting period, but in no event later than the date of the Parity Obligation Instrument authorizing the Additional Obligations for which the calculation is made; and

(ii) to the extent not included in (c)(i), an amount equal to 75 percent of the anticipated Net Revenues expected to be derived from each addition, betterment, extension or improvement to the water, recycled water or sewer system which may be acquired or constructed from proceeds of the Additional Obligations for which the calculation is made. Such estimates are required to be based upon rates and charges which are in effect on or prior to the date of the Parity Obligation Instrument authorizing the Additional Obligations for which the calculation is made.

(d) Credit For Certain Funds. For purposes of the calculations required in (b)(ii) above, Maximum Annual Debt Service shall exclude: (i) amounts on deposit in the Debt Service Fund under this Indenture and debt service funds created under Parity Debt Instruments for Parity Obligations; and (ii) amounts on deposit in any debt service funds created under Governmental Loan Instruments for Governmental Loans.

(e) Amendment by Section 3.07. Section 3.05 shall be amended in the manner and in the circumstances set forth in Section 3.07.

SECTION 3.06. *Government Loans; Limitations on Additional Governmental Loans.*

(a) Existing Governmental Loans. The District has previously incurred the Governmental Loans listed in clauses (i) and (ii) of the definition of the term “Governmental Loans”, which are secured by a pledge of the Governmental Loan Pledged Revenues. The Governmental Loans are on a parity with the Parity Obligations with respect to Tax Revenues and those Net Revenues consisting of Governmental Loan Pledged Revenues.

(b) Additional Governmental Loans. The District covenants that, except for obligations issued or incurred to prepay or refund Governmental Loans which are presently outstanding, the District shall not issue or incur any Additional Governmental Loans unless, except as set forth in Section 3.07 below:

(i) The District is not in default under the terms of this Indenture or outstanding Governmental Loan Instruments;

(ii) Either (A) the Governmental Loans Pledged Revenues, as shown by the books and records of District for the latest Fiscal Year or for any 12 consecutive month period within the last complete 18-month period ended not more than one month before the issuance of or incurrence of such Additional Governmental Loan, as set forth in a certificate of an Independent Consultant, or (B) the estimated Governmental Loans Pledged Revenues for the first complete Fiscal Year when the improvements to the water, recycled water or sewer system financed with the proceeds of the Additional Governmental Loan shall be in operation, as estimated by and set forth in a certificate of an Independent Consultant, plus, at the option of the District, any or all of the items set forth hereinafter in this covenant designated under subsection (c) below, shall have amounted to not less than 1.10 times Maximum Annual Debt Service in any Fiscal Year thereafter; and

(iii) A reserve is established for the proposed Additional Governmental Loan which in the case of a cash reserve is equal to an amount calculated using the formula established for the Reserve Requirement, but with respect to the amount or debt service of the Additional Governmental Loan, which shall be established as a reserve fund separate and apart from the Reserve Fund under the Trust Indenture and from reserves under any outstanding Governmental Loan Instruments. *This provision is deleted in the circumstances set forth in Section 3.07.*

(c) Adjustments to Governmental Loan Pledged Revenues. For purposes of the calculations required in (b)(ii) above, Governmental Loan Pledged Revenues may be adjusted to include:

(i) the estimated annual amount expected to be received from any increase in District rates or charges, calculated on the basis of any percentage or dollar increase authorized by the Board of Directors either during or subsequent to the reporting period, but in no event later than the date of the Governmental Loan Instrument authorizing the Additional Governmental Loan for which the calculation is made; and

(ii) to the extent not included in (c)(i), an amount equal to 75 percent of the anticipated Governmental Loan Pledged Revenues expected to be derived from each addition, betterment, extension or improvement to the water, recycled water or sewer system which may be acquired or constructed from proceeds of the Additional Governmental Loan for which the calculation is made. Such estimates are required to be based upon rates and charges which are in effect on or prior to the date of the Governmental Loan Instrument authorizing the Additional Governmental Loan for which the calculation is made.

(d) Credit For Certain Funds. For purposes of the calculations required in (b)(ii) above, Maximum Annual Debt Service shall exclude: (i) amounts on deposit in any debt service funds created under Governmental Loan Instruments for Governmental Loans; and (ii) amounts on deposit in the Installment

Payment Fund under the Trust Indenture and debt service funds created under Parity Debt Instruments for Parity Obligations.

SECTION 3.07. *Automatic Amendments* . At such time as the Governmental Loans listed in clauses (i) and (ii) of the definition of the term “Governmental Loans” and the Parity Obligations listed in clauses (i), (ii) and (iv) of the definition of the term “Parity Obligations” are no longer outstanding on their terms, then the following provisions of this Indenture shall be automatically amended without any further consent or notice required except that the District shall provide notice to the Trustee that such amendments have taken effect:

(a) Automatic Amendments to Section 3.05.

(i) The requirement for a Parity Reserve set forth in Section 3.05(b)(iii) shall be eliminated and shall have no further force or effect.

(ii) All references to “Tax Revenues” in Section 3.05 shall be deemed to have been deleted and shall have no further force or effect.

(b) Automatic Amendments to Section 3.06. The requirement for a reserve set forth in Section 3.06(b)(iii) shall be eliminated.

(c) Amendments to Defined Terms. Appendix A shall be amended as follows:

(i) The defined term “Tax Revenues” shall be deemed to have been deleted and shall have no further force or effect.

(ii) The defined term “Non-Operating Revenues” shall be amended to mean (A) rents, insurance and condemnation proceeds, (B) amounts appropriated from the Rate Stabilization Fund, (C) the Refundable Credits, (D) the proceeds derived by the District directly or indirectly from the sale, lease or other disposition of any part of, or rights, in the District’s water, recycled water and sewer systems, (E) the amount of property tax revenues (as defined in Section 95 of the Revenue and Taxation Code of the State of California) apportioned, allocated and paid by the Orange County Tax Collector to District pursuant to Section 75.70 and Chapter 6 (commencing with Section 95) of Part 0.5 of Division 1 of the Revenue and Taxation Code of the State of California, as amended from time to time) and (F) other moneys (other than Operating Revenues) received by the District in connection with the water, recycled water and sewer systems.

(b) Deemed Deletion of Tax Revenues. The references in this Indenture to the term “Tax Revenues” that are in addition to those described in the preceding subsections of this Section 3.07 shall be deemed to have been deleted and shall have no further force or effect.

District Initiatives for FY 2019-20

The Board of Directors, with the support of District staff, establish overall District initiatives and policies while identifying resource needs to meet objectives to better serve ratepayers. The identified objectives 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 2019-20 budget, the following were identified as key initiatives 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- Create a dynamic work environment to maximize productivity, efficiency and savings while providing added value to the stakeholders served by the District.

Outreach/ Customer Communication- Promote the District's programs and services to our customers and general public in a positive, purposeful, and cost-effective manner, while also soliciting customer and community feedback.

Demand Management- Develop new and improve existing strategies to cost effectively reduce the District's water demands. Continue the District's leadership role in implementing the Governor's Water Action Plan to make "conservation a way of life" through engagement with our customers.

Data Analytics & Information Management- Implement consistent data standards and innovative technology to improve efficiencies and accessibility for the benefit of our employees, our customers, our industry, and the greater public.

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 programs and projects to implement Board policy on water reliability and develop water resource programs to meet projected future demands to sustain the economic health of the region.

Wastewater Treatment- Provide high quality and cost-effective wastewater treatment services to ensure environmental compliance and maximize wastewater resources for beneficial reuse opportunities.

Government Affairs- Expand the District's engagement and influence on local, county, state and federal issues associated with water, wastewater, and recycled water. Engage with relevant

stakeholders, including elected officials and agency staff, to advance District priorities and projects.

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

Our efforts to ensure a strong and resilient financial position continue to prove very effective. The Long-Range Financial Plan, our rate structure, and a comprehensive review/update of financial policies have positioned the District to continue to be a leader in the industry and state. Our proactive planning efforts, which were built around utilizing staff with sophisticated financial analysis/rate design/forecasting capabilities, have paid dividends and continue to be essential for maintaining the strong financial health of the organization. As the District is expected to continue to invest more resources into its infrastructure, and the State begins to implement the long-term efficiency framework, it is imperative that we use our internally developed tools to evaluate and assess the short-term and long-term financial condition of the District. We will continue to be nimble, able, innovative and conservative in our financial management and plan aggressively to ensure limited financial impact to our customers.

Completed:

- a. Updated Long-Range Financial Plan and 10-year cash flow model
- b. Achieved a successful audit
 - i. Clean audit – No findings on the CAFR or PFC
 - ii. Prepared CAFR, State Controller’s Report, and PFC Statements with internal resources
 - iii. Audit ad-hoc engaged
- c. Evaluated rate increase projections; implemented rate recommendations
- d. Conducted short-term cash forecasting
- e. Coordinated restructuring of investment portfolio with advisors as District continues cash spenddown plan
- f. Invested bond reserves to minimize negative arbitrage on restricted funds

- g. Updated monthly financial statements based on Board feedback
- h. Performed annual review of investment policy, reserve policy, debt management policy, capitalization & surplus policy and purchasing policy
- i. Implemented new payment processing for customers integrated into the customer portal
- j. Implemented GASB 75
- k. Refunded 2009 COPs for over \$14M in cashflow savings
- l. District upgraded by S&P to 'AAA' and reaffirmed 'AAA' by Fitch
- m. Completed JDE ERP and Utility Billing System upgrade
- n. Submitted the FY 18-19 Adopted Budget to the Government Finance Officers Association for consideration of the Distinguished Budget Award

Planned:

- a. Issue new money bond in late-2019 based on Long Range Financial Plan
- b. Review and update financial policies as part of the annual review
- c. Achieve the Distinguished Budget Award from the Government Finance Officers Association
- d. Select additional agreed upon procedures as part of the FY 18/19 audit
- e. Develop streamlined invoicing and cost tracking for Plant 3A
- f. Issue late bill payment collections RFP and select vendor
- g. Update customer service policies consistent with SB 998 on late payments and customer shut-off noticing
- h. Provide Bond Closing Report for any new issuance or refinancing

Labor Relations

Labor relations will always be the most critical component to determining the success of any organization, and our experience confirms this. The District continues to focus on maintaining excellent labor relations. Our current four-year MOU was developed in one day, which speaks to the trust and relationship established between the employees and the District. Having dedicated HR staff has been invaluable in building the trust through care, credibility, and performance. Recruitment and retention are a major concern as many agencies are interested in taking our highly skilled employees and are increasing compensation and benefits to attract talent.

Completed:

- a. Continued to maintain a close working relationship with employees and OCEA
- b. Implemented the second-year provisions of the four-year MOU which continues to balance the importance of retaining and attracting outstanding employees while having conservative management of our ratepayers' funds. This MOU maintained the 50/50 cost share for health insurance premium increases and eliminated retiree health benefits for new employees hired during the term of the MOU. It also added an annual wellness reimbursement benefit to encourage employees to live healthy lifestyles
- c. Filled 144 of 152 budgeted full-time positions (95 percent staffed). Recruitment is in process to fill seven of the current eight vacancies. We expect to be 100 percent staffed by June 2019

- d. Continued succession planning by internally filling eight leadership positions left vacant by retirement, monitoring consistent mentorship between retiring supervisors and current crew leads
- e. Negotiated with Anthem Blue Cross to minimize rate increases in health insurance, which saves money for the District and our employees who share rate increases with the District on a 50/50 basis
- f. Complied with the Affordable Care Act by completing 2018 1094-C & 1095-C reporting
- g. Reported Government Compensation in California data to the State Controller
- h. Implemented new procedures to comply with adopted legislation relative to sexual harassment training, lactation accommodations, employee organization membership, dues and new employee orientations
- i. Created the first H.E.R.O. Academy to train on the importance of the District's core values for staff: Honesty, Effort, Respect, One Team. Four modules were taught by internal staff using skits and activities which included: Honesty-Owning Your Mistakes; Effort-Interview for your Next Job Each Day you Come to Work; Respect-Fake it Until you Make it; and, One Team-Help is Only a Phone Call Away
- j. Update Government Emergency Telecommunications Service (GETS) program data and provide GETS and Wireless Priority Service (WPS) training for all staff
- k. Presented learning modules to staff (i.e., health insurance renewal, CalPERS basics)
- l. Create job descriptions for Wastewater Treatment Plant Operator job family, conduct salary survey to develop compensation structure and recruit for vacant positions
- m. Applied for the Top Workplace in Orange County designation and won first place in the category for our size of employer

Planned:

- a. Review and update the District's Drug & Alcohol Policy
- b. Review Deferred Compensation plans to include evaluation of plan documents, fees and service levels
- c. Monitor labor relations legislation and take appropriate action
- d. Develop learning modules for all staff
- e. Develop FLOW (Future Leaders of Water) program, an initiative to inspire a new generation of water champions

Operations Center

After extensive work to identify the appropriate site for the new Operations Center, we continue to move forward with our plans to construct improvements at the District-owned 2A site. Working with the board appointed ad-hoc, we are making progress and look to break ground this year. We continue to meet frequently with the City of Laguna Hills and the surrounding residents to ensure communication and coordination. This year, we anticipate obtaining final grading and building permits, award of construction contracts, and beginning construction.

Completed:

- a. Continued communication with surrounding residents, including regular meetings to provide project updates
- b. Continued communication with all customers
- c. Continued coordination with the City of Laguna Hills
- d. Worked closely with the architect to substantially complete the design

- e. Continued to maximize existing spaces to provide work stations for existing and new staff
- f. Obtained approval from the City of Laguna Hills for Conditional Use Permit, Site Development Permit, Variance, and Zone Text Amendment
- g. Adopted CEQA IS/MND document
- h. Completed pre-qualification of general contractors
- i. Contracted with design-build contractors for specialty designs
- j. Initiated search for temporary office space to support required project phasing
- k. Awarded construction contract for traffic signal at Gordon Road and Moulton Parkway
- l. Issued Request for Proposal for Construction Manager at Risk (CMAR) Services

Planned:

- a. Finalize construction documents
- b. Complete plan check process with the City of Laguna Hills and obtain grading and building permits.
- c. Move into temporary office space and communicate with customers to ensure business continuity
- d. Complete pre-construction services with CMAR Contractor
- e. Establish Guaranteed Maximum Construction Contract and Guaranteed Completion Date with CMAR for Board consideration
- f. Continue communications and meetings with surrounding residents, as well as customers, to provide project updates

Outreach/Customer Communication

The District has developed a comprehensive outreach program and has integrated public communications, media relations, and community outreach. In addition, we continue to develop focused customer marketing and education programs to reinforce our policies and programs. We've seen the value of outreach and community programs as we have a record number of interactions with the public, new local and regional partners, and have received unprecedented positive media coverage. Based on the feedback from our customers and member cities, they appreciate the increased communication and our participation at community events. As the District's level of community engagement increases, we will need to evaluate resources to continue supporting the day-to-day District projects and to ensure we maintain high levels of engagement and service to our customers and community stakeholders.

Completed:

- a. Significantly increased media coverage of the District in local, regional and industry publications
- b. Enhanced stakeholder partnerships with our member cities, county, chambers and civic groups, school districts, etc.
- c. Implemented a multi-faceted campaign to communicate new online billing system for customers, resulting in over 24,000 customers enrolled in our online customer portal
- d. Developed and implemented an updated communications plan that incorporates the TAP Initiative objectives
- e. Applied data-driven tools and analysis to enhance web, digital and social media marketing strategies

- f. Hosted two regional HOA-focused events targeting HOA Board Members, Property Managers and Landscapers
- g. Expanded Speakers Bureau Program outreach to increase community and civic engagement
- h. Broadened Board participation and involvement in the community
- i. Supported the development of and submitted award applications resulting in awards and recognition such as the Governor's Environmental and Economic Leadership Award (GEELA) and getting recognized from the Orange County Business Council for the District's successful turf replacement program.
- j. Launched a customer appreciation campaign for the District's 50 years of water recycling milestone.
- k. Hosted a record number of community events, civic engagements, and facility tours
- l. Hosted the inaugural water reliability forum highlighting the significance of regional and local reliability

Planned:

- a. Plan and implement water forums to educate community leaders on local and regional water issues
- b. Design and develop customer welcome packets encompassing informational materials to send to new Moulton Niguel customers
- c. Facilitate a social media training for the Board and prepare a social media policy for Board consideration
- d. Conduct an updated customer survey to inform the District's customer communication and outreach strategies
- e. Generate Member City information service fact sheets, including successes within each City
- f. Develop a year-in-review promotional campaign to highlight District achievements
- g. Evaluate and consider restructuring the Citizens' Advisory Committee to continue its purpose, but also use it more as a focus group
- h. Begin process to redesign bill to improve information provided to customers on their water usage and efficiency
 - i. Look at the use and format of the bill message box
 - ii. Review options for defining costs presentation on the bill
- i. Promote and help implement FLOW (Future Leaders of Water), an initiative to inspire a new generation of water champions
- j. Expand portfolio of communication channels including social media, online advertising campaigns and videos to reach our customers and stakeholders in a cost-effective manner
- k. Review partnering options with High School Model United Nations Programs
- l. Develop informational materials to provide to existing customers at various engagement points

Demand Management

The drought crisis presented a unique opportunity for the District in demonstrating our innovative and resourceful approach to managing water demands. We have close engagement with the State and work closely with agencies throughout the State to drive decisions and policies that will have immediate and long-term effects on the District's customers. 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. It is paramount to continue developing strategies and tools to further achieve efficiency and conservation while ensuring reliable service and the economic health of our communities.

Completed:

- a. Implemented updates to the rate structure
- b. Established partnerships with regional agencies and academic institutions
- c. Evaluated/revised WUE programs based on the finalized UC Riverside research study
 - i. Direct Install Smart Timer Program Adopted with MNWD as lead administrator w/ SMWD & IRWD participating
 - ii. NatureScape direct install turf removal and California native plant program implemented
- d. Conducted in depth analysis of higher tier usage to target inefficient use
 - iii. Monthly targeted marketing
- e. Pilot recycled water and potable irrigation AMI project startup, including a customer portal
- f. Developed and implemented Water Loss Audit Program
 - iv. Annual Update of Water Loss Control Program Potable Water System Audit
 - v. 2018 Update of Component Water Losses
 - vi. Water Loss Control Program Pilot
 1. Two phases of discrete metered area pilots completed evaluating water loss using AMR/AMI data
- g. Piloted and implemented a commercial auditing and water efficiency program to help businesses and institutions
- h. Expanded water education program (Project WET) to teachers at local schools
- i. Awarded 2nd Bureau of Reclamation award for Phase 2 expansion of AMI
- j. Conducted two H2O for HOA workshops and a focused HOA working meeting to inform the development of new HOA programs
- k. Hosted two 10-week bilingual training programs for professional landscapers
- l. Retrofitted Mission Viejo High School water devices with high efficiency devices
- m. Tracked legislation on “Making Conservation a California Way of Life” and provided regular updates to the Board on significant changes
- n. Utilized AMI smart meter data and the Recycled Water Masterplan to target customers to shift their peak recycled water usage
- o. Identified opportunities for energy and water integrated efficiency from the awarded California Energy Commission grant in coordination with UC Davis
 - vii. San Diego Gas and Electric Low-Income water efficient device direct install program developed
 - viii. San Diego Gas and Electric commercial kitchens direct install program developed
- p. Expanded watershed education to local schools through integrated field trips and classroom instruction
- q. Updated Quarterly Board report on water efficiency and water resources to include program activity and upcoming key initiatives

Planned:

- a. Implement an acoustic leak detection program to reduce real system water losses
 - i. Review options for internal and contract services
 - ii. Develop procedures for the leak detection program
- b. Initiate evaluation of potable water system pressure to identify opportunities to reduce real system water losses, and update the water loss graphics
- c. Pursue additional state/federal funding opportunities for demand management and recycled water program expansion
- d. Engage with the Board on positions (support or opposition) regarding any statewide water loss policy issues
- e. Develop a Drought Action Plan as a component of an Integrated Resources Plan
- f. Adopt updated Water Shortage Contingency Plan ordinance consistent with 2017 Prop 218 Notice and updates to California Water Code
- g. Continue expanding AMI in Phase 2 to all commercial and multi-family customers (about 4,000 more AMI meters in addition to the current 4,500)
- h. Evaluate expedited AMI to all customers utilizing outside consultant support, and present an implementation plan to the Board
- i. Incorporate internal recycled water system water loss audit to evaluate benefits of full distribution system AMI
- j. Develop regular metrics and analysis based on the UC Riverside study to track new water efficiency programs' effectiveness
- k. Further develop water efficiency programs and marketing in support of Homeowner's Association water use efficiency
- r. Host California Native plant tour in coordination with the California Native Plant Society annual tour in South Orange County

Data Analytics & Information Management

It has long been recognized by agencies and State officials that the water industry is deficient when it comes to data. While individual and state agencies all collect some level of data, there is a lack of consistency in what and how data is collected, analyzed and used. Because of this, 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 increase along with associated public scrutiny, how agencies manage their documents/data are coming into question as we are experiencing a higher number of public records act requests. The District continues to participate in the statewide data collaborative to help inform decision makers on water data issues. The project has received much support and interest from water agencies like ACWA and the SWRCB.

Completed:

- a. Developed Internal framework & process plan for organization of documents and data
- b. Expanded Statewide Data Collaborative
 - i. Supported and coordinated two State Water Data Summits at Stanford University and one at Metropolitan Water District attended by industry leaders, private sector technology companies, academics and non-governmental organizations
 - ii. Recognized at the joint White House Council of Environmental Quality and State Water Resources Control Board Data Challenge as best urban submission
- c. Implemented Records Retention Policy/Plan

- d. Won Amazon Web Services City on a Cloud Award for best practices in managing Advanced Meter Infrastructure data on the cloud
- e. Completed upgrade of SCADA communications network

Planned:

- a. Participate in AB 1755 Open and Transparent Water Data Act Advisory Group
- b. Streamline and integrate rebate and marketing data
- c. Develop standard key performance indicators for marketing and water efficiency data
- d. Pursue innovative and technological solutions that help increase efficiencies, automate activities, inform decision-makers, and improve the delivery of water and wastewater services.
- e. Continue to build partnerships towards the District's leading role in big data and innovation in the water industry
- f. Evaluate and implement customer service technologies including call routing, data tracking and tools to build on our great customer service
- g. Evaluate and recommend new agenda management system, engage the Board of Directors at the beginning of this evaluation process
- h. Ongoing implementation of records retention policy

Asset Management

A comprehensive asset management strategy is critical for accurate capital improvement program planning and budgeting as well as ensuring an effective replacement/refurbishment program. Moulton Niguel developed an Asset Management Framework Plan to assist the District in implementing a comprehensive asset management program. The Plan identified many key areas necessary for a successful program, such as GIS development and integration, asset data collection and hierarchy, a robust Computerized Maintenance Management Program, data development and analytics, condition and criticality assessment programs, and key rehabilitation and replacement capital investments. The District has taken significant strides towards developing and/or implementing many of the identified programs and will continue to refine and implement programs to maximize the useful life of the District's infrastructure while maintaining a high level of service.

Completed:

- a. Asset Management Framework Plan
- b. Fleet Management Functional Needs Assessment
- c. Substantial completion of required GIS horizontal asset attribute data
- d. District-wide GIS Viewer/Mobile implementation and training
- e. GIS integration of various workflows such as: manhole condition assessments, collection system CCTV inspections, valve exercising, and water leakage
- f. Development of various programs such as: Valve Replacement and Maintenance, Reservoir Management Systems, Electrical Systems, Manhole, and Pipeline/Station Rehabilitation and Replacements
- g. Condition Assessment of the Central Intertie Pipeline
- h. Completed CCTV of Oso-Trabuco Sewer
- i. Completed Utilis satellite leak detection pilot study
- j. Refined prioritization plans for the replacement of pipelines and facilities
- k. Completed vertical asset attribute data pilot project
- l. Selected a new Computerized Maintenance Management System

Planned:

- a. Advance GIS attribute population and related workflows
- b. Refine and advance recently developed programs (e.g. Valve Replacement and Maintenance, Reservoir Management Systems, Electrical Systems, Manhole, and Pipeline/Station Rehabilitation and Replacements)
- c. Complete implementation of all recommendations from the District-wide Electrical System Assessment
- d. Complete assessments of Crown Valley and Southwestern Transmission Mains
- e. Continue execution of the Regional Lift Station Force Main Replacement Project
- f. Initiate execution of the Lower and Upper Salada Lift Station Force Main Replacement Projects
- g. Substantial implementation of Computerized Maintenance Management System
- h. Review the finished product of the wireless network for security and aesthetics
- i. Evaluate the potential for adding video security at District infrastructure sites

Water Reliability

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 changed assumptions on water demands and changes to the status of some of the local supply projects. Staff has evaluated opportunities to expand recycled water, review needs and opportunities for additional seasonal storage and initiated a review of water banking program opportunities. These efforts are consistent with the early action items identified in the Long-Range Water Reliability Plan. As further regulations are developed by the State, staff will monitor the potential for indirect and direct potable reuse. Other local efforts such as ocean desalination, storm water capture, and expanding local emergency transfers are also being closely monitored to determine the District's involvement.

Completed:

- a. Participated in the 2018 MWD OC Orange County Reliability Study Update
- b. Increased days of system reliability to 24 from 1.5 over past 10 years through \$70M infrastructure investment and comprehensive demand management strategies including rate structure refinement and water efficiency programs
- c. Completed the Recycled Water Master Plan
- d. Substantially completed the Recycled Water Optimization Study
- e. Substantially completed study of local wells for recycled water makeup use
- f. Added 32 new recycled water service connections over the last 2 years
- g. Piloted new partnership and engaged in an MOU with local cities, County of Orange and local non-governmental organizations to reduce urban runoff through data sharing and collaboration
 - ix. Developed "Smart Watershed Project" to work through our MOU with cities, the County of Orange and neighboring agencies to minimize stormwater runoff towards aiding our mutual ratepayers by evaluating potential use of stranded wastewater assets and demand management strategies through data driven approaches.
- h. Initiated study of potential conversion of Sulfur Creek for seasonal recycled water storage and evaluation of potential IPR/ DPR project

- i. Initiated historic partnership with OCWD to study potential exchange program costs and infrastructure to meet District water reliability objectives
- j. Support of San Juan Basin Authority actions

Planned:

- a. Update 2008 Board Policy on Water Reliability Initiatives to include both system reliability in the event of an emergency and Board policy for drought supply reliability
- b. Update Long Range Water Reliability Plan as a component of an Integrated Resources Plan
- c. Evaluate potential pilot program to provide water storage with the Orange County Water District
- d. Complete the Recycled Water Optimization Study and commence implementation
- e. Complete a new MWD Local Resources Program application for expansion of the recycled water system
- f. Complete study of potential conversion of Sulfur Creek for seasonal recycled water storage and continue engagement with regulatory agencies to support a pathway to direct potable reuse for the District's remaining wastewater
- g. Implement the "Smart Watershed Project" through our MOU with cities, the County of Orange and neighboring agencies to minimize urban runoff and storm flows utilizing data-driven approaches to evaluate mutually beneficial demand management strategies and potential use of wastewater assets
- h. Finalize the Aliso Creek well evaluation
- i. Continue to monitor and review local water supply options, i.e. ocean desalination and storm water capture
 - i. Develop message points for the challenges associated with storm water capture

Wastewater Treatment

Over the years, the District has relied on other organizations for the administration and management of wastewater treatment. Given the significant annual financial contribution for the wastewater treatment needs of our ratepayers, the District has increased its resources to provide greater focus on wastewater operations, capital planning, and financial management. Focusing on the District's wastewater treatment needs to meet the demands of our ratepayers in a reliable and cost-efficient manner remains a critical focal point for the upcoming year. Assuming wastewater operation of Plant 3A, establishing long-term capital planning requirements, and engaging in the review and potential update of governing agreements are major objectives that will allow the District to continue carrying out the defined management strategy.

Completed:

- a. Plant 3A – recruited and filled an operations and engineering team for Plant 3A
- b. Plant 3A – engaged engineering consultants to support the review and initial development of a capital program
- c. Completed wastewater treatment capacity requirements update
- d. SOCWA – ongoing review and engagement of issues at SOCWA, including financial reporting and long-term planning
- e. Supported ongoing litigation regarding Coastal Treatment Plant
- f. Initiated an inflow and infiltration review of the collection system
- g. Completed video inspection of the Oso-Trabuco Trunk Sewer

Planned:

- a. Assume responsibility for the operation and maintenance of Plant 3A
 - i. Complete SCADA Integration
 - ii. Initiate necessary operational contracts
 - iii. Finalize invoice and cost tracking
 - iv. Initiate laboratory services contract and develop operational reports
 - v. Finalize regulatory/permit reassignment to MNWD
- b. Continue development of long-term capital plan for Plant 3A, including potential expansion of Plant 3A Advance Water Treatment facility
- c. Camino Capistrano Lift Station Preliminary Design Report
- d. Review of SOCWA Joint Powers Agreement and Project Committee Agreements
- e. Resolve Coastal Treatment Plant litigation
- f. SOCWA – on-going review and engagement
- g. Review of SOCWA’s Draft Ten Year Plan for the Regional Treatment Plant
- h. Regional Lift Station redundancy improvements
- i. Continue evaluation of Inflow and Infiltration (I&I) into the wastewater collection system
- j. Update Sewer System Management Plan (SSMP)
- k. Review the certification requirements and opportunities for staff

Government Affairs

The Board has identified the need to be informed and engaged in local, regional, state, and federal issues that impact our communities and the District’s services. The District has recognized tremendous value in pursuing interagency partnerships and grant funding opportunities. In order to identify and pursue these opportunities, the District has expanded its representation by both staff and government affairs consultants. District representatives meet with policymakers and agency staff on a regular basis to establish and strengthen relationships, as well as discuss water and other issues of mutual interest. Staff will continue to evaluate opportunities to influence policy and funding at every level.

Completed:

- a. Engaged in familiarization visits with members of the California Legislature and Congress and their legislative staff
- b. Continued Grants Program, supported by staff and consultants, and have received a couple of grants (e.g., AMI funding, Smart Watershed Network) already
- c. Continued engagement at local civic groups and made presentations to several city council meetings, chambers of commerce events
- d. Continued industry leadership as members of the Board of Directors for ACWA, WaterReuse, and the Southern California Water Coalition
- e. Responded to informational requests from OC LAFCO and City of San Juan Capistrano regarding their City of San Juan Capistrano’s Focused Municipal Services Review
- f. Continued work with SOCWMA and the Integrated Regional Watershed Management Plan to identify partnerships and joint funding opportunities
- g. Renewed and/or secured membership in chambers of commerce in all of our member cities, and increased our participation

Planned:

- a. Regularly involve local, state, federal and other policy makers and their staff in District events and activities
- b. Arrange meetings with state and federal legislators and/or their staff to develop and maintain positive working relationships with them, and establish introductory meetings to build relationships with new elected officials
- c. Continue to work with Board to evaluate matters related to the potential transfer of the City of San Juan Capistrano's water and wastewater utility
- d. Continue to work with Board and Orange County Water District on implementing a water storage pilot program
- e. Monitor, and engage, as needed in state and federal legislative discussions related to key issues that may directly impact the District (e.g., water tax proposals, WaterFix, water grant programs)
- f. Evaluate and advise the Board on opportunities to seek funding from regional, state, and federal agencies
- g. Develop and launch Member City Quarterly Leadership Luncheon program
- h. Coordinate for Board of Directors to receive direct mailing from local chambers of commerce and civic organizations
- i. Set-up regular meetings with the Board/Council officers and staff from surrounding agencies
- j. Develop a list of organizations for the Board to engage as desired



Capital Improvement Program Budget for Fiscal Year 2019-20

June 2019

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Overview

The Moulton Niguel Water District (District) Capital Improvement Program (CIP) outlines the projected 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 projection of capital needs based on all identified projects. Many of the identified projects are ultimately refined in scope or deferred following additional investigations or condition assessments. 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, refurbishment, or potentially a condition assessment. 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 will be funded from five sources: General (G) Fund 1, 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 (R&R) are identified through a continuous process of inspections and assessments. In addition, staff develops and refines annual R&R programs such as reservoir recoating, valve replacement, pump and lift station rehabilitation, pipeline rehabilitation and replacement, manhole rehabilitation, meter replacement, service line replacement, and fire hydrant replacement. Through various planning processes staff also identifies 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 projected CIP projects. 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 multi-system projects that are required to maintain and operate the District's infrastructure. Appendix CIP - 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 projected CIP projects totaling \$533M for FY 2019-20 through FY 2028-29. About 26 percent (\$141M) of these projected CIP projects are associated with the District's participation in regional activities such as Joint Power Authorities (JPAs). Figure CIP - 1 shows the breakdown of costs for the 10-year CIP between the various systems:

- Multi-System – 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
- Potable – projects associated with rehabilitation, replacement, and improvement of the potable water system
- Recycled – projects associated with rehabilitation, replacement, and improvement of the recycled water system
- Wastewater – projects associated with rehabilitation, replacement, and improvement of the wastewater collection system and wastewater treatment plants including Plant 3A and facilities operated by South Orange County Wastewater Authority (SOCWA).
- Regional – projects in which there is more than one agency participating, such as: Joint Regional Water Supply System (JRWSS), Upper Oso Reservoir, and Upper Chiquita Reservoir.

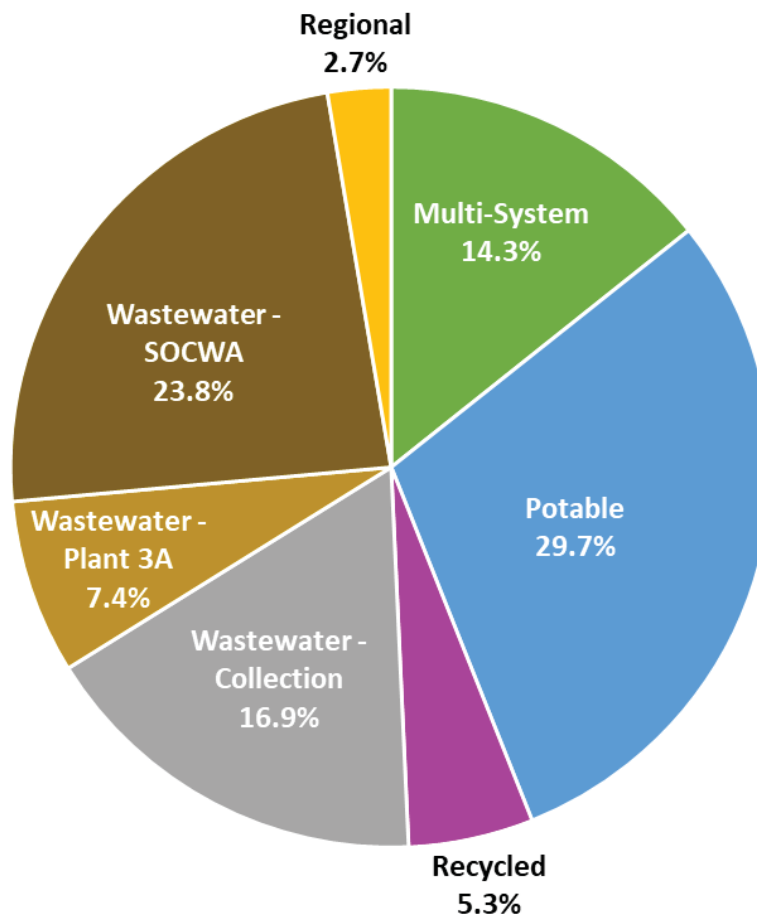


Figure CIP - 1: Distribution of the 10-Year Capital Improvement Program

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

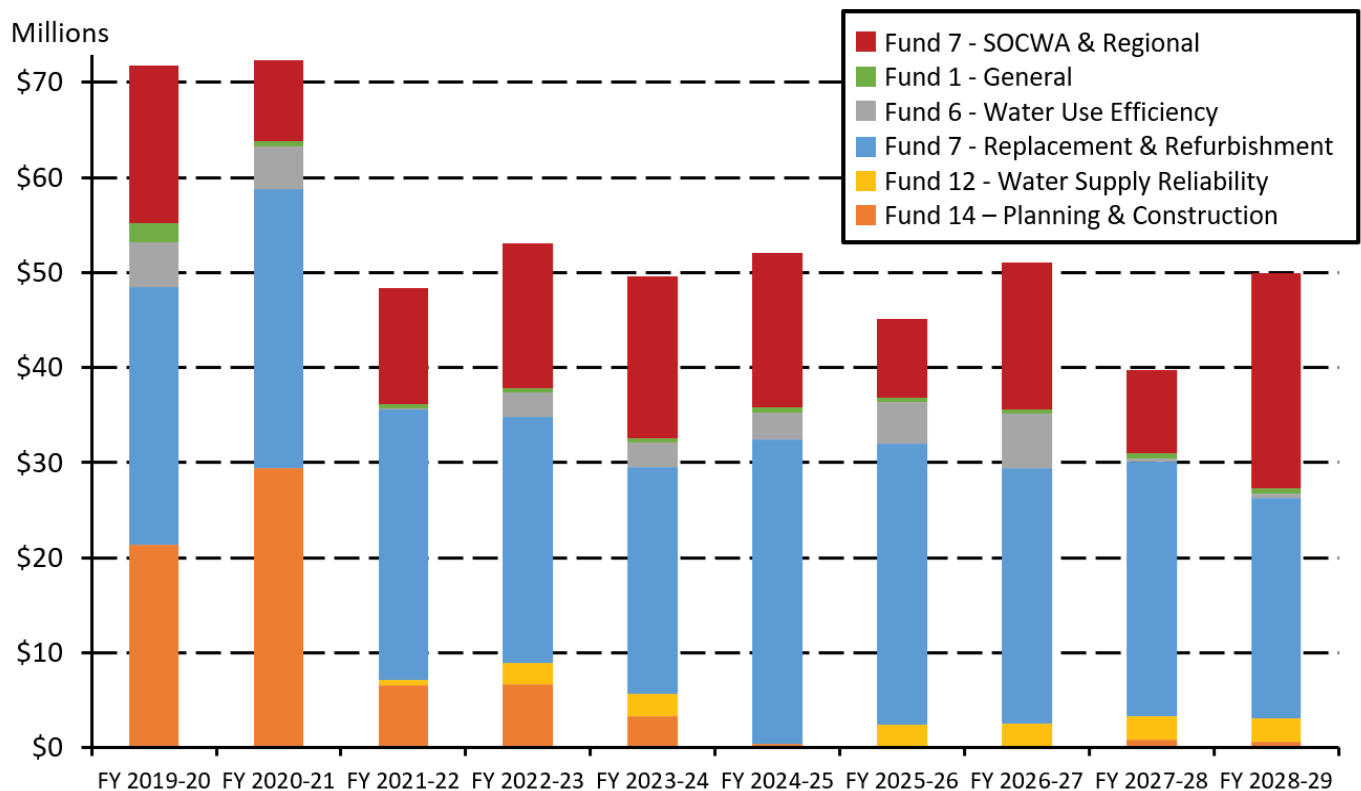


Figure CIP - 2: Proposed Budget Distribution over 10-Year Planning Horizon

Fiscal Year 2018-19 Adopted Budget

The CIP for the FY 2018-19 as adopted by the Board of Directors in June of 2018 had a budget of \$49.0M, exclusive of approximately \$0.4M in capital outlays that were budgeted in Fund 1. The FY 2018-19 budget contained 72 individual projects and two unanticipated project line items. District Engineering staff anticipates that at fiscal year-end, 19 projects will have been completed, 25 projects will be in construction and 22 projects will be in various stages of design. Staff estimates that by fiscal year-end, \$48M will be contracted or otherwise committed and approximately \$25M will have been expended.

Table CIP - 1 summarizes the FY 2018-19 adopted budget.

Table CIP - 1: FY 2018-19 Adopted Capital Improvement Program Budget

Item/Fund	FY 2018-19 Adopted Budget
Water Efficiency - Fund 6	\$950,000
Replacement and Refurbishment - Fund 7	\$25,654,932
SOCWA, JRWSS & SMWD – Fund 7	\$17,452,722
Planning and Construction - Fund 14	\$4,900,382
Total	\$48,958,036
Projected Expenditures for FY 2018-19 ⁽¹⁾	\$25,186,317
Projected Committed Funds/Contracts	\$48,032,232

Note 1. Expenditures based on data through March 31, 2019 and projected expenditures through the end of the fiscal year

Fiscal Year 2019-20 Proposed Budget

The FY 2019-20 CIP outlines \$71.7M in appropriations to continue funding of existing projects and provide funding for new projects. Projects carried forward from FY 2018-19 account for about \$39.9M of the FY 2019-20 CIP budget - \$10.8M is currently in construction and \$29.1M is in various design phases. Appropriations for new projects are about \$15.2M, primarily for design and bidding. Construction of the new projects will occur during later fiscal years and is projected in the 10-Year CIP. The regional projects, totaling \$16.6M, include projects proposed by Irvine Ranch Water District (IRWD) for the Baker Water Treatment Plant; South Coast Water District (SCWD) for the JRWSS; SMWD for jointly owned facilities such as Upper Oso and Upper Chiquita Reservoirs; and SOCWA for wastewater treatment. Appendix CIP - B lists the projects proposed for the 2019-20 budget. The projects are described individually in Appendix C.

Table CIP - 2 summarizes the proposed budget for each of the various Funds while Figure CIP - 3 shows the percentage allocation. Rehabilitation and replacement needs generally drive budget requirements and account for approximately 60 percent 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 CIP - 3 summarizes the proposed expenditure by system while Figure CIP - 4 displays the percentage distribution across systems. The Wastewater, Potable, and Multi-System classifications each account for approximately 30 percent of the fiscal year budget due in large part to regional projects proposed by regional agencies, Reservoir Management Systems Replacement projects, Advanced Metering Infrastructure (AMI) projects, major pipeline projects, and Plant 2A Upgrades projects.

Table CIP - 2: Proposed Budget for FY 2019-20 by Fund

Item/Fund	FY 2019-20 Proposed Budget
General - Fund 1	\$1,949,601
Water Efficiency - Fund 6	\$4,742,500
Replacement and Refurbishment - Fund 7	\$27,066,964
SOCWA, IRWD, JRWSS & SMWD - Fund 7	\$16,557,424
Planning and Construction - Fund 14	\$21,413,204
Total FY 2019-20 Proposed Budget	\$71,729,693

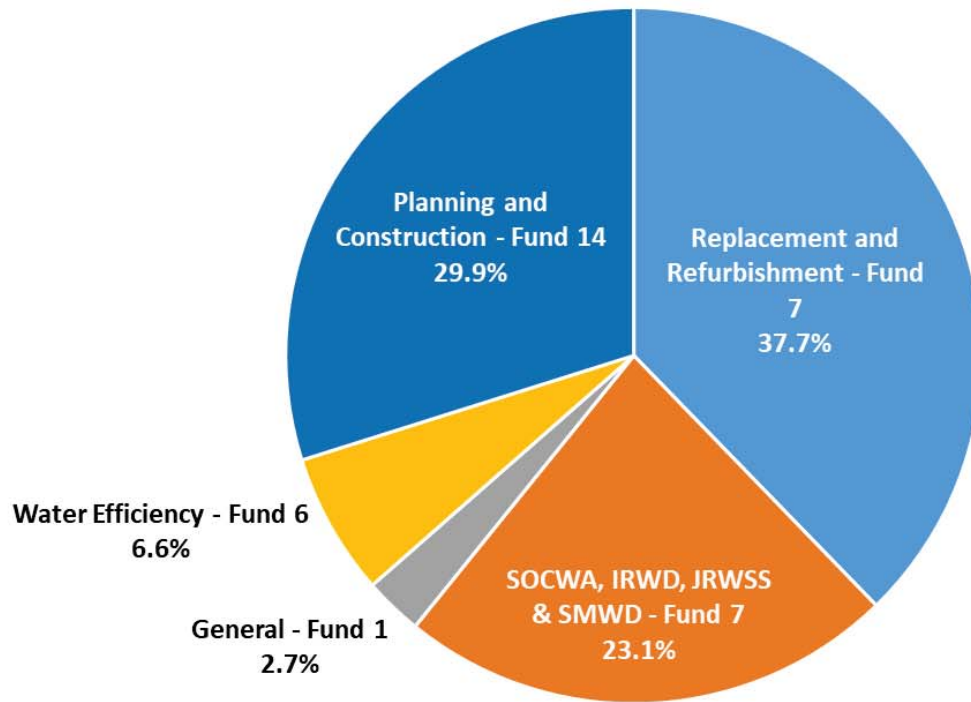


Figure CIP - 3: Percent Distribution of Proposed Budget for FY 2019-20 by Fund

Table CIP - 3: Proposed Budget for FY 2019-20 by System

System	FY 2019-20 Proposed Budget
Multi-System	\$21,987,134
Potable Water	\$21,500,000
Recycled Water	\$2,935,000
Wastewater	
Collection	\$5,770,000
Treatment (Plant 3A)	\$2,980,135
Treatment (SOCWA)	\$14,937,197
Regional (i.e. Baker WTP, JRWSS, Upper Oso/Chiquita, etc.)	\$1,620,227
Total FY 2019-20 Proposed Budget	\$71,729,693

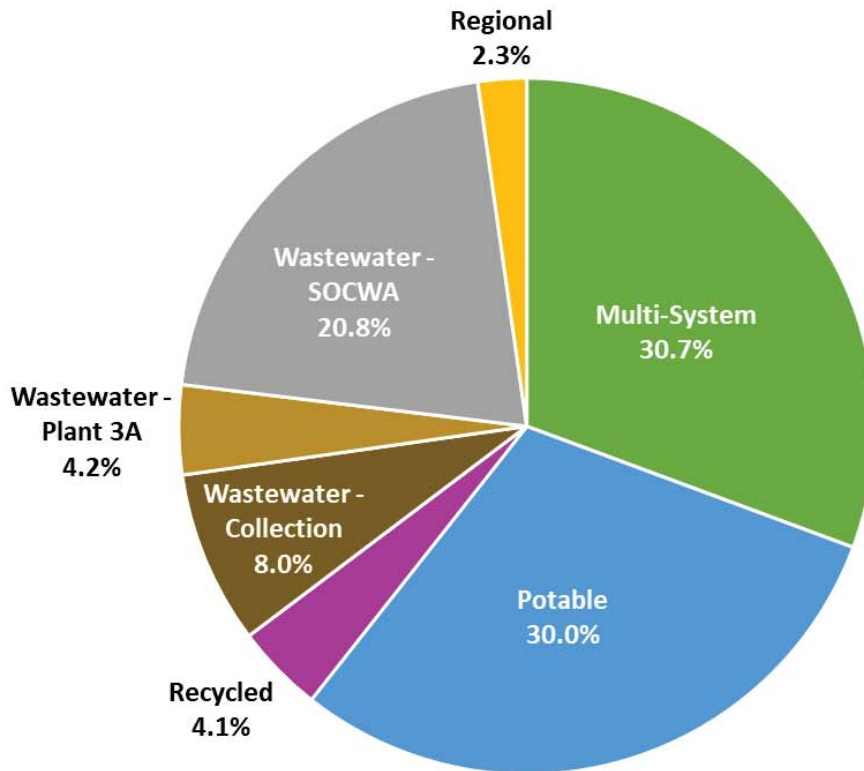


Figure CIP - 4: Percent Distribution of Proposed Budget for FY 2019-20 by System

APPENDIX CIP - A:
10-year Capital Improvement Program

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 to 2028-29
MULTI-SYSTEM								
2016022	14	CAMINO CAPISTRANO OPERATIONS YARD IMPROVEMENTS	CONSTRUCTION	\$1,687,500	\$220,000			
2011024	7	DOCUMENT MANAGEMENT	DESIGN	\$389,000	\$50,000	\$100,000	\$150,000	
2011033	7	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	DESIGN	\$1,041,979	\$400,000	\$300,000		
2011077	14	MOULTON PEAK RADIO TOWER ACCESS IMPROVEMENTS	DESIGN	\$220,000	\$220,000			
	14	ADMINISTRATION FACILITY	DESIGN	\$16,406,203	\$6,272,791	\$9,409,186		
	7	CYBERSECURITY ASSESSMENT AND CYBER RESILIENCY ENHANCEMENT		\$110,000	\$50,000	\$60,000		
	14	EMERGENCY GENERATOR	DESIGN	\$1,545,514	\$590,916	\$886,374		
	7	EQUIPMENT STORAGE	DESIGN	\$111,745	\$42,725	\$64,087		
	14	FIELD MAINTENANCE FACILITY	DESIGN	\$6,461,462	\$2,470,492	\$3,705,739		
	14	FLEET SERVICES BUILDING	DESIGN	\$4,508,314	\$1,723,721	\$2,585,581		
	14	FUELING STATION	DESIGN	\$1,628,262	\$622,554	\$933,831		
	14	LANDSCAPE AND IRRIGATION	DESIGN	\$966,356	\$369,479	\$554,219		
	14	SITE IMPROVEMENTS	DESIGN	\$10,486,758	\$4,009,535	\$6,014,302		
	14	SITE RECONFIGURATION AND GEOPIERS	DESIGN	\$4,191,147	\$1,602,454	\$2,403,681		
	14	SITE UTILITIES	DESIGN	\$2,174,130	\$831,263	\$1,246,894		
	14	VIDEO SITE SURVEILLANCE SYSTEM		\$500,000		\$250,000	\$250,000	
	7	WAREHOUSE IMPROVEMENTS	DESIGN	\$1,357,694	\$519,104	\$778,656		
	1	CAPITAL OUTLAYS - FUND 1		\$6,449,601	\$1,949,601	\$500,000	\$500,000	\$3,500,000
	6	CAPITAL OUTLAYS - FUND 6		\$42,500				\$10,000,000
	6	SUPPLY RELIABILITY ENHANCEMENTS - FUND 6		\$10,000,000				\$10,000,000
	12	SUPPLY RELIABILITY ENHANCEMENTS - FUND 12		\$10,000,000				\$10,000,000
		Subtotal - Multi-System Projects			\$21,987,134	\$29,792,550	\$900,000	\$23,500,000
POTABLE								
2014012	7	HIDDEN HILLS EASEMENT PIPELINE REPLACEMENT	CONSTRUCTION	\$488,711	\$20,000			
2016007	7	54-INCH CIP IMPROVEMENTS	CONSTRUCTION	\$2,460,840	\$300,000			
2017001	7	2017-18 ELECTRICAL SYSTEM IMPROVEMENTS - PW	CONSTRUCTION	\$1,295,546	\$1,100,000			
2017003	7	2017-18 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	CONSTRUCTION	\$5,487,394	\$3,000,000			
2017006	7	2017-18 VALVE REPLACEMENT	CONSTRUCTION	\$2,698,663	\$400,000			
2017009	7	PW MAIN REPLACEMENT AT I-5 OSO CREEK CROSSING	CONSTRUCTION	\$4,401,368	\$2,100,000	\$2,100,000		
2018013	7	CABOT CIP FLOW CONTROL VALVE NO. 1 UPGRADE	CONSTRUCTION	\$297,968	\$250,000			
2018015	7	CASA DEL OSO PUMP STATION - PUMP NO. 1 REPLACEMENT	CONSTRUCTION	\$301,188	\$230,000			
2018019	7	REHABILITATION OF THE BEAR BRAND NO. 2 RESERVOIR	CONSTRUCTION	\$934,204	\$300,000			
2018020	7	REHABILITATION OF THE SADDLEBACK RESERVOIR	CONSTRUCTION	\$927,214	\$500,000			
2010001	14	650-ZONE NIGUEL ROAD INTERTIE	DESIGN	\$375,000	\$250,000			
2015015	7	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	DESIGN	\$1,700,000	\$400,000	\$1,200,000		
2016014	14	SADDLEBACK PS GENERATOR EMERGENCY CONNECTION	DESIGN	\$30,000	\$5,000	\$25,000		
2017005	7	2017-18 ELECTRICAL DISTRIBUTION EQUIPMENT REPLACEMENTS	DESIGN	\$700,000	\$500,000			
2017010	7	PIPELINE ADJUSTMENTS FOR I-5 FREEWAY WIDENING	DESIGN	\$400,000	\$100,000		\$100,000	
2017019	14	SECONDARY FEED FOR 1050 ZONE	DESIGN	\$2,780,000				\$2,450,000
2018007	7	2018-19 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	DESIGN	\$6,185,000	\$1,200,000	\$4,100,000		
2018010	7	2018-19 VALVE REPLACEMENT	DESIGN	\$3,000,000	\$1,200,000		\$1,500,000	
2018014	7	CAMINO CAPISTRANO PW PIPELINE RELOCATION	DESIGN	\$120,000	\$75,000			
2018022	7	SOUTHERLY TAKEOUT REHABILITATION	DESIGN	\$700,000	\$525,000			
	7	FIRE HYDRANT REPLACEMENT PROGRAM	PROGRAM - NEW	\$900,000		\$100,000	\$100,000	\$700,000
	7	METER REPLACEMENT PROGRAM - PW	PROGRAM-NEW	\$4,750,000		\$1,115,000	\$1,115,000	\$2,520,000
	7	PIPELINE REHABILITATION AND REPLACEMENT PROGRAM - PW	PROGRAM	\$14,000,000				\$14,000,000
	7	RESERVOIR MANAGEMENT SYSTEM REPLACEMENT PROGRAM	PROGRAM	\$3,580,000			\$380,000	\$3,200,000
	7	RESERVOIR RECOATING PROGRAM - PW	PROGRAM	\$11,800,000		\$1,350,000	\$1,350,000	\$9,100,000
	7	SERVICE LINE REPLACEMENT PROGRAM - PW	PROGRAM-NEW	\$11,700,000		\$1,300,000	\$1,300,000	\$9,100,000
	7	STEEL TANKS SEISMIC AND STRUCTURAL RETROFITS PROGRAM - PW	PROGRAM	\$5,000,000				\$5,000,000
	7	VALVE REPLACEMENT PROGRAM - PW	PROGRAM	\$19,400,000			\$1,200,000	\$18,200,000
	7	VERTICAL ASSETS REHABILITATION AND REPLACEMENT PROGRAM - PW	PROGRAM - NEW	\$37,000,000		\$115,000	\$115,000	\$1,565,000
2015006	7	I.D. 1 MASTER METER RELOCATION		\$650,000			\$140,000	\$510,000

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 to 2028-29
2015023	7	NORTHERN TRANSMISSION MAIN IMPROVEMENTS N OF LA PAZ		\$500,000				\$300,000
2017016	12	SOUTH COUNTY PIPELINE TAKEOUT FACILITY		\$5,150,000			\$500,000	\$4,600,000
2018002	6	AMI PHASE 2		\$600,000	\$130,000			
2018004	7	2018-19 ELECTRICAL SYSTEM IMPROVEMENTS - PW		\$1,200,000				\$1,200,000
2018017	7	MIRA VISTA EASEMENT PIPELINE REHABILITATION		\$360,000	\$200,000	\$160,000		
2018021	7	SHEEP HILLS PUMP STATION IMPROVEMENTS		\$1,325,000				\$1,325,000
2018025	14	750-ZONE PW SYSTEM EXTENSION AT SALT SPRAY DRIVE		\$400,000		\$200,000	\$200,000	
	7	BEAR BRAND PS PUMP REPLACEMENT		\$435,000				\$435,000
	7	CROWN VALLEY RESERVOIR NO. 3 ROOF PLATE REPLACEMENT AND INTERIOR RECOATING		\$1,000,000			\$50,000	\$950,000
	7	LAGUNA HILLS DR 650 LINE INTERTIE		\$135,000				\$135,000
	12	MARGUERITE/OSO CIP TAKEOUT FACILITY		\$3,100,000				
	14	PACIFIC PARK PUMP STATION PORTABLE GENERATOR CONNECTION		\$150,000				\$150,000
	7	P2450 ALISO CREEK POTABLE LINE RELOCATION		\$420,000				\$420,000
	14	ROLLING HILLS PUMP STATION AUXILIARY GENERATOR		\$675,000				\$675,000
	7	CROWN VALLEY AND MARGUERITE RESERVOIRS SITE PAVING REPLACEMENT		\$375,000				\$375,000
	7	EAST ALISO CREEK RESERVOIR SITE PAVING REPLACEMENT		\$275,000	\$275,000			
	14	RANCHO CAPISTRANO 450-ZONE SERVICE		\$225,000				\$225,000
	7	SADDLBACK RESERVOIR SITE PAVING REPLACEMENT		\$125,000				\$125,000
	7	2019-20 ELECTRICAL SYSTEM IMPROVEMENTS - PW	NEW	\$700,000				\$700,000
	7	2019-20 FIRE HYDRANT REPLACEMENT	NEW	\$100,000	\$100,000			
	7	2019-20 METER REPLACEMENT - PW	NEW	\$1,115,000	\$1,115,000			
	7	2019-20 PRESSURE REDUCING STATION REHABILITATION - PW	NEW	\$100,000	\$100,000			
	7	2019-20 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	NEW	\$6,200,000	\$250,000	\$1,500,000	\$4,450,000	
	7	2019-20 SERVICE LINE REPLACEMENT - PW	NEW	\$1,300,000	\$1,300,000			
	7	2019-20 VALVE REPLACEMENT	NEW	\$3,000,000		\$1,200,000	\$100,000	\$1,700,000
2019002	6	AMI PHASE 3	NEW	\$8,200,000	\$4,100,000	\$4,100,000		
	7	BLACKBIRD AND SOLITARE EASEMENT PIPELINE REHABILITATION	NEW	\$400,000	\$200,000			
	7	CROWN VALLEY PARKWAY TRANSMISSION MAIN (LOWER REACH) REPLACEMENT	NEW	\$5,000,000		\$250,000		\$4,750,000
	7	CROWN VALLEY PARKWAY TRANSMISSION MAIN (UPPER REACH) REHABILITATION	NEW	\$10,000,000				\$10,000,000
	7	ELECTRICAL DISTRIBUTION EQUIPMENT REPLACEMENT AT PID NO. 2 PUMP STATION	NEW	\$150,000				\$150,000
	7	HIDDEN HILLS AND LAGUNA SERRANO APARTMENTS PIPELINE REPLACEMENT	NEW	\$360,000				\$360,000
	14	INTERCONNECTION BETWEEN EASTERN TM AND CIP AT CABOT FCF	NEW	\$500,000				\$500,000
	7	METER UPGRADES AND VALVE REPLACEMENTS AT TAKEOUT FACILITIES ON JRWSS JTM	NEW	\$350,000				\$350,000
	7	REHABILITATION OF RANCHO RESERVOIRS 1, 2, AND 3	NEW	\$2,550,000	\$1,275,000			
	7	SOUTHWESTERN TRANSMISSION MAIN REHABILITATION	NEW	\$8,000,000				\$8,000,000
Subtotal - Potable Projects				\$21,500,000	\$20,040,000	\$12,850,000	\$103,770,000	
RECYCLED								
2017014	7	RW MAIN INSTALLATION AT I-5 OSO CREEK CROSSING	CONSTRUCTION	\$4,401,368	\$2,100,000	\$2,100,000		
2010013	6	RWOS - LA PAZ BRIDGE CROSSING RW PIPELINE	DESIGN	\$475,000	\$420,000			
2018003	6	RWOS - MISCELLANEOUS DISTRIBUTION SYSTEM IMPROVEMENTS	DESIGN	\$585,000	\$460,000			
	7	METER REPLACEMENT PROGRAM - RW	PROGRAM-NEW	\$530,000		\$125,000	\$125,000	\$280,000
	6	RWOS - RECYCLED WATER RETROFITS PROGRAM	PROGRAM	\$4,850,000		\$10,000	\$10,000	\$1,120,000
	7	RESERVOIR RECOATING PROGRAM - RW	PROGRAM	\$2,970,000		\$330,000	\$330,000	\$2,310,000
	7	SERVICE LINE REPLACEMENT PROGRAM - RW	PROGRAM-NEW	\$1,260,000		\$140,000	\$140,000	\$980,000
	7	STEEL TANKS SEISMIC AND STRUCTURAL RETROFITS PROGRAM - RW	PROGRAM	\$200,000				\$200,000
	7	VALVE REPLACEMENT PROGRAM - RW	PROGRAM	\$1,500,000				\$1,500,000
	7	VERTICAL ASSETS REHABILITATION AND REPLACEMENT PROGRAM - RW	PROGRAM	\$14,125,000		\$115,000	\$115,000	\$805,000
2018005	7	2018-19 ELECTRICAL SYSTEM IMPROVEMENTS - RW		\$525,000				\$525,000
	14	GALIVAN BYPASS IMPROVEMENTS		\$175,000		\$175,000		
	7	LN REG PARK RW VAULT RECONFIGURATION		\$150,000				\$150,000
	7	OAKGROVE DRIVE RW PIPELINE REPLACEMENT		\$525,000				\$525,000
	7	RWOS - RW MAIN REPLACEMENT FROM GALIVAN PS TO LA PAZ PS		\$9,000,000				\$9,000,000
	7	RW RESERVOIR DRAINAGE IMPROVEMENTS AT 3 SITES		\$725,000				\$725,000
	6	RWOS - RW MAIN REPLACEMENT FROM CABOT ROAD TO GALIVAN PS		\$850,000				\$850,000

PROJECT NO.	FUND	PROJECT NAME	PRIORITY	TOTAL PROJECT BUDGET	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 to 2028-29
		6 RWOS - RW MAIN REPLACEMENT FROM CROWN VALLEY RESERVOIR TO CABOT ROAD		\$1,725,000				\$1,725,000
		7 2019-20 ELECTRICAL SYSTEM IMPROVEMENTS - RW	NEW	\$325,000				\$325,000
		7 2019-20 METER REPLACEMENT - RW	NEW	\$125,000				
		7 2019-20 PRESSURE REDUCING STATION REHABILITATION - RW	NEW	\$100,000				
		6 2019-20 RECYCLED WATER RETROFITS	NEW	\$10,000				
		7 2019-20 SERVICE LINE REPLACEMENT - RW	NEW	\$140,000				
		Subtotal - Recycled Projects		\$2,935,000	\$3,240,000	\$895,000	\$21,195,000	
WASTEWATER								
2011028		7 VALENCIA LIFT STATION REFURBISHMENT	CONSTRUCTION	\$1,024,022	\$300,000			
2017004		7 2017-18 PIPELINE REHABILITATION AND REPLACEMENT - WW	CONSTRUCTION	\$350,000	\$10,000			
2012024		7 UPPER SALADA LS AUX GENERATOR REPLACEMENT	DESIGN	\$850,000	\$500,000	\$250,000		
2013004		7 REGIONAL LS FORCE MAIN REPLACEMENT	DESIGN	\$10,000,000	\$225,000	\$25,000	\$5,100,000	\$4,000,000
2017007		7 ALSO CREEK LS AUXILIARY GENERATOR REPLACEMENT	DESIGN	\$775,000	\$300,000	\$425,000		\$625,000
2017022		14 REGIONAL LIFT STATION ENHANCEMENTS	DESIGN	\$3,500,000	\$2,225,000	\$1,125,000		
2018023		7 SOUTHWING LS AUXILIARY GENERATOR REPLACEMENT	DESIGN	\$675,000	\$250,000	\$375,000		\$675,000
2018027		7 REGIONAL TREATMENT PLANT SOUTHERLY INFLUENT SEWER IMPROVEMENTS	DESIGN	\$1,775,000	\$1,175,000	\$500,000		
2018028		7 UPPER SALADA LS BYPASS IMPROVEMENTS	DESIGN	\$300,000	\$10,000			
		7 MANHOLE REHABILITATION PROGRAM	PROGRAM	\$3,150,000		\$350,000	\$350,000	\$2,450,000
		7 PIPELINE REHABILITATION AND REPLACEMENT PROGRAM - WW	PROGRAM	\$1,600,000			\$200,000	\$1,400,000
		7 SIPHONS REHABILITATION PROGRAM	PROGRAM - NEW	\$5,000,000				\$5,000,000
		7 VERTICAL ASSETS REHABILITATION AND REPLACEMENT PROGRAM - WW	PROGRAM - NEW	\$27,850,000				\$20,825,000
2011043		14 3A OUTFALL LINE VALVES		\$450,000				\$450,000
2011043		14 3A OUTFALL LINE VALVES - SMWWD REIMBURSEMENT	REIMBURSEMENT	-\$225,000				-\$225,000
2013005		7 LOWER SALADA LS FORCE MAIN REPLACEMENT		\$5,900,000			\$200,000	\$5,700,000
2018024		7 VALENCIA LIFT STATION MANHOLE DIVERSIONS		\$475,000				\$475,000
2018026		14 CAMINO CAPISTRANO LIFT STATION AND FORCE MAIN		\$12,400,000		\$150,000	\$6,000,000	\$6,250,000
		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 - SMWWD REIMBURSEMENT	REIMBURSEMENT	-\$4,437,500				-\$4,437,500
		14 LOWER SALADA LIFT STATION OVERFLOW WETWELL		\$1,250,000				\$1,250,000
2019001		7 2019-20 MANHOLE REHABILITATION	NEW	\$350,000	\$350,000			
		7 ALSO CREEK LIFT STATION REHABILITATION	NEW	\$2,600,000				\$2,600,000
		7 LIFT STATION VENTILATION SYSTEM IMPROVEMENTS	NEW	\$850,000				\$850,000
		7 LOWER & UPPER SALADA O2 SYSTEM REPLACEMENT	NEW	\$750,000	\$125,000	\$625,000		
		7 NORTH ALSO LIFT STATION RECONSTRUCTION	NEW	\$5,000,000	\$100,000			\$4,900,000
		7 SIPHONS REHABILITATION PHASE 1	NEW	\$1,000,000	\$200,000	\$800,000		
		7 UPPER SALADA LIFT STATION FORCE MAIN REHABILITATION AND REPLACEMENT	NEW	\$6,000,000				\$6,000,000
		Subtotal - Wastewater Projects		\$5,770,000	\$4,625,000	\$11,850,000	\$67,662,500	
PLANT 3A								
3A0CI		7 OPERATIONS CAPITAL IMPROVEMENTS	PROGRAM - NEW	\$3,000,000	\$300,000	\$300,000	\$300,000	\$2,100,000
3A18.C01		7 SUBSIDENCE MITIGATION	NEW	\$3,290,000	\$1,472,275	\$1,817,725		
3A18.S02		7 SOLIDS TREATMENT IMPROVEMENTS	NEW	\$20,600,000	\$1,750,000	\$6,250,000	\$10,400,000	\$2,200,000
		7 LIQUID PROCESS IMPROVEMENTS - GROUP A	NEW	\$624,000				
		7 LIQUID PROCESS IMPROVEMENTS - GROUP B	NEW	\$2,000,000			\$300,000	\$1,700,000
		7 LIQUID PROCESS IMPROVEMENTS - GROUP C	NEW	\$15,050,000			\$1,825,000	\$13,225,000
		7 ODOR CONTROL SYSTEM EVALUATION AND REHABILITATION	NEW	\$725,000	\$100,000	\$625,000		
		7 ELECTRICAL SYSTEM IMPROVEMENTS	NEW	\$2,600,000				\$2,600,000
		6 TERTIARY TREATMENT EXPANSION	NEW	\$7,150,000				\$7,150,000
		6 PLANT 3A IMPROVEMENTS FUND 6 - SMWWD REIMBURSEMENT	REIMBURSEMENT					-\$2,010,938
		7 PLANT 3A IMPROVEMENTS FUND 7 - SMWWD REIMBURSEMENT	REIMBURSEMENT	-\$15,479,719	-\$1,166,140	-\$2,381,548	-\$3,782,813	-\$6,138,281
		Subtotal - Plant 3A Projects		-\$15,479,719	\$2,980,135	\$6,086,177	\$9,667,188	\$20,825,781

