

Capital Improvement Program – Project Description

Project No: 2013-TBD

System: Potable

Fund: 7

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

Project Location: Laguna Niguel

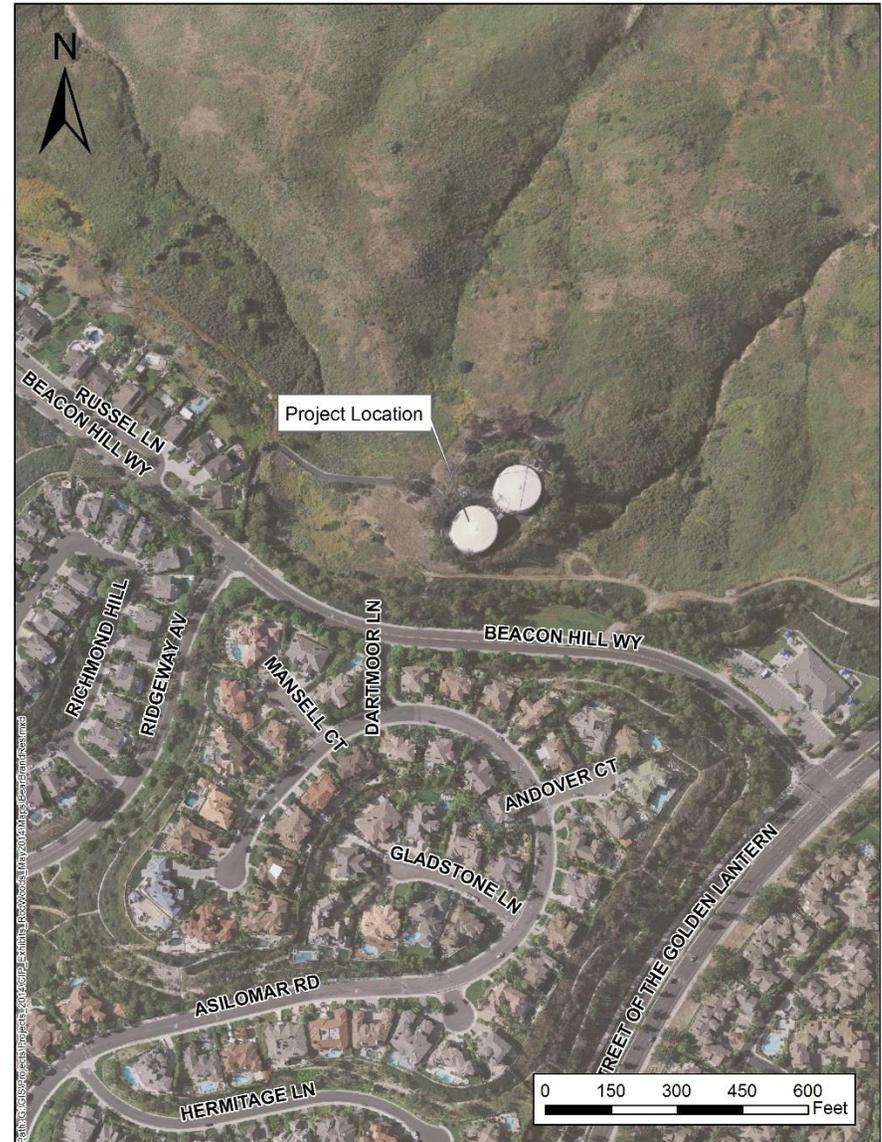
Project Description: Re-coat the interior and exterior of the 2.5 MG steel reservoir (Reservoir No. 1). Add sacrificial anodes for cathodic protection. Relocate the overflow to the outside of the tank; provide an air gap between the overflow and the drain; install a spiral staircase and roof handrail around the entire parameter to improve operation and safety, and to meet current regulations.

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 all of its reservoirs every 10 years to determine if and when recoating is needed. This project addresses the periodic nature of this activity for this asset group. The anodes will prevent premature corrosion. The air gap is required to meet CDPH requirements. The spiral staircase and roof handrail provide improved safety features for personnel that perform maintenance on the tank.

Project Status: Proposed Project.

Estimated Project Amount:

Item	Estimated Cost
Design	\$12,000
CEQA Compliance	Exempt
Construction Contract	\$718,000
Inspection	\$40,000
Total Project Budget	\$770,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Reservoir Water Quality Management Refurbishment

Project Location: 20 potable reservoir sites

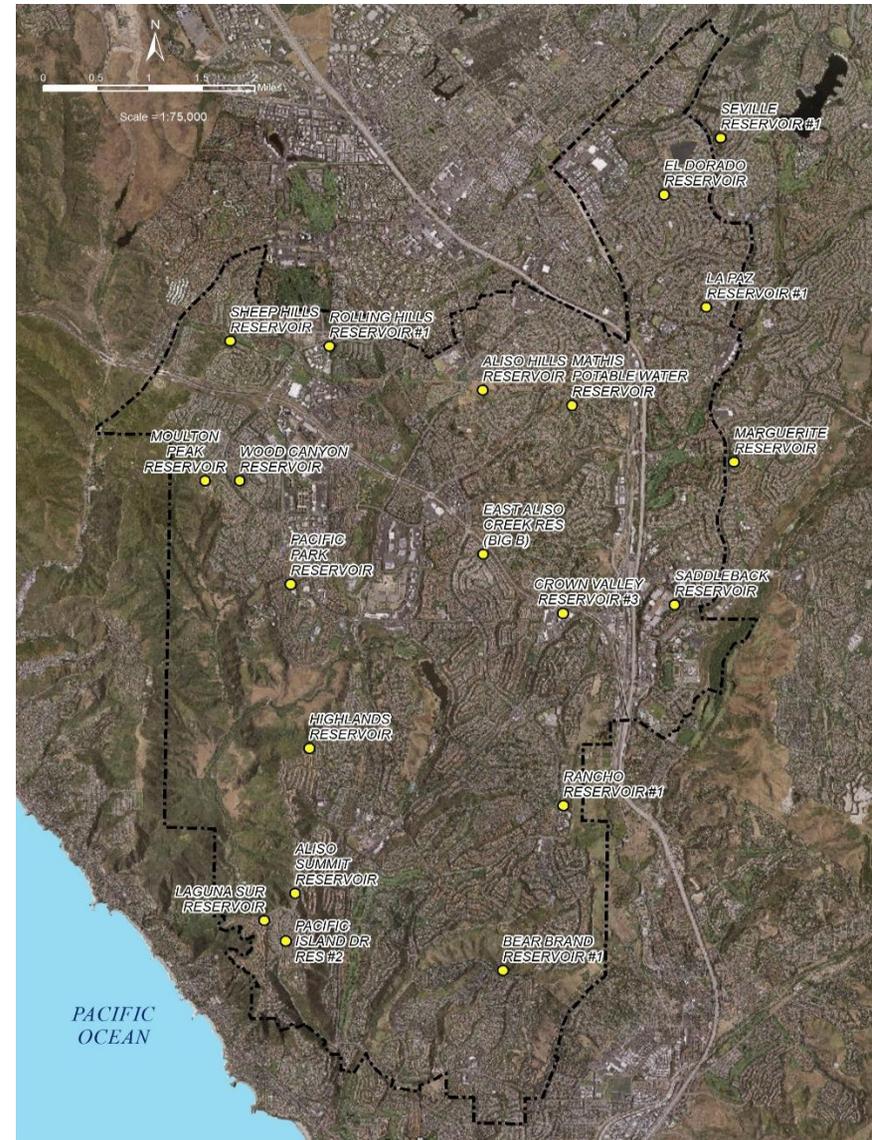
Project Description: Remove and replace current water quality reservoir management systems and current protective structures with permanent style buildings. Replace existing Clor-Tec buildings.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Analysis/Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$6,000,000
Inspection	\$0
Total Project Budget	\$6,200,000



Sites for Clor-Tec Facilities

Capital Improvement Program – Project Description

Project No: 2012.013

System: Potable, Recycled

Fund: 7

Project Name: Field GIS Extension- Valve Exercising Data Collection Software

Project Location: District-wide

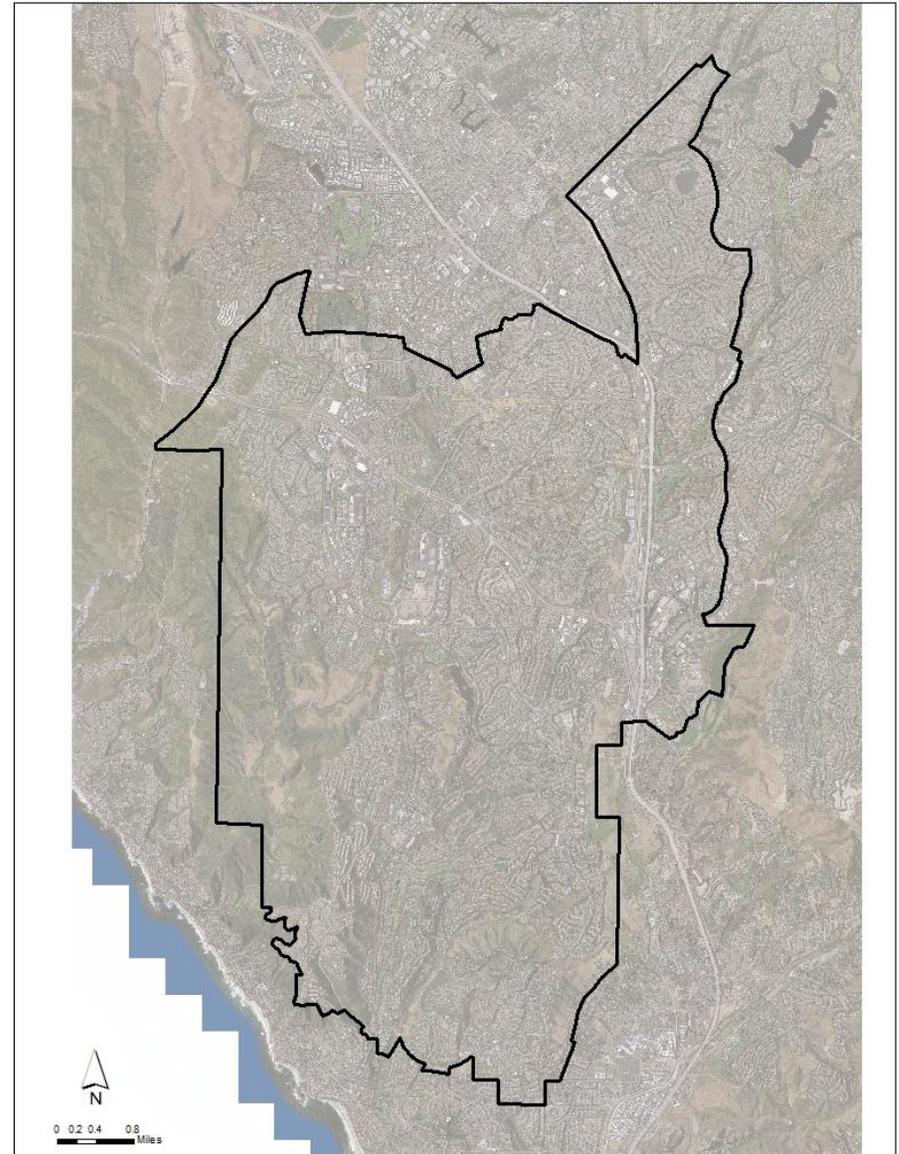
Project Description: Configuration and installation of a valve turning field application that collects asset information, condition assessment, follow-up work order needs, and location information – as well as tracking progress of work crew maintenance activities – all while in the field.

Project Need: The valve exercising effort has recently begun, and efforts are tracked via manual paper process, along with a small datalogger not networked to the District’s asset management database, requiring additional data processing. This effort lacks a number of efficiencies in data collection, reporting of maintenance progress, asset information collection, and identification of required follow-up work. Off-the-shelf software is available from multiple vendors, and was successfully launched by a neighboring Districts resulting in increased efficiencies, supervisory control, maintenance, and asset replacement planning. A successful project will include configuration of the software to meet specific District needs/requirements to mirror current workflows, installation of software, and training.

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Configuration	\$18,000
Software Acquisition	\$22,000
CEQA	Exempt
Total Project Budget	\$40,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Encantamar 16" Abandonment

Project Location: Logo Vista, Dana Point, Sec pg. G-32

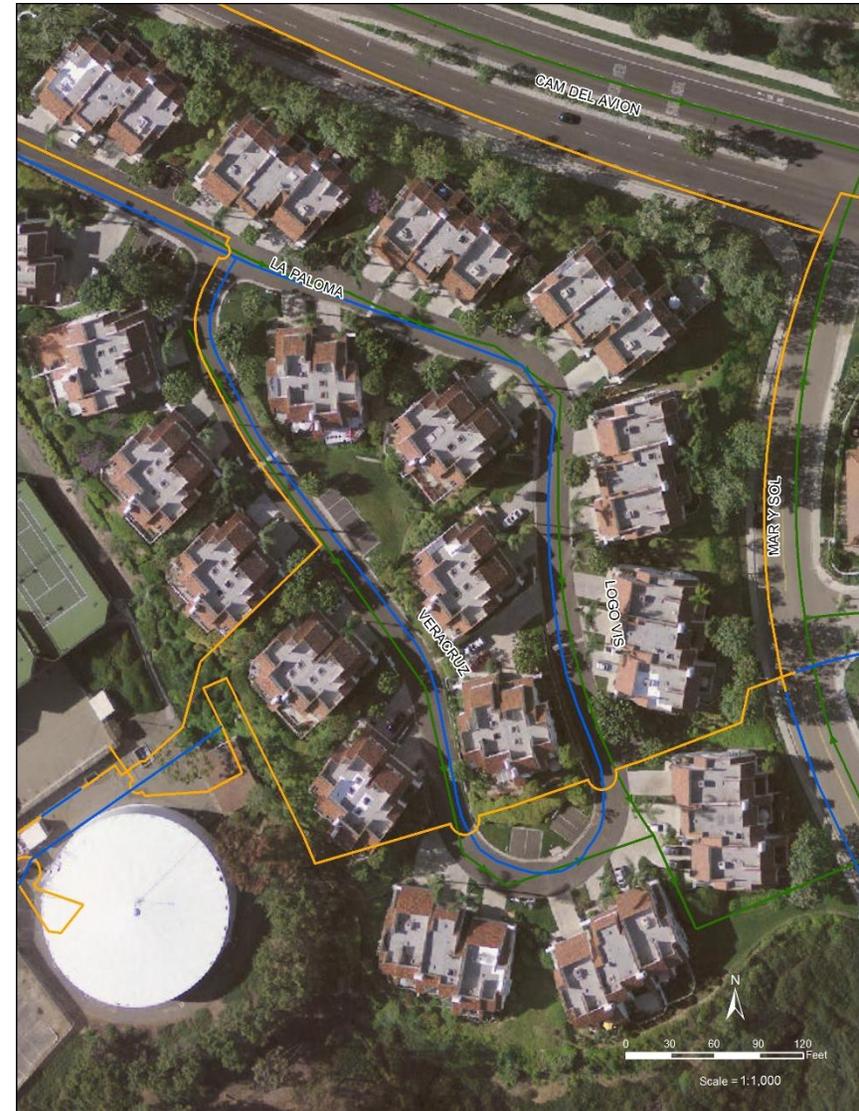
Project Description: Abandon approximately 350 linear feet of 16-inch DIP and cut and cap at two locations.