APPENDIX CIP - A
FY 19-20 | 10-YEAR CAPITAL IMPROVEMENT PROGRAM

PROJECT NO.	FUND	PROJECT NAME	PROJECT STATUS/ PRIORITY	TOTAL PROJECT BUDGET	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 to 2028-29
REGIONAL								
IRWD	7	IRWD BAKER WATER TREATMENT PLANT CAPITAL PROJECTS	PROGRAM - NEW	\$1,500,000	\$150,000	\$150,000	\$150,000	\$1,050,000
JRWSS	7	SCWD/JRWSS CAPITAL PROJECTS	PROGRAM	\$8,056,896	\$1,445,227	\$940,767	\$829,087	\$5,072,855
SMWD	7	SMWD CAPITAL PROJECTS-JOINT FACILITIES	PROGRAM	\$4,537,072	\$25,000	\$743,322	\$1,230,000	\$2,538,750
SOCWA	7	SOCWA CAPITAL PC 2	PROGRAM	\$20,318,202	\$2,255,160	\$2,373,492	\$2,118,409	\$13,571,142
SOCWA	7	SOCWA CAPITAL PC 5	PROGRAM	\$317,817	\$11,746	\$83,913	\$0	\$222,159
SOCWA	7	SOCWA CAPITAL PC 15	PROGRAM	\$12,582,466	\$3,434,492	\$2,112,808	\$1,250,836	\$5,784,330
SOCWA	7	SOCWA CAPITAL PC 17	PROGRAM	\$82,968,371	\$9,189,207	\$2,146,798	\$6,601,095	\$65,031,632
SOCWA	7	SOCWA CAPITAL PC 24	PROGRAM	\$10,432,461	\$46,592	\$22,233	\$0	\$10,363,635
		Subtotal - Regional Projects			\$16,557,423	\$8,573,332	\$12,179,426	\$103,634,503
TOTAL					\$71,729,693	\$72,357,060	\$48,341,614	\$340,587,784

NOTE: TOTAL 10-YEAR CIP PROJECTION (FY 2019-20 THROUGH FY 2028-29) = \$533,016,150

APPENDIX CIP - B:
Proposed FY 2019-20 Budget

APPENDIX CIP - B
PROPOSED FY 2019-20 PROJECTS

PROJECT NO.	PROJECT NAME	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2019-20 PROPOSED BUDGET	ESTIMATED COMPLETION DATE
GENERAL (G) (FUND 1)					
	CAPITAL OUTLAYS - FUND 1	\$6,449,601	\$0	\$1,949,601	6/30/20
	Subtotal - Fund 1 Projects			\$1,949,601	
WATER EFFICIENCY (WE) (FUND 6)					
2018002	AMI PHASE 2	\$600,000	\$479,134	\$130,000	10/31/19
2018003	RWOS - MISCELLANEOUS DISTRIBUTION SYSTEM IMPROVEMENTS	\$585,000	\$0	\$460,000	3/31/20
2019002	AMI PHASE 3	\$8,200,000	\$0	\$4,100,000	6/30/21
	2019-20 RECYCLED WATER RETROFITS	\$10,000	\$0	\$10,000	6/30/20
	CAPITAL OUTLAYS - FUND 6	\$42,500	\$0	\$42,500	6/30/20
	Subtotal - Fund 6 Projects			\$4,742,500	
REPLACEMENT & REBURISHMENT (R&R) (FUND 7)					
2011024	DOCUMENT MANAGEMENT	\$389,000	\$108,092	\$50,000	6/30/22
2011028	VALENCIA LIFT STATION REBURISHMENT	\$1,024,022	\$320,505	\$300,000	8/31/19
2011033	ASSET MANAGEMENT PROGRAM/CMMS IMPLEMENTATION	\$1,041,979	\$95,650	\$400,000	6/30/20
2012024	UPPER SALADA LS AUX GENERATOR REPLACEMENT	\$850,000	\$93,006	\$500,000	3/31/20
2013004	REGIONAL LS FORCE MAIN REPLACEMENT	\$10,000,000	\$498,044	\$225,000	12/31/22
2014012	HIDDEN HILLS EASEMENT PIPELINE REPLACEMENT	\$488,711	\$69,187	\$20,000	6/30/19
2015015	SADDLEBACK PS AUX PUMP & ENGINE REPLACEMENT	\$1,700,000	\$74,278	\$400,000	6/30/21
2016007	54-INCH CIP IMPROVEMENTS	\$2,460,840	\$333,547	\$300,000	7/31/19
2017001	2017-18 ELECTRICAL SYSTEM IMPROVEMENTS - PW	\$1,295,546	\$101,193	\$1,100,000	12/31/19
2017003	2017-18 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$5,487,394	\$372,881	\$3,000,000	3/31/20
2017004	2017-18 PIPELINE REHABILITATION AND REPLACEMENT - WW	\$350,000	\$43,690	\$10,000	9/30/19
2017005	2017-18 ELECTRICAL DISTRIBUTION EQUIPMENT REPLACEMENTS	\$700,000	\$20,900	\$500,000	3/31/20
2017006	2017-18 VALVE REPLACEMENT	\$2,698,663	\$800,089	\$400,000	8/31/19
2017007	ALISO CREEK LS AUXILIARY GENERATOR REPLACEMENT	\$775,000	\$0	\$300,000	12/31/20
2017009	PW MAIN REPLACEMENT AT I-5 OSO CREEK CROSSING	\$4,401,368	\$193,219	\$2,100,000	12/31/19
2017010	PIPELINE ADJUSTMENTS FOR I-5 FREEWAY WIDENING	\$400,000	\$77,221	\$100,000	6/30/19
2017014	RW MAIN INSTALLATION AT I-5 OSO CREEK CROSSING	\$4,401,368	\$176,789	\$2,100,000	12/31/19
2018007	2018-19 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$6,185,000	\$6,958	\$1,200,000	3/31/21
2018010	2018-19 VALVE REPLACEMENT	\$3,000,000	\$41,393	\$1,200,000	6/30/20
2018013	CABOT CIP FLOW CONTROL VALVE NO. 1 UPGRADE	\$297,968	\$24,604	\$250,000	12/31/19
2018014	CAMINO CAPISTRANO PW PIPELINE RELOCATION	\$120,000	\$0	\$75,000	6/30/19
2018015	CASA DEL OSO PUMP STATION - PUMP NO. 1 REPLACEMENT	\$301,188	\$37,582	\$230,000	3/31/20
2018017	MIRA VISTA EASEMENT PIPELINE REHABILITATION	\$360,000	\$0	\$200,000	12/31/20
2018019	REHABILITATION OF THE BEAR BRAND NO. 2 RESERVOIR	\$934,204	\$18,225	\$300,000	12/31/19
2018020	REHABILITATION OF THE SADDLEBACK RESERVOIR	\$927,214	\$14,359	\$500,000	12/31/19
2018022	SOUTHERLY TAKEOUT REHABILITATION	\$700,000	\$5,940	\$525,000	12/31/19
2018023	SOUTHWING LS AUXILIARY GENERATOR REPLACEMENT	\$675,000	\$0	\$250,000	12/31/20
2018027	REGIONAL TREATMENT PLANT SOUTHERLY INFLUENT SEWER IMPROVEMENTS	\$1,775,000	\$68,088	\$1,175,000	3/31/20
2018028	UPPER SALADA LS BYPASS IMPROVEMENTS	\$300,000	\$13,778	\$10,000	9/30/19
2019001	2019-20 MANHOLE REHABILITATION	\$350,000	\$0	\$350,000	6/30/20
3AOC1	OPERATIONS CAPITAL IMPROVEMENTS	\$3,000,000	\$0	\$300,000	6/30/20
3A18C01	SUBSIDENCE MITIGATION	\$3,290,000	\$18,922	\$1,472,275	12/31/20
3A18S02	SOLIDS TREATMENT IMPROVEMENTS	\$20,600,000	\$64,998	\$1,750,000	9/30/22
	2019-20 FIRE HYDRANT REPLACEMENT	\$100,000	\$0	\$100,000	6/30/20

Project expenditures based on March 31, 2019 accounting data

APPENDIX CIP - B
PROPOSED FY 2019-20 PROJECTS

PROJECT NO.	PROJECT NAME	TOTAL PROJECT BUDGET	EXPENDED FROM INCEPTION TO DATE	FY 2019-20 PROPOSED BUDGET	ESTIMATED COMPLETION DATE
	2019-20 METER REPLACEMENT - PW	\$1,115,000	\$0	\$1,115,000	6/30/20
	2019-20 METER REPLACEMENT - RW	\$125,000	\$0	\$125,000	6/30/20
	2019-20 PRESSURE REDUCING STATION REHABILITATION - PW	\$100,000	\$0	\$100,000	6/30/20
	2019-20 PRESSURE REDUCING STATION REHABILITATION - RW	\$100,000	\$0	\$100,000	6/30/20
	2019-20 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$6,200,000	\$0	\$250,000	6/30/20
	2019-20 SERVICE LINE REPLACEMENT - PW	\$1,300,000	\$0	\$1,300,000	6/30/20
	2019-20 SERVICE LINE REPLACEMENT - RW	\$140,000	\$0	\$140,000	6/30/20
	BLACKBIRD AND SOLITARE EASEMENT PIPELINE REHABILITATION	\$400,000	\$0	\$200,000	12/31/20
	CYBERSECURITY ASSESSMENT AND CYBER RESILIENCY ENHANCEMENT	\$110,000	\$0	\$50,000	9/30/20
	EAST ALISO CREEK RESERVOIR SITE PAVING REPLACEMENT	\$275,000	\$0	\$275,000	6/30/20
	EQUIPMENT STORAGE	\$111,745	\$54,577	\$42,725	3/31/21
	LIQUID PROCESS IMPROVEMENTS - GROUP A	\$624,000	\$0	\$624,000	6/30/20
	LOWER & UPPER SALADA O2 SYSTEM REPLACEMENT	\$750,000	\$0	\$125,000	6/30/21
	NORTH ALISO LIFT STATION RECONSTRUCTION	\$5,000,000	\$0	\$100,000	6/30/25
	PLANT 3A IMPROVEMENTS FUND 7 - SMWD REIMBURSEMENT	-\$15,479,719	\$0	-\$1,166,140	Reimbursement
	REHABILITATION OF RANCHO RESERVOIRS 1, 2, AND 3	\$2,550,000	\$0	\$1,275,000	12/31/20
	SIPHONS REHABILITATION PHASE 1	\$1,000,000	\$0	\$200,000	12/31/20
	WAREHOUSE IMPROVEMENTS	\$1,357,694	\$87,323	\$519,104	3/31/21
IRWD	BAKER WATER TREATMENT PLANT CAPITAL PROJECTS	\$1,500,000	NA	\$150,000	6/30/20
JRWSS	SCWD/JRWSS CAPITAL PROJECTS	\$8,056,896	NA	\$1,445,227	6/30/20
SMWD	SMWD CAPITAL PROJECTS-JOINT FACILITIES	\$4,537,072	NA	\$25,000	6/30/20
SOCWA	SOCWA CAPITAL PC 2	\$20,318,202	NA	\$2,255,160	6/30/20
SOCWA	SOCWA CAPITAL PC 5	\$317,817	NA	\$11,746	6/30/20
SOCWA	SOCWA CAPITAL PC 15	\$12,582,466	NA	\$3,434,492	6/30/20
SOCWA	SOCWA CAPITAL PC 17	\$82,968,371	NA	\$9,189,207	6/30/20
SOCWA	SOCWA CAPITAL PC 24	\$10,432,461	NA	\$46,592	6/30/20
	Subtotal - Fund 7 Projects			\$43,624,388	
PLANNING & CONSTRUCTION (P&C) (FUND 14)					
2010001	650-ZONE NIGUEL ROAD INTERTIE	\$375,000	\$0	\$250,000	12/31/19
2011077	MOULTON PEAK RADIO TOWER ACCESS IMPROVEMENTS	\$220,000	\$1,500	\$220,000	6/30/20
2016014	SADDLEBACK PS GENERATOR EMERGENCY CONNECTION	\$30,000	\$0	\$5,000	6/30/21
2016022	CAMINO CAPISTRANO OPERATIONS YARD IMPROVEMENTS	\$1,687,500	\$98,199	\$220,000	9/30/19
2017022	REGIONAL LIFT STATION ENHANCEMENTS	\$3,500,000	\$98,706	\$2,225,000	3/31/20
	ADMINISTRATION FACILITY	\$16,406,203	\$545,769	\$6,272,791	3/31/21
	EMERGENCY GENERATOR	\$1,545,514	\$109,154	\$590,916	3/31/21
	FIELD MAINTENANCE FACILITY	\$6,461,462	\$272,884	\$2,470,492	3/31/21
	FLEET SERVICES BUILDING	\$4,508,314	\$218,307	\$1,723,721	3/31/21
	FUELING STATION	\$1,628,262	\$87,323	\$622,554	3/31/21
	LANDSCAPE AND IRRIGATION	\$966,356	\$43,661	\$369,479	3/31/21
	SITE IMPROVEMENTS	\$10,486,758	\$436,615	\$4,009,535	3/31/21
	SITE RECONFIGURATION AND GEOPIERS	\$4,191,147	\$218,307	\$1,602,454	3/31/21
	SITE UTILITIES	\$2,174,130	\$109,154	\$831,263	3/31/21
	Subtotal - Fund 14 Projects			\$21,413,204	
TOTAL				\$71,729,693	

APPENDIX CIP - C:
Project Descriptions for the 10-Year CIP

Capital Improvement Program – Project Description

Project No: 2016.022

System: Multi-System

Fund: 14

Project Name: Camino Capistrano Operations Yard Improvements

Project Location: Plant 3A / Galivan Reservoir

Project Description: Install site improvements, paving, soil bays, drainage improvements, striping and fencing within areas adjacent to the Galivan Reservoir and Plant 3A.

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

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$110,000
CEQA Compliance	Exempt
Construction Contract	\$1,537,500
Inspection / Legal / Other	\$40,000
Total Project Budget	\$1,687,500



Capital Improvement Program – Project Description

Project No: 2011.024

System: Multi-System

Fund: 7

Project Name: *Document Management/Paperless Agenda Project*

Project Location: N/A

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:

Improved staff efficiency and allowing for improving transparency to MNWD customers for public meetings by providing 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: Multi-System

Fund: 7

Project Name: *Asset Management Program / CMMS Implementation*

Project Location: N/A

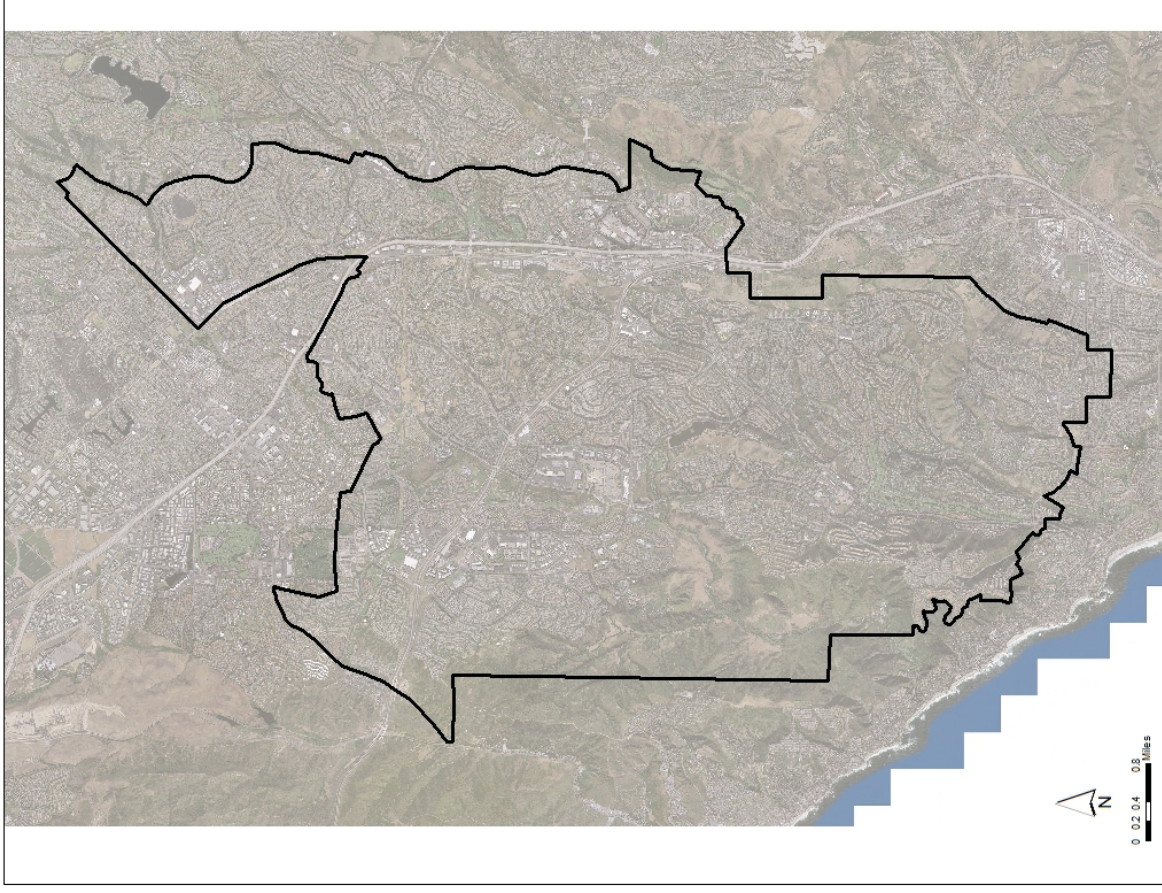
Project Description: The goal is to develop a comprehensive Asset Management Program that supports optimizing the lifecycle costs for the District's assets, providing improved maintenance tracking of horizontal and vertical assets, and prioritizing future capital costs as part of the Replacement and Refurbishment Fund (7) as well as the related operating costs.

Project Need: Tracking the District's infrastructure assets is critical to meeting the primary mission of the agency. Previously, the District was able to capture the horizontal assets (pipes) as part of the GIS Implementation, but the next step is to populate the Asset Register with vertical assets (facilities and components). The CMMS Planning phase documented the maintenance work flows and identified enhancement areas for a new Computerized Maintenance Management Systems (CMMS) to replace a twenty-year old outdated system. The CMMS Software Implementation phase will include selecting, procuring and transitioning the District to the new CMMS.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
CMMS Planning	\$136,898
Asset Register Population	\$229,913
CMMS Software Implementation	\$675,168
Total Project Budget	\$1,041,979



Capital Improvement Program – Project Description

Project No: 2011.077

System: Multi-System

Fund: 14

Project Name: Moulton Peak Radio Tower Access Improvements

Project Location: Moulton Peak Reservoir, Aliso Viejo

Project Description: Relocate a new tower to a location within the Moulton Peak reservoir site that is accessible by vehicle. The tower height will be taller than the existing tower. Modify the Moulton Peak fencing to include the new tower.

Project Need: The existing tower 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	Exempt
Geotechnical	\$10,000
Construction Contract	\$150,000
Inspection/Other	\$20,000
Total Project Budget	\$220,000



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

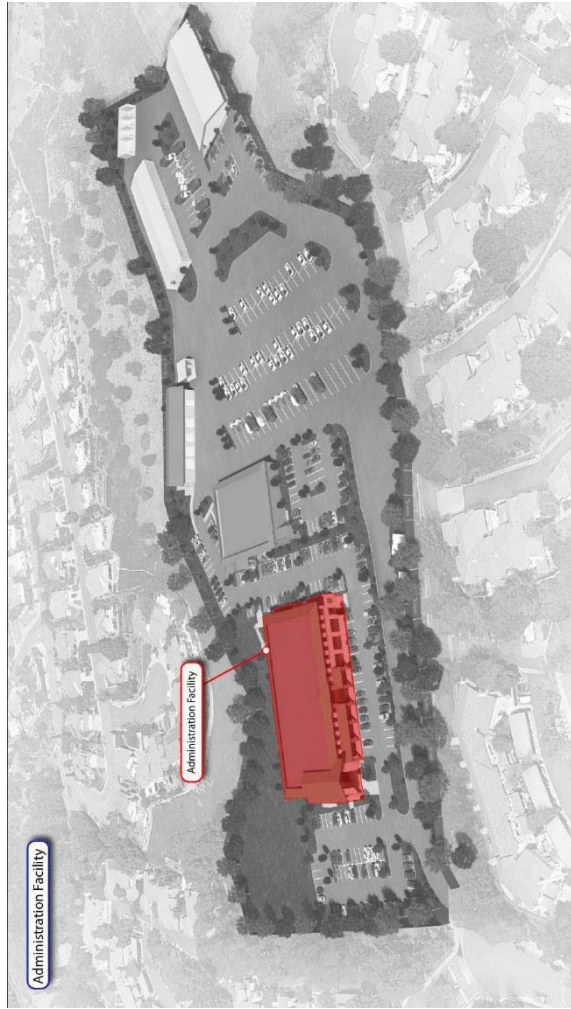
Project Name: Administration Facility

Project Location: 2A

Project Description: Construct a new 46,000 square-foot Administration Facility within the existing Plant 2A site. Construction will consist of a two-story concrete tilt-up office building, including all necessary improvements, to support the needs and requirements of all District Departments.

Project Need: The District has operated from the Main Office and Plant 2A sites for more than 40 years and has maximized the use and value of the two existing sites with minor upgrades and improvements to support growth of the District. A consolidated Administration Facility was determined to be in the best interest of the District for efficient operations within a common facility.

Project Status: In Design



Estimated Project Amount:

Item	Estimated Cost
Design	\$409,646
Environmental/CEQA	\$123,705
Construction Contract	\$15,413,207
Legal/Permit/Other	\$459,645
Total Project Budget	\$16,406,203

Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 7

Project Name: Cybersecurity Assessment and Cyber Resiliency Enhancement

Project Location: District Main Office, 2A, and all remote locations.

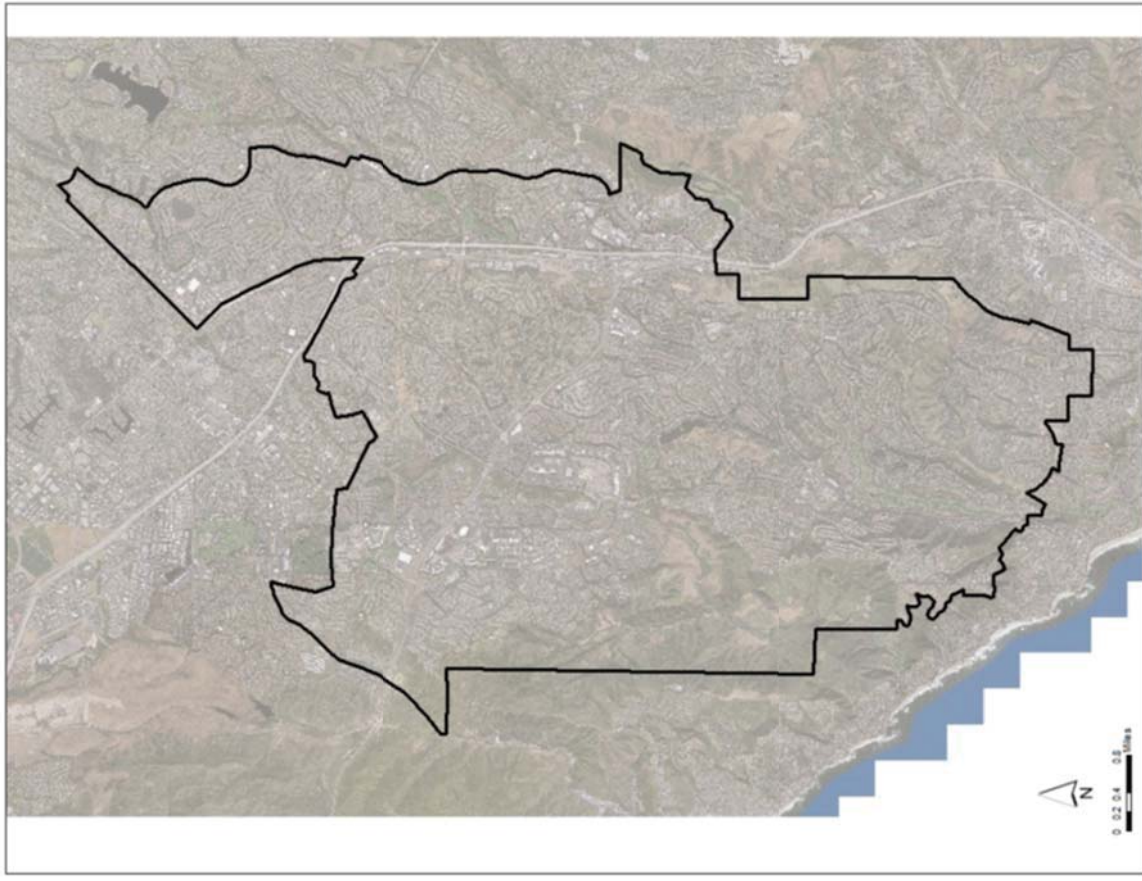
Project Description: Conduct a comprehensive cybersecurity assessment to identify the effectiveness and resiliency of the District's current cyber defense strategies and tactics. The project also includes identifying opportunities and initiatives for enhancing the District's cyber defense strategy, and dedicated funds to pursue those that are determined to be immediately necessary.

Project Need: The number of cyber attacks continues to increase. Public agencies and agencies that maintain utility infrastructure are increasingly becoming targets and victims. The impact of these attacks can result in the inability for District staff to perform daily operations. To stay current with changing threats, it is recommended to perform continuous assessments and make continual improvements to cyber defense strategies.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Assessment and Program Dev.	\$25,000
System Configuration Management Software (SCCM)	\$10,000
Security Information Event Mgmt.	\$30,000
Perimeter Firewall Replacement	\$45,000
Total Project Budget	\$110,000



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Emergency Generator

Project Location: 2A

Project Description: Construct a new 1,000 KW diesel engine driven emergency generator with fuel storage tank and other accessories housed within a new concrete masonry unit building as necessary to support the District's facilities in its function as a 24-hour emergency operations center. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$81,929
Environmental/CEQA	\$24,741
Construction Contract	\$1,346,915
Legal/Permit/Other	\$91,929
Total Project Budget	\$1,545,514



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 7

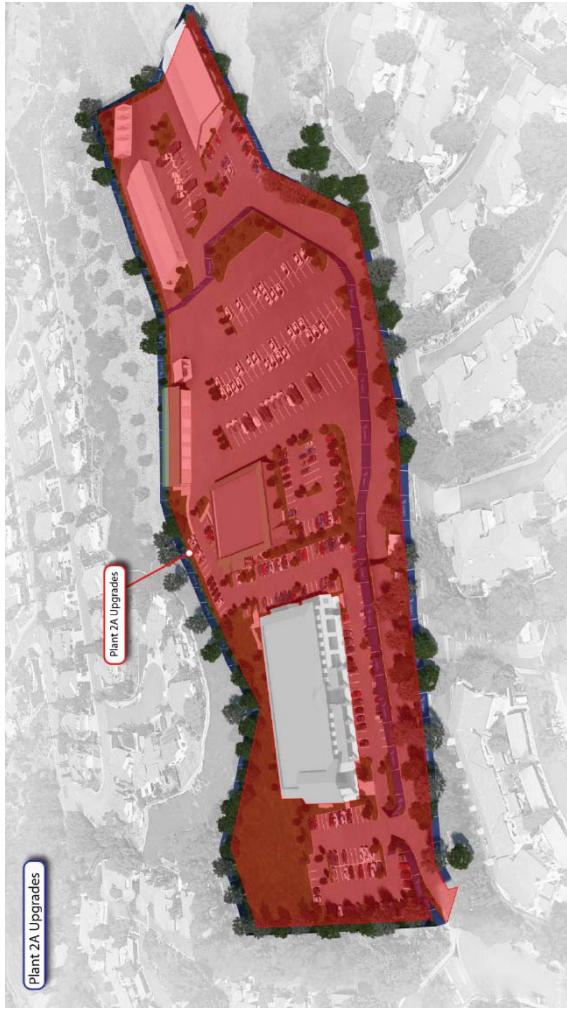
Project Name: Equipment Storage

Project Location: 2A

Project Description: Rehabilitate the exterior of the existing warehouse facility to support storage of materials and equipment in compliance with the District’s stormwater management plan. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design



Estimated Project Amount:

Item	Estimated Cost
Design	\$40,965
Environmental/CEQA	\$12,370
Construction Contract	\$12,446
Legal/Permit/Other	\$45,964
Total Project Budget	\$111,745

Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Field Maintenance Facility

Project Location: 2A

Project Description: Construct a new 12,500 square-foot Field Maintenance Facility within the existing Plant 2A site. Construction will consist of a one-story concrete masonry unit shops building, including all necessary improvements to support the needs and requirements of the District field maintenance crews. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$204,824
Environmental/CEQA	\$61,852
Construction Contract	\$5,964,964
Legal/Permit/Other	\$229,822
Total Project Budget	\$6,461,462



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Fleet Services Building

Project Location: 2A

Project Description: Construct a new 5,900 square-foot Fleet Services Building within the existing Plant 2A site. Construction will consist of a one-story concrete masonry unit building, including all necessary improvements to support the District's fleet services functions. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$163,859
Environmental/CEQA	\$49,482
Construction Contract	\$4,111,115
Legal/Permit/Other	\$183,858
Total Project Budget	\$4,508,314



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Fueling Station

Project Location: 2A

Project Description: Demolish and dispose of existing underground storage tank, piping, dispenser island, and canopy. Construct new fueling system to include a 12,000 gallon diesel and 8,000 gallon gasoline underground storage tanks, a new fuel dispensing island, and all other supporting accessories for an operable fueling facility. The increased fuel storage will increase the District's system reliability during power outages and will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,543
Environmental/CEQA	\$19,793
Construction Contract	\$1,469,383
Legal/Permit/Other	\$73,543
Total Project Budget	\$1,628,262



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Landscape and Irrigation

Project Location: 2A

Project Description: Install a comprehensive planting and supporting irrigation system to provide a cohesive landscaped facility that aligns with the District’s goals in the use of more native, drought-tolerant plantings. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design



Estimated Project Amount:

Item	Estimated Cost
Design	\$32,772
Environmental/CEQA	\$9,896
Construction Contract	\$886,916
Legal/Permit/Other	\$36,772
Total Project Budget	\$966,356

Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Site Improvements

Project Location: 2A

Project Description: Install site paving and hardscapes throughout Plant 2A to provide adequate parking for the District’s fleet and employee vehicles, and install covered parking to increase the useful life of the District’s large equipment and vehicles, and to comply with current building code provisions. Install new fencing and access gates for the public and private spaces. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$327,717
Environmental/CEQA	\$98,964
Construction Contract	\$9,692,361
Legal/Permit/Other	\$367,716
Total Project Budget	\$10,486,758



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

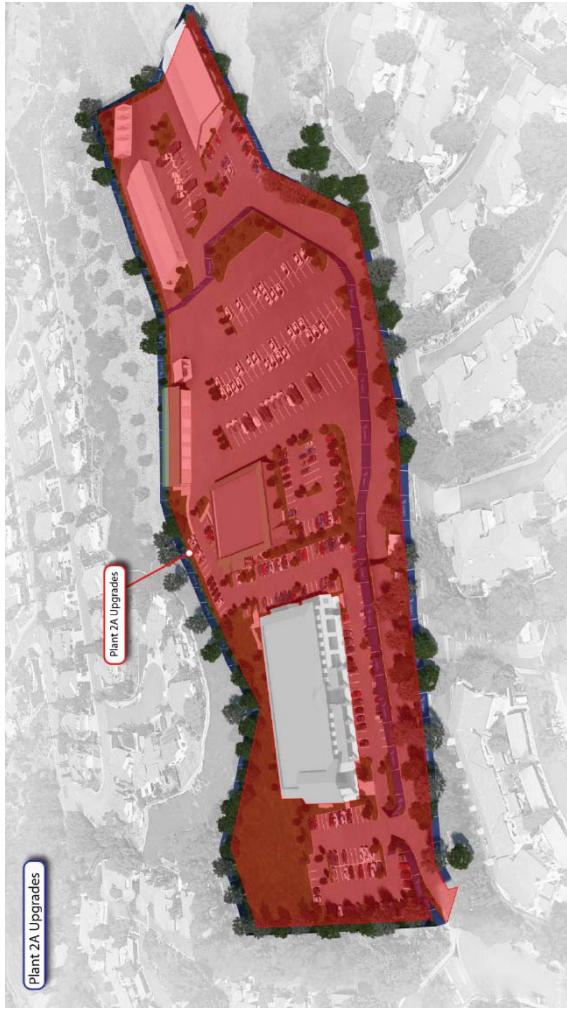
Project Name: Site Reconfiguration and Geopiers

Project Location: 2A

Project Description: Demolish the existing paving surfaces and mechanical appurtenances, and complete ground improvements to maximize the available space and stabilize the soft, native soils as necessary for new facilities. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design



Estimated Project Amount:

Item	Estimated Cost
Design	\$163,859
Environmental/CEQA	\$49,482
Construction Contract	\$3,793,948
Legal/Permit/Other	\$183,858
Total Project Budget	\$4,191,147

Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Site Utilities

Project Location: 2A

Project Description: Demolish the existing underground utilities throughout the Plant 2A site and install new potable, recycled, wastewater, stormwater, natural gas, power, and communications infrastructure to comply with current District standards and to support the new facilities. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$81,929
Environmental/CEQA	\$24,741
Construction Contract	\$1,975,531
Legal/Permit/Other	\$91,929
Total Project Budget	\$2,174,130



Capital Improvement Program – Project Description

Project No: TBD

System: Multi-System

Fund: 14

Project Name: Video Site Surveillance System

Project Location: Various

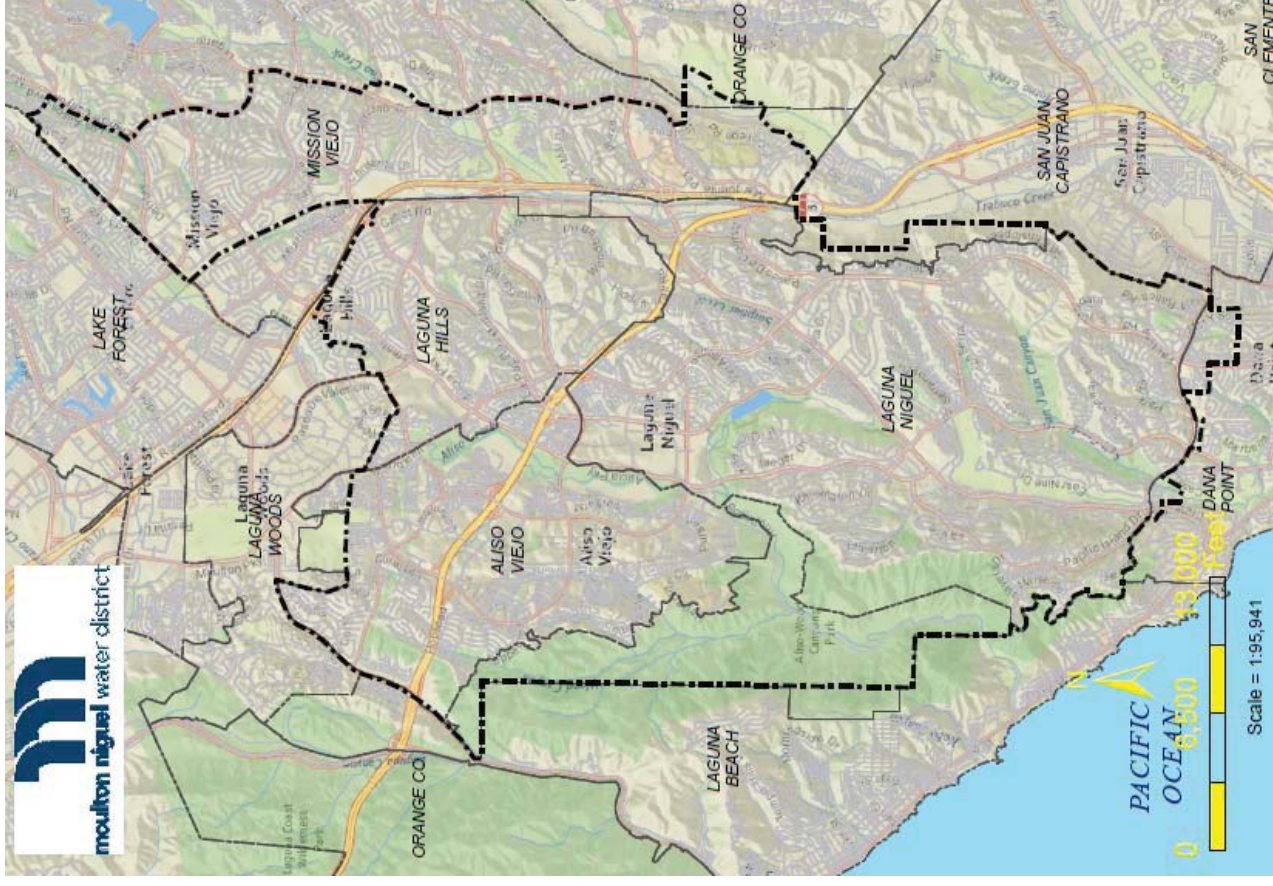
Project Description: The installation of video surveillance at various district facilities and the installation of additional data storage capacity at Plant 2a.

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: TBD

System: Multi-System

Fund: 7

Project Name: Warehouse Improvements

Project Location: 2A

Project Description: Rehabilitate the existing 11,463 square-foot Field Operations Building to include code-compliance upgrades, reconfiguration of some office spaces, and the conversion of the remaining spaces to climate-controlled warehouse functions. This will be completed as part of the Plant 2A Upgrades.

Project Need: The District has operated from the Plant 2A site since the early 1970s with various improvements to the facility over the next 30 years. Since that time, only minor improvements have been made to the facility despite increasing operations requirements to provide potable water, recycled water, and wastewater collection and treatment services to the communities served by the District. These existing facilities are generally undersized for their current uses, and no longer sufficient to meet the changing and developing operational requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,544
Environmental/CEQA	\$19,793
Construction Contract	\$1,198,814
Legal/Permit/Other	\$73,543
Total Project Budget	\$1,357,694



Capital Improvement Program – Project Description

Project No: 2014.012

System: Potable

Fund: 7

Project Name: Hidden Hills Easement Pipeline Replacement

Project Location: Hidden Hills Village Condo Rentals, Laguna Niguel

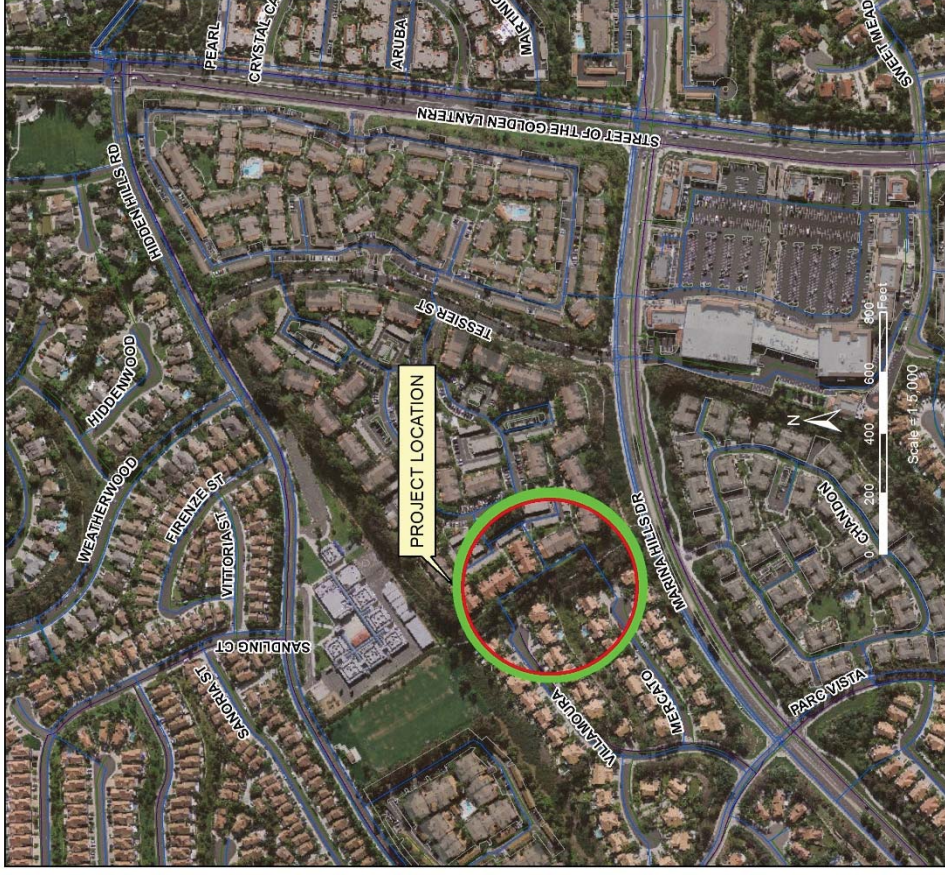
Project Description: Replace approximately 800 feet of 8-inch ductile iron pipe within an easement connecting the Hidden Hills Village Condo Rentals community to the cul-de-sacs at Villamoura and Mercato in the Marina Hills HOA within the City of Laguna Niguel.

Project Need: The existing pipeline has reached the end of its useful life and is in need of replacement.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	Exempt
Construction Contract	\$408,711
Geotechnical	\$10,000
Easement/Legal/Other	\$5,000
Total Project Budget	\$488,711



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 rehabilitation and replacement of corroded fittings, nuts and bolts, ventilation piping, mortar, 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: The 54-inch CIP is a critical water delivery facility for the District. The improvements will enable staff to monitor and control corrosion of the 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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$400,000
CEQA Compliance	Exempt
Geotechnical	\$5,000
Construction Contracts	\$2,050,840
Inspection/Other	\$5,000
Total Project Budget	\$2,460,840



Capital Improvement Program – Project Description

Project No: 2017.001

System: Potable

Fund: 7

Project Name: 2017-18 Electrical System Improvements

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

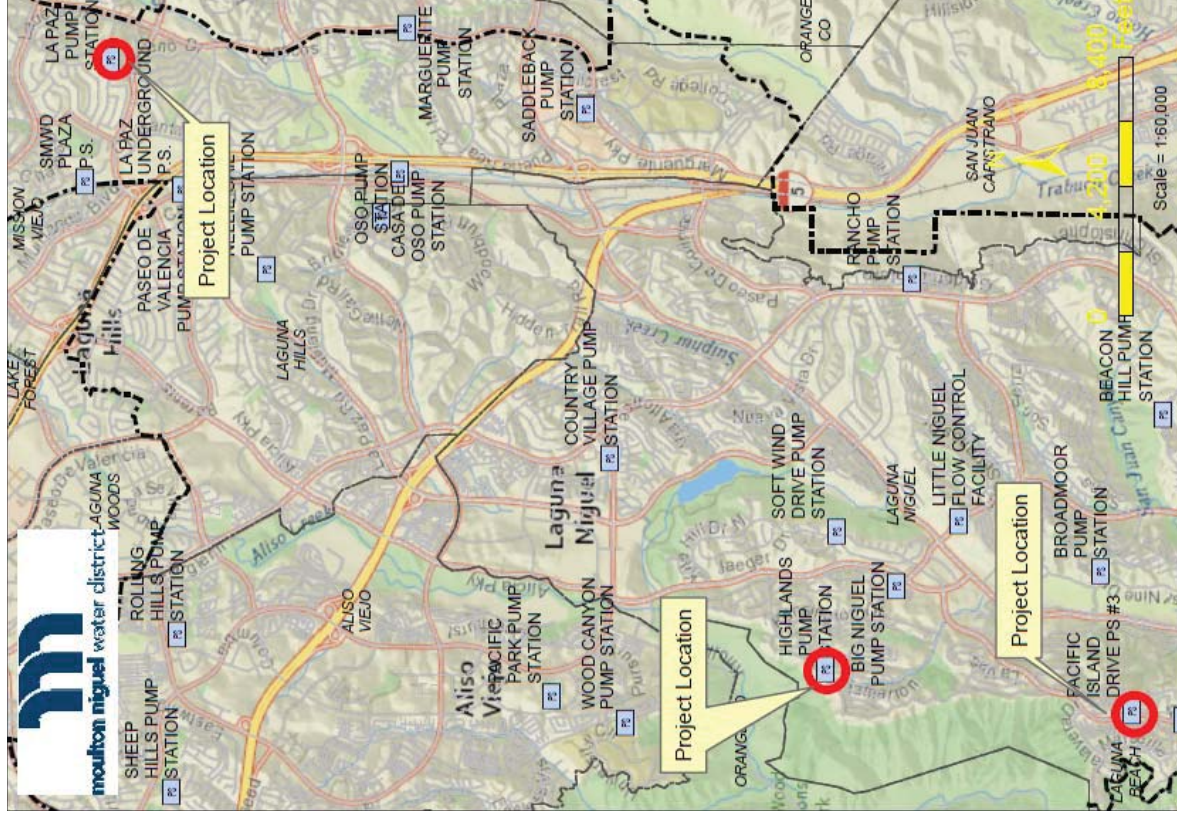
Project Description: Replace main Switchboard, Main Circuit Breaker, VFDs, MCCs, and related electrical equipment at PID PS #3. Due to the critical nature of this pump station, temporary electrical service entrance and switchgear will be required to maintain operation of the facility during construction. Replace Main Circuit Breaker and Load Bank at La Paz Reservoir PS. Relocate and replace Load Bank at Highlands Pump Station.

Project Need: These service sections and associated main circuit breakers are old and beyond their useful lives. If these existing electrical components remain, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$120,000
CEQA Compliance	Exempt
Construction Contract	\$1,140,546
Specialty Inspection	\$30,000
Legal/Permits/Other	\$5,000
Total Project Budget	\$1,295,546



Capital Improvement Program – Project Description

Project No: 2017.003

System: Potable

Fund: 7

Project Name: 2017-18 Reservoir Management System Replacement

Project Location: Crown Valley, Highlands, Marguerite, Moulton Peak, and Pacific Park 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.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$514,243
CEQA Compliance	Exempt
Construction Contract	\$4,553,262
Special Inspection	\$394,889
Legal/Permits/Other	\$25,000
Total Project Budget	\$5,487,394



Sites for RMS Facilities

Capital Improvement Program – Project Description

Project No: 2017.006

System: Potable

Fund: 7

Project Name: 2017-18 Valve Replacement

Project Location: Various

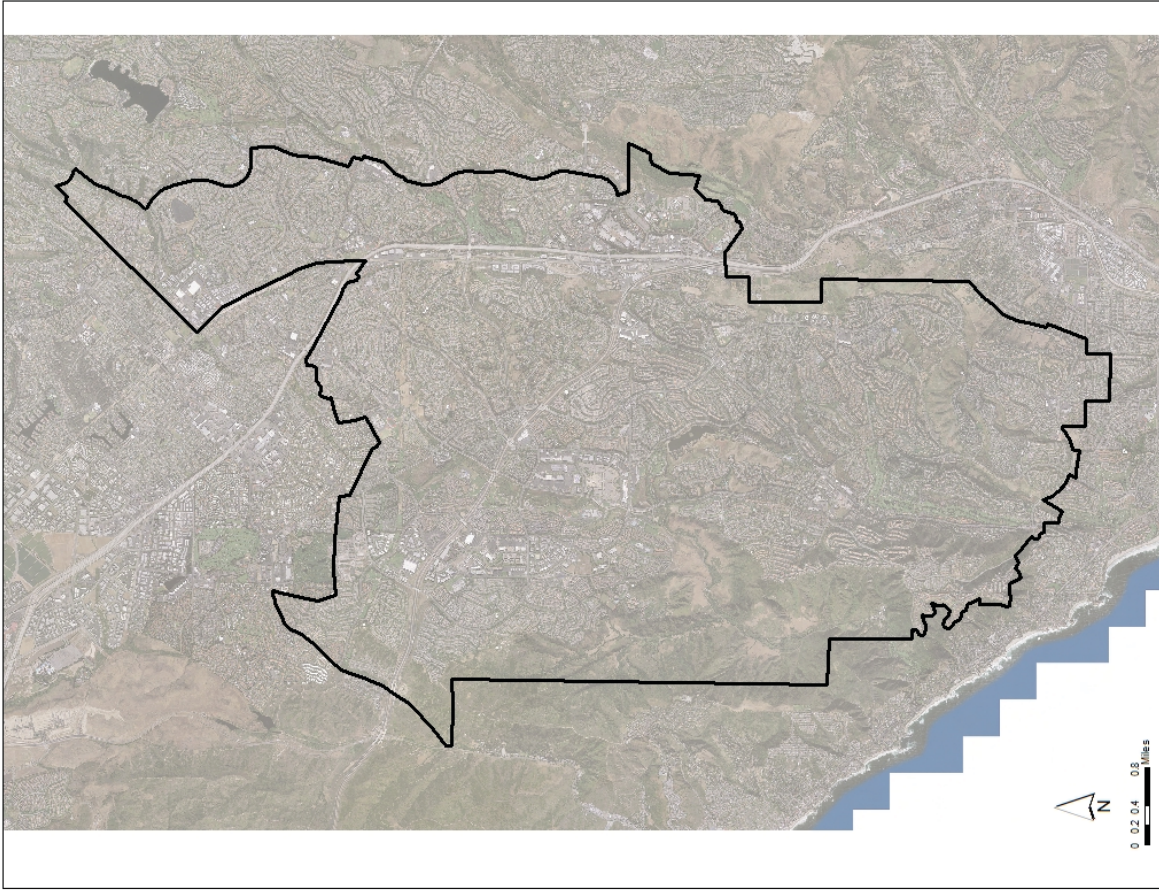
Project Description: Replace pipeline in-line valves.

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 by the District's Valve Crew.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$2,038,663
Inspection/Other	\$10,000
Construction by District	\$600,000
Total Project Budget	\$2,698,663



Capital Improvement Program – Project Description

Project No: 2017.009

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 21" welded steel potable water pipe within a ~72" steel casing utilizing a micro-tunneling method for the replacement of the existing 14" potable water pipeline.

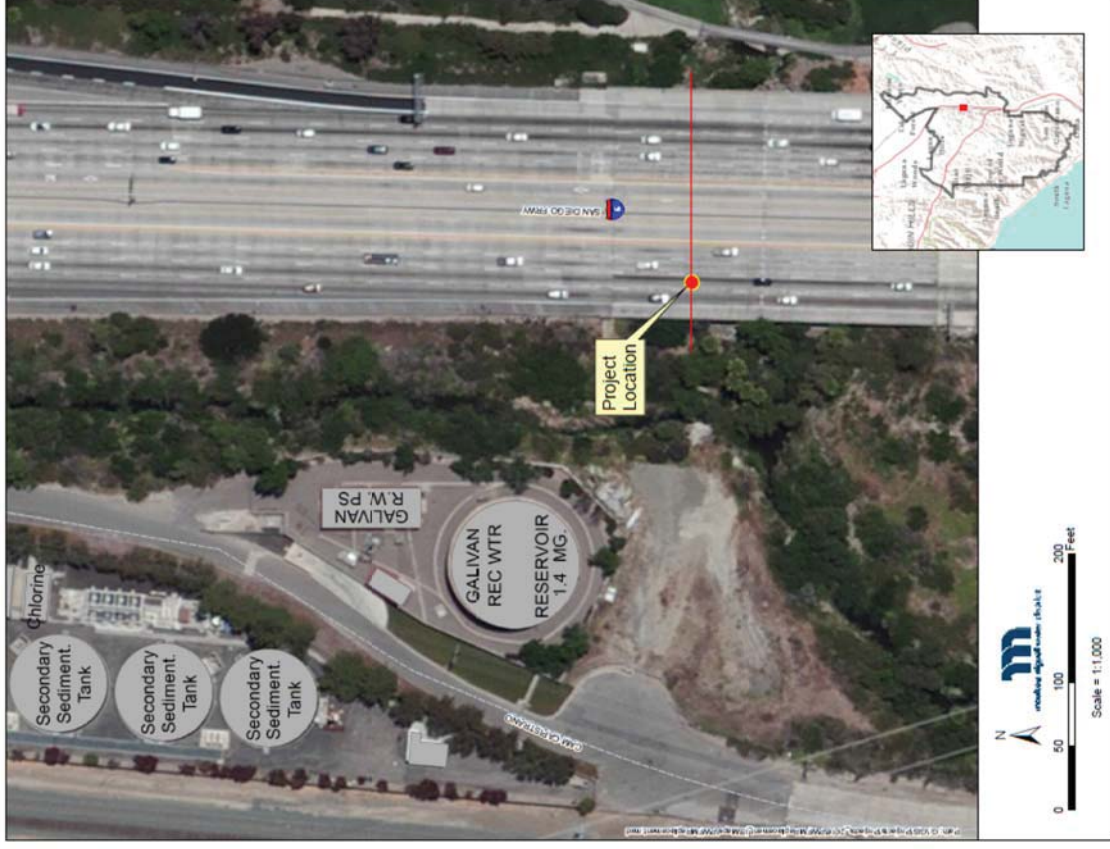
This project to be completed simultaneously with 2017.014, RW Main Installation at I-5 / Oso Creek Crossing, with the PW and RW pipes installed in a shared casing.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$259,618
Construction Contract	\$3,844,500
CM/Inspection/Geotech/CEQA	\$272,250
Legal/Permits/District Labor	\$25,000
Total Project Budget	\$4,401,368



Capital Improvement Program – Project Description

Project No: 2018.013

System: Potable

Fund: 7

Project Name: Cabot CIP Flow Control Valve No. 1 Upgrade

Project Location: Cabot Flow Control Facility, Mission Viejo

Project Description: Upsize Valve Train No. 1 from an 8" to a 12" service, including new motor operated ball valve, flow control valve, isolation valve, flow meter, piping and related equipment.

Project Need: The existing motor operated valve is non-operable. Additionally, the service need to be upsized to accommodate current and future flow requirements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$45,000
CEQA Compliance	Exempt
Construction Contract	\$247,968
Legal, Permits, District Labor	\$5,000
Total Project Budget	\$297,968



Capital Improvement Program – Project Description

Project No: 2018.015

System: Potable

Fund: 7

Project Name: Casa Del Oso Pump Station – Pump No. 1 Replacement

Project Location: Casa Del Oso Pump Station, Laguna Hills

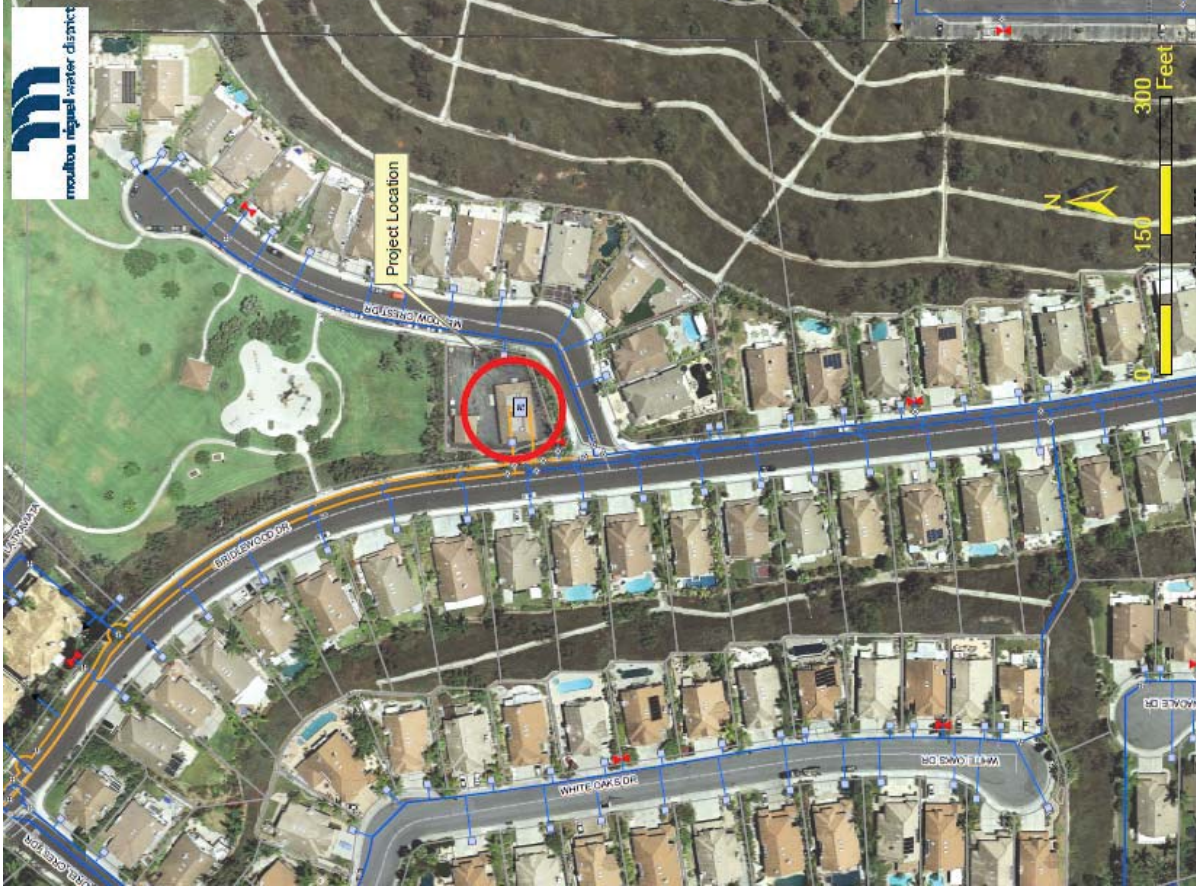
Project Description: The replacement of a 300 gallons per minute (gpm) pump and a 20 horsepower (hp) electric motor with a 750 gpm pump and a 40 hp electric motor. The work will also consist of up-sizing the existing 6-inch piping and appurtenances for Pump No. 1 to 8-inch piping and appurtenances.

Project Need: Currently the Casa Del Oso pump station primarily uses Pump No. 2 to pump potable water to the 750 pressure zone during high demand periods. The Casa Del Oso pump station currently does not carry a redundant pump for Pump No. 2 and the output of Pump No. 1 is too small to meet system demands. Therefore, staff recommends to replace Pump No. 1 and motor to a pump and motor similar to the performance of Pump No. 2. This will ensure system reliability as the pump station would be able to maintain its pumping capacity should Pump No. 2 require maintenance or additional servicing.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$70,000
CEQA Compliance	Exempt
Construction Contract	\$226,188
Legal, Permits, District Labor	\$5,000
Total Project Budget	\$301,188



Capital Improvement Program – Project Description

Project No: 2018.019

System: Potable

Fund: 7

Project Name: *Rehabilitation of the Bear Brand No. 2 Reservoir*

Project Location: 24939 Beacon Hill Lane, Laguna Niguel

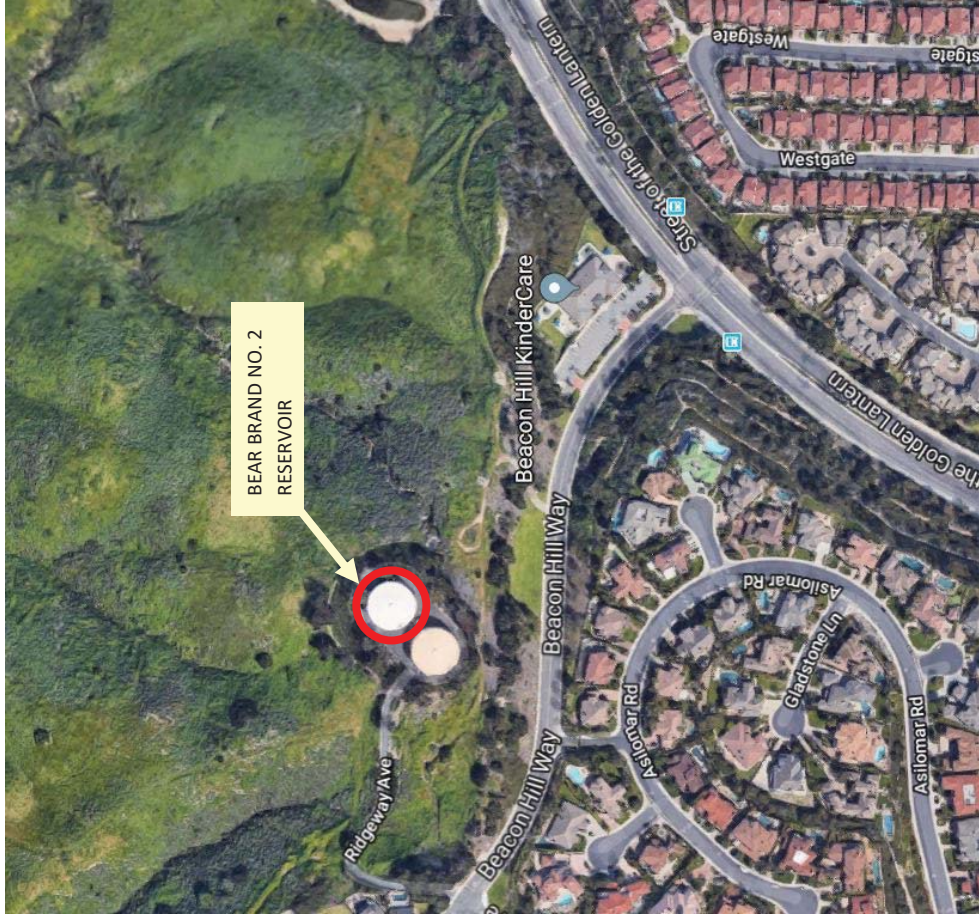
Project Description: Re-coat the interior and exterior of 2.5 million gallon (MG) Bear Brand No. 2 Reservoir, structural and corrosion rehabilitation, tank operation and safety improvements, and a cathodic protection system.

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 5 to 10 years to determine if and when recoating is needed.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$27,274
CEQA Compliance	Exempt
Construction Contract	\$831,930
Specialty Inspection	\$70,000
Legal, Permits & District Labor	\$5,000
Total Project Budget	\$934,204



Capital Improvement Program – Project Description

Project No: 2018.020

System: Potable

Fund: 7

Project Name: *Rehabilitation of the Saddleback Reservoir*

Project Location: 27989 Marguerite Parkway, Mission Viejo

Project Description: Re-coat the interior and exterior of 2.0 million gallon (MG) Saddleback Reservoir, structural and corrosion rehabilitation, 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 5 to 10 years to determine if and when recoating is needed.

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$27,274
CEQA Compliance	Exempt
Construction Contract	\$819,940
Specialty Inspection	\$75,000
Legal, Permits & District Labor	\$5,000
Total Project Budget	\$927,214



Capital Improvement Program – Project Description

Project No: 2010.001

System: Potable

Fund: 14

Project Name: 650-Zone Niguel Road Intertie

Project Location: Niguel Road, Laguna Niguel

Project Description: Install approximately 700 feet of 16" pipe, valves, and fittings to provide a connection between Big Niguel Pump Station, Ivy Glen PR, and Little Niguel Pump Station.