Project Need: Existing main has failed and is too deep to maintain. Line valve is currently closed and pipeline is live on the other side.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$60,000
Inspection	\$0
Total Project Budget	\$75,000



Capital Improvement Program – Project Description

Project No: 2014-TBD

System: Potable

Fund: 7

Project Name: 2014-2015 Valve Replacement Program

Project Location: District-wide

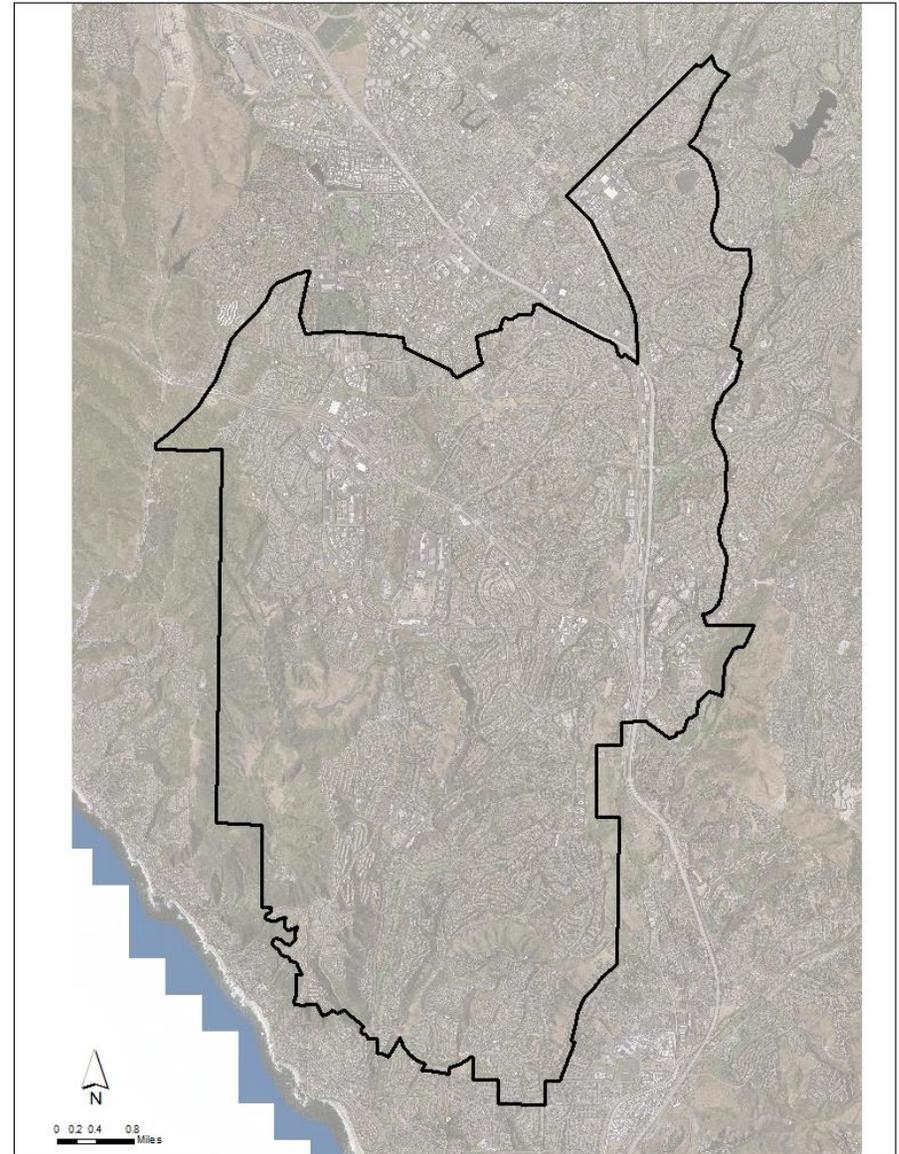
Project Description: Replace failed in-line valves.

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

Project Status: Proposed, 2014-2015 program – when individual projects are identified funds are transfer to the specific project.

Estimated Project Amount:

Item	Estimated Cost
Design	\$0
CEQA Compliance	Exempt
Construction Contract	\$560,000
Inspection	\$40,000
Total Project Budget	\$600,000



Capital Improvement Program – Project Description

Project No: 2009.010

System: Potable

Fund: 14

Project Name: *Mission Hospital Secondary Feed*

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

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

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

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction	\$230,000
Inspection	\$10,000
Total Project Budget	\$380,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Saddleback PS Auxiliary Pump Engine Replacement.

Project Location: 27989 Marguerite Pkwy, Mission Viejo

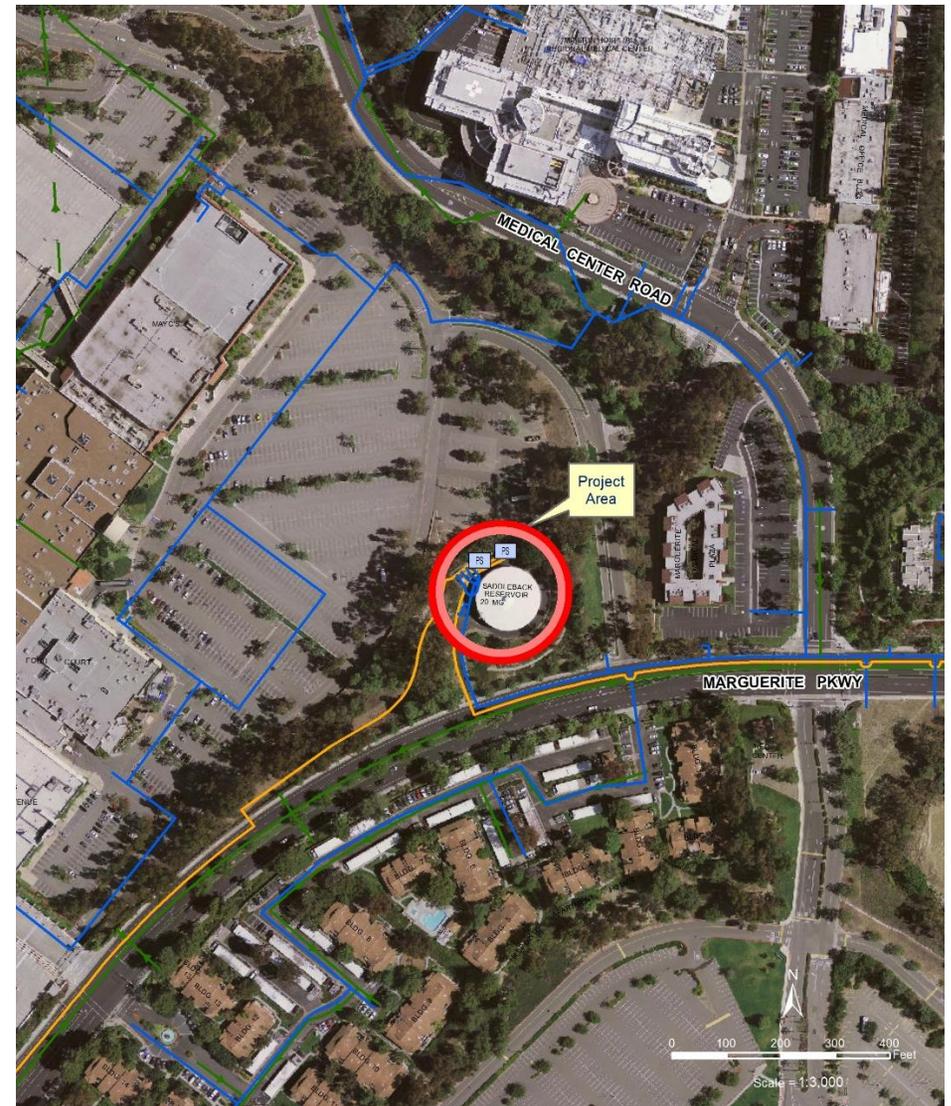
Project Description: Replace 1987 Waukesha Propane 550 Hp backup Auxiliary Pump.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$750,000
Inspection	\$0
Total Project Budget	\$800,000



Saddleback PS-Auxiliary Pump Engine Replacement

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: *Water Master Plan*

Project Location: District-wide

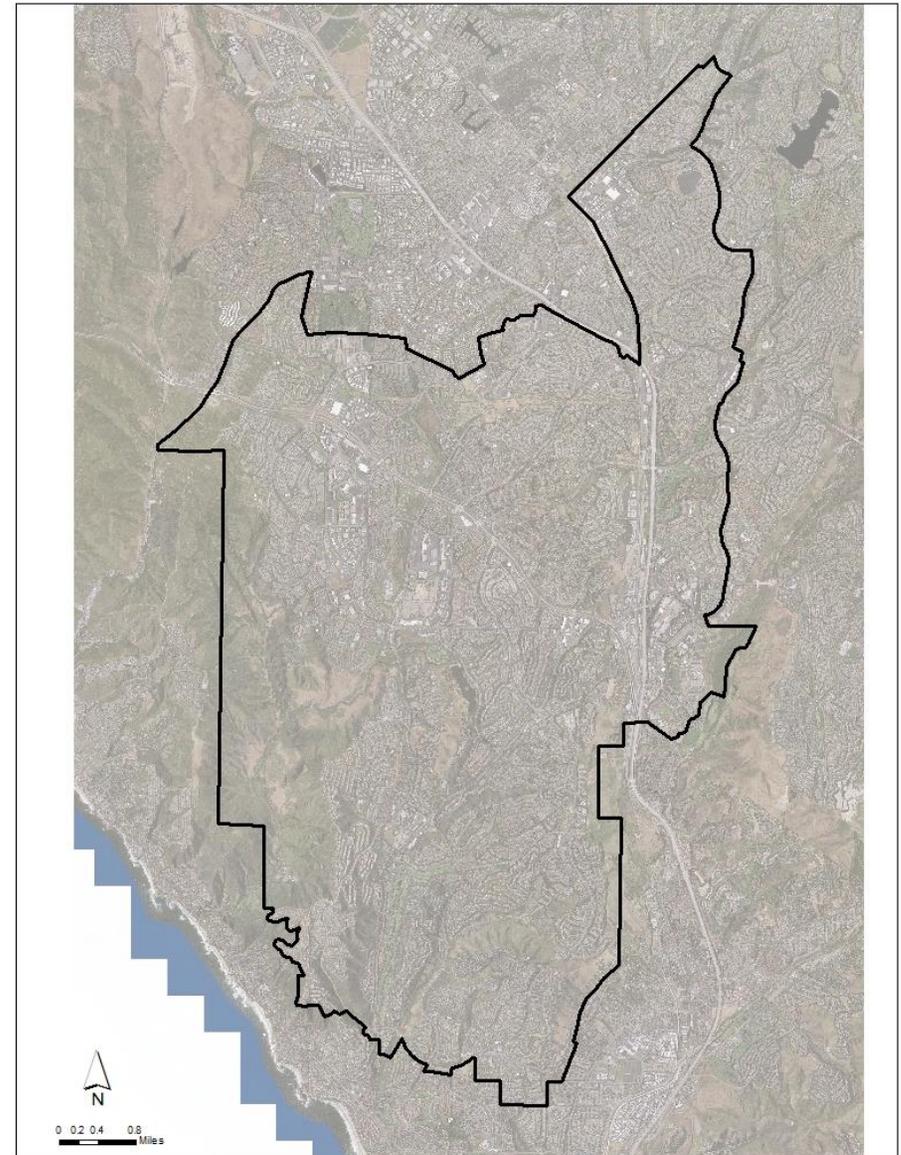
Project Description: A planning level document that discusses the District's current status and future state and implementation needs for the potable water system.

Project Need: The District is transitioning from a growth era to a maintenance period as the land development activities within the District conclude. The District needs a planning document that will identify current system deficiencies, describe where the system needs to be during the planning period, and what kind of improvements need to be undertaken to maintain potable water service to the District's customers. The document will evaluate water supply sources, storage needs, delivery system, drinking water regulations, best practices for the maintenance of the system, and develop an expenditure plan for the District.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Analysis	\$700,000
CEQA Compliance	Programmatic EIR
Total Project Budget	\$700,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable, District Overall

Fund: 7

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

Project Location: Oso Parkway, Bridlewood Drive to Antonio Parkway, Cities of Mission Viejo and Laguna Hills

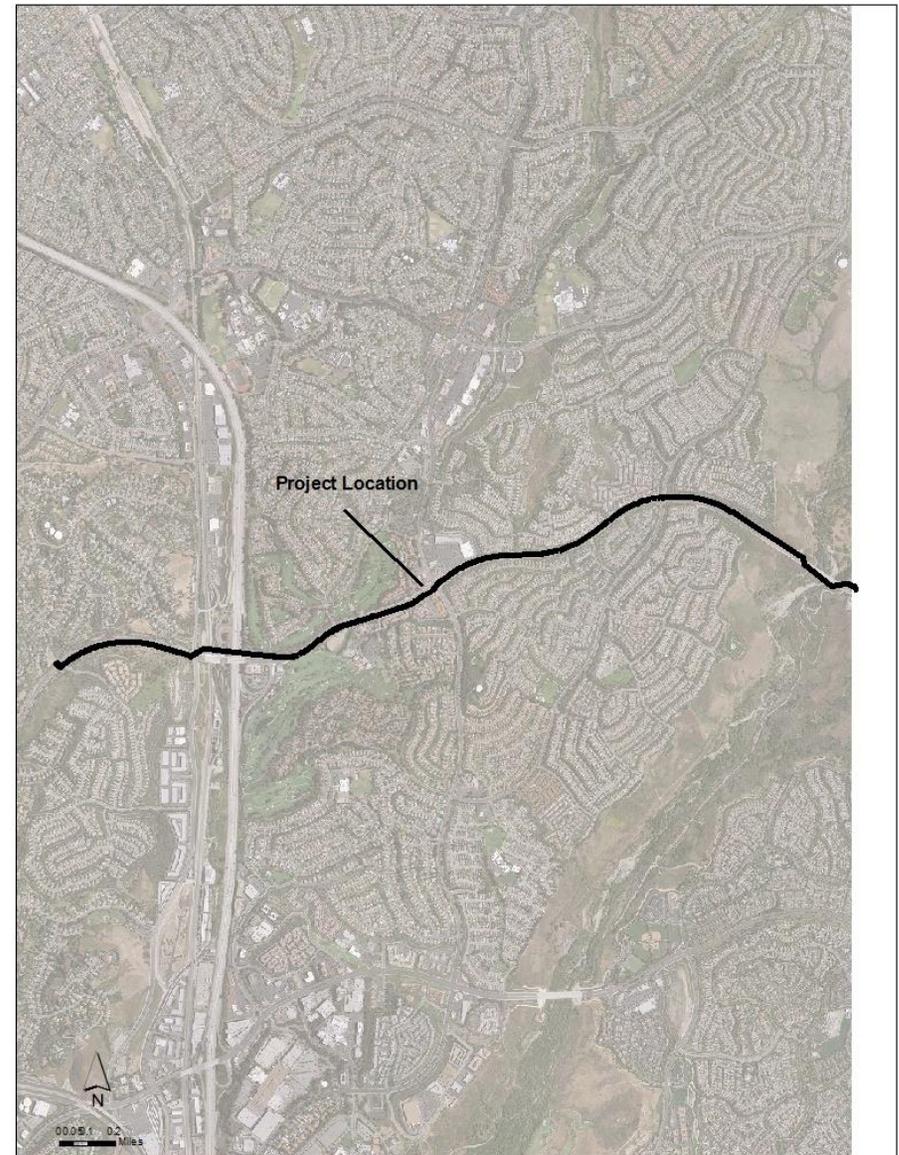
Project Description: Inspection of the Central Intertie Pipeline was completed in August 2012. A summary report was prepared to describe details of the inspection and recommend near-term (2 year) and long-term capital improvements. This project provides funds to construct proposed improvements including,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

Project Need: As a critical water delivery facility, failure of this line would be catastrophic to District operations. The recommended improvements will enable the staff to monitor and control corrosion of pipeline and appurtenances to maintain the CIP in good working order to insure uninterrupted service.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$400,000
Inspection	\$50,000
Total Project Budget	\$500,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: Tessier Water Loop

Project Location: Tessier Street, Laguna Niguel

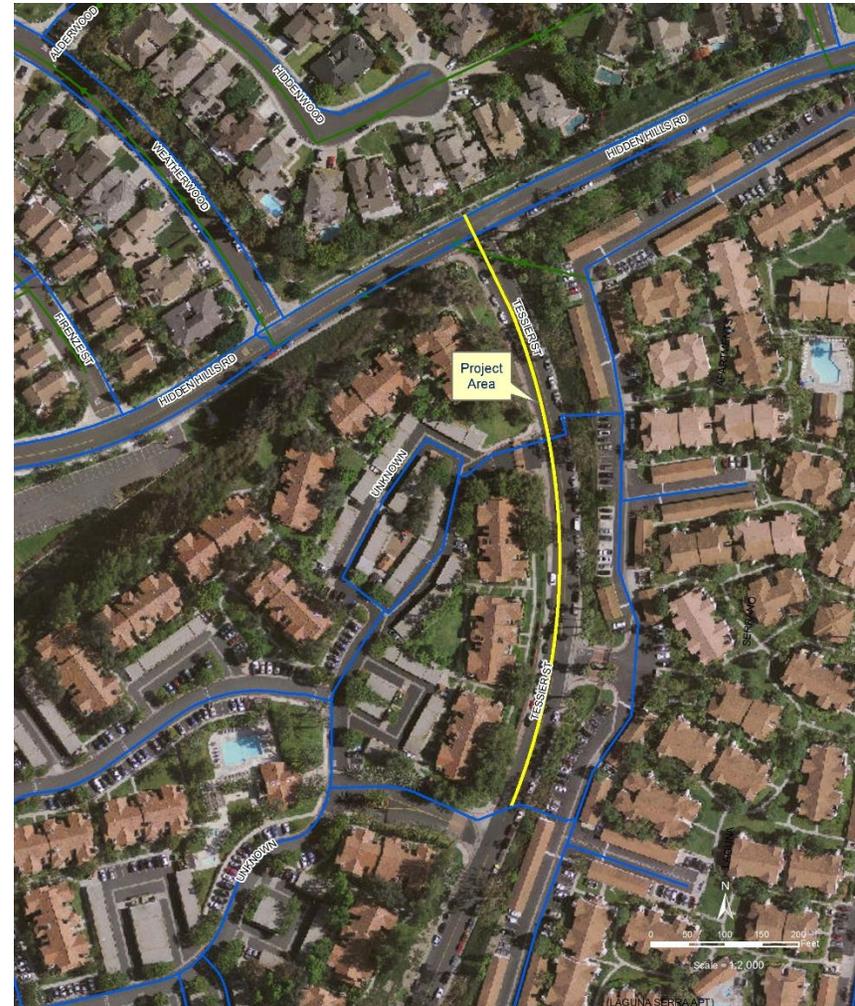
Project Description: Install new 8-inch water main from Hidden Hills Road approximately 750 linear feet past last point of connection.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$200,000
Inspection	\$0
Total Project Budget	\$240,000



Tessier Water Loop

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: I.D. 1 Master Meter Relocation

Project Location: Crown Valley Parkway and Paseo Del Valle

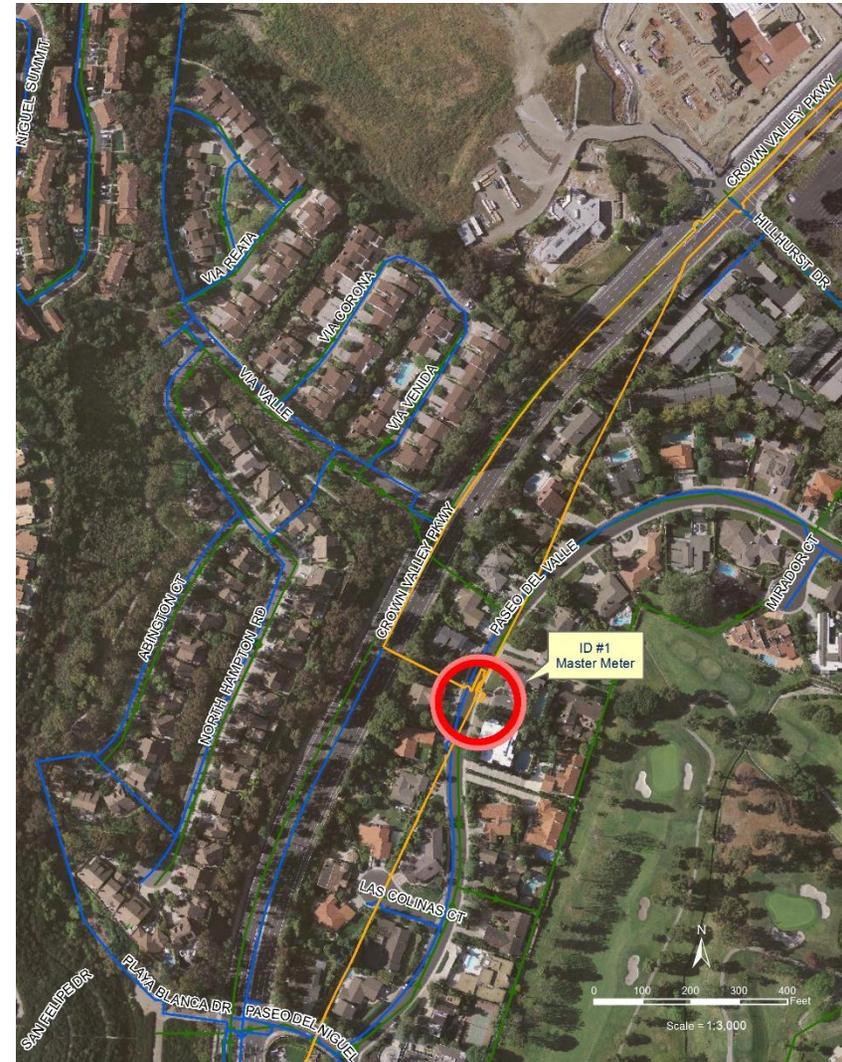
Project Description: Construct a meter vault and needed piping.

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 location. The JRWSS team has their project scheduled for design in FY2016-17 and construction in FY2017-18.

Project Status: Proposed Project

Estimated Project Amount: \$400,000

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$300,000
Inspection	\$
Other	\$50,000
Total Project Budget	\$400,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: La Siena Mainline Replacement

Project Location: La Siena, Laguna Niguel, Sectional page F-21

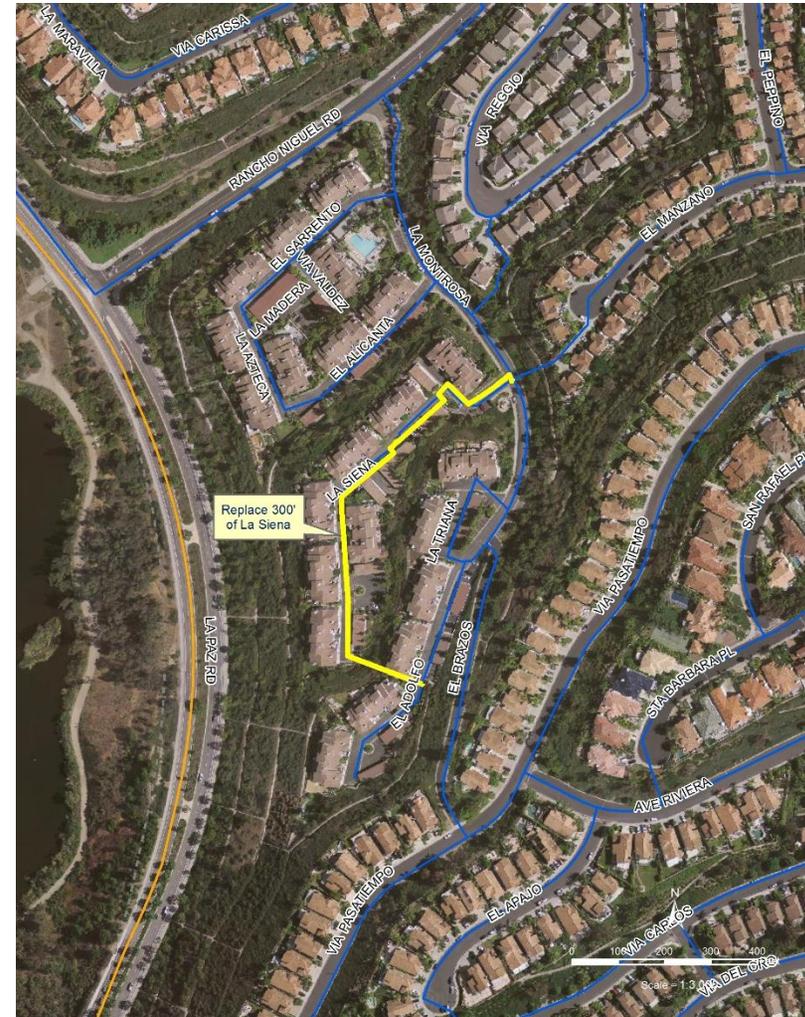
Project Description: Remove and replace approximately 320 linear feet of 8-inch DIP water main.