Project Need: The pipeline will improve operational efficiency in the 650 pressure zone and provide for an interconnection between portions of the zone served by the Highland and Rancho reservoirs. The pipeline also puts the Ivy Glen PR on the 650 pressure zone instead of the CIP so that it can operate with the CIP offline and removes the need for flow control at Little Niguel.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	Exempt
Construction	\$300,000
Legal/Permits/Other	\$10,000
Total Project Budget	\$375,000



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

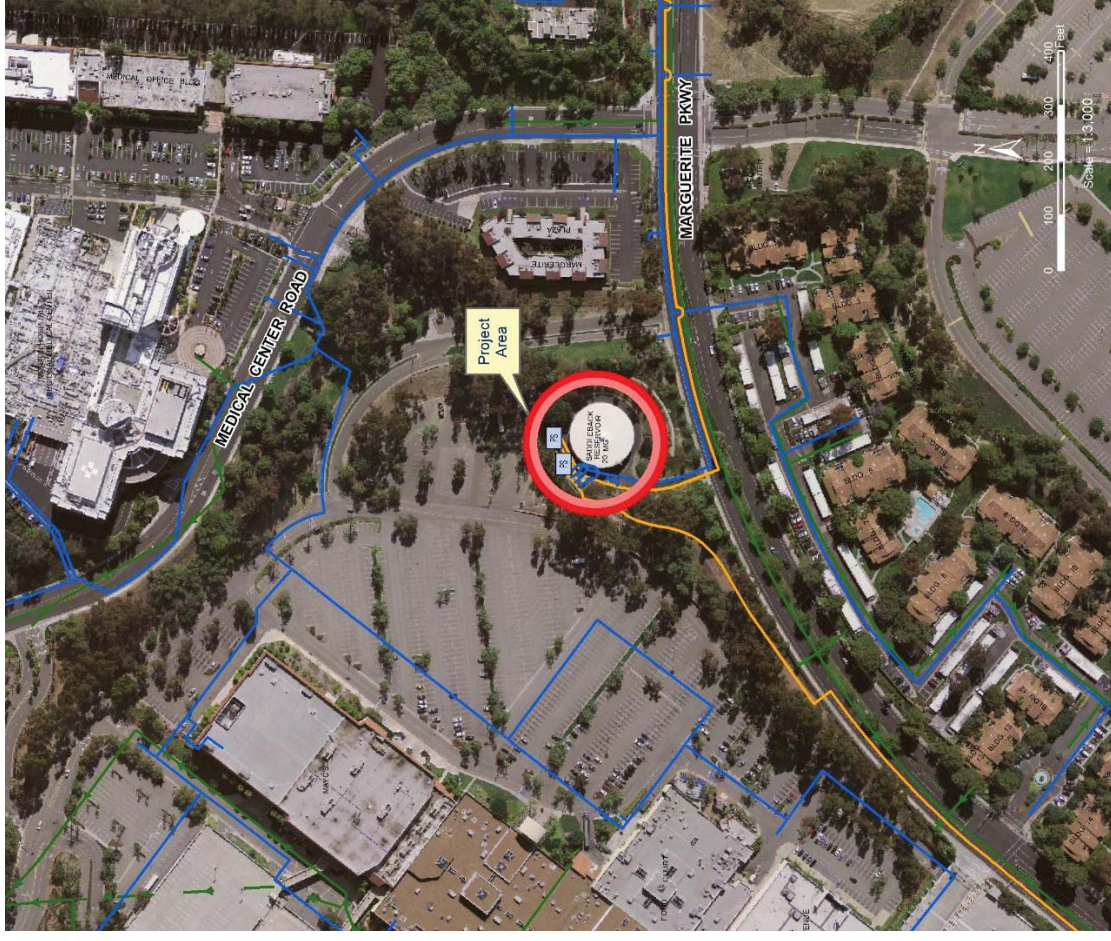
Project Description: Replace 1987 Waukesha Propane 550 Hp backup Auxiliary Pump, switchgear and associated piping and valves.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Preliminary Design	\$75,000
Design	\$150,000
CEQA Compliance	Exempt
Construction Contract	\$1,375,000
Inspection/Other	\$100,000
Total Project Budget	\$1,700,000



Saddleback PS-Auxiliary Pump Engine Replacement

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	\$5,000
CEQA Compliance	Exempt
Construction Contract	\$25,000
Inspection	\$0
Total Project Budget	\$30,000



Saddleback PS-Emergency Connections

Capital Improvement Program – Project Description

Project No: 2017.005

System: Potable

Fund: 7

Project Name: 2017-18 Electrical Distribution Equipment Replacements

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

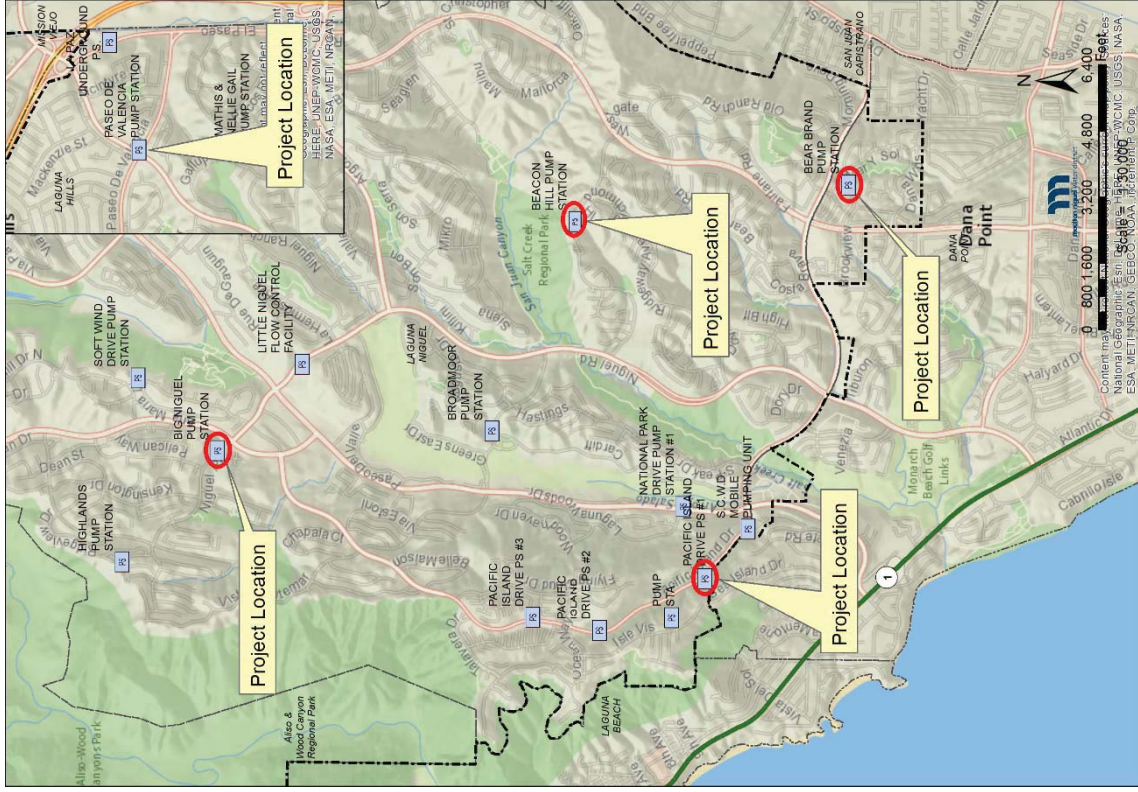
Project Description: Replace utility service sections at five (5) sites that have reached the end of their useful lives. Other electrical and structural improvements to be completed to accommodate the new service sections.

Project Need: These service sections and associated main circuit breakers range from 35 to 50 years old (beyond useful life). If these existing electrical components remain, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$130,000
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection/Utility Fees/Other	\$70,000
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: 2017.010

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 Parkway and El Toro Road within the Cities of Mission Viejo, Laguna Hills and Laguna Niguel

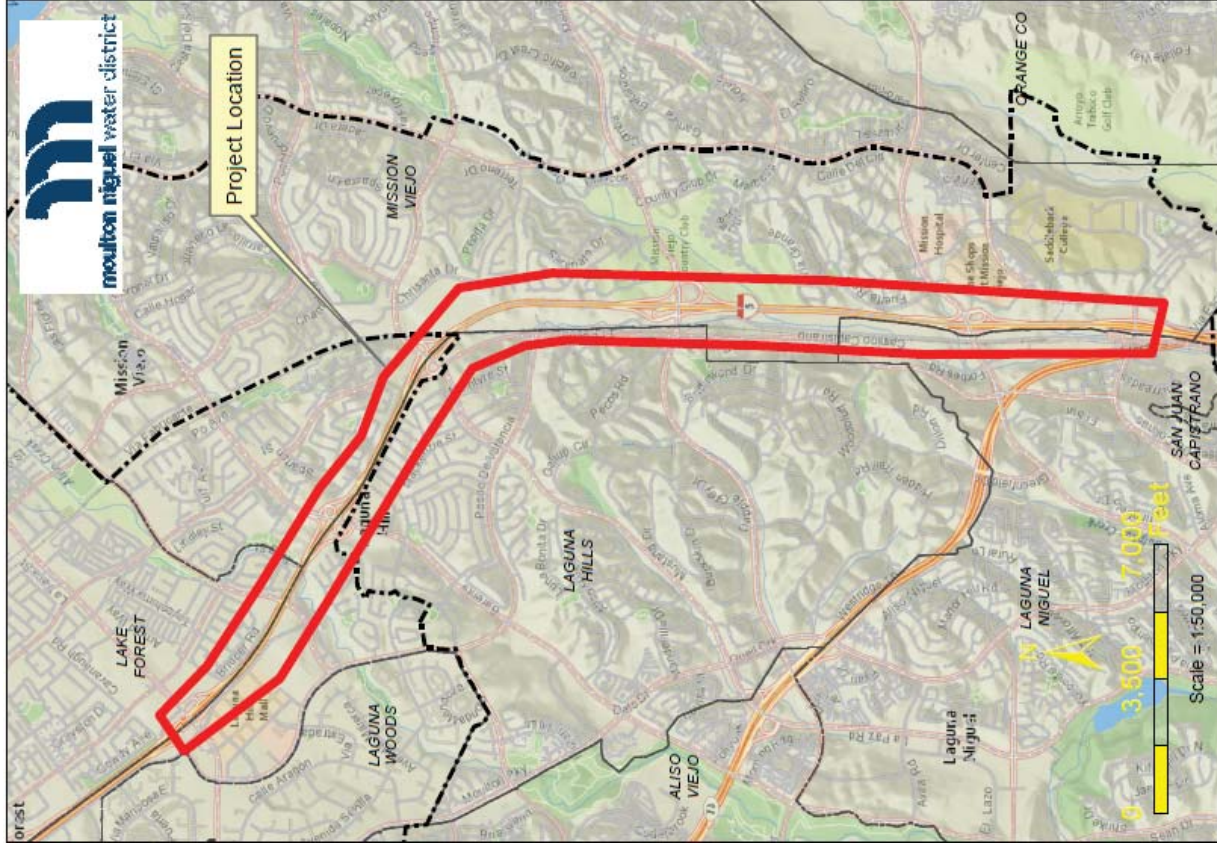
Project Description: The work involves the remediation of District's infrastructure affected by the I-5 Freeway widening project including: the relocation of hydrants and meters; raising of valve and manhole covers to grade; extending pipe casings; and constructing retaining walls.

Project Need: The Caltrans I-5 Freeway widening project will require the District to adjust its infrastructure to accommodate the proposed transportation improvements.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection/Other	\$50,000
Total Project Budget	\$400,000



Capital Improvement Program – Project Description

Project No: 2017.019

System: Potable

Fund: 14

Project Name: Secondary Feed for the 1050 Zone

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

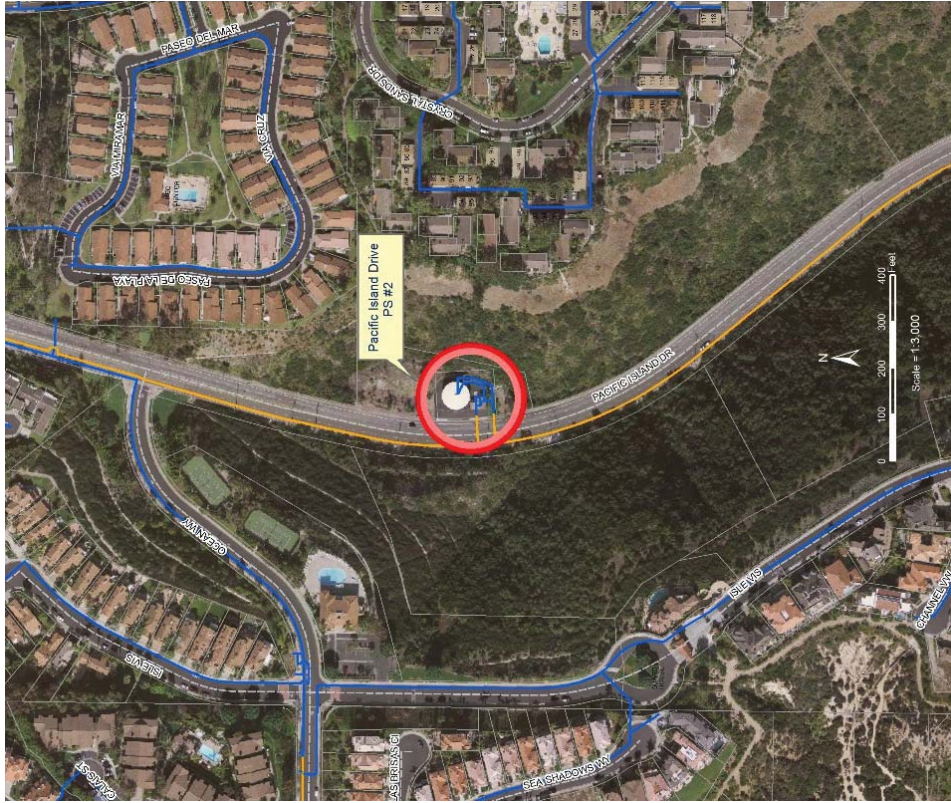
Project Description: Install approximately 2,000 linear feet of 12-inch pipe. Construct a standalone, back-up, pump station at the PID Pump Station No. 2 site.

Project Need: Provide a secondary feed for the 1050 pressure zone closed system. The secondary feed will receive water from the 920 pressure zone and pump it to the 1050 zone. The improvements will establish redundancy and more liability to the 1050 zone.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Preliminary Design	\$100,000
Design	\$150,000
CEQA Compliance	\$80,000
Construction Contract	\$2,400,000
Inspection, Other	\$50,000
Total Project Budget	\$2,780,000



Capital Improvement Program – Project Description

Project No: 2018.007

System: Potable

Fund: 7

Project Name: 2018-19 Reservoir Management System Replacement

Project Location: Aliso Hills, Aliso Summit, Rolling Hills, Sheep Hills, and Bear Brand Reservoir Sites

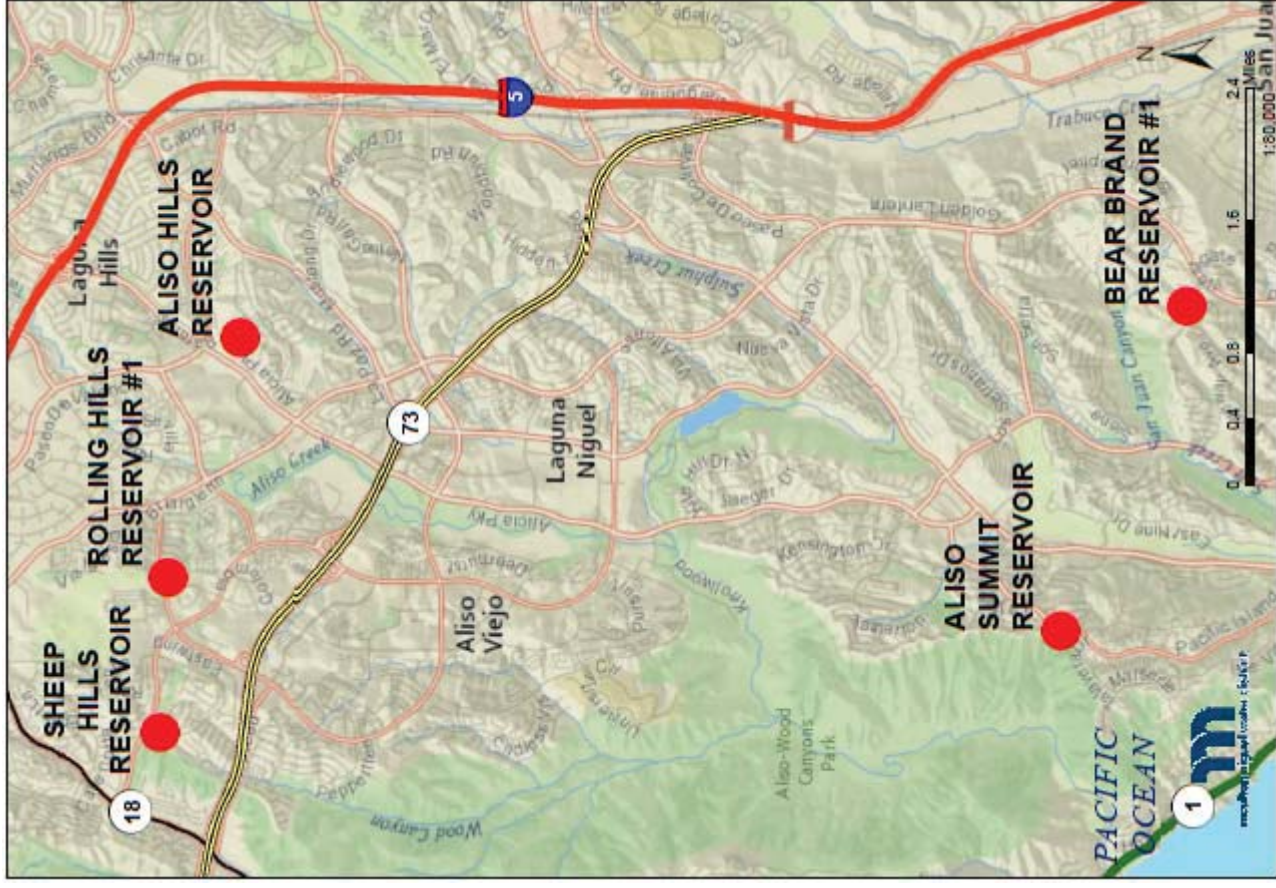
Project Description: Remove existing on-site generation water quality reservoir management systems and protective structures and replace with new water quality reservoir management systems and permanent style buildings. The work will include the installation of liquid sodium hypochlorite and ammonia water quality reservoir management systems.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$530,000
CEQA Compliance	Exempt
Construction Contract	\$5,230,000
Legal/Permits/Other	\$25,000
Special Inspection	\$400,000
Total Project Budget	\$6,185,000



Capital Improvement Program – Project Description

Project No: 2018.010

System: Potable

Fund: 7

Project Name: 2018-19 Valve Replacement

Project Location: Various

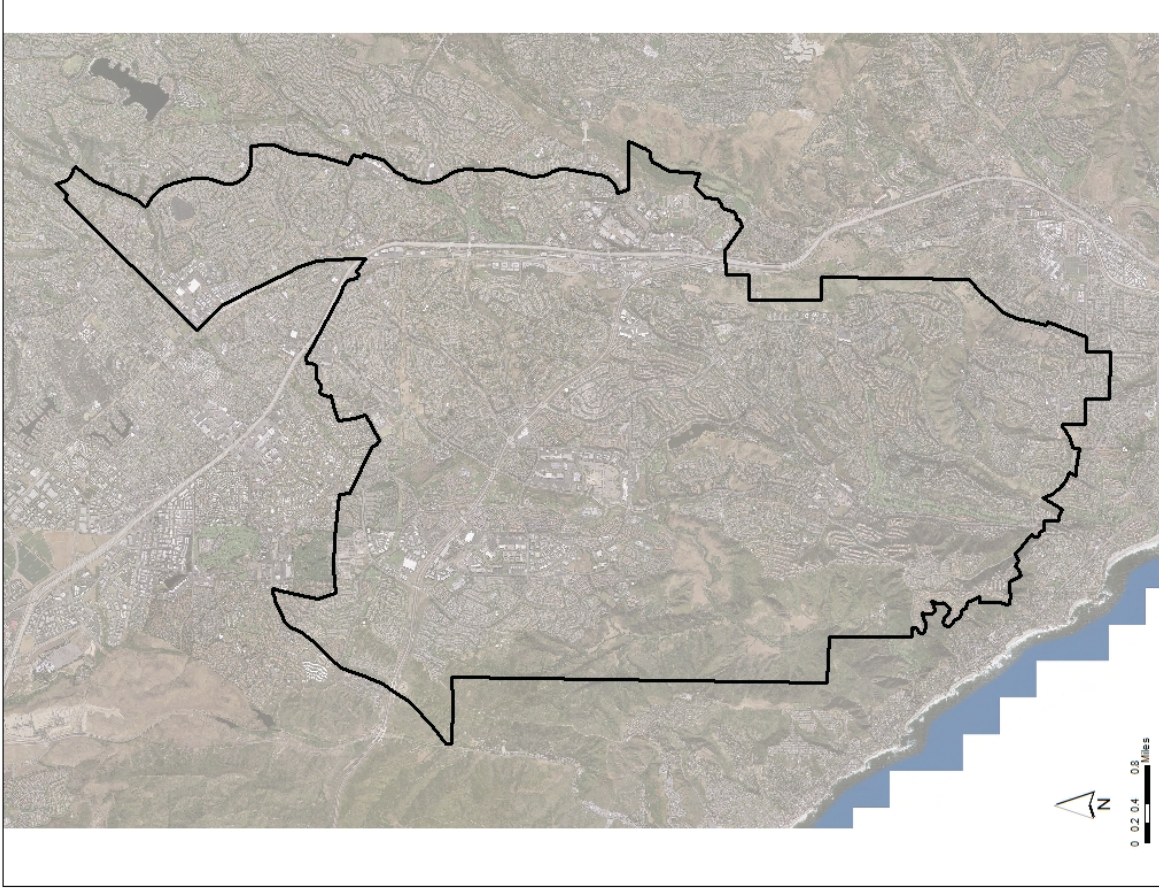
Project Description: Replace pipeline in-line valves.

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 by the District's Valve Crew.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$85,000
CEQA Compliance	Exempt
Construction Contract	\$1,700,000
Inspection/Other	\$40,000
Construction by District	\$1,175,000
Total Project Budget	\$3,000,000



Capital Improvement Program – Project Description

Project No: 2018.014

System: Potable

Fund: 7

Project Name: *Camino Capistrano PW Pipeline Relocation*

Project Location: Laguna Niguel

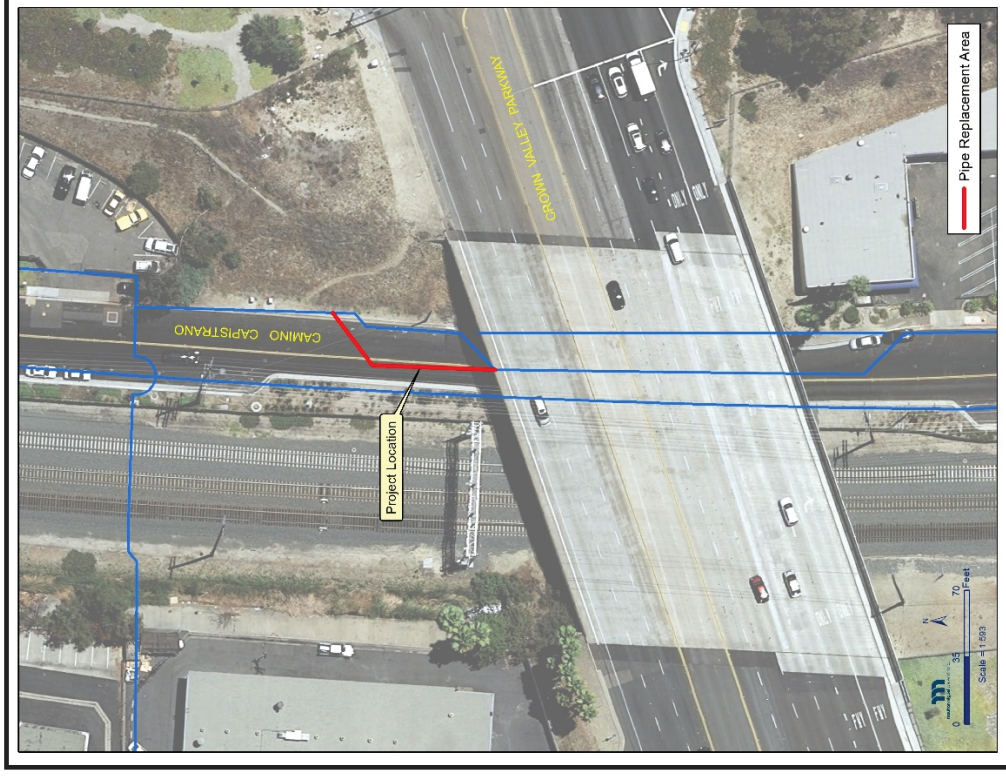
Project Description: Replace approximately 100 feet of existing 8" and 10" PW Main Pipeline with new 8" PW Pipeline in Camino Capistrano, underneath the existing Crown Valley Parkway Bridge. In addition, relocate a number of appurtenances in Forbes Road to stay behind new street curb face alignment.

Project Need: The City of Laguna Niguel is performing roadway improvements in Crown Valley Parkway, including new medians, curb and gutter, and bridge improvements over Camino Capistrano. The District's existing PW pipeline in Camino Capistrano conflicts with a proposed new bridge footing. This project will relocate the existing PW pipeline to avoid the conflict with the new design improvements. Additionally, the City of Laguna Niguel will be performing street improvements on Forbes Road.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance/Legal	Exempt
Construction Contract	\$75,000
CM/Inspection/Permits/Other	\$5,000
Total Project Budget	\$120,000



Capital Improvement Program – Project Description

Project No: 2018.022

System: Potable

Fund: 7

Project Name: *Southerly Takeout Rehabilitation*

Project Location: SWC Aliso Creek Rd & Alicia Parkway, Laguna Niguel

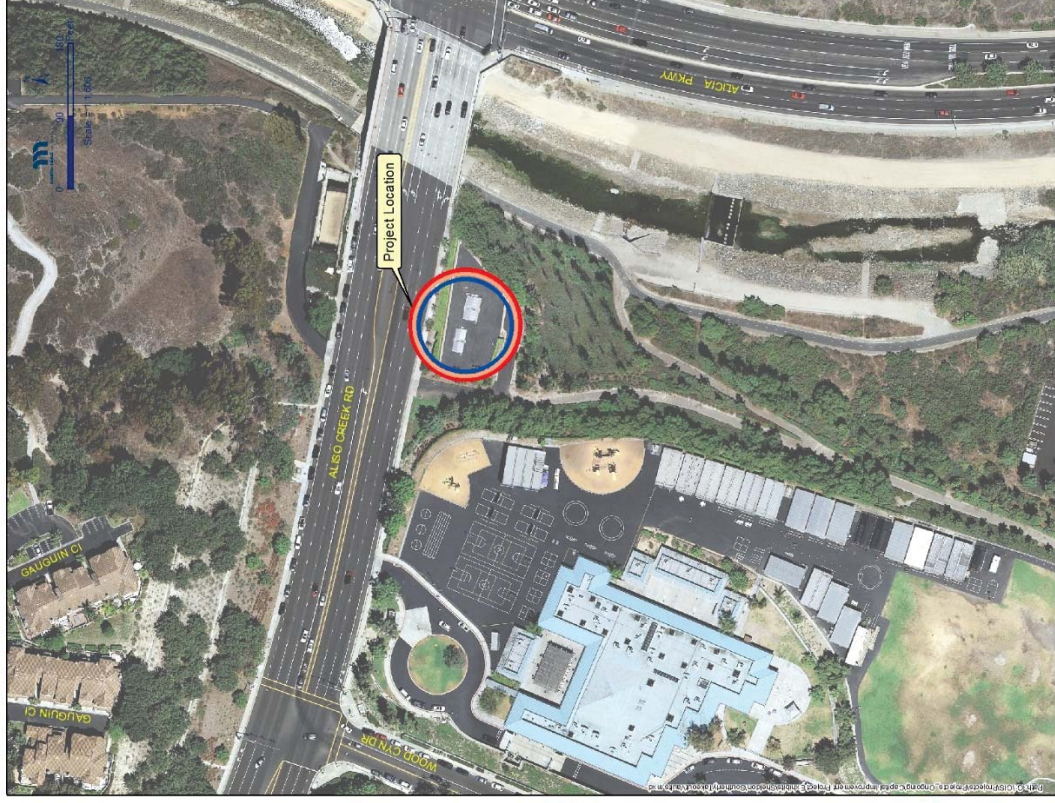
Project Description: Abandon bypass vault. Replacing piping, valves and appurtenances in flow control vault. Remove and replace the existing vault hatch on flow control vault with new sectional hatch.

Project Need: Bypass vault is no longer needed. Existing piping, valves and appurtenances in flow control vault have reached the end of their useful lives and are in need of replacement. The existing vault hatch no longer functions properly making access difficult. Installing a new sectional vault hatch will allow for proper access of personnel and equipment.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$640,000
Inspection/Other	\$10,000
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Fire Hydrant Replacement Program

Project Location: Various

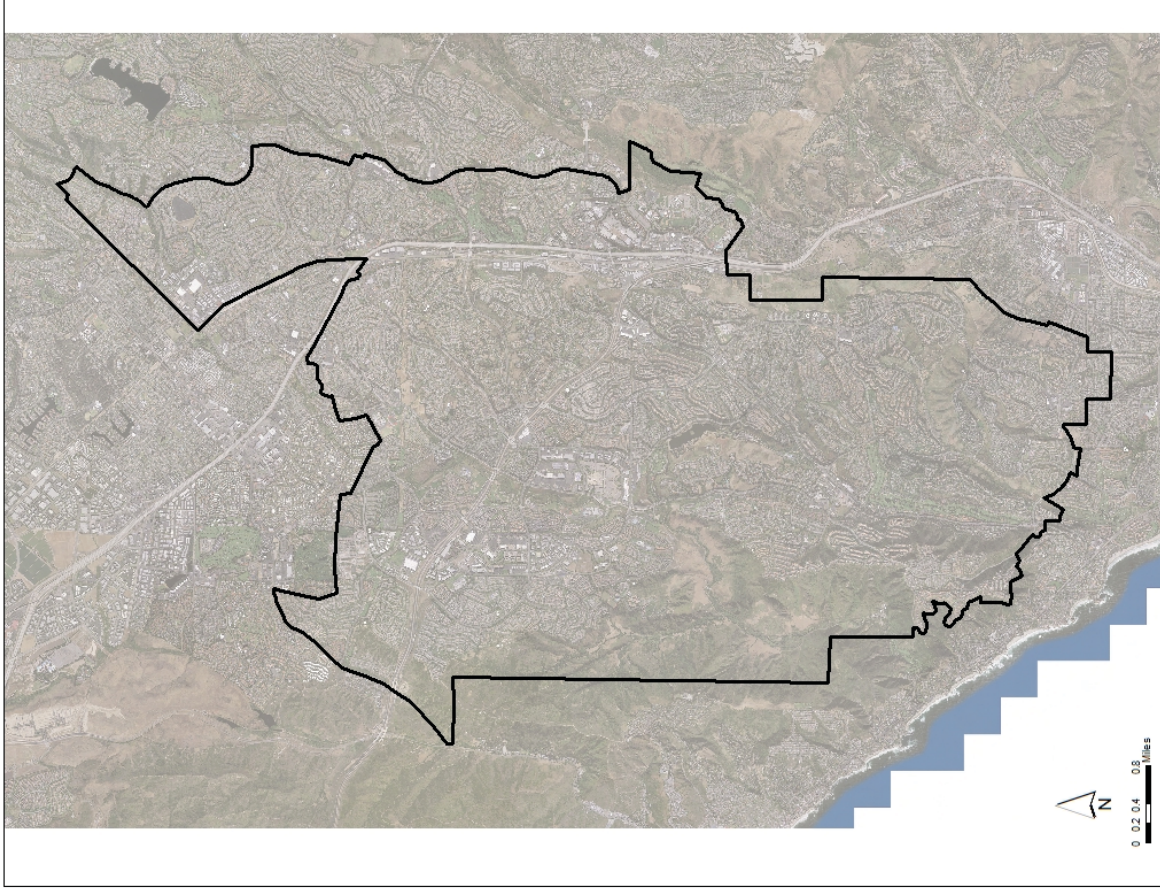
Project Description: Replace existing fire hydrants.

Project Need: The District has approximately 7,000 fire hydrants in the potable water system. This program will replace existing fire hydrants as they reach the end of their useful lives.

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

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction by District	\$900,000
Total Project Budget	\$900,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: *Meter Replacement Program - PW*

Project Location: Various

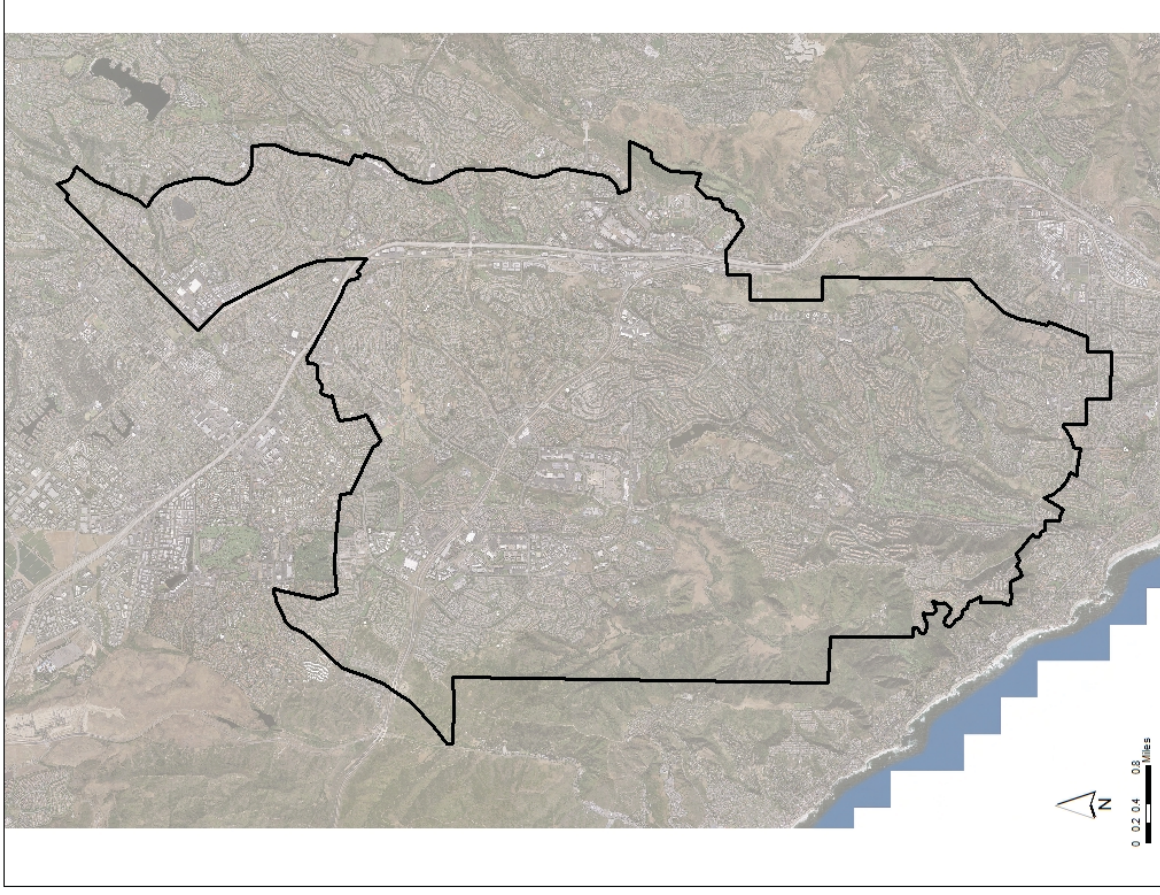
Project Description: Replace existing meters.

Project Need: The District has approximately 55,000 meters in the potable water system. This program will replace existing meters as they reach the end of their useful lives.

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

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction	\$4,750,000
Total Project Budget	\$4,750,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Pipeline Rehabilitation and Replacement Program – PW

Project Location: Various

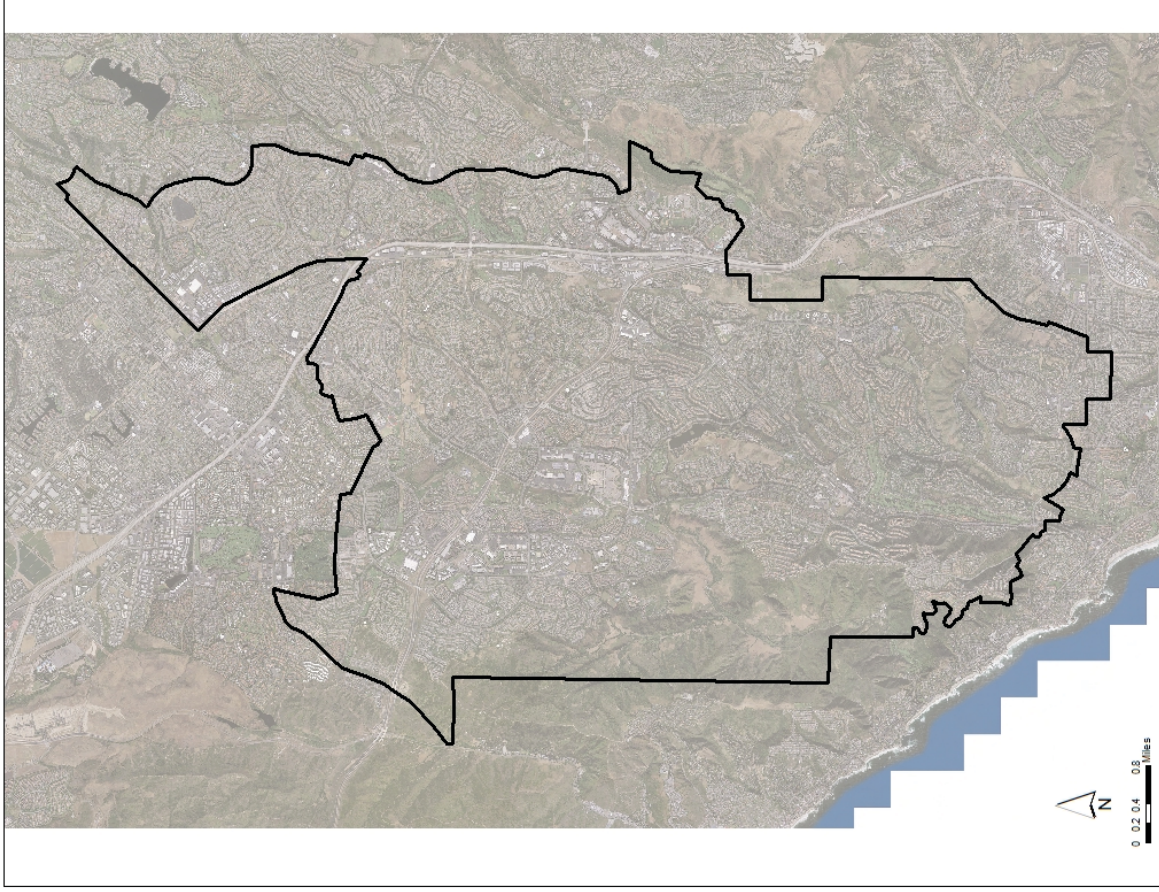
Project Description: Rehabilitate or replace pipelines that have reached the end of their useful lives. An analysis was performed using information contained in the District's Geographic Information System (GIS) to prioritize potable water pipelines for rehabilitation and replacement.

Project Need: The District has approximately 680 miles of potable water pipelines in the system. These pipelines are used to convey potable water to customers throughout the District's service area. The pipelines range in diameter from 4-inch to 54-inch and are made of various materials including PVC, asbestos-cement, ductile iron, steel, and concrete.

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

Estimated Project Amount:

Item	Estimated Cost
Design	\$1,680,000
CEQA Compliance	\$280,000
Construction Contract	\$11,900,000
Inspection/Other	\$140,000
Total Project Budget	\$14,000,000



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	\$330,000
CEQA Compliance	Exempt
Construction Contract	\$3,000,000
Legal/Permits/Other	\$25,000
Special Inspection	\$225,000
Total Project Budget	\$3,580,000



Sites for RMS Facilities

Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Reservoir Recoating Program – PW Program

Project Location: Various

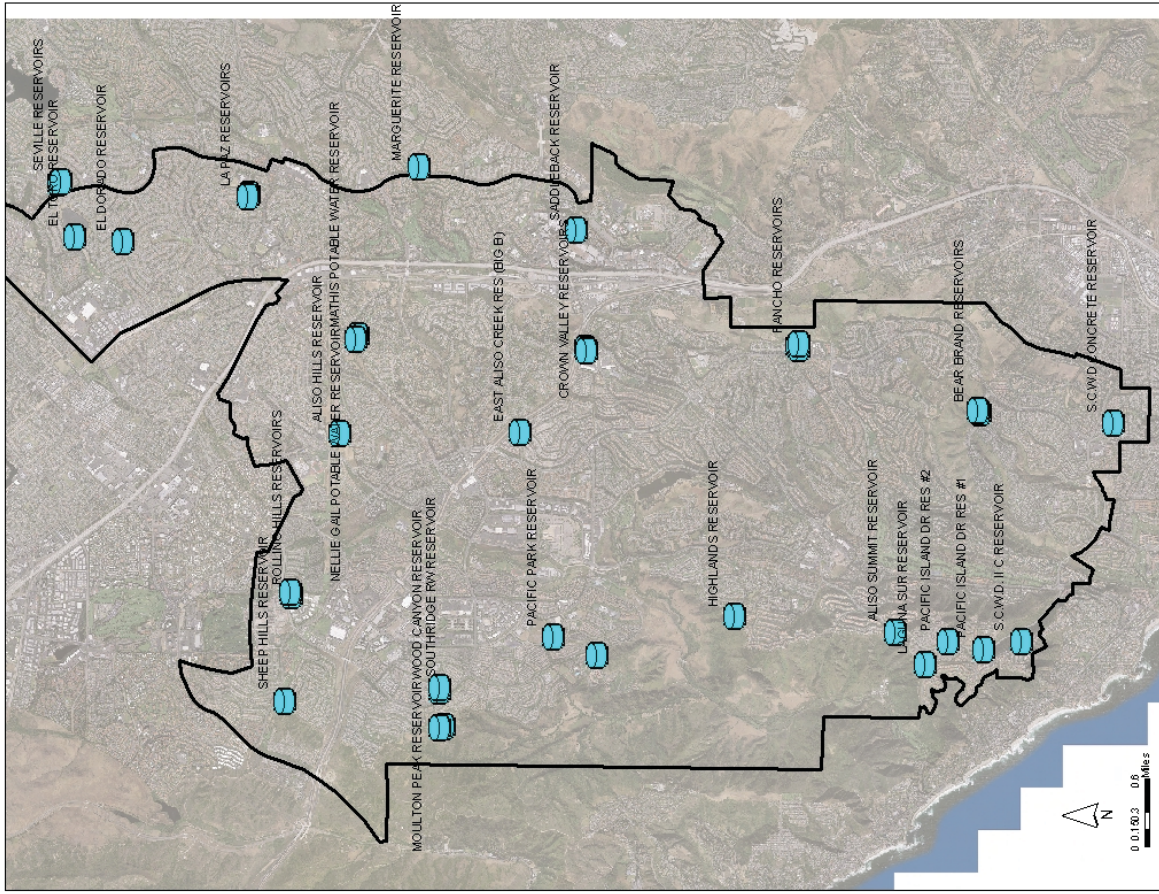
Project Description: Recoat the interior and exterior of steel reservoirs in the potable system.

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	\$400,000
CEQA Compliance	Exempt
Construction Contract	\$10,440,000
Inspection	\$960,000
Total Project Budget	\$11,800,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: Service Line Replacement Program – PW

Project Location: Various

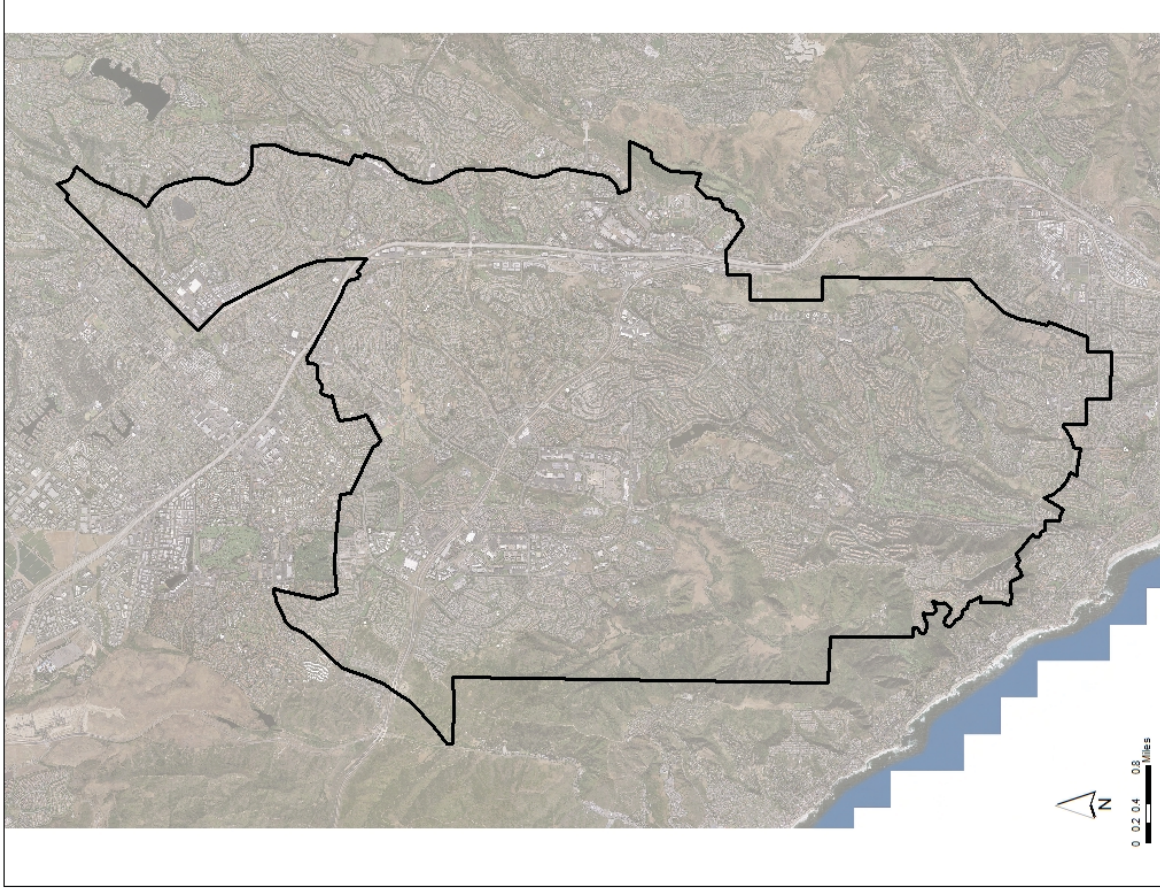
Project Description: Replace existing service lines.

Project Need: The District has approximately 55,000 services in the potable water system. The service lines are used to connect distribution piping to customer meters. This program will replace service lines as they reach the end of their useful lives.

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

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance Exempt	
Construction by District	\$11,700,000
Total Project Budget	\$11,700,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

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

Project Location: Various

Project Description: Construct the recommendations from Project No.

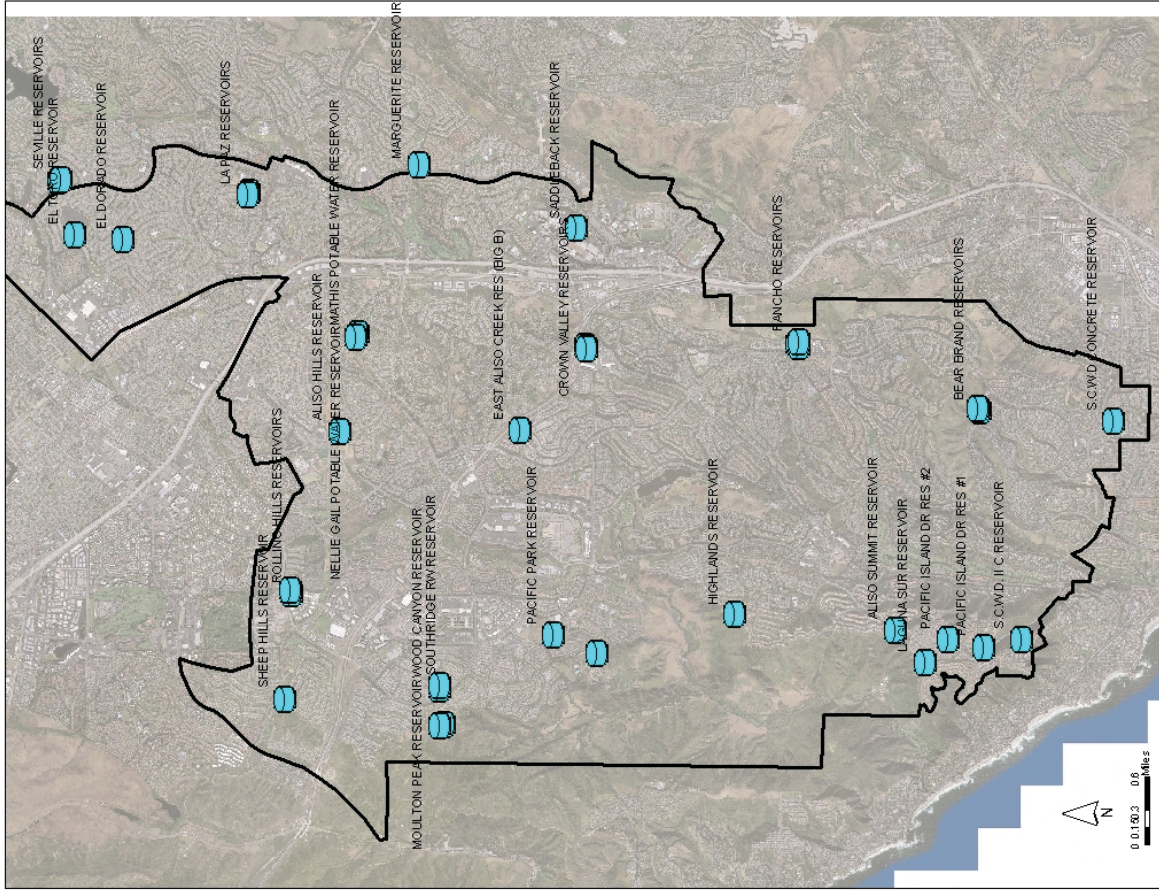
2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

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: Various

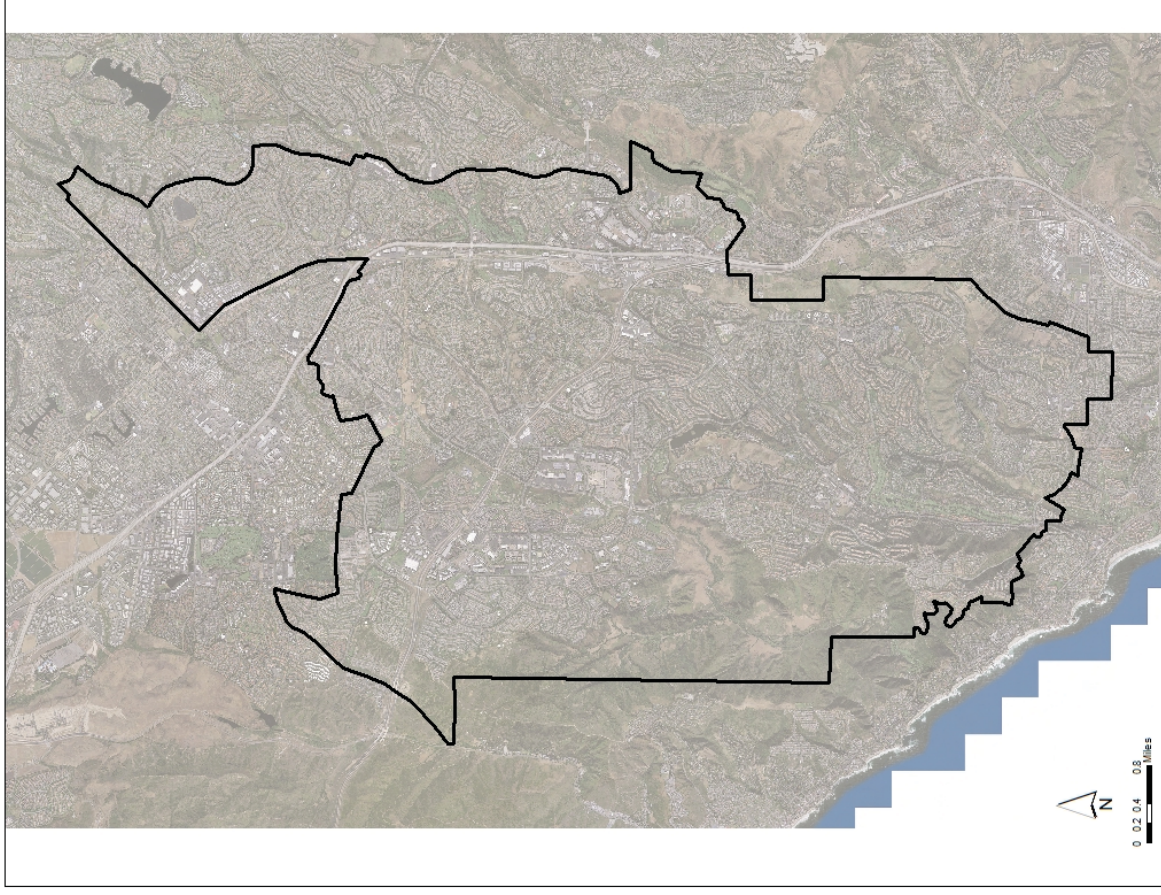
Project Description: Replace pipeline valves.

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	\$450,000
CEQA Compliance	Exempt
Construction Contract	\$9,200,000
Inspection/Other	\$150,000
Construction by District	\$9,600,000
Total Project Budget	\$19,400,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Potable

Fund: 7

Project Name: *Vertical Assets Rehabilitation and Replacement Program – PW*

Project Location: Various

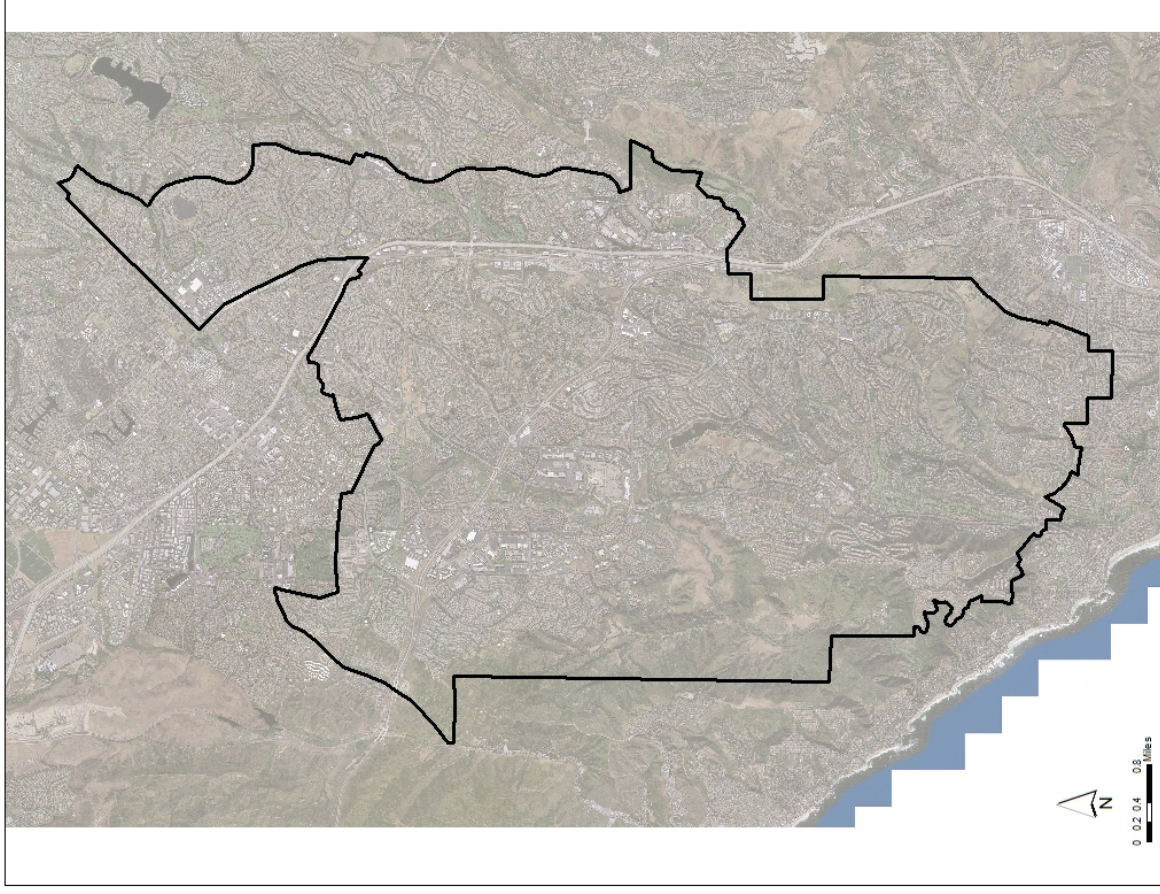
Project Description: Rehabilitate or replace structures and equipment at pump station, flow control and pressure reducing stations that have reached the end of their useful lives. An analysis was performed by staff to prioritize the methodical rehabilitation or replacement of vertical assets within the potable water system.

Project Need: The District has 23 active pump stations, 6 active flow control facilities, and 14 active pressure reducing stations in the potable water system. These vertical assets are used to convey potable water to customers throughout the District's service area. As the facilities reach the end of their useful lives, the equipment there becomes obsolete, does not function efficiently, and requires 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	\$4,250,000
CEQA Compliance	Exempt
Construction Contract	\$28,500,000
Inspection/Other	\$4,250,000
Total Project Budget	\$37,000,000



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.

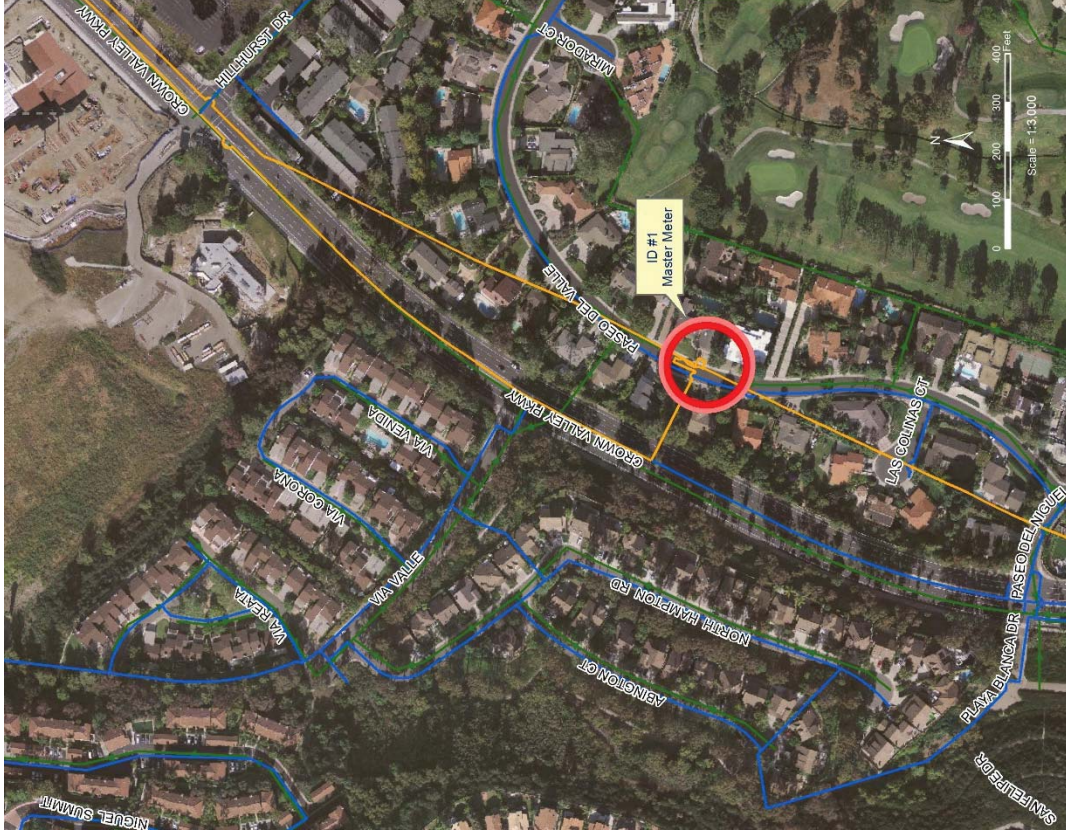
Project Need: JRWSS will be relocating the JTM out of the housing track on Paseo Del Valle and into Crown Valley Parkway. I.D. Master Meter will need to be relocated and connected to the new part of the JTM or at a different location, depending on site availability. The JRWSS project has been deferred. 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 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: 2017.016

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 and up to 100% of the 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	\$400,000
CEQA Compliance	\$50,000
Construction Contract	\$4,500,000
Inspection	\$200,000
Total Project Budget	\$5,150,000



Capital Improvement Program – Project Description

Project No: 2018.002

System: Potable

Fund: 6

Project Name: AMI Phase 2

Project Location: Various

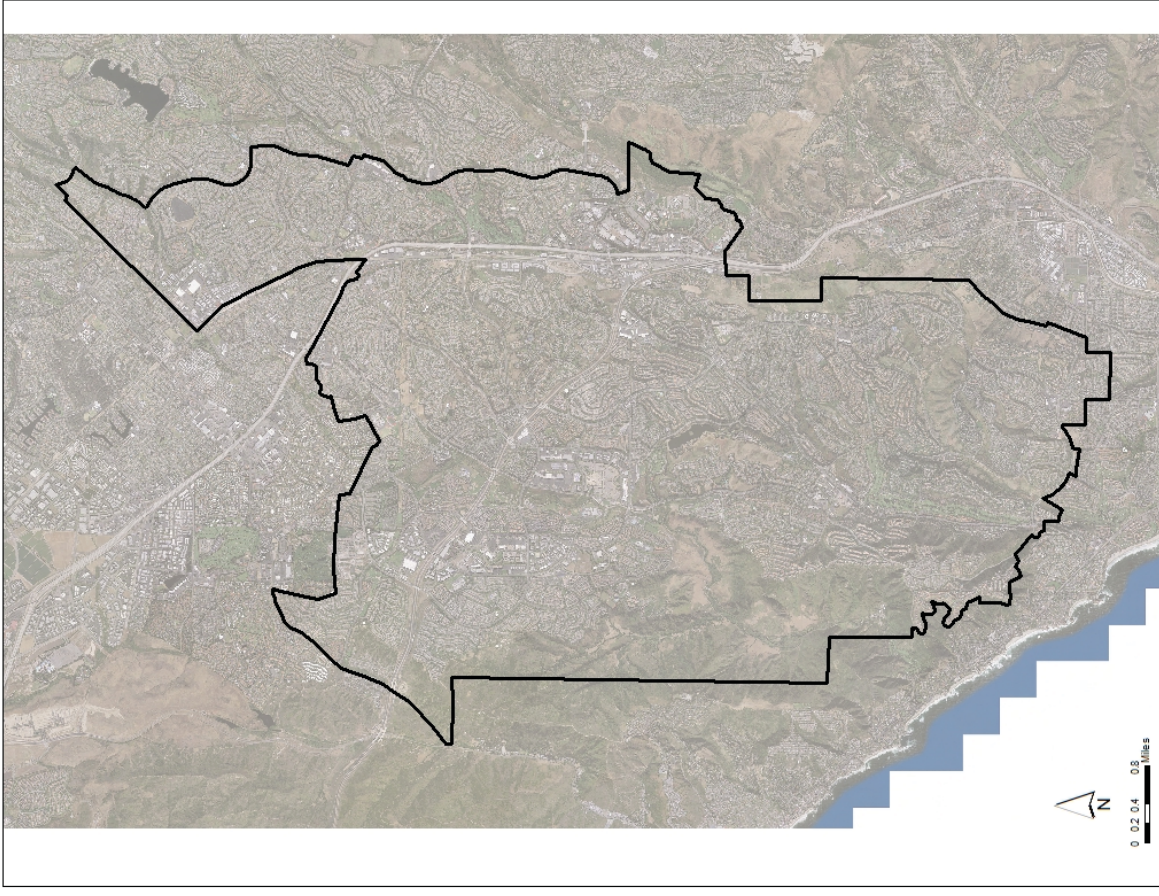
Project Description: In Phase I of the AMI Implementation Program, the District established a remote reading and communication network with coverage of the entire service area and implemented a customer portal for the District's Potable and Recycled Water Irrigation as well as 1,800 residential customers 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	\$600,000
Total Project Budget	\$600,000



Capital Improvement Program – Project Description

Project No: 2018.004

System: Potable

Fund: 7

Project Name: 2018-19 Electrical System Improvements - PW

Project Location: Country Village Pump Station, Laguna Niguel; Pacific Park Pump Station & Sheep Hills Pump Station, Aliso Viejo

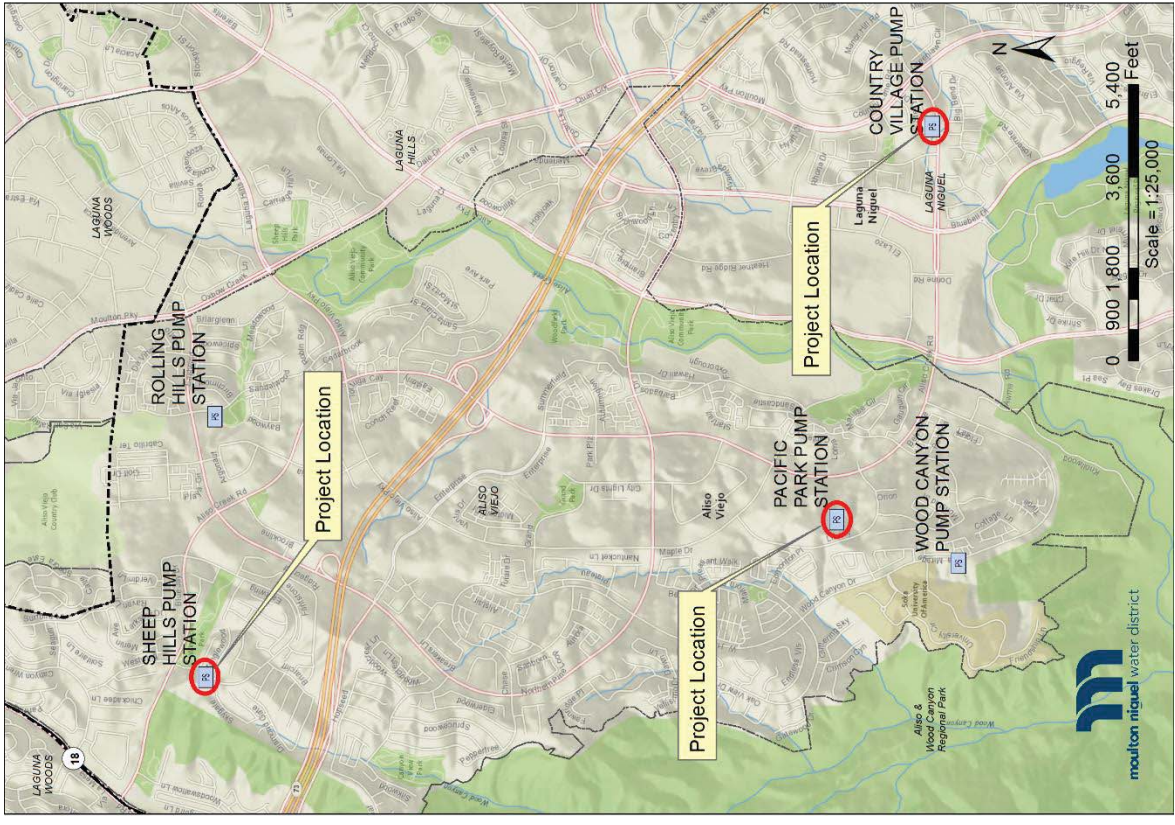
Project Description: Replace 1600A MCC, 600A E-MCC, and Load Bank Circuit Breaker at Country Village PS. Temporary switchgear will be required to maintain operation during construction. Replace Meter/Main Section at Pacific Park PS. Replace Meter/Main Section and MCC at Sheep Hills PS.

Project Need: The noted electrical equipment at each facility is old and beyond their useful lives. If these existing electrical components remain, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$850,000
Inspection/Utility Fees/Other	\$150,000
Total Project Budget	\$1,200,000



Capital Improvement Program – Project Description

Project No: 2018.017

System: Potable

Fund: 7

Project Name: *Mira Vista Easement Pipeline Rehabilitation*

Project Location: Mira Vista and Vista Ladera, Laguna Niguel

Project Description: Rehabilitate the existing 8" pipeline located within an easement between cul-de-sacs utilizing trenchless technologies such as CIPP or spray-in lining. Traditional pipeline replacement is not feasible.

Project Need: Rehabilitation of the easement pipeline is required to limit maximum flow velocities in the pipelines during fire-flow events.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$300,000
Permits/Legal/Other	\$10,000
Total Project Budget	\$360,000



Capital Improvement Program – Project Description

Project No: 2018.021

System: Potable

Fund: 7

Project Name: *Sheep Hills Pump Station Improvements*

Project Location: 22404 Aliso Creek Road, Aliso Viejo

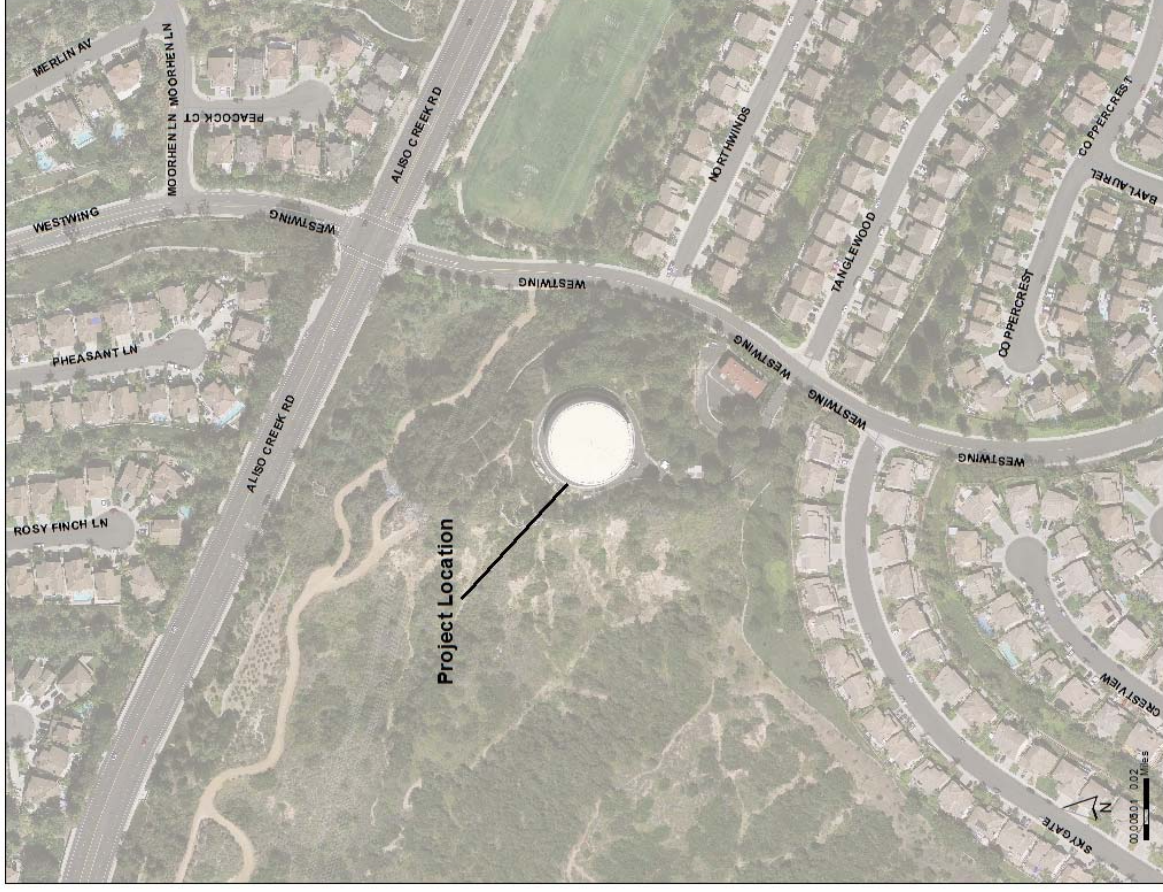
Project Description: Evaluate options to remove and replace the fire pump and natural gas engine with a new diesel generator, including up to three new duty pumps, valves, and associated piping. Ultimate pump station improvements will be based upon recommendations from a hydraulic modeling analysis.

Project Need: The fire pump, three of the duty pumps, and natural gas engine are nearly 30 years old. The equipment has out lived its life expectancy and can no longer be refurbished. A new diesel generator will add reliability to the station.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Preliminary Design Analysis	\$50,000
Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$1,100,000
Inspection/Other	\$75,000
Total Project Budget	\$ 1,325,000



Capital Improvement Program – Project Description

Project No: 2018.025

System: Potable

Fund: 14

Project Name: 750-Zone PW System Extension at Salt Spray Drive

Project Location: Laguna Niguel

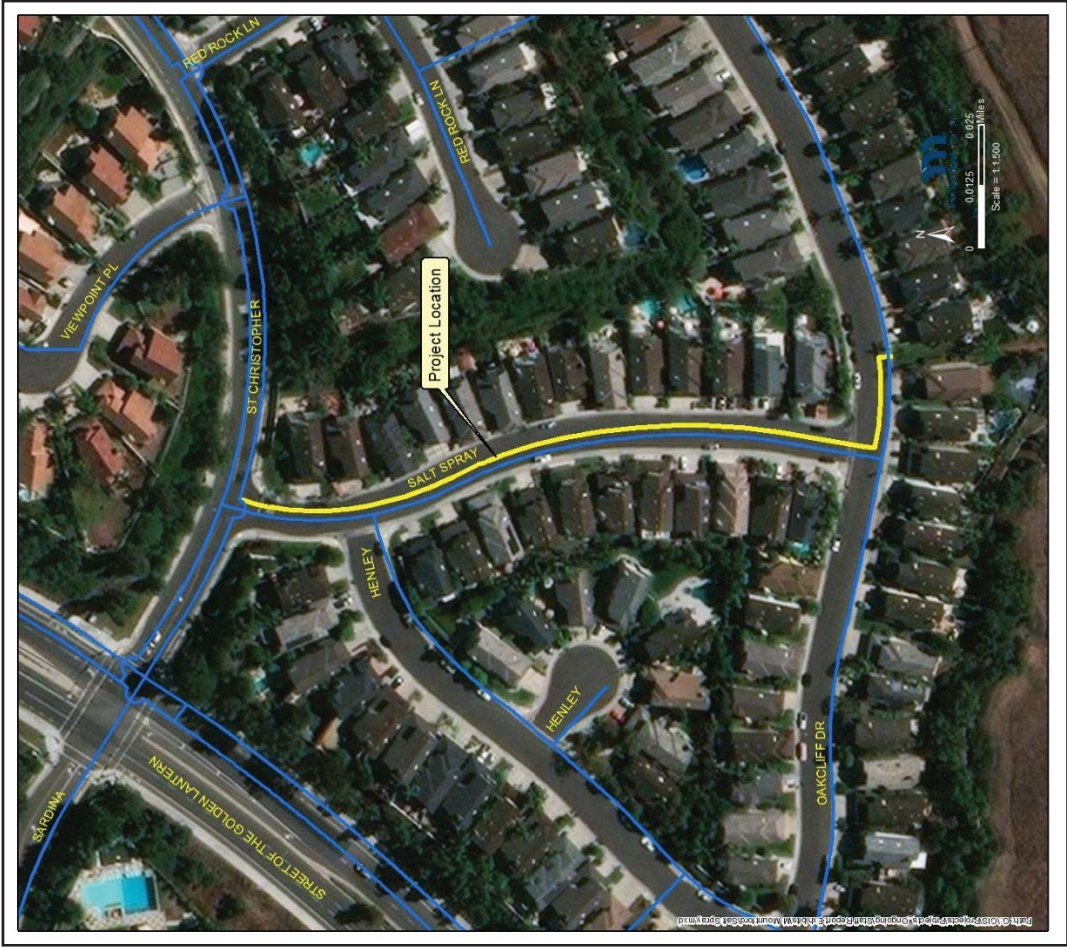
Project Description: Install approximately 800 feet of new 12” PW Main Pipeline @ Salt Spray Drive

Project Need: Pipeline will provide 750 Zone distribution redundancy where none currently exists. Project is contingent upon the installation of a new developer-installed pipeline.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$330,000
Inspection/Other	\$20,000
Total Project Budget	\$400,000



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

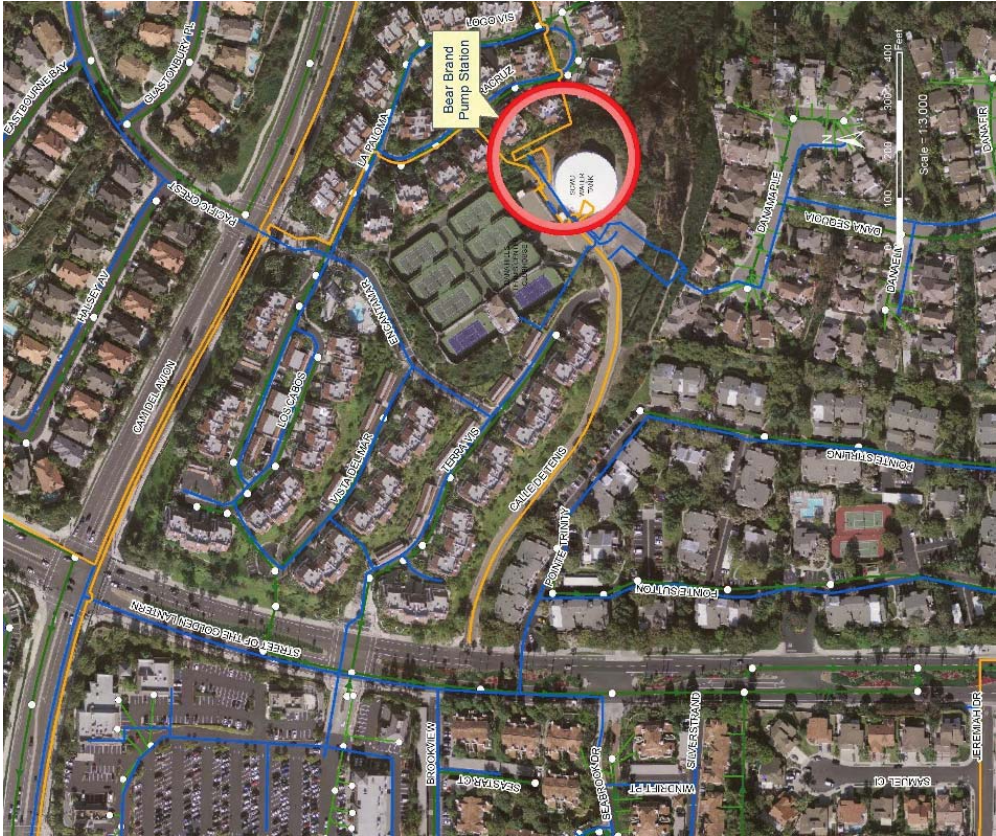
Project Description: Replace existing two pumps and 100 HP and 150 HP motors, and select piping and valves. A hydraulic analysis using District’s water model may be required to verify final design.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection/Other	\$10,000
Total Project Budget	\$435,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

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

Project Location: Crown Valley Reservoir, Laguna Niguel

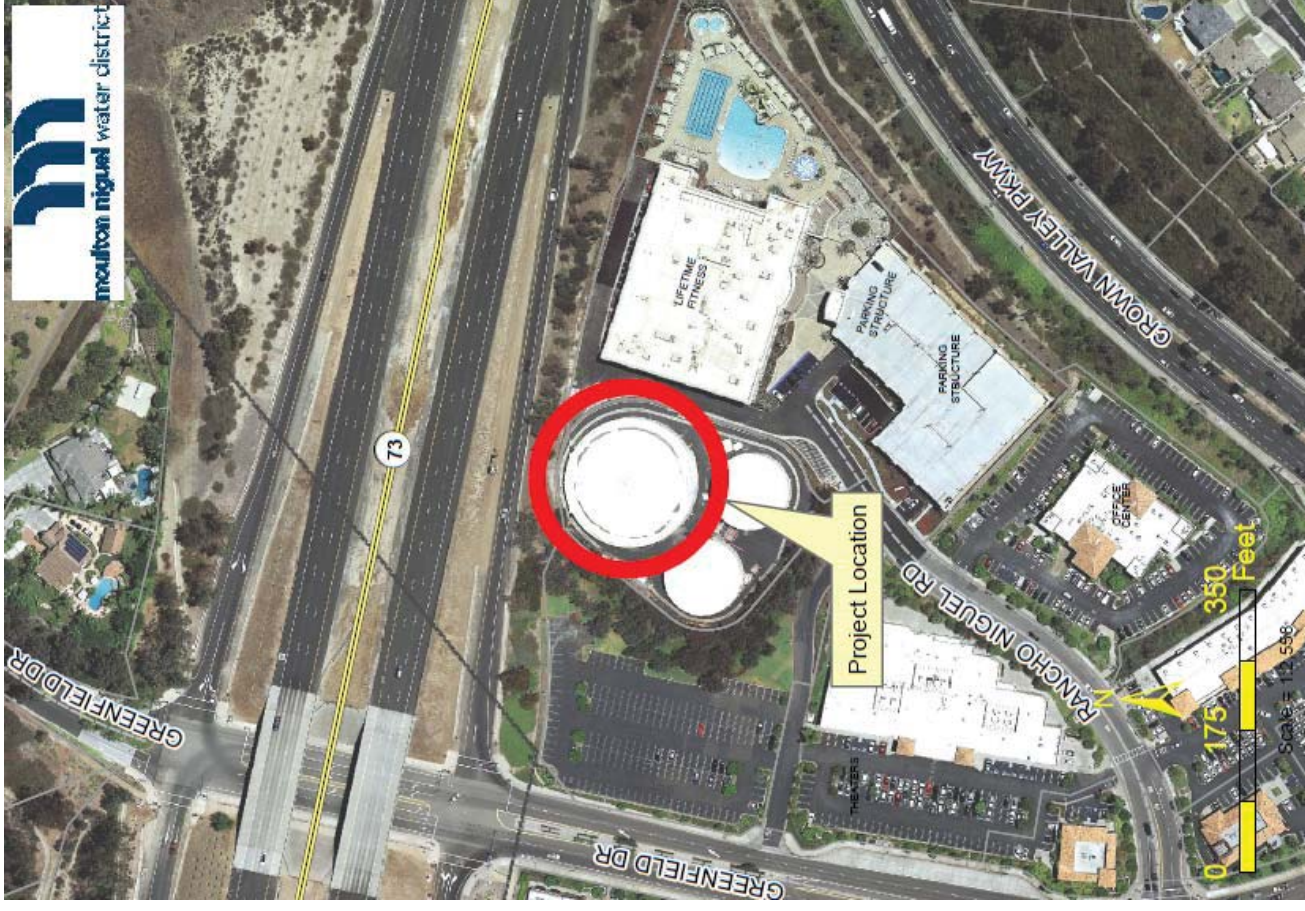
Project Description: The Crown Valley Reservoir No. 3 requires roof plate replacements, interior recoating and exterior roof paint.

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 is 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

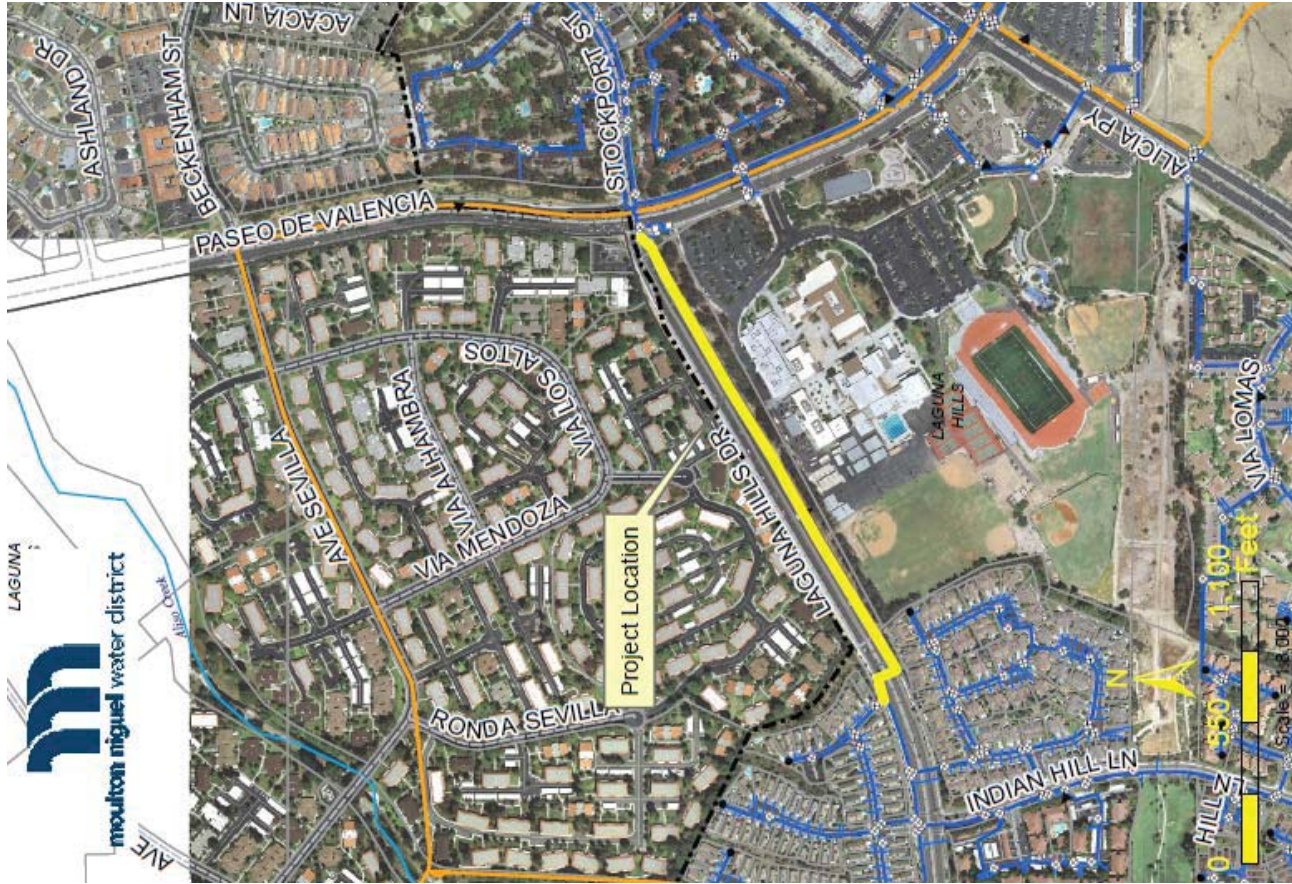
Project Description: Option 1: Abandon about 1,900 linear feet of 8-inch pvc pipe. The work will consist of terminating two connection points to the main and filling the pipe with slurry to properly abandon-in-place. Option 2: Reconfigure zones 450, 470, and 650 to include the installation of various 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: 12

Project Name: *Marguerite/Oso CIP Takeout Facility*

Project Location: Oso Parkway & Marguerite Parkway, Mission Viejo

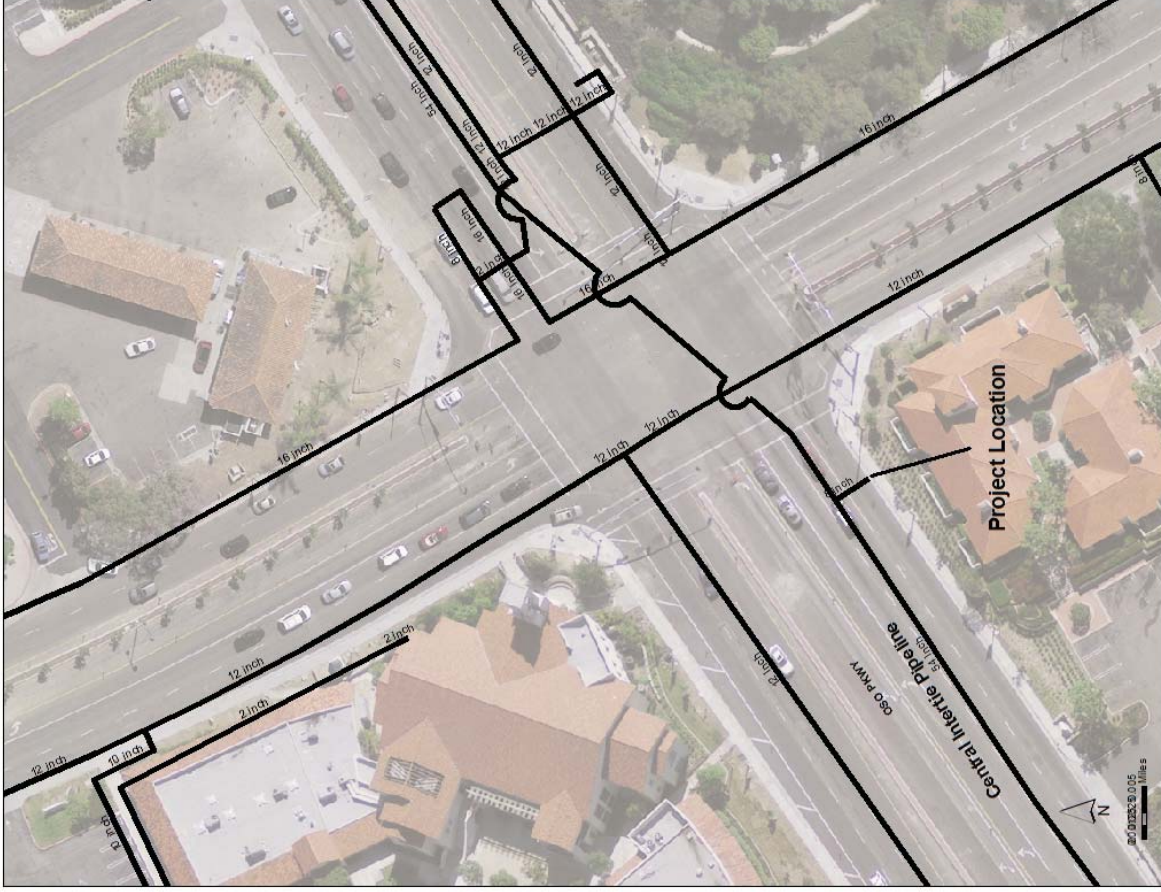
Project Description: Design and construct a flow control facility from the Central Intertie Pipeline (CIP) to the 650 & 750 pressure zones via Marguerite Reservoir.

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	\$2,500,000
Inspection/Other	\$250,000
Total Project Budget	\$3,100,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Pacific Park Pump Station Portable Generator Connection*

Project Location: 27613 Aliso Creek Road, Aliso Viejo

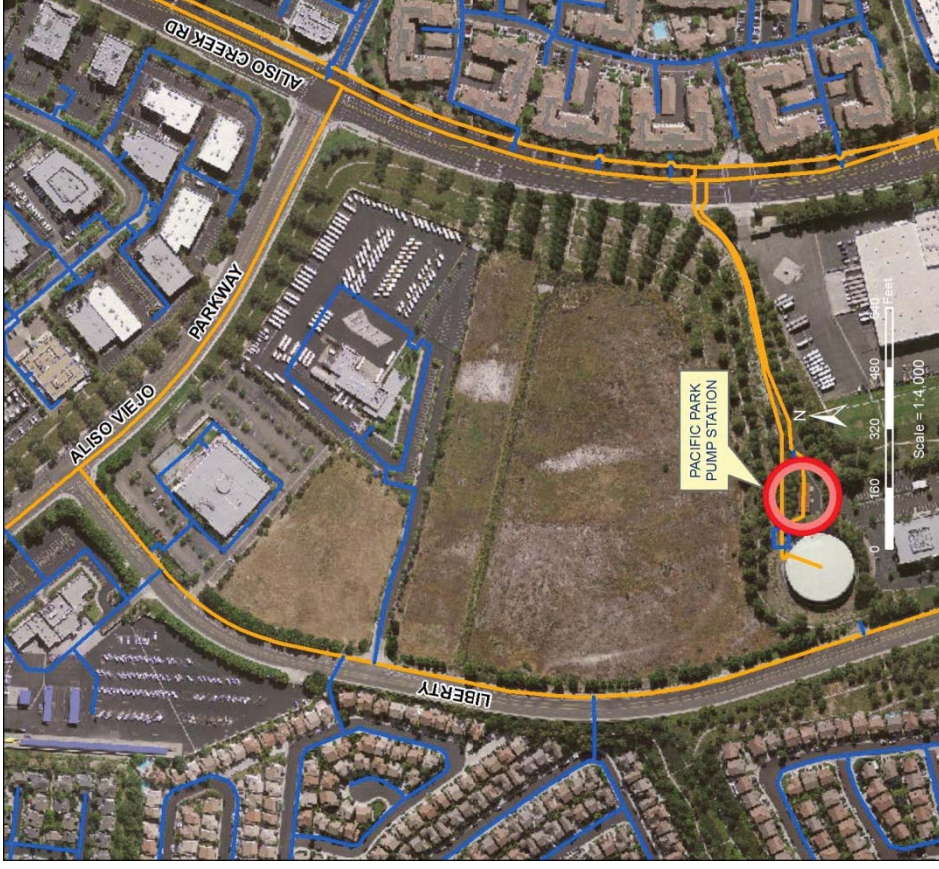
Project Description: Remove the fire pump and natural gas engine. Install a portable generator connection.

Project Need: The existing equipment is nearly 30 years old. The fire pump and natural gas engine have out lived their life expectancy and can no longer be refurbished. A new portable generator connection will add reliability to the station.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$120,000
Inspection/Other	\$5,000
Total Project Budget	\$150,000



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

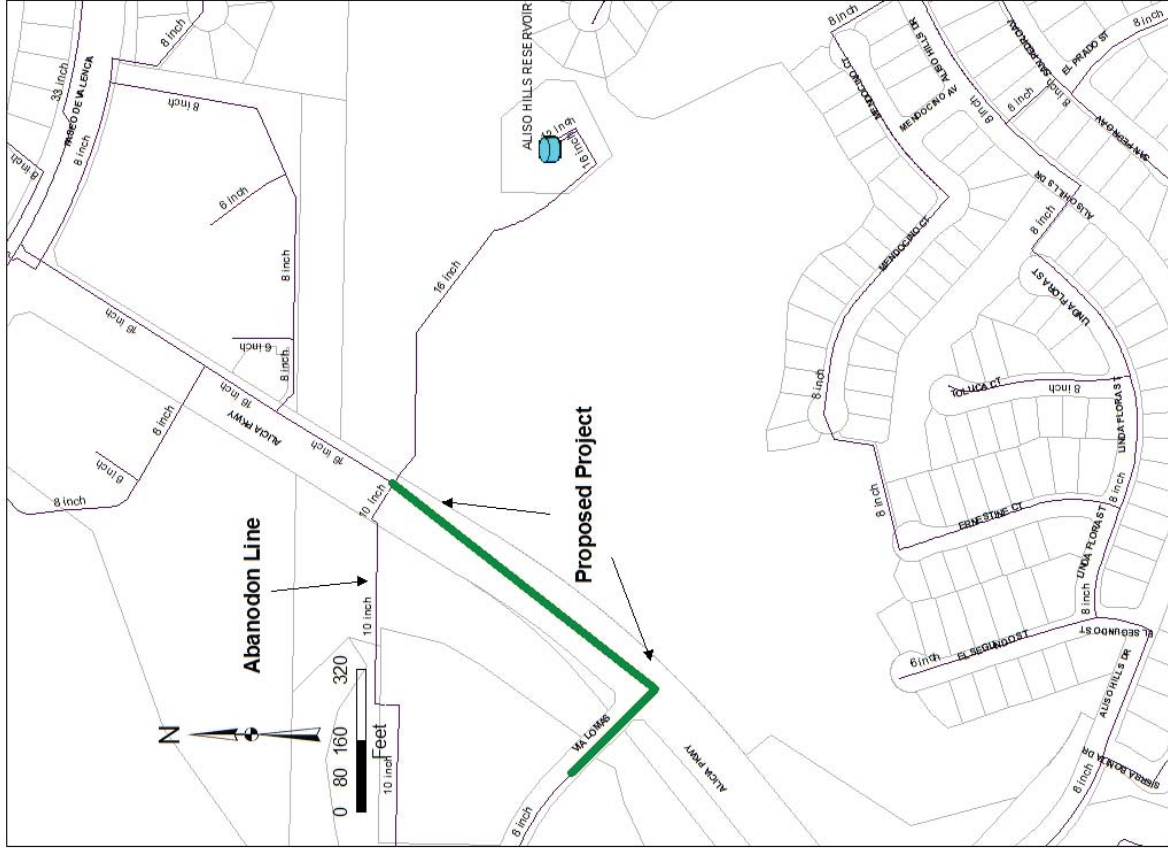
Project Description: Install about 1,000 feet of 10-inch diameter pipe and abandon about 500 feet under Aliso Creek.

Project Need: The existing potable water line under Aliso Creek has reached the end of its useful life. 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	\$350,000
Inspection/Other	\$20,000
Total Project Budget	\$420,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Rolling Hills Pump Station Auxiliary Generator*

Project Location: 25343 Cedarbrook, Aliso Viejo

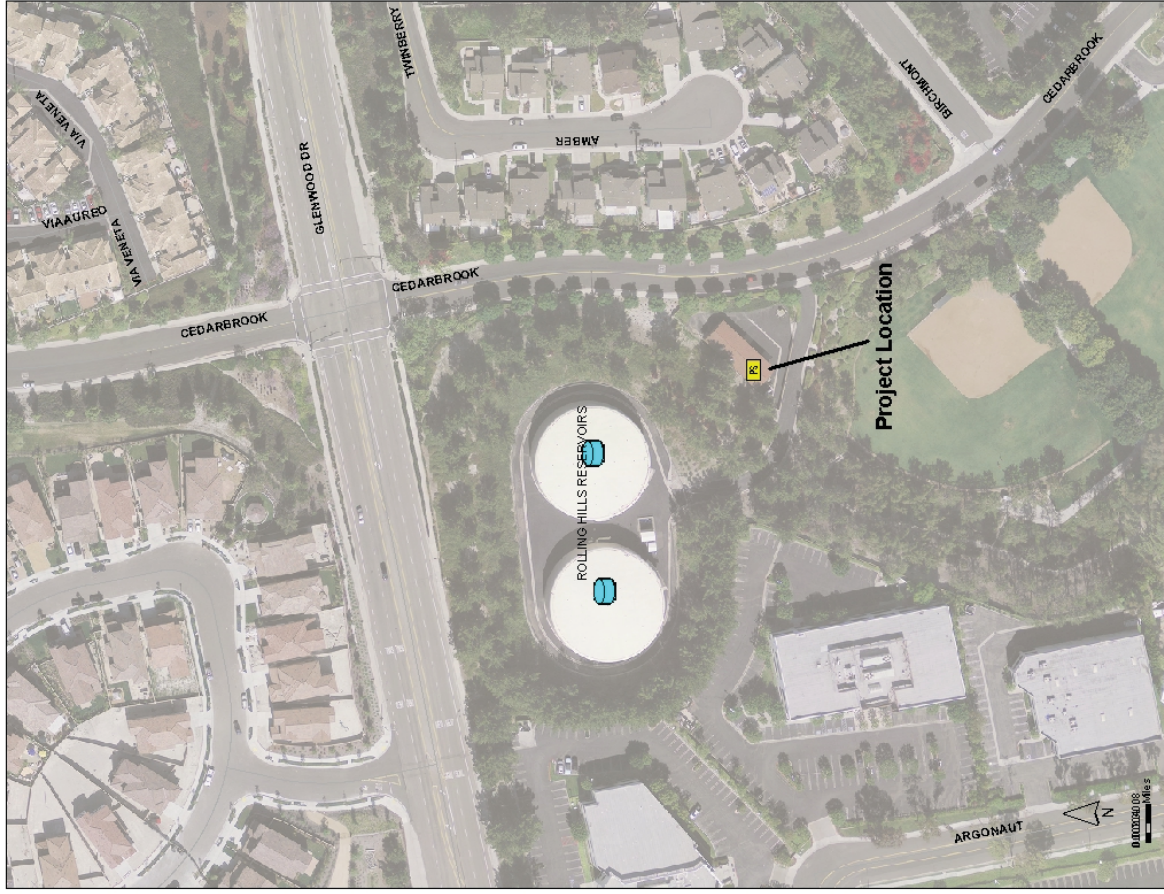
Project Description: Remove and replace the fire pump and natural gas engine with a new auxiliary diesel generator and associated piping. A hydraulic analysis using District's water model may be required to verify final design.

Project Need: The existing equipment is over 30 years old. The fire pump and natural gas engine have out lived their life expectancy and can no longer be refurbished. A new diesel generator will add reliability to the station.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$80,000
CEQA Compliance	Exempt
Construction Contract	\$575,000
Inspection/Other	\$20,000
Total Project Budget	\$675,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Crown Valley and Marguerite Reservoirs Site Paving Replacement

Project Location: Crown Valley Reservoirs, Laguna Niguel; Marguerite Reservoir, Mission Viejo

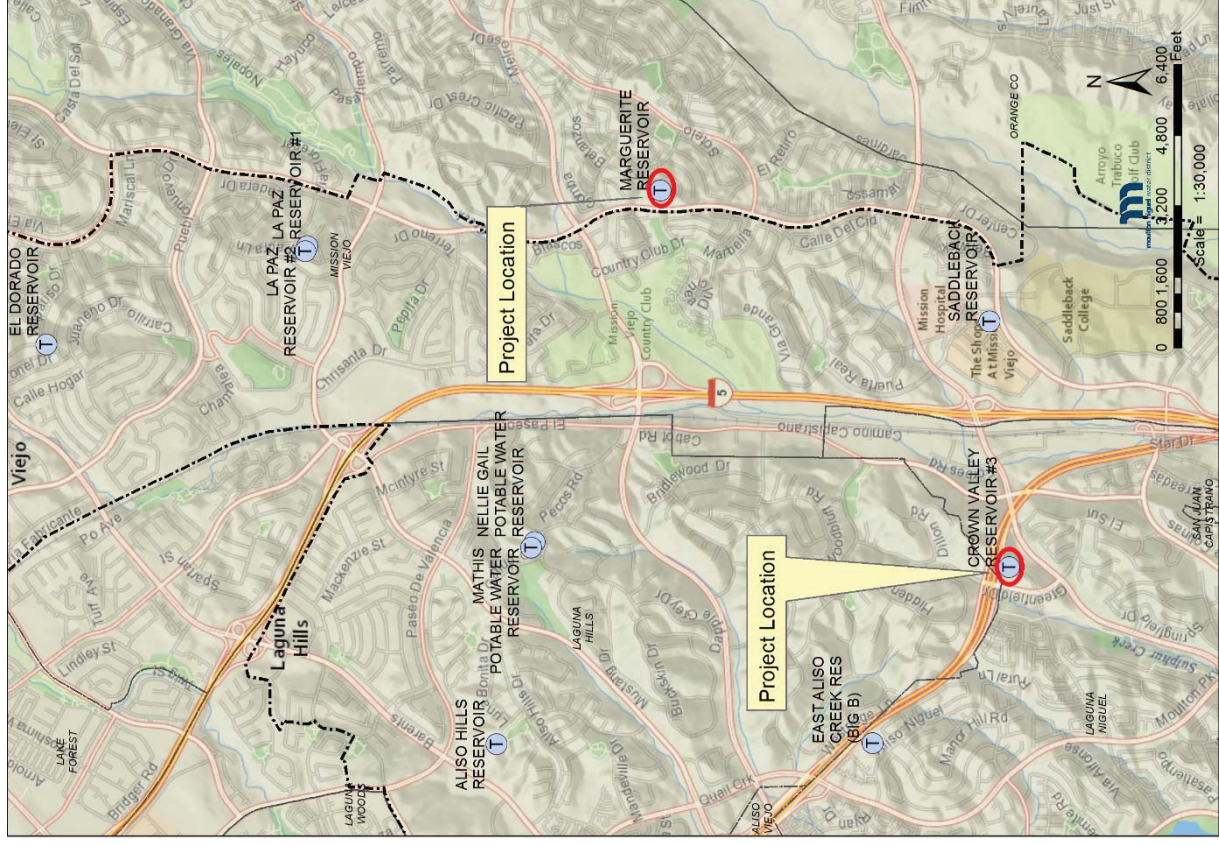
Project Description: Remove ~44,000 sq. ft. existing asphalt paving and replace with new 4" asphalt paving over existing base. Remove and replace ~500 ft. asphalt curb.

Project Need: The existing site paving has exceeded its useful life and is in need of replacement.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$325,000
Inspection/Other	\$50,000
Total Project Budget	\$375,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *East Aliso Creek Reservoir Site Paving Replacement*

Project Location: 27393 Moulton Parkway, Laguna Niguel

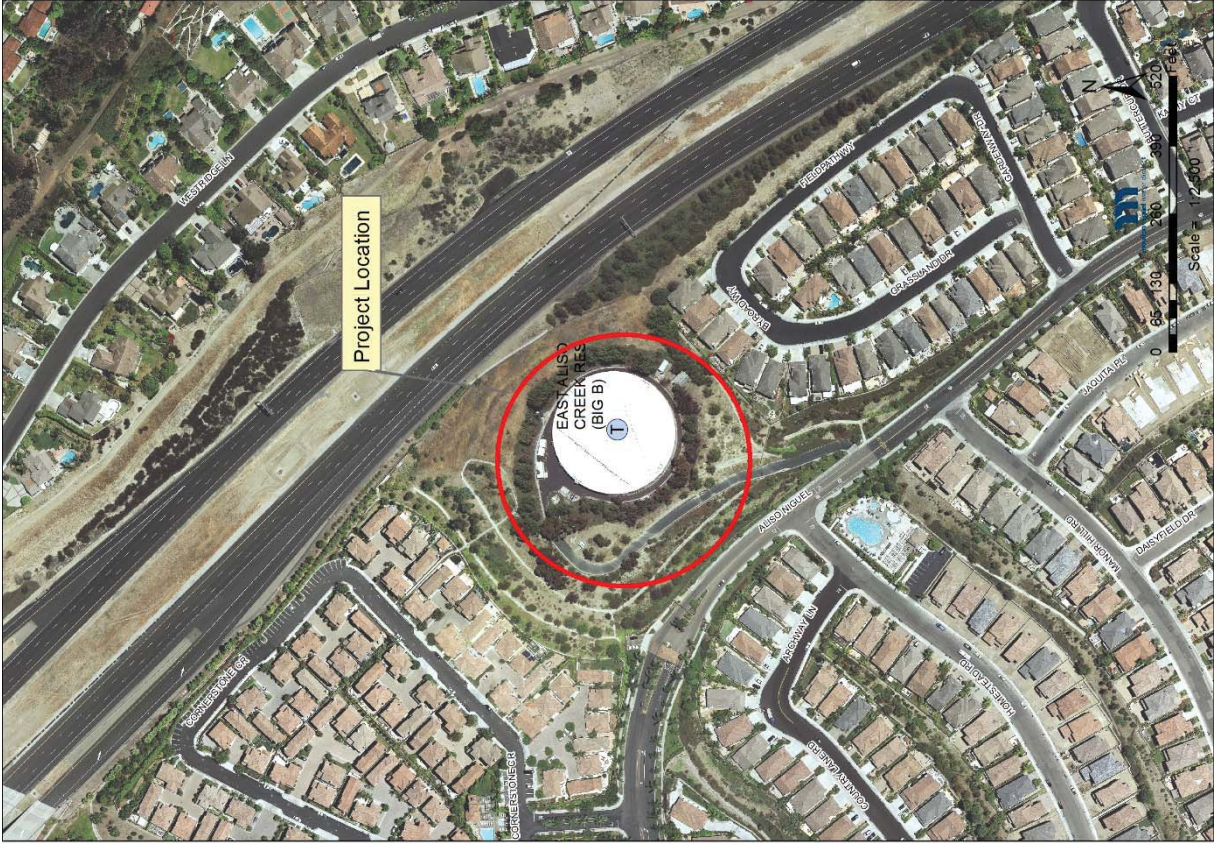
Project Description: Remove ~34,000 sq. ft. existing 2” asphalt paving over 4” base and replace with new 4” asphalt paving over existing base. Remove and replace ~700 ft. asphalt curb.

Project Need: The existing site paving has exceeded its useful life and is in need of replacement.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection/Other	\$25,000
Total Project Budget	\$275,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Rancho Capistrano 450-Zone Service*

Project Location: Rancho Capistrano (Schuller's Ranch), San Juan Capistrano

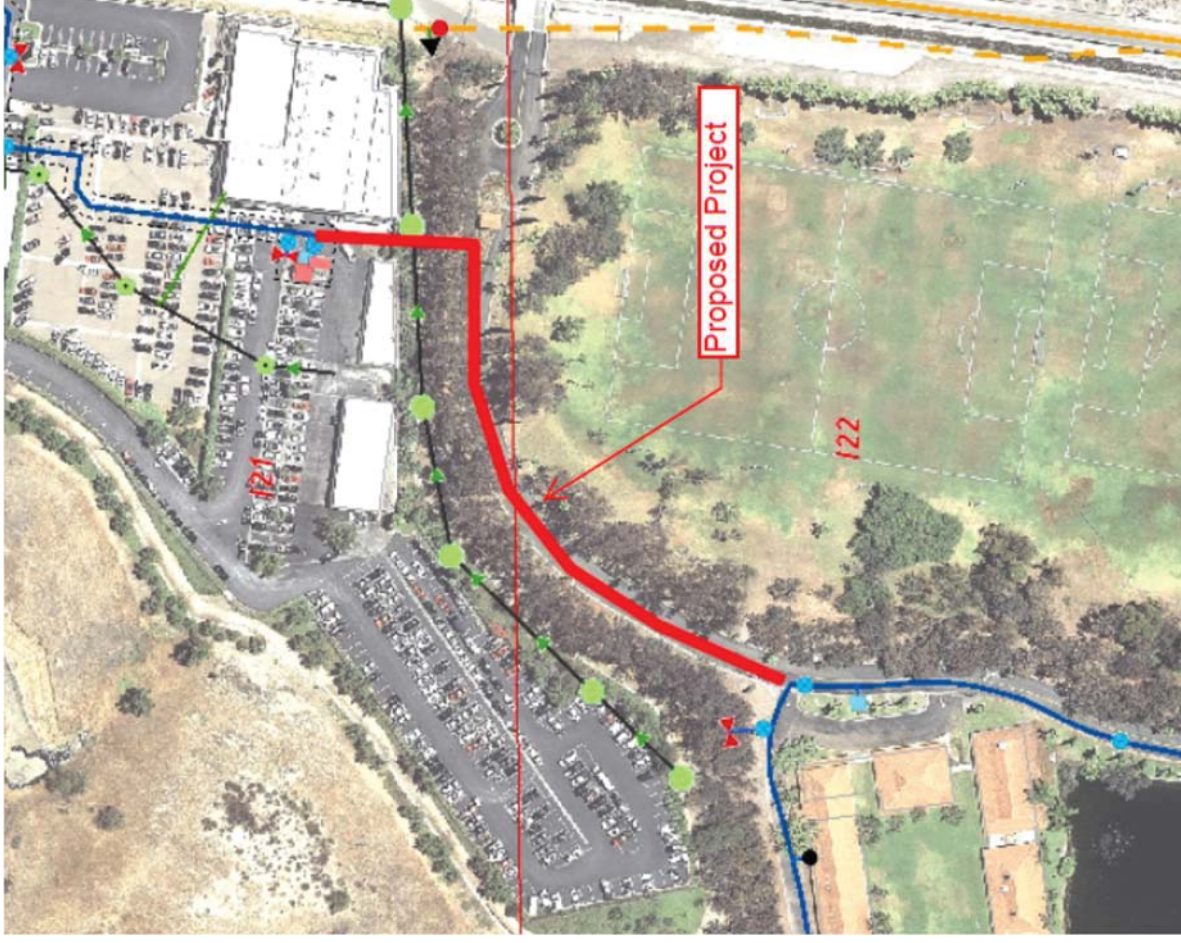
Project Description: Install approximately 650' of 8" pipeline from the Mercedes dealership to Rancho Capistrano. Install hi/lo double valve and blow-off at connection to existing loop at Rancho Capistrano. Modelling of the system is included to verify fire-flows from the 450-zone, and also the potential conversion of the area to the 450-zone rather than the existing 650-zone.

Project Need: There is currently only a single feed from the 650 zone to the Rancho Capistrano facility. This project would provide water reliability to the area through a second feed.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design & Modelling	\$55,000
CEQA Compliance	Exempt
Construction Contract	\$150,000
Easement Acquisition Support	\$10,000
Inspection/Permits/Other	\$10,000
Total Project Budget	\$225,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Saddleback Reservoir Site Paving Replacement

Project Location: Saddleback Reservoir, Mission Viejo

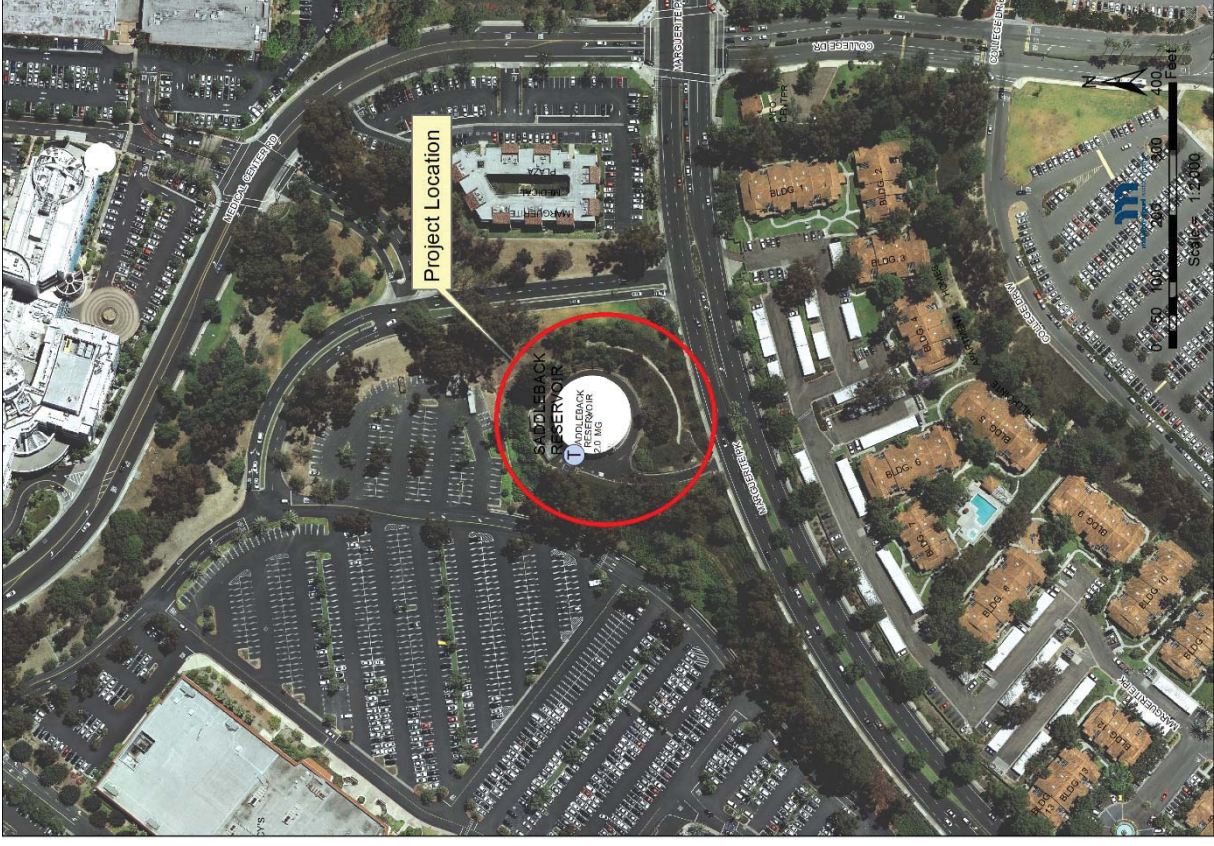
Project Description: Remove ~12,000 sq. ft. existing asphalt paving and replace with new 4" asphalt paving over existing base. Remove and replace ~400 ft. asphalt curb.

Project Need: The existing site paving has exceeded its useful life and is in need of replacement.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$100,000
Inspection/Other	\$25,000
Total Project Budget	\$125,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Electrical System Improvements - PW

Project Location: Rancho Pump Station (Laguna Niguel) and Rolling Hills Pump Station (Aliso Viejo)

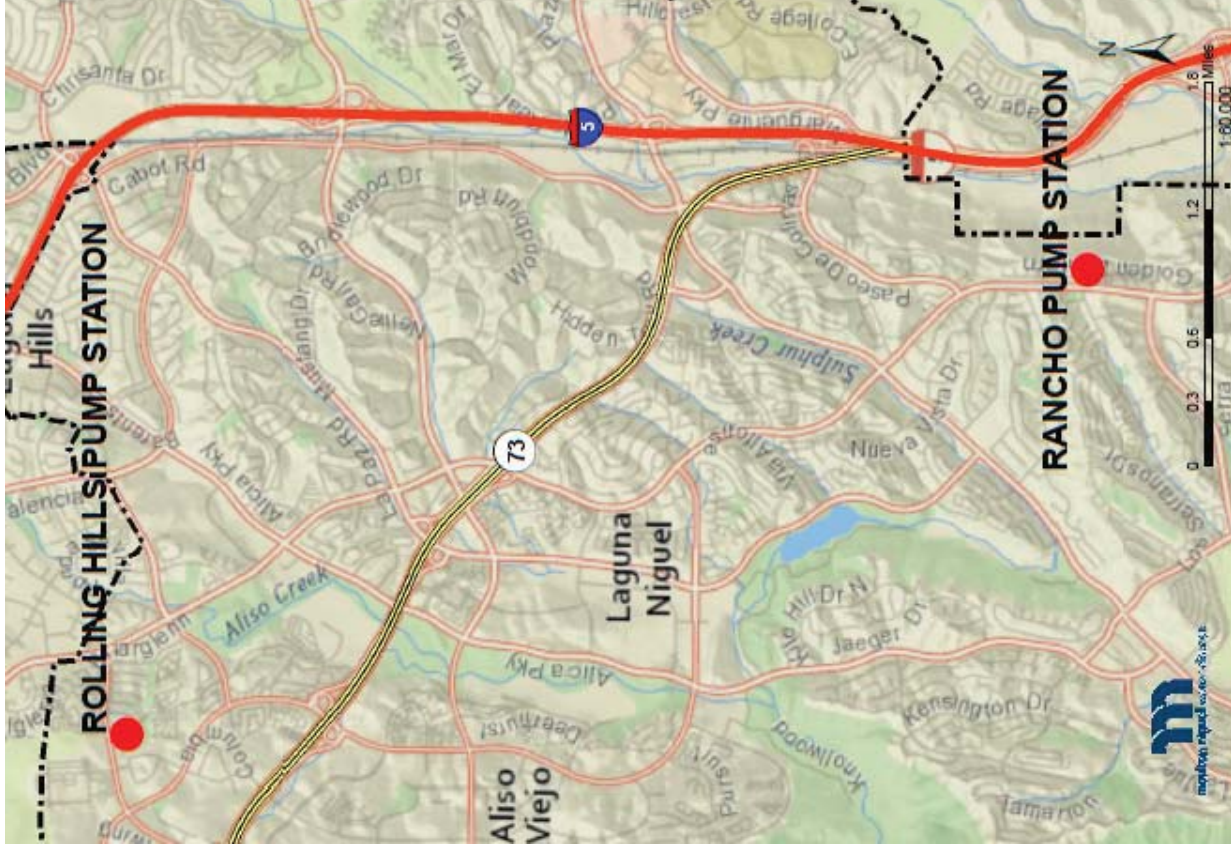
Project Description: Remove the existing MCPs and replace with new 100A circuit breakers for Pumps 1-3 as well as increase the corresponding cable sizes; remove and replace the VFDs for Pumps 4 and 5 at Rancho Pump Station. Remove and replace the main switchboard and MCC at the Rolling Hills Pump Station.

Project Need: The noted electrical equipment at each facility is old and beyond their useful lives. If the electrical equipment remain, they could be hazardous to personnel or property and would likely never be useful again. Rancho Pump Station is a critical facility and must remain operational during this work. Rolling Hills Pump Station is not considered a critical facility, and thus can be shut down for the duration of the required electrical work without implementation of temporary power and/or bypassing.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$150,000
CEQA Compliance	Exempt
Construction Contract	\$500,000
Inspection/Utility Fees/Other	\$50,000
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Fire Hydrant Replacement

Project Location: Various

Project Description: Replace existing fire hydrants.

Project Need: This annual project will replace existing fire hydrants in the potable water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction by District	\$100,000
Total Project Budget	\$100,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Meter Replacement - PW

Project Location: Various

Project Description: Replace existing meters.

Project Need: This annual project will replace meters in the potable water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction	\$1,115,000
Total Project Budget	\$1,115,000



Fund: 7

Project Location: Belle Maison PRS, Laguna Niguel

Project Need: The equipment within the pressure reducing station is reaching its useful life, is requiring increased maintenance, and needs to be replaced. This project occurs on an annual basis as part of the Vertical Asset Rehabilitation and Replacement Program.

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contracts	\$85,000
Inspection	\$0
Total Project Budget	\$100,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Reservoir Management System Replacement

Project Location: PID1-R, PID2-R, Rancho, Saddleback, and Wood Canyon

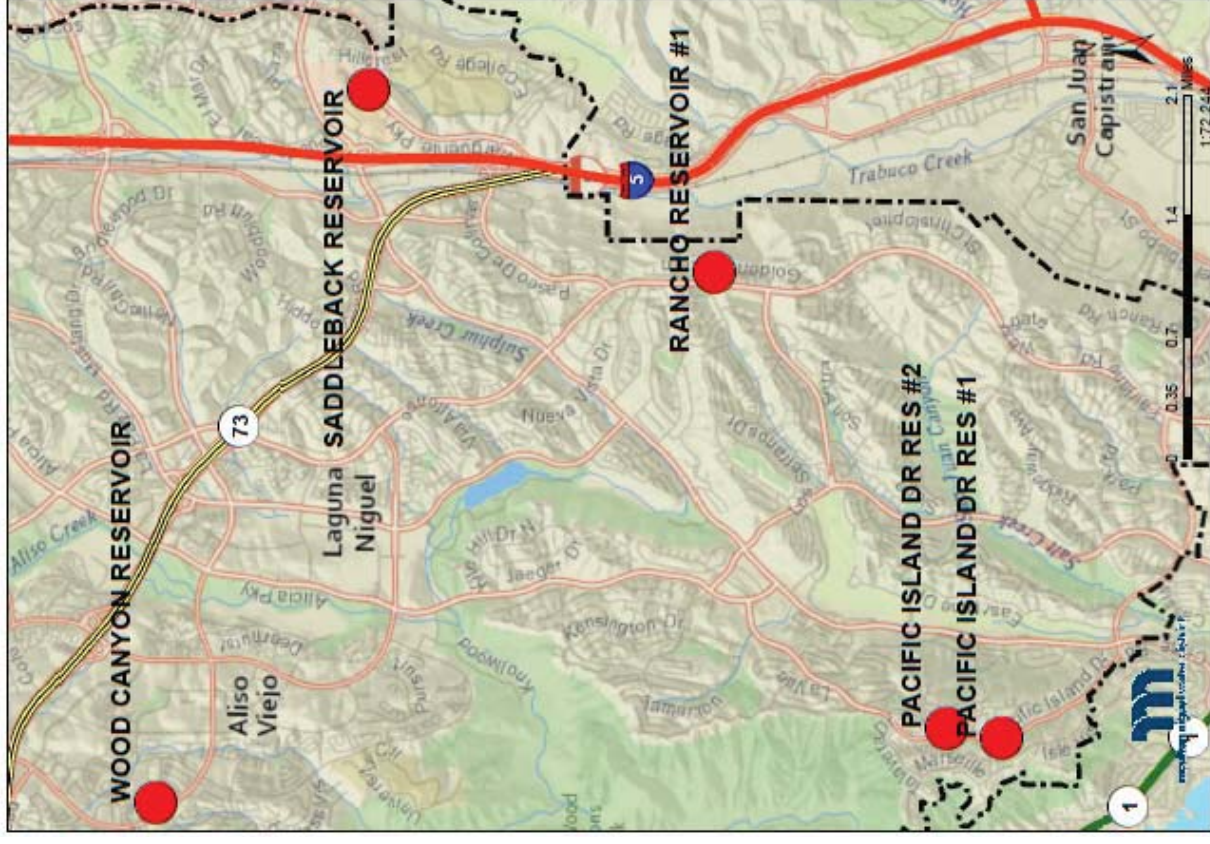
Project Description: Remove existing on-site generation water quality reservoir management systems and protective structures and replace with new water quality reservoir management systems and permanent style buildings. The work will include the installation of liquid sodium hypochlorite and ammonia water quality reservoir management systems.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$530,000
CEQA Compliance	Exempt
Construction Contract	\$5,250,000
Legal/Permits/Other	\$20,000
Special Inspection	\$400,000
Total Project Budget	\$6,200,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Service Line Replacement - PW

Project Location: Various

Project Description: Replace existing service lines.

Project Need: This annual project will replace service lines in the potable water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction by District	\$1,300,000
Total Project Budget	\$1,300,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: 2019-20 Valve Replacement

Project Location: Various

Project Description: Replace existing in-line valves.

Project Need: Many of the District's valves have exceeded their useful life and are not operating properly or have increased maintenance requirements. This project focuses on replacement of these valves on critical transmission and distribution mains. Valves in subdivisions, usually lines 8-inches and smaller, are replaced by the District's Valve Crew.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$85,000
CEQA Compliance	Exempt
Construction Contract	\$1,700,000
Inspection/Other	\$40,000
Construction by District	\$1,175,000
Total Project Budget	\$3,000,000



Capital Improvement Program – Project Description

Project No: 2019.002

System: Potable

Fund: 6

Project Name: AMI Phase 3

Project Location: Various

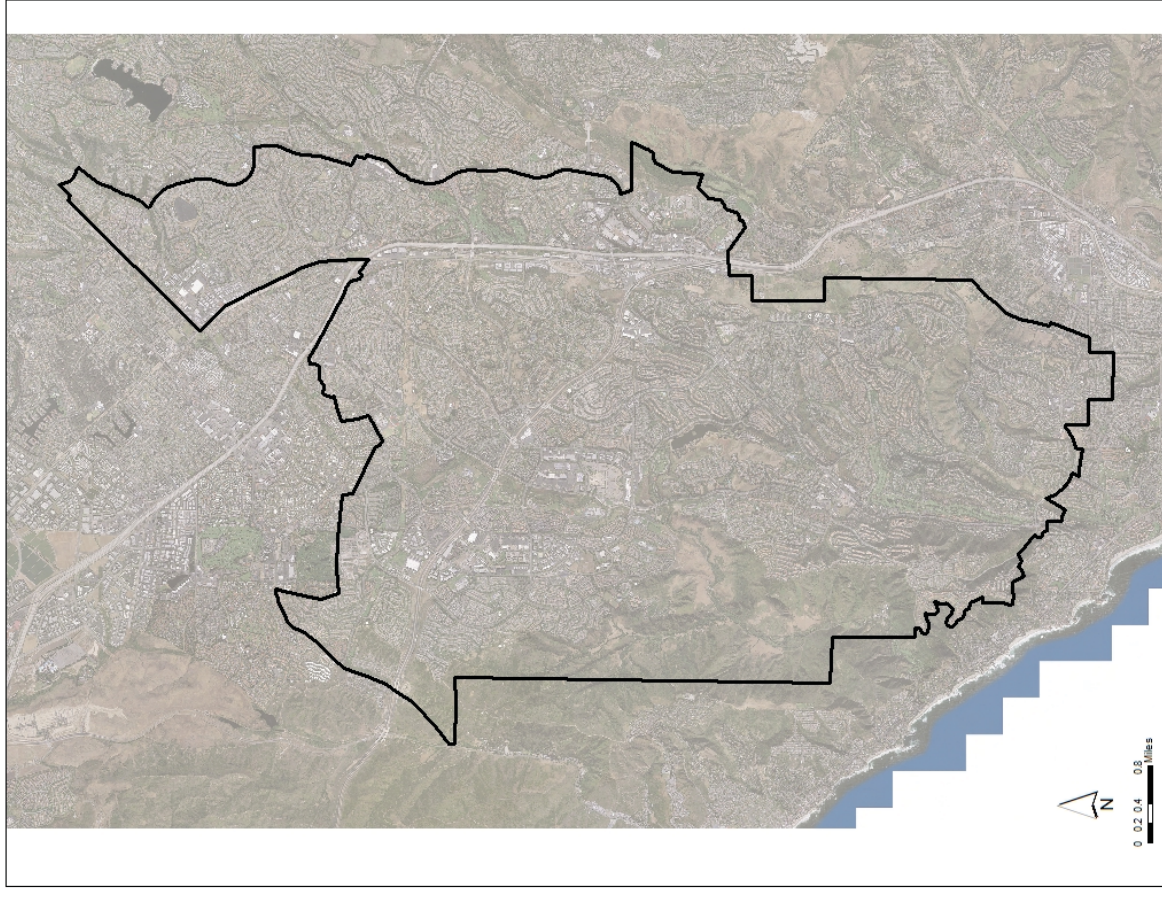
Project Description: In Phase 1 and 2 of the AMI Implementation Program, the District established a remote reading and communication network with coverage of the entire service area and implemented a customer portal for the District's Potable and Recycled Water Irrigation, commercial, multi-family as well as 1,800 residential customers with hourly data as well as a portal deployed for all remaining customers. Phase 3 of the AMI Implementation Program will expand the program to install an AMI radio for all remaining single-family residential customers' meters (approximately 45,500 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	\$8,200,000
Total Project Budget	\$8,200,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Blackbird and Solitaire Easement Pipeline Rehabilitation

Project Location: Aliso Viejo

Project Description: Rehabilitate approximately 400 linear feet of 8-inch ductile iron pipe (880 pressure zone) within an existing easement connecting Blackbird Lane and Solitaire Lane within the City of Aliso Viejo.

Project Need: The existing pipeline has reached the end of its useful life and is in need of rehabilitation. The pipeline segment is located within a residential neighborhood of Aliso Viejo.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$65,000
CEQA Compliance	Exempt
Construction Contract	\$310,000
Easement/Legal/Other	\$25,000
Total Project Budget	\$400,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Crown Valley Parkway Transmission Main (Lower Reach) Replacement*

Project Location: Crown Valley Parkway, Laguna Niguel

Project Description: Replace the existing 12-inch Concrete Cylinder Pipe potable water main from Camino del Avion/Pacific Island Drive at the south end to approximately Paseo de Niguel at the north end.