Project Need: Numerous pipeline failures within reach.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$180,000
Inspection	\$20,000
Total Project Budget	\$250,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 12

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

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

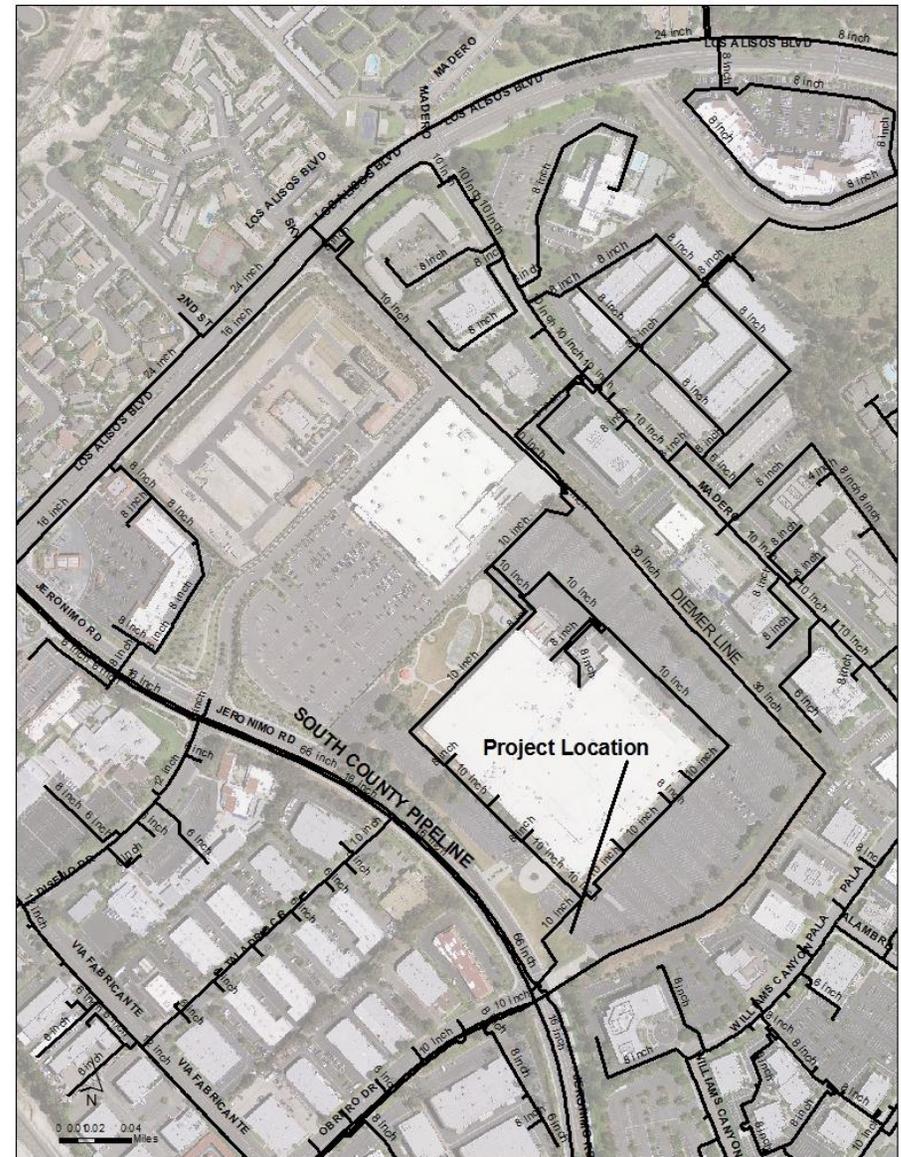
Project Description: Identify site, acquire property, design and construct a flow control facility.

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

Project Status: Proposed Project

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

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

Project Location: District-Wide

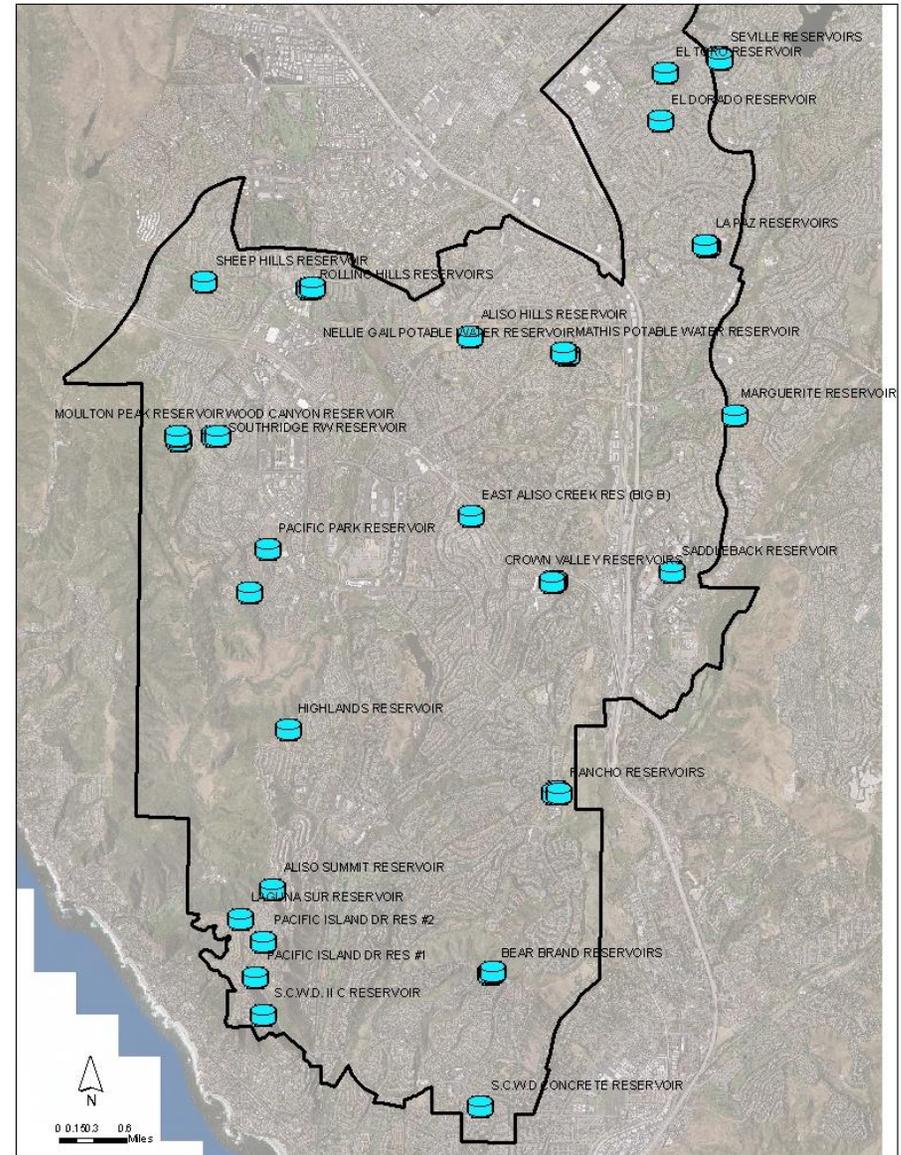
Project Description: Construct the recommendations from Project No. 2011.014 - Seismic and Structural Assessment of Steel Reservoirs to bring all steel tanks to current seismic, structural and safety standards.

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

Project Status: Proposed Projects

Estimated Project Amount:

Item	Estimated Cost
Design	\$200,000
CEQA Compliance	Exempt
Construction Contract	\$1,550,000
Inspection	\$50,000
Total Project Budget	\$1,800,000



Capital Improvement Program – Project Description

Project No: 2012.011

System: Potable

Fund: 7

Project Name: Easement Rehabilitation Program – Phase 1

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

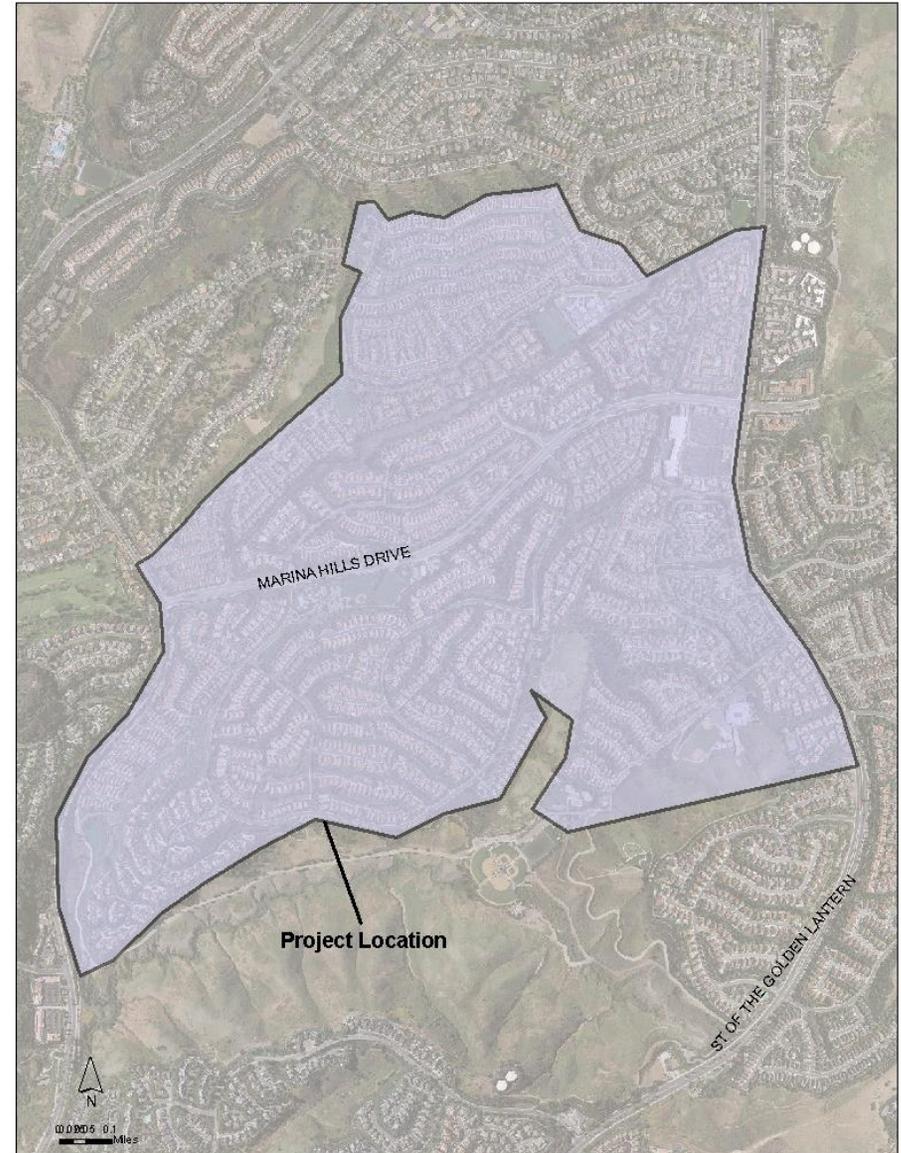
Project Description: This project implements the findings from Project 2010.023 – Easement Lining Program. This project evaluated and identified risks associated with the ductile iron pipes (DIP) in the project area. Based on the finding of the analysis, various improvement recommendations were proposed.

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

Project Status: In planning.

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Easement Rehabilitation Program – Phase 2

Project Location: District-wide

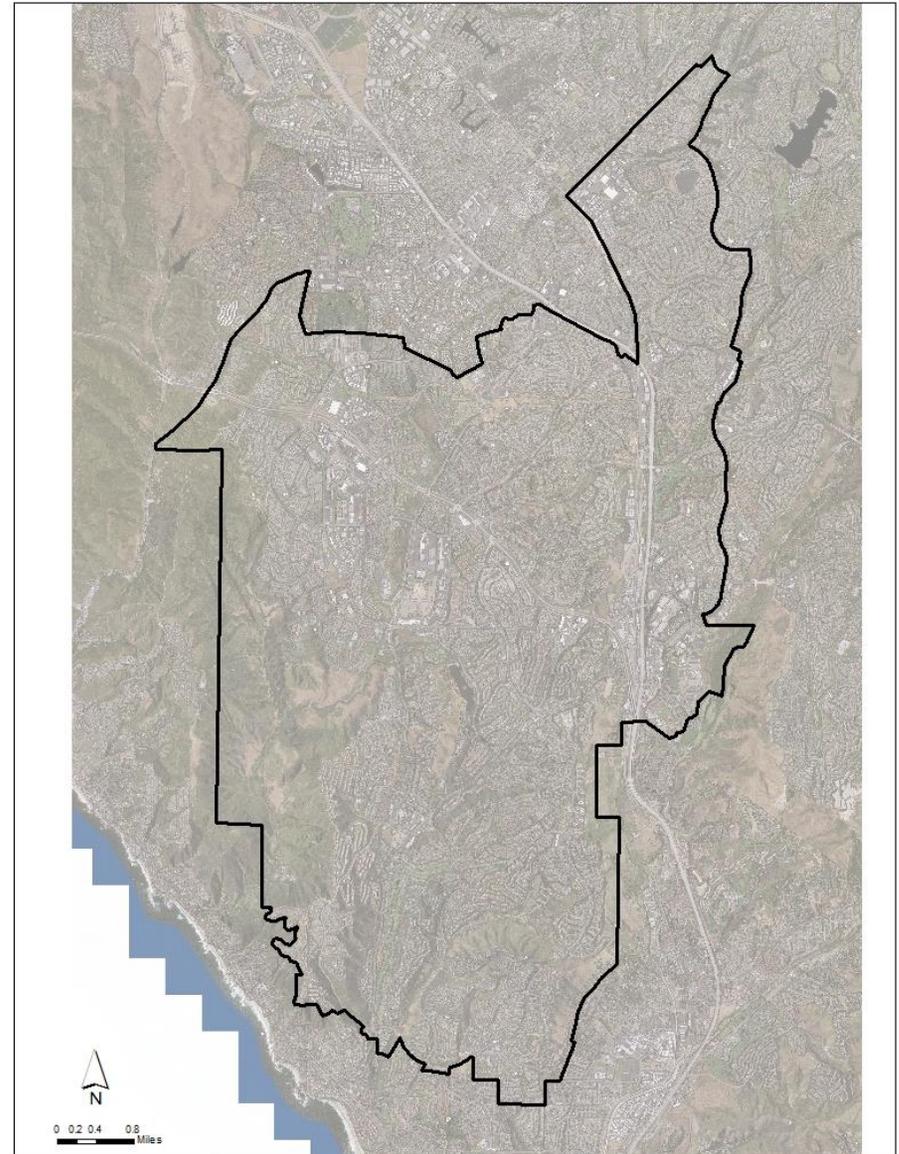
Project Description: This project is a continuation of an Easement Rehabilitation Program. Based on the outcome of the Phase 1, other areas where metallic pipes are in easements will be evaluated. Based on the finding of the analysis, additional improvements to easement pipes will be performed.

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

Project Status: Proposed Project

Estimated Project Amount:

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



Capital Improvement Program – Project Description

Project No: 2011.037

System: Potable

Fund: 7

Project Name: Mission Viejo High School Line/Vault Refurbishment

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

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

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

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Design	\$10,000
CEQA Compliance	exempt
Construction Contract	\$140,000
Inspection	\$10,000
Total Project Budget	\$160,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: Saddleback PS Generator Emergency Connection

Project Location: Saddleback Pump Station

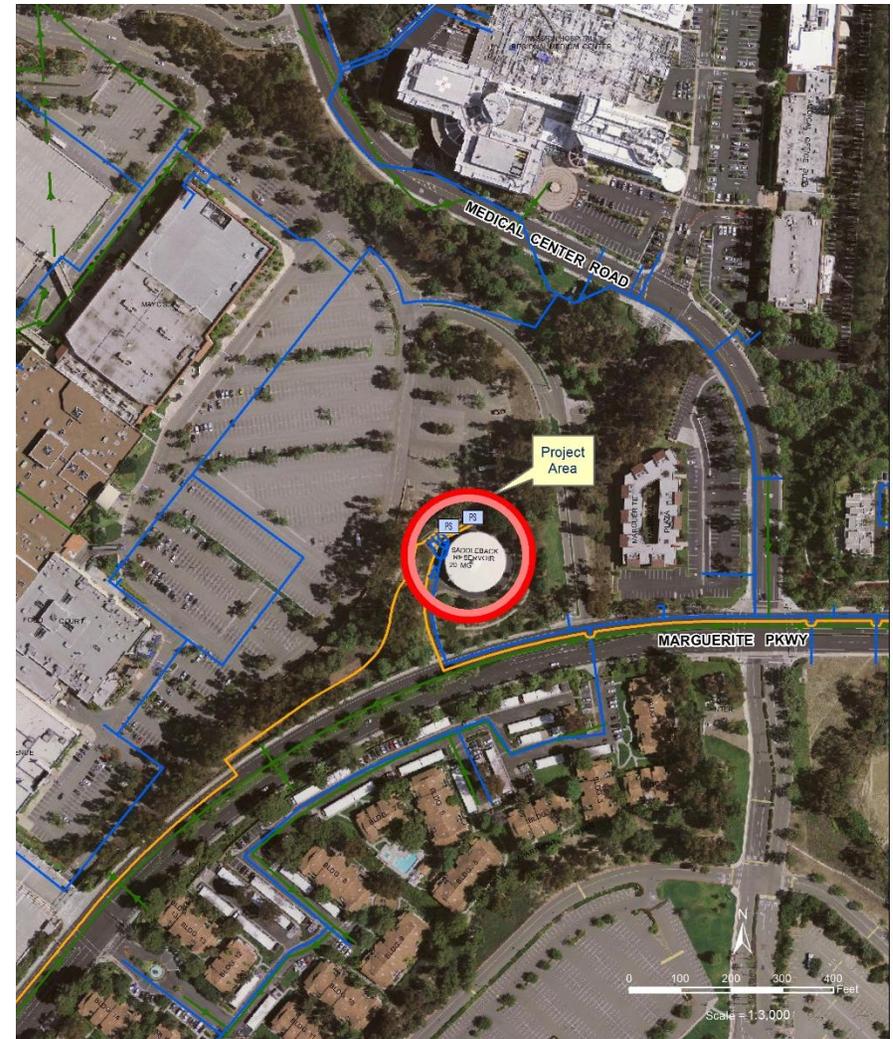
Project Description: Install new emergency generator connection.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$10,000
CEQA Compliance	Exempt
Construction Contract	\$25,000
Inspection	\$0
Total Project Budget	\$35,000



Saddleback PS-Emergency Connections

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: Pradera 850 Loop System

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

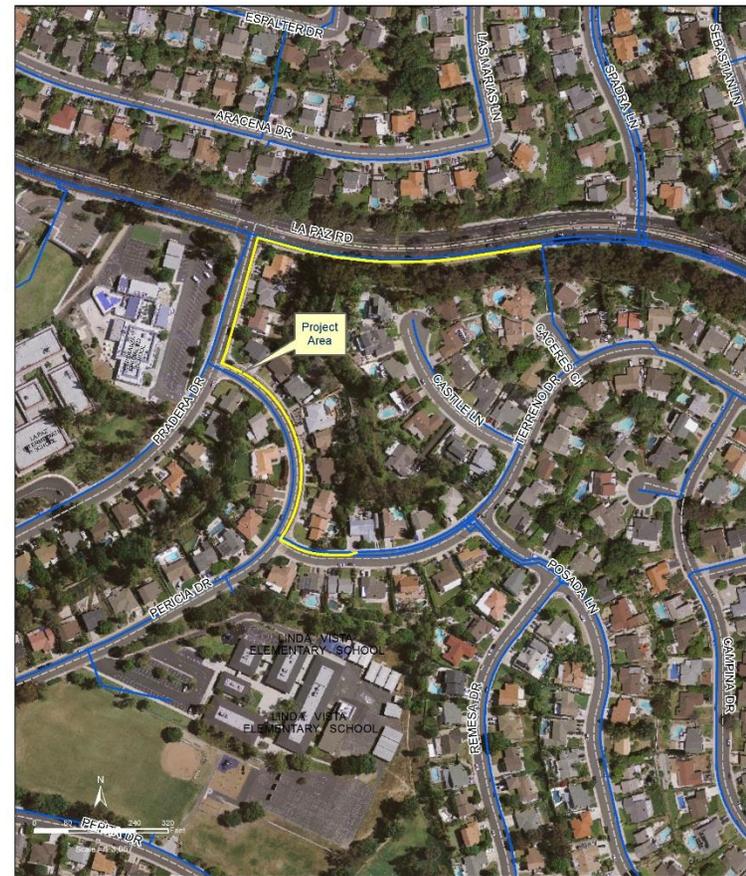
Project Description: Install 1000 linear feet of 8-inch water main on La Paz Road and extend into tract No. 6310 and tie to Terreno Dr.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$40,000
CEQA Compliance	Exempt
Construction Contract	\$200,000
Inspection	\$0
Total Project Budget	\$240,000



Pradera 850 Loop System

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Pacific Park PS Pump and Engine Replacement

Project Location: Laguna Niguel

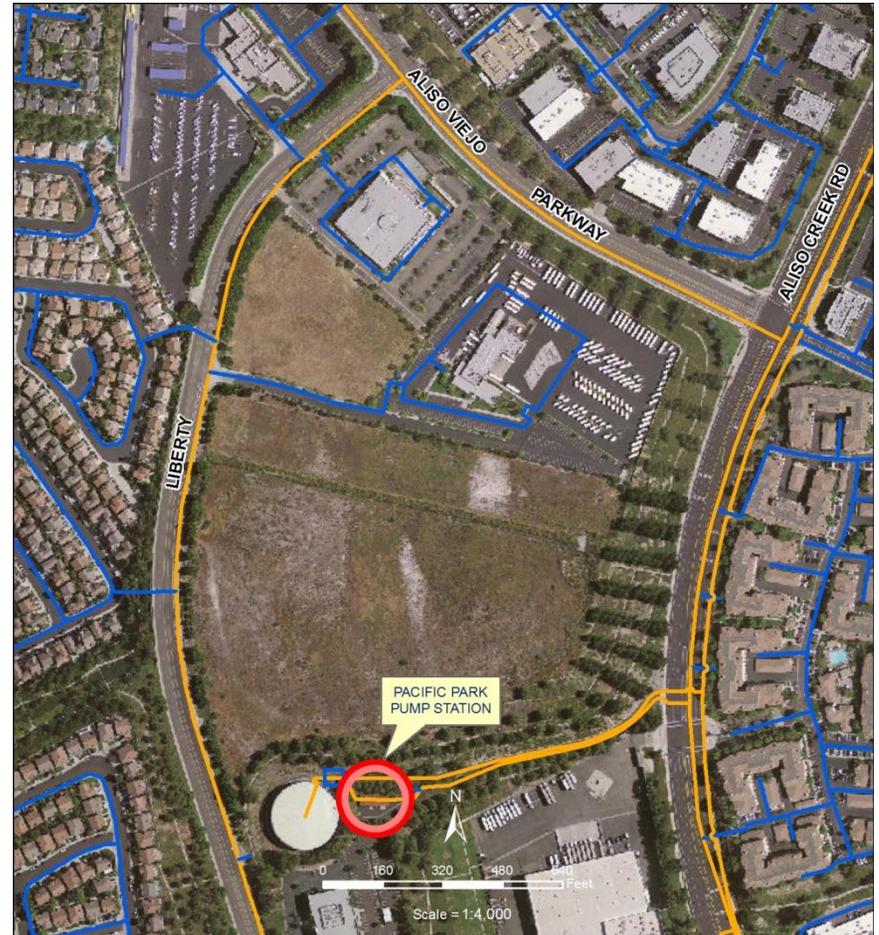
Project Description: Remove and replace the fire pump and natural gas engine, the pump control valve, suction and discharge valves.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$430,000
Inspection	\$0
Total Project Budget	\$505,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

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

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

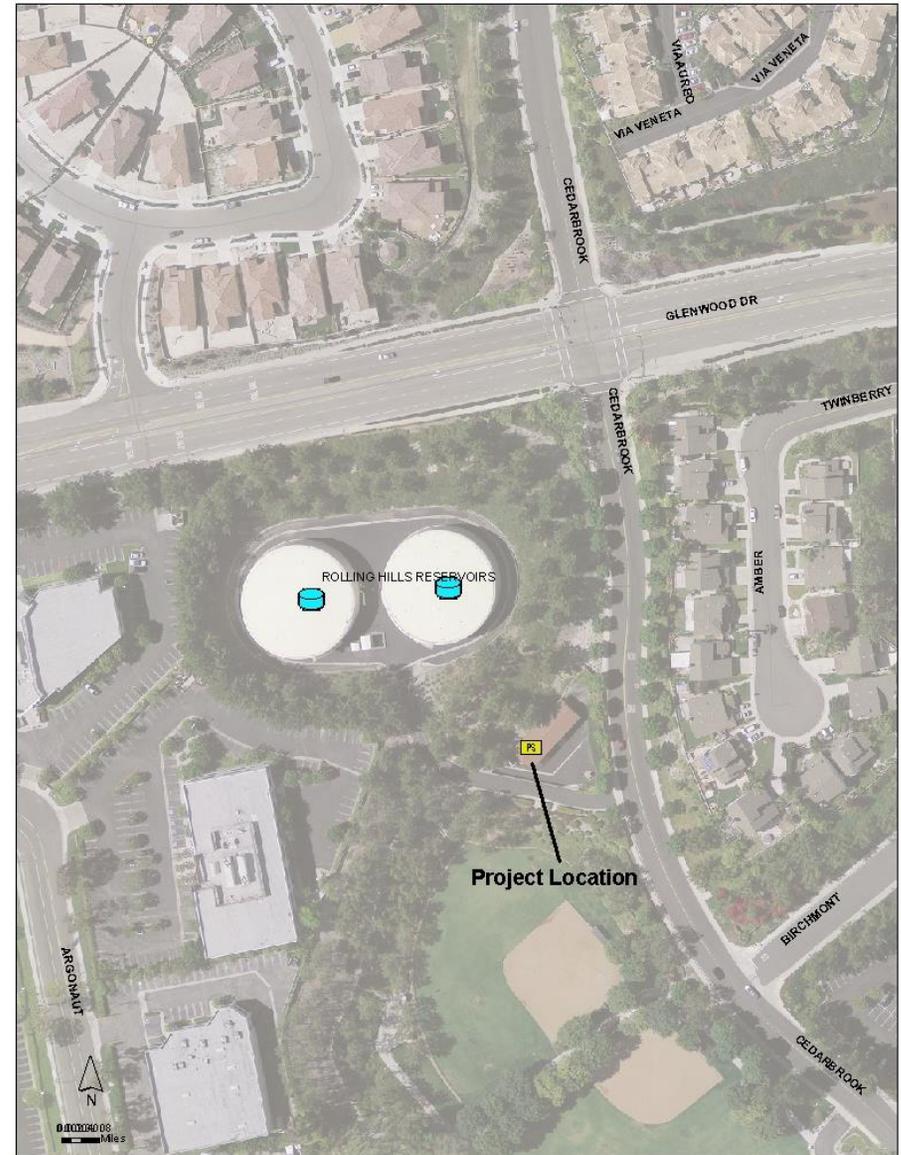
Project Description: Replace existing auxiliary engine, pump assembly, claval, suction valves and discharge valves.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$75,000
CEQA Compliance	Exempt
Implementation	\$480,000
Inspection	\$10,000
Total Project Budget	\$565,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Sheep Hills Engine & Pump Replacement