Project Need: This 1.8-mile segment of potable water transmission main was constructed in the 1960s for the 450 pressure zone and has experienced multiple problems from corrosion and age causing related pipe leaks.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	\$50,000
Construction Contract	\$3,950,000
Inspection/Other	\$500,000
Total Project Budget	\$5,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Crown Valley Parkway Transmission Main (Upper Reach)*
Rehabilitation

Project Location: Crown Valley Parkway, Laguna Niguel

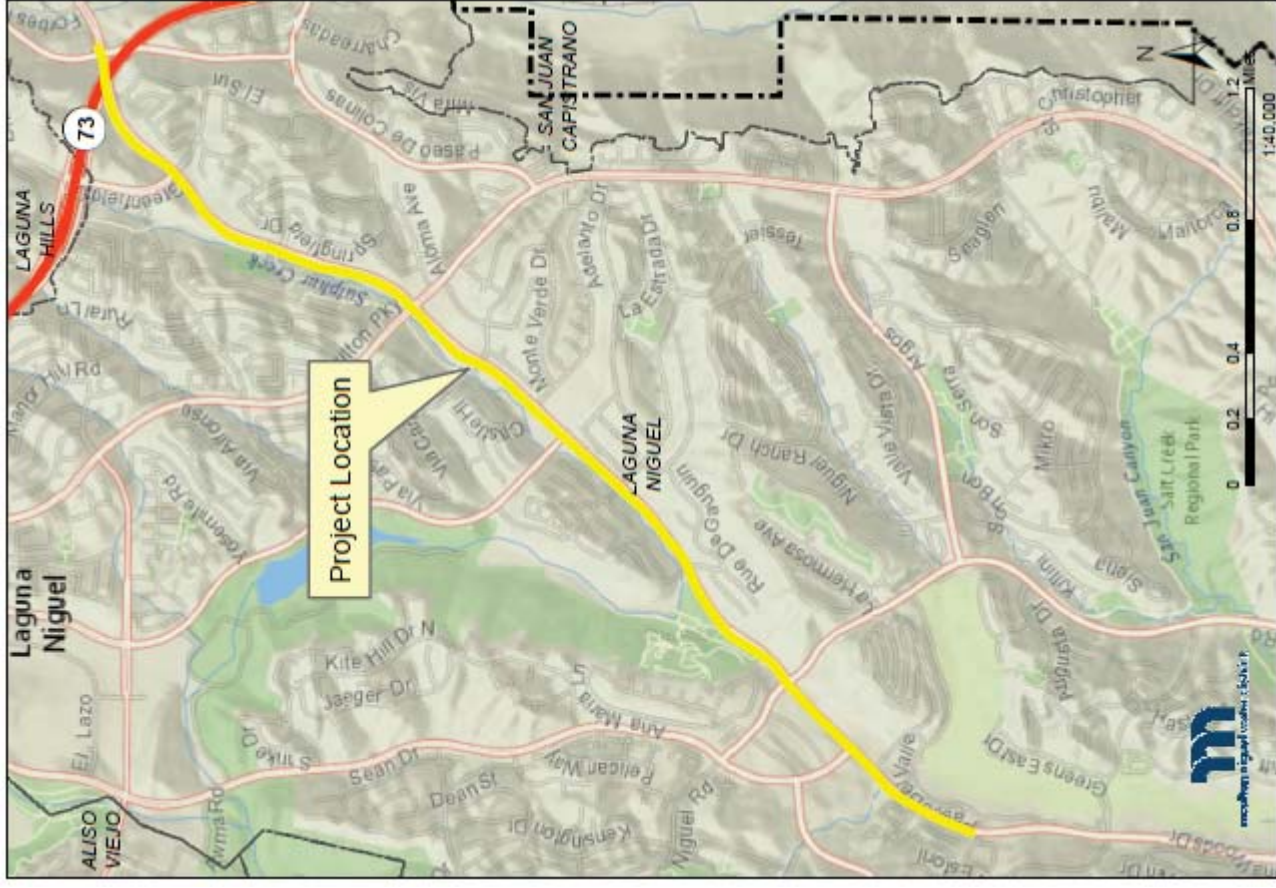
Project Description: Rehabilitate the existing 16-inch CML&C transmission main from near Paseo de Niguel at the south end to approximately Cabot Road at the north end. The majority of this 3.5 mile segment of pipeline is currently located beneath the landscaped center median along Crown Valley Parkway.

Project Need: The transmission main was constructed in the 1960s for the 450 pressure zone and has experienced multiple interruptions from corrosion and age causing related pipe leaks, joint problems, and crumbling of the interior mortar lining when draining and recharging.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$800,000
CEQA MND	\$100,000
Construction Contract	\$8,300,000
Inspection/Other	\$800,000
Total Project Budget	\$10,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Electrical Distribution Equipment Replacement at PID No. 2 Pump Station

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

Project Description: Replace utility service section at the PID No. 2 Pump Station that has reached the end of its useful life. Other electrical improvements to be completed to accommodate the new service sections.

Project Need: The service section and associated main circuit breakers are more than 50 years old (beyond useful life). If these existing electrical components remain, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$25,000
CEQA Compliance	Exempt
Construction Contract	\$100,000
Inspection/Utility Fees/Other	\$25,000
Total Project Budget	\$150,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Hidden Hills and Laguna Serrano Apartments Pipeline Replacement*

Project Location: Hidden Hills and Laguna Serrano Apartments, Laguna Niguel

Project Description: The project includes the removal of approximately 350 feet of 8-inch ductile iron pipe and replacement with new PVC pipe, as well as new valves and fittings.

Project Need: This area has experienced repeated issues on the ductile iron water pipes supplying these apartment communities. This project will replace all remaining ductile iron pipe connections to these apartment communities.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$300,000
Inspection/Other	\$10,000
Total Project Budget	\$360,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Interconnection Between Eastern Transmission Main and Central Intertie Pipeline (CIP) at Cabot Flow Control Facility*

Project Location: Cabot Flow Control Facility, Cabot Road and Oso Parkway, Laguna Hills

Project Description: The project includes piping, isolation valves, pressure reducing valves, and appurtenances to connect the existing 54" Central Intertie Pipeline to the existing 30" Eastern Transmission Main on the site of the District's Cabot Flow Control facility.

Project Need: The Eastern Transmission Main is currently supplied by the Joint Regional Transmission Main (JTM) and serves several District takeout facilities, in addition to the City of San Juan Capistrano. This project provides operational flexibility and improved reliability by allowing the District to take water from Metropolitan Water District's (MWD's) South County Pipeline via the Central Intertie Pipeline (CIP) into the Eastern Transmission Main.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$400,000
Inspection/Other	\$25,000
Total Project Budget	\$500,000



Capital Improvement Program – Project Description

Project No: TBD
System: Potable
Fund: 7

Project Name: Meter Upgrades and Valve Replacements at Takeout Facilities
on JRWSS JTM

Project Location: Northerly Takeout (Aliso Viejo), Paseo De Valencia Pump Station (Laguna Hills), Oso Pump Station (Mission Viejo), Del Avion Takeout (Dana Point), CC-3 Takeout (Laguna Niguel), ID-3 Master Meter (Laguna Hills)

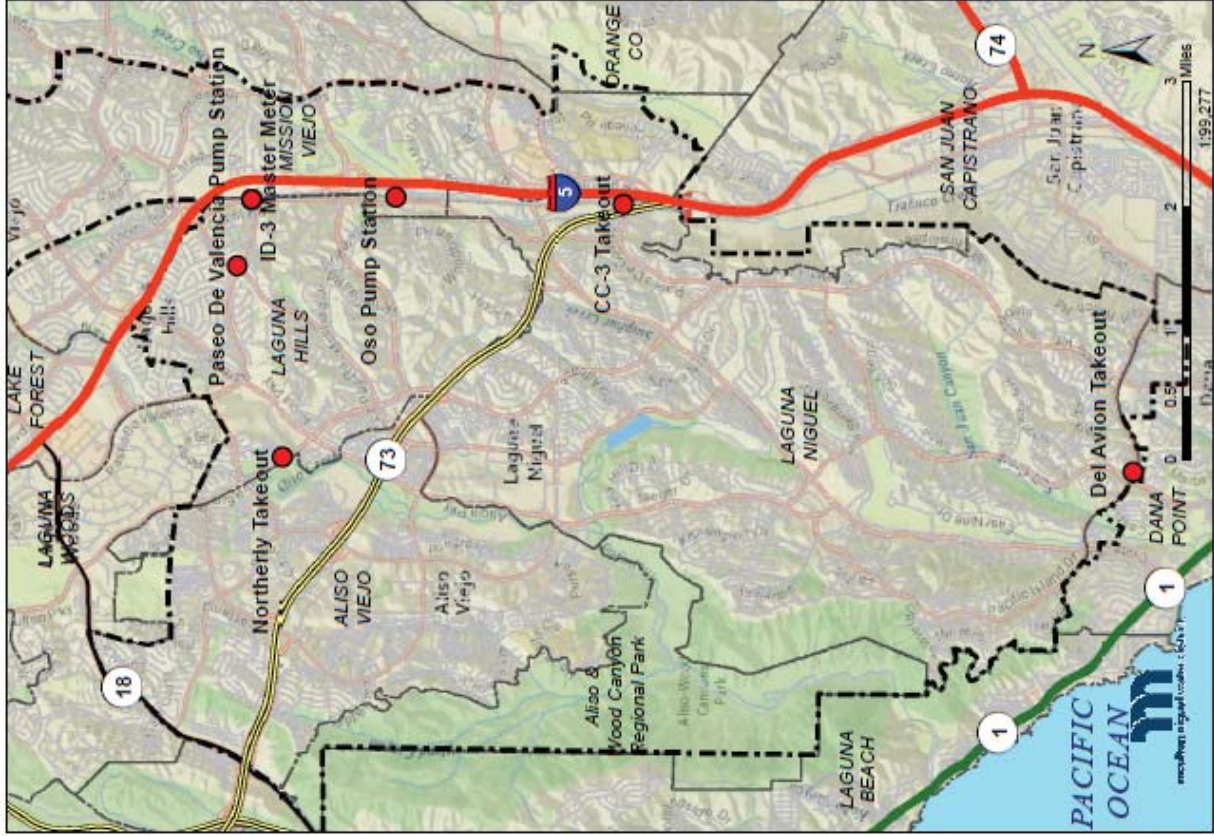
Project Description: The project includes replacement and upgrading of existing flow meters (including AMI capability) and the replacement of associated piping, valves and appurtenances within several pump station, takeout and metering facilities on the Joint Regional Water Supply System (JRWSS) Joint Transmission Main (JTM).

Project Need: The existing flow meters and valves are nearing the end of their useful lives and are in need of replacement. The existing flow meters are not equipped with AMI capability.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Inspection/Other	\$25,000
Total Project Budget	\$350,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Rehabilitation of Rancho Reservoirs 1, 2, and 3*

Project Location: 29828 Golden Lantern, Laguna Niguel

Project Description: Re-coat the interior and exterior of Ranch Reservoirs 1, 2, & 3. The Rancho Reservoirs 1 & 2 have a maximum capacity 1.5 million gallons each and Rancho Reservoir 3 has a maximum capacity of 2.8 million gallons. The work will also include structural and corrosion rehabilitation, tank operation and safety improvements, and installation of 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 5 to 10 years to determine if and when recoating is needed.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	Exempt
Construction Contract	\$2,300,000
Specialty Inspection	\$180,000
Legal, Permits & District Labor	\$10,000
Total Project Budget	\$2,550,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Southwestern Transmission Main Rehabilitation*

Project Location: Mission Viejo

Project Description: Rehabilitate the existing 24-inch steel CML&C pipe, originating from the Santa Margarita Water District Plaza Pump Station at the north end to near 25422 El Paseo at the south end. This 0.9-mile pipeline segment is part of the 650 pressure zone.

Project Need: The pipeline was constructed in the 1970s and has had a history of leaks. This segment includes one crossing of the San Diego Freeway (Interstate 5) which is one of the District's three critical freeway crossings in the 650 pressure zone. The pipeline has experienced multiple problems from corrosion and age causing related pipe leaks.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$700,000
CEQA Compliance	\$100,000
Construction Contract	\$6,500,000
Inspection/Other	\$700,000
Total Project Budget	\$8,000,000



Capital Improvement Program – Project Description

Project No: 2017.014

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 30" welded steel reclaimed water pipe within a ~72" steel casing using a micro-tunneling method for the replacement of the existing pipes and future expansion of the reclaimed water system between the Galivan Pump Station to the Upper Oso Reservoir.

This project to be completed simultaneously with 2017.009, PW Main Replacement at I-5 / Oso Creek Crossing, with the PW and RW pipes installed in a shared casing.

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: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$259,618
Construction Contract	\$3,844,500
CM/Inspection/Geotech/CEQA	\$272,250
Legal/Permits/District Labor	\$25,000
Total Project Budget	\$4,401,368



Capital Improvement Program – Project Description

Project No: 2010.013

System: Recycled

Fund: 6

Project Name: *Recycled Water Optimization Study (RWOS) - 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. The RWOS identified this reach as needed for the initial optimization phase, to support 138 AFY of additional RW demand.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$55,000
CEQA Compliance	City Project
Construction Contract	\$400,000
Inspection/Permits/Other	\$20,000
Total Project Budget	\$475,000



Capital Improvement Program – Project Description

Project No: 2018.003

System: Recycled

Fund: 6

Project Name: *Recycled Water Optimization Study (RWOS) - Miscellaneous Distribution System Improvements*

Project Location: Aliso Viejo, Mission Viejo

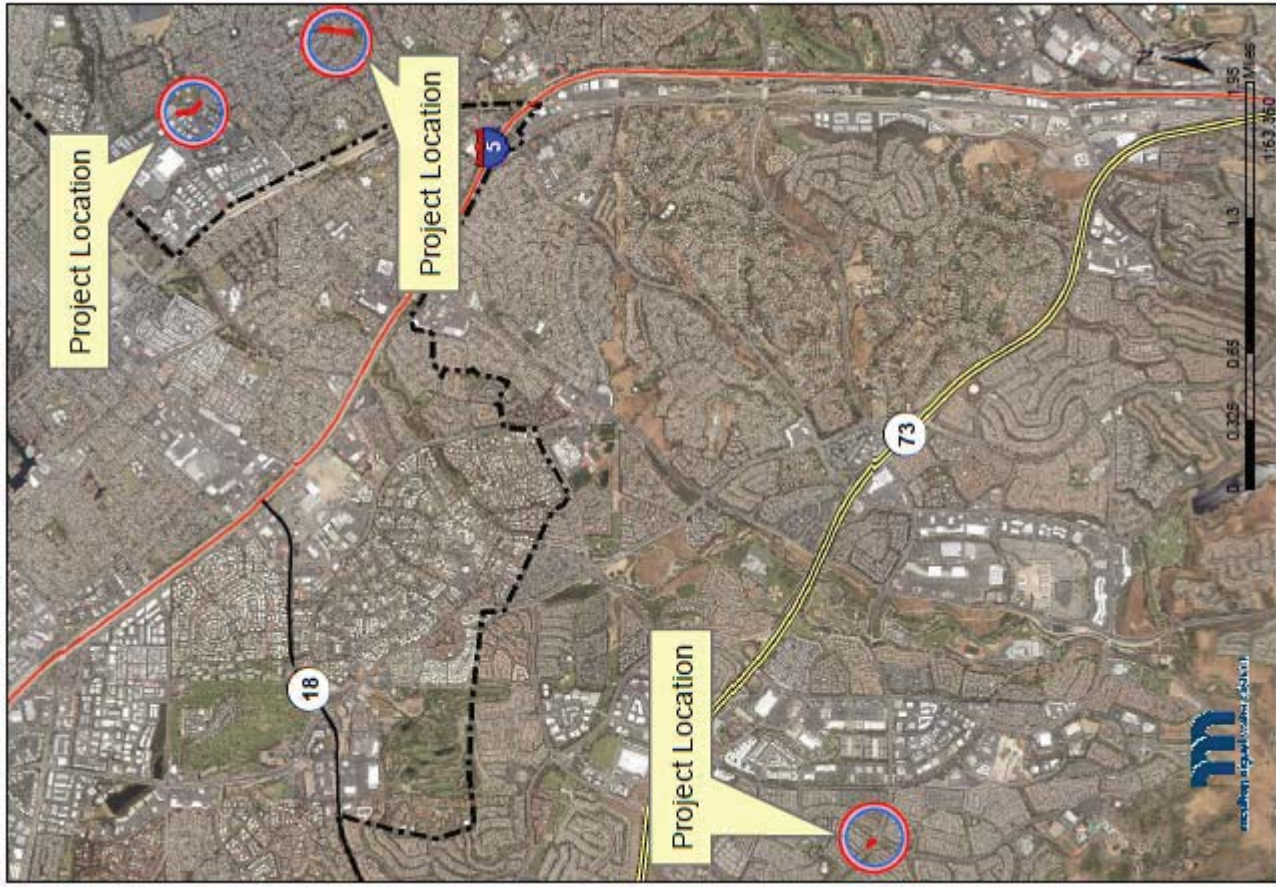
Project Description: Replace approximately 1,300 feet of existing 6", 8", and 12" RW Main Pipeline with new 8", 12", and 16" RW Pipeline in 3 locations throughout the cities of Aliso Viejo and Mission Viejo.

Project Need: These projects were identified in the RWOS and the Recycled Water Master Plan. Pipeline is currently undersized, resulting in velocities greater than 10 feet-per-second. Project IDs M1-B1, M1-B2, and M1-C in RW Masterplan. Locations are at Carrillo Drive north of Jeronimo, Via Linda north of Alicia, and at the intersection of Pacific Park Drive and Aliso Viejo Parkway. Needed for initial optimization phase, to support 138 AFY of additional RW demand.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance/Legal Exempt	
Construction Contract	\$500,000
CM/Inspection/Permits/Other	\$10,000
Total Project Budget	\$585,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: *Meter Replacement Program - RW*

Project Location: Various

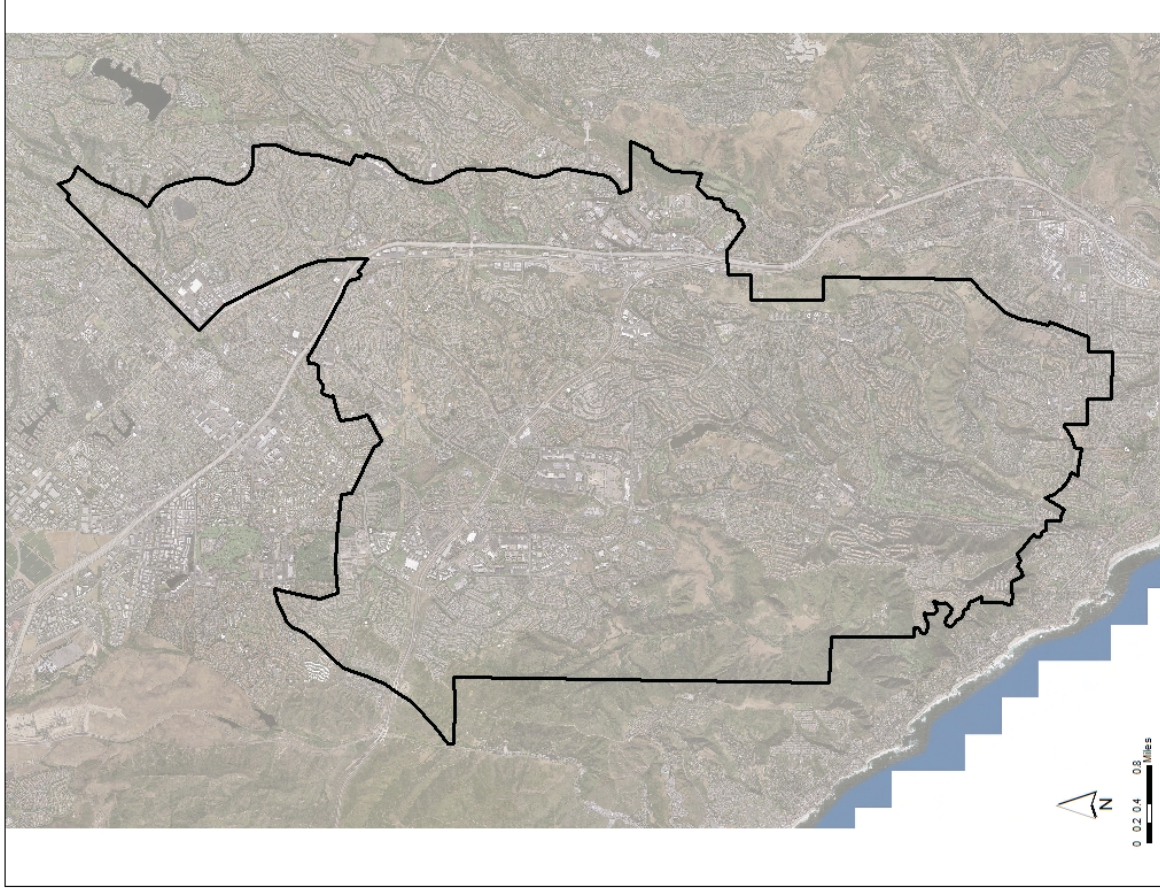
Project Description: Replace existing meters.

Project Need: The District has approximately 1,300 meters in the recycled water system. This program will replace existing meters as they reach the end of their useful lives.

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

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction	\$530,000
Total Project Budget	\$530,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 6

Project Name: *Recycled Water Optimization Study (RWOS) - Recycled Water Retrofits Program*

Project Location: Various

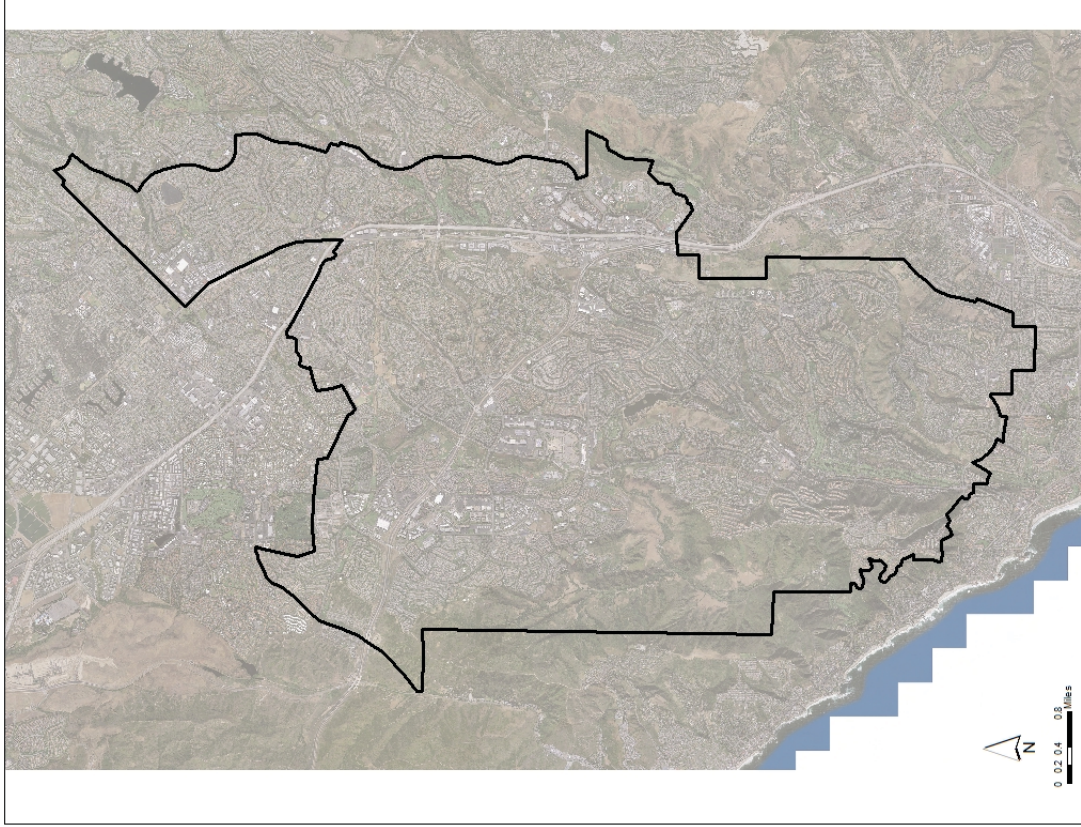
Project Description: Install recycled water service connection and irrigation pumps.

Project Need: The District is continuously evaluating irrigation sites for conversion to recycled water. The RWOS identified 70 potable water irrigation users that are recommended for retrofit. Projects will include the installation of the recycled water service and abandonment of the potable service. In addition, on occasion the recycled water service is in a lower pressure zone than the existing potable service. In this case, 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	\$350,000
CEQA Compliance	Exempt
Construction Contract	\$3,750,000
Inspection	\$750,000
Total Project Budget	\$4,850,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: Reservoir Recoating Program – RW

Project Location: Various

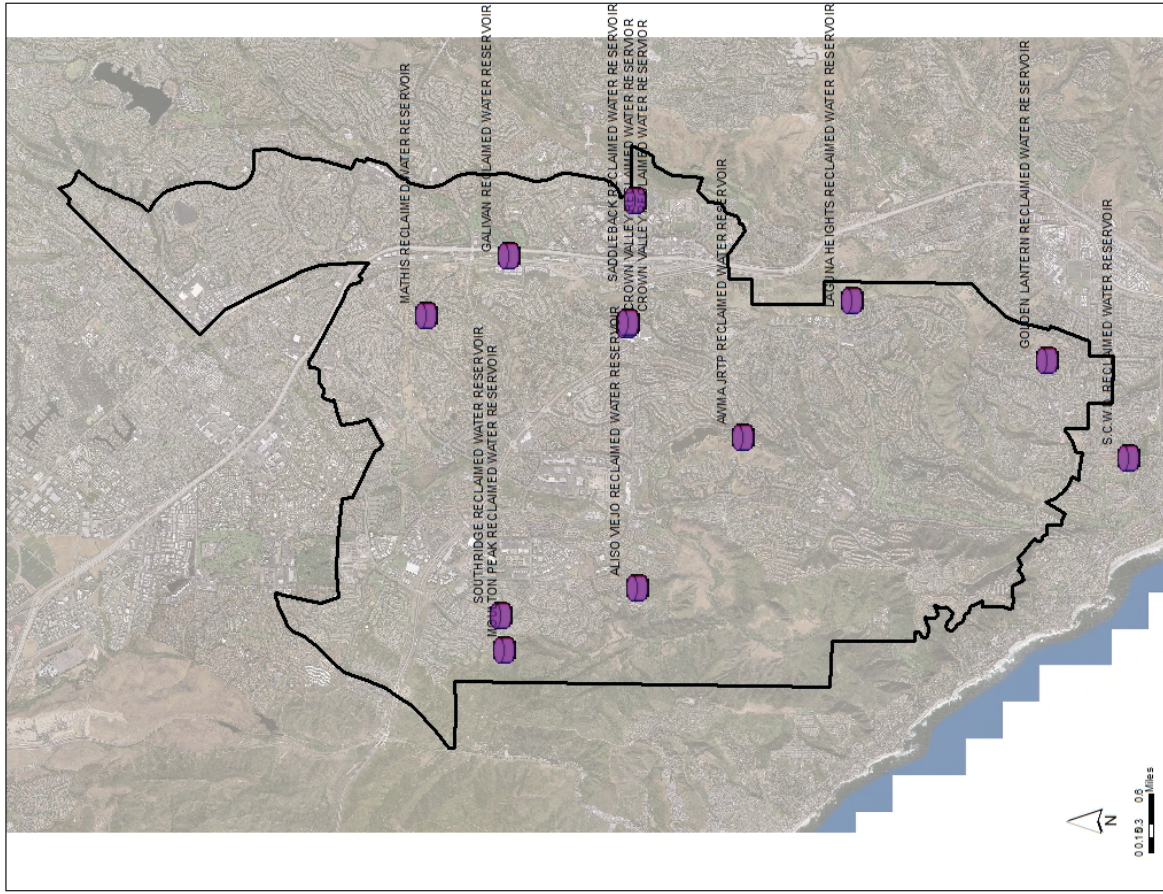
Project Description: Recoat the interior and exterior of steel reservoirs in the recycled system.

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: Service Line Replacement Program – RW

Project Location: Various

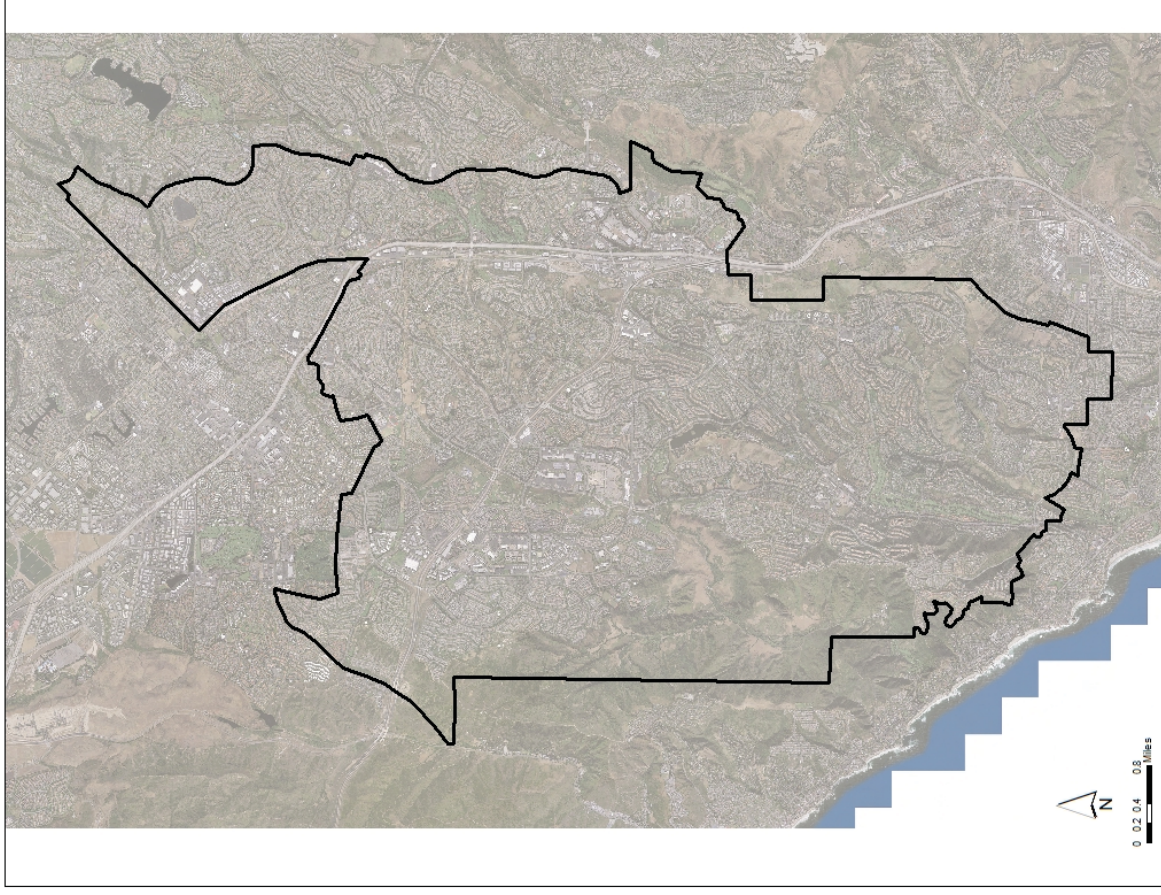
Project Description: Replace existing service lines.

Project Need: The District has approximately 1,300 services in the recycled water system. The service lines are used to connect distribution piping to customer meters. This program will replace service lines as they reach the end of their useful lives.

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

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance Exempt	
Construction by District	\$1,260,000
Total Project Budget	\$1,260,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: *Steel Tanks Seismic and Structural Retrofits Program - RW*

Project Location: Various

Project Description: Construct the recommendations from Project No.

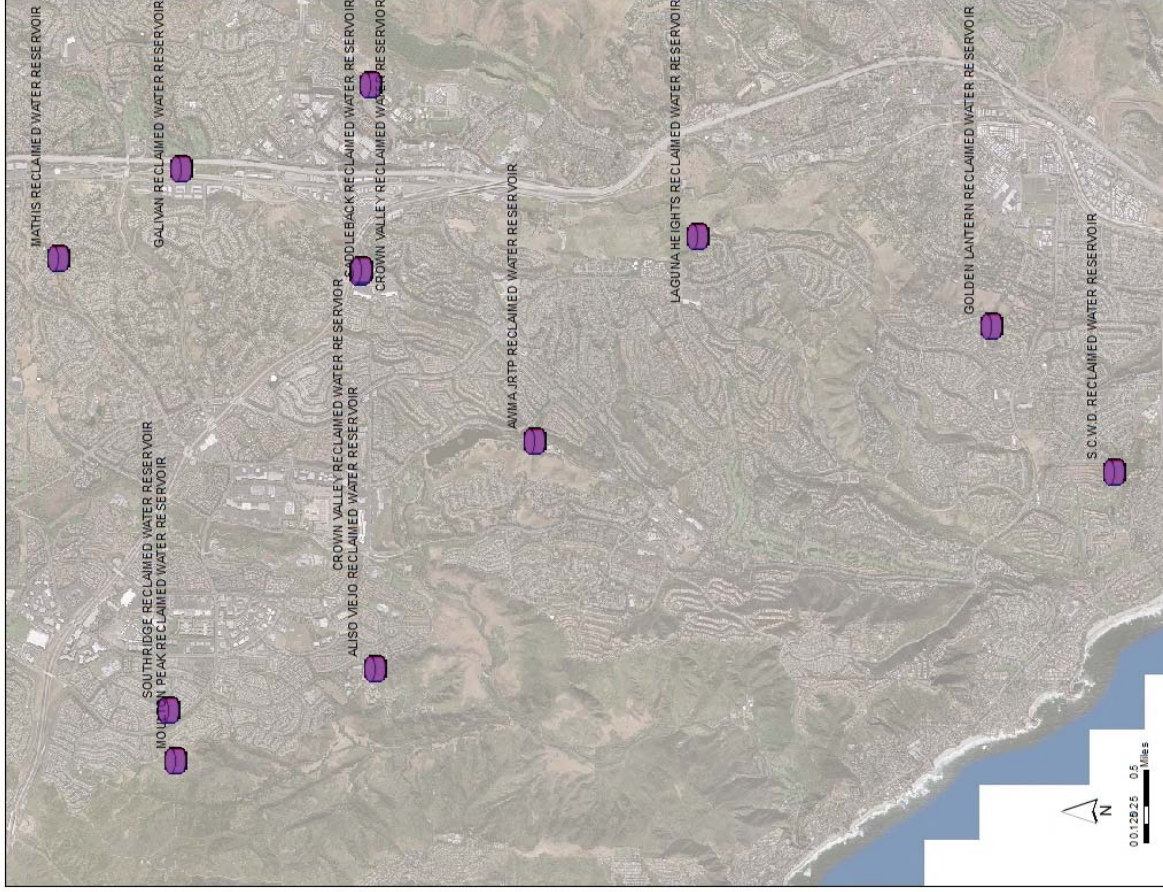
2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

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: Various

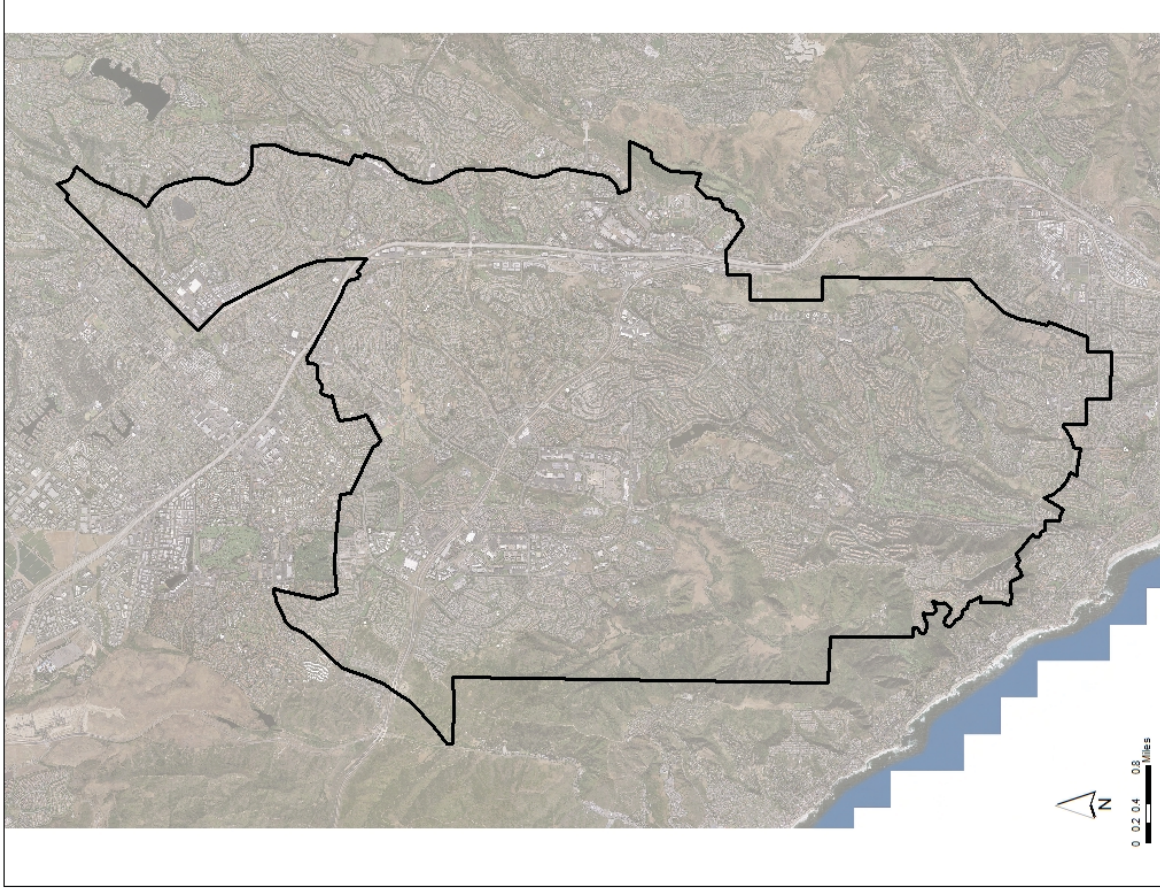
Project Description: Replace pipeline valves.

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	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$750,000
Inspection/Other	\$50,000
Construction by District	\$625,000
Total Project Budget	\$1,500,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Recycled

Fund: 7

Project Name: *Vertical Assets Rehabilitation and Replacement Program – RW*

Project Location: Various

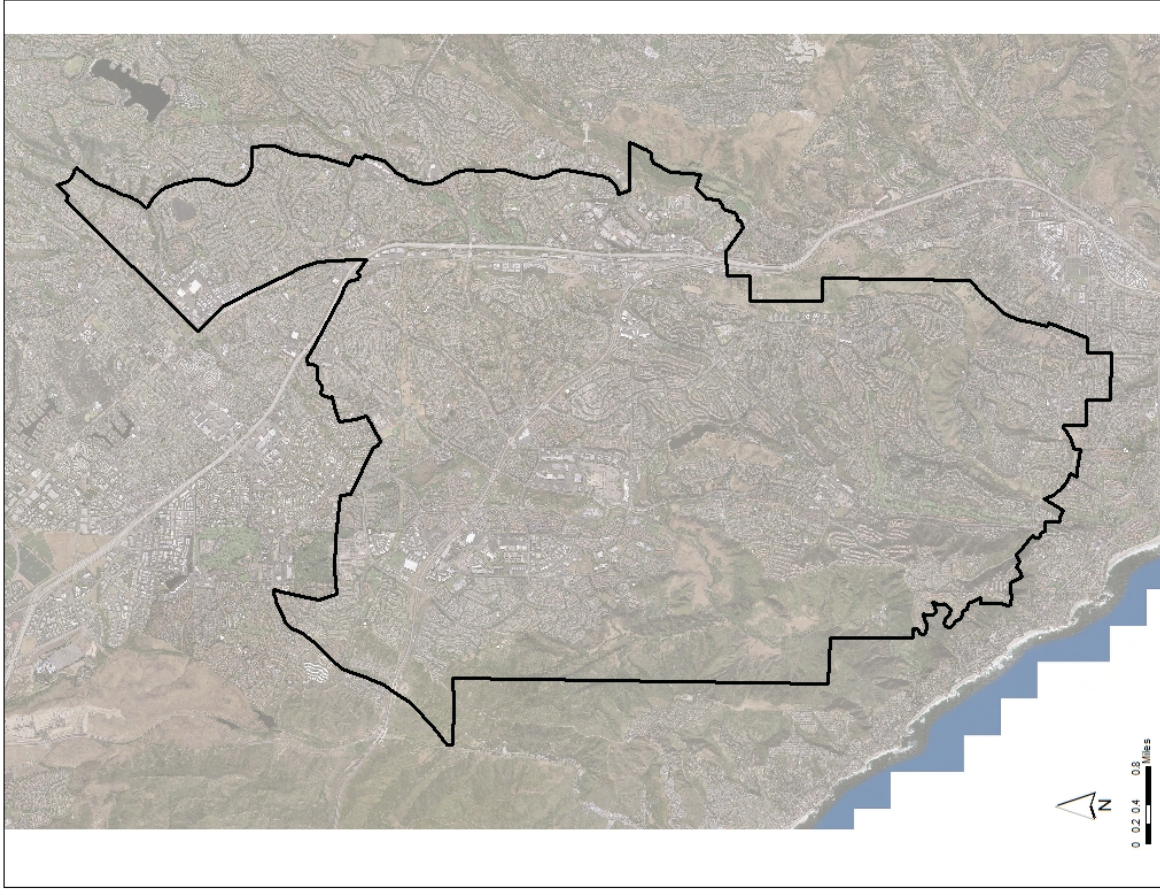
Project Description: Rehabilitate or replace structures and equipment at pump station and pressure reducing stations that have reached the end of their useful lives. An analysis was performed by staff to prioritize the methodical rehabilitation or replacement of vertical assets within the recycled water system.

Project Need: The District has 10 active pump stations and 14 active pressure reducing stations in the recycled water system. These vertical assets are used to convey recycled water to customers throughout the District's service area. As the facilities reach the end of their useful lives, the structures and equipment at each station become obsolete, require increased maintenance, and will need to be replaced or rehabilitated.

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

Estimated Project Amount:

Item	Estimated Cost
Design	\$1,625,000
CEQA Compliance	Exempt
Construction Contract	\$11,000,000
Inspection/Other	\$1,500,000
Total Project Budget	\$14,125,000



Capital Improvement Program – Project Description

Project No: 2018.005

System: Recycled

Fund: 7

Project Name: 2018-19 Electrical System Improvements - RW

Project Location: Alicia Recycled Water Pump Station, Laguna Niguel;

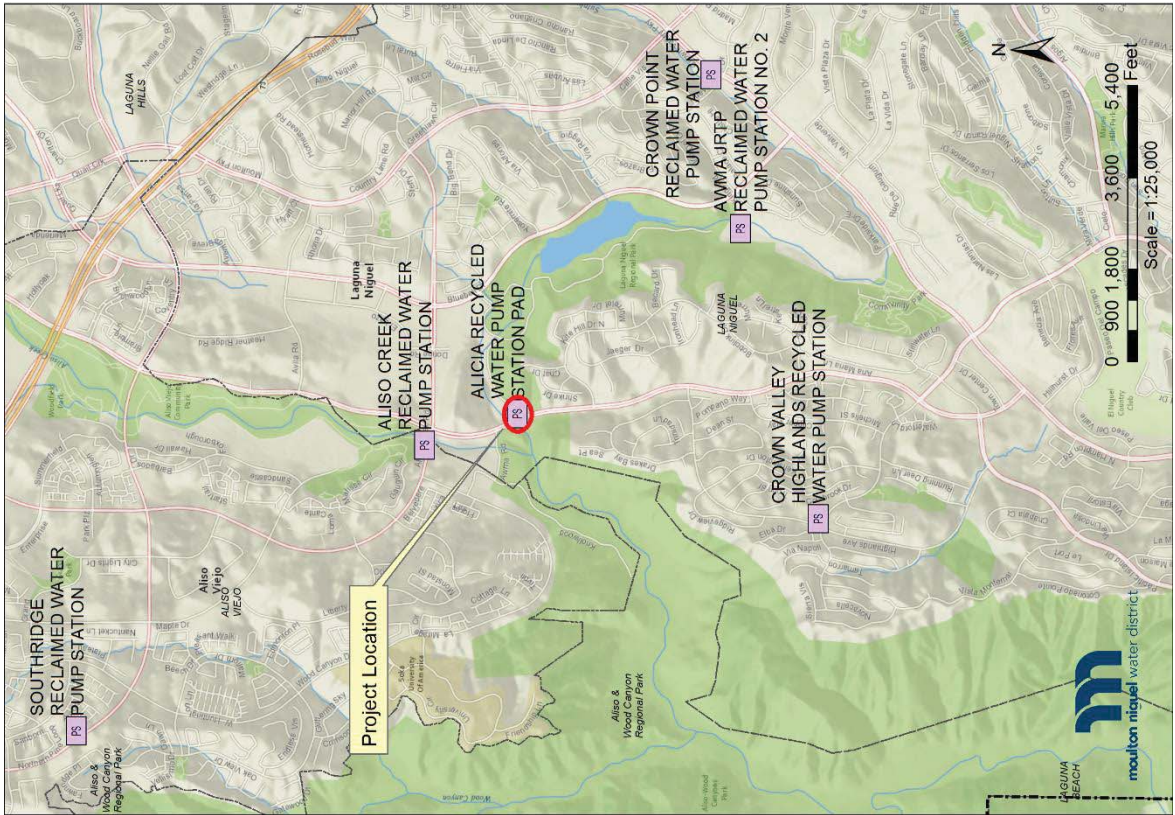
Project Description: Replace MCC Sections 4, 5, 6 & 7. Temporary switchgear will be required to maintain operation during construction.

Project Need: The noted electrical equipment at this facility is old and beyond their useful lives. If these existing electrical components remain, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: Proposed Project

Estimated Project Amount:

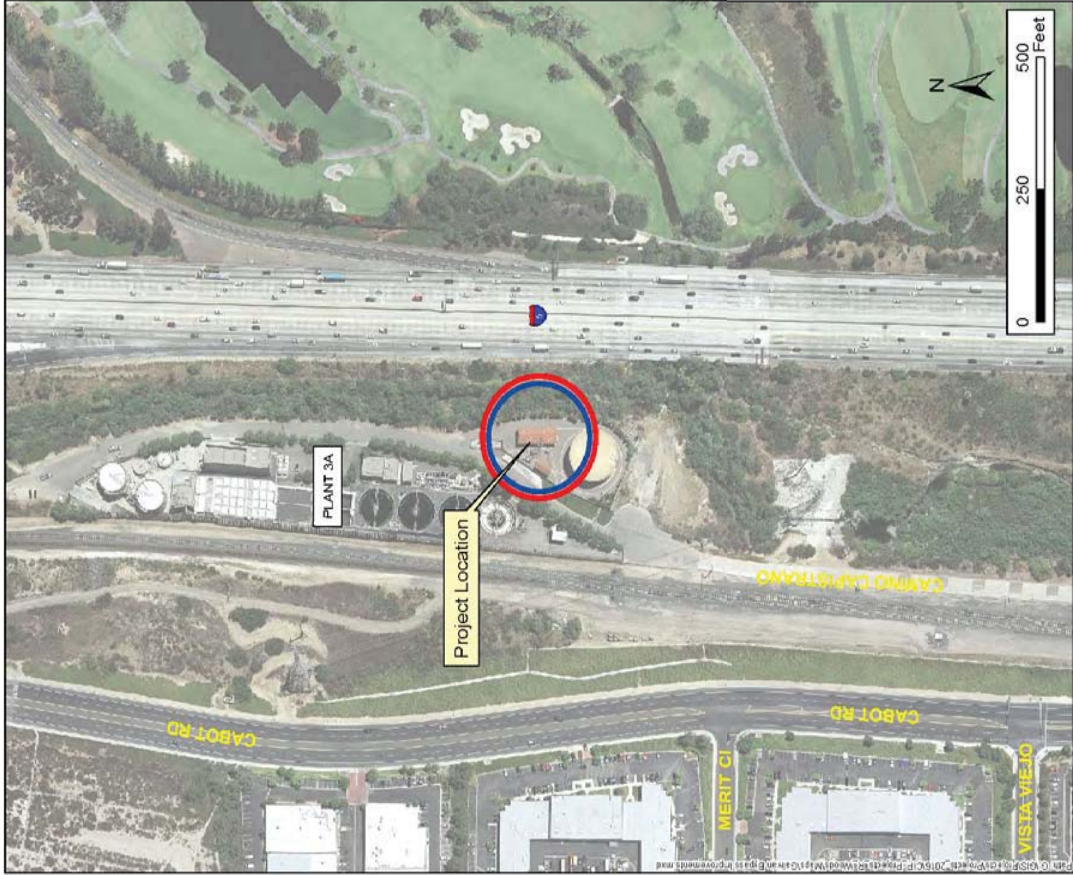
Item	Estimated Cost
Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$350,000
Inspection/Utility Fees/Other	\$75,000
Total Project Budget	\$525,000



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

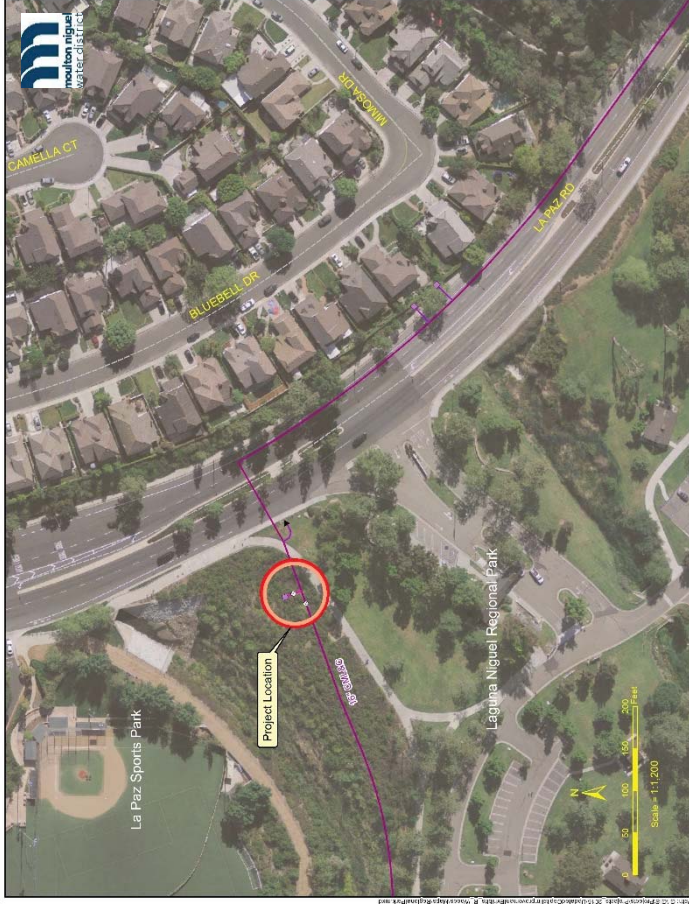
Project Description: This project would clear existing vegetation, reconfigure the existing 3-rail fencing, and reconfigure/replace existing valving at the recycled water meter vault.

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

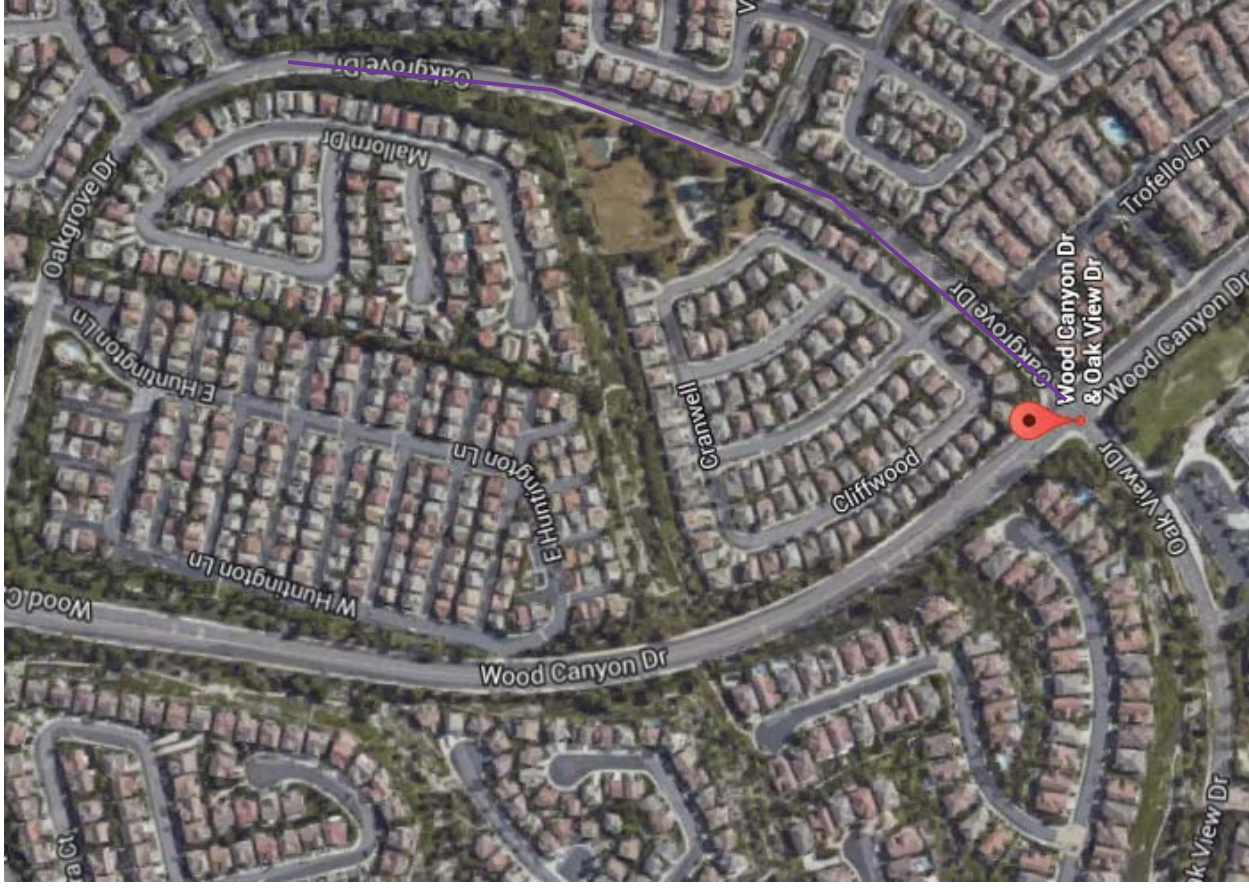
Project Description: Remove and replace approximately 1,500 linear feet of 8-inch DIP recycled water main. Electrical main is in close proximity to current alignment; will likely need to replace pipeline in a new alignment. Replace all valves along the main.

Project Need: Numerous pipeline interruptions within abovementioned 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: 7

Project Name: Recycled Water Optimization Study (RWOS) - RW Main Replacement from Galivan PS to La Paz PS

Project Location: Mission Viejo, CA

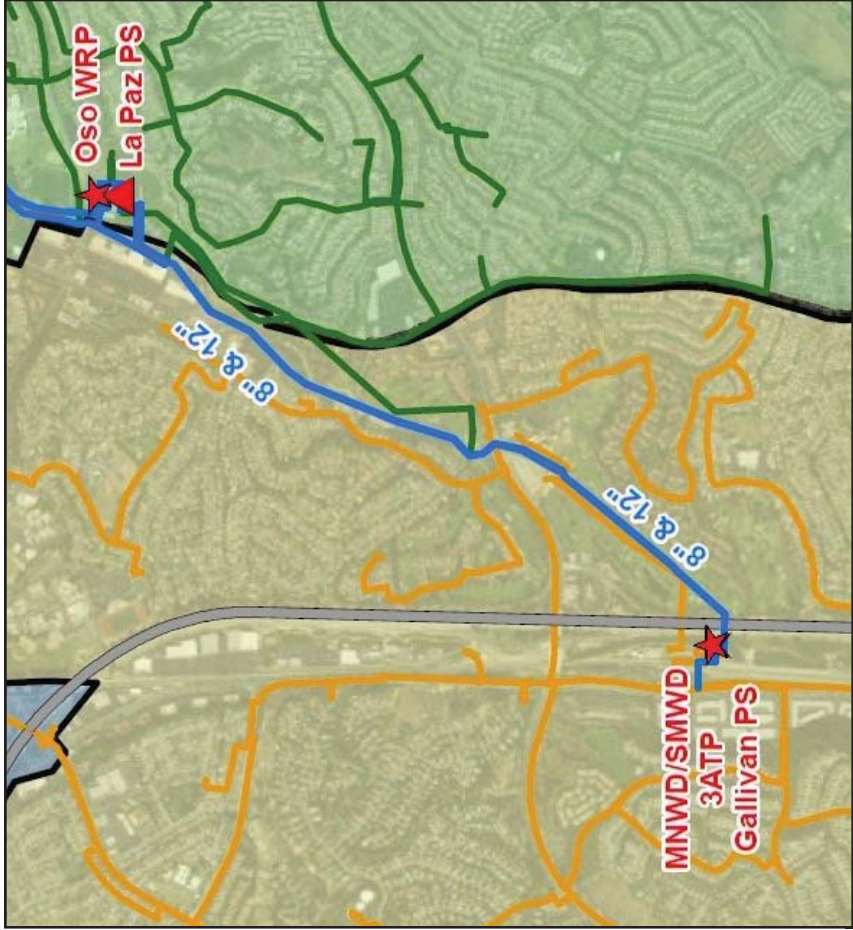
Project Description: Replace approximately 11,000 feet of existing 8” and 12” RW Main Pipelines with new 24” RW Pipeline. This includes some pipelines within Santa Margarita Water District’s Zone B La Paz Pump Station facility.

Project Need: Existing 8” and 12” pipelines have experienced repeated interruptions and are becoming maintenance intensive. The RWOS identified that these pipelines are undersized for summertime RW system demands. Required to support additional system demands of 306 AFY.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$1,400,000
CEQA Compliance	\$450,000
Construction Contract	\$5,750,000
CM/Inspection/Permits/Other	\$1,400,000
Total Project Budget	\$9,000,000



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.

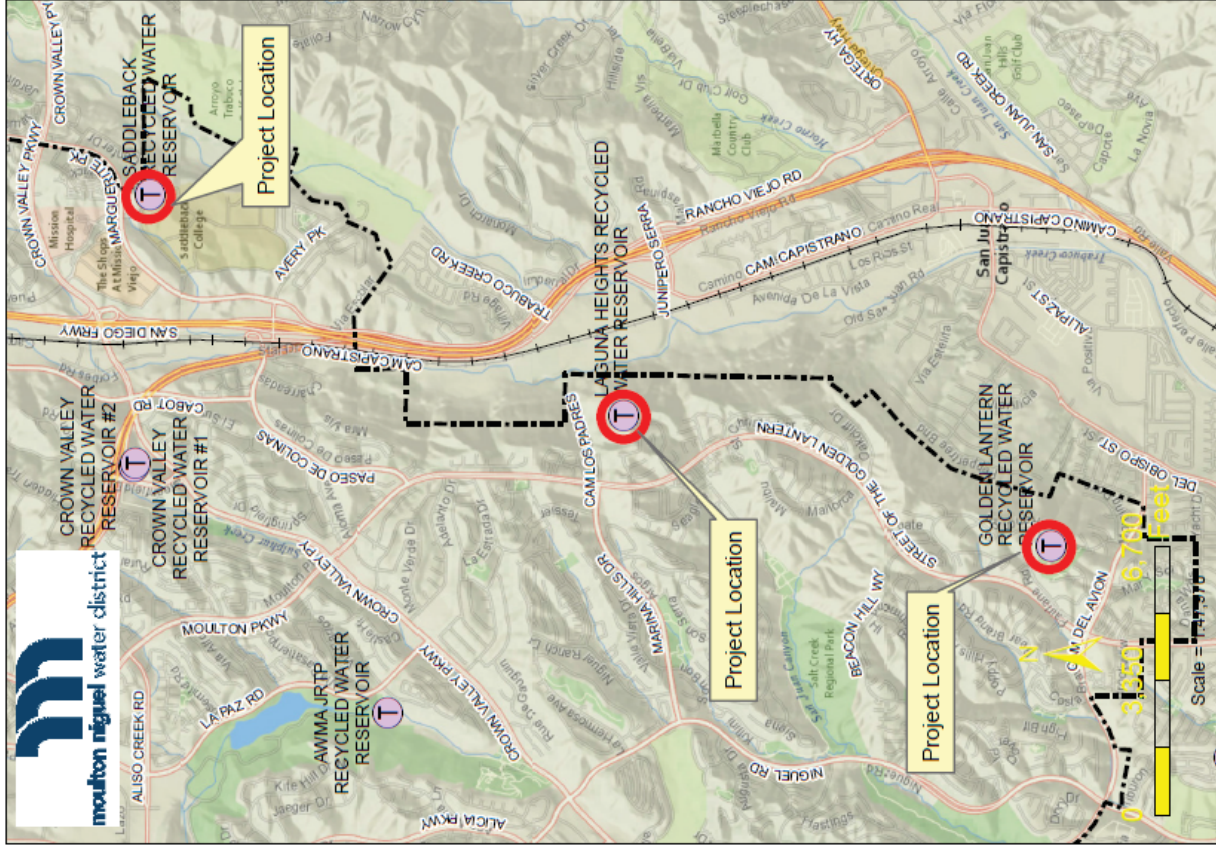
Saddleback: Acquire new easements and construct approximately 550 linear feet of 6-inch drain pipe to a SMWD sewer manhole on Hillcrest.

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: TBD

System: Recycled

Fund: 6

Project Name: Recycled Water Optimization Study (RWOS) - RW Main Replacement from Cabot Road to Galivan PS

Project Location: Mission Viejo, CA

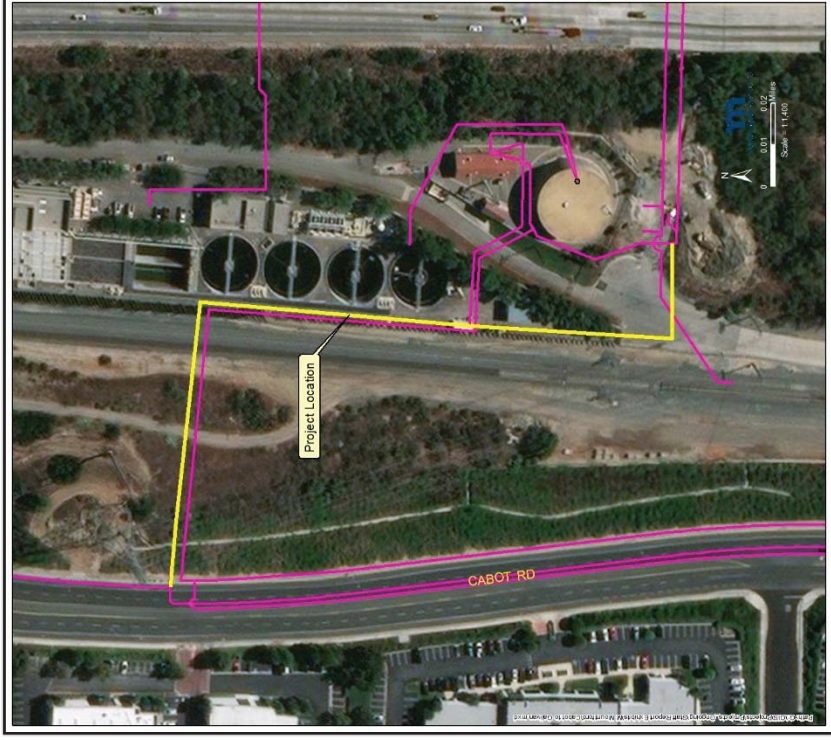
Project Description: Rehabilitate existing abandoned 20-inch force main from Cabot Road to 3A treatment plant. Install approximately 800 feet of new 20" RW Pipeline.

Project Need: The RWOS identified that the existing 16" pipeline is undersized for conveyance of summertime supply from Upper Oso Reservoir. Required to support additional system demands of 306 AFY.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$60,000
CEQA Compliance	\$150,000
Construction Contract	\$540,000
CM/Inspection/Permits/Other	\$100,000
Total Project Budget	\$850,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 6

Project Name: *Recycled Water Optimization Study (RWOS) - RW Main Replacement from Crown Valley Reservoir to Cabot Road*

Project Location: Laguna Niguel, CA

Project Description: Install approximately 2,600 feet of new 20" RW Pipeline, parallel with the existing 16" RW Main, from Greenfield to Cabot Road.

Project Need: 16" Pipeline is currently undersized for conveyance of summertime supply from Upper Oso Reservoir. RWOS identified this project as necessary to support additional system demands of 306 AFY.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$250,000
CEQA Compliance	Exempt
Construction Contract	\$1,150,000
CM/Inspection/Permits/Other	\$325,000
Total Project Budget	\$1,725,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: 2019-20 Electrical System Improvements - RW

Project Location: Southridge Recycled Water Pump Station, Aliso Viejo

Project Description: Replace the existing three SMC starters (P2, P3, and P4) to raise the short circuit rating to a minimum of 25kA at 480V. Remove and replace the main switchboard.

Project Need: The noted electrical equipment at this facility is old and beyond their useful lives. If this electrical equipment remains, they could be hazardous to personnel or property and would likely never be useful again.

Project Status: Proposed Project

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: 2019-20 Meter Replacement - RW

Project Location: Various

Project Description: Replace existing meters.

Project Need: This annual project will replace meters in the recycled water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction	\$125,000
Total Project Budget	\$125,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: 2019-20 Pressure Reducing Station Rehabilitation – RW

Project Location: Wood Canyon Drive PRS, Aliso Viejo

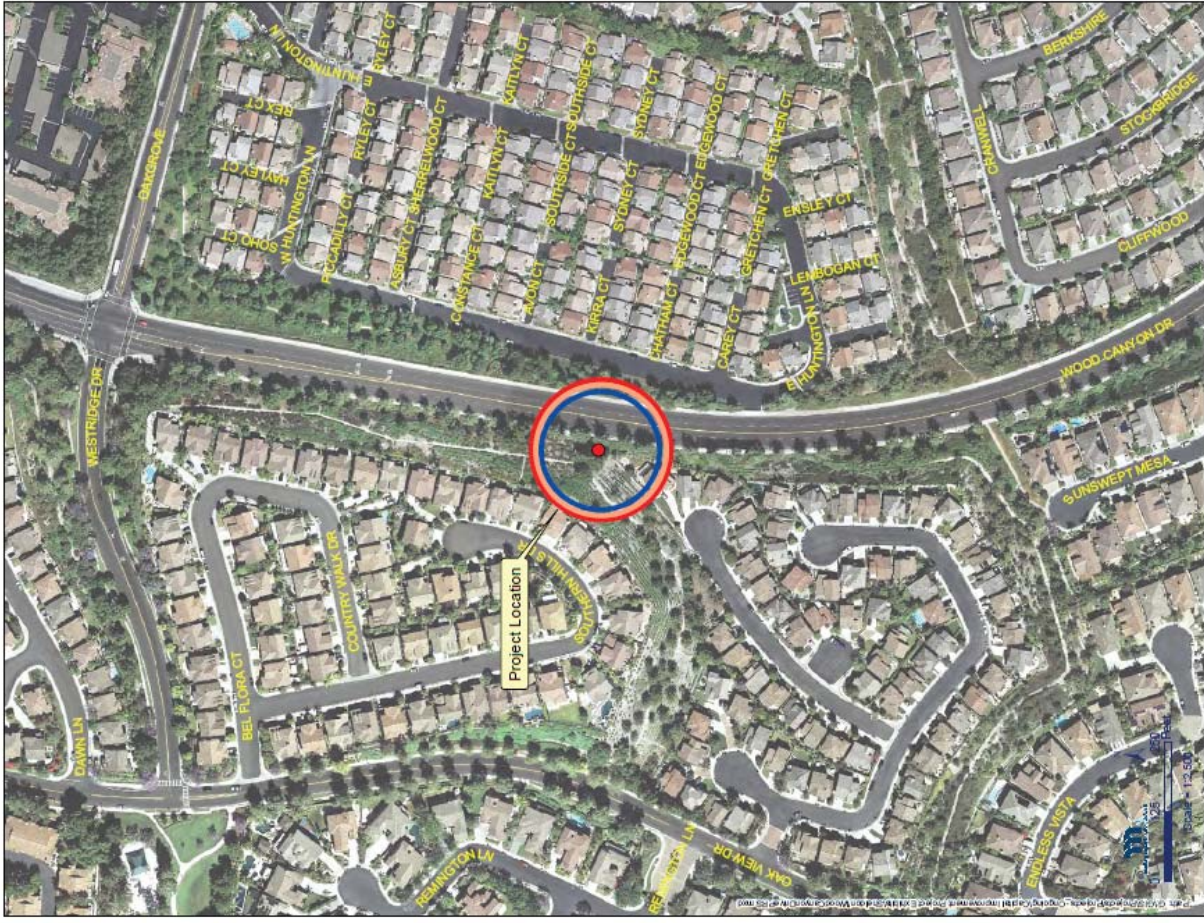
Project Description: Rehabilitate the structure as required and replace the pressure reducing station valves, mechanical equipment and appurtenances that have reached the end of their useful lives.

Project Need: The equipment within the pressure reducing station is reaching its useful life, is requiring increased maintenance, and needs to be replaced. This project occurs on an annual basis as part of the Vertical Asset Rehabilitation and Replacement Program.

Project Status: Proposed project

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contracts	\$85,000
Inspection	\$0
Total Project Budget	\$100,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 6

Project Name: 2019-20 Recycled Water Retrofits

Project Location: Various

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	\$10,000
Inspection	\$0
Total Project Budget	\$10,000



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: 2019-20 Service Line Replacement - RW

Project Location: Various

Project Description: Replace existing service lines.

Project Need: This annual project will replace service lines in the recycled water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction by District	\$140,000
Total Project Budget	\$140,000



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, instrumentation, valves, and various piping. Replace electrical equipment, including main switchboard, MCC, conduit, wire and lighting. Rehabilitate wet well, including demolition of existing T-Lock lining, concrete repair, and new spray-on lining.

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 Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$131,043
CEQA Compliance	Exempt
Construction Contract	\$852,979
Legal/Permits/Inspection/Other	\$40,000
Total Project Budget	\$1,024,022



Capital Improvement Program – Project Description

Project No: TBD

System: Recycled

Fund: 7

Project Name: 2019-20 Meter Replacement - RW

Project Location: Various

Project Description: Replace existing meters.

Project Need: This annual project will replace meters in the recycled water distribution system as they reach the end of their useful lives.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
CEQA Compliance	Exempt
Construction	\$125,000
Total Project Budget	\$125,000



Capital Improvement Program – Project Description

Project No: 2017.004

System: Wastewater

Fund: 7

Project Name: 2017-18 Pipeline Rehabilitation and Replacement - WW

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), Rocinante Easement (Mission Viejo), railroad easement east of Valencia Lift Station (City of Laguna Hills), and on-site drainage pipelines at Saddleback Reservoir (City of Mission Viejo).

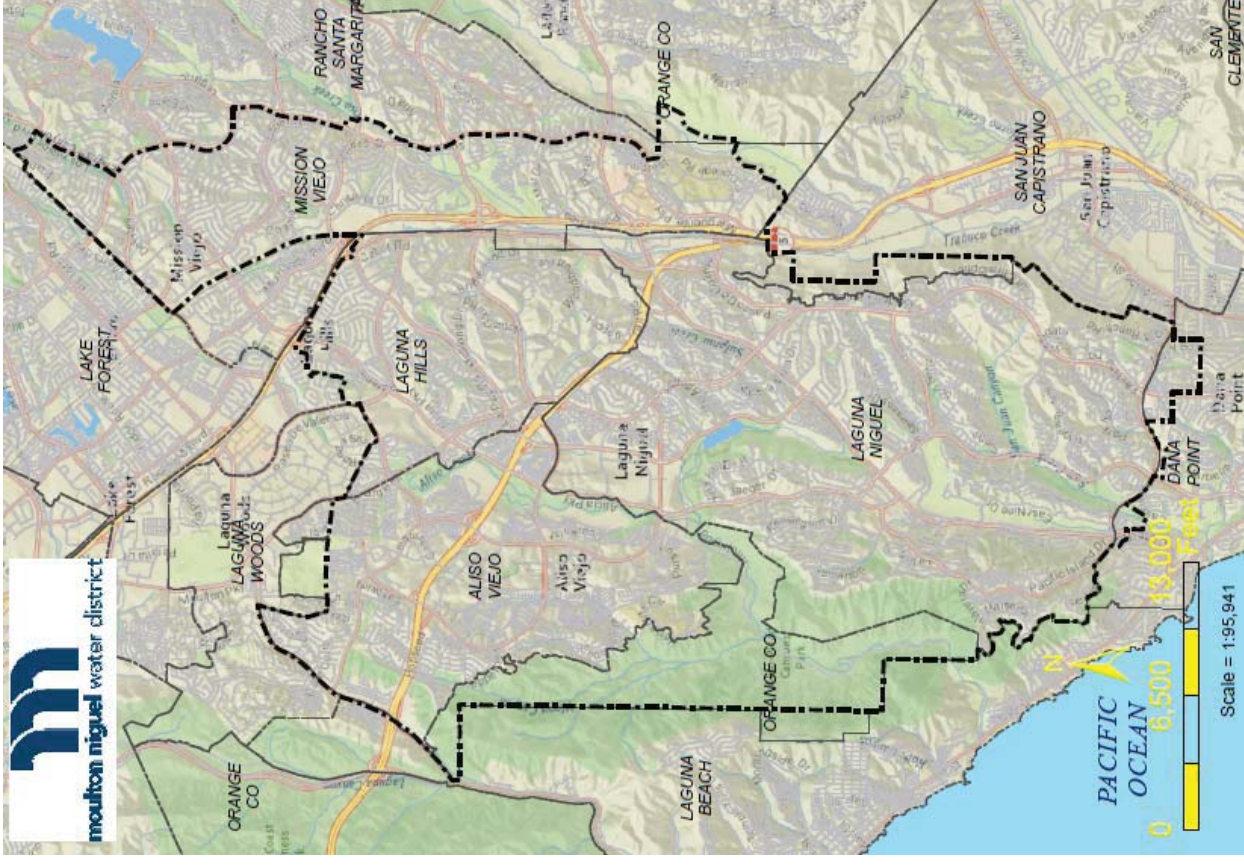
Project Description: Perform heavy root and calcium encrustation removal, clean and install approximately 3,500 feet of cured-in-place pipe (CIPP) liner.

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

Project Status: In Construction

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$275,000
Inspection/Other	\$25,000
Total Project Budget	\$350,000



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 the existing natural gas generator with an AQMD compliant emergency standby diesel generator, including site development to accommodate fire code requirements. Site improvements to include CMU retaining walls, paving, drainage, and fencing replacements.

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 requires property acquisition and site improvements.

Project Status: In Design

Estimated Project Amount:

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



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

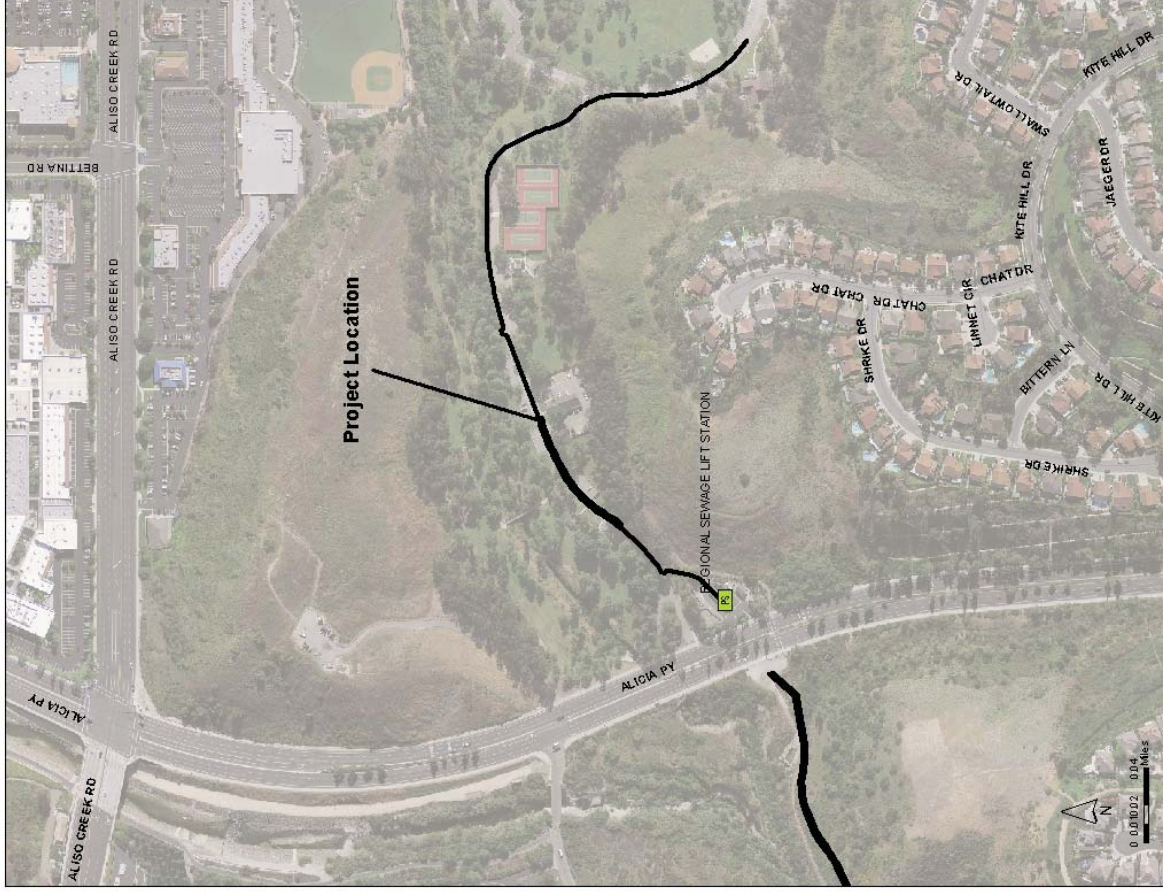
Project Description: Abandon existing 20" and 24" Techite force mains and construct new parallel force mains. Approximate length of new force mains is 9,200 linear feet each. Rehabilitate and repurpose existing force mains to become supplemental effluent transmission mains for Regional Treatment Plant, including connection to existing ETM at Alicia Pkwy. Extensive environmental permitting will be required.

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: 2017.007

System: Wastewater

Fund: 7

Project Name: *Aliso Creek LS Auxiliary Generator Replacement*

Project Location: 21933 Aliso Creek Road, Aliso Viejo

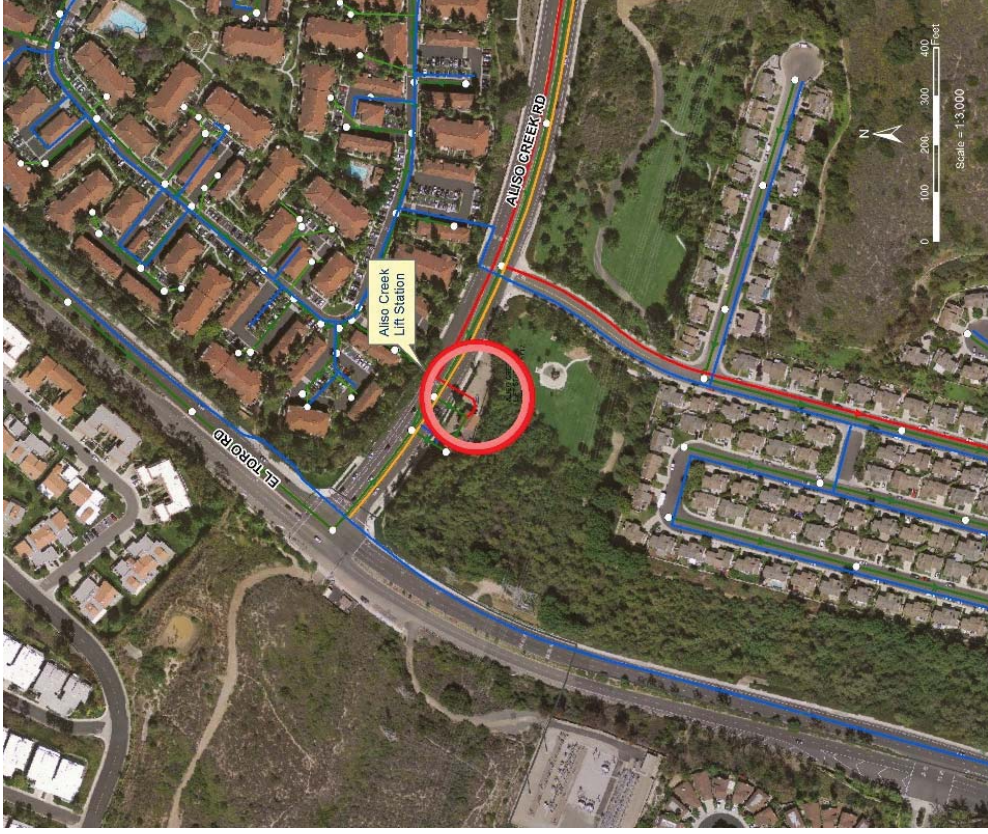
Project Description: Remove and replace the existing 1990 Cummins Propane 250 KW backup generator with a new auxiliary diesel generator.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA Compliance	Exempt
Construction Contract	\$650,000
Inspection/Other	\$25,000
Total Project Budget	\$775,000



Capital Improvement Program – Project Description

Project No: 2017.022

System: Wastewater

Fund: 14

Project Name: Regional Lift Station Enhancements

Project Location: Regional Lift Station, Laguna Niguel

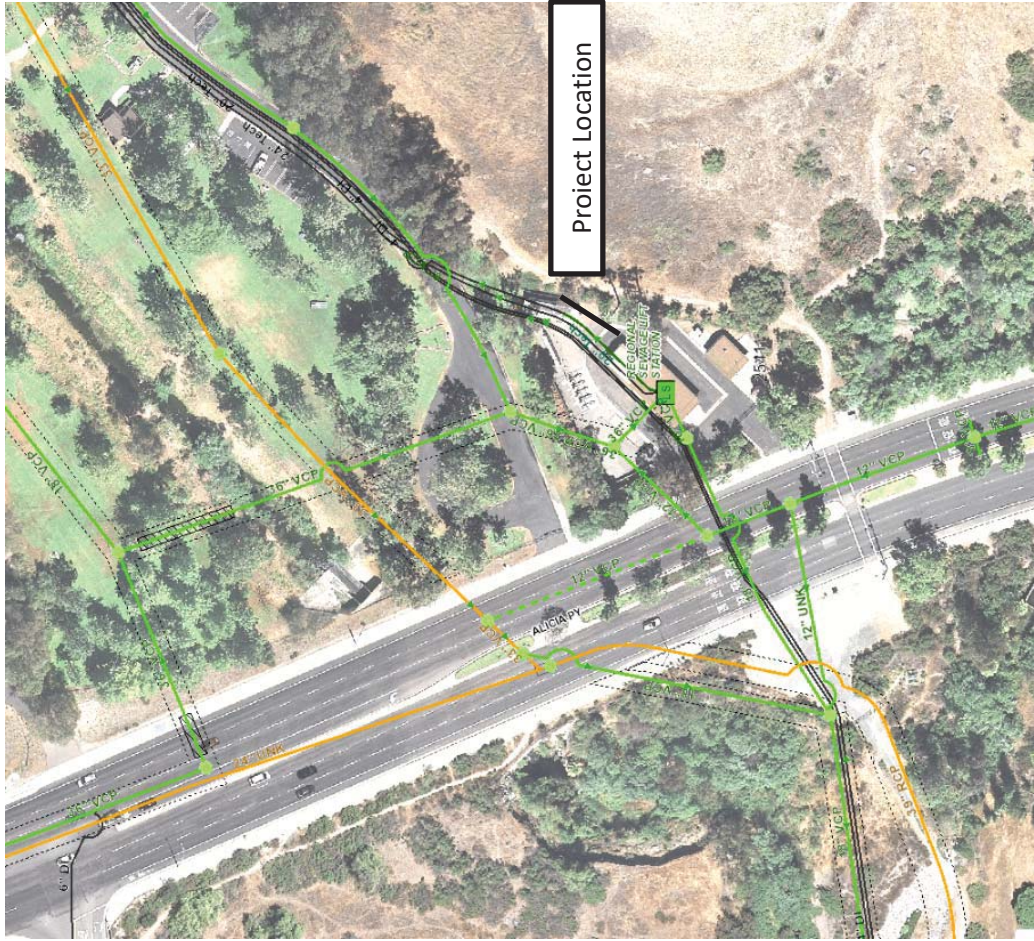
Project Description: Construct new suction and discharge piping for a new permanently installed diesel powered bypass pumping system. Suction pipe will be connected to existing wet well. Discharge will connect to existing force mains in valve vault. Construct new overflow structure. Rehabilitate existing wet well. Bypass pumping will be required during wet well rehab. Replace existing pump #5 with smaller pump to be used during low flow periods.

Project Need: A redundant, diesel powered bypass system is required for this critical facility in the event of an electrical system outage. Due to decreased sewage flows, existing pumps are too large to effectively pump during low flow periods.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$3,000,000
Inspection/Permits/Other	\$300,000
Total Project Budget	\$3,500,000



Capital Improvement Program – Project Description

Project No: 2018.023

System: Wastewater

Fund: 7

Project Name: Southwing LS Auxiliary Generator Replacement

Project Location: 22124 Canyon Vistas, Aliso Viejo

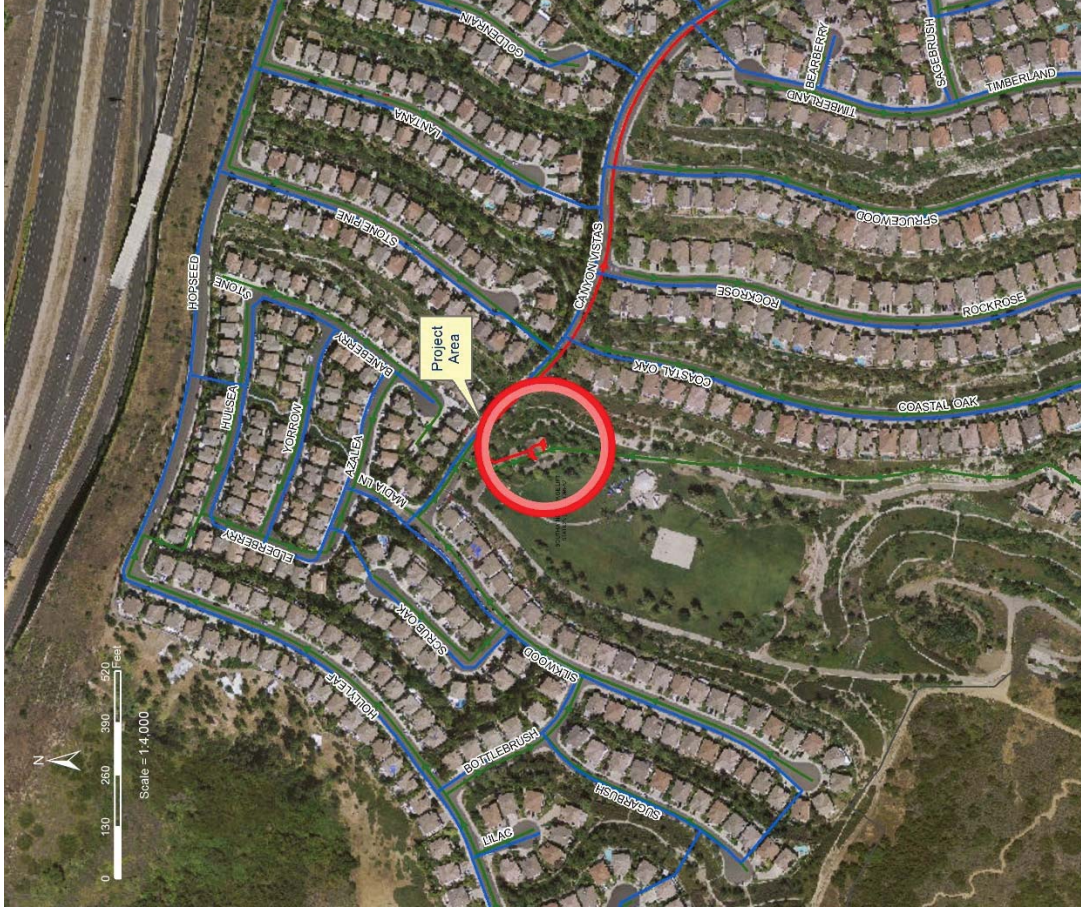
Project Description: Remove and replace the existing 1994 Cummins Propane 170 KW backup generator with a new auxiliary diesel generator.

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

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$575,000
Inspection/Other	\$25,000
Total Project Budget	\$675,000



Southwing LS-Auxiliary Generator Replacement

Capital Improvement Program – Project Description

Project No: 2018.027

System: Wastewater

Fund: 7

Project Name: *Regional Treatment Plant Southerly Influent Sewer Improvements*

Project Location: 29201 La Paz Road, Laguna Niguel

Project Description: Remove and replace the existing diversion structure, adjacent manholes, and conflicting sewer lines that are part of the two paralleling sewer inlet pipelines to the treatment plant, to allow for better operations & maintenance of the pipelines. Rehabilitate the on-site reinforced concrete pipes just upstream of the headworks. Bypass pumping will be required.

Project Need: The existing configuration of the diversion structure and adjacent manholes promotes sewer debris buildup inside the pipelines and requires more maintenance. The on-site reinforced concrete pipes are severely corroded and need to be rehabilitated.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$150,000
CEQA Compliance	Exempt
Construction Contract	\$1,600,000
Inspection/Other	\$25,000
Total Project Budget	\$1,775,000



Regional Treatment Plant – Wastewater

Capital Improvement Program – Project Description

Project No: 2018.028

System: Wastewater

Fund: 7

Project Name: *Upper Salada Lift Station Bypass Improvements*

Project Location: Upper Salada Lift Station, Laguna Niguel

Project Description: Replace and reconfigure the existing flow meter and bypass connections for the sewer force main at the Upper Salada Lift Station, including a new flow meter, valves, and an independent connection to each of the two force main pipes within Niguel Road

Project Need: The valves on the existing bypass connection are not functioning properly, causing emergency repairs to be completed. Additionally, the existing bypass connection to the western force main is within the slow lane of the southbound side of Niguel Road, which is a safety concern. Improvements would relocate both bypass connections to be within the Upper Salada Lift Station site.

Project Status: In Design

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$ 200,000
Inspection/Other	\$25,000
Total Project Budget	\$300,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: *Manhole Rehabilitation Program*

Project Location: Various

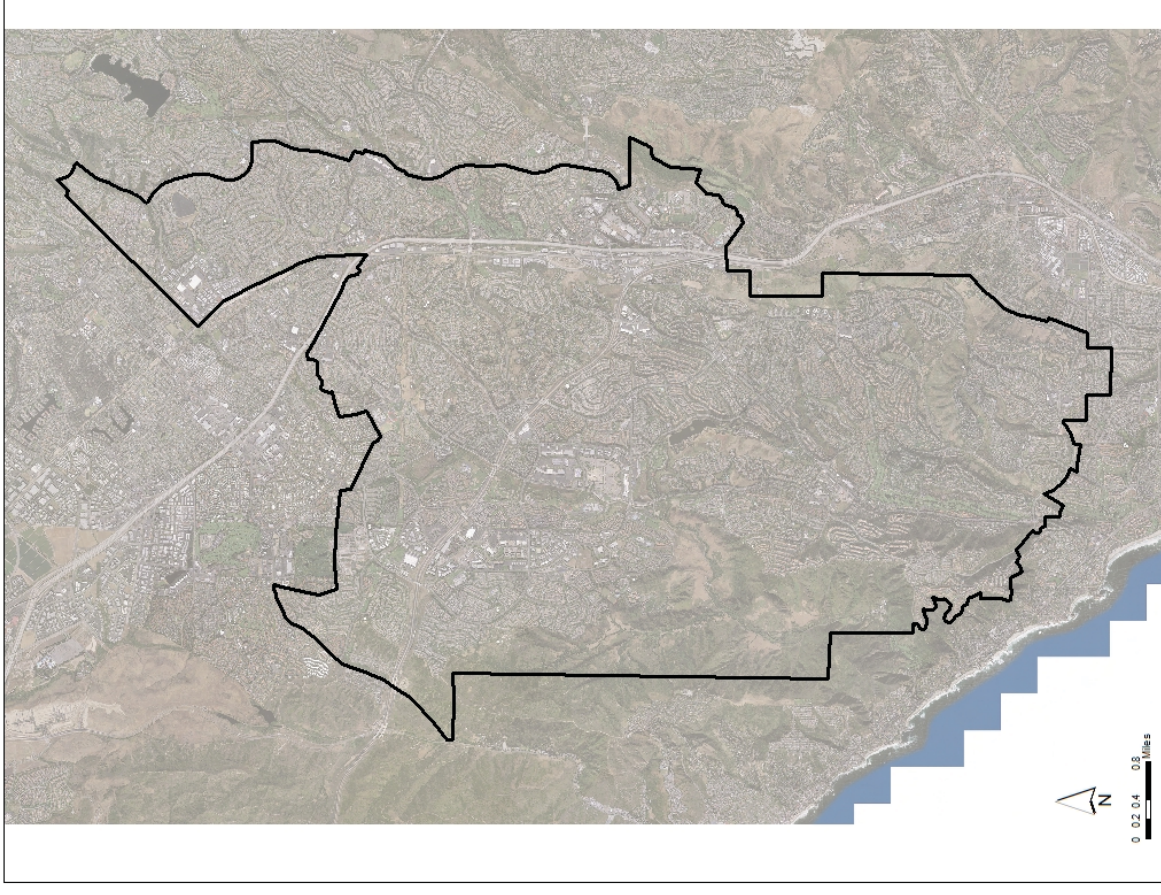
Project Description: Rehabilitate existing sewer manholes.

Project Need: District staff inspects the sewer system continuously. As damaged facilities are identified, they are 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: Pipeline Rehabilitation and Replacement Program – WW

Project Location: Various

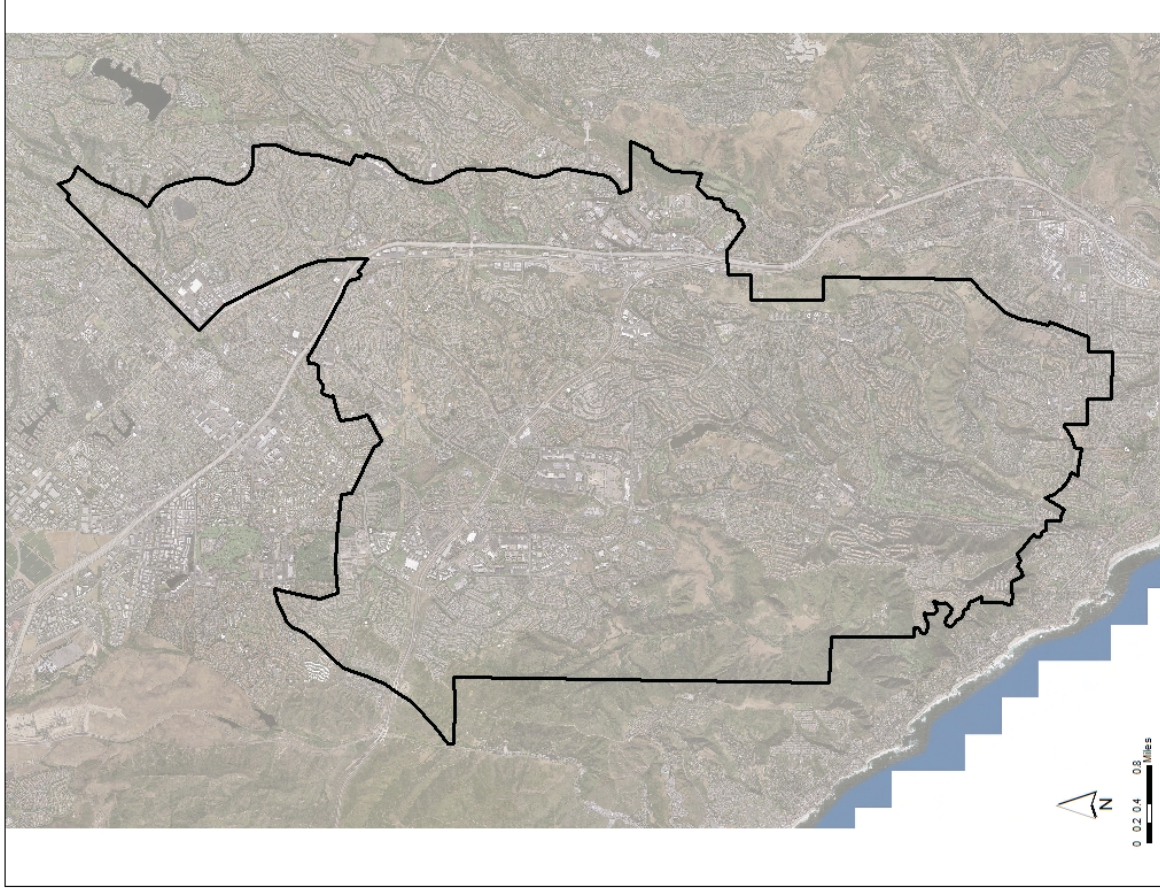
Project Description: Rehabilitate or replace pipelines that have reached the end of their useful lives. An analysis was performed using information contained in the District's Geographic Information System (GIS) to prioritize potable water pipelines for rehabilitation and replacement.

Project Need: The District has approximately 490 miles of sewer pipelines in the system. These pipelines are used to collect wastewater from customers throughout the District's service area. The pipelines range in diameter from 4-inch to 48-inch and are made of various materials including vitrified-clay, PVC, asbestos-cement, ductile iron, steel, and concrete.

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

Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	Exempt
Construction Contract	\$1,250,000
Inspection/Other	\$50,000
Total Project Budget	\$1,600,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: Siphons Rehabilitation Program

Project Location: Various

Project Description: Dewater, clean, preform condition assessment and rehabilitate sewer siphons.

Project Need: This integrity of siphons within the sewer collection systems is being compromised by root infiltration, calcium encrustation, and pipe cracking. The condition assessment and rehabilitation of siphons will extend the useful life without having to replace the pipelines in difficult locations.

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

Estimated Project Amount:

Item	Estimated Cost
Condition Assessment / Design	\$750,000
CEQA Compliance	Exempt
Construction Contract	\$4,000,000
Inspection / Other	\$250,000
Total Project Budget	\$5,000,000



Capital Improvement Program – Project Description

Project No: Annual Program

System: Wastewater

Fund: 7

Project Name: *Vertical Assets Rehabilitation and Replacement Program - WW*

Project Location: Various

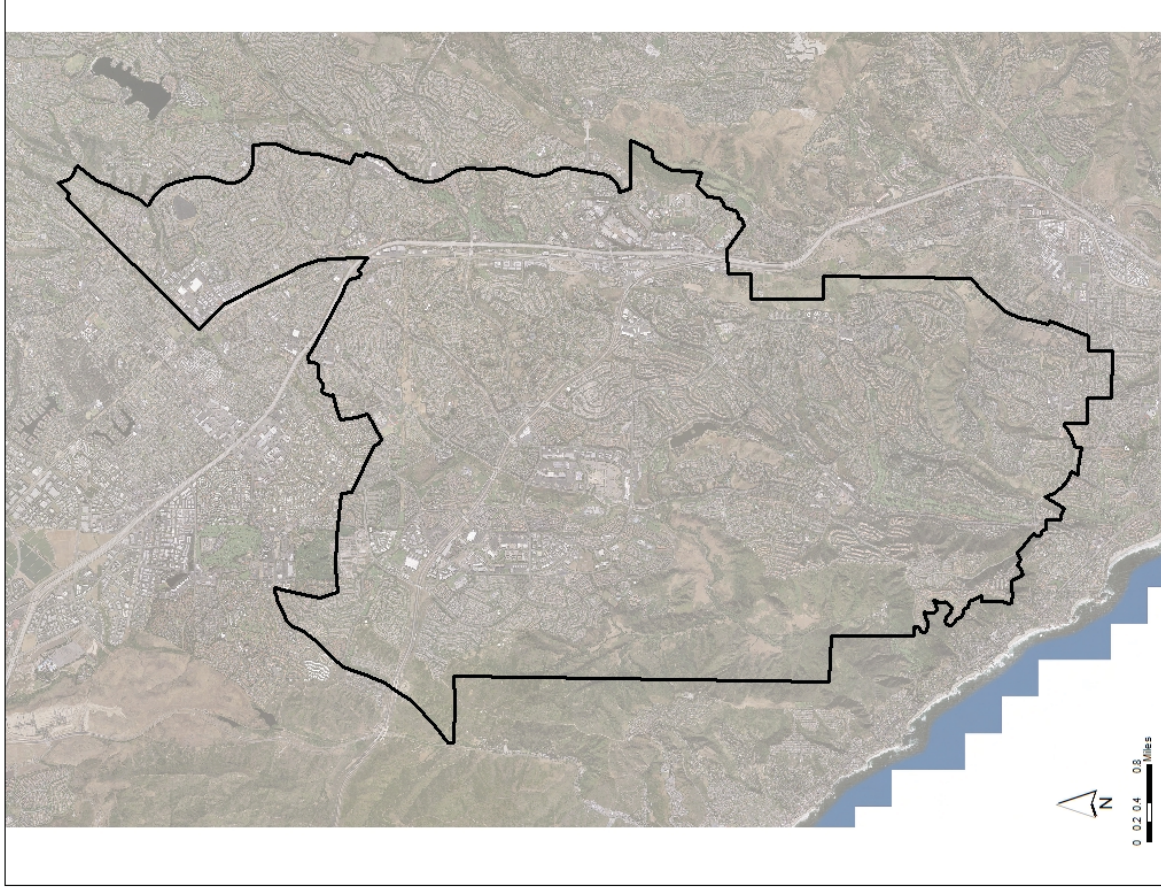
Project Description: Rehabilitate or replace structures and equipment at lift stations that have reached the end of their useful lives. An analysis was performed by staff to prioritize the methodical rehabilitation or replacement of vertical assets within the wastewater system.

Project Need: The District has 18 active sewage lift stations in the wastewater system. These vertical assets are used to convey wastewater from the collections system of District's service area to various wastewater treatment plants. As the facilities reach the end of their useful lives, the equipment there becomes obsolete, does not function efficiently, and requires 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	\$3,200,000
CEQA Compliance	Exempt
Construction Contract	\$21,500,000
Inspection/Other	\$3,150,000
Total Project Budget	\$27,850,000



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

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

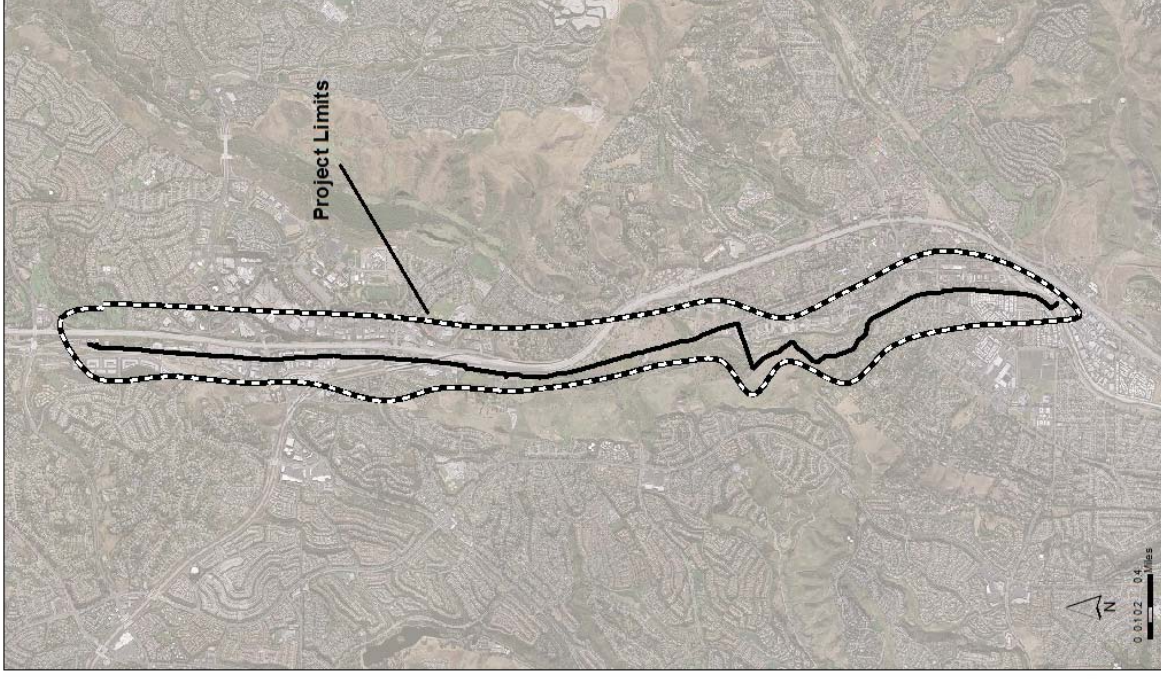
Project Need: The 3A outfall line was constructed as a feed line from San Juan Capistrano to Mission Viejo Lake. The District purchased the facility and changed its use from the intended design. Additional valves are proposed along this five mile reach to increase the number of isolation points and improve the overall operations and maintenance capability of the District.

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

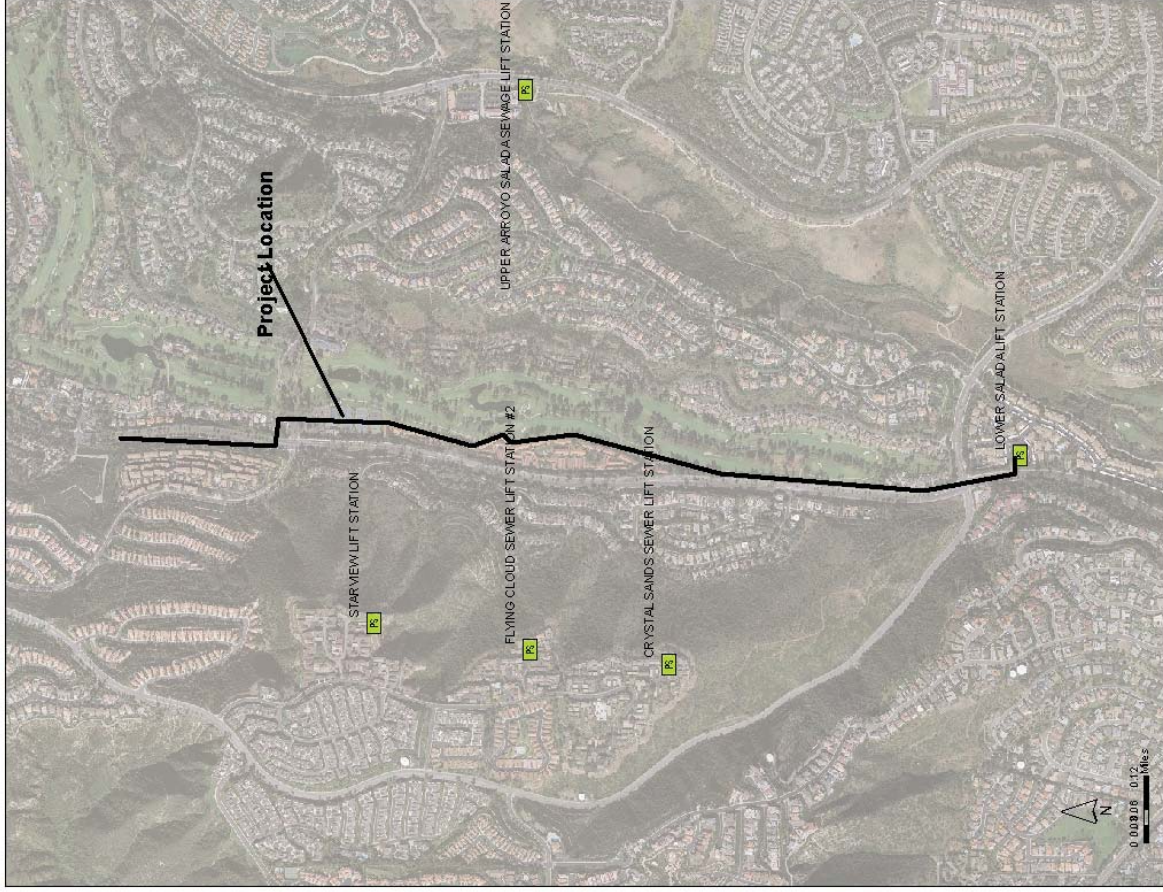
Project Description: Abandon existing 12" class 100 ACP force main and construct new force main in Crown Valley Parkway. Approximate length of new force main is 9,000 linear feet. A moratorium is in effect along this part of Crown Valley Parkway until 2020.

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

Project Status: Proposed Project

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: 2018.024

System: Wastewater

Fund: 7

Project Name: *Valencia Lift Station Manhole Diversions*

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

Project Description: Reconstruct three sewer manholes to install manually operated slide gates for flow diversion to or away from the Valencia Lift Station. Bypassing operations and traffic control will be required at each manhole.

Project Need: The sewer manholes surrounding the Valencia Lift Station need to be reconstructed to allow flow diversion to or away from the lift station as operationally needed.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$250,000
Sewer Bypass System	\$150,000
Inspection/Permits/Other	\$25,000
Total Project Budget	\$475,000



Capital Improvement Program – Project Description

Project No: 2018.026

System: Wastewater

Fund: 14

Project Name: Camino Capistrano Lift Station and Force Main

Project Location: Camino Capistrano Lift Station, Laguna Niguel;

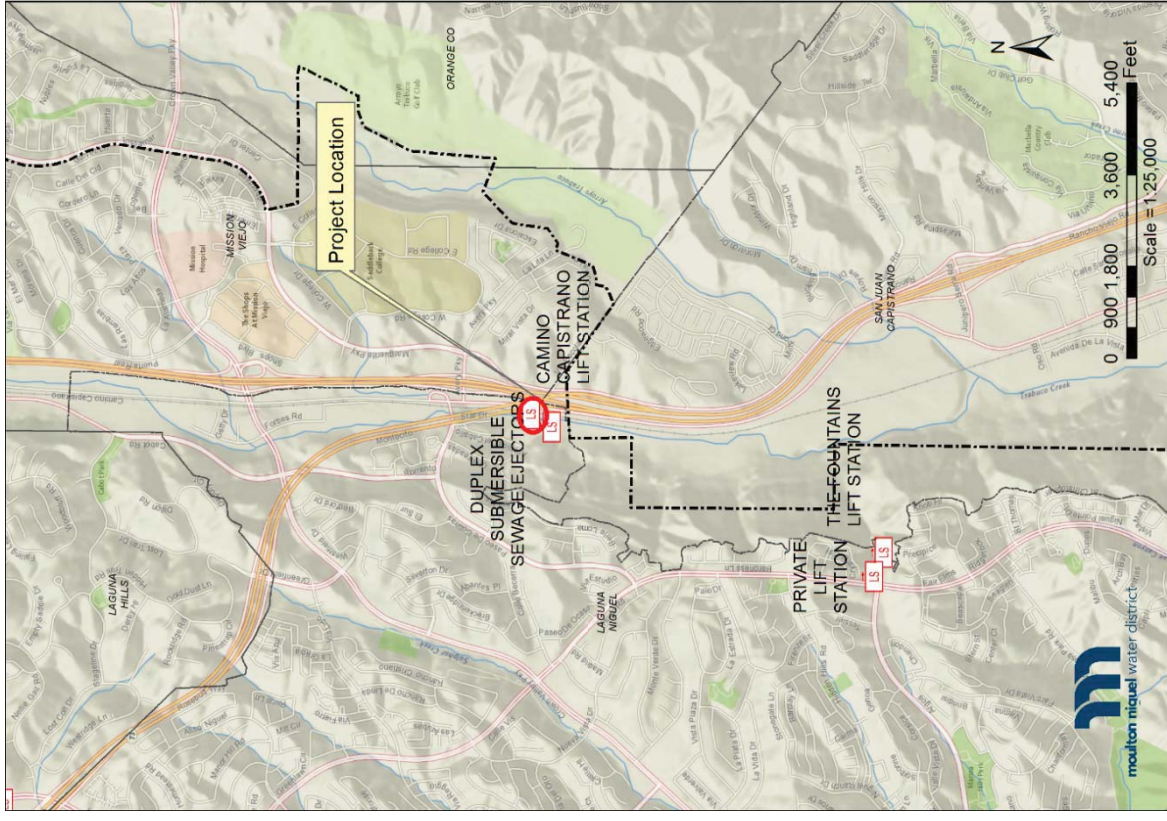
Project Description: Construct a new Camino Capistrano Lift Station to divert wastewater from the Oso Trabuco trunk sewer and to Plant 3A for treatment and re-use as recycled water. Construct influent siphon below Oso Creek, between the Oso Trabuco Trunk Sewer and the Camino Capistrano Lift Station. Construct a 12-inch force main from Camino Capistrano Lift Station to Plant 3A. Construct a new lift station with new pumps, mechanical and electrical equipment. Construct an approximately 0.5 MG equalization basin to accommodate diurnal flows. Property acquisition is anticipated.

Project Need: Diversion of approximately 1.0 MGD of wastewater to Plant 3A in order to maximize wastewater treatment efficiency and recycled water production.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Initial Study & Property Acquisition Support	\$100,000
Property Acquisition	\$1,000,000
Design	\$350,000
CEQA IS/MND	\$100,000
Construction Contract	\$10,500,000
CM and Special Inspection	\$250,000
Inspection/Utility Fees/Other	\$100,000
Total Project Budget	\$12,400,000



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.

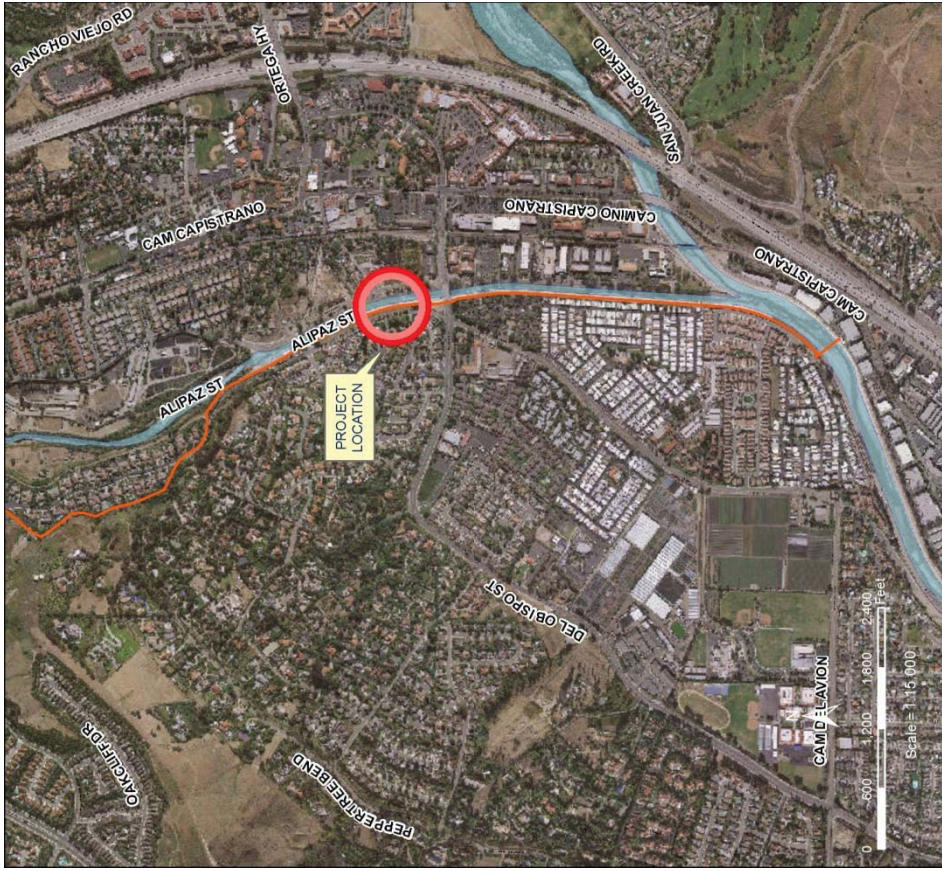
Project Need: The existing ETM is located in an embankment along an unprotected bank of Oso Creek and is subjected to potential erosion of the creek bank. This proposed project will extend riprap to provide protection for the existing pipe.

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

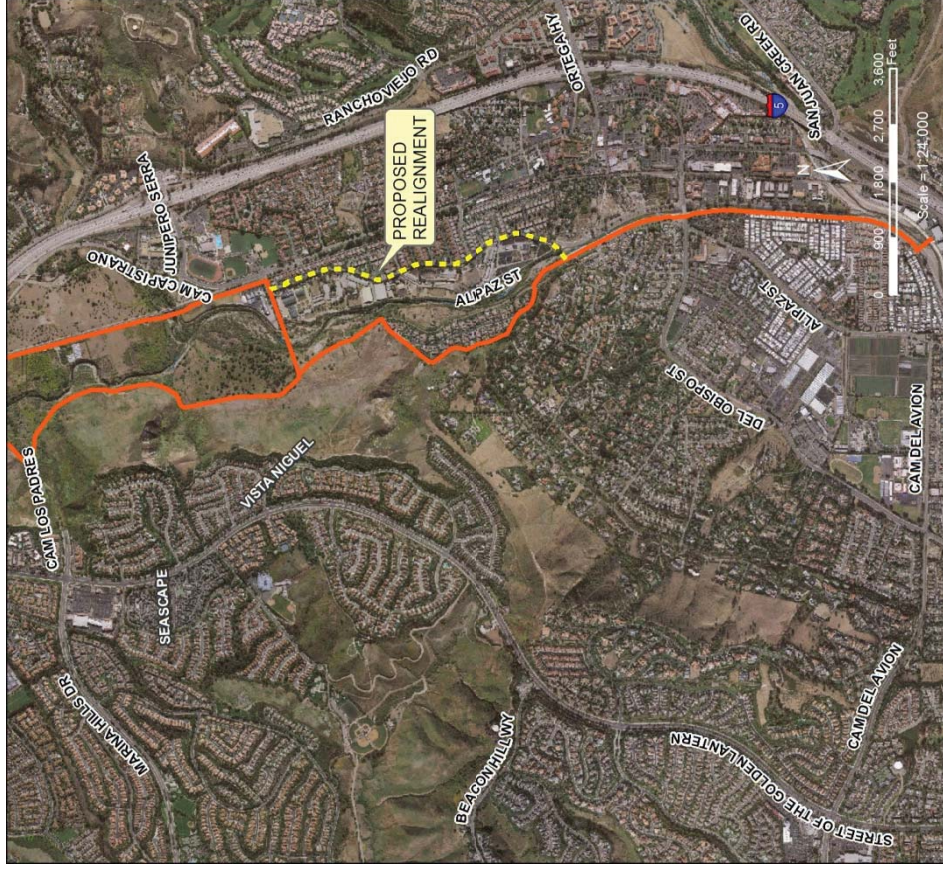
Project Description: Abandon the existing ETM from Station 221+00 to Station 298+00 and construct a 30-inch ductile iron pipe along Avenida De La Vista, approximately 4,700 feet from Oso Road to the cul-de-sac. The alignment will proceed 1,000 feet on Trabuco Creek Trail until it is jacked and bored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

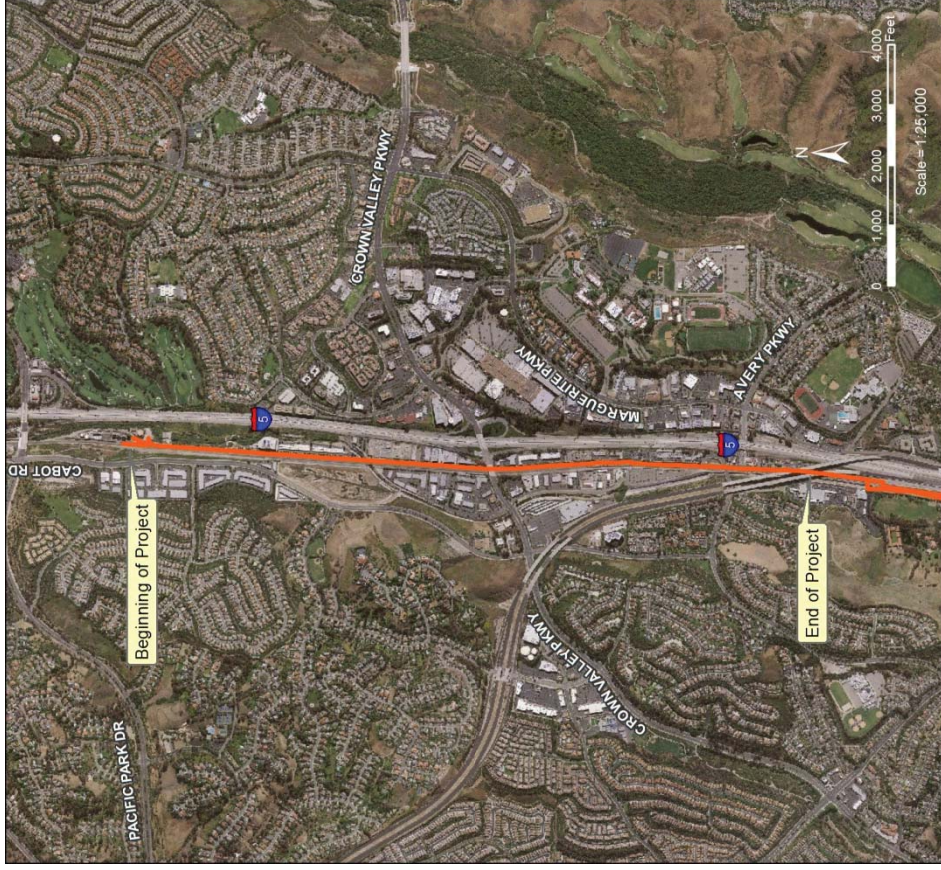
Project Need: The existing pipeline is approaching the end of its useful life. Replacement of the existing 20-inch pipeline will increase hydraulic capacity and improve operation of the pipeline.

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 the need for relocation or replacement 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: 14

Project Name: Lower Salada Lift Station Overflow Wetwell

Project Location: Lower Salada Lift Station, Laguna Niguel

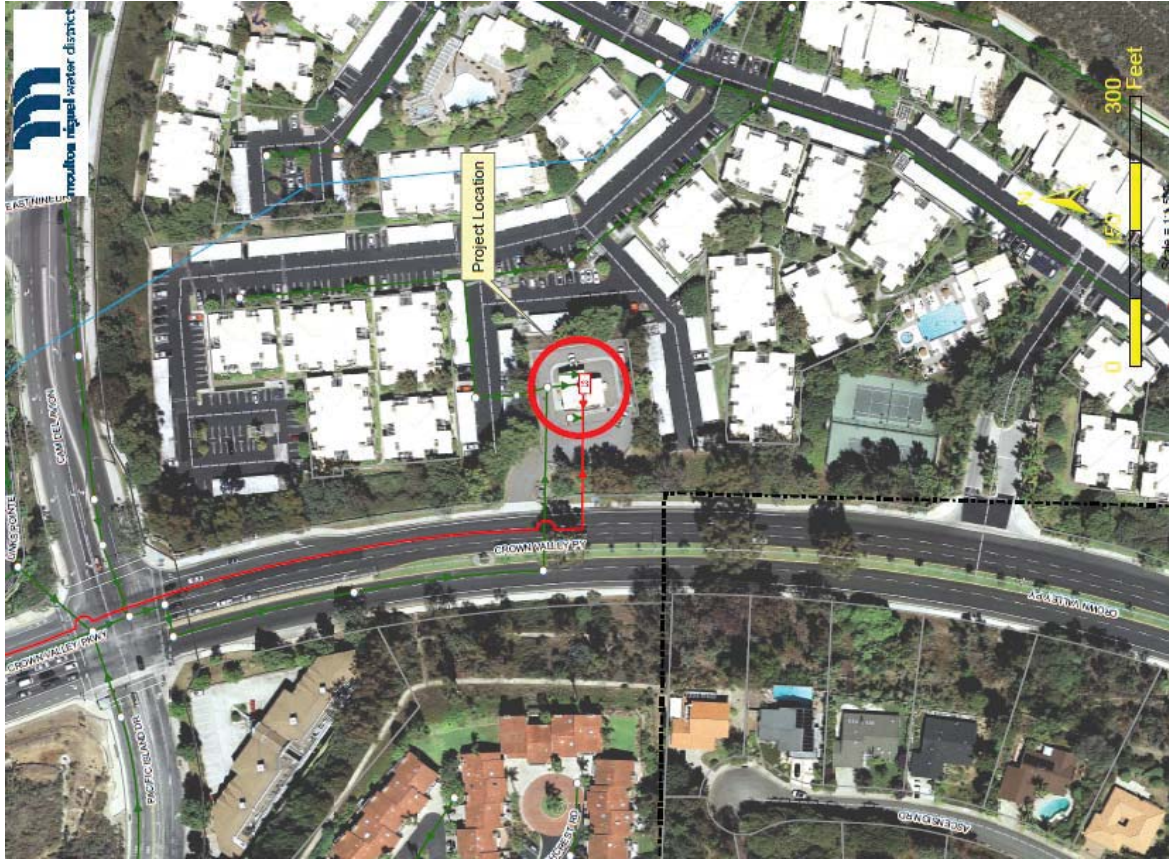
Project Description: The construction of a new overflow wetwell at the Lower Salada Lift Station.

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 overflow. The lift station's existing 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 sewage overflow.

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: 2019.001

System: Wastewater

Fund: 7

Project Name: 2019-20 Manhole Rehabilitation

Project Location: Various

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: Aliso Creek Lift Station Rehabilitation

Project Location: Aliso Creek Lift Station, Aliso Viejo

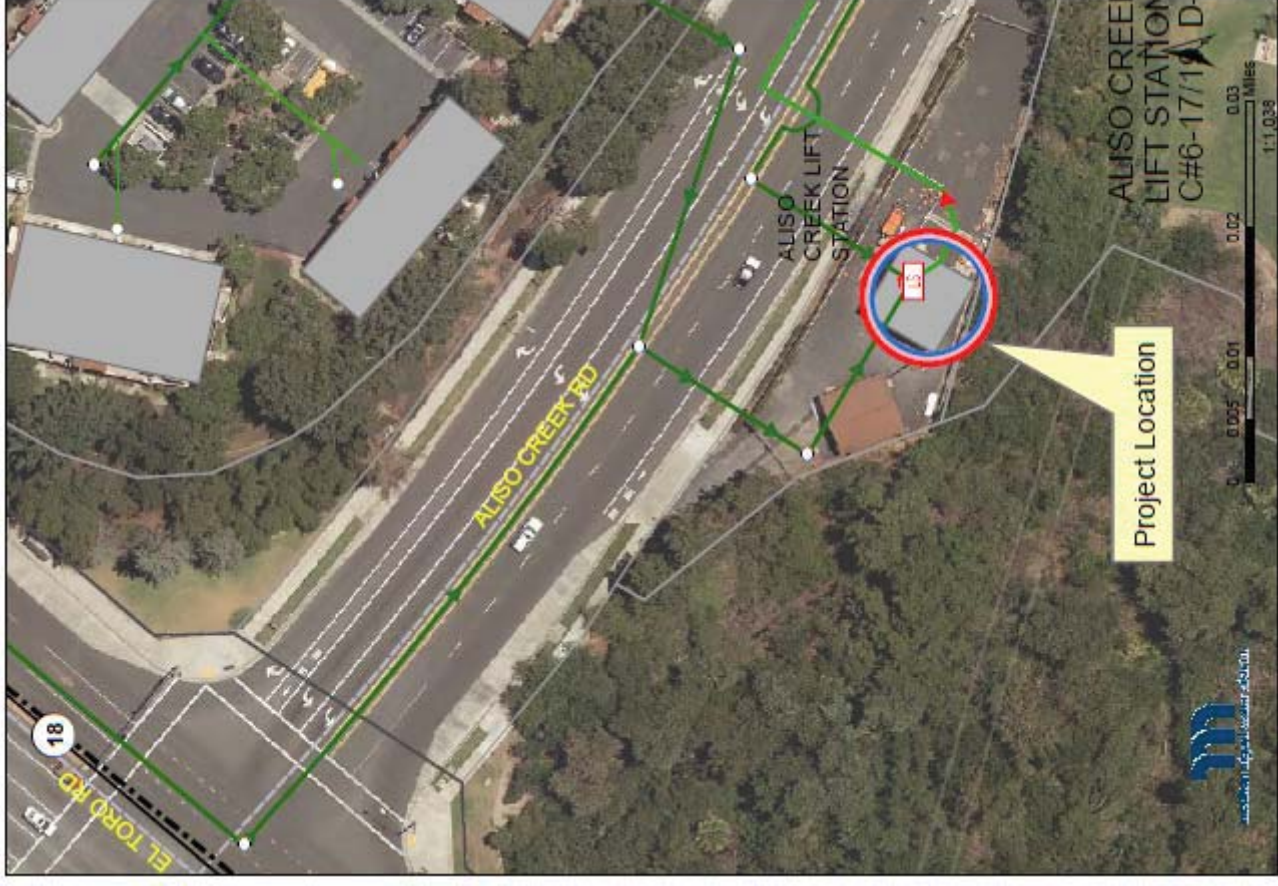
Project Description: Rehabilitate the Aliso Creek Lift Station in its entirety, including gravity sewer improvements to allow for isolation of the wet well; wet well rehabilitation, mechanical equipment replacements, electrical system replacements, instrumentation system replacements, and sitework restoration. A third pump is also necessary to conform to District standards for this type of facility. Perform condition assessments and maintenance of all other remaining facility components.

Project Need: The Aliso Creek Lift Station was constructed in 1989. Much of the equipment has become obsolete, with replacement parts being difficult to locate. Additionally, the wet well is in need of condition assessment and rehabilitation.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA IS/MND	Exempt
Construction Contract	\$2,000,000
CM and Specialty Inspection	\$250,000
Legal/Permit/Other	\$50,000
Total Project Budget	\$2,600,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: Lift Station Ventilation System Improvements

Project Location: Audubon LS, Boundary Oak LS, San Joaquin Hills LS, Southwing LS (City of Aliso Viejo). Del Avion LS, Lower Salada LS, Regional LS (City of Laguna Niguel).

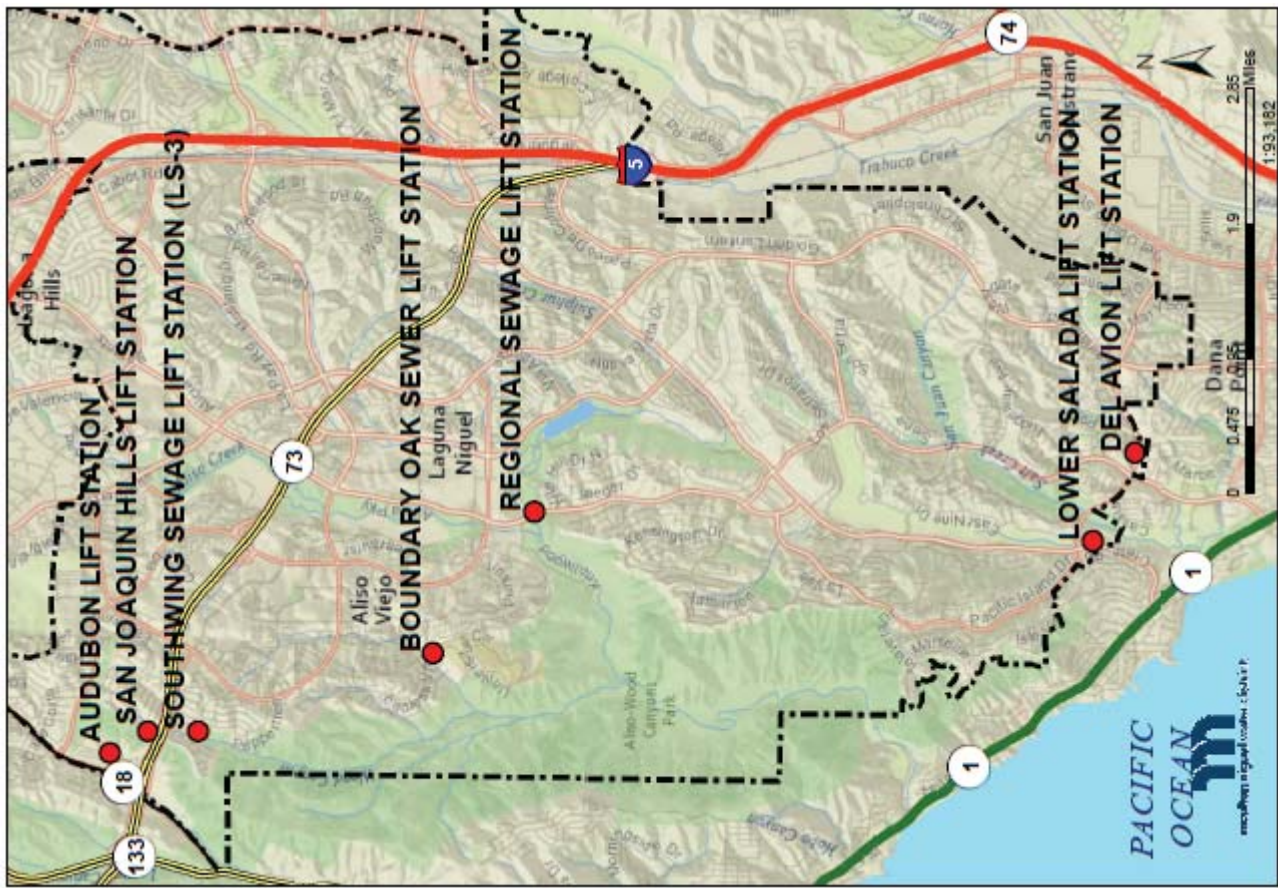
Project Description: Reconfigure and reconstruct the ventilation systems at seven sewer lift stations to provide clean air and maintain safe atmospheric conditions within the equipment rooms of the sewage lift stations. New ductwork and ventilation fans are to be installed and configured with air intakes away from the lift station wet wells to avoid bringing toxic and corrosive gases into the stations.