Project Location: Aliso Viejo

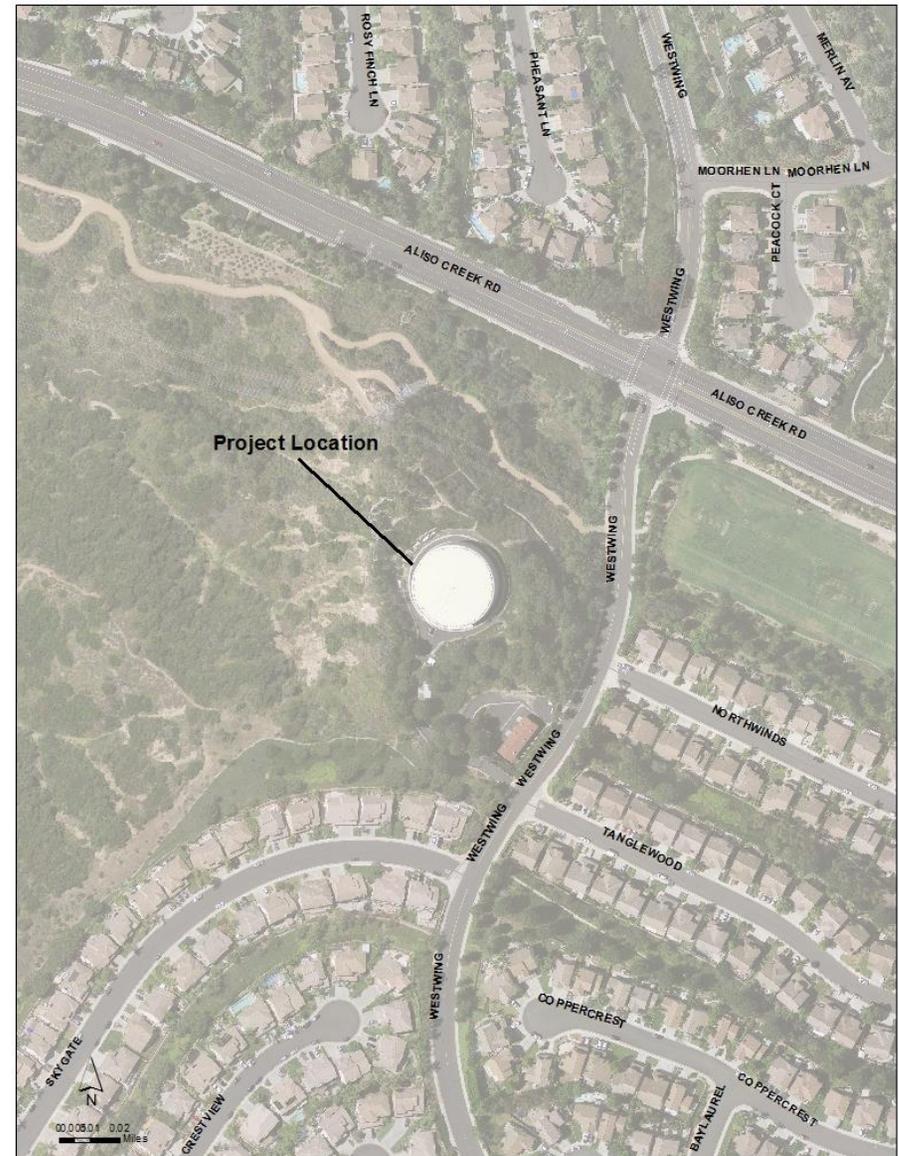
Project Description: Remove and replace the fire pump and gas engine, the pump control valve, and the suction and discharge shutoff valves.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$84,000
CEQA Compliance	Exempt
Construction Contract	\$481,000
Inspection	\$0
Total Project Budget	\$565,000



Capital Improvement Program – Project Description

Project No: 2012.010

System: Potable

Fund: 7

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

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

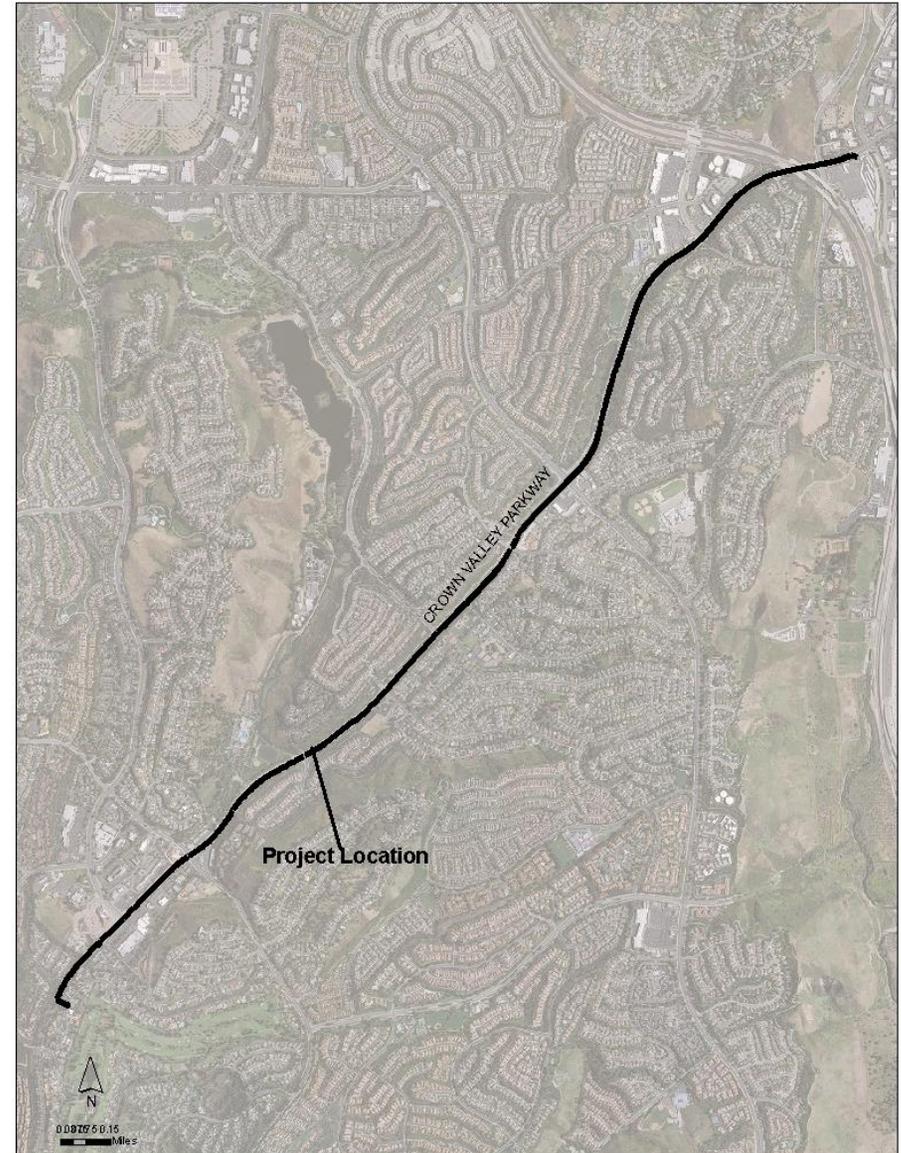
Project Description: Perform analysis to determine the best rehabilitation methodology for the approximately 4 miles of a 16-inch transmission main and implement recommendations.

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

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Design	\$90,000
CEQA Compliance	Exempt
Construction Contract	\$550,000
Inspection	\$10,000
Total Project Budget	\$650,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: Marguerite/Oso CIP Takeout

Project Location: Oso Parkway & Marguerite Parkway, Mission Viejo

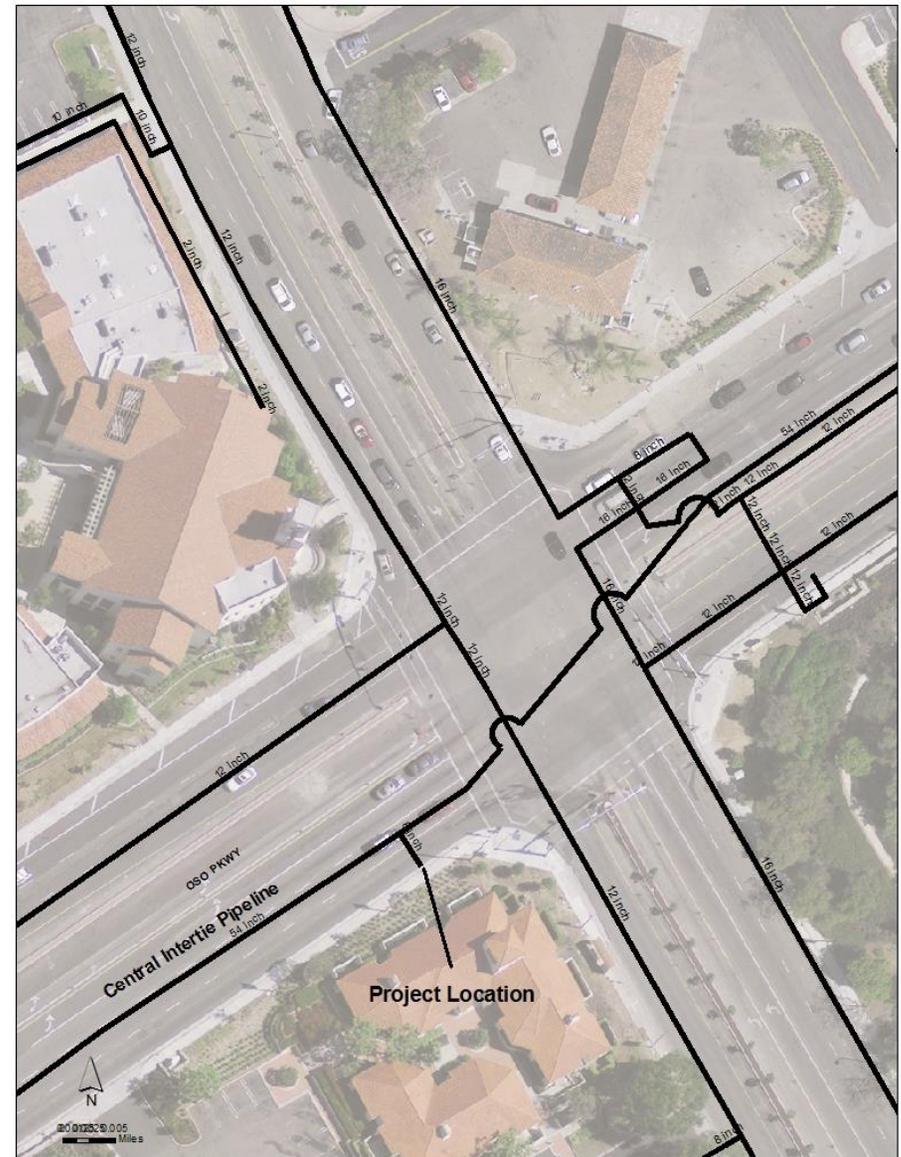
Project Description: Design and construct a flow control facility from the Central Intertie Pipeline (CIP) to the 750 pressure zone via Marguerite Reservoir.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design/Property Acquisition	\$400,000
CEQA Compliance	\$50,000
Construction Contract	\$2,000,000
Inspection	\$50,000
Total Project Budget	\$2,500,000



Capital Improvement Program – Project Description

Project No: 2012.016

System: Potable

Fund: 7

Project Name: Little Niguel Pump Station Roof Replacement

Project Location: 30315 Niguel Road, Laguna Niguel

Project Description: Replace roof.

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

Project Status: In planning.

Estimated Project Amount:

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



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

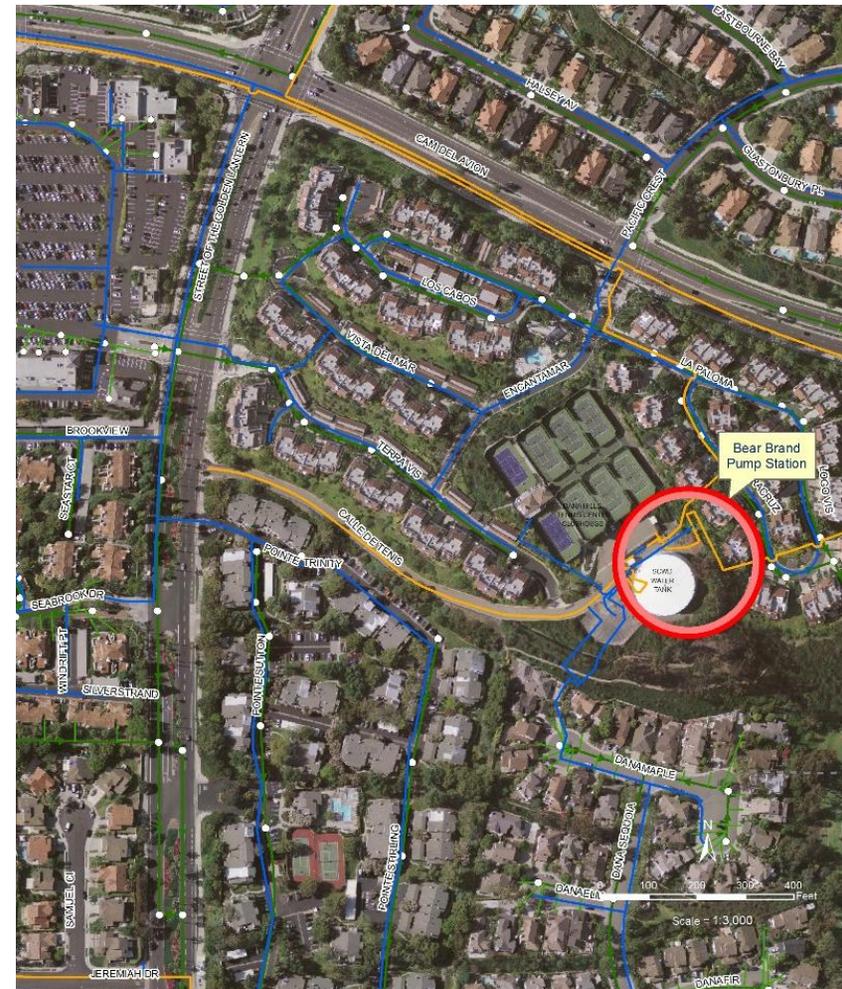
Project Description: Replace existing two pumps and 100 HP and 150 HP motors.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	Exempt
Construction Contract	\$100,000
Inspection	\$0
Total Project Budget	\$130,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Little Niguel PS Pump Replacement

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

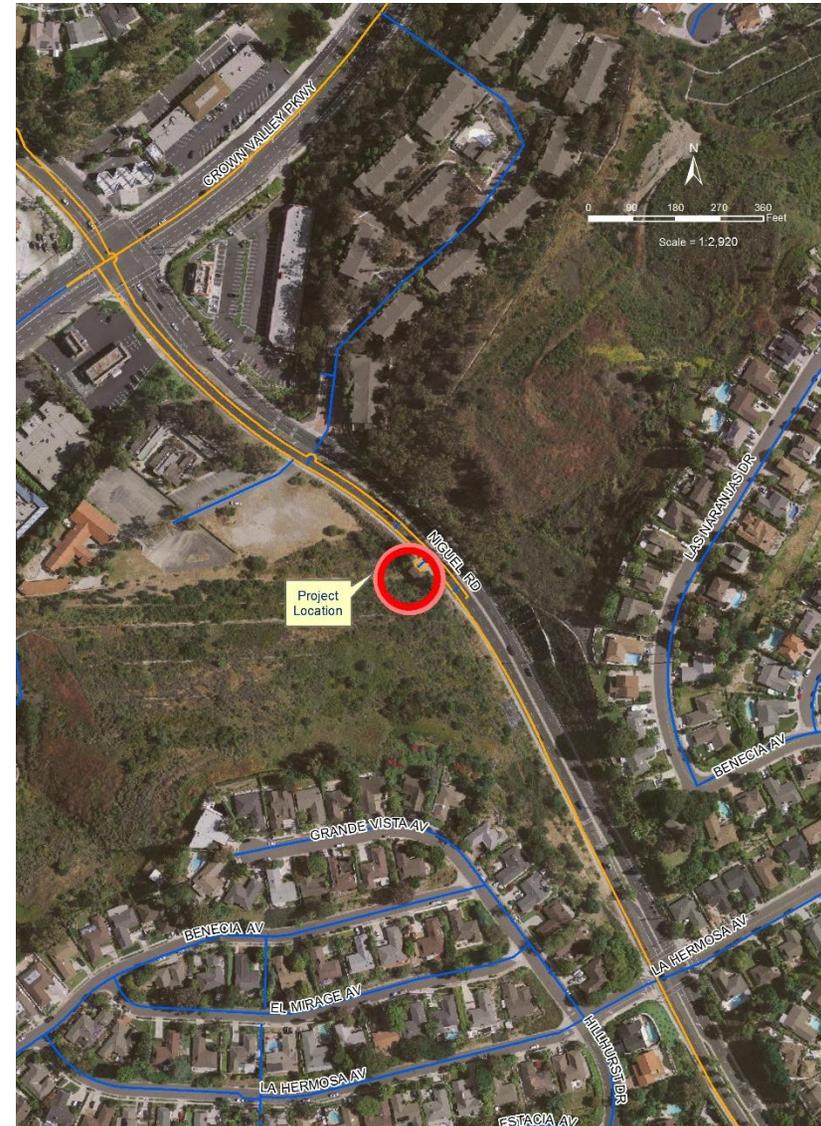
Project Description: Replace existing 125 HP pump and motor in kind.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$35,000
Inspection	\$0
Total Project Budget	\$50,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Casa Del Oso VFD Replacement

Project Location: Casa Del Oso Pump Station

Project Description: Replace (3) 75 HP VFD's and (1) 50 HP VFD.

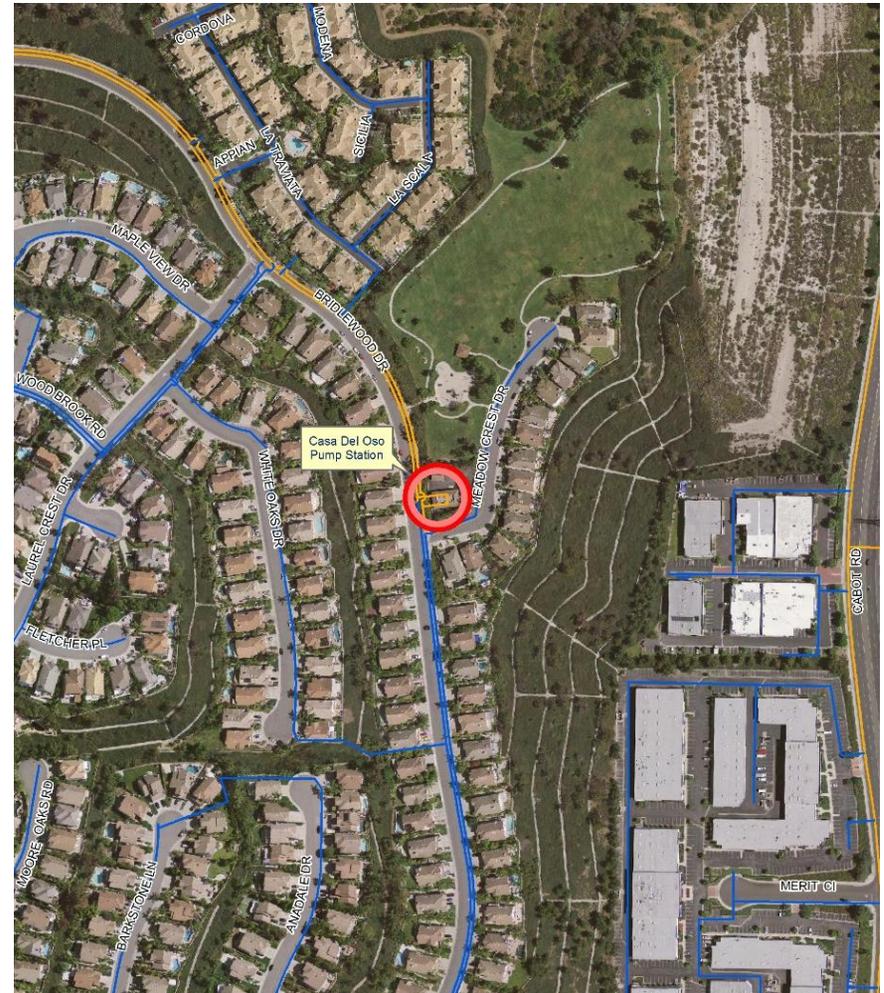
Project Need: The existing variable frequency drives need to be replaced based on the drives' age and associated reliability.

Project Status: Proposed Project

Estimated Project Amount:

Costs are for equipment only. District staff will perform installation.

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



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 14

Project Name: 920 Zone Loop Pipeline

Project Location: Pacific Island Drive, Laguna Niguel

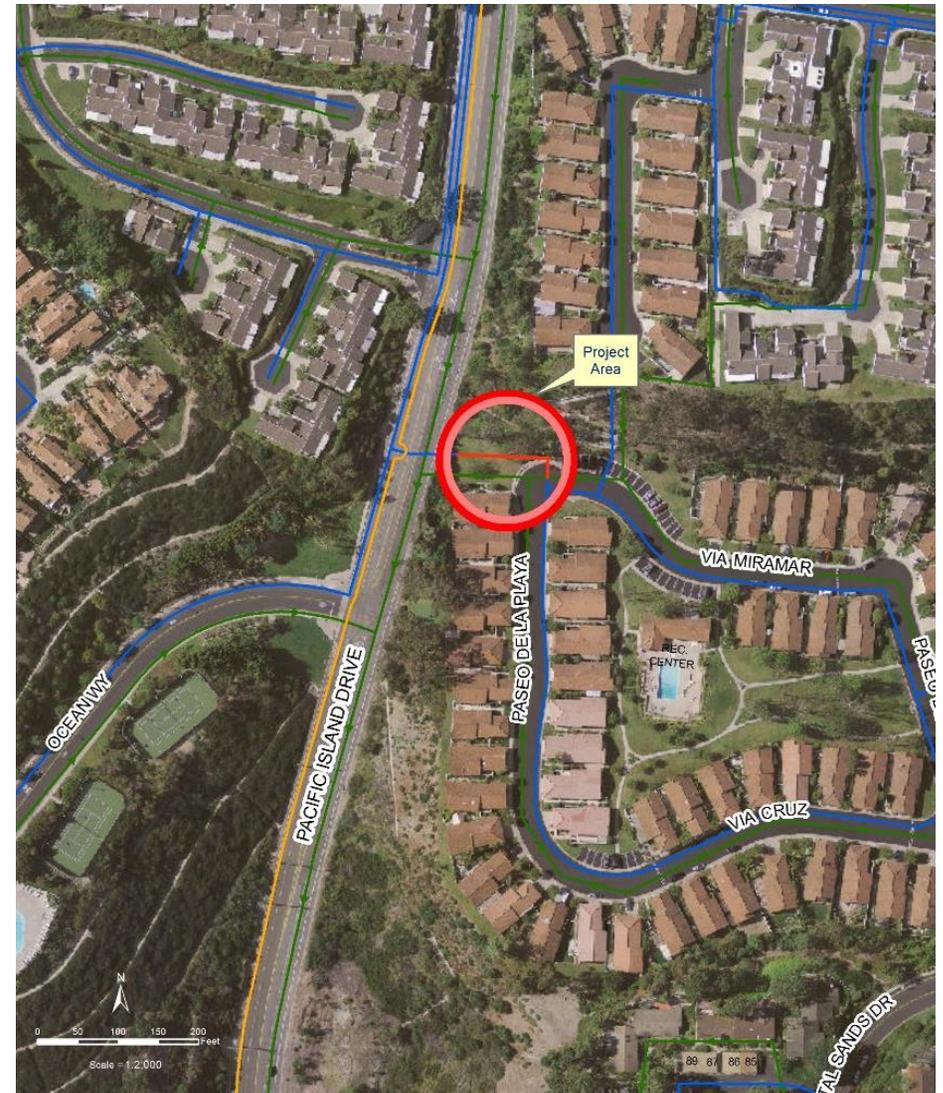
Project Description: Install new easement pipeline, approximately 300' linear feet of 8", from Pacific Island Drive to Via Miramar on the 920 zone to provide a second feed and loop the system.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$30,000
CEQA Compliance	TBD
Construction Contract	\$100,000
Inspection, Other	\$20,000
Total Project Budget	\$150,000



Capital Improvement Program – Project Description

Project No: 2011.026

System: Potable

Fund: 7

Project Name: *Rancho Underground Pump Station Refurbishment*

Project Location: Avenida Del Caballo, Laguna Niguel

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

Project Need: The existing equipment has reached its useful life and requires replacement.

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Design	\$5,000
CEQA Compliance	Exempt
Construction Contract	\$240,000
Inspection	\$5,000
Total Project Budget	\$250,000



Capital Improvement Program – Project Description

Project No: 2011.032

System: Potable

Fund: 7

Project Name: Old Ranch Road Easement Refurbishment

Project Location: off Old Ranch Road, Laguna Niguel

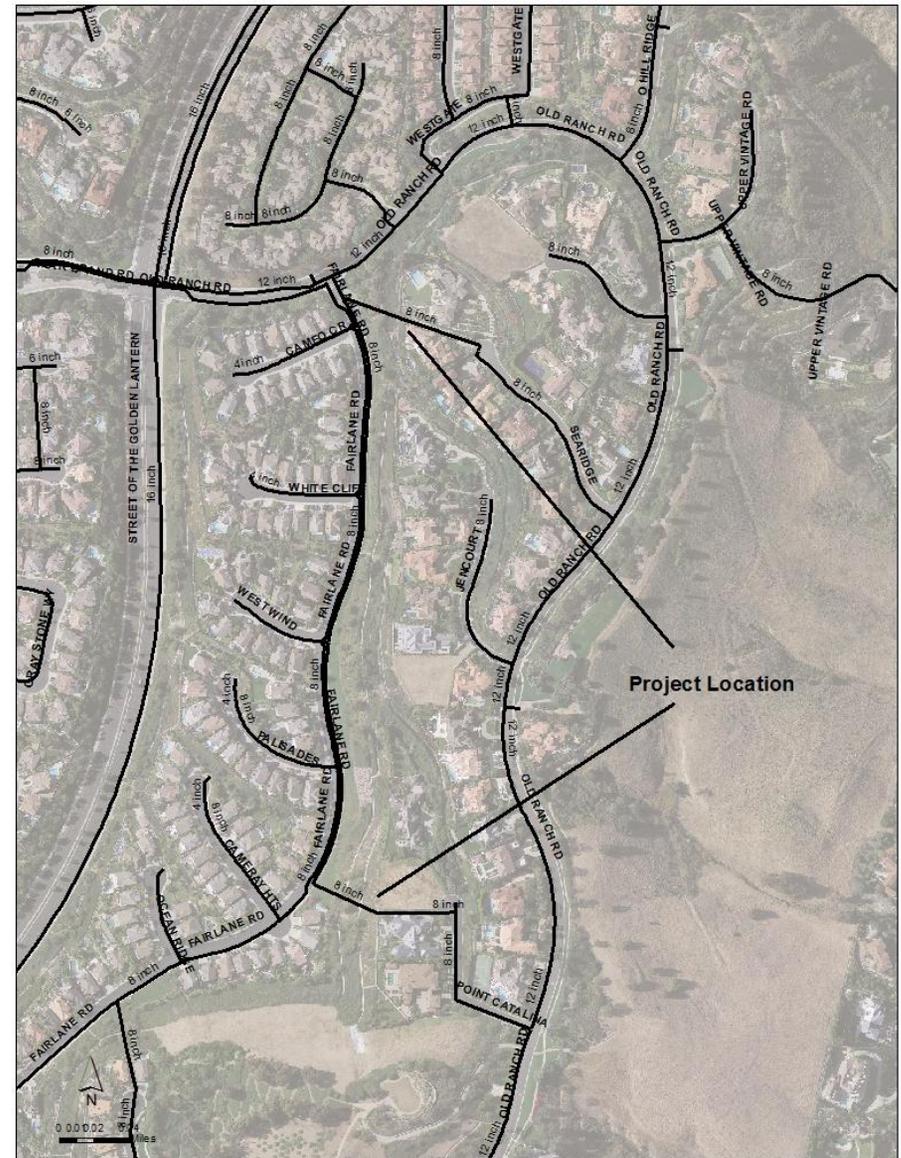
Project Description: Rehabilitate easement line from Point Catalina to Fairlane Road and abandon easement line in from Searidge to Fairlane Road.

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

Project Status: In planning.

Estimated Project Amount:

Item	Estimated Cost
Design	\$15,000
CEQA Compliance	Exempt
Construction Contract	\$80,000
Inspection	\$5,000
Total Project Budget	\$100,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

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

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

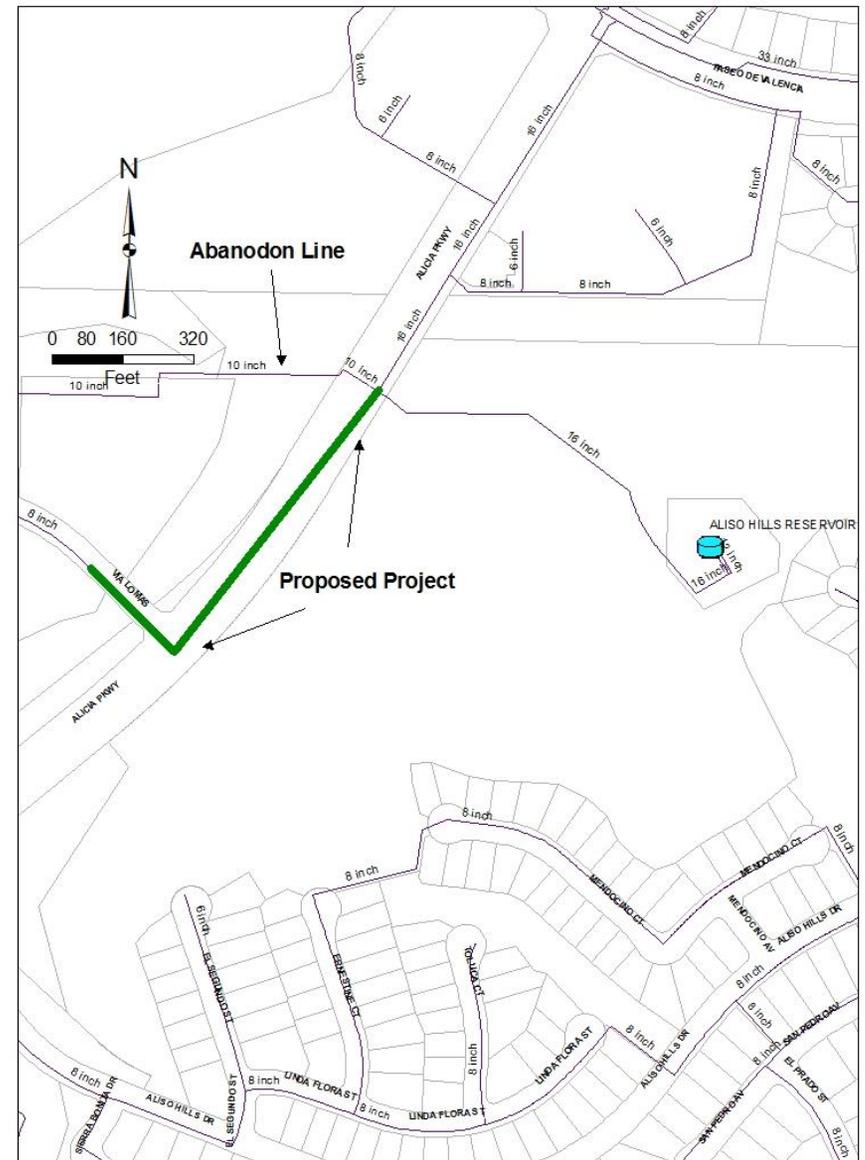
Project Description: Install about 1,000 feet of 10-inch diameter pipe and abandon about 500 feet under Aliso Creek.

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$190,000
Inspection	\$15,000
Total Project Budget	\$255,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Vault Removal (11 sites)*

Project Location: Various – see table

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

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

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$340,000
Inspection	\$10,000
Total Project Budget	\$400,000

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

Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: Reservoir Overflow and Drainage Improvements

Project Location: District-wide

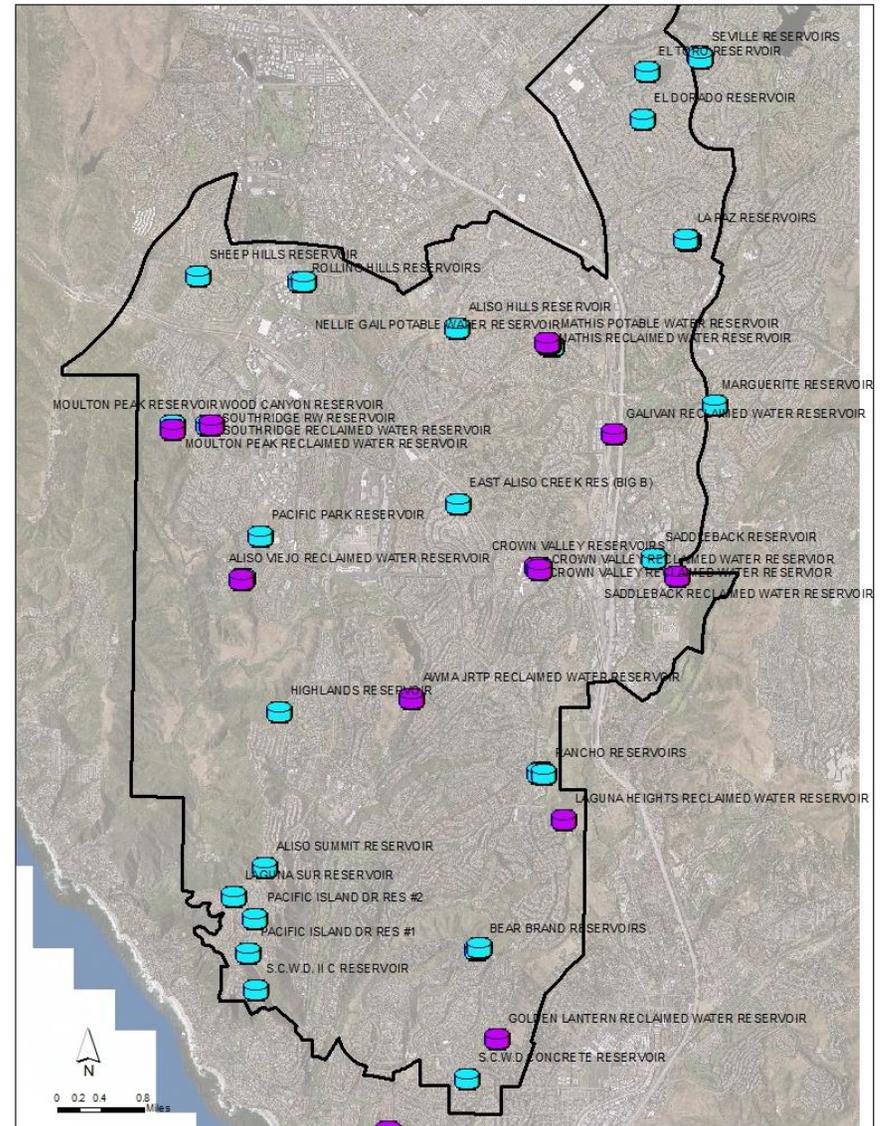
Project Description: Evaluate, design and construct improvements to overflows on storage tanks and site drainage.

Project Need: The District owns and operates 37 potable and recycled storage tanks of various sizes constructed over the last 50 years. Many of these tanks have internal overflows that when damaged or broken could cause the tank to drain. These overflow structures need to be relocated to the outside of the tanks. In addition, many of the overflow pipes are connected to storm drains that may not have the capacity to carry the expected volumes in an overflow or emergency drain event. This project will evaluate these concerns, propose improvements, develop an implementation plan, design the improvements, and construct. The total cost of the project will not be complete until after the implementation plan is developed.

Project Status: Proposed Projects

Estimated Project Amount:

Item	Estimated Cost
Assessment/Design	\$75,000
CEQA Compliance	Exempt
Construction Contract	\$315,000
Inspection	\$10,000
Total Project Budget	\$400,000



Capital Improvement Program – Project Description

Project No: TBD

System: Potable

Fund: 7

Project Name: *Mathis Pump Station Improvements*

Project Location: Mathis Pump Station, Laguna Hills

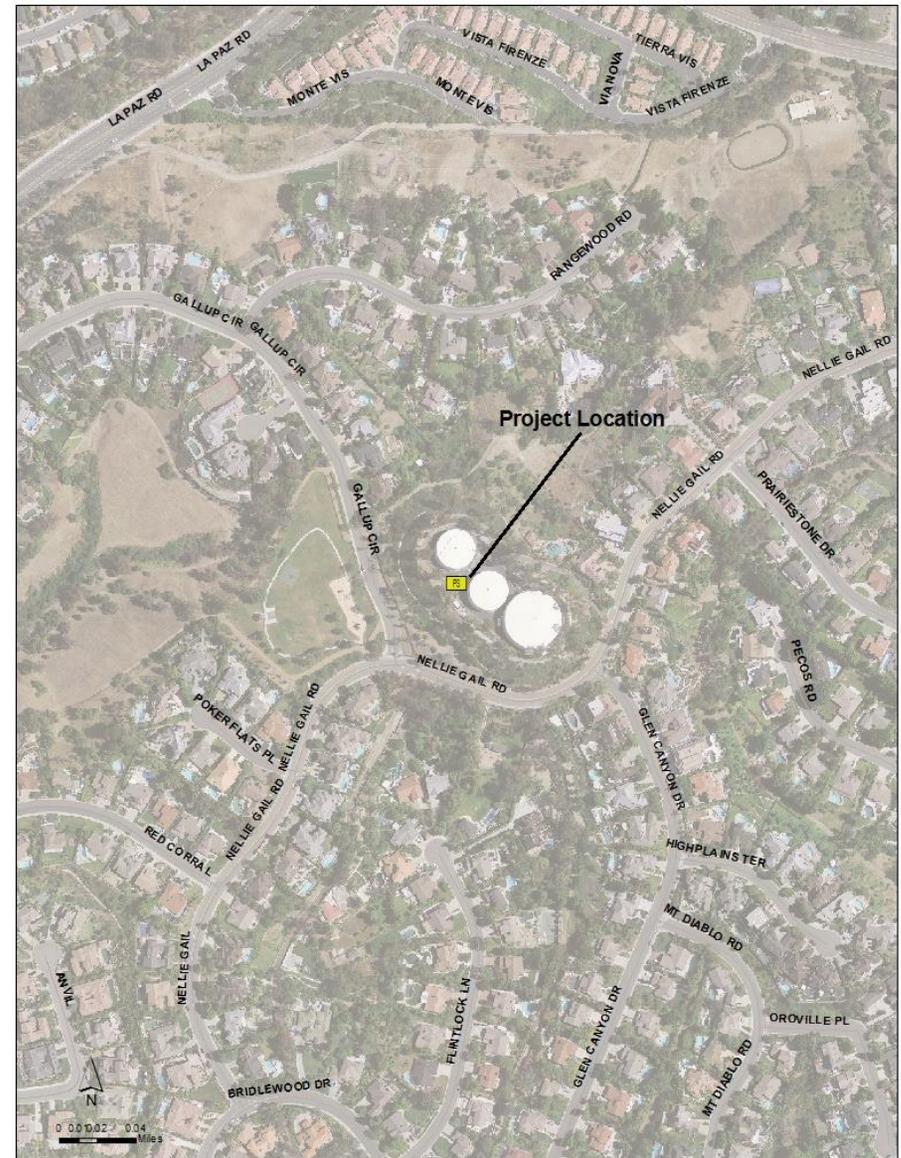
Project Description: This project will replace the existing pump and motor lifting water from the 650 to the 750 Zone, increasing flow capacity to support fire flows for the Nellie Gail community north of Oso Pkwy.

Project Need: The 750 Zone serving the Nellie Gail community north of Oso Pkwy relies on a turnout from the Bridlewood Flow Control Facility. In the event this turnout is unavailable, this community would rely on Casa Del Oso and Mathis Pump Stations for domestic service and fire flows, pumping water from the 650 to the 750 zone. If Casa Del Oso Pump Station was out of service, or if the 750 Zone water line in Bridlewood Dr. crossing Oso Pkwy was lost, Mathis Pump Station would be undersized, and could not support the community's fire flow needs. This project would engage a design review and analysis to identify needed improvements to supply 750 Zone water demands from Mathis Pump Station, and provide redundancy for the Casa Del Oso PS and Bridlewood FCF. Construction costs will be updated when the project scope and design recommendations are developed during the analysis part of the project.

Project Status: Proposed Project

Estimated Project Amount:

Item	Estimated Cost
Design	\$90,000
CEQA Compliance	Exempt
Construction Contract	\$300,000
Inspection	\$10,000
Total Project Budget	\$400,000



Recycled

Capital Improvement Program – Project Description

Project No: 2011.031

System: Recycled

Fund: 7

Project Name: Niguel Road Recycled Water Line Rehabilitation

Project Location: City of Laguna Niguel, Crown Valley Parkway AWMA Regional Wastewater Treatment Plant to El Niguel Country Club

Project Description: Rehabilitate or replace about 2 miles of an 8-inch asbestos cement pipe (ACP).

Project Need: The existing ACP line was constructed in 1972 and is one of the first recycled lines in the District. The line has experienced some failures and reduced service pressure in some areas. This project will evaluate the condition of the line, develop improvement needs to maintain services, and construct the improvements.

Project Status: In construction.

Estimated Project Amount:

Item	Estimated Cost
Design	\$50,000
CEQA Compliance	Exempt
Construction Contract	\$340,000
Inspection	\$10,000
Total Project Budget	\$400,000