Project Need: The ventilation systems at lift stations are critical components to maintain safe atmospheric conditions for personnel and sensitive electrical components within the facilities. These systems are requiring increased maintenance and need replacement. Additionally, several systems require reconfiguration to locate the suction inlet away from the wet well of the station.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$100,000
CEQA IS/MND	Exempt
Construction Contract	\$700,000
Inspection/Other	\$50,000
Total Project Budget	\$850,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: *Lower & Upper Salada O2 System Replacement*

Project Location: Lower & Upper Salada Lift Stations, Laguna Niguel

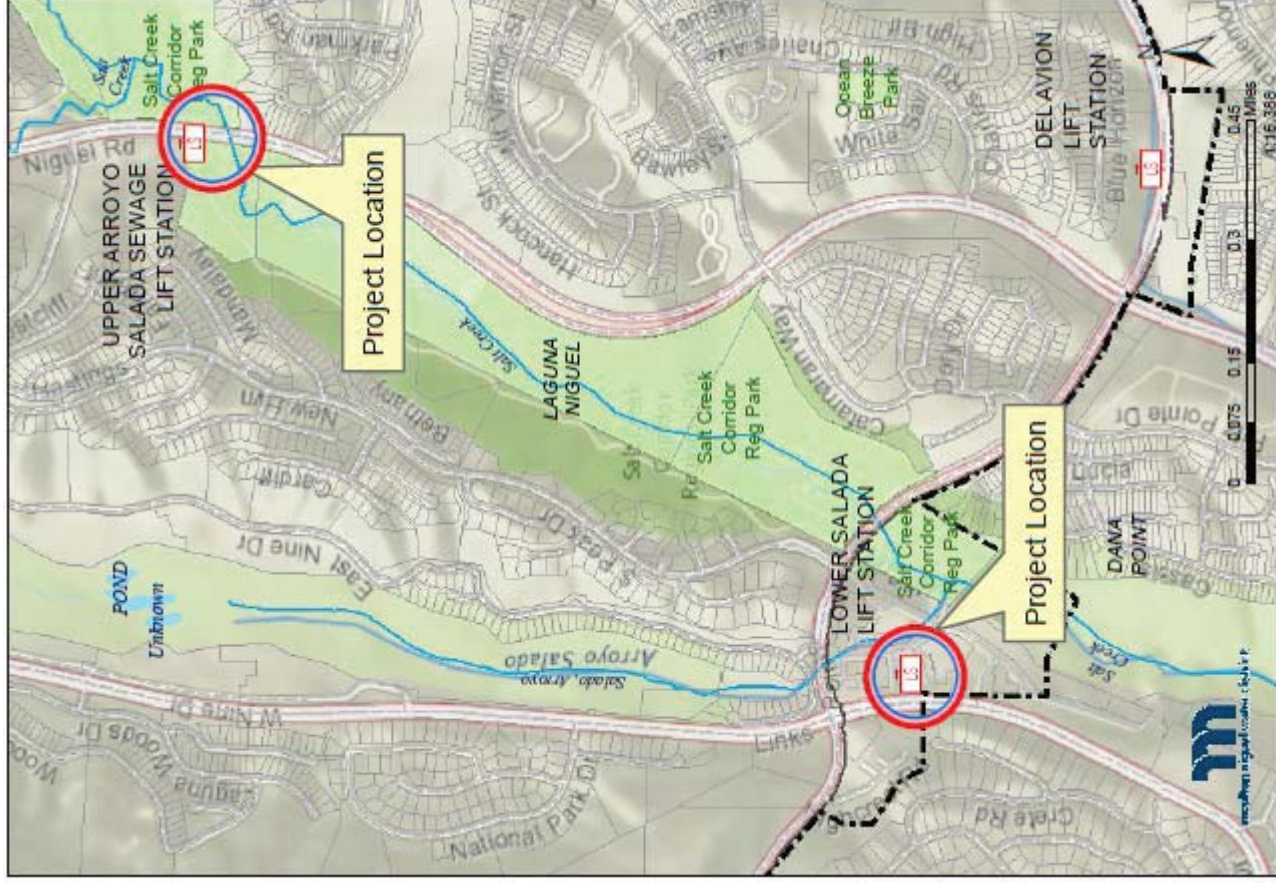
Project Description: Replace the existing on-site O2 systems at both the Lower and Upper Salada Lift Stations. The extent of replacement will be based on an evaluation and recommendation(s) on how to best proceed with a treatment system at both sites.

Project Need: The existing O2 systems at both lift stations are not functioning properly, causing additional maintenance and repairs to be completed. The O2 systems are part of the District's operations and maintenance to reduce odors at known hot spots. Improvements at both lift stations will also include, but is not limited to replacing auxiliary electrical conduits and connections, sidestream pumps, piping and accompanying valves.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$125,000
CEQA Compliance	Exempt
Construction Contract	\$600,000
Inspection/Other	\$25,000
Total Project Budget	\$750,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: North Aliso Lift Station Reconstruction

Project Location: North Aliso Lift Station, Mission Viejo

Project Description: Demolish and reconstruct the entire North Aliso Lift Station with a new adequately sized wet well and overflow basin, new pump room configured to District standards for lift station facilities, enclosed electrical room, and other related facility improvements. A third pump is also necessary to conform to District standards.

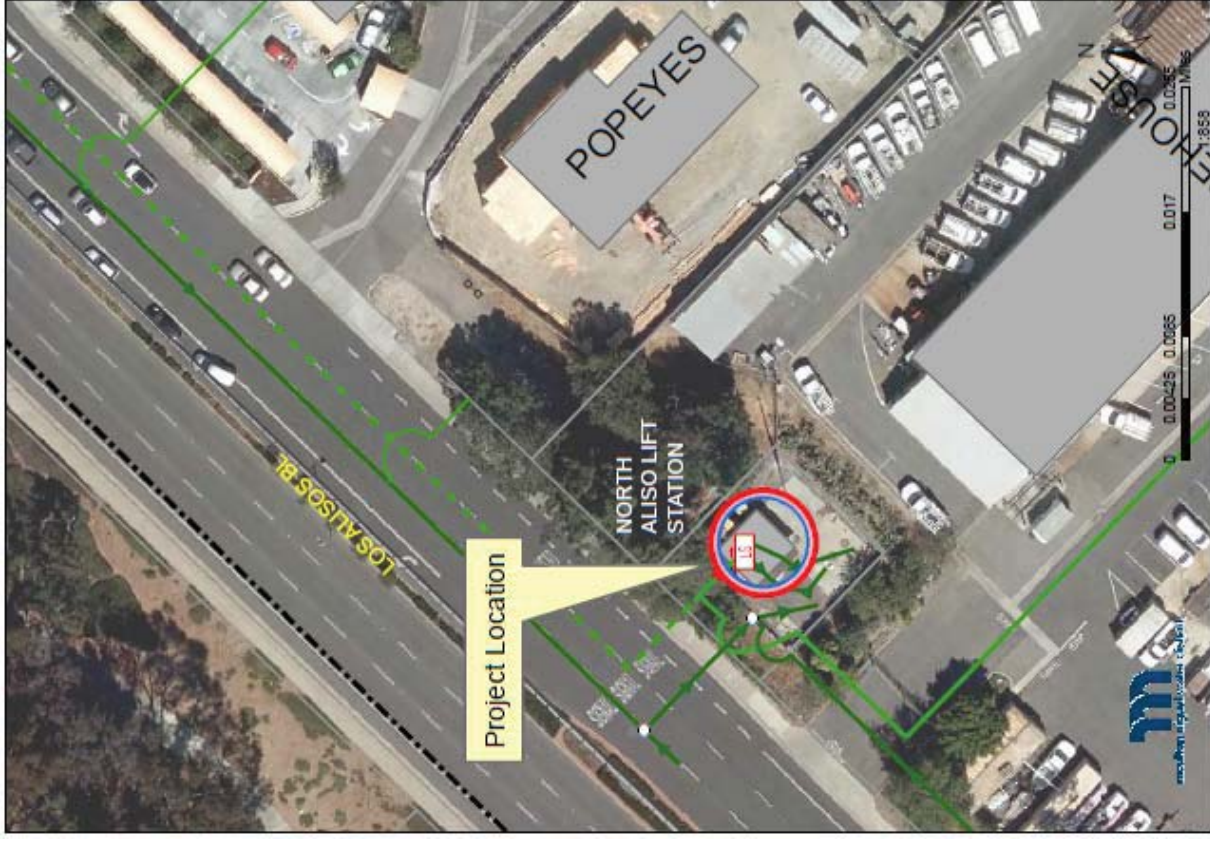
This project will require an extensive bypass pumping system and long term temporary construction easement.

Project Need: The North Aliso Lift Station was constructed in 1991. Although periodic improvements have been made, the equipment is obsolete, requires increased maintenance, and needs replacement. The wet well is undersized, and lacks operating depth, requiring that a new wet well and overflow basin be constructed.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$500,000
CEQA IS/MND	Exempt
Construction Contract	\$4,000,000
CM and Specialty Inspection	\$450,000
Inspection/Other	\$50,000
Total Project Budget	\$5,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: Siphons Rehabilitation Phase 1

Project Location: Various

Project Description: Dewater, clean, preform condition assessment and rehabilitate sewer siphons.

Project Need: This integrity of siphons within the sewer collection systems is being compromised by root infiltration, calcium encrustation, and pipe cracking. The condition assessment and rehabilitation of siphons will extend the useful life without having to replace the pipelines in difficult locations.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Condition Assessment / Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$750,000
Inspection / Other	\$50,000
Total Project Budget	\$1,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Wastewater

Fund: 7

Project Name: *Upper Salada Lift Station Force Main Rehabilitation and Replacement*

Project Location: Niguel Road, Laguna Niguel

Project Description: Replace 5,400 linear feet of existing 8-inch Sewer Force Main with a new 12-inch PVC Force Main and CIPP line 6,700 linear feet of existing 12-inch Sewer Force Main along Niguel Road, from the Upper Salada Lift Station to the summit manhole near La Hermosa Avenue.

Due to the length of pipeline repair and replacement, a CEQA IS/MND is anticipated to be required for the project.

Project Need: Corrosion of the metallic force main pipes has been identified near the Upper Salada Lift Station. Additionally, the existing 8-inch force main is undersized for wet-weather flows.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$650,000
CEQA Compliance	\$100,000
Construction Contract	\$ 4,600,000
Inspection/Other	\$650,000
Total Project Budget	\$6,000,000



Capital Improvement Program – Project Description

Project No: 3AOCI

System: Plant 3A

Fund: 7

Project Name: Operations Capital Improvements

Project Location: Plant 3A, Laguna Niguel

Project Description: Plant 3A requires lots of improvements of the treatment processes including pumps covers, monitoring instruments, new valves, electrical and control conduit replacements, safety improvements, security enhancements, adding new pumps, process optimization, and etc. This will be ongoing projects for many years.

Project Need: This project will be to rehabilitate and re-establish the desired level of service and redundancy for the entire Plant 3A treatment facilities. Also, this project will make improvements to meet the current permit capacity of 6 MGD with desired redundancy and reduce operational and maintenance costs and improve the ease of operations and safety and security level.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$300,000
CEQA Compliance	Exempt
Construction Contract	\$2,400,000
Inspection/Other	\$300,000
Total Project Budget	\$3,000,000



Capital Improvement Program – Project Description

Project No: 3A18.C01

System: Plant 3A

Fund: 7

Project Name: *Subsidence Mitigation*

Project Location: Plant 3A, Laguna Niguel

Project Description: Plant 3A requires site grading and stormwater drainage issues and remediate backfill around deep structures caused by subsidence to upgrade the plant for long-term operation. Remediate backfill around deep structures, rehabilitate asphalt and concrete paving to extend their service life. Provide drainage infrastructure to contain stormwater within the site and direct it to the plant.

Project Need: At Plant 3A, subsidence has been occurring in locations of backfill around deep structures within the site since construction in the early 1990's. The site grading due to the subsidence needs to be addressed for the long-term operation of the plant and the backfill needs to be remediated to reduce the potential for ongoing settlement and damage. Current stormwater catch basins connect to the downstream OSO Trabuco Main Sewer Line or non-desirable locations within site. Stormwater discharge should be consolidated to the plant.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$380,000
CEQA Compliance	Exempt
Construction Contract	\$2,530,000
Inspection/Other	\$380,000
Total Project Budget	\$3,290,000



Capital Improvement Program – Project Description

Project No: 3A18.S02

System: Plant 3A

Fund: 7

Project Name: Solids Treatment Improvements

Project Location: Plant 3A, Laguna Niguel

Project Description: This project will rehabilitate and re-establish the desired level of service and redundancy for the solids treatment facilities including solids thickening system, solids digesters (mixing, heating, heat exchangers, steel dome covers), solids dewatering system. Dewatering system upgrades and improvements including centrifuges and feed grinders (s).

Project Need: The existing solids handling facilities has been in operation since 1997 and the facilities have experienced typical deterioration, and has been impacted by settlement, and has lost the functional redundancy on all of those solids treatment processes. Increasing plant capacity to 6 MGD requires operation of both digesters and solids thickening equipment. Additionally, due to subsidence, one of the two DAF units cannot operate properly. Heater pumps are at the end of their useful life and cannot support proper digestion. Boiler currently used for heat exchange does not meet air quality regulations and needs replacing.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$2,380,000
CEQA Compliance	Exempt
Construction Contract	\$15,850,000
Inspection/Other	\$2,370,000
Total Project Budget	\$20,600,000



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 7

Project Name: *Liquid Process Improvements – Group A*

Project Location: Plant 3A, Laguna Niguel

Project Description: Plant 3A requires upgrade of primary clarifier No. 3 and 4 effluent launders and concrete coating, repair visible break in diffuser in Aeration Tank 1 and replace valve actuator in Aeration Tank 2, and rebuilding five (5) RAS pumps.

Project Need: Existing launders and coating on primary clarifiers are corroded and beyond their useful lives; more reliable and consistent air distribution necessary for meeting performance requirements; and replacement of wear parts of the RAS pumps is necessary for maintaining reliable operation of the aeration basins.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$72,000
CEQA Compliance	Exempt
Construction Contract	\$480,000
Inspection/Other	\$72,000
Total Project Budget	\$624,000



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 7

Project Name: Liquid Process Improvements – Group B

Project Location: Plant 3A, Laguna Niguel

Project Description: Plant 3A requires upgrade of grit removal system and aeration system in influent channel and miscellaneous equipment upgrades such as rehab of air gap facilities, improvement of influent wet well access, and assessment with modification/replacement of two (2) existing WAS pumps. Also, plant water source conversion to RW is included.

Project Need: The existing grit removal system is in poor condition, which is resulting in excess grit load to primary clarifiers and digesters and miscellaneous equipment upgrades required to improve facility operations, maintenance and reliability. Currently, washdown water source is 3W and need to be converted to RW.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$230,000
CEQA Compliance	Exempt
Construction Contract	\$1,540,000
Inspection/Other	\$230,000
Total Project Budget	\$2,000,000



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 7

Project Name: Liquid Process Improvements – Group C

Project Location: Plant 3A, Laguna Niguel

Project Description: A liquids capacity planning and reliability study will evaluate the sources, trends and characteristics of influent flow and loadings rates to Plant 3A and project future loading rates at the rated 6 MGD capacity of the facility, including the ability to upgrade the recycled water capacity. Additionally, an evaluation of the impact of treating all influent flows received at Plant 3A at the plant without bypass of untreated wastewater will identify which plant hydraulics, primary and secondary processes, new aeration tank and backup power improvements are necessary to implement to reach desired goals.

Project Need: A plant hydraulic evaluation is needed to determine the ability of Plant 3A to treat all influent flows. Plant 3A currently does not have a backup power source. When power is lost, all raw wastewater is diverted, and recycled water production is temporarily halted. A business case evaluation is needed to compare the cost of maintaining the current operational philosophy to the capital and O&M cost of onsite emergency generators and upgrading plant hydraulics to accommodate all peak flows without bypass.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$1,725,000
CEQA Compliance	\$100,000
Construction Contract	\$11,500,000
Inspection/Other	\$1,725,000
Total Project Budget	\$15,050,000



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 7

Project Name: *Odor Control System Evaluation and Rehabilitation*

Project Location: Plant 3A, Laguna Niguel

Project Description: The existing odor control system should be evaluated its current condition and performance including media replacement for bioscrubber and activated carbon media. The odor monitoring system also should be evaluated and rehabilitated for maximum performance.

Project Need: The existing odor control system at Plant 3A has not been evaluated its performance and rehabilitated since its first service start in 1997. Activated carbon media never been replaced but replacement of carbon media is required at regular intervals to maintain odor control efficacy and prevent odor complaints.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$90,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection/Other	\$85,000
Total Project Budget	\$725,000



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 7

Project Name: *Electrical Systems Improvements*

Project Location: Plant 3A, Laguna Niguel

Project Description: Replace existing electrical power distribution system at Plant 3A including main switchgear and transformers, MCCs, and VFDs located at 5 load centers. Additionally, install an automatic transfer switch, which the plant currently does not have.

Project Need: The existing electrical equipment at Plant 3A is outdated making it difficult and costly to replace because the manufacturer no longer provides parts and materials.

Project Status: Proposed Project

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: TBD

System: Plant 3A

Fund: 6

Project Name: Tertiary Treatment Expansion

Project Location: Plant 3A, Laguna Hills

Project Description: Demolish existing sand filters with treatment capacity of 2.4 MGD and install new tertiary filter system with capacity of 4.4 MGD to address additional recycled water demand. The design concept for the project is to construct new Fuzzy filter systems, install pasteurization process for disinfection of the additional flow, install new microturbine power generation system to provide power to Plant 3A and heat for the pasteurization system, expand the pumping capacity at the Galivan Pump Station, and rehabilitate the existing Secondary Clarifier #3 to accommodate the additional wastewater flows to the facility.

Project Need: The existing sand filter equipment has reached its useful life, is experiencing poor performance, requires increased maintenance, and should be replaced. Additionally, to meet increasing recycled water demands, the tertiary treatment capacity needs to be increased.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$500,000
CEQA Compliance	\$100,000
Construction Contract	\$6,400,000
Inspection/Other	\$150,000
Total Project Budget	\$7,150,000



Capital Improvement Program – Project Description

Project No: IRWD

System: Regional (Potable)

Fund: 7

Project Name: *IRWD Baker Water Treatment Plant Capital Projects*

Project Location: Baker Water Treatment Plant, Lake Forest

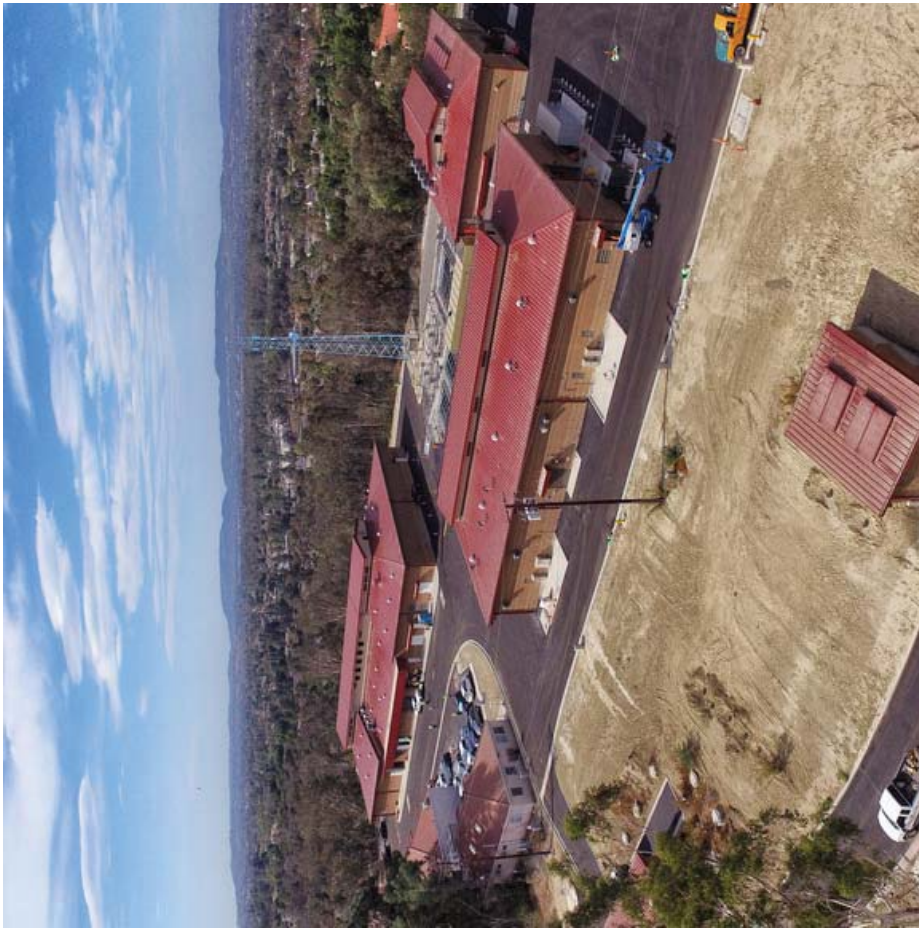
Project Description: Various CIP projects identified by IRWD for Baker Water Treatment Plant.

Project Need: Annual budget required for projects that have not yet been identified.

Project Status: Annual as provided by IRWD. Funds are paid to IRWD 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	\$1,500,000



Capital Improvement Program – Project Description

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

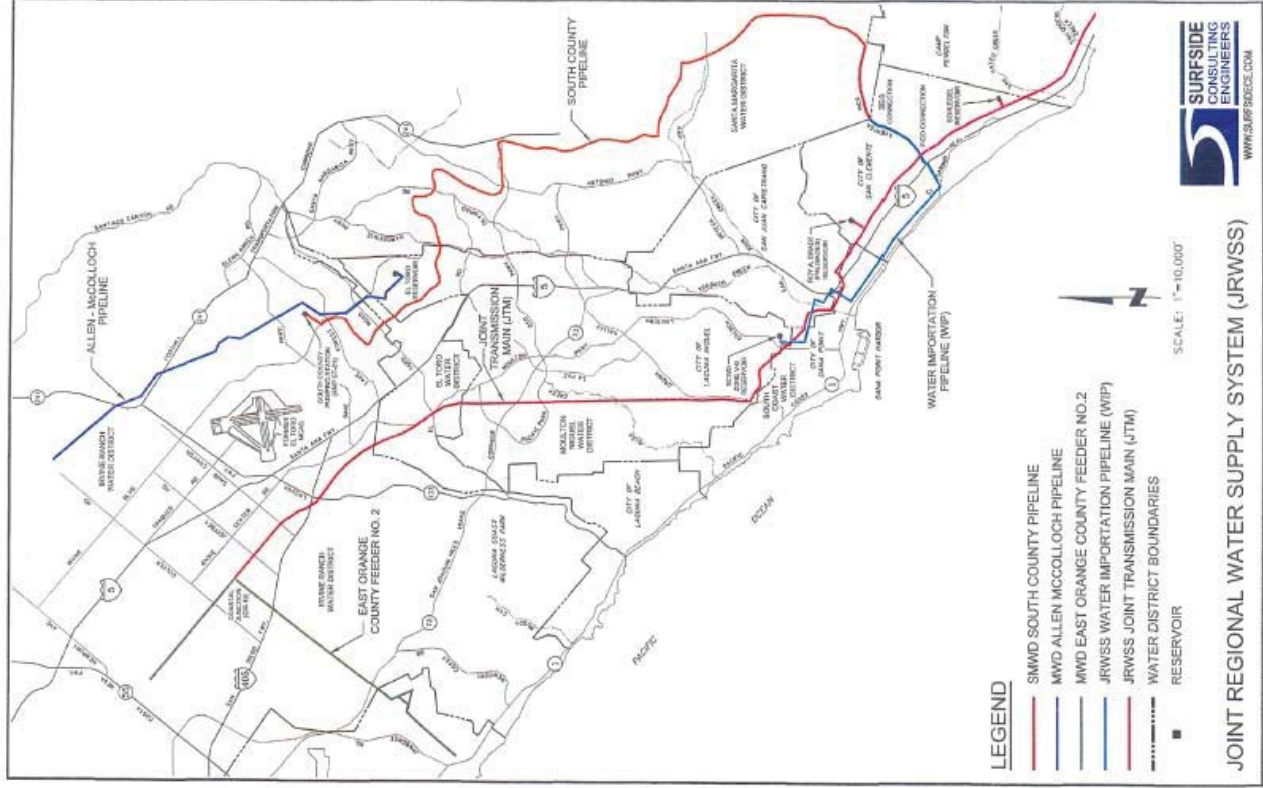
Project Location: Joint Transmission Main

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	\$8,056,896



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	\$4,537,072



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	TBD
Construction Contract	TBD
Inspection	TBD
Total Project Budget	\$20,318,202



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	TBD
Construction Contract	TBD
Inspection	TBD
Total Project Budget	\$317,817

Capital Improvement Program – Project Description

Project No: SOCWA

System: Regional (Wastewater)

Fund: 7

Project Name: *SOCWA Capital Project Committee 15*

Project Location: Coastal Treatment Plant, Aliso Viejo

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

Project Need: 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	TBD
Construction Contract	TBD
Inspection	TBD
Total Project Budget	\$12,582,466



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

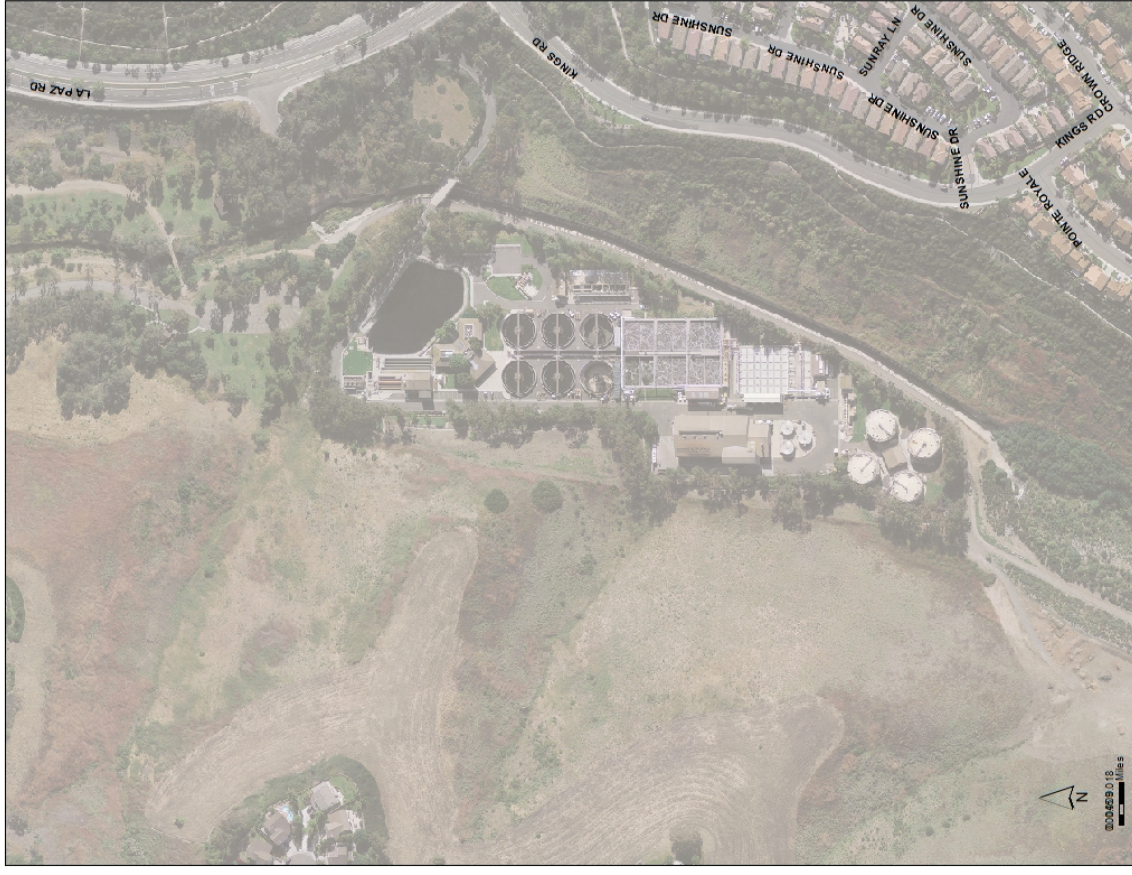
Project Description: Implement capital improvements as recommended by South Orange County Wastewater Authority (SOCWA).

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	TBD
Construction Contract	TBD
Inspection	TBD
Total Project Budget	\$82,968,371



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	TBD
Construction Contract	TBD
Inspection	TBD
Total Project Budget	\$10,432,461



Financial Policies for Fiscal Year 2019-20

June 2019

APPENDIX FP - A:
Debt Management Policy



POLICY A-3: MANAGING WATER DISTRICT DEBT

See also:
INVEST POLICY

6.13.2019
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Last Revised:
6.21.2018

POLICY A-3: MANAGING WATER DISTRICT DEBT

This Policy may be amended by the Board as it deems appropriate from time to time in the prudent management of the debt of the District.

1. Policy Statement

This policy documents Moulton Niguel Water District's 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 therefore all District debt must be approved by the Board of Directors.

To achieve the highest practical credit ratings and endorse prudent financial management, the District is committed to systematic capital planning and long-term financial planning. Evidence of this commitment to long term 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.

This Debt Policy is intended to comply with Government Code Section 8855(i), effective on January 1, 2017, and shall govern all debt undertaken by the District.



POLICY A-3: MANAGING WATER DISTRICT DEBT

See also:
INVEST POLICY

6.13.2019
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6.21.2018

2. Purpose of Policy

The purpose of this debt management policy is 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

3. 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, 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 analyze any debt financing proposal to

determine its benefit to the District and if it complies with the District's long-term financial planning objectives, such as maintaining or improving credit ratings.

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. The weighted average maturity of the debt (or the portion of the debt allocated to the project) will not exceed the average useful life of the project to be financed by more than 20%. The final maturity of bonds or state or federal loan debt shall be limited to 30 years after the date of issuance.

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.

4. District Policies Provide Guidance for Debt Management

General. The District's Debt Management Policy, Reserve Policy and Investment Policy are all part of 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 when:

- Projected existing revenues pay for the proposed debt service.
- As necessary, other revenues have been identified to pay for the proposed debt.
- 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 average useful life of the project to be financed by

more than 20 percent 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. 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 percent of outstanding debt.

The proceeds of the bond sales will be invested until used for the intended project(s) to maximize use 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, while complying with arbitrage and tax provisions.

Bond proceeds will be deposited and recorded in separate accounts. The District's trustee will administer the disbursement of bond proceeds pursuant to the applicable Indenture of Trust or similar document. Requisition for the disbursement of bonds' funds will 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 any 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 percent of refunded bonds

- 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.

5. District Will Maintain Acceptable Debt Service Coverage

The District will not finance debt unless the proposed obligation, when combined with all existing debts, results in acceptable debt service coverage ratios. To determine the affordability of proposed revenue bonds, the District will compare 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.

To keep its high-quality credit rating, the District will maintain a DCR at or above 1.75.

6. Financial Managers Will Pursue Positive Credit Rating on Debt Issuance

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.

7. Managers and Financial Advisors Will Structure District Debt

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, 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 (3-7 years) may also be used.

8. Types of Debt

The District may use 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 District may from time to time find that other forms of debt would be beneficial to further its public purposes and may approve such debt without an amendment of this Debt Policy. 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.

9. Board May Consider Credit Enhancement to Establish or Improve Credit Rating

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.

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 or Financial Planning Manager determine a debt service reserve fund is advantageous, the debt reserves will be maintained in keeping with the District's Reserve Policy.

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. 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. Under all circumstances, interest may not be capitalized for any period longer than that permitted under Federal tax law to the extent such interest relates to tax exempt debt for Federal tax law purposes.

10. District Will Maintain Highest Possible 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.

Each proposal for additional debt will be analyzed for its impact upon the District's debt rating on outstanding debt.

11. Any Major Credit Rating Agencies May be Used

The District may seek credit ratings from any of the major credit rating agencies - Standard & Poor's, Moody's Investors Service, and Fitch Investors Service, as appropriate. The District will also evaluate the value of additional ratings case-by-case (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 with a new debt issuance when 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.

The General Manager, Director of Planning, and Financial Planning Manager, working with the District's financial advisor, shall determine 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.

12. The Best Method of Sale Will be Used to Sell Municipal Bonds

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

- **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. Due to this policy, the General Manager may sign the bid form on behalf of the District to fix the interest rates on bonds sold on a competitive basis.
- **Negotiated sale.** The General Manager, Director of Planning and Financial Planning Manager select the underwriter, or team of underwriters, of its securities before 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. Before the sale, the General Manager, 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. With this policy, the General Manager may sign the bond purchase agreement on behalf of the District to fix the interest rates on bonds sold on a negotiated basis.
- **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 financing be completed.

13. Financial Planning Manager Will Make Debt Financing Recommendations to the Board

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.

The District is committed to long-term capital planning. The District intends to issue debt for the purposes stated in this Policy and to implement policy decisions incorporated in the District's capital budget and the capital improvement plan.

The District shall strive to fund the upkeep and maintenance of its infrastructure and facilities due to normal wear and tear through the expenditure of available operating revenues. The District shall seek to avoid the use of debt to fund infrastructure and facilities improvements that are the result of normal wear and tear.

The District shall integrate its debt issuances with the goals of its capital improvement program by timing the issuance of debt to ensure that projects are available when needed in furtherance of the District's public purposes.

The District shall seek to avoid the use of debt to fund infrastructure and facilities improvements in circumstances when the sole purpose of such debt financing is to reduce annual budgetary expenditures.

The District shall seek to issue debt in a timely manner to avoid having to make unplanned expenditures for capital improvements or equipment from its general fund.

All proposed debt financings shall be approved by the Board.

Debt is to be issued by 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.

14. Policy Goals Related to Planning Goals and Objectives

The District is committed to long-term financial planning, maintaining appropriate reserves levels and employing prudent practices in governance, management and budget administration. The District intends to issue debt for the purposes stated in this Policy and to implement policy decisions incorporated in the Issuer's annual operations budget.

It is a policy goal of the District to protect taxpayers, ratepayers and constituents by utilizing conservative financing methods and techniques so as to obtain the highest practical credit ratings (if applicable) and the lowest practical borrowing costs.

The District will comply with applicable state and federal law as it pertains to the maximum term of debt and the procedures for levying and imposing any related taxes, assessments, rates and charges.

When refinancing debt, it shall be the policy goal of the District to realize, whenever possible, and subject to any overriding non-financial policy considerations, (i) minimum net present value debt service savings equal to or greater than 3.0% of the refunded principal amount, and (ii) present value debt service savings equal to or greater than 100% of any escrow fund negative arbitrage.

15. Internal Control Procedures

When issuing debt, in addition to complying with the terms of this Policy, the District shall comply with any other applicable policies regarding initial bond disclosure, continuing disclosure, post-issuance compliance, and investment of bond proceeds.

The District will periodically review the requirements of and will remain in compliance with the following:

- any continuing disclosure undertakings under SEC Rule 15c2-12,
- any federal tax compliance requirements, including without limitation arbitrage and rebate compliance, related to any prior bond issues, and;
- its investment policies as they relate to the investment of bond proceeds.

It is the policy of the District to ensure that proceeds of debt are spent only on lawful and intended uses. Whenever reasonably possible, proceeds of debt will be held by a

third-party trustee and the Issuer will submit written requisitions for such proceeds. The District will submit a requisition only after obtaining the signature of the Controller or Director of Planning. In those cases where it is not reasonably possible for the proceeds of debt to be held by a third-party trustee, the Controller shall retain records of all expenditures of proceeds through the final payment date for the debt.

16. 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.

17. Financial Advisors May Help Execute Bond and Debt Transactions

The District will select independent registered municipal advisors (financial advisors) to help execute all bond and debt transactions. To avoid any conflict of interest, financial advisors cannot also underwrite District bonds. Financial advisors shall be selected through a competitive process after a review of proposals by the staff and approved by the Board.

The financial advisor will:

- Advise the District on refunding opportunities for current outstanding debt.
- Evaluate the merits of competitive, negotiated or private placement of new debt.
- Determine the most appropriate structure to ensure effective pricing that meets the District's near-term and long term cash flow needs.

The 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 financial advisor will help the District develop and distribute bid specifications for: desired services, trustee and paying agents, printing, remarketing and credit liquidity service providers, and assist the District in its review process. The District also expects its financial advisor to provide objective advice and analysis, maintain confidentiality of the District's financial plans, and be free from any conflict of interest.

18. District May Hire 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 select or qualify firms on that basis. The District is not bound by any underwriting agreement; oral or written, to which it was not a party.

19. The District Will Comply With Federal Arbitrage and Rebate Regulations

The Financial Planning Manager and Controller will take all permitted steps to minimize any rebate liability through proactive management in the structure and oversight of its individual debt issues. All District tax-exempt issues, including lease purchase agreements, are subject to arbitrage compliance regulations.

The Controller and Financial Planning Manager must:

- Monitor 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.

- Monitor 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.
- Contract with 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.

The District will include any arbitrage rebate liability in its annual Comprehensive Annual Financial Report (CAFR).

20. Continuing Disclosures are Required by Law

The District will meet secondary disclosure requirements in a timely and comprehensive manner, as described by the Securities Exchange Commission (SEC) Rule 15c2-12 and consistent with the District's Disclosure Procedures Policy. The Financial Planning Manager shall provide 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 annually provide financial information and operating data within 9 months of the end of its fiscal year, along with 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.

21. District Must Verify 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.

22. Finance and Information Technology Board Will Review this Policy

On an as needed basis, the General Manager will update and revise this Policy which shall be reviewed at the Finance and Information Technology Board meeting and adopted by the Board.

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.

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.
- 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.



POLICY A-3: MANAGING WATER DISTRICT DEBT

See also:
INVEST POLICY

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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.

APPENDIX FP - B: Investment Policy

MOULTON NIGUEL WATER DISTRICT
STATEMENT OF INVESTMENT POLICY

Effective: July 1, 2019

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.

C. This policy covers all funds and investment activities under the direct authority of the District, as set forth in the State Government Code, Sections 53600 et seq., with the following exceptions:

1. Proceeds of debt issuance shall be invested in accordance with the District's general investment philosophy as set forth in this policy; however, such proceeds are to be invested pursuant to the permitted investment provisions of their specific bond indentures.
2. Any other funds specifically exempted by the District.

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 three 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."

D. The District shall inform the investment adviser from time to time of amounts to be allocated to each of the three 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.

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 ICE 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 ICE 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.

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.

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 from issuers not defined in sections 2 and 3 of the Authorized Investments section of this policy, provided that:

- a) *The securities are rated in a rating category of "AA" or its equivalent or better by a NRSRO.*
- b) *No more than 20% of the total portfolio may be invested in these securities.*
- c) *No more than 5% of the portfolio may be invested in any single Asset-Backed or Commercial Mortgage security issuer.*
- d) *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.

COMMERICAL 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.

APPENDIX FP - C: Purchasing Policy



POLICY A-5: PURCHASING SERVICES, MATERIALS, AND PUBLIC WORKS PROJECTS

See also:

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POLICY A-5: PURCHASING SERVICES, MATERIALS, AND PUBLIC WORKS PROJECTS

This policy applies to the purchase of services and materials, equipment, supplies (referred to collectively as “materials”), and Public Works projects for the Moulton Niguel Water District (“District”) as required by California State law (Code Sections 54201, 54202 and 54204) and the Office of Management and Budget Uniform Grants Guidance Title 2, Subtitle A, Chapter II, Part 200, Subpart D (UGG 2 CFR 200).

All purchases of services or materials and Public Works projects paid for by the District must adhere to the authority level and dollar limits set in this Policy.

1. Delegation of Purchasing Authority

The Board has authorized the General Manager, or assigned representatives, to perform essential duties for District operations, including purchase authority.

The General Manager may delegate purchasing authority to others who may use purchasing cards, purchase orders, check requests, or other written authorization.

Board-established purchasing limits and contract signatory authority are listed in Table 2. These limits apply on a per-purchase/per-contract basis, not on an aggregated basis, for unrelated activities.

Purchases and Contract awards must be authorized by the appropriate authority in Table 2.

If an authorized signatory (other than the General Manager) for a given request is absent, the next highest authority in Table 2 may provide the purchase authority.

2. Unauthorized Purchasing is Prohibited and Subject to Penalties

Anyone making purchases outside this Policy and without General Manager or Board authorization, will be subject to disciplinary action and/or termination as outlined in the District Personnel and Salary Policy.

3. Division of Contracts

The District prohibits separating or dividing Contracts, reducing its cost below a specified sum to avoid the requirements of this or any related policy. But Contracts may be divided to meet unique scheduling needs of a project or to meet necessary time frames. Also, no Contract shall include language to limit competitive bidding or solicitation to any one specific vendor, brand, product, thing, or service, except for the exempt items listed in this policy. (See Item #14)

4. Purchase Amounts Include Taxes and Shipping

Purchase amounts include taxes and the cost of shipping, freight fees, and any other charges billed by the supplier or contractor within the authorized limits in this Policy.

5. Online Purchases and Utilization of Electronic Signatures

The District may use electronic commerce whenever reasonable or cost-effective. The District may accept electronic signatures and records for District procurement.

6. Requisitions for Purchasing Materials and Services

District staff who 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. The Purchasing Department will generate a Purchase Order (PO) from the Requisition.

7. Check Requests

A check request can be used for certain limited materials or services without a PO. Check requests may be used to request payment for Non-Discretionary Purchases, such as services rendered, subscriptions, membership dues, workshop/seminar/conference registrations, and use of facilities. Check requests are subject to the authorization limits established in Table 2.

8. Purchasing Cards

Authorized District staff may be assigned Cal Cards to make miscellaneous purchases within the limits of Table 2. Cal Card purchases are subject to the terms and conditions of the District Cardholder Acceptance Agreement.

Services may not be purchased with Cal Cards due to lack of insurance and indemnification language associated with these purchases. District staff using Cal Cards are subject to the terms of this Policy and all related Cal Card usage terms or amendments. A Cal Card should not be used if a Purchase Order or other procurement method would be appropriate.

9. Blanket Purchase Orders

A Blanket Purchase Order is issued to cover all amounts expected to be paid to the supplier/contractor/Consultant for the fiscal year or through a Contract term. Blanket Purchase Orders expire at the end of the fiscal year or as soon as a Contract ends, whichever comes first.

For Blanket Purchase Orders exceeding \$75,000, the District will utilize work order forms to initiate work with the supplier/contractor/Consultant. The work order forms will indicate the estimated cost for the work order, and must be signed by a Staff Director or Staff Officer prior to initiating the work with the supplier/contractor/Consultant. If the Director or Officer for a given work order is absent, the next highest authority in Table 2 may provide the authorization.

10. References and Financial Responsibility Before Awarding Contracts

Before awarding any Contract, the District will verify the references and financial responsibility of the contracting parties. After award, all Contracts shall be executed on behalf of the District by the appropriate authorized signatory indicated in Table 2.

No Contract will be awarded if funds are not available to make payment upon delivery or completion, or by payment schedule, unless authorized and approved by the Board or General Manager.

11. Contracts are Required for Any Services and Public Works Projects over \$5,000

Contracts for Non-Professional Services, Professional Services and Public Works shall be executed when the cost exceeds \$5,000 (except for an Emergency as defined in this policy).

12. Authorization of Multi-Year Contracts in the District's Best Interest

Multiple Year Contracts are allowed when they are in the best interest of the District as determined by the General Manager.

The dollar value of a Multiple Year Contract shall be the total contract value, including optional renewal periods. Once initially approved, any contract renewals may be authorized by the General Manager, regardless of dollar amount, if the pre-priced option is consistent with the terms of the initial Contract.

13. Non-Discretionary Purchases

Non-Discretionary Purchases do not require Board approval for payment, including those over the General Manager limit of \$75,000. Initial software license agreements and cloud-based services are subject to the purchase limits in Table 2. Purchase Orders are not required for Non-Discretionary Purchases.

14. Emergency Services Above \$75,000

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 pursuant to Board policy. 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.

15. District Warehouse Inventory

Purchase requests to replenish the District's warehouse inventory within established inventory re-order levels require no prior authorization or signatory approval under Table 2.

16. Non-Professional Services and Materials Procurement

The District requires a competitive bid or selection process for purchasing non-professional services and materials, and for Public Works projects.

For non-professional services and materials estimated to cost \$10,000 or less, District staff may request a proposal from one qualified Consultant or Vendor.

District staff will request a minimum of three bids or proposals for non-professional services and materials when the contract amount is expected to cost between \$10,001 and \$75,000.

For a non-professional services and materials contract expected to cost more than \$75,000, the District will initiate an RFP or RFQ.

- All quotes, bids and proposals must be in writing. Email is acceptable.
- RFP, RFQ, and Invitation to Bid submissions must comply with all terms of the solicitation, or any related laws. Submissions that fail to comply may be disqualified.

17. Exceptions to Competitive Solicitations

- 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
- Purchases made after a reasonable attempt to obtain competitive bids and:
 - No additional suppliers/providers/contractors/Consultants can be located.
 - The District receives no response from suppliers/providers/contractors/Consultants to a competitive bid.
 - No other satisfactory bids/proposals are received.

Except for purchases greater than \$75,000 and requiring Board authorization, the General Manager or Assistant General Manager may decide whether a purchase meets the criteria above to be exempt from competitive solicitation.

18. Public Works Contracts

Contracts for Public Works projects shall comply with all requirements for Public Works contracts under State law, including rules for:

- Listing subcontractors.
- Posting payment bonds equal to no less than 100 percent of the total contract amount (for all Public Works contracts over \$25,000).
- Paying prevailing wages (for all contracts for Public Works exceeding \$1,000), or as otherwise required by law.

Unless the General Manager and legal counsel approve a waiver, the District requires performance bonds for all Public Works Contracts equal to no less than 100 percent of the total contract amount. Public Works Contracts let by an Invitation to Bid will be awarded to the lowest responsive, responsible bidder as allowed by State law and the District's standard Public Works contract documents.

19. Professional Services Procurement

Professional Services Contracts must meet the terms of California Government Code §4525 et seq., and §53060, based on proof of competence and qualifications for the types of services to be performed at fair and reasonable prices, as determined by the District.

For Professional Services estimated to cost \$25,000 or less, District staff may request a proposal from one qualified Consultant.

District staff will request three proposals for Professional Services when the contract amount is expected to cost between \$25,001 and \$75,000.

For a Professional Services Contract expected to cost more than \$75,000, the District will initiate an RFP.

The following criteria shall apply as exceptions to the competitive solicitation requirements as indicated for Professional Services where such requirements would otherwise apply:

- In the case of sole or single source procurements of Professional Services, only one proposal from a qualified firm is required.

- For Professional Services in which it is infeasible to comply with the selection process because of the unique, exploratory or experimental nature of the project, District staff may request a proposal from one qualified Consultant.

20. Nonresponsive or Unqualified Bid or Response

In response to any Invitation to Bid, RFQ, or RFP, the District may reject any unqualified bid or other response that is 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 District's best interest, and in accordance with law.

Rejection of all bids or responses or cancellation of competitive solicitations, including determinations to re-bid, or re-solicit is subject to the same authority level required to award a Contract in Table 2, and as required by law.

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.

21. Change Orders for Goods and Services

The District may issue Change Orders, as required by changes in the specifications or conditions of a project, services performed, or materials issued.

Change orders or amendments that extend the expiration date of the original Board approved contract by no more than 12 months, but do not affect the total contract price can be approved subject to the contract signing authority indicated in Table 2.

The Purchasing department may issue Change Orders up to 10 percent over the original PO without further approvals if the original purchase amount was \$10,000 or less. For any Change Order request over the original PO by more than 10 percent or the \$1,000

limit, the requesting department will complete a revised Purchase Order Requisition (approved at the levels in Table 2.)

- For Contracts and Amendments up to \$75,000:
 - Change Orders can be approved by the total appropriate authorization levels as outlined in Table 2 up to a total Contract amount of \$75,000 without Board approval.
 - Board approval is required for a Change Order if the proposed Change Order would cause the total Contract amount to exceed \$75,000.
- For Contracts and Amendments over \$75,000:
 - Board approval is required for Change Order requests which increase the contract amount, unless sufficient contract contingency was previously approved by the Board.

A Change Order above the Change Order limits set forth in this policy may be authorized by the General Manager or Assistant General Manager prior to Board approval if:

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

The Board shall be notified by the General Manager of any Change Order above the General Manager's authorized limit at the next Board meeting.

22. Personal Financial Interest in District Contract

Board members and District staff, spouses, or dependent children shall not be financially interested in any contract made by them in their official capacity. (Government Code Section 1090).

Board Members and District staff, spouses, or dependent children shall not participate in any way to influence a governmental decision in which they have a financial interest. (Government Code Section 87100).

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

Confidential or proprietary information must be handled with due care and proper consideration of ethical and legal ramifications and governmental regulations. Purchasing activities must be performed in accordance with all applicable laws and this policy. Employees/individuals who violate the standards set forth in this Section are subject to disciplinary action consistent with District Personnel and Salary Policy.

23. This District Makes Purchases as a California Water District

As a California Water District, the District is not required by State law to competitively bid any purchases, unless otherwise stated in this policy.

The District may:

- Enter into non-bid contracts for Public Works.
- Purchase materials, services and supplies.
- Contract for design-build work.
- Job-order contracting.
- Enter into Cooperative Purchasing contracts to plan, build, and maintain Public Works.
- Undertake any other form of contract found to be in the District's lawful best interest.

24. Maintenance of this Policy

The General Manager and assigned representatives, working with the District's legal counsel, will maintain and propose revisions to this policy as needed. All changes to this policy shall require the approval of the Board of Directors. In all cases, the District shall implement this policy in a manner that is consistent with Federal, State or local regulations.

TABLE 1: Definitions

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 Administrator 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.

Blanket Purchase Orders - Used for payment to the same supplier/contractor/Consultant multiple times, or for ongoing monthly purchases/expenses.

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.

POLICY A-5: PURCHASING SERVICES, MATERIALS, AND PUBLIC WORKS PROJECTS

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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 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, and for the purposes of this policy, shall also include expenses previously approved by the Board, which would require significant advanced planning to change service providers, such as software license agreement renewal/ cloud based services renewal, insurance providers, and healthcare providers.

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. (California Government 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.

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Public Works – As defined by California Public Contract 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 and Home Depot 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 Enterprise Resource Planning 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.



POLICY A-5: PURCHASING SERVICES, MATERIALS, AND PUBLIC WORKS PROJECTS

See also:

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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.

Work Order – Request and approval for services or performances of specific tasks to be completed, and placed against a pre-established contract. Vendors may also use the terms “task order” and “statement of work”. For District purposes, these items will be treated as “work orders”. (These typically apply to on call or as needed contracts or Blanket Purchase Orders).



POLICY A-5: PURCHASING SERVICES, MATERIALS, AND PUBLIC WORKS PROJECTS

See also:

6.13.2019

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TABLE 2: Procurement Limits and Contract Signature Authority

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, Government Affairs Officer, Information Systems Officer</i>	up to \$25,000	up to \$25,000
<i>Board Secretary, Staff Assistant Directors</i>	up to \$20,000	None
<i>Superintendents, Managers, Controller, Principal Engineers, Coordinators</i>	up to \$10,000	None
<i>Supervisors, Purchasing Agent, Administrative Personnel, Sr. Water Efficiency Specialist, Sr. Wastewater Treatment Plant Operators</i>	up to \$5,000	None

APPENDIX FP - D: Capitalization Policy

POLICY A-4: CAPITALIZATION, REGULATED ASSETS& SURPLUS

This policy is intended to specify what types of costs will be capitalized by the Moulton Niguel Water District (District), how to properly account for capital assets, and to comply with the requirements of Governmental Accounting Standard Board (GASB) Statement Numbers 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments*, 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, and IRS code. This Statement requires the reporting of District capital assets and depreciation and regulatory assets and amortization, in the annual audited financial statements.

1. Capital Asset Threshold

The District maintains a schedule of individual capital assets that meet the capitalization threshold within its financial reporting operating system. Items with an original value of less than \$3,000, or with an estimated useful life of less than five years, are recorded as operating expenditures.

This financial reporting system should include:

- Capital asset description
- Location
- Physical dimensions, if possible
- Original value
- Date placed in service
- Original useful life
- Accumulated Depreciation
- Book Value
- Impairments, if any
-

2. Depreciation of Capital Assets Using Straight-Line Method

Depreciation will be calculated using the straight-line method with no salvage value for all depreciable capital assets. The following estimated useful lives will be used by asset type:

POLICY A-4: CAPITALIZATION & SURPLUS

See also:

6.21.2018

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- | | |
|--------------------------------|----------------|
| • Water and wastewater systems | 10 to 75 years |
| • Capacity rights | 10 to 99 years |
| • Buildings | 20 to 50 years |
| • Automobiles and equipment | 5 to 15 years |

The Engineering Department will provide the Accounting Department with the description and type of asset the expenditures qualify for, and the Accounting Department will record the asset in the financial reporting system.

3. Capital Assets Are Reported at Historical Value

The District will report purchased or District-constructed capital assets at their historical cost for financial reporting in audited financial statements. The total cost of each capital asset is the cash outlay (or its equivalent) required to purchase or construct the asset and put it in service.

These costs will include (when applicable):

- contract price
- freight
- sales tax
- licensing fees
- handling and assembling
- installation and testing
- fully burdened direct labor and materials

Any cost specifically for a planned capital project (or asset acquisition), including public information costs and costs incurred to get project financing will be capitalized. Contributed capital assets will be recorded at their estimated fair market value at the date the asset was contributed to the District. The Accounting Department will determine if the estimated fair market value is appropriate.

4. Repairs and Maintenance Are Classified As Operating Expenses

Any outlay that only returns a capital asset to its existing condition before the repair or maintenance, regardless of amount, will be classified as an operating expense.

5. Regulated Asset Threshold

Regulated assets are created by the Board of Directors by deferring certain expenses that are recoverable by future rate charges in accordance with the District's rate ordinance. The District maintains a schedule of individual regulated assets that meet the criteria to qualify as regulatory assets within its financial reporting operating system. The criteria are as follows:

- The District's Board of Directors establish the rates
- The regulated rates are designed to recover the specific regulated activity's costs of providing the regulated service
- The rates must be set at levels that will at least recover the costs over the life of the asset and the associated rates can be charged to and collected from customers.
- Future revenues will be provided to permit recovery of the actual regulated cost rather than expected levels of similar service.

6. Amortization of Regulated Assets

Regulated assets are amortized over the period in which future rate charges will recover actual costs incurred for regulated services. Amortization will be calculated using a straight-line method to match the associated revenues and expenses. The following estimated useful lives will be used by asset type:

- | | |
|-------------------------------|----------------|
| • Potable regulated assets | 15 to 25 years |
| • Wastewater regulated assets | 15 to 25 years |

The Engineering and Operations Departments will provide the Accounting Department with the description and type of asset the expenditures qualify for, and the Accounting Department will record the asset in the financial reporting system.

7. Regulated Assets Are Reported at Historical Value

The District will report purchased or District-constructed regulated assets at their historical cost for financial reporting in audited financial statements. The total cost of each regulated asset is the cash outlay (or its equivalent) required to purchase or construct the asset and put it in service.

These costs will include (when applicable):

- contract price
- freight
- sales tax
- licensing fees
- handling and assembling
- installation and testing
- fully burdened direct labor and materials

Any cost specifically for a planned capital project (or asset acquisition), including public information costs and costs incurred to get project financing will be capitalized.

8. Purchasing Department Maintains Inventory

The Purchasing department safeguards and maintains inventory items. Inventory will be recorded within the District's financial reporting operating system, and the Purchasing department will count the physical inventory regularly. Access to the warehouse will be restricted to those required to perform the duties of their job. The District will measure the value of all inventory items using the perpetual method of accounting, where inventory reflects actual quantities on hand, including new arrivals and items used in operations.

This financial reporting system should include:

- Item description
- Location
- Physical dimensions
- Usage statistics
- Original value

Quantity on hand

9. The District Will Sell or Dispose of Surplus Property

Sections 35604 and 65400 of the Water Code (California Water District Act) authorizes the District to dispose of surplus property. The District will sell or dispose of surplus property with the intent to gain the greatest return. Sales will occur in the public market, by public auction, internet sales, consignment, or other public bidding. Property with no net value will be recycled, if practical, or discarded in keeping with environmental and hazardous waste disposal laws.

10. General Manager and Board Decide Whether to Dispose of Real Property

The General Manager will review the District's real property and decide whether it is surplus. Before disposing of any real property, the General Manager will:

- Determine if an appraisal is necessary, and obtain one independent appraisal if determined necessary
- Obtain authorization from the Board to dispose of real property.
- Solicit offers to purchase or lease the real property at fair market value as determined by the appraisal (or opinion of value), from certain public agencies in accordance with Chapter 5 (commencing with Section 54220) of Part 1, Division 2, Title 5 of the Government Code, or successor provisions.

If no acceptable offer is made within the required 60-day (or other) negotiation period, the General Manager may lease or sell the real property as prescribed by the Board.

11. District Recycles Surplus Scrap Material

Scrap material will be collected in a designated location on district property, and the General Manager or designee will regularly review the surplus property to determine it has been accurately designated as scrap material or surplus.

The Purchasing department will recycle scrap material as appropriate. Recycling vendors will be reviewed periodically to consider rates, quality of service provided, fees and other applicable factors.

12. All Other Surplus Property Sales Require Approval

All other surplus property, other than real property and scrap material requires approval of surplus status prior to sale. An "Approval of Surplus Property" form must be completed by staff and approved by a supervisor. Prior to disposal of the approved surplus property, the Assistant General Manager must approve the disposal. The Purchasing department will maintain a list of all approved surplus property. The list of surplus property approved for disposal will be used to sell the items in the public market, by public auction, internet sales, consignment, or other public bidding methods.

13. District Follows California Law When Disposing of Property

POLICY A-4: CAPITALIZATION & SURPLUS

See also:

6.21.2018

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The District will comply with the California Environmental Quality Act and all applicable laws for disposing of property.

14. Staff and Families Are Not Eligible to Acquire District Property

Board members, District staff, spouses and dependent children may not bid for, purchase, or otherwise have interests in surplus property of the District, directly with the District, or represent any potential bidder or purchaser, under any terms and conditions.

15. Accounting Will Record All Funds Received From Disposal of Surplus Property

All revenues collected from the disposal of surplus property shall be reported to and deposited by the Accounting department. All revenues will be recorded in a manner consistent with District procedures and standard accounting practices.

TABLE 1: Definitions

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

Capital Asset – The Government Finance Officers Association (“GFOA”) defines capital assets as “assets that are used in operations and that have initial lives extending beyond a single reporting period.” Capital assets may be intangible (capacity rights) or tangible (buildings, equipment). To be considered a capital asset, a District expenditure must cost at least \$3,000 and have a useful life of at least five years.

Inventory - an asset that is intended to be used in the ordinary course of business with a cost of less than \$3,000 per item or does not have an initial life extending beyond five years.

Salvage value - the estimated market value once the property has been deemed surplus. The salvage value will be determined by the purchasing department through market comparison.

Scrap material - the value of which consists only of intrinsic material content and which has no commercial value for its original purpose as fabricated.

Surplus property – property that is excess of the current or planned future needs of the District or no longer has an economic use by the District, including property that which has become worn, broken, deteriorated or obsolete to a point where it is uneconomical for use by the District

APPENDIX FP - E: Reserve Policy

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 1)**

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.

APPENDIX FP - F:
Federal Grant Management Policy

POLICY A-6: FEDERAL GRANT MANAGEMENT

This policy applies to management and fiscal accountability of federal grants for the Moulton Niguel Water District (District). This policy is intended to supplement, not supplant the District's employee/organizational policies and procedures.

As a recipient of federal grants, the District will adhere to the regulations contained at 2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, in addition to other applicable federal statutes, guidelines and directives.

1. Primary Point of Contact

A designated project manager shall serve as the primary contact between the District and the federal funding agency and any external consultants.

2. Cash Management - Legal requirement: 2 CFR 200.305

Requests for reimbursement of expenses or advance payments must be consistent and fully compliant with the terms of the grant. The District must also comply with Federal regulations.

- a. The District will maintain effective internal controls for federal grant funds.
- b. The District must protect federal grant cash and other assets and must assure that grant monies are only used for authorized purposes.
- c. The District will maintain adequate records which identify the source and application of funds for federally-funded activities. These records must include source documents of Federal awards, authorizations, obligations, unobligated balances, revenue and expenses.
- d. Office of Management and Budget (OMB) cost principles, program regulations, and terms of the grant agreement will determine if the cost is allowable, allocable and reasonable to the award.
- e. Federal expenditures will be compared with budgeted amounts for each grant.

3. Procedures for Cash Management- Legal requirement: 2 CFR 200.305

The project manager will approve allowable grant expenditures in accordance with Table 2 of the District's Purchasing Policy. The District pays for the approved expenditures through the District's normal accounting processes.

- a. The Controller initiates reimbursement requests per the stipulations of the grant award after review of federal expenditure activity.
- b. Reimbursement is made via ACH wire directly into the District's bank account.

- c. The cash receipt is entered into the financial system.
 - d. A copy of the ACH confirmation will be maintained with the cash receipt. The cash receipt is reviewed and approved in the financial system. Cash receipts are recorded in the "Grant funding" object account within the same fund used for the project business unit.
 - e. If the District receives an advance, per Federal requirement, any interest earned more than \$500 will be returned to the awarding agency.
- 4. Allowability of Costs** - *Legal requirement: 2 CFR 200.302(b)(7), 2 CFR 200.309, and 2 CFR 200.403 - 2 CFR 200.405*

Except where otherwise authorized by statute, costs must meet the following general criteria to be allowable under Federal awards:

- a. Must be necessary and reasonable for the performance of the Federal award or sponsored agreement and does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.
- b. Must be allocable to a project if it is considered a direct cost of that project.
- c. Must be consistent with policies and procedures that apply uniformly to both federally-financed and other activities of the District.
- d. Consistently treated when used in like circumstances and adequately documented.
- e. Must be allowed by the District's approved policy and procedures and conform to any limitations or exclusions set forth by §200.403 principles or identified in the award.
- f. Determined in accordance with Generally Accepted Accounting Principles (GAAP).
- g. Has not been included or used to meet cost sharing or matching requirements of any other federally-financed program in either the current or prior period.

In the event a special or unusual cost arises, the project manager should attempt to receive prior written approval from the Federal awarding agency to avoid any unreasonableness or non-allocability. If prior approval is not obtained, it does not mean those costs will not be allowed.

Direct costs can be identified specifically with a Federal award or other program or activity or can be charged directly to the account assigned to that program or activity. Direct costs include salaries, wages, and proportional fringe benefits of staff directly

engaged in the program and only if they are included in the grant agreement. Direct costs also include the cost of equipment, materials, supplies, and services, consultant fees subcontracts, or other allowable costs per the terms of the agreement.

A direct cost can benefit more than one program or function and can be allocated to the benefiting programs or functions on a reasonable or equitable basis.

Any expenditure that is not allowed to be charged to the award by the agreement, federal agency regulations, or the Uniform Guidance for Federal Awards shall not be charged to the award.

5. Cost Share/Matching Funds - *Legal requirement: 2 CFR 200.306*

All cost sharing/matching expenses shall be documented in the same manner as regular program expenses. Contributions must meet all the following criteria to be included as matching funds:

- a. Verifiable from the contributor's records;
- b. Not included as contributions for any other federal grant project or program;
- c. Necessary and reasonable to complete project or program objectives;
- d. Allowable under the applicable Federal Cost Principles;
- e. Not paid by the federal government under another award;
- f. Provided for in the approved budget when required by the federal awarding agency;

6. Program and Budget Revisions - *Legal requirement: 2 CFR 200.308*

The project manager is responsible for obtaining written approvals for program or budget revisions.

7. Lobbying - *Legal requirement: 2 CFR 200.450*

Federal grant funds will not be used for lobbying activities or other influencing activities associated with obtaining grants, contracts, or agreements.

8. Reporting - *Legal requirement: 2 CFR 200.327, 2 CFR 200.328 and 2 CFR 200.329*

- a. Grant expenditures are coded by the project manager to the project business unit, separating Federal grant expenditures from other expenditures.

- b. The Controller reviews the financial statements and general ledger activity for accuracy, completeness, proper coding, and general adherence to award terms and conditions.
- c. The project manager submits financial status reports to awarding agency, if required.
- d. The Controller presents monthly financial status reports to the District Administrative Committee.
- e. The Controller maintains the Schedule of Federal Expenditures of Awards.

9. Monitoring Grant Program - *Legal requirement: 2 CFR 200.328 and 2 CFR 200.331*

The District will monitor the activities and progress of its federal grants and any problems, delays or adverse conditions that will materially impact the ability to meet a grant's objectives will be reported to the federal funding agency by the project manager. This will include making sure activities follow laws, regulations and the provisions of the grant agreements; and that performance goals are achieved.

10. Timesheets - *Legal requirement: 2 CFR 200.430(i) and 2 CFR 200.306*

All District employees that work on projects funded through federal grants, are responsible for completing their timesheets on a bi-weekly basis. Employees must record all time spent on grant and non-grant activities. Grant activities will be monitored by a unique identifier in the time sheets, and the actual cost of those hours will be allocated to the project business unit.

The payroll department will maintain a file with all timesheets, and the project manager will maintain a file that documents hours charged to the project.

11. Contract Administration and Payment - *Legal requirement: 2 CFR 200.318(b)*

The project manager and Contracts Analyst shall be responsible for monitoring administration of the contract and shall ensure the fulfillment of all written requirements. Disbursement of federal funds will follow the same accounts payable process as nonfederal payments.

12. Standards of Conduct - *Legal requirement: 2 CFR 200.318(c)(1) and 2 CFR 200.318(c)(2)*

District employees and members of the Board of Directors must comply with the District's conflict of interest policy. The Board Secretary shall maintain conflict of interest statements for all employees and Board members.

13. Procurement Records and Files - Legal requirement: 2 CFR 200.318(i)

The District will retain historical records of federal procurements in accordance with the District's records retention policy.

14. Suspension/Debarment - Legal requirement: 2 CFR 200.213

No procurement will be made using a contractor that has been suspended or debarred from receiving federal funds. Prior to awarding any contract, District staff will search the federal *Excluded Parties List System* (www.sam.gov) to determine that the contractor is not suspended or debarred. Documentation of this search will be maintained in the grant procurement file.

15. Open and Free Competition - Legal requirement: 2 CFR 200.319

Proposal selection shall be based on responsiveness to the solicitation, price, quality, deadlines of delivery, warranties, accountability and fulfillment of the service and other relevant factors.

To ensure full and open competition, the District will abide by the following guidelines:

Procurement Amount	Action
Greater than \$75,000	Formal solicitations shall be conducted, and a cost/price analysis shall be conducted
\$10,001 - \$75,000	Cost/price analysis shall be conducted
\$1 - \$10,000	Formal solicitations or cost/price analysis are not required

The District reserves the right to award purchase orders, consultant agreements or project contracts on a sole source/noncompetitive basis when one or more of the following circumstances apply: (1) the item or service is available only from a single source that has predominate capability; (2) there is a public emergency that will not permit a delay from competitive solicitations; (3) The District received prior approval from the awarding agency; or (4) competition is determined to be inadequate after solicitation from a number of sources. A written justification will be prepared and kept on file for any noncompetitive procurement.

16. Procurement Procedures - *Legal requirement: 2 CFR 200.320*

- A. **Methods of Procurement.** One of the following procurement methods must be used:

Procurement Method	Purpose
Micro-purchases	For supplies or services when the aggregate dollar amount does not exceed \$10,000 Solicitation of price quotations is not required.
Small purchases	For supplies, services or other property that do not exceed \$75,000. A cost/price analysis must be conducted. A minimum of three written price quotes shall be obtained.
Sealed bids	The preferred procurement method for construction projects. Formal advertising required. A minimum of three responsible bidders must be considered. Public works contracts will be awarded to the lowest responsive bidder.
Competitive proposals	For supplies and services of more than \$75,000 when the use of sealed bids is not appropriate. Requests for proposals must be formally advertised and solicited from a minimum of three qualified sources. Formal solicitations shall be conducted.
Noncompetitive proposals	Authorized only by the General Manager.

- B. **Procurement Authority for Operating Expenses.** The individuals with purchasing authority and the ability to sign contracts is listed in Table 2 of the Purchasing Policy.

RFPs must be publicized and identify all evaluation factors and their relative importance. All proposals will be reviewed by the project manager and the contracts department using similar evaluation criteria for nonfederal awards.

17. Use of Small Businesses, Minority-owned Firms and Women's Business Enterprises -

Legal requirement: 2 CFR 200.321

The District will make positive efforts to utilize small businesses, minority-owned firms, women's business enterprises, wherever fully practicable. To further this goal, the District will:

- a. Place qualified small and minority businesses and women's business enterprises on solicitation lists to encourage and facilitate their participation;
- b. Solicit small and minority businesses and women's business enterprises when they are identified as potential sources;
- c. When feasible, divide larger projects into smaller components to permit maximum participation by small and minority businesses and women's business enterprises;
- d. Establish delivery schedules, when permissible, that encourages participation by small and minority businesses and women's business enterprises;
- e. Use the services of organizations such as local Chambers of Commerce, the Small Business Administration and the Minority Business Development Agency of the Department of Commerce;
- f. Require prime contractors to take the same affirmative steps if subcontracts are awarded.

18. Cost or Price Analysis - Legal requirement: 2 CFR 200.323

A cost or price analysis shall be conducted for every procurement action **greater than \$10,000**. The cost or price analysis shall be performed **prior to** receiving bids or proposals. A cost analysis shall consist of a review and evaluation of each element of cost to determine reasonableness, allocability and allowability. A price analysis shall consist of comparing price quotations, market prices and similar information.

19. Required Contract Provisions - Legal requirement: 2 CFR 200.326

The District shall include all provisions required by the Federal funding agency and applicable provisions found in *Appendix II of the Uniform Guidance (2 CFR Part 200)*.

20. Equipment Records - Legal requirement: 2 CFR 200.313(d)(1)

- A. For all equipment purchased with federal grant funds, the District will maintain accurate information about the equipment including the following:

- i. A description and serial number or other identification number;
- ii. Source of funding, including the Federal Award Information Number (FAIN);
- iii. Whether title vests in the recipient or the federal government;
- iv. Acquisition or received date and cost;
- v. Percentage of federal participation in the cost;
- vi. Location use, condition, and the date the information was reported;
- vii. Ultimate disposition data, including date of disposal and sales price.

B. Equipment owned by the federal government shall be identified as such.

21. Inventory - Legal requirement: 2 CFR 200.313(d)(2)

The District will conduct a physical inventory at least once each year. Any differences between quantities between the inspection and the accounting records shall be investigated. The District will verify the existence, current utilization and continued need for the equipment.

22. Disposition of Equipment - Legal requirement: 2 CFR 200.311(c) 2 CFR 200.313(d)(5) and 2 CFR 200.313(e)

When equipment purchased with federal funds is no longer needed for the original project or program, District staff will consult the grant's terms and conditions, and the federal program officer for disposition instructions.

23. Financial and Program Records - Legal requirement: 2 CFR 200.333

All records will be retained in accordance with the District's records retention policy and retained for at least three years. The only exceptions are the following:

- a. Litigation, claims, or audits - records shall be retained until all litigation, claims or audit findings involving the records have been resolved;
- b. If the District is notified by the granting agency that records must be retained beyond the three-year period;
- c. Records for disposition of equipment shall be retained for three years after disposition;

24. Access to Records - Legal requirement: 2 CFR 200.336

The District will grant personnel from the federal awarding agency, Inspectors General, the Comptroller General of the United States and the pass-through entity, or any of

their authorized representatives, access to any documents, papers, or other records which are pertinent to the federal grant. District staff will be available to answer questions related to such documents.

25. Safeguarding Sensitive Information - *Legal requirement: 2 CFR 200.303(e)*

The District will take reasonable measures to safeguard protected personally identifiable information and other information the Federal awarding agency or District considers sensitive consistent with laws regarding privacy and obligations of confidentiality.

APPENDIX FP - G: Budget Resolution

RESOLUTION NO. 19-13

**RESOLUTION OF THE BOARD OF DIRECTORS OF
MOULTON NIGUEL WATER DISTRICT
APPROVING A BUDGET APPROPRIATION AND ADOPTING THE OPERATIONS
AND MAINTENANCE BUDGET AND CAPITAL IMPROVEMENT PROGRAM
BUDGET FOR FISCAL YEAR 2019-20**

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 five sources: General ("G") Fund 1, 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. 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 2019-20 Operations and Maintenance Budget and Capital Improvement Budget. In addition, a public meeting of the Board was duly noticed and conducted under the Brown Act on June 13, 2019 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 2019-20 Budget," is hereby made part of this Resolution.

SECTION 2. Said Operations and Maintenance Budget and Capital Improvement Budget is hereby adopted for the Fiscal Year beginning July 1, 2019, and ending June 30, 2020, and consists of the estimated and anticipated expenditures and revenues for the Fiscal Year for all Funds.

SECTION 3. Except as provided for in SECTION 4, 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 4. 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 Director level staff, the Assistant General Manager and/or Controller to transfer amounts between categories 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 \$65,037,592.
 2. The maximum amount which may be transferred by the General Manager between and among Funds 7, 12, and 14 shall be \$65,037,592.
 3. The maximum amount which may be transferred by the General Manager from the Capacity Fee Fund 15 to Fund 7 shall be \$197,728 to be spent on the identified projects in Table 1.

Table 1.

Description	FY 2019-20 Budget
2018-19 RESERVOIR MANAGEMENT SYSTEM REPLACEMENT	\$1,200,000
PLANT 3A IMPROVEMENTS	\$3,222,275
Total	\$4,422,275

4. The maximum amount which may be transferred by the General Manager from Fund 1 to Funds 12, 68, 69, 70, and 71 shall be \$7,672,124 to be spent on debt service payments.
5. The maximum amount which may be transferred by the General Manager from Fund 70 to Funds 1 shall be \$685,572.

6. The maximum amount which may be transferred by the General Manager from Fund 1 to Fund 4 shall be \$1,638 to be spent on insurance deductibles and claims.
 7. The maximum amount which may be transferred by the General Manager from Fund 52 to Fund 1 shall be \$122,828 to align Fund 52 (Rate Stabilization Reserve) with its designated target per the District's Reserve Policy.
- C. The General Manager is authorized to employ during the fiscal year(s) covered by this Budget, the number 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 5. All appropriations for the Capital Improvement Projects remaining unexpended on June 30, 2019, are hereby appropriated for such Capital Projects for the 2019-20 Fiscal Year.

SECTION 6. All appropriations and outstanding encumbrances for non-Capital Projects as of June 30, 2019, expire as of said date.

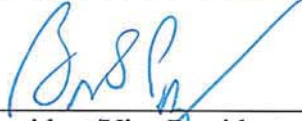
SECTION 7. The Board of Directors does hereby approve and adopt the General Manager, General Unit, Supervisory Unit and Exempt Employees' Job Classification Salary Schedules effective June 22, 2019, for Fiscal Year 2019-2020.

SECTION 8. 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.

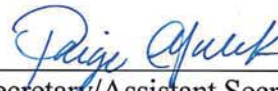
SECTION 9. The Recitals set forth above are incorporated herein and made an operative part of this Resolution.

ADOPTED, SIGNED and APPROVED this 13th day of June, 2019.

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

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)


I, PAIGE GULCK, Secretary of the Board of Directors of the MOULTON
NIGUEL WATER DISTRICT, do hereby certify that the foregoing Resolution was duly
adopted by the Board of Directors of said District at a regular meeting of said Board held
on the 13th day of June, 2019 that it was so adopted by the following vote:

AYES: CAVE, FIORE, FROELICH, JENNINGS, KURTZ,
MOORHEAD, PROBOLSKY

NOES:

ABSTAIN:

ABSENT:



Paige Gulck, Secretary
MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
GENERAL UNIT

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 I	G26.1
Electrical/Instrumentation Technician II	G36
Electrical/Instrumentation Technician III	G46.1
Facilities Coordinator	G32
GIS Analyst	G39
GIS Technician	G20
Information Systems Analyst I	G44
Information Systems Analyst II	G48
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

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
GENERAL UNIT**

JOB CLASSIFICATION	RANGE
Mechanic III	G33
Permit Technician	G20
Purchasing Agent	G47
Records & Mapping Technician	G20
Recycled Water Inspector I	G12
Recycled Water Inspector II	G24
Recycled Water Inspector III	G34
Senior Cross Connection Inspector	G42
Senior Customer Account Representative	G26
Senior Customer Service Field Technician	G31
Senior Electrical/Instrumentation Technician	G48.1
Senior Inspector	G42
Senior Maintenance Worker - Collections	G38
Senior Maintenance Worker - Facilities	G40
Senior Maintenance Worker - Streets	G37
Senior Mechanic	G41
Senior Recycled Water Inspector	G42
Senior Wastewater Treatment Plant Operator	G47.1
Senior Water Efficiency Representative	G31
Senior Water Systems Operator	G45
Wastewater Treatment Plant Operator I	G33.1
Wastewater Treatment Plant Operator II	G41.1
Wastewater Treatment Plant Operator in Training	G22.1
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 22, 2019
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
Customer Account Representative I			G1	Monthly	3,745.73	3,839.33	3,934.67	4,033.47	4,134.00	4,238.00	4,343.73	4,452.93	4,563.87	4,678.27	4,794.40
				Hourly	21.61	22.15	22.70	23.27	23.85	24.45	25.06	25.69	26.33	26.99	27.66
				Annually	44,948.80	46,072.00	47,216.00	48,401.60	49,608.00	50,856.00	52,124.80	53,435.20	54,766.40	56,139.20	57,532.80
Accounting Assistant I			G2	Monthly	3,971.07	4,069.87	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
Hourly	22.91	23.48		24.07	24.67	25.29	25.92	26.57	27.23	27.91	28.61	29.33			
Annually	47,652.80	48,838.40		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			
Customer Service Field Technician I Inventory Clerk Water Efficiency Representative I			G3	Monthly	3,974.53	4,073.33	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
				Hourly	22.93	23.50	24.09	24.69	25.31	25.94	26.59	27.26	27.94	28.64	29.35
				Annually	47,694.40	48,880.00	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
Customer Account Representative II			G4	Monthly	4,212.00	4,317.73	4,425.20	4,536.13	4,648.80	4,764.93	4,884.53	5,007.60	5,132.40	5,260.67	5,392.40
				Hourly	24.30	24.91	25.53	26.17	26.82	27.49	28.18	28.89	29.61	30.35	31.11
				Annually	50,544.00	51,812.80	53,102.40	54,433.60	55,785.60	57,179.20	58,614.40	60,091.20	61,588.80	63,128.00	64,708.80
Maintenance Worker I - Streets			G5	Monthly	4,277.87	4,385.33	4,494.53	4,607.20	4,721.60	4,839.47	4,960.80	5,085.60	5,212.13	5,342.13	5,475.60
				Hourly	24.68	25.30	25.93	26.58	27.24	27.92	28.62	29.34	30.07	30.82	31.59
				Annually	51,334.40	52,624.00	53,934.40	55,286.40	56,659.20	58,073.60	59,529.60	61,027.20	62,545.60	64,105.60	65,707.20
Maintenance Worker I - Collections			G6	Monthly	4,286.53	4,394.00	4,503.20	4,615.87	4,732.00	4,849.87	4,971.20	5,096.00	5,222.53	5,352.53	5,487.73
				Hourly	24.73	25.35	25.98	26.63	27.30	27.98	28.68	29.40	30.13	30.88	31.66
				Annually	51,438.40	52,728.00	54,038.40	55,390.40	56,784.00	58,198.40	59,654.40	61,152.00	62,670.40	64,230.40	65,852.80
Accounting Assistant II			G7	Monthly	4,468.53	4,579.47	4,695.60	4,811.73	4,933.07	5,056.13	5,182.67	5,310.93	5,444.40	5,581.33	5,720.00
				Hourly	25.78	26.42	27.09	27.76	28.46	29.17	29.90	30.64	31.41	32.20	33.00
				Annually	53,622.40	54,953.60	56,347.20	57,740.80	59,196.80	60,673.60	62,192.00	63,731.20	65,332.80	66,976.00	68,640.00
Customer Service Field Technician II Water Efficiency Representative II			G8	Monthly	4,472.00	4,584.67	4,699.07	4,815.20	4,936.53	5,059.60	5,186.13	5,316.13	5,447.87	5,584.80	5,725.20
				Hourly	25.80	26.45	27.11	27.78	28.48	29.19	29.92	30.67	31.43	32.22	33.03
				Annually	53,664.00	55,016.00	56,388.80	57,782.40	59,238.40	60,715.20	62,233.60	63,793.60	65,374.40	67,017.60	68,702.40
Administrative Assistant I			G9	Monthly	4,489.33	4,602.00	4,716.40	4,834.27	4,955.60	5,078.67	5,206.93	5,336.93	5,470.40	5,607.33	5,746.00
				Hourly	25.90	26.55	27.21	27.89	28.59	29.30	30.04	30.79	31.56	32.35	33.15
				Annually	53,872.00	55,224.00	56,596.80	58,011.20	59,467.20	60,944.00	62,483.20	64,043.20	65,644.80	67,288.00	68,952.00
Maintenance Worker I - Facilities			G10	Monthly	4,544.80	4,659.20	4,775.33	4,894.93	5,016.27	5,142.80	5,271.07	5,402.80	5,538.00	5,676.67	5,817.07
				Hourly	26.22	26.88	27.55	28.24	28.94	29.67	30.41	31.17	31.95	32.75	33.56
				Annually	54,537.60	55,910.40	57,304.00	58,739.20	60,195.20	61,713.60	63,252.80	64,833.60	66,456.00	68,120.00	69,804.80
Mechanic I			G11	Monthly	4,553.47	4,667.87	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
				Hourly	26.27	26.93	27.60	28.29	29.00	29.72	30.47	31.23	32.01	32.81	33.63
				Annually	54,641.60	56,014.40	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

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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
Cross Connection Inspector I Inspector I Recycled Water Inspector I	G12	Monthly	4,629.73	4,745.87	4,863.73	4,985.07	5,109.87	5,238.13	5,369.87	5,503.33	5,640.27	5,782.40	5,926.27
		Hourly	26.71	27.38	28.06	28.76	29.48	30.22	30.98	31.75	32.54	33.36	34.19
		Annually	55,556.80	56,950.40	58,364.80	59,820.80	61,318.40	62,857.60	64,438.40	66,040.00	67,683.20	69,388.80	71,115.20
Water Systems Operator I	G13	Monthly	4,693.87	4,811.73	4,931.33	5,054.40	5,180.93	5,310.93	5,442.67	5,579.60	5,718.27	5,862.13	6,007.73
		Hourly	27.08	27.76	28.45	29.16	29.89	30.64	31.40	32.19	32.99	33.82	34.66
		Annually	56,326.40	57,740.80	59,176.00	60,652.80	62,171.20	63,731.20	65,312.00	66,955.20	68,619.20	70,345.60	72,092.80
Customer Account Representative III	G14	Monthly	4,740.67	4,858.53	4,979.87	5,104.67	5,232.93	5,362.93	5,498.13	5,635.07	5,775.47	5,921.07	6,068.40
		Hourly	27.35	28.03	28.73	29.45	30.19	30.94	31.72	32.51	33.32	34.16	35.01
		Annually	56,888.00	58,302.40	59,758.40	61,256.00	62,795.20	64,355.20	65,977.60	67,620.80	69,305.60	71,052.80	72,820.80
Maintenance Worker II - Streets	G15	Monthly	4,816.93	4,936.53	5,061.33	5,187.87	5,316.13	5,449.60	5,586.53	5,725.20	5,869.07	6,016.40	6,165.47
		Hourly	27.79	28.48	29.20	29.93	30.67	31.44	32.23	33.03	33.86	34.71	35.57
		Annually	57,803.20	59,238.40	60,736.00	62,254.40	63,793.60	65,395.20	67,038.40	68,702.40	70,428.80	72,196.80	73,985.60
Maintenance Worker II - Collections	G16	Monthly	4,825.60	4,946.93	5,070.00	5,196.53	5,326.53	5,460.00	5,596.93	5,735.60	5,879.47	6,026.80	6,177.60
		Hourly	27.84	28.54	29.25	29.98	30.73	31.50	32.29	33.09	33.92	34.77	35.64
		Annually	57,907.20	59,363.20	60,840.00	62,358.40	63,918.40	65,520.00	67,163.20	68,827.20	70,553.60	72,321.60	74,131.20
Accounting Assistant III	G17	Monthly	5,028.40	5,154.93	5,283.20	5,414.93	5,550.13	5,688.80	5,830.93	5,976.53	6,127.33	6,279.87	6,437.60
		Hourly	29.01	29.74	30.48	31.24	32.02	32.82	33.64	34.48	35.35	36.23	37.14
		Annually	60,340.80	61,859.20	63,398.40	64,979.20	66,601.60	68,265.60	69,971.20	71,718.40	73,528.00	75,358.40	77,251.20
Customer Service Field Technician III Water Efficiency Representative III	G18	Monthly	5,030.13	5,156.67	5,284.93	5,416.67	5,551.87	5,690.53	5,832.67	5,980.00	6,129.07	6,281.60	6,439.33
		Hourly	29.02	29.75	30.49	31.25	32.03	32.83	33.65	34.50	35.36	36.24	37.15
		Annually	60,361.60	61,880.00	63,419.20	65,000.00	66,622.40	68,286.40	69,992.00	71,760.00	73,548.80	75,379.20	77,272.00
Administrative Assistant II	G19	Monthly	5,066.53	5,193.07	5,323.07	5,456.53	5,591.73	5,732.13	5,876.00	6,023.33	6,172.40	6,326.67	6,486.13
		Hourly	29.23	29.96	30.71	31.48	32.26	33.07	33.90	34.75	35.61	36.50	37.42
		Annually	60,798.40	62,316.80	63,876.80	65,478.40	67,100.80	68,785.60	70,512.00	72,280.00	74,068.80	75,920.00	77,833.60
GIS Technician Permit Technician Records & Mapping Technician	G20	Monthly	5,099.47	5,227.73	5,357.73	5,491.20	5,628.13	5,770.27	5,914.13	6,061.47	6,214.00	6,368.27	6,527.73
		Hourly	29.42	30.16	30.91	31.68	32.47	33.29	34.12	34.97	35.85	36.74	37.66
		Annually	61,193.60	62,732.80	64,292.80	65,894.40	67,537.60	69,243.20	70,969.60	72,737.60	74,568.00	76,419.20	78,332.80
Maintenance Worker II - Facilities	G21	Monthly	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	6,378.67	6,538.13
		Hourly	29.47	30.21	30.96	31.74	32.53	33.34	34.18	35.03	35.91	36.80	37.72
		Annually	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	76,544.00	78,457.60
Mechanic II	G22	Monthly	5,123.73	5,252.00	5,383.73	5,517.20	5,655.87	5,796.27	5,941.87	6,090.93	6,243.47	6,399.47	6,558.93
		Hourly	29.56	30.30	31.06	31.83	32.63	33.44	34.28	35.14	36.02	36.92	37.84
		Annually	61,484.80	63,024.00	64,604.80	66,206.40	67,870.40	69,555.20	71,302.40	73,091.20	74,921.60	76,793.60	78,707.20

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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
Wastewater Treatment Plant Operator in Training	G22.1	Monthly	5,151.47	5,279.73	5,411.47	5,548.40	5,687.07	5,829.20	5,974.80	6,123.87	6,276.40	6,434.13	6,593.60
		Hourly	297.2	30.46	31.22	32.01	32.81	33.63	34.47	35.33	36.21	37.12	38.04
		Annually	61,817.60	63,356.80	64,937.60	66,580.80	68,244.80	69,950.40	71,697.60	73,486.40	75,316.80	77,209.60	79,123.20
Inspector II	G23	Monthly	5,206.93	5,336.93	5,470.40	5,607.33	5,747.73	5,891.60	6,038.93	6,189.73	6,344.00	6,503.47	6,664.67
		Hourly	30.04	30.79	31.56	32.35	33.16	33.99	34.84	35.71	36.60	37.52	38.45
		Annually	62,483.20	64,043.20	65,644.80	67,288.00	68,972.80	70,699.20	72,467.20	74,276.80	76,128.00	78,041.60	79,976.00
Cross Connection Inspector II Recycled Water Inspector II	G24	Monthly	5,246.80	5,378.53	5,512.00	5,650.67	5,791.07	5,936.67	6,084.00	6,236.53	6,392.53	6,552.00	6,716.67
		Hourly	30.27	31.03	31.80	32.60	33.41	34.25	35.10	35.98	36.88	37.80	38.75
		Annually	62,961.60	64,542.40	66,144.00	67,808.00	69,492.80	71,240.00	73,008.00	74,838.40	76,710.40	78,624.00	80,600.00
Water Systems Operator II	G25	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 Account Representative	G26	Monthly	5,333.47	5,466.93	5,603.87	5,744.27	5,886.40	6,033.73	6,184.53	6,340.53	6,498.27	6,661.20	6,827.60
		Hourly	30.77	31.54	32.33	33.14	33.96	34.81	35.68	36.58	37.49	38.43	39.39
		Annually	64,001.60	65,603.20	67,246.40	68,931.20	70,636.80	72,404.80	74,214.40	76,086.40	77,979.20	79,934.40	81,931.20
Electrical/Instrumentation Technician I	G26.1	Monthly	5,371.60	5,505.07	5,643.73	5,784.13	5,929.73	6,077.07	6,229.60	6,385.60	6,545.07	6,708.00	6,876.13
		Hourly	30.99	31.76	32.56	33.37	34.21	35.06	35.94	36.84	37.76	38.70	39.67
		Annually	64,459.20	66,060.80	67,724.80	69,409.60	71,156.80	72,924.80	74,755.20	76,627.20	78,540.80	80,496.00	82,513.60
Maintenance Worker III - Streets	G27	Monthly	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	6,926.40
		Hourly	31.22	32.00	32.80	33.62	34.46	35.32	36.21	37.11	38.04	38.99	39.96
		Annually	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	83,116.80
Maintenance Worker III - Collections	G28	Monthly	5,423.60	5,558.80	5,697.47	5,841.33	5,986.93	6,136.00	6,290.27	6,446.27	6,607.47	6,773.87	6,942.00
		Hourly	31.29	32.07	32.87	33.70	34.54	35.40	36.29	37.19	38.12	39.08	40.05
		Annually	65,083.20	66,705.60	68,369.60	70,096.00	71,843.20	73,632.00	75,483.20	77,355.20	79,289.60	81,286.40	83,304.00
Buyer	G29	Monthly	5,591.73	5,732.13	5,874.27	6,021.60	6,172.40	6,326.67	6,484.40	6,647.33	6,813.73	6,983.60	7,158.67
		Hourly	32.26	33.07	33.89	34.74	35.61	36.50	37.41	38.35	39.31	40.29	41.30
		Annually	67,100.80	68,785.60	70,491.20	72,259.20	74,068.80	75,920.00	77,812.80	79,768.00	81,764.80	83,803.20	85,904.00
Accountant	G30	Monthly	5,654.13	5,796.27	5,940.13	6,089.20	6,241.73	6,397.73	6,557.20	6,720.13	6,888.27	7,061.60	7,238.40
		Hourly	32.62	33.44	34.27	35.13	36.01	36.91	37.83	38.77	39.74	40.74	41.76
		Annually	67,849.60	69,555.20	71,281.60	73,070.40	74,900.80	76,772.80	78,686.40	80,641.60	82,659.20	84,739.20	86,860.80
Senior Customer Service Field Technician Senior Water Efficiency Representative	G31	Monthly	5,657.60	5,799.73	5,943.60	6,092.67	6,245.20	6,401.20	6,560.67	6,725.33	6,893.47	7,065.07	7,241.87
		Hourly	32.64	33.46	34.29	35.15	36.03	36.93	37.85	38.80	39.77	40.76	41.78
		Annually	67,891.20	69,596.80	71,323.20	73,112.00	74,942.40	76,814.40	78,728.00	80,704.00	82,721.60	84,780.80	86,902.40
Facilities Coordinator Maintenance Worker III - Facilities	G32	Monthly	5,747.73	5,891.60	6,038.93	6,189.73	6,344.00	6,503.47	6,666.40	6,832.80	7,002.67	7,177.73	7,358.00
		Hourly	33.16	33.99	34.84	35.71	36.60	37.52	38.46	39.42	40.40	41.41	42.45
		Annually	68,972.80	70,699.20	72,467.20	74,276.80	76,128.00	78,041.60	79,996.80	81,993.60	84,032.00	86,132.80	88,296.00

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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
Mechanic III	G33	Monthly	5,763.33	5,907.20	6,054.53	6,207.07	6,361.33	6,520.80	6,683.73	6,850.13	7,021.73	7,196.80	7,377.07		
		Hourly	33.25	34.08	34.93	35.81	36.70	37.62	38.56	39.52	40.51	41.52	42.56		
		Annually	69,160.00	70,886.40	72,654.40	74,484.80	76,336.00	78,249.60	80,204.80	82,201.60	84,260.80	86,361.60	88,524.80		
Wastewater Treatment Plant Operator I	G33.1	Monthly	5,794.53	5,940.13	6,087.47	6,240.00	6,396.00	6,555.47	6,720.13	6,888.27	7,059.87	7,236.67	7,416.93		
		Hourly	33.43	34.27	35.12	36.00	36.90	37.82	38.77	39.74	40.73	41.75	42.79		
		Annually	69,534.40	71,281.60	73,049.60	74,880.00	76,752.00	78,665.60	80,641.60	82,659.20	84,718.40	86,840.00	89,003.20		
Cross Connection Inspector III Inspector III Recycled Water Inspector III	G34	Monthly	5,858.67	6,006.00	6,155.07	6,309.33	6,467.07	6,628.27	6,794.67	6,964.53	7,137.87	7,316.40	7,500.13		
		Hourly	33.80	34.65	35.51	36.40	37.31	38.24	39.20	40.18	41.18	42.21	43.27		
		Annually	70,304.00	72,072.00	73,860.80	75,712.00	77,604.80	79,539.20	81,536.00	83,574.40	85,654.40	87,796.80	90,001.60		
Water Systems Operator III	G35	Monthly	5,940.13	6,089.20	6,240.00	6,397.73	6,557.20	6,720.13	6,888.27	7,061.60	7,236.67	7,418.67	7,604.13		
		Hourly	34.27	35.13	36.00	36.91	37.83	38.77	39.74	40.74	41.75	42.80	43.87		
		Annually	71,281.60	73,070.40	74,880.00	76,772.80	78,686.40	80,641.60	82,659.20	84,739.20	86,840.00	89,024.00	91,249.60		
Electrical/Instrumentation Technician II	G36	Monthly	6,042.40	6,193.20	6,347.47	6,506.93	6,669.87	6,836.27	7,007.87	7,182.93	7,361.47	7,546.93	7,734.13		
		Hourly	34.86	35.73	36.62	37.54	38.48	39.44	40.43	41.44	42.47	43.54	44.62		
		Annually	72,508.80	74,318.40	76,169.60	78,083.20	80,038.40	82,035.20	84,094.40	86,195.20	88,337.60	90,563.20	92,809.60		
Senior Maintenance Worker - Streets	G37	Monthly	6,090.93	6,243.47	6,399.47	6,558.93	6,723.60	6,891.73	7,063.33	7,240.13	7,420.40	7,607.60	7,796.53		
		Hourly	35.14	36.02	36.92	37.84	38.79	39.76	40.75	41.77	42.81	43.89	44.98		
		Annually	73,091.20	74,921.60	76,793.60	78,707.20	80,683.20	82,700.80	84,760.00	86,881.60	89,044.80	91,291.20	93,558.40		
Senior Maintenance Worker - Collections	G38	Monthly	6,103.07	6,255.60	6,411.60	6,572.80	6,737.47	6,905.60	7,077.20	7,254.00	7,436.00	7,621.47	7,812.13		
		Hourly	35.21	36.09	36.99	37.92	38.87	39.84	40.83	41.85	42.90	43.97	45.07		
		Annually	73,236.80	75,067.20	76,939.20	78,873.60	80,849.60	82,867.20	84,926.40	87,048.00	89,232.00	91,457.60	93,745.60		
GIS Analyst Water Efficiency Analyst	G39	Monthly	6,454.93	6,616.13	6,782.53	6,950.67	7,125.73	7,302.53	7,486.27	7,673.47	7,864.13	8,061.73	8,262.80		
		Hourly	37.24	38.17	39.13	40.10	41.11	42.13	43.19	44.27	45.37	46.51	47.67		
		Annually	77,459.20	79,393.60	81,390.40	83,408.00	85,508.80	87,630.40	89,835.20	92,081.60	94,369.60	96,740.80	99,153.60		
Senior Maintenance Worker - Facilities	G40	Monthly	6,467.07	6,628.27	6,794.67	6,964.53	7,137.87	7,316.40	7,500.13	7,687.33	7,879.73	8,077.33	8,278.40		
		Hourly	37.31	38.24	39.20	40.18	41.18	42.21	43.27	44.35	45.46	46.60	47.76		
		Annually	77,604.80	79,539.20	81,536.00	83,574.40	85,654.40	87,796.80	90,001.60	92,248.00	94,556.80	96,928.00	99,340.80		
Senior Mechanic	G41	Monthly	6,482.67	6,645.60	6,810.27	6,981.87	7,155.20	7,333.73	7,517.47	7,706.40	7,898.80	8,096.40	8,299.20		
		Hourly	37.40	38.34	39.29	40.28	41.28	42.31	43.37	44.46	45.57	46.71	47.88		
		Annually	77,792.00	79,747.20	81,723.20	83,782.40	85,862.40	88,004.80	90,209.60	92,476.80	94,785.60	97,156.80	99,590.40		
Wastewater Treatment Plant Operator II	G41.1	Monthly	6,519.07	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		
		Hourly	37.61	38.55	39.51	40.50	41.51	42.55	43.62	44.71	45.82	46.97	48.14		
		Annually	78,228.80	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		
Senior Cross Connection Inspector Senior Inspector Senior Recycled Water Inspector	G42	Monthly	6,590.13	6,754.80	6,922.93	7,096.27	7,274.80	7,456.80	7,642.27	7,832.93	8,028.80	8,229.87	8,436.13		
		Hourly	38.02	38.97	39.94	40.94	41.97	43.02	44.09	45.19	46.32	47.48	48.67		
		Annually	79,081.60	81,057.60	83,075.20	85,155.20	87,297.60	89,481.60	91,707.20	93,995.20	96,345.60	98,758.40	101,233.60		

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
GENERAL UNIT

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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
	G43	Monthly	6,609.20	6,773.87	6,943.73	7,117.07	7,295.60	7,477.60	7,664.80	7,855.47	8,053.07	8,254.13	8,460.40	
		Hourly	38.13	39.08	40.06	41.06	42.09	43.14	44.22	45.32	46.46	47.62	48.81	
		Annually	79,310.40	81,286.40	83,324.80	85,404.80	87,547.20	89,731.20	91,977.60	94,265.60	96,636.80	99,049.60	101,524.80	
Information Systems Analyst I	G44	Monthly	6,669.87	6,836.27	7,007.87	7,182.93	7,361.47	7,546.93	7,735.87	7,928.27	8,125.87	8,330.40	8,538.40	
		Hourly	38.48	39.44	40.43	41.44	42.47	43.54	44.63	45.74	46.88	48.06	49.26	
		Annually	80,038.40	82,035.20	84,094.40	86,195.20	88,337.60	90,563.20	92,830.40	95,139.20	97,510.40	99,964.80	102,460.80	
Senior Water Systems Operator	G45	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	
	G46	Monthly	6,794.67	6,964.53	7,137.87	7,316.40	7,500.13	7,687.33	7,879.73	8,077.33	8,278.40	8,486.40	8,697.87	
		Hourly	39.20	40.18	41.18	42.21	43.27	44.35	45.46	46.60	47.76	48.96	50.18	
		Annually	81,536.00	83,574.40	85,654.40	87,796.80	90,001.60	92,248.00	94,556.80	96,928.00	99,340.80	101,836.80	104,374.40	
Electrical/Instrumentation Technician III	G46.1	Monthly	6,798.13	6,968.00	7,143.07	7,321.60	7,503.60	7,690.80	7,883.20	8,080.80	8,283.60	8,489.87	8,701.33	
		Hourly	39.22	40.20	41.21	42.24	43.29	44.37	45.48	46.62	47.79	48.98	50.20	
		Annually	81,577.60	83,616.00	85,716.80	87,859.20	90,043.20	92,289.60	94,598.40	96,969.60	99,403.20	101,878.40	104,416.00	
Purchasing Agent	G47	Monthly	6,983.60	7,158.67	7,337.20	7,520.93	7,708.13	7,900.53	8,098.13	8,300.93	8,508.93	8,722.13	8,938.80	
		Hourly	40.29	41.30	42.33	43.39	44.47	45.58	46.72	47.89	49.09	50.32	51.57	
		Annually	83,803.20	85,904.00	88,046.40	90,251.20	92,497.60	94,806.40	97,177.60	99,611.20	102,107.20	104,665.60	107,265.60	
Senior Wastewater Treatment Plant Operator	G47.1	Monthly	7,335.47	7,519.20	7,706.40	7,898.80	8,096.40	8,299.20	8,507.20	8,720.40	8,937.07	9,160.67	9,389.47	
		Hourly	42.32	43.38	44.46	45.57	46.71	47.88	49.08	50.31	51.56	52.85	54.17	
		Annually	88,025.60	90,230.40	92,476.80	94,785.60	97,156.80	99,590.40	102,086.40	104,644.80	107,244.80	109,928.00	112,673.60	
Information Systems Analyst II	G48	Monthly	7,501.87	7,689.07	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	
		Hourly	43.28	44.36	45.47	46.61	47.77	48.97	50.19	51.45	52.73	54.05	55.40	
		Annually	90,022.40	92,268.80	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	
Senior Electrical/Instrumentation Technician	G48.1	Monthly	7,647.47	7,838.13	8,034.00	8,235.07	8,441.33	8,652.80	8,869.47	9,089.60	9,318.40	9,550.67	9,789.87	
		Hourly	44.12	45.22	46.35	47.51	48.70	49.92	51.17	52.44	53.76	55.10	56.48	
		Annually	91,769.60	94,057.60	96,408.00	98,820.80	101,296.00	103,833.60	106,433.60	109,075.20	111,820.80	114,608.00	117,478.40	
	G49	Monthly	8,441.33	8,652.80	8,869.47	9,089.60	9,318.40	9,550.67	9,789.87	10,034.27	10,285.60	10,542.13	10,805.60	
		Hourly	48.70	49.92	51.17	52.44	53.76	55.10	56.48	57.89	59.34	60.82	62.34	
		Annually	101,296.00	103,833.60	106,433.60	109,075.20	111,820.80	114,608.00	117,478.40	120,411.20	123,427.20	126,505.60	129,667.20	

**MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
SUPERVISORY UNIT**

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 Supervisor	S15
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
Wastewater Treatment Plant Supervisor	S14
Water Distribution Supervisor	S11
Water Efficiency Supervisor	S5

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
SUPERVISORY UNIT

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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
Records and Mapping Coordinator		S1	Monthly	5,737.33	5,881.20	6,028.53	6,179.33	6,333.60	6,491.33	6,654.27	6,820.67	6,990.53	7,165.60	7,344.13
			Hourly	33.10	33.93	34.78	35.65	36.54	37.45	38.39	39.35	40.33	41.34	42.37
			Annually	68,848.00	70,574.40	72,342.40	74,152.00	76,003.20	77,896.00	79,851.20	81,848.00	83,886.40	85,987.20	88,129.60
Senior Accountant		S2	Monthly	6,361.33	6,520.80	6,683.73	6,850.13	7,021.73	7,196.80	7,377.07	7,560.80	7,751.47	7,943.87	8,143.20
			Hourly	36.70	37.62	38.56	39.52	40.51	41.52	42.56	43.62	44.72	45.83	46.98
			Annually	76,336.00	78,249.60	80,204.80	82,201.60	84,260.80	86,361.60	88,524.80	90,729.60	93,017.60	95,326.40	97,718.40
Street Crew Supervisor		S3	Monthly	6,851.87	7,023.47	7,198.53	7,378.80	7,562.53	7,751.47	7,945.60	8,144.93	8,347.73	8,557.47	8,770.67
			Hourly	39.53	40.52	41.53	42.57	43.63	44.72	45.84	46.99	48.16	49.37	50.60
			Annually	82,222.40	84,281.60	86,382.40	88,545.60	90,750.40	93,017.60	95,347.20	97,739.20	100,172.80	102,689.60	105,248.00
Collection System Supervisor		S4	Monthly	6,865.73	7,037.33	7,214.13	7,394.40	7,578.13	7,768.80	7,962.93	8,160.53	8,365.07	8,574.80	8,788.00
			Hourly	39.61	40.60	41.62	42.66	43.72	44.82	45.94	47.08	48.26	49.47	50.70
			Annually	82,388.80	84,448.00	86,569.60	88,732.80	90,937.60	93,225.60	95,555.20	97,926.40	100,380.80	102,897.60	105,456.00
Customer Service Field Supervisor Water Efficiency Supervisor		S5	Monthly	6,994.00	7,169.07	7,347.60	7,531.33	7,720.27	7,912.67	8,110.27	8,313.07	8,521.07	8,734.27	8,952.67
			Hourly	40.35	41.36	42.39	43.45	44.54	45.65	46.79	47.96	49.16	50.39	51.65
			Annually	83,928.00	86,028.80	88,171.20	90,376.00	92,643.20	94,952.00	97,323.20	99,756.80	102,252.80	104,811.20	107,432.00
Accounting Supervisor		S6	Monthly	7,156.93	7,335.47	7,519.20	7,706.40	7,900.53	8,098.13	8,299.20	8,507.20	8,720.40	8,938.80	9,160.67
			Hourly	41.29	42.32	43.38	44.46	45.58	46.72	47.88	49.08	50.31	51.57	52.85
			Annually	85,883.20	88,025.60	90,230.40	92,476.80	94,806.40	97,177.60	99,590.40	102,086.40	104,644.80	107,265.60	109,928.00
Senior GIS Analyst		S7	Monthly	7,259.20	7,441.20	7,626.67	7,817.33	8,013.20	8,212.53	8,418.80	8,628.53	8,845.20	9,065.33	9,292.40
			Hourly	41.88	42.93	44.00	45.10	46.23	47.38	48.57	49.78	51.03	52.30	53.61
			Annually	87,110.40	89,294.40	91,520.00	93,808.00	96,158.40	98,550.40	101,025.60	103,542.40	106,142.40	108,784.00	111,508.80
Station Maintenance Supervisor		S8	Monthly	7,274.80	7,456.80	7,642.27	7,834.67	8,030.53	8,231.60	8,436.13	8,647.60	8,864.27	9,084.40	9,313.20
			Hourly	41.97	43.02	44.09	45.20	46.33	47.49	48.67	49.89	51.14	52.41	53.73
			Annually	87,297.60	89,481.60	91,707.20	94,016.00	96,366.40	98,779.20	101,233.60	103,771.20	106,371.20	109,012.80	111,758.40
Support Services Supervisor		S9	Monthly	7,293.87	7,475.87	7,663.07	7,855.47	8,051.33	8,252.40	8,458.67	8,670.13	8,886.80	9,108.67	9,337.47
			Hourly	42.08	43.13	44.21	45.32	46.45	47.61	48.80	50.02	51.27	52.55	53.87
			Annually	87,526.40	89,710.40	91,956.80	94,265.60	96,616.00	99,028.80	101,504.00	104,041.60	106,641.60	109,304.00	112,049.60
Cross Connection Supervisor Inspection Supervisor		S10	Monthly	7,416.93	7,602.40	7,793.07	7,987.20	8,186.53	8,391.07	8,600.80	8,815.73	9,037.60	9,262.93	9,493.47
			Hourly	42.79	43.86	44.96	46.08	47.23	48.41	49.62	50.86	52.14	53.44	54.77
			Annually	89,003.20	91,228.80	93,516.80	95,846.40	98,238.40	100,692.80	103,209.60	105,788.80	108,451.20	111,155.20	113,921.60
Water Distribution Supervisor		S11	Monthly	7,519.20	7,706.40	7,900.53	8,098.13	8,299.20	8,507.20	8,720.40	8,938.80	9,160.67	9,391.20	9,625.20
			Hourly	43.38	44.46	45.58	46.72	47.88	49.08	50.31	51.57	52.85	54.18	55.53
			Annually	90,230.40	92,476.80	94,806.40	97,177.60	99,590.40	102,086.40	104,644.80	107,265.60	109,928.00	112,694.40	115,502.40

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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
			S12	Monthly	7,645.73	7,836.40	8,032.27	8,233.33	8,439.60	8,651.07	8,866.00	9,087.87	9,314.93	9,548.93	9,786.40
				Hourly	44.11	45.21	46.34	47.50	48.69	49.91	51.15	52.43	53.74	55.09	56.46
				Annually	91,748.80	94,036.80	96,387.20	98,800.00	101,275.20	103,812.80	106,392.00	109,054.40	111,779.20	114,587.20	117,436.80
Customer Account Supervisor			S13	Monthly	7,678.67	7,871.07	8,066.93	8,269.73	8,476.00	8,687.47	8,904.13	9,127.73	9,356.53	9,588.80	9,829.73
				Hourly	44.30	45.41	46.54	47.71	48.90	50.12	51.37	52.66	53.98	55.32	56.71
				Annually	92,144.00	94,452.80	96,803.20	99,236.80	101,712.00	104,249.60	106,849.60	109,532.80	112,278.40	115,065.60	117,956.80
Wastewater Treatment Plant Supervisor			S14	Monthly	8,252.40	8,458.67	8,670.13	8,886.80	9,108.67	9,337.47	9,569.73	9,808.93	10,055.07	10,306.40	10,562.93
				Hourly	47.61	48.80	50.02	51.27	52.55	53.87	55.21	56.59	58.01	59.46	60.94
				Annually	99,028.80	101,504.00	104,041.60	106,641.60	109,304.00	112,049.60	114,836.80	117,707.20	120,660.80	123,676.80	126,755.20
Electrical/Instrumentation Supervisor			S15	Monthly	8,604.27	8,819.20	9,039.33	9,266.40	9,496.93	9,734.40	9,978.80	10,228.40	10,483.20	10,744.93	11,013.60
				Hourly	49.64	50.88	52.15	53.46	54.79	56.16	57.57	59.01	60.48	61.99	63.54
				Annually	103,251.20	105,830.40	108,472.00	111,196.80	113,963.20	116,812.80	119,745.60	122,740.80	125,798.40	128,939.20	132,163.20

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
EXEMPT EMPLOYEES

JOB CLASSIFICATION	RANGE
Administrative Analyst	E1
Assistant Director of Operations	E14
Assistant General Manager	E18
Board Secretary/Executive Assistant	E4.1
Communications Coordinator	E4.1
Contracts Analyst	E2
Controller	E11
Customer Engagement Coordinator	E3
Development Services Specialist	E1
Director of Engineering	E16
Director of Engineering & Operations	E17
Director of Finance & Water Resources	E16
Director of Human Resources	E16
Director of Operations	E15.1
Director of Regional & Legal Affairs	E17
Engineering Manager	E15
Financial Data Analyst	E2
GIS Administrator	E5
Government Affairs Officer	E15.1
Human Resources Analyst	E1
Information Systems Administrator	E5
Information Systems Manager	E6
Information Systems Officer	E15
Manager of Financial Planning	E11
Marketing & Social Media Coordinator	E4.1
Principal Engineer	E13
Safety & Compliance Coordinator	E4.1
Senior Engineer	E8
Senior Human Resources Analyst	E3
Senior Water Efficiency Specialist	E3
Senior Water Resources Analyst	E4
Senior Water Resources Planner	E8
Superintendent of Customer Service	E12
Superintendent of Engineering	E12
Superintendent of Operations	E12
Superintendent of Wastewater Operations	E12
Water Efficiency Manager	E11
Water Resources Analyst	E2

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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 Development Services Specialist Human Resources Analyst	E1	Monthly	5,855.20	5,973.07	6,090.93	6,214.00	6,337.07	6,465.33	6,593.60	6,725.33	6,860.53	6,997.47	7,137.87	7,280.00	7,425.60	7,574.67	7,725.47	7,879.73
		Hourly	33.78	34.46	35.14	35.85	36.56	37.30	38.04	38.80	39.58	40.37	41.18	42.00	42.84	43.70	44.57	45.46
		Annually	70,262.40	71,676.80	73,091.20	74,568.00	76,044.80	77,584.00	79,123.20	80,704.00	82,326.40	83,969.60	85,654.40	87,360.00	89,107.20	90,896.00	92,705.60	94,556.80
Contracts Analyst Financial Data Analyst Water Resources Analyst	E2	Monthly	6,260.80	6,385.60	6,513.87	6,643.87	6,777.33	6,912.53	7,051.20	7,191.60	7,335.47	7,482.80	7,631.87	7,784.40	7,940.40	8,099.87	8,261.07	8,425.73
		Hourly	36.12	36.84	37.58	38.33	39.10	39.88	40.68	41.49	42.32	43.17	44.03	44.91	45.81	46.73	47.66	48.61
		Annually	75,129.60	76,627.20	78,166.40	79,726.40	81,328.00	82,950.40	84,614.40	86,299.20	88,025.60	89,793.60	91,582.40	93,412.80	95,284.80	97,198.40	99,132.80	101,108.80
Customer Engagement Coordinator Sr. Human Resources Analyst Sr. Water Efficiency Specialist	E3	Monthly	7,058.13	7,198.53	7,344.13	7,489.73	7,640.53	7,793.07	7,949.07	8,106.80	8,269.73	8,434.40	8,604.27	8,775.87	8,950.93	9,131.20	9,313.20	9,498.67
		Hourly	40.72	41.53	42.37	43.21	44.08	44.96	45.86	46.77	47.71	48.66	49.64	50.63	51.64	52.68	53.73	54.80
		Annually	84,697.60	86,382.40	88,129.60	89,876.80	91,686.40	93,516.80	95,388.80	97,281.60	99,236.80	101,212.80	103,251.20	105,310.40	107,411.20	109,574.40	111,758.40	113,984.00
Sr. Water Resources Analyst	E4	Monthly	7,278.27	7,423.87	7,572.93	7,723.73	7,878.00	8,035.73	8,196.93	8,359.87	8,528.00	8,697.87	8,872.93	9,049.73	9,230.00	9,415.47	9,602.67	9,795.07
		Hourly	41.99	42.83	43.69	44.56	45.45	46.36	47.29	48.23	49.20	50.18	51.19	52.21	53.25	54.32	55.40	56.51
		Annually	87,339.20	89,086.40	90,875.20	92,684.80	94,536.00	96,428.80	98,363.20	100,318.40	102,336.00	104,374.40	106,475.20	108,596.80	110,760.00	112,985.60	115,232.00	117,540.80
Board Secretary/Executive Assistant Communications Coordinator Marketing & Social Media Coordinator Safety and Compliance Coordinator	E4.1	Monthly	7,968.13	8,127.60	8,290.53	8,455.20	8,625.07	8,796.67	8,973.47	9,153.73	9,335.73	9,522.93	9,713.60	9,907.73	10,105.33	10,308.13	10,514.40	10,724.13
		Hourly	45.97	46.89	47.83	48.78	49.76	50.75	51.77	52.81	53.86	54.94	56.04	57.16	58.30	59.47	60.66	61.87
		Annually	95,617.60	97,531.20	99,486.40	101,462.40	103,500.80	105,560.00	107,681.60	109,844.80	112,028.80	114,275.20	116,563.20	118,892.80	121,264.00	123,697.60	126,172.80	128,689.60
GIS Administrator Information Systems Administrator	E5	Monthly	8,692.67	8,866.00	9,044.53	9,224.80	9,408.53	9,597.47	9,789.87	9,985.73	10,185.07	10,387.87	10,595.87	10,809.07	11,024.00	11,244.13	11,469.47	11,700.00
		Hourly	50.15	51.15	52.18	53.22	54.28	55.37	56.48	57.61	58.76	59.93	61.13	62.36	63.60	64.87	66.17	67.50
		Annually	104,312.00	106,392.00	108,534.40	110,697.60	112,902.40	115,169.60	117,478.40	119,828.80	122,220.80	124,654.40	127,150.40	129,708.80	132,288.00	134,929.60	137,633.60	140,400.00
Information Systems Manager	E6	Monthly	9,030.67	9,210.93	9,394.67	9,583.60	9,774.27	9,970.13	10,169.47	10,374.00	10,580.27	10,791.73	11,008.40	11,228.53	11,453.87	11,682.67	11,914.93	12,154.13
		Hourly	52.10	53.14	54.20	55.29	56.39	57.52	58.67	59.85	61.04	62.26	63.51	64.78	66.08	67.40	68.74	70.12
		Annually	108,368.00	110,531.20	112,736.00	115,003.20	117,291.20	119,641.60	122,033.60	124,488.00	126,963.20	129,500.80	132,100.80	134,742.40	137,446.40	140,192.00	142,979.20	145,849.60
	E7	Monthly	9,268.13	9,453.60	9,642.53	9,834.93	10,032.53	10,233.60	10,438.13	10,646.13	10,859.33	11,076.00	11,297.87	11,523.20	11,753.73	11,989.47	12,228.67	12,473.07
		Hourly	53.47	54.54	55.63	56.74	57.88	59.04	60.22	61.42	62.65	63.90	65.18	66.48	67.81	69.17	70.55	71.96
		Annually	111,217.60	113,443.20	115,710.40	118,019.20	120,390.40	122,803.20	125,257.60	127,753.60	130,312.00	132,912.00	135,574.40	138,278.40	141,044.80	143,873.60	146,744.00	149,676.80
Senior Engineer Senior Water Resources Planner	E8	Monthly	9,351.33	9,538.53	9,729.20	9,923.33	10,122.67	10,325.47	10,531.73	10,741.47	10,956.40	11,176.53	11,398.40	11,627.20	11,859.47	12,096.93	12,339.60	12,585.73
		Hourly	53.95	55.03	56.13	57.25	58.40	59.57	60.76	61.97	63.21	64.48	65.76	67.08	68.42	69.79	71.19	72.61
		Annually	112,216.00	114,462.40	116,750.40	119,080.00	121,472.00	123,905.60	126,380.80	128,897.60	131,476.80	134,118.40	136,780.80	139,526.40	142,313.60	145,163.20	148,075.20	151,028.80
	E9	Monthly	9,668.53	9,862.67	10,058.53	10,259.60	10,465.87	10,675.60	10,888.80	11,105.47	11,329.07	11,554.40	11,786.67	12,022.40	12,261.60	12,507.73	12,757.33	13,012.13
		Hourly	55.78	56.90	58.03	59.19	60.38	61.59	62.82	64.07	65.36	66.66	68.00	69.36	70.74	72.16	73.60	75.07
		Annually	116,022.40	118,352.00	120,702.40	123,115.20	125,590.40	128,107.20	130,665.60	133,265.60	135,948.80	138,652.80	141,440.00	144,268.80	147,139.20	150,092.80	153,088.00	156,145.60
	E10	Monthly	9,689.33	9,883.47	10,081.07	10,282.13	10,488.40	10,698.13	10,911.33	11,129.73	11,353.33	11,580.40	11,810.93	12,046.67	12,287.60	12,533.73	12,785.07	13,039.87
		Hourly	55.90	57.02	58.16	59.32	60.51	61.72	62.95	64.21	65.50	66.81	68.14	69.50	70.89	72.31	73.76	75.23
		Annually	116,272.00	118,601.60	120,972.80	123,385.60	125,860.80	128,377.60	130,936.00	133,556.80	136,240.00	138,964.80	141,731.20	144,560.00	147,451.20	150,404.80	153,420.80	156,478.40
Controller Manager of Financial Planning Water Efficiency Manager	E11	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	156,984.00
Superintendent of Customer Service Superintendent of Engineering Superintendent of Operations Superintendent of Wastewater Operations	E12	Monthly	9,923.33	10,122.67	10,323.73	10,530.00	10,741.47	10,956.40	11,174.80	11,398.40	11,627.20	11,859.47	12,096.93	12,337.87	12,585.73	12,837.07	13,093.60	13,355.33
		Hourly	57.25	58.40	59.56	60.75	61.97	63.21	64.47	65.76	67.08	68.42	69.79	71.18	72.61	74.06	75.54	77.05
		Annually	119,080.00	121,472.00	123,884.80	126,360.00	128,897.60	131,476.80	134,097.60	136,780.80	139,526.40	142,313.60	145,163.20	148,054.40	150,928.80	153,844.80	157,123.20	160,264.00

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
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	10,410.40	10,618.40	10,831.60	11,048.27	11,268.40	11,493.73	11,724.27	11,958.27	12,197.47	12,441.87	12,689.73	12,944.53	13,202.80	13,466.27	13,736.67	14,010.53
		Hourly	60.06	61.26	62.49	63.74	65.01	66.31	67.64	68.99	70.37	71.78	73.21	74.68	76.17	77.69	79.25	80.83
		Annually	124,924.80	127,420.80	129,979.20	132,579.20	135,220.80	137,924.80	140,691.20	143,499.20	146,369.60	149,302.40	152,276.80	155,334.40	158,433.60	161,595.20	164,840.00	168,126.40
Assistant Director of Operations	E14	Monthly	10,590.67	10,802.13	11,018.80	11,238.93	11,464.27	11,693.07	11,927.07	12,164.53	12,408.93	12,656.80	12,909.87	13,168.13	13,431.60	13,700.27	13,974.13	14,253.20
		Hourly	61.10	62.32	63.57	64.84	66.14	67.46	68.81	70.18	71.59	73.02	74.48	75.97	77.49	79.04	80.62	82.23
		Annually	127,088.00	129,625.60	132,225.60	134,867.20	137,571.20	140,316.80	143,124.80	145,974.40	148,907.20	151,881.60	154,918.40	158,017.60	161,179.20	164,403.20	167,689.60	171,038.40
Information Systems Officer Engineering Manager	E15	Monthly	11,216.40	11,440.00	11,668.80	11,902.80	12,140.27	12,384.67	12,630.80	12,883.87	13,142.13	13,403.87	13,672.53	13,946.40	14,225.47	14,509.73	14,799.20	15,095.60
		Hourly	64.71	66.00	67.32	68.67	70.04	71.45	72.87	74.33	75.82	77.33	78.88	80.46	82.07	83.71	85.38	87.09
		Annually	134,596.80	137,280.00	140,025.60	142,833.60	145,683.20	148,616.00	151,569.60	154,606.40	157,705.60	160,846.40	164,070.40	167,356.80	170,705.60	174,116.80	177,590.40	181,147.20
Director of Operations Government Affairs Officer	E15.1	Monthly	11,965.20	12,204.40	12,448.80	12,698.40	12,951.47	13,209.73	13,474.93	13,743.60	14,019.20	14,300.00	14,586.00	14,877.20	15,175.33	15,478.67	15,787.20	16,104.40
		Hourly	69.03	70.41	71.82	73.26	74.72	76.21	77.74	79.29	80.88	82.50	84.15	85.83	87.55	89.30	91.08	92.91
		Annually	143,582.40	146,452.80	149,385.60	152,380.80	155,417.60	158,516.80	161,699.20	164,923.20	168,230.40	171,600.00	175,032.00	178,526.40	182,104.00	185,744.00	189,446.40	193,252.80
Director of Engineering Director of Finance & Water Resources Director of Human Resources	E16	Monthly	12,771.20	13,026.00	13,287.73	13,552.93	13,823.33	14,100.67	14,383.20	14,670.93	14,963.87	15,262.00	15,568.80	15,879.07	16,196.27	16,520.40	16,851.47	17,187.73
		Hourly	73.68	75.15	76.66	78.19	79.75	81.35	82.98	84.64	86.33	88.05	89.82	91.61	93.44	95.31	97.22	99.16
		Annually	153,254.40	156,312.00	159,452.80	162,635.20	165,880.00	169,208.00	172,598.40	176,051.20	179,566.40	183,144.00	186,825.60	190,548.80	194,355.20	198,244.80	202,217.60	206,252.80
Director of Engineering and Operations Director of Regional & Legal Affairs	E17	Monthly	13,738.40	14,014.00	14,293.07	14,579.07	14,870.27	15,168.40	15,471.73	15,780.27	16,097.47	16,418.13	16,747.47	17,082.00	17,423.47	17,771.87	18,127.20	18,489.47
		Hourly	79.26	80.85	82.46	84.11	85.79	87.51	89.26	91.04	92.87	94.72	96.62	98.55	100.52	102.53	104.58	106.67
		Annually	164,860.80	168,168.00	171,516.80	174,948.80	178,443.20	182,020.80	185,660.80	189,363.20	193,169.60	197,017.60	200,969.60	204,984.00	209,081.60	213,262.40	217,526.40	221,873.60
Assistant General Manager	E18	Monthly	15,412.80	15,721.33	16,035.07	16,355.73	16,683.33	17,016.13	17,357.60	17,704.27	18,057.87	18,420.13	18,787.60	19,163.73	19,546.80	19,938.53	20,337.20	20,742.80
		Hourly	88.92	90.70	92.51	94.36	96.25	98.17	100.14	102.14	104.18	106.27	108.39	110.56	112.77	115.03	117.33	119.67
		Annually	184,953.60	188,656.00	192,420.80	196,268.80	200,200.00	204,193.60	208,291.20	212,451.20	216,694.40	221,041.60	225,451.20	229,964.80	234,561.60	239,262.40	244,046.40	248,913.60

MOULTON NIGUEL WATER DISTRICT
JOB CLASSIFICATION SALARY SCHEDULE - JUNE 22, 2019
GENERAL MANAGER

JOB CLASSIFICATION	FREQUENCY	RATE
General Manager	Annually	\$ 300,964

APPENDIX FP - H:
GANN Appropriations Limit Resolution

RESOLUTION NO. 19-11

**RESOLUTION OF THE BOARD OF DIRECTORS OF
MOULTON NIGUEL WATER DISTRICT
APPROVING ITS APPROPRIATIONS LIMIT FOR FISCAL YEAR 2019-20 AND
FINDING COMPLIANCE WITH ARTICLE XIII B OF THE CONSTITUTION
OF THE STATE OF CALIFORNIA**

WHEREAS, the Board of Directors of the Moulton Niguel Water District (MNWD) has reviewed the financial affairs of MNWD and has reviewed the proposed Budget for the Fiscal Year 2019-20; and

WHEREAS, the Board of Directors desires to establish an Appropriations Limit for Fiscal Year 2019-20 for the purpose of complying with Article XIII B of the Constitution of the State of California. Said calculations have been posted at MNWD's offices and made available to the public at least 15 days prior to the adoption of this Resolution; and

WHEREAS, the Board of Directors desires at this time to approve its Appropriations Limit for said Fiscal Year 2019-20;


NOW, THEREFORE, the Board of Directors of MNWD does RESOLVE, DETERMINE, and ORDER as follows:

Section 1. That an Appropriations Limit of **\$8,572,772** be and the same hereby is established as the limit to which funds derived from proceeds of taxes may be appropriated during the Fiscal Year 2019-20.

Section 2. That the Treasurer of MNWD be and the same is hereby authorized to file copies of said Budget with such other public agencies as may be necessary. Pursuant to Government Code Section 7910, any judicial action or proceeding to attach, review, set aside, void, or annul the establishment of the appropriations limit as set forth herein must be commenced within 45 days of the adoption of this Resolution.

ADOPTED, SIGNED and APPROVED this 13th day of June, 2019.

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

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, PAIGE GULCK, Secretary of the Board of Directors of the MOULTON
NIGUEL WATER DISTRICT, do hereby certify that the foregoing Resolution was duly
adopted by the Board of Directors of said District at a regular meeting of said Board held
on the 13th day of June, 2019 that it was so adopted by the following vote:

AYES: CAVE, FIORE, FROELICH, JENNINGS, KURTZ,
MOORHEAD, PROBOLSKY

NOES:

ABSTAIN:

ABSENT:



Paige Gulck, Secretary
MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof

APPENDIX FP - I:
2019 GO Bond Tax Rate Resolution

RESOLUTION NO. 19-12

**RESOLUTION OF THE BOARD OF DIRECTORS OF
MOULTON NIGUEL WATER DISTRICT
SETTING TAX RATE FOR OUTSTANDING GENERAL OBLIGATION BONDS OF
IMPROVEMENT DISTRICT NO. 7 FOR FISCAL YEAR 2019-20**

WHEREAS, the Board of Directors of MOULTON NIGUEL WATER DISTRICT (sometimes the "District" herein) has considered the financial needs of the MOULTON NIGUEL WATER DISTRICT and its IMPROVEMENT DISTRICT NO 7 for the 2019-20 Fiscal Year for payment of outstanding bonded indebtedness of such improvement district, and the funds available and estimated to become available for meeting said financial needs; and

WHEREAS, pursuant to Section 37206 of the Water Code of the State of California, the Board of Directors of the District shall furnish to the Board of Supervisors of the County of Orange and the Auditor of the County of Orange an estimate in writing of the amount of money needed to be raised by the District during the 2019-20 Fiscal Year for the payment of outstanding voter approved general obligation bonded indebtedness of the District's improvement districts for the 2019-20 Fiscal Year.

NOW, THEREFORE, the Board of Directors of MOULTON NIGUEL WATER DISTRICT does hereby resolve, determine and order as follows:

Section 1. That the amount of money necessary to be raised by ad valorem assessments upon the taxable property (land only) within the IMPROVEMENT DISTRICT NO. 7 of MOULTON NIGUEL WATER DISTRICT, as revenue to pay the voter approved indebtedness for said district for the 2019-20 Fiscal Year, is the sum of \$560,680. The estimated tax rate to be levied shall be .0003124 percent (.03124%) per \$100 of taxable land value. The tax rate herein is levied pursuant to Section 93 and 93.61 (a) (l) of the Revenue and Taxation Code for the purpose of paying voter approved indebtedness of the MOULTON NIGUEL WATER DISTRICT for IMPROVEMENT DISTRICT NO. 7.

Section 2. That the Secretary and Acting Treasurer of the District are hereby requested to furnish a certified copy of this Resolution to the Auditor of the County of Orange.


APPROVED, ADOPTED and SIGNED this 13th day of June, 2019.

MOULTON NIGUEL WATER DISTRICT

A handwritten signature in blue ink, appearing to be "B. S. L.", written over a horizontal line.

President/Vice President

MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof

A handwritten signature in blue ink, appearing to be "D. S. L.", written over a horizontal line.

Secretary/Assistant Secretary

MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)


I, PAIGE GULCK, Secretary of the Board of Directors of the MOULTON
NIGUEL WATER DISTRICT, do hereby certify that the foregoing Resolution was duly
adopted by the Board of Directors of said District at a regular meeting of said Board held
on the 13th day of June, 2019 that it was so adopted by the following vote:

AYES: CAVE, FIORE, FROELICH, JENNINGS, KURTZ,
MOORHEAD, PROBOLSKY

NOES:

ABSTAIN:

ABSENT:



Paige Gulck, Secretary
MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof