CONSTRUCTION NETWORK
Connecting Owners to AEC and CM Industries

Water Districts

Project Updates & Contracting Opportunities

Presentation 10/17/23

Otay Water District

Kevin Cameron

Engineering Manager

Vallecitos Water District

Jason Hubbard, P.E.

District Engineer

Padre Dam Municipal Water District

Michael Hindle

Manager of District Projects

Santa Fe Irrigation District

Marissa Potter, P.E.

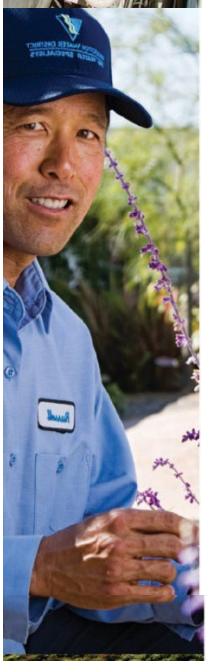
Engineering Services Manager

OTAY WATER DISTRICT
LARGE CAPITAL IMPROVEMENT PROJECTS

CIP No	Project Title	Project Manager	Budget Amount	Expected Construction (Fiscal Year)
P2608	PL - 8-inch, 850 Zone, Coronado Avenue, Chestnut/Apple	Lito Santos	$1,820,000	2025
P2058	PL - 20-Inch, 1296 Zone, Proctor Valley Road from Melody Road to Highway 94	Lito Santos	$2,750,000	2025
P2171	PL - 20-Inch, 1296 Zone, Proctor Valley Road from Pioneer Way to Melody Road	Lito Santos	$3,600,000	2025
P2615	PL - 12-Inch Pipeline Replacement, 803 PZ, Vista Grande	Lito Santos	$2,600,000	2025
P2228	Res - 870-2 Reservoir 3.4 MG	Jeff Marchioro	$11,000,000	2025
P2563	Res - 870-1 Reservoir Cover/Liner Replacement	Jeff Marchioro	$3,500,000	2025
P2460	I.D. 7 Trestle and Pipeline Demolition	Stephen Beppler	$900,000	2025
P2631	1485-2 Reservoir Interior/Exterior Coating & Upgrades	Lito Santos	$1,450,000	2025
P2639	Vista Diego Hydropneumatic Pump Station Replacement	Jeff Marchioro	$3,700,000	2025
S2069	Cottonwood Sewer Pump Station Renovation	Stephen Beppler	$3,000,000	2025/2026
P2657	1485-1 Reservoir Interior/Exterior Coating & Upgrades	Lito Santos	$1,150,000	2026

Joint Project with City of Chula Vista (Lead Agency)				
P2553	Heritage Road Bridge Replacement and Utility Relocation	Lito Santos	$5,050,000	2025

Fund	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Potable	$ 10,189	$ 19,899	$ 20,994	$ 24,817	$ 22,085	$ 18,597	$ 116,581
Recycled	4,152	3,746	1,437	1,937	5,903	2,878	$ 20,053
Sewer	1,000	1,246	2,000	3,301	1,896	1,915	$ 11,358
Total CIP by Fund	$ 15,341	$ 24,891	$ 24,431	$ 30,055	$ 29,884	$ 23,390	$ 147,992



VALLECITOS WATER DISTRICT

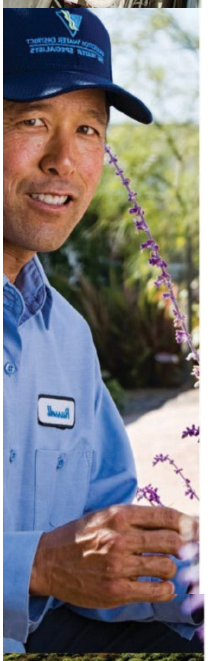
Water and Wastewater Specialists since 1955

Capital Improvement Program

Design Opportunities		
Project Name	**Status**	**Design Budget**
Land Outfall Parallel Sewer Section A	RFP 12/23	$900,000
TOVR Sewer Improvement Phase 1	RFP 2/24	$750,000
MRF Direct Potable Reuse Feasibility Study	RFP 5/24	$650,000
Richland Invert Sewer Replacement	RFP 6/24	$355,000

CM and Inspection Opportunities		
Project Name	**Status**	**Const Budget**
Tres-Amigos Waterline Replacement Phase 1	RFP 11/23	$5,630,000
MRF Conversion to Sodium Hypochlorite	RFP 12/23	$4,800,000
Chlorine Contact Tank Expansion	RFP 1/24	$9,250,000
Richland Invert Sewer Replacement	TBD	$1,155,000
Land Outfall West Repair and Rehab	RFP 3/25	$520,000
TOVR Sewer Improvement Phase 1	RFP 4/25	$20,000,000

Construction Opportunities		
Project Name	**Status**	**Const Budget**
MRF Conversion to Sodium Hypochlorite	Bid 12/23	$4,800,000
Rock Springs Valve Replacement	Bid 12/23	$311,000
Chlorine Contact Tank Expansion	Bid 1/24	$9,250,000
Tres-Amigos Waterline Replacement Phase 1	Bid 1/24	$5,630,000
Las Posas Waterline Replacement and Rehab	Bid 1/24	$260,000
Sewer Lining and Rehab 2024	Bid 3/24	$760,000
Pipeline Corrosion Protection Improvements	Bid 1/25	$832,000
TOVR Sewer Improvement Phase 1	Bid 5/25	$20,000,000



VALLECITOS WATER DISTRICT
Water and Wastewater Specialists since 1955

Capital Improvement Program

Project Descriptions:

Land Outfall Parallel Sewer Section A –
The existing 12,000-feet of 20 to 24-inch Siphon Section A, and 1,625-feet 30-inch Gravity Section A of the Land Outfall are under capacity and will require design and environmental clearance for a parallel 30-inch siphon pipeline and a new 42-inch gravity pipe to be installed. The ductile iron pipe portions of the existing siphon need to be rehabilitated with cured-in-place pipe liner. Two new diversion structures between the existing siphon and the new parallel siphon will be necessary at the downstream end for chemical injection, metering, and maintenance and at the upstream end. Additionally, this project will include a meter vault with pipeline interconnects, a new connection to the MRF solids forcemain, and a connection to the City of Carlsbad's Poinsettia lift station.

TOVR Sewer Improvement Phase 1 –
Approximately 15,800-feet of existing 8 to 12-inch sewer pipe along Twin Oaks Valley Road is under capacity and needs to be upsized to 10 and 15-inch pipe within the same trench line. Twin Oaks Valley Sub-Area Master Plan Study will be prepared to determine how much Capital Facility Fees would need to be increased to fund the capacity portion of these sewer improvements as a District capital improvement project.

Tres-Amigos Waterline Replacement Phase 1 –
Replace approximately 7,800-feet of the 19,000-foot-long Tres-Amigos water line. The aging thin-wall steel 6-inch to 8-inch steel pipe will be replaced with new PVC pipe. A key project objective includes the relocation of the existing pipelines out of private backyards and into more accessible areas.

MRF Conversion to Sodium Hypochlorite –
Expand the existing Chlorine Contact Tank (CCT) at the Meadowlark Water Reclamation Facility (MRF) from 5 million gallons a day (MGD) to 6.5 MGD. The new CCT will be constructed to the north of the existing CCTs. To accommodate the area required, an existing retaining wall and curb line on the along the adjacent roadway will need to be shifted to the north by approximately 4 feet.

Chlorine Contact Tank Expansion –
Replace the use of chlorine gas at the Meadowlark Water Reclamation Facility (MRF) with bulk storage of sodium hypochlorite (bleach).

Richland Invert Sewer Replacement –
This project will evaluate whether a new, larger capacity siphon underneath the San Marcos Creek will replace the existing 8-inch and 10-inch or a gravity line in the City right-of-way is the most cost-effective option. If the creek crossing is selected, staff anticipates environmental wetland permitting will be required.

Land Outfall West Repair and Rehab –
In 2021 the District performed a thorough condition assessment with recommended actions for cleaning and rehabilitation/repairs. This project will evaluate these prior recommendations in the context of future up-sizing needs and clean, rehabilitate, and repair necessary sections of approximately 17,700-feet of sewer pipeline ranging in size from 21-inch to 54-inch.

Las Posas Waterline Replacement and Rehab –
A 10-inch ductile iron (DIP) water main underneath a double reinforced box culvert (RBC) on Las Posas Road is aging and in need of rehabilitation involving installing a structural liner inside the host water main using trenchless technology and reconnecting to the existing asbestos-cement pipe (ACP) located on either side of a double RBC.

Sewer Lining and Rehab 2024 –
The project consists of rehabilitating two manholes and approximately 9,500-feet of gravity sewer with trenchless cured-in-place pipe liner at locations throughout the District.

SANTA FE IRRIGATION DISTRICT
TOTAL DISTRICT CAPITAL SPENDING - UPDATED

District Only Projects					
Project	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**
Government Road	$ 1,740,000	$ 1,480,000			
District Yard Solar	200,000	200,000			
District Corporate Yard Building				500,000	
La Granada Pipeline and PRS Elimination			814,723	1,110,052	1,110,052
Larrick Reservoir and Pump Station Upgrades			526,636	2,358,780	1,485,415
24-inch Pipeline Realignment /Replacement			552,069	2,385,727	2,385,727
Group A Pipe Replacement				107,245	965,208
PRS Replacement 406-A2 and A3					188,692
Total District Projects	$ 1,940,000	$ 1,680,000	$ 1,890,000	$ 6,460,000	$ 6,140,000

Joint Facility Projects					
Project	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**
R.E. Badger Basin and Filters Concrete Repairs	$ 935,300				
Cielo Pump Station Valve	785,000				
Rehabilitation of 15-inch SDPS 30-inch			769,300	2,315,000	3,985,000
Parallel 30-inch Raw Water Pipeline				299,943	299,943
R.E. Badger Septic Tank and Leach Field	70,000	500,000			
Chlorine Scrubber Replacement	410,000				
Ozone Generation					
Filter Surface Washwater Header	204,750	204,750			
Flocculator Replacement Project			96,600	843,400	
Filter Washwater Solids Removal & Return					
Solids Removal Equipment Replacement					
Hydroelectric Decommissioning		410,000			
Total Joint Facilities	$ 2,410,000	$ 1,110,000	$ 870,000	$ 3,460,000	$ 4,280,000
SDWD Share	$ 2,410,000	$ 1,110,000	$ 870,000	$ 3,460,000	$ 4,280,000
SFID Share	$ -	$ -	$ -	$ -	$ -

Total SFID Capital	$ 1,940,000	$ 1,680,000	$ 1,890,000	$ 6,460,000	$ 6,140,000

Fiscal Years 2023-2027

Capital Improvement Program Budget

PADRE DAM
Municipal Water District

Capital Improvement Program Budget

Fiscal Years 2023-2027

Board of Directors 2023

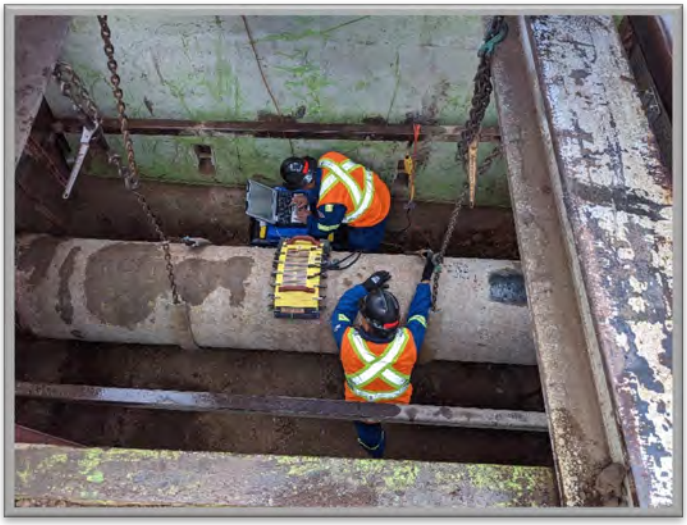
Brian Fordyce
Division I

Suzanne Till
Division II

Bill Pommering
Division III

August Caires
Division IV

Rocky Qualin
Division V



CEO/General Manager

Kyle Swanson

Management Team

Jeff Moneda, PE
Director of Engineering & Planning

Mark Niemiec, PE
Director of East County Advanced Water Purification

Paul Clarke
Director of Operations & Water Quality

Karen Jassoy, CPA
Director of Finance/CFO

Lisa Sorce
Director of Human Resources & Administrative Services

Laura Koval
Director of Park & Recreation

9300 Fanita Parkway
Santee, CA 92071
T 619 448 3111 F 619 449 9469
www.padredam.org
PO Box 719003
Santee, CA 92072-9003

Photos:
The cover and inside title pages show photos of projects completed during the 2018-2022 Five Year Business Plan.

Cover, from top to bottom: New surge tank for the Rios Canyon Pump Station; new 16-inch ductile iron potable water pipe being installed for the Mountain View Connector Pipeline project; commissioning of a new potable water pump station for the Eastern Service Area Secondary Connection Project; rehabilitation of the Fletcher Hills/Grossmont combo-tank (jointly operated by Helix Water District and Padre Dam Municipal Water District); a technician taking measurements of a steel potable water main for the Pipeline Condition Assessment project; set-point adjustments for the new Quail Canyon Pressure Reducing Station; and installation of scaffolding system and containment wrap for exterior coating work at Viejas Mountain Reservoir.

Inside title page, top: New 16-inch ductile iron potable water pipe being installed for the Mountain View Connector Pipeline project.

Inside title page, bottom: Investigation utilizing non-destructive electromagnetic scanning technology to measure steel pipe cylinder thickness near Labrador Lane

TABLE OF CONTENTS

FIGURES

TABLES

A Message from the CEO/General Manager, Kyle Swanson

Dear Customers, Board Members and Employees,

We are pleased to present Padre Dam Municipal Water District's 2023 - 2027 Capital Improvements Program (CIP) Budget. The CIP Budget is one component of Padre Dam's 2023 - 2027 Five Year Strategic Business Plan (Business Plan), which serves as the framework that guides the District in prioritizing capital replacement and infrastructure improvements for the benefit of our customers.

Our goal is to provide the best quality of service at the lowest possible cost. We understand that we, the employees of Padre Dam, are simply stewards of a system that belongs to you, the community. Our obligation as public servants and water professionals is to manage this system in a manner that provides long-term sustainability for a safe and reliable system for current and future generations and minimizes the impact on the environment and maximizes the contribution to our community's social and economic vitality at an acceptable level of risk while continuously delivering the required levels of service.

The proposed CIP presents improvement projects based on the water, recycled water, and wastewater system evaluations conducted as part of the development of the recent Master Plan Update (previously called 'Comprehensive Facilities Master Plan') completed in June 2022. Padre Dam strives to meet customers' needs in the most cost-effective manner possible. With limited resources, Padre Dam must therefore prioritize spending. Development of the CIP Budget, in conjunction with the Business Plan, ensures sufficient financial resources are invested for completing priority projects while promoting customer affordability. Overall objectives of the CIP during this Business Plan include:

1. Improving System Resiliency
2. Prioritizing critical assets through condition assessment or replacement
3. Compliance with regulatory mandates
4. Supporting the East County Advanced Water Purification Program
5. Ensuring safe and reliable water and sewer facilities

Additional priorities include refurbishing existing aging facilities, various facility improvements, creating redundancy in the water distribution and transmission systems, and ongoing capitalized operations projects.

I want to thank you, our customers, for trusting us with your water, recycled water and wastewater systems. We don't take the responsibility lightly. We look forward to the successful implementation of the Capital Improvements Program and continued investment in your water district.

Best Regards,

Kyle Swanson
CEO/General Manager

THIS PAGE INTENTIONALLY LEFT BLANK

PADRE DAM Municipal Water District

Figure 1

Accomplishments 2017 - 2022
Western Service Area

WRF Projects
- -WRF Ecological Assessment at Pond B
- -WRF Fence Replacement
- -WRF Lab Renovations
- -WRF Lighting
- -WRF Primary & Secondary Flights & Gear Upgrades
- -WRF Upgrade Primary & Secondary Basin Refurbishment
- -WRF Zimpro Bathroom & Sewer Replacement

- Facility
- Potable
- Recycled
- Sewer
- New Sewer Main
- Sewer Projects FY 15/16
- Sewer Rehabilitation FY 2018
- Sewer Rehabilitation FY 2019
- Sewer Rehabilitiation FY 2020
- WSA Water and Sewer
- WSA Sewer Only
- ESA Water Only

0 0.25 Miles

District Wide Projects
- -Pipeline Condition Assessment
- -Reservoir Management Study
- -Valve Prioritization Study

Project Number	Project Name
1	District Building "B" Roof Replacement
2	Sewer Trans-River Interceptor
3	Operations Yard Preliminary Analysis
4	Grossmont College Privitization
5	WRF Projects
6	Woodrose Ave Techite Sewer Replacement
7	El Capitan Pipeline Valve and Vault Removal on Woodside Ave.

Padre Dam CIP Budgt

PADRE DAM Municipal Water District

Accomplishments 2017 - 2022
Eastern Service Area

Figure 2

Project Number	Project Name
8	Los Coches Inlet Blowoff Repair
9	ESA Secondary Connection
10	Cordial Road Pipe Replacement
11	Rios Canyon Pump Station Surge Tank Design & Construction
12	Blossom Valley Reservoir Emergency Action Plan
13	Pump Station 3 & 4 Surge Tank Replacement
13	Pump Station 3 & 4 Surge Tank Replacement
14	Mountain View Connector Pipeline
15	I-8 Viewside Lane Water Pipeline Replacement
16	Alpine Blvd Water Relocations
17	Viejas Mountain Reservoir Refurbishment & Coating

District Wide Projects
- -Pipeline Condition Assessment
- -Reservoir Management Study
- -Valve Prioritization Study

Potable
New Potable Main
WSA Water and Sewer
WSA Sewer Only
ESA Water Only

0 0.25 Miles

1. GENERAL INFORMATION

Glossary

AC, ACP	Asbestos cement, Asbestos cement pipe
Buy-in	Portion of developers' capacity fees which pays their share of existing facilities.
Carryover projects, carryover budget	Refers to projects which began construction at the end of the prior budget and will be completed during the current budget. Funds are "carried over" from the previous budget and earmarked for use to complete construction.
CEF	Capital Expansion Funds. Restricted reserves funded by a portion of developer-paid capacity fees. These restricted funds are set aside to be used to fund growth related projects.
CEQA	California Environmental Quality Act. Requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts.
CIP	Capital Improvement Program
Master Plan Update	Master Plan Update, June 2022 (previously called 'Comprehensive Facilities Master Plan)
COP	Certificates of Participation. A debt instrument similar to a bond that is typically issued by government agencies to finance construction projects. Padre Dam issued $45 million COP in 2009 to finance high priority water projects.
CRF	Capital Replacement Funds. Designated reserves funded by existing customer rates and a portion of developer capacity fees. These funds are set aside to cover the repair or replacement cost of capital assets. CRF funds are also used to pay debt principle payments. Funds capital projects which benefit existing customers. Revenues come from bills paid by existing customers, and by a portion of the capacity fees paid by developers. Consists of three funds: Water, Sewer, and Recycled Water.
CSC	Padre Dam's Customer Service Center
CSMFO	California Society of Municipal Finance Officers, a statewide organization promoting excellence in financial management for cities, counties, and special districts in California.
CWA	San Diego County Water Authority
ENR LA CCI	Engineering News Record Construction Cost Index for Los Angeles
East County AWP	East County Advanced Water Purification (AWP) Program. A regional program to reduce wastewater flow to Point Loma while increasing potable and non-potable water reuse in East County.
ESA	Padre Dam's Eastern Service Area
Expensed	Certain early phases of a CIP project development are required to be expensed rather than capitalized (e.g. preliminary analysis, feasibility studies). Expenditures during these phases are included in the Operating Budget and are not part of the final asset cost.
Fiscal Year (FY)	The District's fiscal year is July 1 through June 30 of the following year. In the tables a year shown as "22/23" represents Fiscal Year 2023, or July 1, 2022 through June 30, 2023.
Business Plan	Padre Dam's Five Year Strategic Business Plan covering July 1, 2022 through June 30, 2027.

GASB	Governmental Accounting Standards Board, the source of generally accepted accounting principles used by state and local governments in the United States.
GIS	Geographical Information System
gpm	Gallons per minute
IPS	Padre Dam's Wastewater Influent Pump Station which pumps collected wastewater to either the Water Recycling Facility or to Metro sewer for conveyance to the Point Loma Wastewater Treatment Plant.
Metro	City of San Diego, Metropolitan Wastewater Department
MG, mgd	million gallons, million gallons per day
New CIP	Projects funded by the CIP Budget for Fiscal Years 2023 – 2027 rather than carried over from the previous 2017-2022 budget.
NPDES	National Pollutant Discharge Elimination System, a national program under the Clean Water Act for regulation of discharges of pollutants to waters of the United States.
O & M	Operations and Maintenance
Operating budget	Pays for salaries, wages, materials costs, direct costs of imported water, and other items which cannot be capitalized. Certain phases of CIP project development are funded from the operating budget - see "Expensed."
Operations	Padre Dam's Operations Department including Systems Maintenance and Construction, Water System Operations, Water Recycling, Lab, and Warehouse.
Park	Same as Santee Lakes Recreation Preserve
PAYGO	Pay As You Go. PAYGO is the financing of expenditures with funds that are currently available rather than borrowed.
Business Plan	Same as the Strategic Business Plan for Fiscal Years 2023 - 2027.
PRS	Pressure reducing station
PS	Pump station
Santee Lakes	Santee Lakes Recreation Preserve, a park and recreational area owned and operated by Padre Dam. Water provided to the lakes is produced by Padre Dam's Water Recycling Facility. The park is completely self-supporting and has its own Capital Improvement Program and revenue sources.
SCADA	Supervisory Control and Data Acquisition
SGMA	Sustainable Groundwater Management Act. Padre Dam is the contract administrator for procurement of a contractor to prepare the SGMA-required Groundwater Sustainability Plan for the San Diego River Valley Groundwater Basin.
WRF	Padre Dam's Ray Stoyer Water Recycling Facility
WSA	Padre Dam's Western Service Area

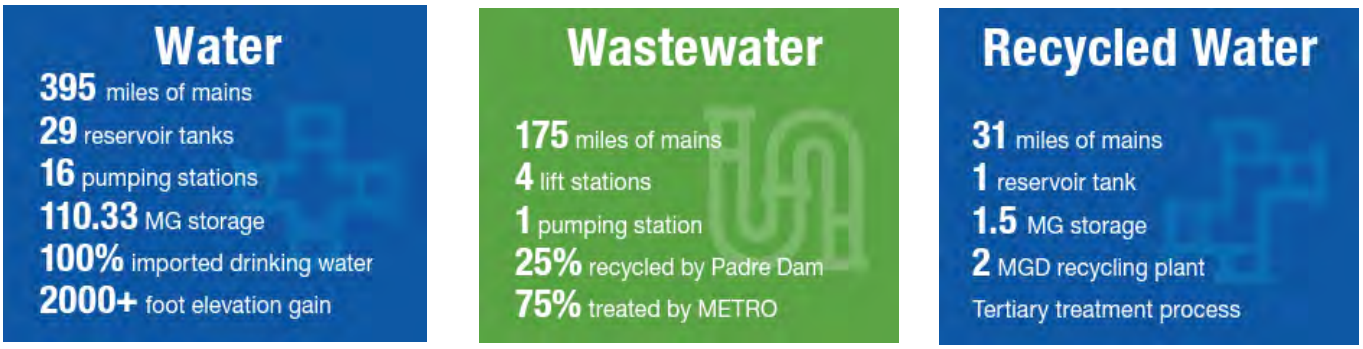
Overview of Padre Dam

Padre Dam Municipal Water District (Padre Dam or the District) is a multi-purpose public utility that provides potable water, recycled water, and wastewater collection, disposal, and treatment, to a service area population of 102,106 based on 2021 SANDAG data. The District also owns and operates the 190-acre Santee Lakes Recreation Preserve. The District is governed by a five-member Board of Directors elected for four-year staggered terms. Padre Dam employs approximately 143 full-time equivalent employees to provide management, engineering maintenance, and operation of the District.

The District encompasses approximately 80 square miles and is located in eastern San Diego County, approximately 15 miles northeast of downtown San Diego. The District can be segregated into two geographic areas: the Western Service Area (WSA) and the Eastern Service Area (ESA). Within the Western Service Area, the District provides potable water, recycled water, and wastewater services to the City of Santee and parts of the City of El Cajon and Lakeside. The Santee Lakes Recreation Preserve and the Ray Stoyer Water Recycling Facility are located within the Western Service Area. Within the Eastern Service Area, the District provides potable water service to the communities of Blossom Valley, Dehesa, Crest, Alpine, Harbison Canyon and Flinn Springs. Approximately 69 percent of water customers are in the Western Service Area compared to 31 percent in the Eastern Service Area. The District does not provide sewer service to the Eastern Service Area. The District also provides sewer-only service to some customers in the Helix and Lakeside Water Districts and bills these customers directly.

District Infrastructure Highlights as of June 2022

The existing water, wastewater and recycled water system includes:



19 pressure regulating stations **2 imported water connections**

Unique Rate Factors

Certain unique factors differentiate Padre Dam from other agencies in the San Diego region. Some of these factors include:

No Local Water Supply. Currently, Padre Dam is 100 percent reliant on imported drinking water from the San Diego County Water Authority. However, the District is pursuing a water recycling opportunity that would diversify East County's water supply and reduce our dependence on imported water. Our Advanced Water Purification Program could produce up to 30% of East County's current drinking water demands using state-of-the-art technology to purify East County's recycled water.

Significant Elevation Changes. Padre Dam delivers water to elevations as high as 2,646 feet above sea level. Pumping water to higher elevations requires additional infrastructure (pump stations), which add to the operations and maintenance costs of our distribution system. It also takes a lot of electricity to pump water to higher elevations, which affect the cost of providing water. Our pump stations add $20 million in infrastructure value to the District.

Large Service Area per Customer. The size of a service area directly impacts the cost of maintenance. Longer pipelines increase costs of maintenance, replacement, and travel time to cover the service area. Our service area covers approximately 73 square miles for approximately 25,400 customers - fewer customers per square foot than our neighboring agencies. Over $700 million (about $28,800 per customer) of infrastructure supports this large service area.

Santee Lakes Recreation Preserve

Santee Lakes Recreation Preserve (Park or Santee Lakes) operates independently of the District's water, sewer, and recycling operations. The Park is 100 percent self-sufficient and receives no funds from Padre Dam utility customers or taxpayers. Revenues generated from park campground and day-use fees provide the necessary funding for operating expenses and capital improvements. Santee Lakes maintains its own CIP and budget and therefore is not included in this document.

Figure 3 District Map

PADRE DAM MUNICIPAL WATER DISTRICT FACILITIES

LEGEND

FACILITY SYMBOLS

- District Offices
- Potable Reservoirs
- Recycled Reservoir
- Potable Water Pump Stations
- Sewer Lift Stations
- Recycled Water Pump Station
- CWA Intake Connections
- Emergency Interconnects
- Pressure Reducing Stations
  1) Shadow Mountain #2
  2) Shadow Mountain #1
  3) La Cresta
  4) Sycuan
  5) Harbison Canyon
  6) Arnold Way #1
  7) Arnold Way #2
  8) Arnold Way #3
  9) Arnold Way #4
  10) South Grade Rd.
  11) Midway Dr.
  12) Via Asoleado
  13) Via Dieguenos
  14) Highland Vista
  15) N. Victoria Dr.
  16) Blackwolf Dr.
  17) Sky Ranch
  18) Alpine Trails
  19) Sage Mountain
- Turnouts
  1) Santee #1
  2) Santee #2
  3) Santee #3
  4) Santee #4
  5) Santee #5

BOUNDARIES

- Western Service Area (Water/Sewer/Recycled)
- Lakeside Water District
- LWD & PDMWD Overlapping Boundaries
- Eastern Service Area

SAN VICENTE RESERVOIR

EL CAPITAN RESERVOIR

LOVELAND RESERVOIR

LAKE MURRAY

LAKE JENNINGS

PALO VERDE LAKE

MORENO

EUCALYPTUS HILLS

LAKESIDE

SANTEE

EL CAJON

FLINN SPRINGS

BLOSSOM VALLEY

HARBISON CANYON

CREST

DEHESA

ALPINE

SAN CARLOS

Water Recycling Facility (WRF)
Recycled Water
Advanced Water Purification Demonstration (AWP)

Park Office
Customer Service Center & Operations

Santee Main Influent Pump Station

Carlton Hills
Cuyamaca
Magnolia
Magnolia Summit
Mission Creek
Sunrise
Woodside Ave
Charles Price
High Rise Way
Northcote
Sky Ranch
Klosterman
Los Coches
Lakeview
El Capitan Booster
CWA Conn. #6
CWA Conn. #7
ESA Secondary Connection
Helix/PDMWD Emergency Connection
Lakeside/PDMWD Emergency Connection
El Capitan Pipeline
ESA Primary Pump Station
ESA Transmission Pipelines
Blossom Valley
Oak Creek
Flinn Springs
Rios Canyon
East County Square
Mountain Top
Jerry Johnson
Crest WTF
Chocolate Summit
Operations Alpine
Galloway Valley
Arnold Way
West Victoria
East Victoria
Alpine Pacific
Viejas Mt. North
Viejas Mt.
Alpine
Spanish Bit
Alpine Heights
Fanita Terrace
Fletcher Hills
Grossmont
CWA Conn. #4
SDCWA Aqueduct

N

0 0.5 1 2
Miles

Revision Date: 01/24/2019

M:/Projects/GIS/G0087/ArcMap/Facility2019Jan.mxd

2. CAPITAL IMPROVEMENT PROGRAM

The District is charged with managing water, wastewater, and recycled water assets in order to provide safe and reliable services in the most cost-effective manner possible at the lowest responsible rates. The Capital Improvement Program (CIP) is the foundation of the District's long-range capital investment and financial planning. The CIP establishes a specific list of preventative maintenance, capital replacement and improvement projects, associated timelines, and estimated costs to deliver those projects. These costs feed into the development of revenue requirements and ultimately rates in order to complete the projects within the proposed timeframes.

The CIP budget is also a major component of the FY 2023-2027 Business Plan. The CIP is the framework that guides the District in prioritizing capital replacement and improvement needs to support its core business functions. It is also intended to minimize uncertainties in financial decision making and maximize the use of financial resources allocated to capital improvements. Agencies, like Padre Dam, are faced with an aging infrastructure system, limited financial resources, and competing priorities. In fact, Padre Dam operates a critical pipeline that is approximately 100-years old and much of the infrastructure was originally constructed over 50-years and ago and is continually ageing. This infrastructure requires maintenance and upgrades irrespective of the amount of revenue generated. It is imperative that an effective capital program is developed and executed to maximize the useful life of our existing assets, prioritize replacement and rehabilitation based on timely condition assessments, and ensure long-term infrastructure sustainability through flexibility and adaptability. The CIP budget is structured such that it positions the District to take the initial steps to achieve long term infrastructure sustainability in the most efficient manner. The key components required to achieve infrastructure sustainability can be summed up by the three R's:

RELIABILITY – RESILIENCY – RATE PAYER AFFORDABILITY

Overall objectives of the CIP during this Business Plan include:

With limited resources, the District must prioritize capital spending. The District will continue to be proactive with replacement and rehabilitation of existing infrastructure. Furthermore, based on a combination of condition assessment data and a grand total CIP budget of approximately $16.8 million per year, the District's near- term strategy is to focus on implementing projects that incorporate opportunities for energy efficiencies, as well as

comprehensive condition assessments of the existing infrastructure to collect data, extending useful service lives as much as possible, and identifying those facilities that require rehabilitation or replacement.

The CIP budget includes funding for ESA water reliability projects. Although the WSA is, for the most part, well looped with multiple sources of water spread geographically, communities in the ESA are served by only a single water transmission main and a single water supply source, which requires improvements to the system in order to provide increased reliability and redundancy. The series of ESA water reliability projects, such as the ESA Secondary Connection and the Mountain View Connector Pipeline, were completed in FY17-22. Additional reliability projects include the Galloway Valley and Alpine West Projects which are included in the FY23-27 CIP but will likely extend into the next Business Plan.

Additional CIP priorities include refurbishing existing aging facilities, facility improvements, creating redundancy in the water distribution and transmission systems, and ongoing capitalized operations projects. By the end of the Business Plan, the CIP projects listed in Table 5 Annual Project Expenditures and Chapters 5 through 13 are anticipated to be completed assuming there are no major unforeseen challenges or funding issues.

CIP Planning Process

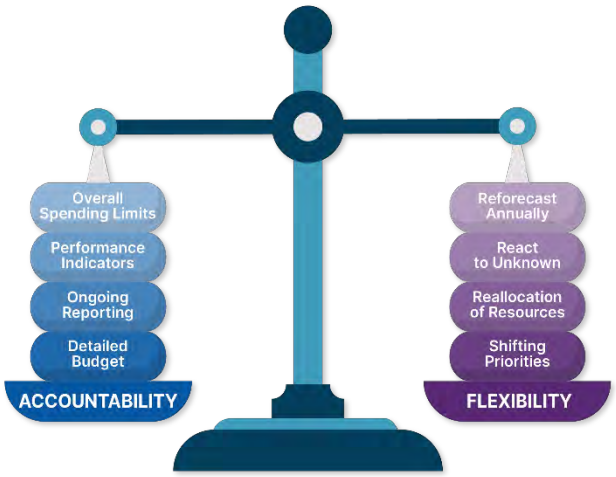
The Pipeline is a philosophy at Padre Dam Municipal Water District that enables broad-based participation in the organization's decision-making processes. The Pipeline relies on the primary principle that Padre Dam can better serve its customers by conducting its activities in a collaborative and transparent manner.

The development of the CIP is a great example of the Pipeline at work. It is an iterative process that relies on collaboration to develop project prioritization criteria that ensures objectivity, consistency, and credibility.

The following outlines the process used by the Engineering, Operations, and Finance Departments to develop a final CIP:

1. **Identify projects from the June 2022 Master Plan Update without regard to available budget/funding, timing, or other considerations.**
2. **Schedule projects in priority order within funding constraints, difficulty or ease of implementation of specific projects, staffing, dependencies between projects, and other considerations.**
3. **Review results and provide revised list of prioritized suggested projects based on available funding and the Five-Year Business Plan.**
4. **Final prioritization, review, and approval by management.**
5. **Board approval.**

The CIP budget is updated annually utilizing the same process. Under the Five-Year Business Plan, staff is held accountable and must "live within the household budget" even though spending patterns and priorities within each year are flexible. Funds can be moved between accounts and years, if necessary, and appropriate. The CIP requires extensive planning, analysis, and project prioritization in order to be consistent with available funding. CIP Projects are continually reprioritized to ensure the most vital projects are completed. Funds may also be transferred between the operating, CIP, and capital budget to accommodate justified, unanticipated needs if approved by the CFO.



The budget is refined annually to capture new information and react to previously unknown facts; it may also be adjusted if a significant event negatively impacts operations. However, overall spending is limited to the original approved Budget. Annually, the re-forecasted Budget is presented to the Board of Director for re-affirmation. Only in the event of an unforeseen significant event would staff request a variance from the approved Budget. Ultimately, this process provides a balance between accountability and flexibility.

Revenue

Revenue to fund CIP projects comes primarily from rates charged to customers and capacity fees charged to developers.

Potable Water Sales. The District's main source of revenue is from potable water sales. Customers are charged a rate per hundred cubic foot of water used. Residential customers' water use is priced according to an inclining three-tier schedule. Non-residential customers are charged a single rate depending on customer type.

Sewer Sales. The second highest source of revenue for the District is derived from the conveyance and treatment of customers' sewer flows. Residential customers' sewer flow charge is determined once a year and is based on the lowest two months of water consumption. Commercial customers' charge varies monthly, based on monthly water use. They are also charged according to their assigned concentration level.

Recycled Water Sales. Padre Dam currently treats 2 million gallons per day (MGD) of its wastewater flows at its Ray Stoyer Water Recycling Facility to produce Title 22 Non-Potable Recycled Water. One MGD is discharged to Santee Lakes and one MGD is sold to recycled water customers primarily for irrigation.

Systems Charges. Approximately 17 percent of District revenue comes from fixed system charges for its potable, sewer, and recycled operations. Customers are charged a fixed monthly fee based on the size of their meter; this revenue helps to partially offset fixed operational costs.

Property Taxes. The District currently receives approximately $3.7 million in property tax revenue from the State of California for its potable water operations. By a resolution approved by the District's Board of directors, any reduction in or elimination of property taxes by the State will result in an equivalent water rate increase.

Capacity Fees. Capacity fees are charged to developers in accordance with the 2017 Capacity Fee Study, with fees based on planned use and, size of irrigated areas, meter size, and other factors. Capacity fees are set to support planned growth-related projects identified in the CIP and to buy in to existing infrastructure. The capacity fees will be updated and new fees implemented in January 2023.

Sales Forecasts

In FY 2022, Raftelis Financial Consultants, Inc. (Raftelis) was hired by the District to perform a Cost of Service and Rate Study for its potable water, recycled water, and wastewater operations. Raftelis analyzed historical customer use data and developed annual and monthly sales projections for potable and recycled water as shown below in Figures 1 and 2. Raftelis did not do a separate analysis for sewer flows but instead tied its sewer sales forecast to projected water sales. Because residential sewer charges are set at the beginning of each year, sewer revenue for budgeting purposes is equally divided over the year.

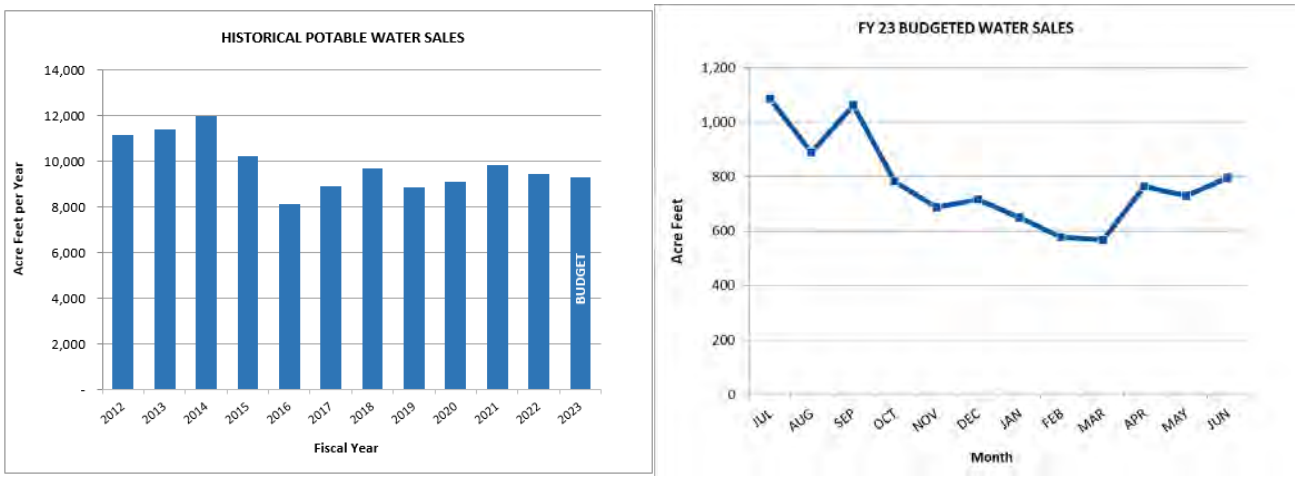


Figure 4 Historical and Budgeted Potable Water Sales

Figure 5 Historical and Budgeted Recycled Water Sales

Capacity Fees Forecast

Capacity fee revenue was conservatively estimated from proposed large development projects actively in Business Plan review.

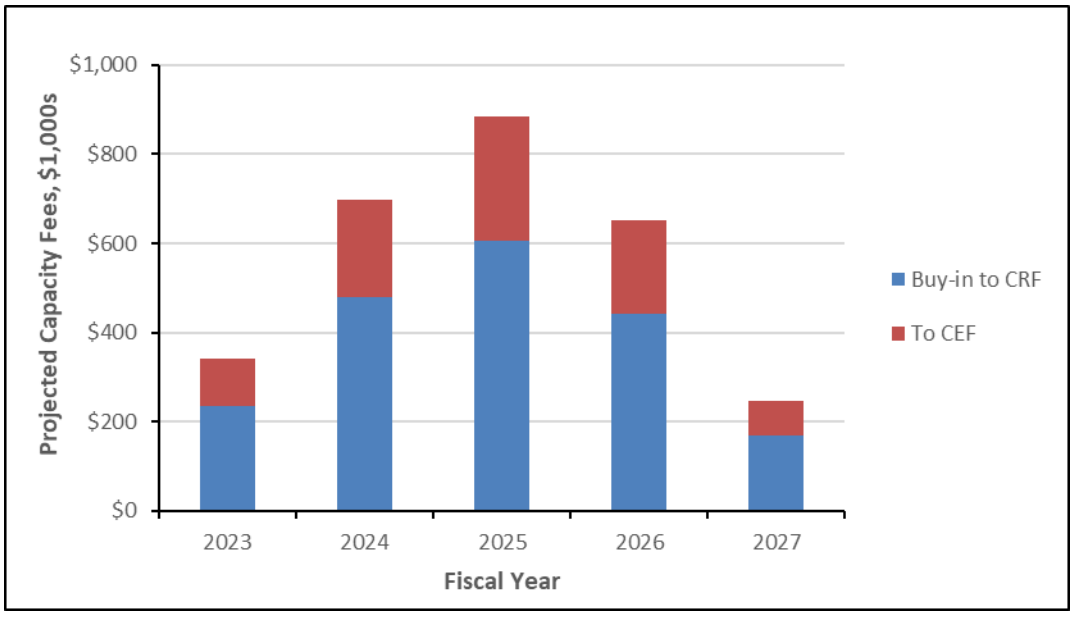


Figure 6 Projected Capacity Fees - Water (includes Recycled Water)

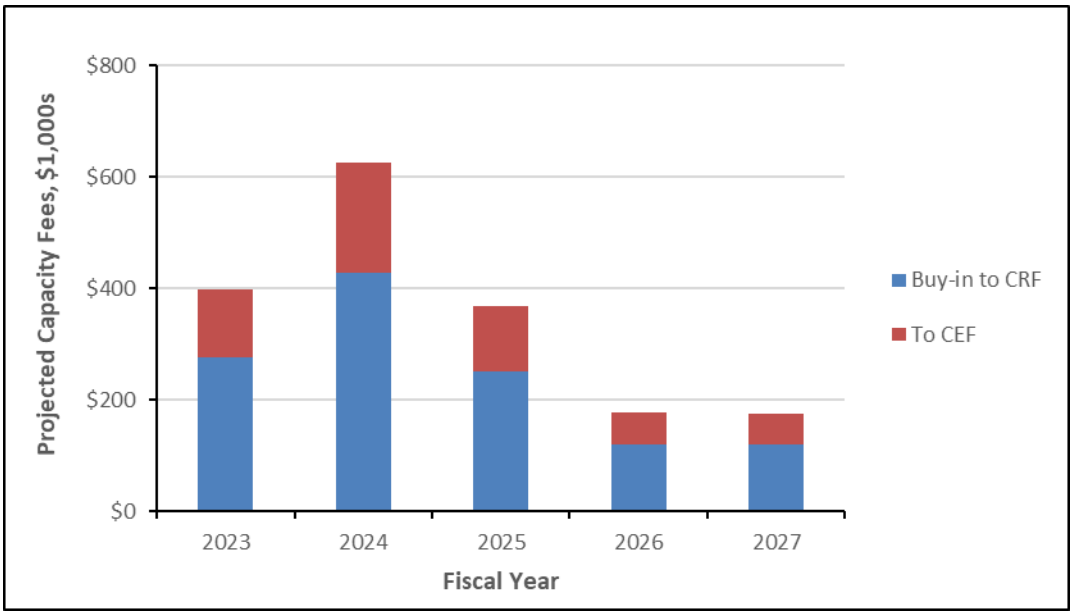


Figure 7 Projected Capacity Fees - Sewer

CIP Funding

CIP projects can be funded by capital reserves, current revenues (i.e. "Pay-go"), debt or a combination of these sources. The source of funding depends on the type of project and the availability of funds.

The first step in determining a project's source of funding is to establish whether the project is needed for the water system, recycled water system, sewer system or some combination. The second step is to establish whether the project is required irrespective of future development and growth or only because of future development and growth. The next step is to determine what proportion of a project benefits existing customers and what percentage benefits future customers. For example, a two-million-gallon reservoir may be needed to meet current storage deficits, but in order to accommodate future growth, a three-million-gallon facility is recommended. In this example, two thirds of the project would be funded from the CRF Water fund and one third from the CEF Water fund. Finally, the availability of funds must be considered; if there is a lack of funds, a project could be delayed or debt could be issued. Detailed funding allocation is calculated for every CIP project and provided to the Finance Department annually along with a schedule of fund expenditures.

The following summarizes the main sources of funding for CIP projects:

Capital Replacement Funds

Capital Replacement Funds (CRF) are internally designated to benefit existing customers. CRF funds the replacement of capital assets (other than vehicles and equipment) as they reach the end of their useful lives; it also funds debt principal payments for borrowings related to existing facilities. Funding of the CRF is determined as part of the rate setting process; sources include rates charged to existing customers and a portion of capacity fees paid by developers to "buy-in" to the existing system.

Capital Expansion Funds

Capital Expansion Funds (CEF) are restricted funds for each operation (excluding Park). CEF are used to construct facilities that extend services to new customers. This reserve is funded by the growth portion of new user and developer-paid capacity fees and can only be used to fund projects required by growth. Great care is taken to ensure ratepayers are not funding developer projects and vice versa.

Capital Improvement Program Reserve Fund

This reserve was established in the last Business Plan to help defray the cost of important Capital Improvement Projects. This reserve can be funded with unrestricted funds, earmarked CIP funds not spent in a particular year or used to save for expensive projects so as not to overtake the CIP budget or spike rates.

Operating Budget

The District's operating budget is funded by rates charged to existing customers. In 2009, the District adopted Governmental Accounting Standards Board (GASB) Statement No. 51 (GASB 51). Under GASB 51, certain phases of project development cannot be capitalized, such as studies and preliminary analysis. Only work specifically tied to the final constructed asset can be capitalized. Therefore, certain preliminary project tasks are expensed and therefore included in the operating budget.

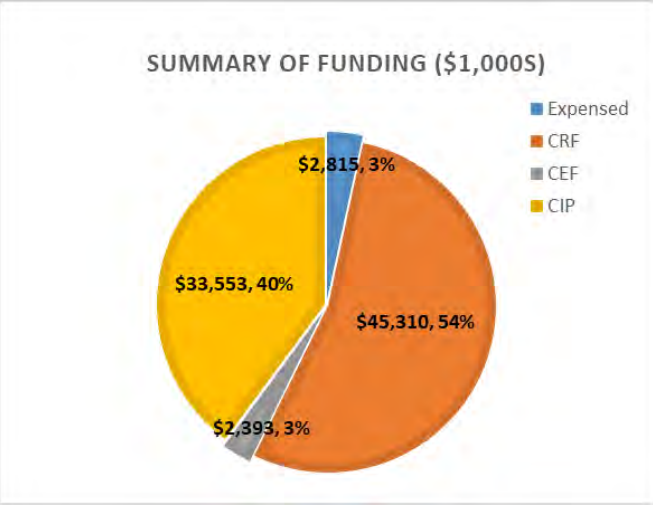
Other Sources of Funding

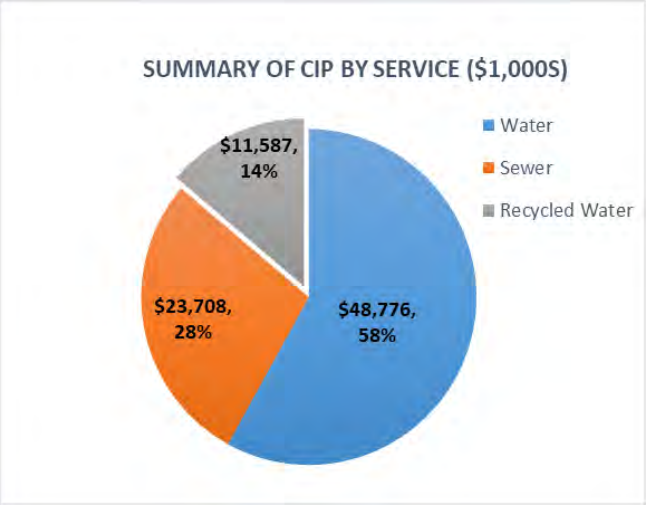
The current CIP budget is projected to utilize only the District's capital reserves and pay-go. However, the District is continually exploring other sources of funding, such as debt financing, grants, and participation by other agencies and developers.

CIP Funding Plan

Consistent with the Business Plan, the CIP is tasked to "live within the household budget." Total projected expenditures for the Five-Year CIP are anticipated to be approximately $84.1 million. Approximately $45.3 million is required from Capital Replacement Funds, $2.4 million from Capital Expansion Funds, and $33.6 million from the District's CIP Reserve Funds. The remaining $2.8 million, shown as "Expensed," is included in the District's operating budget.

ANNUAL CIP BUDGET INCLUDED IN THE OPERATING BUDGET*						
OPERATION	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**TOTAL**
POTABLE WATER						
Expense	$394,961	$567,594	$651,930	$337,738	$495,989	$2,448,212
CRF	$6,030,490	$6,299,790	$4,410,285	$4,108,002	$9,227,676	$30,076,243
CEF	$112,035	$112,035	$161,263	$238,620	$240,730	$864,682
CIP	-	$5,335,000	$10,051,693	-	-	$15,386,693
Subtotal	**$6,537,486**	**$12,314,419**	**$15,275,170**	**$4,684,360**	**$9,964,395**	**$48,775,830**
SEWER						
Expense	$32,445	$51,945	$119,667	$69,393	$41,084	$314,534
CRF	$1,256,320	$2,715,840	$5,168,424	$3,141,909	$1,057,360	$13,339,853
CEF	$67,900	$248,500	$586,975	$391,963	$232,669	$1,528,007
CIP	-	$2,644,000	$2,644,000	$1,444,500	$1,793,012	$8,525,512
Subtotal	**$1,356,665**	**$5,660,285**	**$8,519,065**	**$5,047,765**	**$3,124,125**	**$23,707,905**
RECYCLED WATER						
Expense	-	$4,500	$16,124	$28,389	$2,937	$51,950
CRF	$38,075	$183,735	$583,402	$955,986	$133,043	$1,894,240
CEF	-	-	-	-	-	$0
CIP	-	$3,493,000	$3,259,000	$1,444,500	$1,444,500	$9,641,000
Subtotal	**$38,075**	**$3,681,235**	**$3,858,525**	**$2,428,875**	**$1,580,480**	**$11,587,190**
TOTAL						
Expense	$427,406	$624,039	$787,721	$435,520	$540,010	$2,814,696
Capitalized	$7,504,820	$21,031,900	$26,865,039	$11,725,480	$14,128,990	$81,256,229
Total	**$7,932,226**	**$21,655,939**	**$27,652,760**	**$12,161,000**	**$14,669,000**	**$84,070,925**
*** Excludes Park CIP which is funded by Park revenues and does notimpact utility rates.**						





3. CIP BUDGET TABLES

Introduction to the Tables

Project Cost Estimates Project cost estimates are updated every year. Components of the cost estimates includes engineering service (planning, design and construction management); environmental related costs; land acquisition; direct costs (including legal fees and administration support); indirect costs (such as office maintenance and utilities, accounting and other support services); and construction contingencies. Cost estimates are accurate within plus and minus ranges* that vary depending on project stage as follows:

Preliminary planning estimate	+50 percent to -30 percent
Completion-of-planning estimates	+30 percent to -20 percent
Design level estimates	+15 percent to -10 percent

* AACE International Recommended Practice No. 18R-97: Cost Estimate Classification System (Rev. March 2019)

Accounting Method This document was prepared in accordance with generally accepted accounting principles. The accrual basis of accounting is utilized as required by the Government Accounting Standards Board for enterprise municipalities.

Year The District's fiscal year begins July 1 and ends June 30 of the following year. In the tables, a year shown as "22/23" represents Fiscal Year 2023, or July 1, 2022 through June 30, 2023.

Inflation The budget includes an inflation allowance of 3.3 percent per year.

New CIP Projects with new budgets in the 2023-2027 Business Plan i.e. not carried over from the prior business plan (see "Carryover"). These are the projects supported by the rate increases of this Five Year Business Plan.

Committed Projects These projects were budgeted to be complete in 2018-2022 but are still on-going and will be invoiced during the 2023-2027 Business Plan. The committed funding comes from the previous 2018-2022 budget cycle and therefore aren't included in the current budget cycle for 2023-2027.

Capitalized Operations Capital projects overseen by the Operations Department, most of which are recurring projects that are capitalized annually.

WRF R&R Replacement and rehabilitation projects at the Ray Stoyer Water Recycling Facility (WRF). The WRF will be decommissioned due to the construction of a new wastewater treatment plant that will be commissioned as part of the East County Advanced Water Purification Project. Budget has been allocated to maintain operations at the current WRF until the new East County AWP Treatment Facilities are commissioned in FY '26.

Mandated by External Agencies Projects required by regulatory agencies and agencies other than Padre Dam. An example is utility relocations for city or county project in alignments where Padre Dam doesn't have prior rights, or participation in inter-agency contractual agreements.

Developer Driven Projects driven by development and developer projects with Padre Dam participation.

CIP General CIP projects that don't fit in the other categories and are managed primarily by the Engineering Department. These are divided by operation into water, sewer, recycled water, and multiple service types.

Expenditures by Project Type

Figure 8 summarizes annual expenditures by operation. Water projects comprise 42.0 %, sewer projects comprise 18.5 %, recycling projects comprise 2.3 %, CIP Reserve Fund project comprises 16.1%, and East County AWP projects comprise 21.2% of the budget. Table 1 summarizes the CIP budget, as a whole, by project type for each operation. Rehabilitation and replacement comprise 62.2% of the total budget. Capacity upgrades comprise 8.8%. Reliability projects make up 20.6% of the budget. The remaining 8.4% is upgrades to existing facilities, external mandates, developer driven projects, and other.

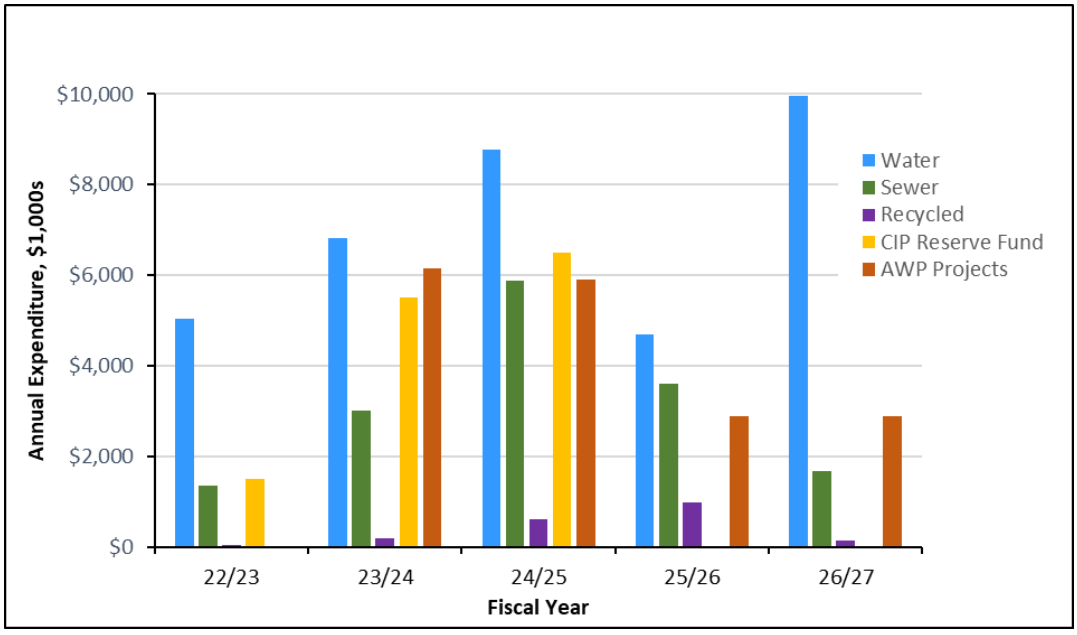


Figure 8 Annual Expenditures by Operation

Table 1 Total Expenditures by Project Type ($1,000s)

Service	Capacity	Rehab. & Replacement	Reliability	Upgrades	Mandates, developer, misc.	Total
Water	$1,750	$17,600	$11,143	$2,300	$2,500	$35,293
Sewer	$5,659	$6,059	$3,189	$607	$0	$15,514
Recycling	$0	$173	$111	$1,662	$0	$1,946
CIP Reserve Fund	$0	$13,500	$0	$0	$0	$13,500
AWP Projects	$0	$14,930	$2,888	$0	$0	$17,818
Total	$7,409	$52,262	$17,331	$4,569	$2,500	$84,071

CIP Project Expenditures

Table 2 provides a summary of CIP project expenditures. Table 3 shows annual expenditures for each planned CIP project.

Table 2 Summary of CIP Projects ($1,000s)

	22/23	23/24	24/25	25/26	26/27	Total
NEW CIP						
Capitalized Operations	$ 1,517	$ 1,527	$ 1,789	$ 1,549	$ 1,551	$ 7,933
WRF Replacement & Rehab	$ 105	$ 105	$ 105	$ 105	$ 105	$ 525
Mandated by External Agencies	$ 350	$ 350	$ 350	$ 350	$ 350	$ 1,750
Developer Driven	$ 150	$ 150	$ 150	$ 150	$ 150	$ 750
CIP General Water	$ 3,059	$ 4,827	$ 6,478	$ 2,252	$ 7,525	$ 24,141
CIP General Sewer	$ 1,251	$ 2,910	$ 5,528	$ 3,116	$ 1,184	$ 13,989
CIP General Recycled	$ -	$ 150	$ 500	$ 850	$ -	$ 1,500
CIP General Multiple Service Types	$ -	$ -	$ 350	$ 900	$ 915	$ 2,165
Net Total	*$ 6,432*	*$10,019*	*$15,250*	*$ 9,272*	*$11,780*	*$52,753*
CIP Reserve Fund & East County AWP Projects						
Blossom Valley Reservoir Improvements	$ 1,500	$ 5,500	$ 6,500	$ -	$ -	$ 13,500
AWP_Pond C work	$ -	$ 531	$ -	$ -	$ -	$ 531
AWP_Ray Stoyer Demo	$ -	$ -	$ -	$ 2,889	$ 2,889	$ 5,778
AWP_Ray Stoyer Electrical Improvements	$ -	$ 1,054	$ 1,053	$ -	$ -	$ 2,107
AWP_Ray Stoyer Electric Pole Relocation	$ -	$ -	$ 300	$ -	$ -	$ 300
AWP_Ray Stoyer Title 22 Improvements	$ -	$ 1,396	$ 1,395	$ -	$ -	$ 2,791
AWP_Tertiary Filters	$ -	$ 512	$ 511	$ -	$ -	$ 1,023
AWP_PD2 Forcemain & Lift Station	$ -	$ 1,444	$ 1,444	$ -	$ -	$ 2,888
AWP_IPS Improvements	$ -	$ 1,200	$ 1,200	$ -	$ -	$ 2,400
Net Total	*$ 1,500*	*$11,637*	*$12,403*	*$ 2,889*	*$ 2,889*	*$31,318*
Grand Total						
Net Grand Total	**$ 7,932**	**$ 21,656**	**$ 27,653**	**$ 12,161**	**$ 14,669**	**$ 84,071**

NOTES:

1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 3 Annual Project Expenditures ($1,000s)

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Capitalized Operations						
Access Control, Security & Fire System (Near Term)	$0	$2	$300	$0	$0	$302
Blowoff Installation	$5	$5	$7	$5	$5	$27
Pump Station Facility Maintenance	$45	$45	$55	$55	$55	$255
Poly Service Replacement ESA	$92	$92	$92	$92	$92	$460
Poly Service Replacement WSA	$220	$220	$220	$220	$220	$1,100
SCADA Upgrades at District Facilities - Water	$40	$48	$0	$62	$62	$212
Security Enhancements - Field Sites	$20	$20	$20	$20	$20	$100
Sewer Manhole Rehabilitation	$25	$25	$25	$25	$27	$127
Site Paving As Needed	$137	$137	$137	$137	$137	$685
Valve Replacement Contracted - Water[1)]	$8	$8	$8	$8	$8	$42
Valve Replacement Contracted - Water[2)]	$272	$272	$272	$272	$272	$1,358
Valve Rplc ESA - Water	$304	$304	$304	$304	$304	$1,520
Valve Rplc WSA - Water	$349	$349	$349	$349	$349	$1,745
Subtotal Capitalized Operations	***$1,517***	***$1,527***	***$1,789***	***$1,549***	***$1,551***	***$7,933***
WRF Replacement & Rehab						
WRF Mechanical	$50	$50	$50	$50	$50	$250
WRF Electrical	$35	$35	$35	$35	$35	$175
WRF Instrumentation	$20	$20	$20	$20	$20	$100
Subtotal WRF Replacement & Rehabilitation	***$105***	***$105***	***$105***	***$105***	***$105***	***$525***
Mandated by External Agencies						
External Mandates[1)]	$11	$11	$11	$11	$11	$53
External Mandates[2)]	$340	$340	$340	$340	$340	$1,698
Subtotal Mandated by External Agencies	***$350***	***$350***	***$350***	***$350***	***$350***	***$1,750***
Developer Driven						
D/P General[1)]	$5	$5	$5	$5	$5	$23
D/P General[2)]	$146	$146	$146	$146	$146	$728
Subtotal Developer Driven	***$150***	***$150***	***$150***	***$150***	***$150***	***$750***
CIP General Water						
Capacity Improvement Projects per Master Plan[1)]	$8	$8	$8	$8	$8	$38
Capacity Improvement Projects per Master Plan[2)]	$243	$243	$243	$243	$243	$1,213
Condition Assessment - Pipelines	$250	$250	$250	$250	$250	$1,250
Condition Assessment & Rehabilitation - Pump Stations[1)]	$6	$7	$7	$7	$7	$34
Condition Assessment & Rehabilitation - Pump Stations[2)]	$205	$211	$219	$226	$233	$1,094
ESA Looping (Galloway Valley/Alpine West)[1)]	$0	$0	$8	$23	$180	$210
ESA Looping (Galloway Valley/Alpine West)[2)]	$0	$0	$243	$728	$5,820	$6,790
Facility Erosion Repairs	$149	$153	$159	$164	$169	$794
Harbison Canyon Road Pipeline[1)]	$0	$0	$0	$8	$8	$15
Harbison Canyon Road Pipeline[2)]	$0	$0	$0	$243	$243	$485
I-8 Unencased Trans Main Crossing @ Labrador&Dunbar[1)]	$15	$75	$150	$0	$0	$240
I-8 Unencased Trans Main Crossing @ Labrador&Dunbar[2)]	$485	$2,425	$4,850	$0	$0	$7,760
Jerry Johnson Reservoir Refurb/Coating[1)]	$23	$15	$0	$0	$0	$38
Jerry Johnson Reservoir Refurb/Coating[2)]	$728	$485	$0	$0	$0	$1,213
Pipeline Replacement @ Caltrans / Bridge Crossings[1)]	$6	$6	$6	$7	$7	$32
Pipeline Replacement @ Caltrans / Bridge Crossings[2)]	$193	$198	$205	$211	$218	$1,026
Pressure Reducing Station Installations[1)]	$0	$0	$4	$4	$4	$12
Pressure Reducing Station Installations[2)]	$0	$2	$128	$133	$137	$400
Reservoir Refurb/Coating[1)]	$23	$23	$0	$0	$0	$45
Reservoir Refurb/Coating[2)]	$728	$728	$0	$0	$0	$1,455
Subtotal CIP General Water	***$3,059***	***$4,827***	***$6,478***	***$2,252***	***$7,525***	***$24,141***

Table 3 Annual Project Expenditures ($1,000s) (Continued)

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
CIP General Sewer						
County Trunk Sewer Participation[1)]	$0	$23	$24	$36	$0	$83
County Trunk Sewer Participation[2)]	$0	$728	$776	$1,164	$0	$2,668
IPS Influent Sewer[1)]	$11	$8	$32	$0	$0	$50
IPS Influent Sewer[2)]	$340	$243	$1,019	$0	$0	$1,601
Magnolia Av/SR67 Sewer Capacity Improvements[1)]	$15	$15	$45	$0	$0	$75
Magnolia Av/SR67 Sewer Capacity Improvements[2)]	$485	$485	$1,464	$0	$0	$2,434
Sewer & Maintenance Hole Rehabilitation/Replacement	$285	$294	$303	$300	$318	$1,500
Sewer Master Plan Capacity Projects[1)]	$0	$0	$8	$15	$23	$45
Sewer Master Plan Capacity Projects[2)]	$0	$0	$243	$485	$728	$1,455
Siphon and Sludge Main Improvements - Constr	$0	$1,000	$1,500	$1,000	$0	$3,500
Sewer Lift Station Rehabilitation[1)]	$3	$3	$3	$3	$3	$17
Sewer Lift Station Rehabilitation[2)]	$113	$113	$113	$113	$113	$563
Subtotal CIP General Sewer	***$1,251***	***$2,910***	***$5,528***	***$3,116***	***$1,184***	***$13,989***
CIP General Recycled						
Fanita Terrace Reservoir Improvements[1)]	$0	$5	$15	$26	$0	$45
Fanita Terrace Reservoir Improvements[2)]	$0	$146	$485	$825	$0	$1,455
Subtotal CIP General Recycled	***$0***	***$150***	***$500***	***$850***	***$0***	***$1,500***
CIP General Multiple Service Types						
Energy Efficiency Projects[1)]	$0	$0	$0	$15	$9	$24
Energy Efficiency Projects[2)]	$0	$0	$0	$485	$306	$791
Ops Yard Phase 3 Improvements[1)]	$0	$0	$11	$12	$18	$41
Ops Yard Phase 3 Improvements[2)]	$0	$0	$340	$388	$582	$1,310
Subtotal General Multiple Service Types	***$0***	***$0***	***$350***	***$900***	***$915***	***$2,165***
TOTAL NEW CIP	**$6,432**	**$10,019**	**$15,250**	**$9,272**	**$11,780**	**$52,753**
CIP RESERVE FUNDING						
Blossom Valley Reservoir Improvements[1)]	$45	$165	$195	$0	$0	$405
Blossom Valley Reservoir Improvements[2)]	$1,455	$5,335	$6,305	$0	$0	$13,095
AWP PROJECTS[3)]	$0	$0	$0	$0	$0	
Pond C work	$0	$531	$0	$0	$0	$531
Ray Stoyer Demo	$0	$0	$0	$2,889	$2,889	$5,778
Ray Stoyer Electrical Improvements	$0	$1,054	$1,053	$0	$0	$2,107
Ray Stoyer Electric Pole Relocation	$0	$0	$300	$0	$0	$300
Ray Stoyer Title 22 Improvements	$0	$1,396	$1,395	$0	$0	$2,791
Tertiary Filters	$0	$512	$511	$0	$0	$1,023
PD2 Forcemain & Lift Station	$0	$1,444	$1,444	$0	$0	$2,888
IPS Improvements	$0	$1,200	$1,200	$0	$0	$2,400
SUBTOTAL RESERVE FUNDING & AWP PROJECTS	**$1,500**	**$11,637**	**$12,403**	**$2,889**	**$2,889**	**$31,318**
GRAND TOTAL	**$7,932**	**$21,656**	**$27,653**	**$12,161**	**$14,669**	**$84,071**

NOTES:

1) This is for the Expensed Component of the project including preliminary engineering.
2) This is for the Capitalized Component of the project including design, and construction.
3) This projects are for the components of the East County AWP that directly benefit Padre Dam and are being performed as part of the East County AWP construction.

Expenditures by Funding Source

Table 4 presents a summary of expenditures by funding source followed by Tables 5 through 13 which present a detailed listing of project expenditures for each District fund.

Table 4 Expenditures by Funding Source ($1,000s)[1),2)]

	22/23	23/24	24/25	25/26	26/27	Total
CRF Water						
New CIP	$ 4,575	$ 6,300	$ 8,113	$ 3,977	$ 8,180	$ 31,146
CIP Reserve Funding	$ 1,455	$ 5,335	$ 6,305	$ -	$ -	$ 13,095
Net Total	*$ 6,030*	*$11,635*	*$14,418*	*$ 3,977*	*$ 8,180*	*$44,241*
CEF Water						
New CIP	$ 112	$ 112	$ 205	$ 370	$ 1,288	$ 2,087
CIP Reserve Funding	$ -	$ -	$ -	$ -	$ -	$ -
Net Total	*$ 112*	*$ 112*	*$ 205*	*$ 370*	*$ 1,288*	*$ 2,087*
Expensed Water						
New CIP	$ 350	$ 403	$ 457	$ 338	$ 496	$ 2,043
CIP Reserve Funding	$ 45	$ 165	$ 195	$ -	$ -	$ 405
Net Total	*$ 395*	*$ 568*	*$ 652*	*$ 338*	*$ 496*	*$ 2,448*
CRF Sewer						
New CIP	$ 1,256	$ 2,716	$ 5,168	$ 3,142	$ 1,406	$ 13,688
CIP Reserve Funding	$ -	$ 2,644	$ 2,644	$ 1,445	$ 1,445	$ 8,177
Net Total	*$ 1,256*	*$ 5,360*	*$ 7,812*	*$ 4,586*	*$ 2,850*	*$21,865*
CEF Sewer						
New CIP	$ 68	$ 249	$ 587	$ 392	$ 233	$ 1,528
CIP Reserve Funding	$ -	$ -	$ -	$ -	$ -	$ -
Net Total	*$ 68*	*$ 249*	*$ 587*	*$ 392*	*$ 233*	*$ 1,528*
Expensed Sewer						
New CIP	$ 32	$ 52	$ 120	$ 69	$ 41	$ 315
CIP Reserve Funding	$ -	$ -	$ -	$ -	$ -	$ -
Net Total	*$ 32*	*$ 52*	*$ 120*	*$ 69*	*$ 41*	*$ 315*
CRF Recycled						
New CIP	$ 38	$ 184	$ 572	$ 927	$ 104	$ 1,825
CIP Reserve Funding	$ -	$ 3,493	$ 3,259	$ 1,445	$ 1,445	$ 9,641
Net Total	*$ 38*	*$ 3,677*	*$ 3,831*	*$ 2,372*	*$ 1,548*	*$11,466*
CEF Recycled						
New CIP	$ -	$ -	$ 11	$ 29	$ 29	$ 69
CIP Reserve Funding	$ -	$ -	$ -	$ -	$ -	$ -
Net Total	*$ -*	*$ -*	*$ 11*	*$ 29*	*$ 29*	*$ 69*
Expensed Recycled						
New CIP	$ -	$ 5	$ 16	$ 28	$ 3	$ 52
CIP Reserve Funding	$ -	$ -	$ -	$ -	$ -	$ -
Net Total	*$ -*	*$ 5*	*$ 16*	*$ 28*	*$ 3*	*$ 52*
Total						
New CIP	$ 6,432	$ 10,019	$ 15,250	$ 9,272	$ 11,780	$ 52,753
CIP Reserve Funding	$ 1,500	$ 11,637	$ 12,403	$ 2,889	$ 2,889	$ 31,318
Net Total	**$ 7,932**	**$ 21,656**	**$ 27,653**	**$ 12,161**	**$ 14,669**	**$ 84,071**

NOTES:
1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 5 Expenditures by Funding Source - CRF Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Capitalized Operations						
Access Control, Security & Fire System (Near Term)	$0	$1	$183	$0	$0	$184
Blowoff Installation	$5	$5	$7	$5	$5	$27
Pump Station Facility Maintenance	$45	$45	$55	$55	$55	$255
Poly Service Replacement ESA	$92	$92	$92	$92	$92	$460
Poly Service Replacement WSA	$220	$220	$220	$220	$220	$1,100
SCADA Upgrades at District Facilities - Water	$40	$48	$0	$62	$62	$212
Security Enhancements - Field Sites	$20	$20	$20	$20	$20	$100
Site Paving As Needed	$127	$127	$127	$127	$127	$634
Valve Replacement Contracted - Water	$272	$272	$272	$272	$272	$1,358
Valve Rplc ESA - Water	$304	$304	$304	$304	$304	$1,520
Valve Rplc WSA - Water	$349	$349	$349	$349	$349	$1,745
Subtotal Capitalized Operations	$***1,473***	$***1,483***	$***1,628***	$***1,505***	$***1,505***	$***7,595***
Mandated **by External Agencies**						
External Mandates	***$227***	***$227***	***$227***	***$227***	***$227***	***$1,137***
Subtotal Mandated *by External Agencies*	$***227***	$***227***	$***227***	$***227***	$***227***	$***1,137***
Developer **Driven**						
D/P General	***$146***	***$146***	***$146***	***$146***	***$146***	***$728***
Subtotal Developer Driven	$***146***	$***146***	$***146***	$***146***	$***146***	$***728***
CIP General Water						
Capacity Improvement Projects per Master Plan	$243	$243	$243	$243	$243	$1,213
Condition Assessment & Rehabilitation - Pump Stations	$205	$211	$219	$226	$233	$1,094
ESA Looping (Galloway Valley/Alpine West)	$0	$0	$199	$597	$4,772	$5,568
Facility Erosion Repairs	$149	$153	$159	$164	$169	$794
Harbison Canyon Road Pipeline	$0	$0	$0	$243	$243	$485
I-8 Unencased Trans Main Crossing @ Labrador & Dunbar	$485	$2,425	$4,850	$0	$0	$7,760
Jerry Johnson Reservoir Refurb/Coating	$728	$485	$0	$0	$0	$1,213
Pipeline Replacement @ Caltrans / Bridge Crossings	$193	$198	$205	$211	$218	$1,026
Pressure Reducing Station Installations	$0	$2	$128	$133	$137	$400
Reservoir Refurb/Coating	***$728***	***$728***	***$0***	***$0***	***$0***	***$1,455***
Subtotal CIP General Water	$***2,729***	$***4,444***	$***6,002***	$***1,816***	$***6,014***	$***21,006***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$157	$99	$256
Ops Yard Phase 3 Improvements	***$0***	***$0***	***$110***	***$126***	***$189***	***$424***
Subtotal General Multiple *Service Types*	$**0**	$**0**	$**110**	$**283**	$**288**	$**680**
TOTAL NEW CIP	$4,575	$6,300	$8,113	$3,977	$8,180	$31,146
CIP RESERVE FUNDING						
Blossom Valley Reservoir Improvements	**$1,455**	**$5,335**	**$6,305**	**$0**	**$0**	**$13,095**
SUBTOTAL RESERVE FUNDING	**$1,455**	**$5,335**	**$6,305**	**$0**	**$0**	**$13,095**
GRAND TOTAL	**$6,030**	**$11,635**	**$14,418**	**$3,977**	**$8,180**	**$44,241**

NOTES:

1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 6 Expenditures by Funding Source - CEF Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Mandated by External Agencies						
External Mandates	$112	$112	$112	$112	$112	$560
Subtotal	***$112***	***$112***	***$112***	***$112***	***$112***	***$560***
CIP General Water						
ESA Looping (Galloway Valley/Alpine West)	$0	$0	$44	$131	$1,048	$1,222
Subtotal	***$0***	***$0***	***$44***	***$131***	***$1,048***	***$1,222***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$70	$44	$115
Ops Yard Phase 3 Improvements	$0	$0	$49	$56	$84	$190
Subtotal	***$0***	***$0***	***$49***	***$127***	***$129***	***$305***
TOTAL NEW CIP	**$112**	**$112**	**$205**	**$370**	**$1,288**	**$2,087**
GRAND TOTAL	**$112**	**$112**	**$205**	**$370**	**$1,288**	**$2,087**

NOTES:

1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 7 Expenditures by Funding Source – Operating (Expensed) Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Capitalized Operations						
Valve Replacement Contracted - Water	$8	$8	$8	$8	$8	$42
Subtotal	***$8***	***$8***	***$8***	***$8***	***$8***	***$42***
Mandated by External Agencies						
External Mandates	$7	$7	$7	$7	$7	$35
Subtotal	***$7***	***$7***	***$7***	***$7***	***$7***	***$35***
Developer Driven						
D/P General	$5	$5	$5	$5	$5	$23
Subtotal	***$5***	***$5***	***$5***	***$5***	***$5***	***$23***
CIP General Water						
Capacity Improvement Projects per Master Plan	$8	$8	$8	$8	$8	$38
Condition Assessment - Pipelines	$250	$250	$250	$250	$250	$1,250
Condition Assessment & Rehabilitation - Pump Stations	$6	$7	$7	$7	$7	$34
ESA Looping (Galloway Valley/Alpine West)	$0	$0	$8	$23	$180	$210
Harbison Canyon Road Pipeline	$0	$0	$0	$8	$8	$15
I-8 Unencased Trans Main Crossing @ Labrador & Dunbar	$15	$75	$150	$0	$0	$240
Jerry Johnson Reservoir Refurb/Coating	$23	$15	$0	$0	$0	$38
Pipeline Replacement @ Caltrans / Bridge Crossings	$6	$6	$6	$7	$7	$32
Pressure Reducing Station Installations	$0	$0	$4	$4	$4	$12
Reservoir Refurb/Coating	$23	$23	$0	$0	$0	$45
Subtotal	***$330***	***$383***	***$432***	***$305***	***$463***	***$1,913***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$7	$4	$11
Ops Yard Phase 3 Improvements	$0	$0	$5	$6	$8	$19
Subtotal	***$0***	***$0***	***$5***	***$13***	***$13***	***$30***
TOTAL NEW CIP	**$350**	**$403**	**$457**	**$338**	**$496**	**$2,043**
CIP RESERVE FUNDING						
Blossom Valley Reservoir Improvements	$45	$165	$195	$0	$0	$405
SUBTOTAL RESERVE FUNDING	**$45**	**$165**	**$195**	**$0**	**$0**	**$405**
GRAND TOTAL	**$395**	**$568**	**$652**	**$338**	**$496**	**$2,448**

NOTES:

1) Costs include an inflation factor of 3.3% per year.

2) Amounts are rounded which may affect footing.

Table 8 Expenditures by Funding Source - CRF Sewer ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Capitalized Operations						
Access Control, Security & Fire System (Near Term)	$0	$1	$93	$0	$0	$94
Sewer Manhole Rehabilitation	$25	$25	$25	$25	$27	$127
Site Paving As Needed	$7	$7	$7	$7	$7	$34
Subtotal	***$32***	***$32***	***$125***	***$32***	***$34***	***$255***
WRF Replacement & Rehab						
WRF Mechanical	$34	$34	$34	$34	$34	$168
WRF Electrical	$23	$23	$23	$23	$23	$117
WRF Instrumentation	$13	$13	$13	$13	$13	$67
Subtotal	***$70***	***$70***	***$70***	***$70***	***$70***	***$352***
CIP General Sewer						
County Trunk Sewer Participation	$0	$728	$776	$1,164	$0	$2,668
IPS Influent Sewer	$272	$194	$815	$0	$0	$1,280
Magnolia Ave/SR-67 Sewer Capacity Improvements	$485	$485	$1,464	$0	$0	$2,434
Sewer & Manhole Rehabilitation/Replacement	$285	$294	$303	$300	$318	$1,500
Sewer Master Plan Capacity Projects	$0	$0	$204	$407	$611	$1,222
Siphon and Sludge Main Improvements - Constr	$0	$800	$1,200	$800	$0	$2,800
Sewer Lift Station Rehabilitation	$113	$113	$113	$113	$113	$563
Subtotal	***$1,154***	***$2,613***	***$4,874***	***$2,784***	***$1,042***	***$12,466***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$142	$90	$232
Ops Yard Phase 3 Improvements	$0	$0	$99	$114	$171	$384
Subtotal	***$0***	***$0***	***$99***	***$256***	***$260***	***$615***
TOTAL NEW CIP	**$1,256**	**$2,716**	**$5,168**	**$3,142**	**$1,406**	**$13,688**
CIP RESERVE FUNDING						
Ray Stoyer Demo	$0	$0	$0	$1,445	$1,445	$2,889
PD2 Forcemain & Lift Station	$0	$1,444	$1,444	$0	$0	$2,888
IPS Improvements	$0	$1,200	$1,200	$0	$0	$2,400
SUBTOTAL RESERVE FUNDING	**$0**	**$2,644**	**$2,644**	**$1,445**	**$1,445**	**$8,177**
GRAND TOTAL	**$1,256**	**$5,360**	**$7,812**	**$4,586**	**$2,850**	**$21,865**

NOTES:

1) Costs include an inflation factor of 3.3% per year.

2) Amounts are rounded which may affect footing.

Table 9 Expenditures by Funding Source - CEF Sewer ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
CIP General Sewer						
IPS Influent Sewer	$68	$49	$204	$0	$0	$320
Sewer Master Plan Capacity Projects	$0	$0	$39	$78	$116	$233
Siphon and Sludge Main Improvements - Constr	$0	$200	$300	$200	$0	$700
Subtotal	***$68***	***$249***	***$543***	***$278***	***$116***	***$1,253***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$64	$40	$104
Ops Yard Phase 3 Improvements	$0	$0	$44	$51	$76	$172
Subtotal	***$0***	***$0***	***$44***	***$114***	***$116***	***$275***
TOTAL NEW CIP	**$68**	**$249**	**$587**	**$392**	**$233**	**$1,528**
GRAND TOTAL	**$68**	**$249**	**$587**	**$392**	**$233**	**$1,528**

NOTES:

1) Costs include an inflation factor of 3.3% per year.

2) Amounts are rounded which may affect footing.

Table 10 Expenditures by Funding Source - Operating (Expensed) Sewer ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Mandated by External Agencies						
External Mandates	$3	$3	$3	$3	$3	$17
Subtotal	***$3***	***$3***	***$3***	***$3***	***$3***	***$17***
CIP General Sewer						
County Trunk Sewer Participation	$0	$23	$24	$36	$0	$83
IPS Influent Sewer	$11	$8	$32	$0	$0	$50
Magnolia Ave/SR-67 Sewer Capacity Improvements	$15	$15	$45	$0	$0	$75
Sewer Master Plan Capacity Projects	$0	$0	$8	$15	$23	$45
Sewer Lift Station Rehabilitation	$3	$3	$3	$3	$3	$17
Subtotal	***$29***	***$48***	***$112***	***$54***	***$26***	***$270***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$6	$4	$10
Ops Yard Phase 3 Improvements	$0	$0	$4	$5	$8	$17
Subtotal	***$0***	***$0***	***$4***	***$11***	***$12***	***$28***
TOTAL NEW CIP	**$32**	**$52**	**$120**	**$69**	**$41**	**$315**
GRAND TOTAL	**$32**	**$52**	**$120**	**$69**	**$41**	**$315**

NOTES:

1) Costs include an inflation factor of 3.3% per year.

2) Amounts are rounded which may affect footing.

Table 11 Expenditures by Funding Source - CRF Recycled Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
Capitalized Operations						
Access Control, Security & Fire System (Near Term)	$0	$0	$24	$0	$0	$24
Site Paving As Needed	$3	$3	$3	$3	$3	$17
Subtotal	***$3***	***$4***	***$27***	***$3***	***$3***	***$41***
WRF Replacement & Rehab						
WRF Mechanical	$17	$17	$17	$17	$17	$83
WRF Electrical	$12	$12	$12	$12	$12	$58
WRF Instrumentation	$7	$7	$7	$7	$7	$33
Subtotal	***$35***	***$35***	***$35***	***$35***	***$35***	***$173***
CIP General Recycled						
Fanita Terrace Reservoir Improvements	$0	$146	$485	$825	$0	$1,455
Subtotal	***$0***	***$146***	***$485***	***$825***	***$0***	***$1,455***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$36	$23	$59
Ops Yard Phase 3 Improvements	$0	$0	$25	$29	$43	$97
Subtotal	***$0***	***$0***	***$25***	***$65***	***$66***	***$155***
TOTAL NEW CIP	**$38**	**$184**	**$572**	**$927**	**$104**	**$1,825**
East County AWP PROJECTS						
Pond C work	$0	$531	$0	$0	$0	$531
Ray Stoyer Demo	$0	$0	$0	$1,445	$1,445	$2,889
Ray Stoyer Electrical Improvements	$0	$1,054	$1,053	$0	$0	$2,107
Ray Stoyer Electric Pole Relocation	$0	$0	$300	$0	$0	$300
Ray Stoyer Title 22 Improvements	$0	$1,396	$1,395	$0	$0	$2,791
Tertiary Filters	$0	$512	$511	$0	$0	$1,023
SUBTOTAL East County AWP PROJECTS	**$0**	**$3,493**	**$3,259**	**$1,445**	**$1,445**	**$9,641**
GRAND TOTAL	**$38**	**$3,677**	**$3,831**	**$2,372**	**$1,548**	**$11,466**

NOTES:

1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 12 Expenditures by Funding Source CEF Recycled Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$16	$10	$26
Ops Yard Phase 3 Improvements	$0	$0	$11	$13	$19	$43
Subtotal	***$0***	***$0***	***$11***	***$29***	***$29***	***$69***
TOTAL NEW CIP	**$0**	**$0**	**$11**	**$29**	**$29**	**$69**
GRAND TOTAL	**$0**	**$0**	**$11**	**$29**	**$29**	**$69**

NOTES:

1) Costs include an inflation factor of 3.3% per year.
2) Amounts are rounded which may affect footing.

Table 13 Expenditures by Funding Source - Operating (Expensed) Recycled Water ($1,000s)[1),2)]

Project Name	FY '23	FY '24	FY '25	FY '26	FY '27	Total
NEW CIP						
CIP General Recycled						
Fanita Terrace Reservoir Improvements	$0	$5	$15	$26	$0	$45
RW System Decomissioning	$0	$0	$0	$0	$0	$0
RW System Decomissioning	$0	$0	$0	$0	$0	$0
Subtotal	***$0***	***$5***	***$15***	***$26***	***$0***	***$45***
CIP General Multiple Service Types						
Energy Efficiency Projects	$0	$0	$0	$0	$0	$0
Ops Yard Phase 3 Improvements	$0	$0	$1	$1	$2	$4
Subtotal	***$0***	***$0***	***$1***	***$1***	***$2***	***$4***
TOTAL NEW CIP	**$0**	**$5**	**$16**	**$27**	**$2**	**$49**
GRAND TOTAL	**$0**	**$5**	**$16**	**$27**	**$2**	**$49**

NOTES:

1)Costs include an inflation factor of 3.3% per year.
2)Amounts are rounded which may affect footing.

4. CIP PROJECT DESCRIPTIONS

The following section provides a detailed description of each project planned over the next five years including scope, status and timing if applicable, and budget.

Table 14 Explanation of Terms

Project Name	Unique title provided to each individual project typically identifying project type and purpose.
Job No.	Job number assigned for internal budget tracking purposes. Job numbers are opened once preliminary work begins.
Category	Category as shown in the budget tables.
Priority	Divided into three priority categories Highest, High, and Medium. Priority is a result of the ranking process described in the CIP Planning Process in Chapter 2. Some projects are labeled "NA" (not applicable) either because they are developer driven upgrades, mandates by external agencies, or annually recurring projects performed by Operations staff.
Master Plan No.	Facilities Plan Update dated June 2022.
Dept	Department responsible for implementing the project.
Project Type	Operation and whether the project is primarily rehabilitation and replacement (R&R) of an existing facility, capacity, upgrade of an existing facility, water reliability, etc.
Location	Street and city if applicable.
Description	Brief description of the scope and reason for the project.
Schedule	Planned schedule. If the project has advanced beyond planning level, additional detail is provided such as major phases of work and factors affecting the schedule.
Related Projects	Projects which are either prerequisites to, or are dependent on, the project being discussed.
Cost Estimate Accuracy	Preliminary planning level +50 percent to -30 percent Completion-of-planning level +30 percent to -20 percent Design level +15 percent to -10 percent
District Fund Allocation	Percent of project expenditures allocated to each fund. Proceeds from grants and loans replenish District funds in the same percentages.
Budget	Budgeted annual expenditures.
Cost to Date or Historical Costs	Total costs incurred as of June 20, 2022. For annually recurring projects such as valve replacement, an average of similar past projects.
Operating Budget	Where possible, either a qualitative description or a dollar estimate of Incremental operations and maintenance expenses is provided.

5. CAPITALIZED OPERATIONS

Access Control, Security, & Fire System

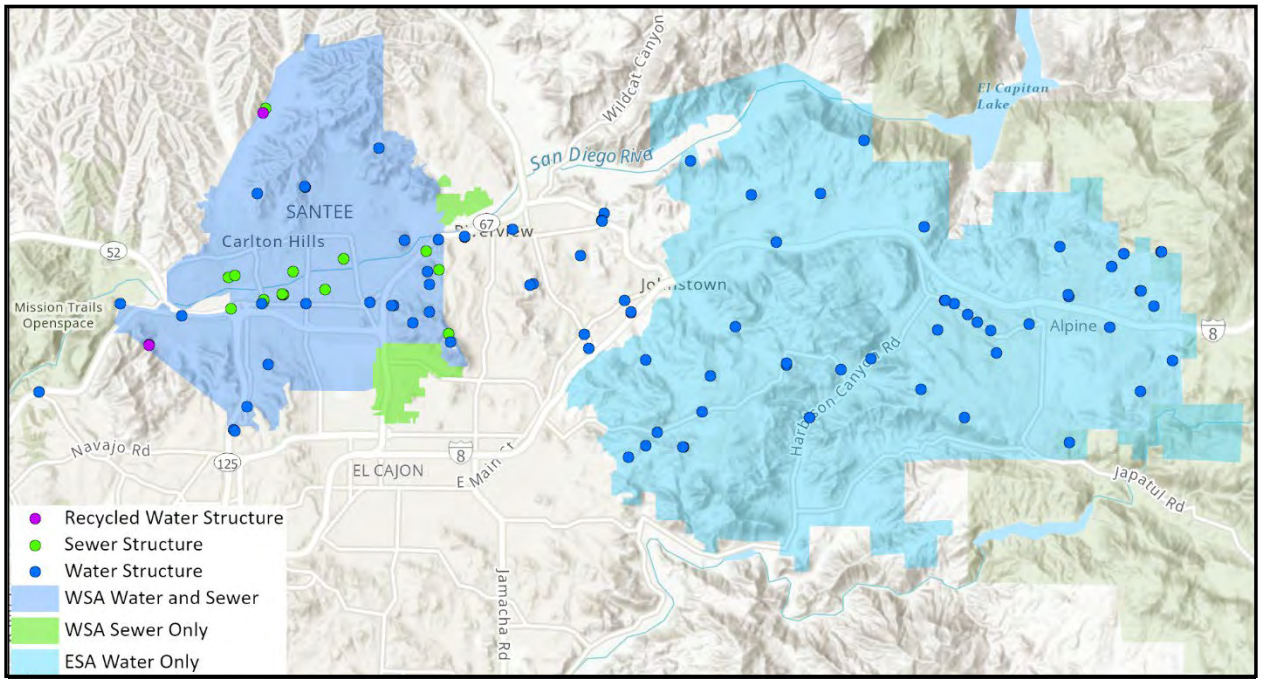
Priority: Medium

Masterplan No: PM-9, WWO-3, RWO-5
Department and Project Manager: Operations
Project Type: Water, Sewer, Recycling, Miscellaneous
Schedule: The project will be completed in FY25.

Total Budget: $302,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation: 61% CRF Water; 31% CRF sewer; 8% CRF Recycling

Description: The Access Control, Security & Fire System Project improves the safety and security of District facilities and our employees. Our goal is to consolidate alarm-monitoring companies and reduce monthly costs. It would improve security by upgrading equipment and allowing remote system access for real time monitoring. The District would also gain improved and centralized administrative controls for our campus and satellite facilities.

Location: District-wide as needed.



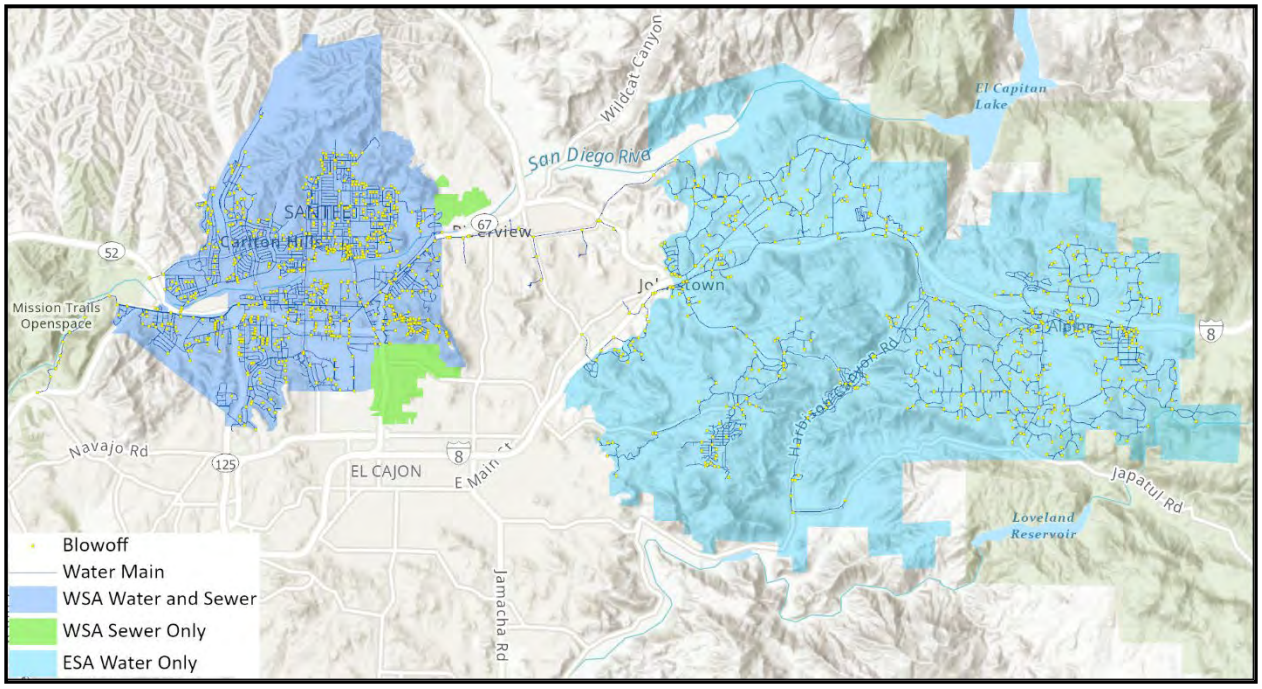
Blow-off Installation

Priority: Medium
Masterplan No: PM-10
Department: Operations
Project Type: Water, Miscellaneous
Schedule: Ongoing

Total Budget: $27,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
Historical Costs: $212,000 in the FY 17-22.
District Fund Allocation: 100% CRF Water

Description: The Blow-off Installation Project is an ongoing project to add and replace blow-offs at the end of dead-end pipes throughout the District. The new and existing blow-offs will facilitate pipe flushing in those pipes without a fire hydrant near the end of the line. Flushing reduces water age and improves the distribution system chlorine residual and overall water quality.

Location: District-wide as needed.



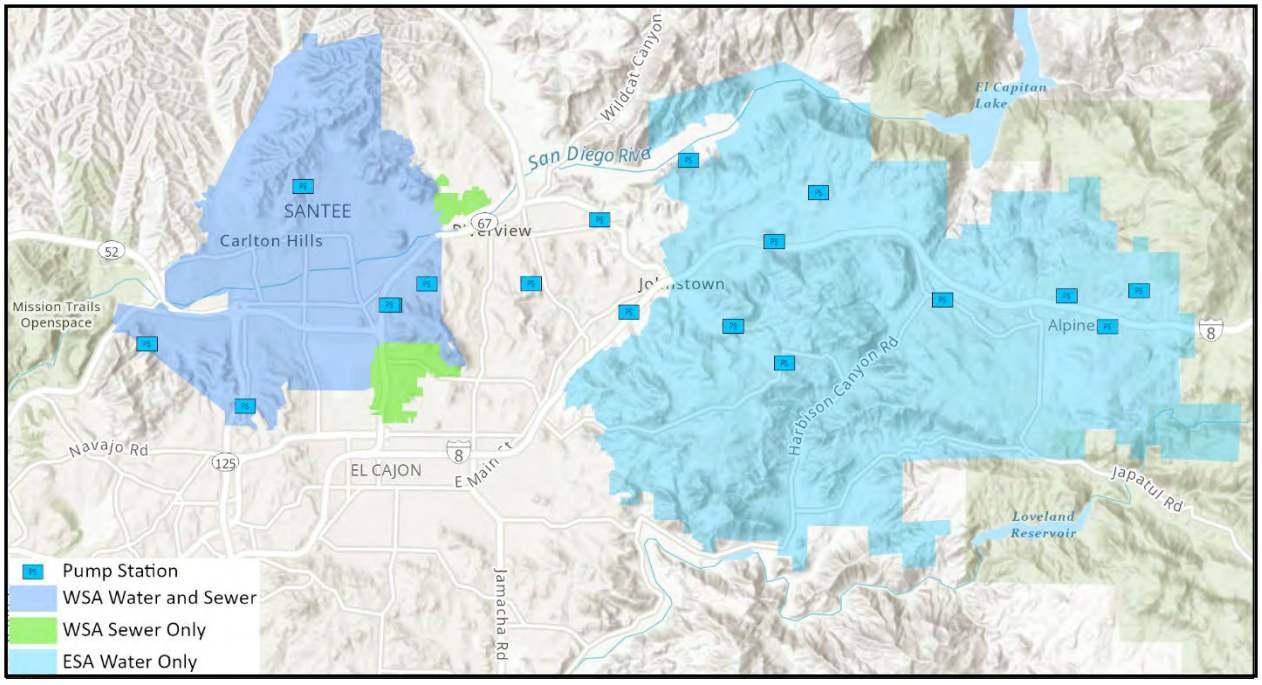
Pump Station Facility Improvements

Priority: Medium
Masterplan No: NA
Department: Operations
Project Type: Water, Miscellaneous
Schedule: Ongoing

Total Budget: $255,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: 100% CRF Water

Description: This Pump Station Facility Improvements Project proposes upgrades to the District's pump station buildings. This includes roof replacements and other architectural improvements that improve weatherproofing. For FY23-27, up to three (3) facility improvement projects will be performed in FY23-27.

Location: District-wide as needed



Poly Service Replacement

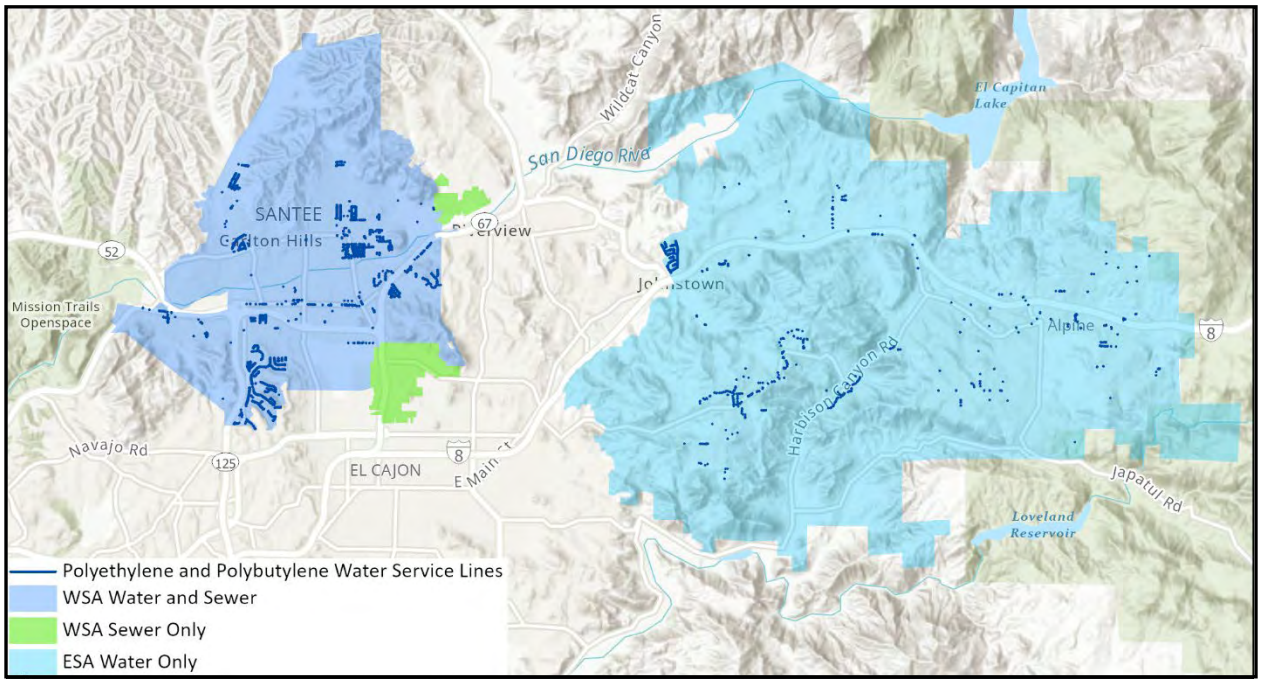
Priority: High
Masterplan No: PM-12, PM-13
Department: Operations
Project Type: Water, Miscellaneous
Schedule: Ongoing

Total Budget: $1,560.000
Operating Budget Impact: None.
Cost Estimate Accuracy: Planning Level, based on historical costs.
Historical Costs: $345,000 was spent in the ESA and $796,000 in the WSA during FY 17-22.
District Fund Allocation: 100% CRF Water

Description: This is an ongoing project consisting of the replacement of polyethylene and polybutylene ("poly") water pipelines used by developers in the 1960s and 1970s. Due to improper installation and a tendency to become brittle over time, these pipelines have been found to have a shortened useful service life. The method of replacement is pipe bursting of the polyethylene/ polybutylene pipe with copper pipe, negating the need for open trenching and pavement repair.

There are approximately 700 poly services in the ESA and 2,600 in the WSA. This project replaces approximately 40 poly service lines per year for a total of 200 services during FY23-27.

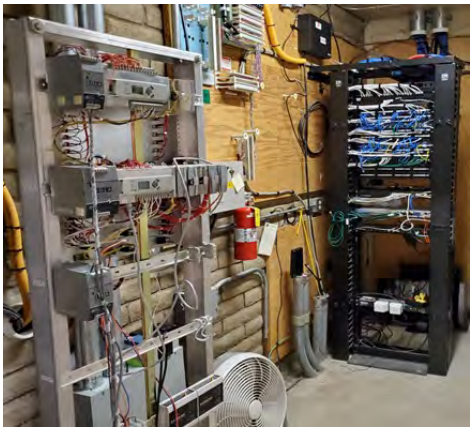
Location: District-wide as needed.



SCADA Upgrades at District Facilities-Water

Priority: Medium
Masterplan No: PM-14
Department: Operations
Project Type: Water, Miscellaneous
Schedule: Upgrades are planned annually.

Total Budget: $212,000
Operation Budget Impact: None
Cost Estimate Accuracy: Based on historical costs
District Fund Allocation: 100% CRF Water



Description
The monitoring and control of the water and recycled water distribution system and wastewater collection system is performed through the use of a computerized system comprised of digital sensors, Programmable Logic Controllers (PLCs), and radio telemetry hardware located at each facility that communicates and continuously reports back to a central control station. The industrial control system, called Supervisory Control and Data Acquisition (SCADA) system, is customized specifically for District's distribution and collection systems. PLCs are installed at each tank, pump station, lift station and chloramine feed station. The SCADA system needs to be upgraded and equipment replaced about every 10 years due to aging and also to maintain compatibility with current software, industry systems and security standards. In addition, technology advances so quickly that hardware, software and support are no longer available for the District's older SCADA system components.

Location: District-wide.

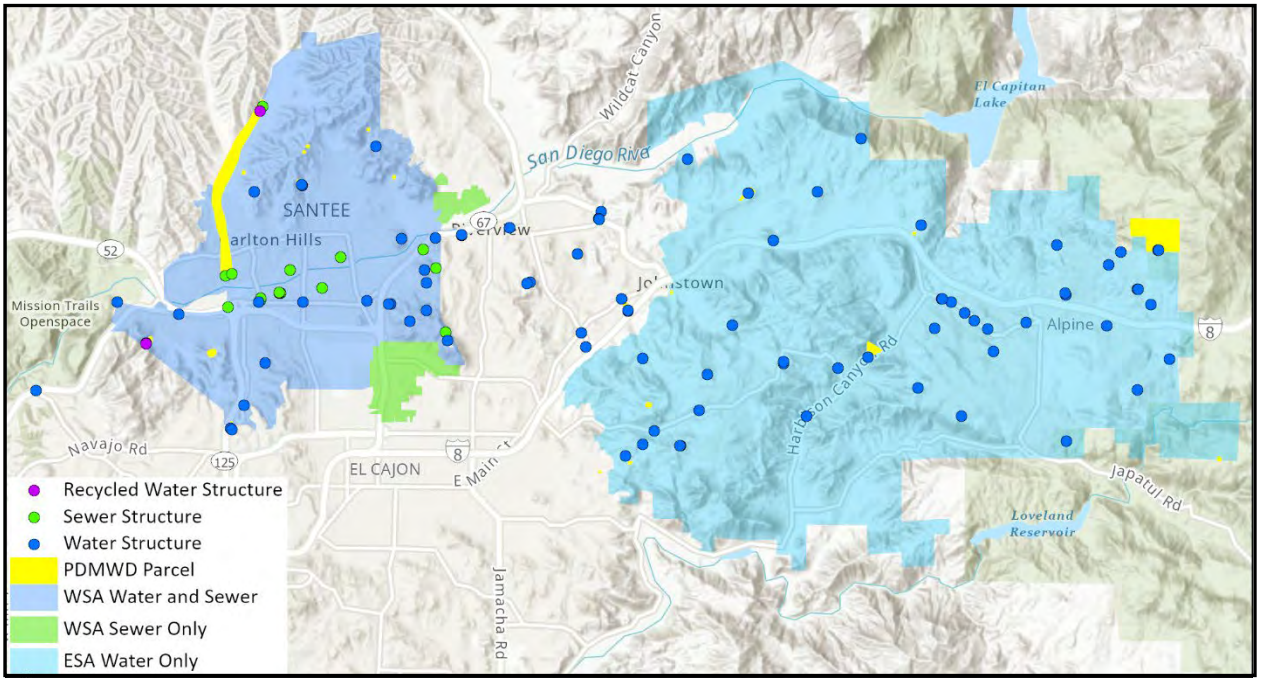
Security Enhancement-Field Sites

Priority: Medium
Masterplan No: PM-15
Department: Operations
Project Type: Water, Miscellaneous
Schedule: This will be an annual project

Total Budget: $100,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on recent project.
Historical Costs: $212,000 was spent in the FY 17-22.
District Fun Allocation: 100% CRF Water

Description: The Security Enhancement – Field Sites Project will make improvements at District facilities on the security system/CCTV, fence lines, lights, and other security related items. Improvements will be based on site needs and priority will be given to higher-risk facilities.

Location: District-wide



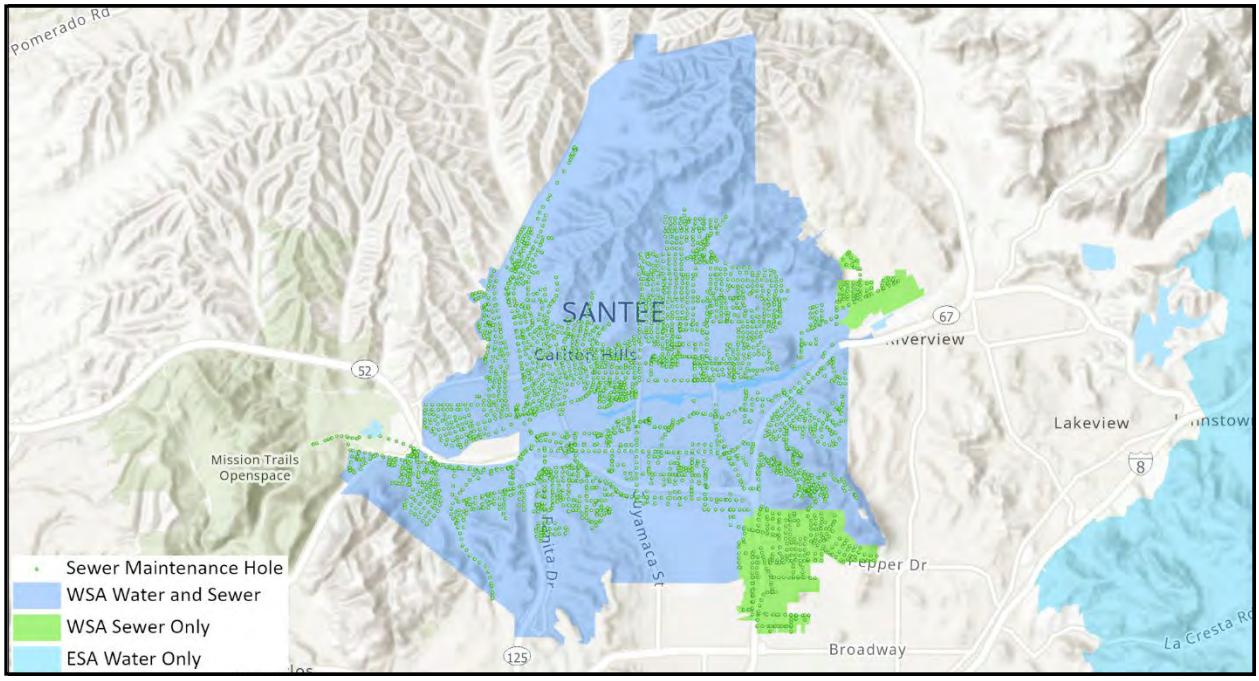
Sewer Maintenance Hole Rehabilitation

Priority: High
Masterplan No: WWR-14
Department: Operations
Project Type: Sewer, R&R
Schedule: This will be an annual project.

Total Budget: $127,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on recent projects.
District Fund Allocation: 100% CRF Sewer

Description
There are approximately 3,000 concrete maintenance holes in Padre Dam's sewer service area. Physical inspections by staff indicate that a number of the maintenance holes are beginning to fail primarily due to hydrogen sulfide corrosion and age. Rather than delay repairs until the maintenance hole requires complete replacement, this project will rehabilitate the maintenance hole, protecting the interior concrete from the effects of hydrogen sulfide corrosion, thereby adding additional service life to the infrastructure and reducing overall repair costs.

Location: Sewer service area located in the Western Service Area.

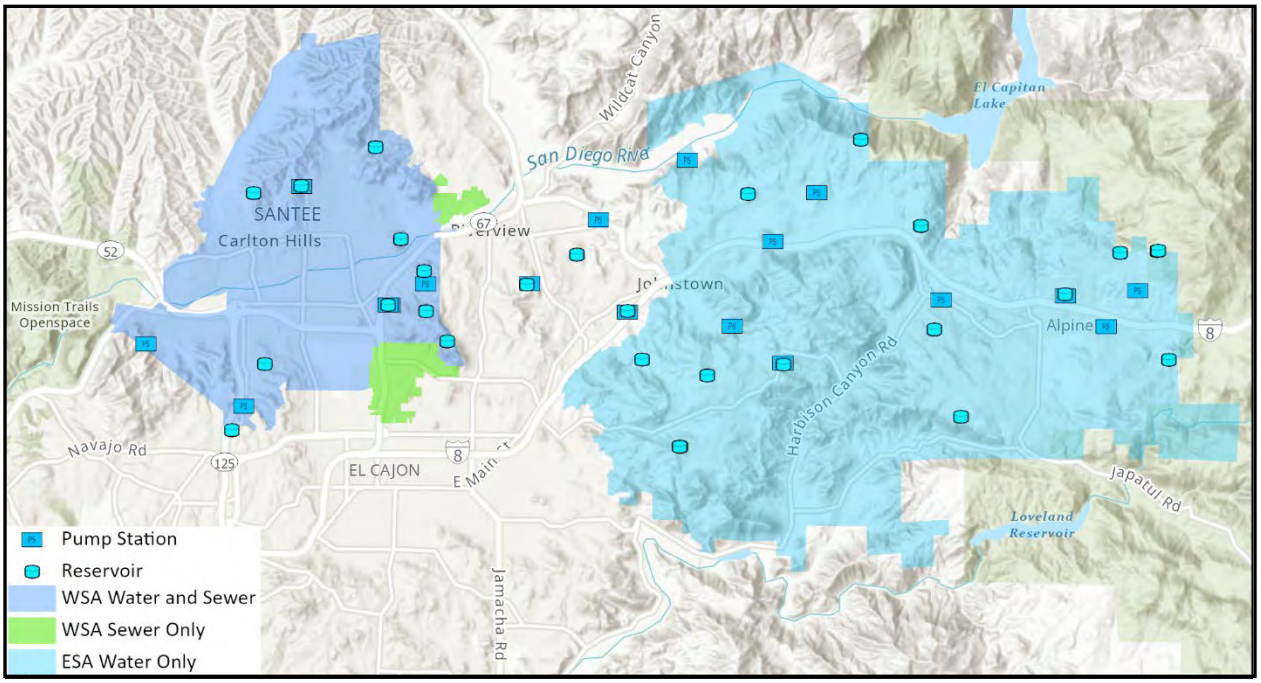


Site Paving As Needed

Priority: High
Masterplan No: PM-16, WWO-5, RWO-7
Department: Operations
Project Type: Water, Sewer, Recycling, Miscellaneous
Schedule: This will be an annual project.
Total Budget: $685,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on recent projects.
Historical Costs: $662,905 was spent through an As-Needed Paving contract in the FY 17-22.
District Fund Allocation: 92.5% CRF Water, 5% CRF Sewer, 2.5% CRF Recycling

Description
Annual budget for paving reservoir and pump station sites as needed. Site paving includes immediate District property and access roads that are located within District maintained easements.

Location: District-wide.



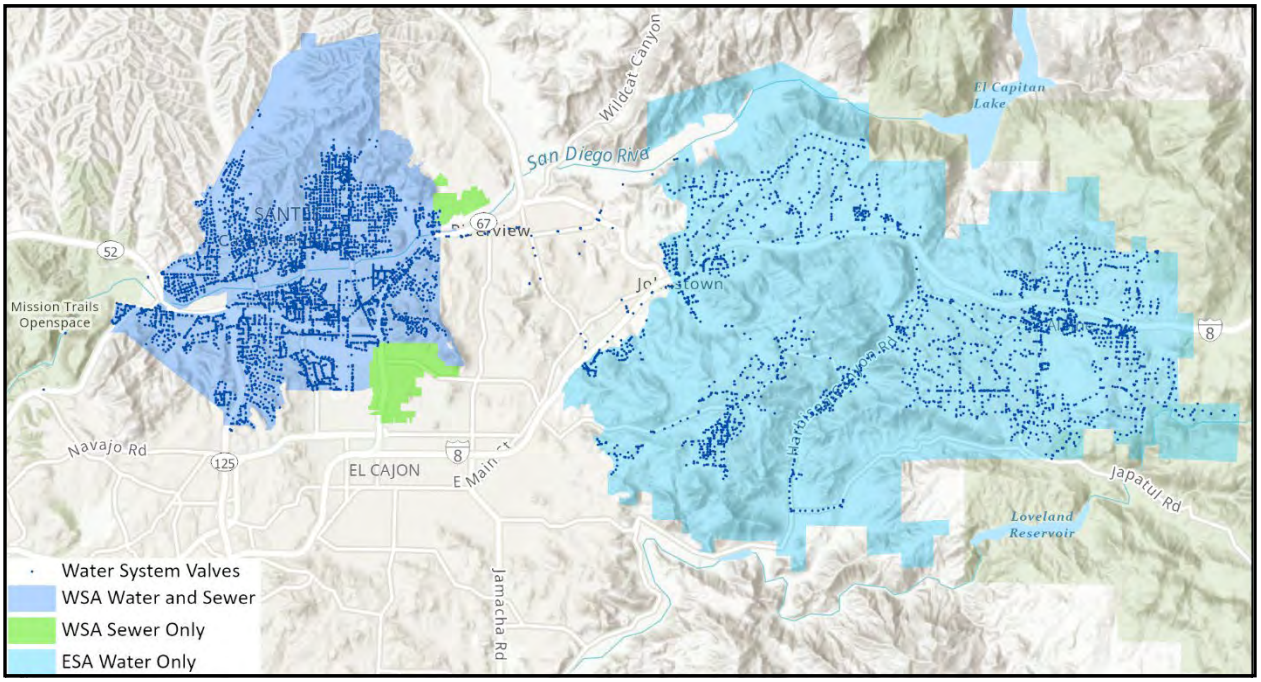
Valve Replacement Program

Priority: High
Masterplan No: PM-17, PM-18, PM-19
Department: Operations
Project Type: Water, Miscellaneous
Schedule: This will be an annual project.

Total Budget: $4,665,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
Historical Costs: A total of $2,989,000 was spent from FY 17-22 with 475 valves replaced.
District Fund Allocation: 100% CRF Water

Description: This program provides a systematic replacement of valves that are not functioning for isolation purposes, broken, or inoperable. This project is primarily constructed by dedicated Operations crews. Three contracted projects are planned within this Five-Year Business Plan to supplement operations work. A Valve Prioritization study to assess each valve's criticality was completed in the previous Business Plan and this information will be used to prioritize valves for replacement.

Location: District-wide.



6. WATER RECYCLING FACILITY REPLACEMENT AND REHABILITATION PROJECTS

Padre Dam's Ray Stoyer Water Recycling Facility treats 2 million gallons per day of wastewater, producing recycled water for the Santee Lakes and for irrigation. The Ray Stoyer WRF has been in operation since the 1960s with an expansion in 1997. Investments to the WRF were made during FY17 through FY22 to replace ageing flights and gears system for the primary and secondary clarifiers. Additional investments were made to recoat deteriorating concrete for the clarifiers (primary and secondary) and the clearwell.

Beginning in FY26, Padre Dam will no longer operate a wastewater treatment plant as this effort will be transferred to the East County JPA due to the development and commissioning of the East County Advanced Water Purification Project. Padre Dam will then purchase approximately 1.2 MGD (1,350 acre-foot per year) of Title 22 Non-Potable Recycled Water from the East County JPA. However, the projects identified in the recycled water CIP are necessary as Padre Dam will still be responsible for maintaining a reliable distribution system in order to supply recycled water to its existing customers.

WRF Mechanical

Priority: Medium
Masterplan No: WWO-7, RWO-9
Department: Operations
Project Type: Sewer, Recycling, Miscellaneous
Schedule: This will be an annual project.

Total Budget: $250,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: 67% CRF Sewer, 33% CRF Recycling

Description: Upgrades to mechanical equipment for the WRF.

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

WRF Electrical

Priority: High
Masterplan No: WWO-8, RWO-10
Department: Operations
Project Type: Sewer, Recycling, Miscellaneous
Schedule: This will be an annual project.

Total Budget: $175,000
Operation Budget Impact: Minor savings.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: 67% CRF Sewer, 33% CRF Recycling

Description
This project consists of replacement or repair of existing conduit and wiring throughout the WRF which is nearing then end of its useful service life.

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

WRF Instrumentation

Priority: High
Masterplan No: WWO-9, RWO-11
Department: Operations
Project Type: Sewer, Recycling, Miscellaneous
Schedule: This will be an annual project.

Total Budget: $100,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.

District Fund Allocation: 67% CRF Sewer, 33% CRF Recycling

Description
The monitoring and control of WRF processes is performed through the use of a computerized system comprised of digital sensors and Programmable Logic Controllers (PLCs) located at each process that communicates and continuously reports back to a workstation. The computerized control system, called Supervisory Control and Data Acquisition (SCADA) system, is customized specifically for WRF. PLCs are installed at each treatment process. The existing system was installed during the 1997 plant expansion, over twenty years ago. The replacement cycle for this equipment should be about seven years, with a maximum of ten years. The equipment is severely corroded, aging, and failing. Replacement hardware is difficult to find and the system is no longer supported. This project would replace portions of the existing system. This project proposes to implement selective improvements for the lowest possible cost in order to maintain safe and effective wastewater treatment and recycled water services until the WRF is decommissioned in FY26 after commissioning of the new East County AWP facilities.

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

7. MANDATED BY EXTERNAL AGENCIES

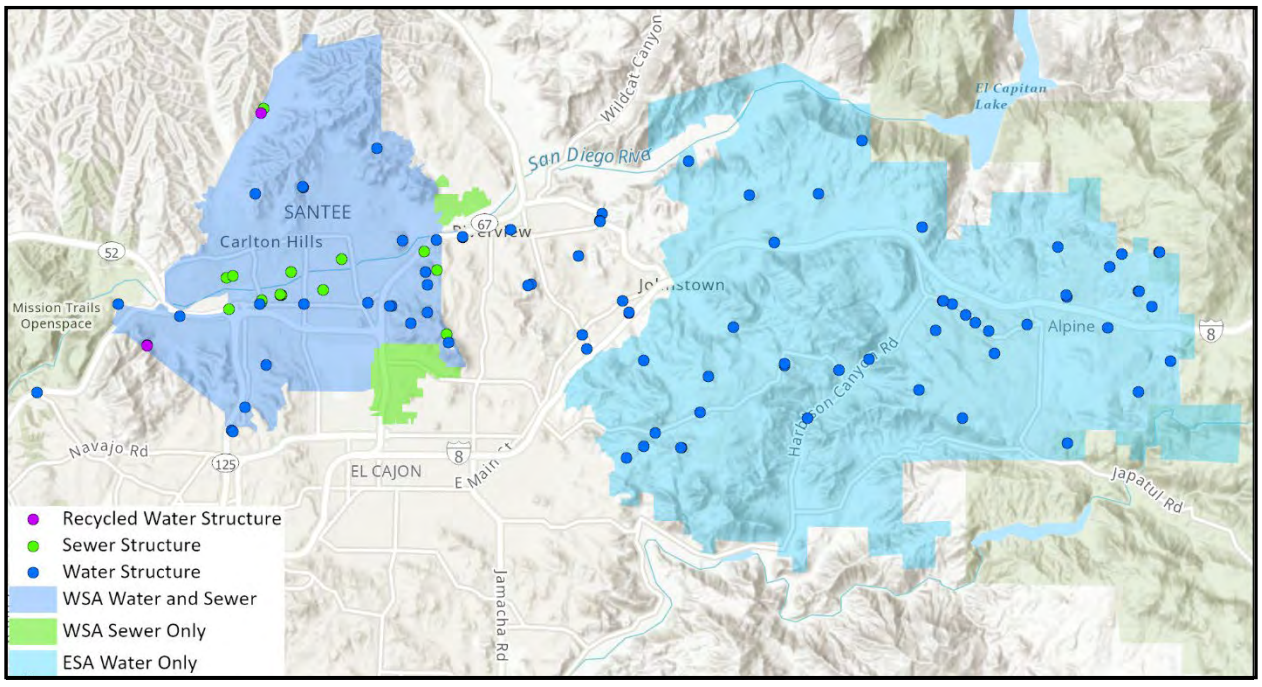
External Mandates

Priority: NA
Masterplan No: PM-20
Department: Engineering
Project Type: Water, Sewer, Miscellaneous
Schedule: As Needed

Total Budget: $1,750,000
Operation Budget Impacts: It is anticipated that all work will be funded through the operating budget.
Cost Estimate Accuracy: Planning level based on past experience and discussions with other agencies.
District Fund Allocation: Preliminary analysis - 67% Expense Water; 33% Expense Sewer. Design and construction - 67% CRF Water and 33% CEF Water

Description
This project consists of utility relocations if required by other agencies' construction projects. Additionally, funding will be utilized to participate in a study that is required from a State Water Resources Control Board to study fecal coliform sources for the Lower San Diego River Watershed.

Location: Locations to be determined, District-wide.



8. DEVELOPER DRIVEN

District Participation General

Priority: NA
Masterplan No: PM-21
Department: Engineering
Project Type: Water, Miscellaneous
Schedule: To be determined

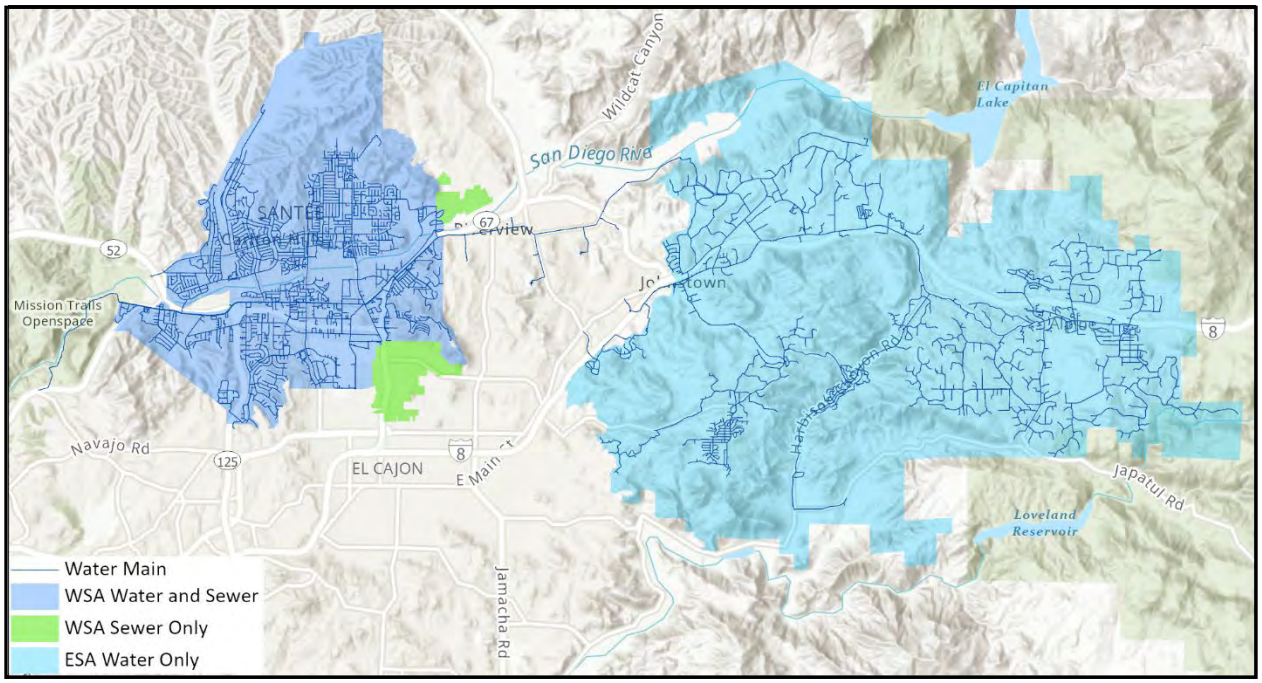
Total Budget: $750,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis - 100% Expense Water. Design and construction - 100% CRF Water

Description
Placeholder allowance for District participation in future developer projects.

Location: To be determined.

9. CIP GENERAL WATER

Capacity Improvement Projects per Master Plan-Water



Priority: High
Masterplan No: NA
Department: Engineering
Project Type: Water, Capacity
Schedule: Analysis, design, and construction is anticipated to be completed in FY26

Total Budget: $1,250,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation: Preliminary analysis – 100% Expense Water. Design and construction – 100% CRF Water

Description
The Master Plan Update identified the need for capacity improvement for water transmission lines to increase the capacity required to meet fire flow requirements. This project proposes to evaluate the capacity pipeline improvements recommended in the Master Plan Update and the highest priority pipelines will be replaced in FY26.

Location: To be determined.

Condition Assessment-Pipelines-Water

Priority: High
Masterplan No: PM-7
Department: Engineering
Project Type: Water, Miscellaneous
Schedule: The project will start in FY23 and is anticipated to be completed by the end of FY26.

Total Budget: $1,250,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis - 100% Expense Water. Design and construction - 100% CRF Water

Description
The District, like many utilities, face an on-going struggle between maintaining aging infrastructure, funding fixed operational costs, and minimizing rate increases. With limited resources, the District must prioritize capital spending. The District's near- term strategy for prioritizing pipelines for replacement is to perform comprehensive condition assessments of the existing buried infrastructure in order to prioritize pipeline replacements and subsequent timing.

This project builds upon the initial phases completed between FY18 and FY22 which included a study to assess overall pipeline risk. The results of the pipeline risk assessment were then used to identify pipelines for indirect assessments (soil corrosivity analysis, pipeline electrical potential survey and continuity testing) for approximately 48,000 feet of critical pipeline infrastructure. The results were used to identify a specific location for detailed direct assessment which included the deployment of an electromagnetic scanning tool to assess the actual thickness of the steel pipe cylinder. The next phase of condition assessment will deploy similar techniques to assess the condition of other critical potable water pipelines.

Location: District-wide.

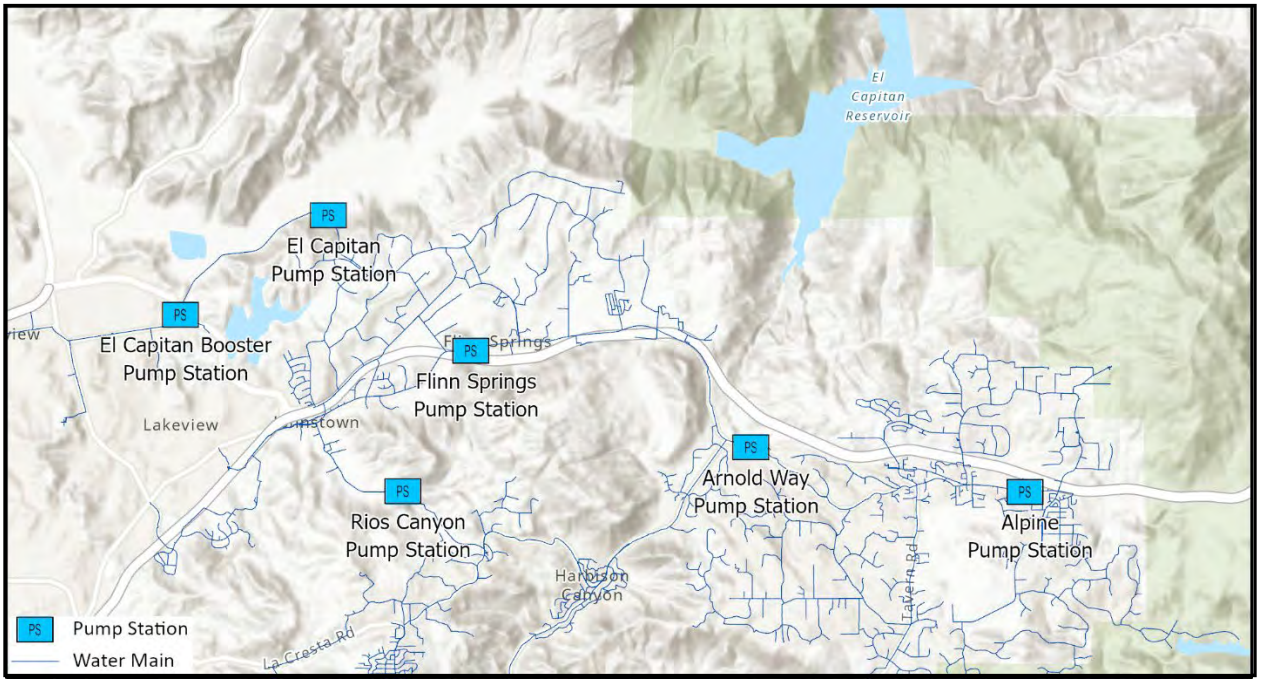
Condition Assessment & Rehabilitation-Pump Stations

Priority: High
Masterplan No: WRPS-1, 2, 3
Department: Engineering
Project Type: Water, R&R
Schedule: Preliminary analysis and design will be completed in FY24 and the improvements completed in FY26.

Total Budget: $1,128,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis - 100% Expense Water. Design and construction - 100% CRF Water

Description
This project captures significant capital level enhancements and improvements tasks focusing on structural improvements including building repair and replacement based on structural and seismic evaluation. These strategic projects are set to extend the life and improve seismic performance and safety of the structure and will extend the service lives of the facilities for the lowest possible cost.

Location: District-wide.



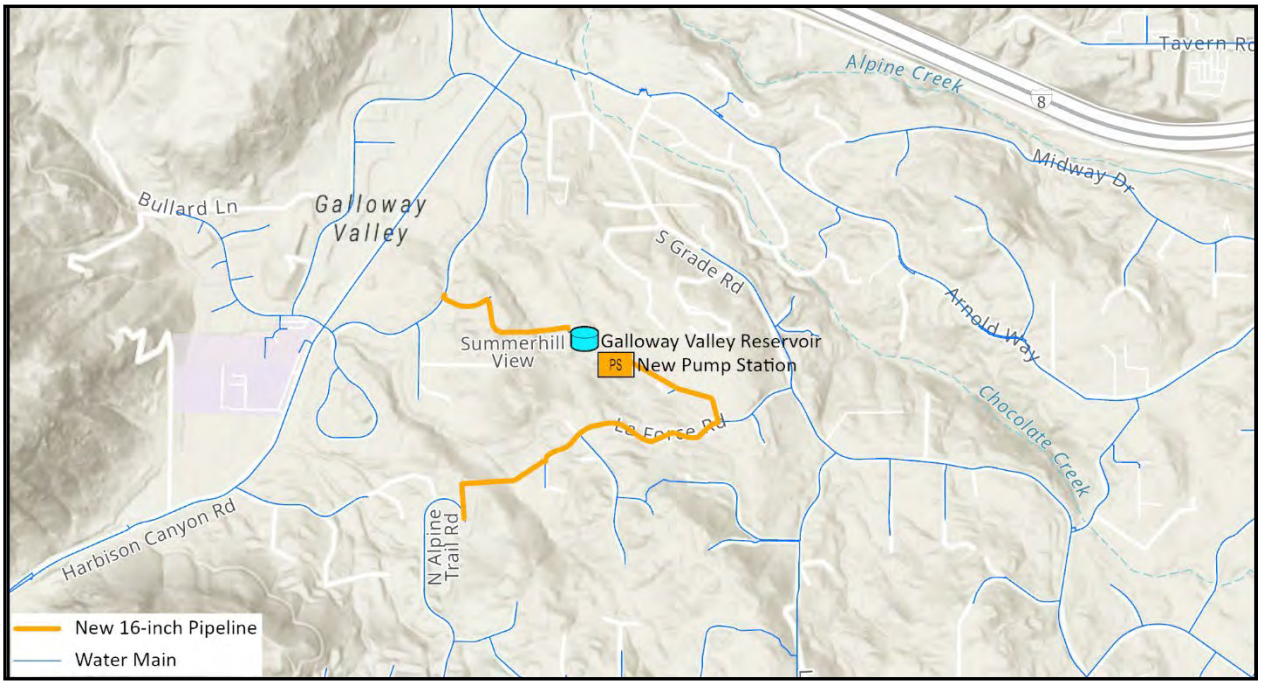
ESA Looping (Galloway / Alpine West)

Priority: High
Masterplan No: RPS-2 & 2A
Department: Engineering
Project Type: Water, Reliability
Schedule: Preliminary analysis will be completed in FY25, design completed in FY26, and construction will start in FY27 and completed in FY28.

Total Budget: $7,000,000.
Operation Budget Impact: Increased O&M for the new facilities.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis - 100% Expensed Water. Design and construction - 82% CRF Water and 18% CEF Water

Description
Construction of a new pump station is anticipated to include three 1,450 gpm pumps with a firm capacity of 2,900 gpm and approximately 2,400 feet of 16-inch diameter pipeline to provide a second transmission system to establish a new connection between the the Chocolate Summit and Alpine West pressure zones. These projects provide water supply reliability in the ESA and will also be sized to serve future growth.

Location: New Galloway PS pipeline from Chocolate Summit Zone to Alpine West Zone.



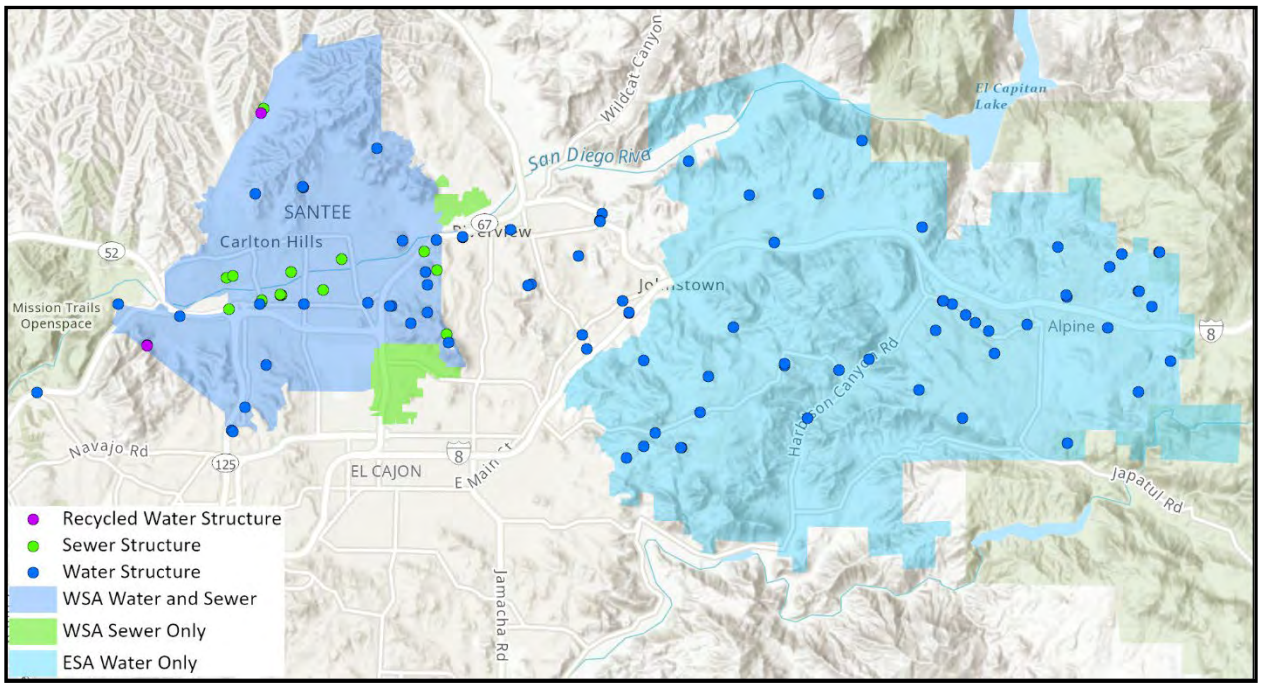
Facilities Erosion Repairs

Priority: Medium
Masterplan No: PM-1
Department: Engineering
Project Type: Water, Miscellaneous
Schedule: Ongoing

Total Budget: $794,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation: 100% CRF Water

Description
This project consists of repairing previous damage and mitigating future erosion at various District water facilities site.

Location: District-wide.



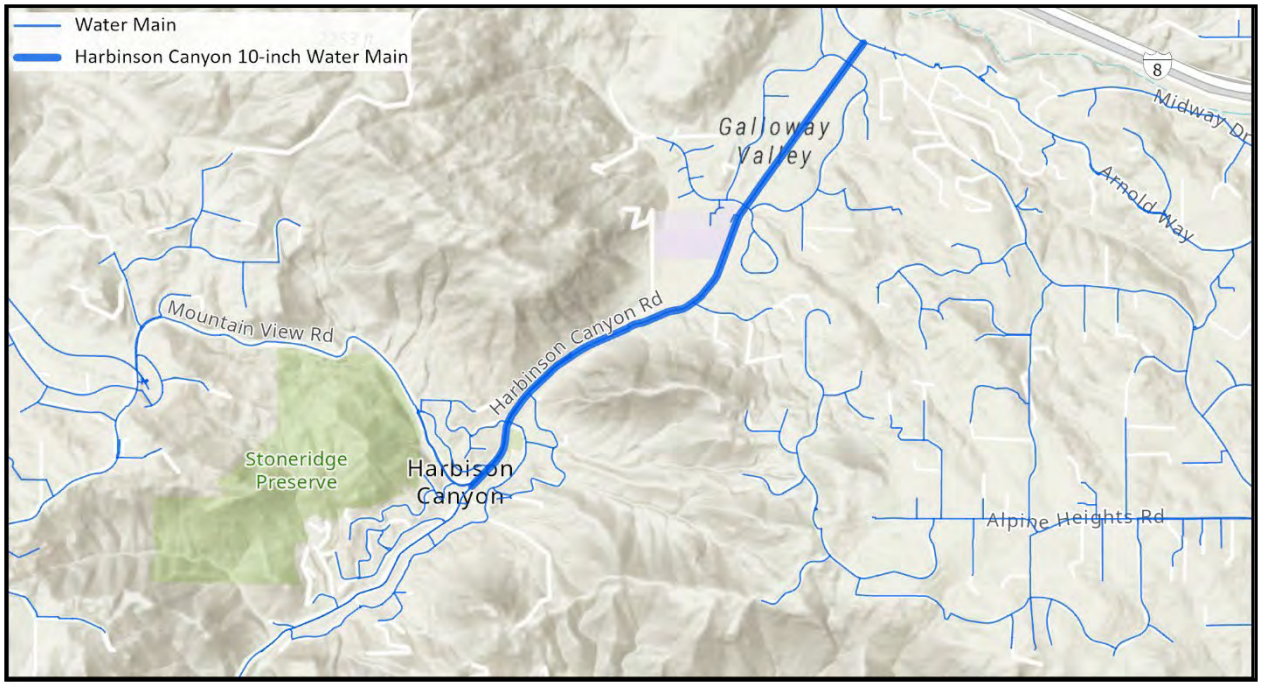
Harbison Canyon Road Pipeline

Priority: High
Masterplan No: R-7
Department: Engineering
Project Type: Water Reliability
Schedule: Evaluation, and design will be completed in FY26-27. Construction will be start in FY 27 and anticipated to be completed in FY 28.

Total Budget: $500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis – 100% Expensed Water. Design and construction – 100% CRF Water.

Description
Existing 10-inch ACP water main is undersized. To improve water reliability in the ESA, approximately 10,600 ft of 10-inch ACP pipe needs to be replaced with 16-inch pipe along Harbison Canyon Road.

Location: Harbison Canyon Road between Frances Drive and Arnold Way.



I-8 Unencased Transmission Main Crossings @ Labrador & Dunbar

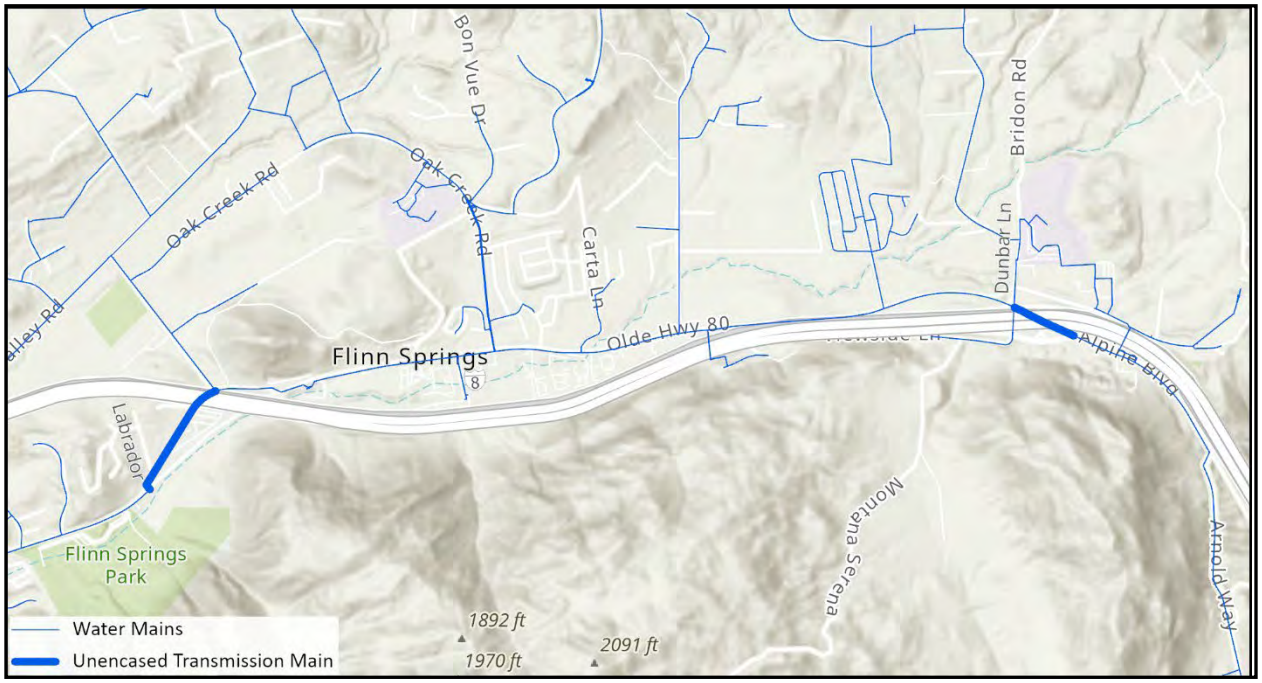
Priority: High
Masterplan No: RI-5, RI-9
Department: Engineering
Project Type: Water Reliability
Schedule: Preliminary design is complete. Design will be completed in FY23 and construction is anticipated to be completed in FY 25.

Total Budget: $8,000,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis - 100% Expensed Water. Design and construction - 100% CRF Water

The Labrador Lane 24-inch main ruptured in 2008 400 feet away from the Interstate. This pipe crosses under the Interstate and is not in a casing.

Description
The ESA's potable water transmission system, also referred to as the "backbone system" was constructed in the early 1960's and consists of concrete cylinder pipe (CCP) ranging in diameter from 16-33 inches. Two sections of the backbone system are direct buried under the Interstate 8 freeway and are therefore difficult or impossible to access, inspect, and repair. These sections are 24, and 30 inches in diameter. A preliminary design report evaluating alternative alignments was completed in November 2014. The project is currently in the detailed design phase and construction is anticipated to be completed by the end of FY25.

Location: Two locations in the Eastern Service Area: Dunbar Lane and Alpine Blvd and Labrador Lane.



Jerry Johnson Reservoir Refurbishing/Coating

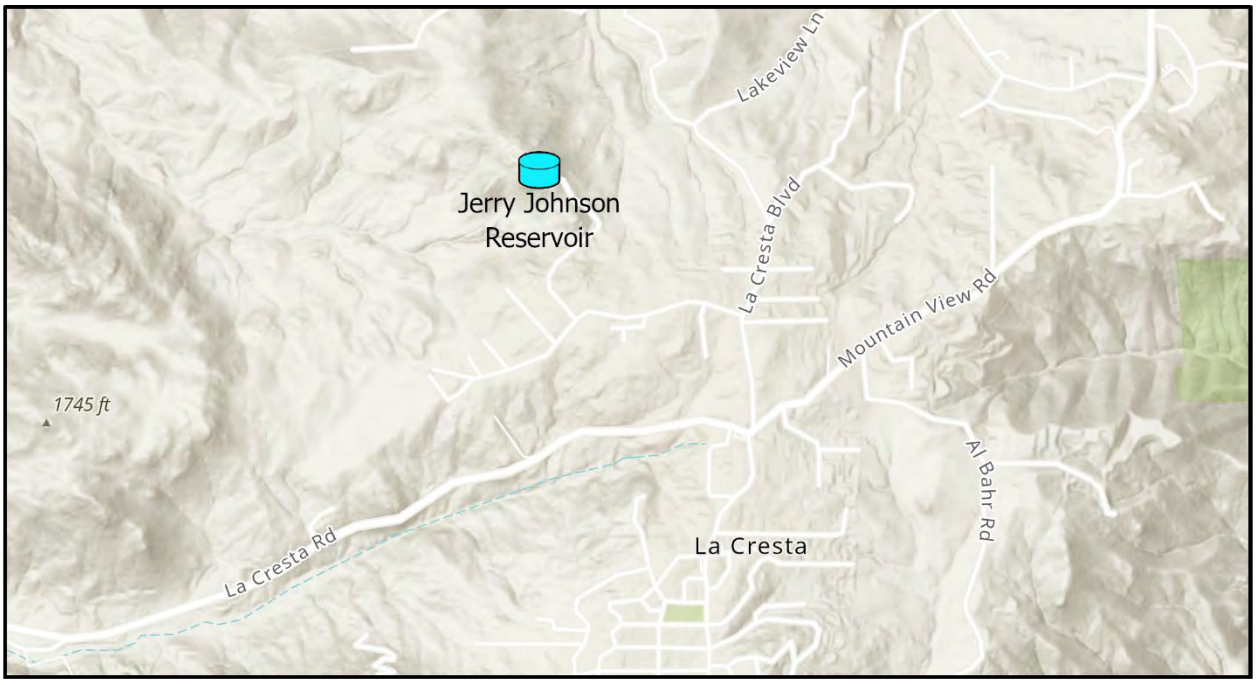
Priority: High
Masterplan No: WRS-5
Department and Project Manager: Engineering
Project Type: Water, R&R
Schedule: Design will be completed in FY23 and construction completed in FY 25.

Total Budget: $1,251,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation:
Preliminary analysis - 100% Expensed Water
Design and construction - 100% CRF Water

Description: The Jerry Johnson (La Cresta) Reservoir is a 1.0 million gallon steel reservoir, but due to the hydraulic grade, only 0.33 million gallons are usable. This 70 ft diameter by 36 ft high structure is made up of a knuckle roof with a single center column support.

Inspection of the reservoir by the District's Corrosion and Cathodic Protection specialist has indicated a need to replace the existing coatings. An engineer was retained to evaluate structural integrity and recommended the replacement of the steel column supported roof with a new corrosion resistant aluminum dome roof. This project provides funding to recoat the interior and exterior reservoir walls as well as replacing the existing roof with an aluminum dome type roof.

Location: Kent Drive in the community of Crest, El Cajon



Pipeline Replacement at Caltrans/Bridge Crossings

Priority: High
Masterplan No: RI-2, RI-3
Department: Engineering
Project Type: Water R&R
Schedule: Design and construction will be completed in FY25.

Total Budget: $1,058,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Probable construction cost estimates at 90% design were prepared as part of the 2019 design with $603,000, but ENR construction cost index and inflation shall be considered during final design.
District Fund Allocation: Preliminary analysis - 100% Expensed Water. Design and construction - 100% CRF Water

10-inch Asbestos Cement Potable Water pipeline located inside bride box under I-8 at Tavern Road.

16-inch concrete cylinder potable water pipeline inside bridge girder under I-8 at Victoria Drive.

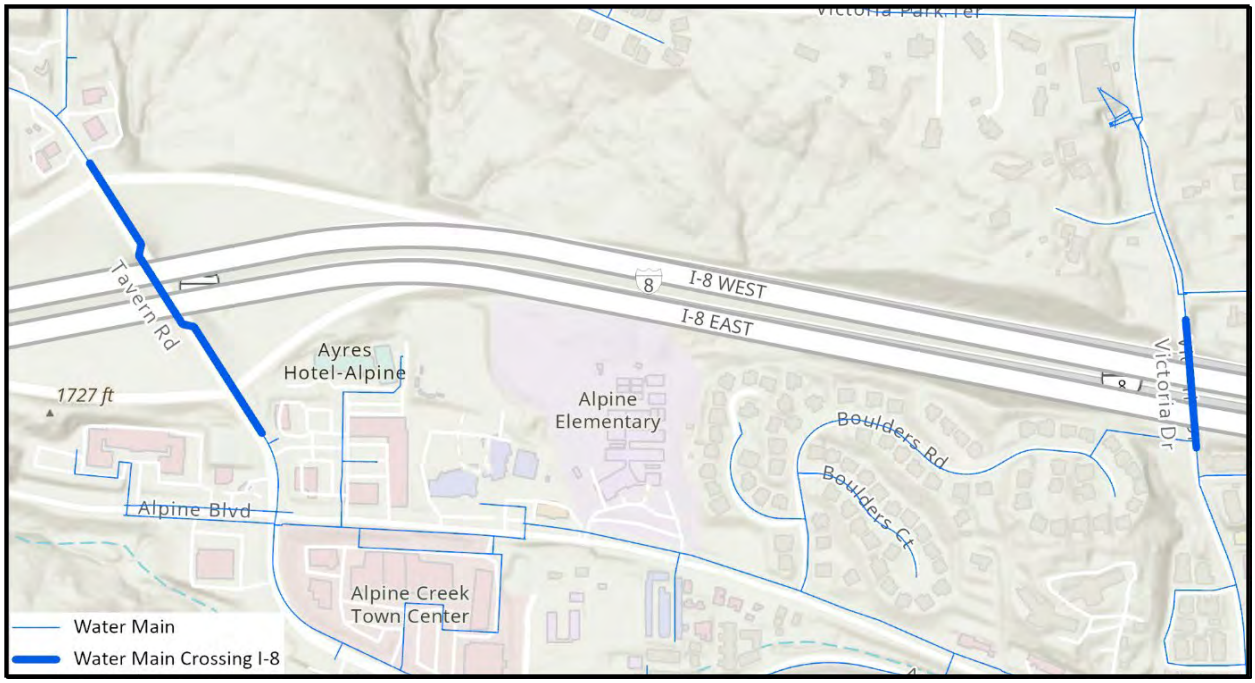
Description
Padre Dam operates and maintains a network of pipelines supporting its potable water and recycled water systems. Due to geographical challenges, some of these pipelines have been constructed within or hung on various bridges. The District has 30 such bridge crossings throughout the system. Pipeline diameters range from 8 inches to 24 inches. Pipeline material ranges from asbestos cement, ductile iron, concrete cylinder, high density polyethylene and steel.

In 2017, a structural and seismic condition assessment was completed of each crossing. Following the condition assessment, a risk assessment was performed to prioritize repairs, if needed, on each pipeline based on condition risk, infrastructure risk, and distribution system impacts. The crossings categorized as high risk show visual sign of movement such as deflected joints, damaged supports or had a previous repair. The crossings categorized as medium and moderate risk do not show signs of movement; however, improvements are required to minimize their potential of failure. The low-risk crossings are buried or encased. Repairs vary but typically include replacement of pipe, supports, recoating, provisions for lateral and vertical movement, and recoating.

The District is coordinating with Caltrans on obtaining a Caltrans Encroachment Permit to replace and rehabilitate the pipelines.

Related Projects: The Pipelines at Bridge Crossings Assessment (JN 215026) was completed in February 2017. The Mast Blvd Bridge (JN 214018) and Prospect Avenue Bridge (JN 215002) pipeline repairs were performed in 16/17 as a result of the assessment.

Location: Tavern Road crossing and Victoria Drive crossing at I-8.


Victoria Park Ter
Tavern Rd
8
I-8 WEST
I-8 EAST
Victoria Dr
Ayres
Hotel-Alpine
1727 ft
Alpine
Elementary
Boulders Rd
Boulders Ct
Alpine Blvd
Alpine Creek
Town Center
Water Main
Water Main Crossing I-8

Pressure Reducing Station Installations

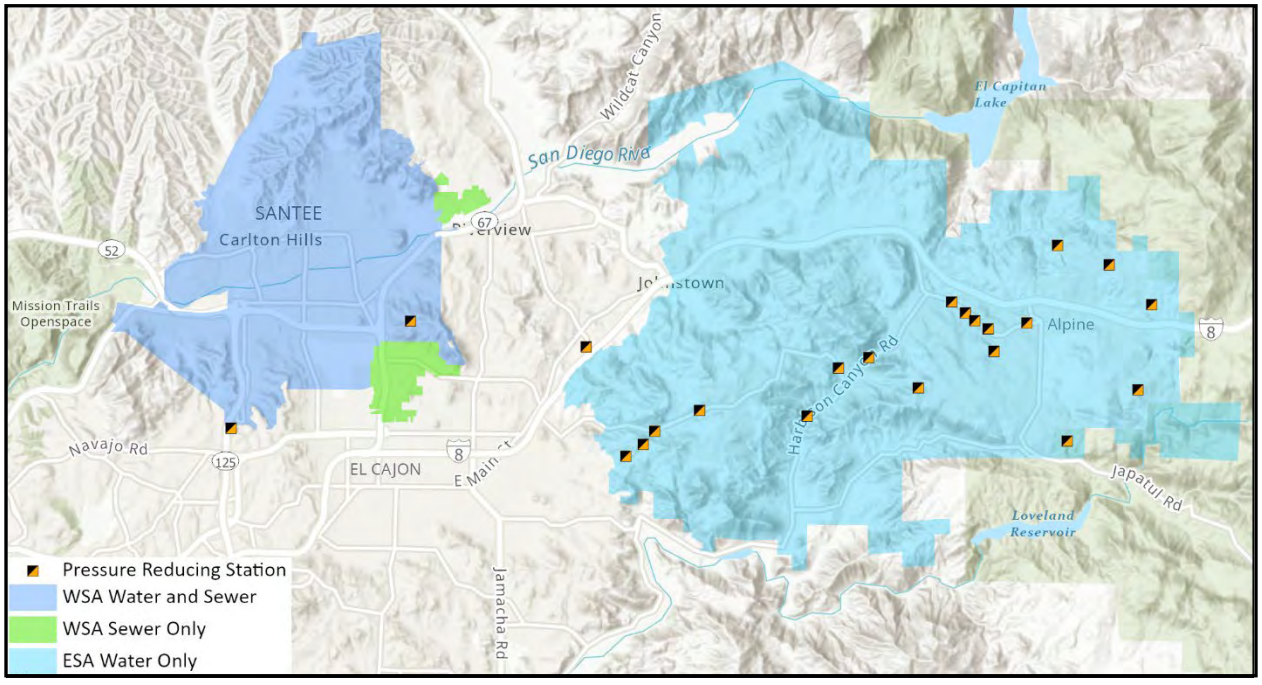
Priority: Medium
Masterplan No: PM-8
Department: Engineering
Project Type: Water, Miscellaneous
Schedule: Preliminary analysis and design will be completed in FY25 construction completed in FY26.

Total Budget: $412,000
Operation Budget Impact: Preliminary analysis is funded from the operating budget. Long term O&M will be increased.
Cost Estimate Accuracy: Experience with similar projects.
District Fund Allocation: Preliminary analysis - 100% Expensed Water. Design and construction - 100% CRF Water

Description
Pressure reducing stations allow distribution systems to transfer water from higher pressure zones to lower pressure zones without exceeding the allowable pressures in the lower zones or completely draining the pressure out of the higher zone.

An analysis completed as part of the development of the 2020 Master Plan identified the installation of pressure reducing stations to resolve high pressure issues and pipeline pressure rating exceedances. The reduction of pressures also reduce water loss and assist with extending the useful service lives of the pipelines.

Location: District-wide.



Reservoir Refurbishing / Coating-East County Reservoir

Priority: High
Masterplan No: WRS-6
Department: Engineering
Project Type: Water, R&R
Schedule:
Design will be completed in FY23 and construction completed in FY 24.

Total Budget: $1,500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Design Level.
District Fund Allocation: Preliminary analysis - 100% Expensed Water. Design and construction - 100% CRF Water

Description
The East County Square Reservoir is a 1.5 million gallon steel reservoir. This 97 ft diameter x 30 ft high structure consists of a welded steel shell and a corrosion resistant aluminum dome roof. Inspection of the reservoir by the District's Corrosion and Cathodic Protection specialist has indicated a need to replace the existing coatings. This project provides funding to recoat the interior and exterior reservoir walls as well as the interior piping appurtenances. The existing cathodic protection system is ageing and will also be replaced.
Location: East County Square Reservoir in the community of East County, El Cajon.

10. CIP General Sewer

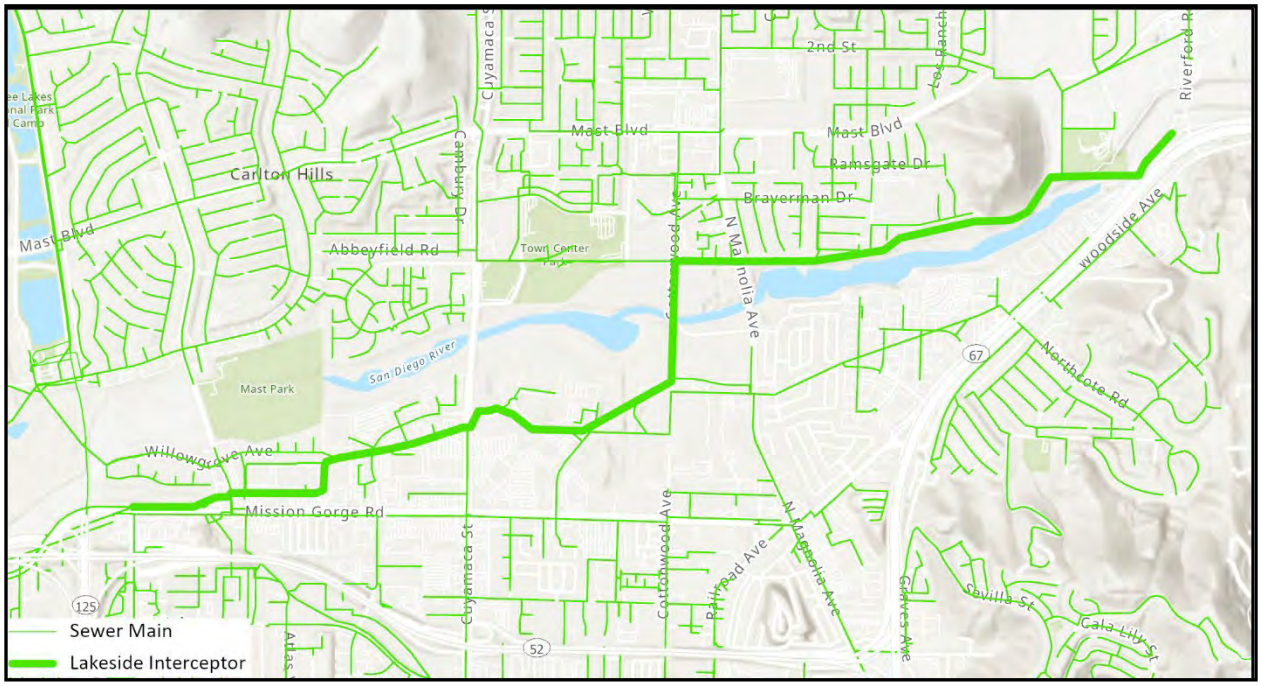
County Trunk Sewer Participation

Priority: Medium
Masterplan No: WWO-2
Department: Engineering
Project Type: Sewer, Miscellaneous
Schedule: The County anticipates improvements completed in FY25.

Total Budget: $2,771,000
Operation Budget Impact: None.
Cost Estimate Accuracy: The annual budget is based on construction cost estimates provided by the County.
District Fund Allocation: Preliminary analysis - 100% Expensed Sewer. Design and construction - 100% CRF Sewer

Description
Padre Dam discharges some of its sewer flows to the County of San Diego's Lakeside Interceptor for conveyance to the City of San Diego's Metro facilities. This project was established to track costs associated with the ongoing District participation in the capital costs for the Cottonwood Interceptor rehabilitation. The County of San Diego is the lead agency for this project. Per an agreement with the County, Padre Dam is responsible for its proportional share of the repair and replacement cost.

Location: City of Santee



IPS Influent Sewer

Priority: High
Masterplan No: WWC-3
Department: Engineering
Project Type: Sewer, Capacity
Schedule: Preliminary study planned for FY23. Design and construction will be completed in FY25.

Total Budget: $1,650,000
Operation Budget Impact: Preliminary analysis is from the operating budget. No increase in O&M costs.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis - 100% Expensed Sewer. Design and construction - 80% CRF Sewer, 20% CEF Sewer

Description
There are two primary drivers for this project to increase the capacity of the existing gravity collection system downstream of the Cottonwood Diversion Structure. First, hydraulic modeling conducted during development of the 2020 Master Plan Update identified capacity deficiencies under the assumed peak wet weather conditions. Second, in order to convey enough additional flow to the Influent Pump Station (IPS) to meet the desired 6.0 mgd (average daily) flow rate to provide additional flow for recycled water use, the District will have to increase the amount of wastewater diverted from the County of San Diego's (County) Lakeside Interceptor to the District's collection system.

This project will rehabilitate the existing collection system from south of Carlton Oaks Drive, MH 3001, to IPS influent sewer connection, MH 2684, approximately 490 feet of 30-inch VCP and will mitigate the risk of a sanitary sewer overflow (SSO) in the area due and to San Diego River basin. Reference the Master Plan Update for proposed pipe sizing.

Location: North of Carlton Oaks Drive to IPS sewer entrance point in Santee.

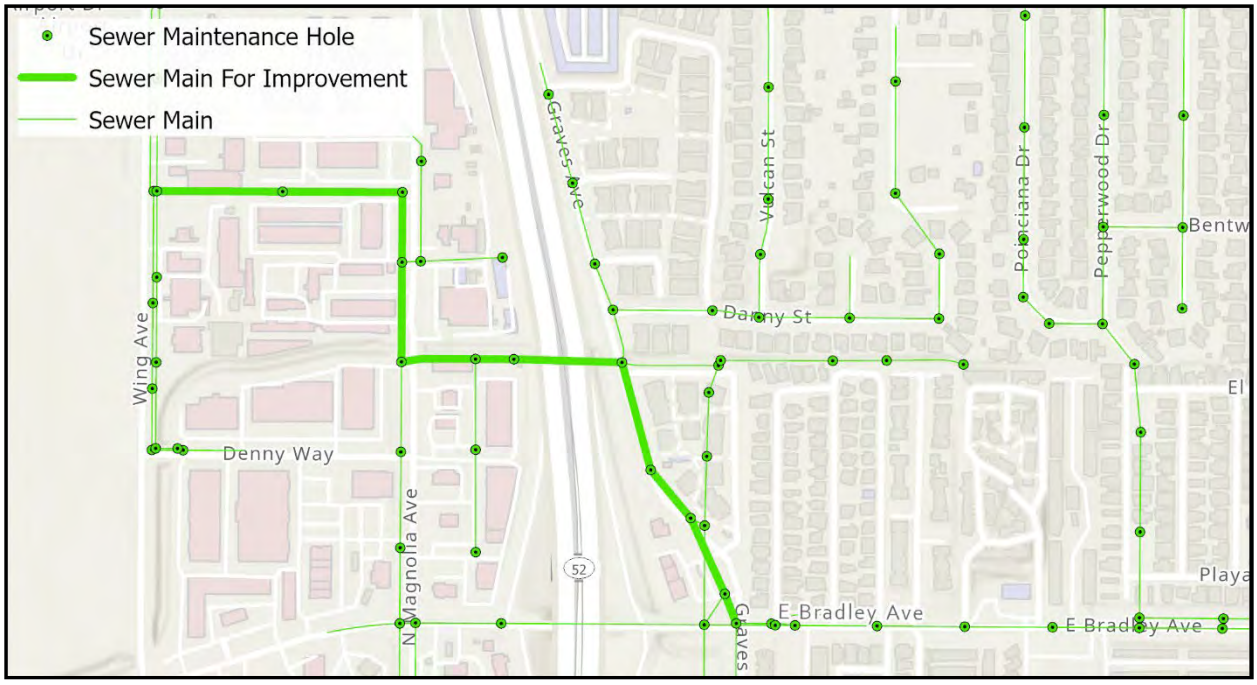
Magnolia Ave/SR-67 Sewer Capacity Improvements

Priority: High
Masterplan No: WWC-6
Department: Engineering
Project Type: Sewer, Capacity
Schedule: Preliminary study planned for FY23. Design will be completed in FY24 and construction will be completed in FY25.

Total Budget: $2,509,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation: Preliminary analysis - 100% Expensed Sewer. Design and construction - 100% CRF Sewer

Description
The Master Plan Update identified capacity deficiencies of existing 8-inch and 10-inch diameter vitrified clay pipe sewers of approximately 2,910 feet under the assumed peak wet weather conditions. All identified pipe segments shall be upsized to 12-inch.

Location: From Graves Ave at the southern intersection with East Bradley Ave, north to the northern end of Countryside Village Apartments, west under SR-67, north along North Magnolia Ave to Ferguson Fire and Fabrication, and then west to Wing Ave.



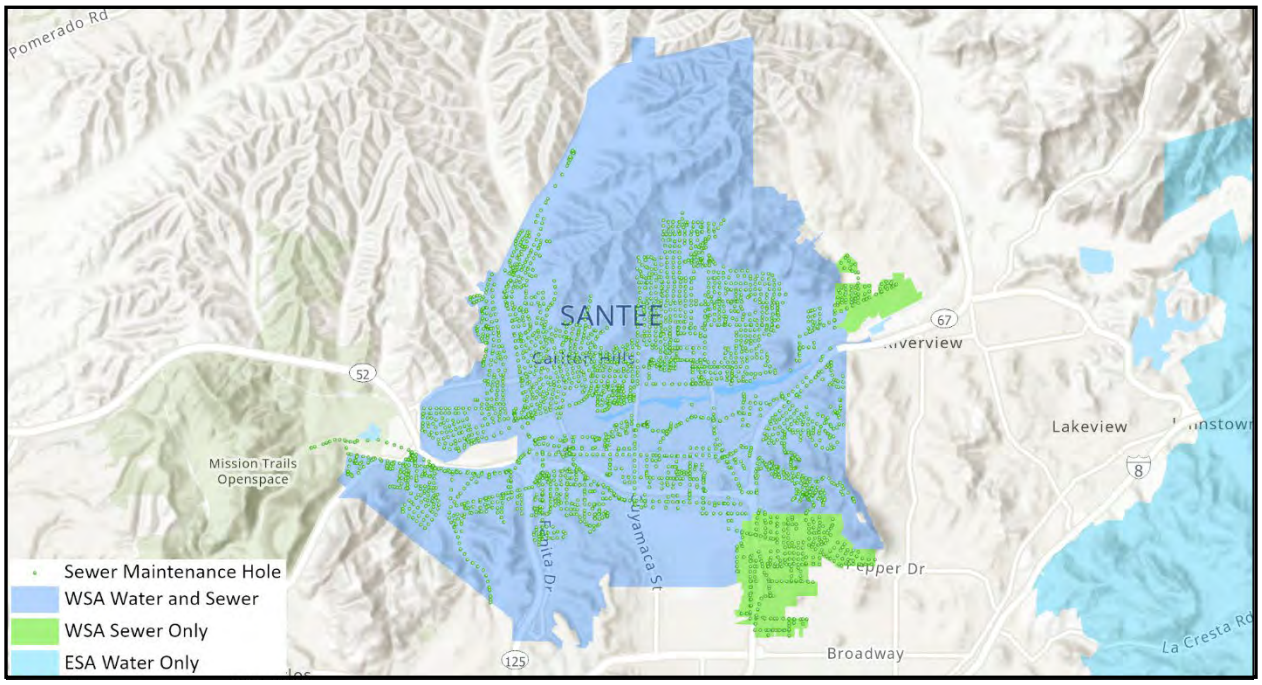
Sewer & Maintenance Hole Rehabilitation / Replacement

Priority: Medium
Masterplan No: WWR-2, 3, 4
Department: Engineering
Project Type: Sewer, R&R
Schedule: Ongoing

Total Budget: $1,500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Based on historical costs.
District Fund Allocation: Preliminary analysis – 100% CRF Sewer

Description
Provides annual budget for ongoing sewer and maintenance hole assessment, replacement, or rehabilitation as needed. For every 5 Year Business Plan, approximately 10,000 linear feet of 6 to 15-inch sewer lines and 50-70 maintenance holes are rehabilitated.

Location: Western Service Area / Sewer Service area.



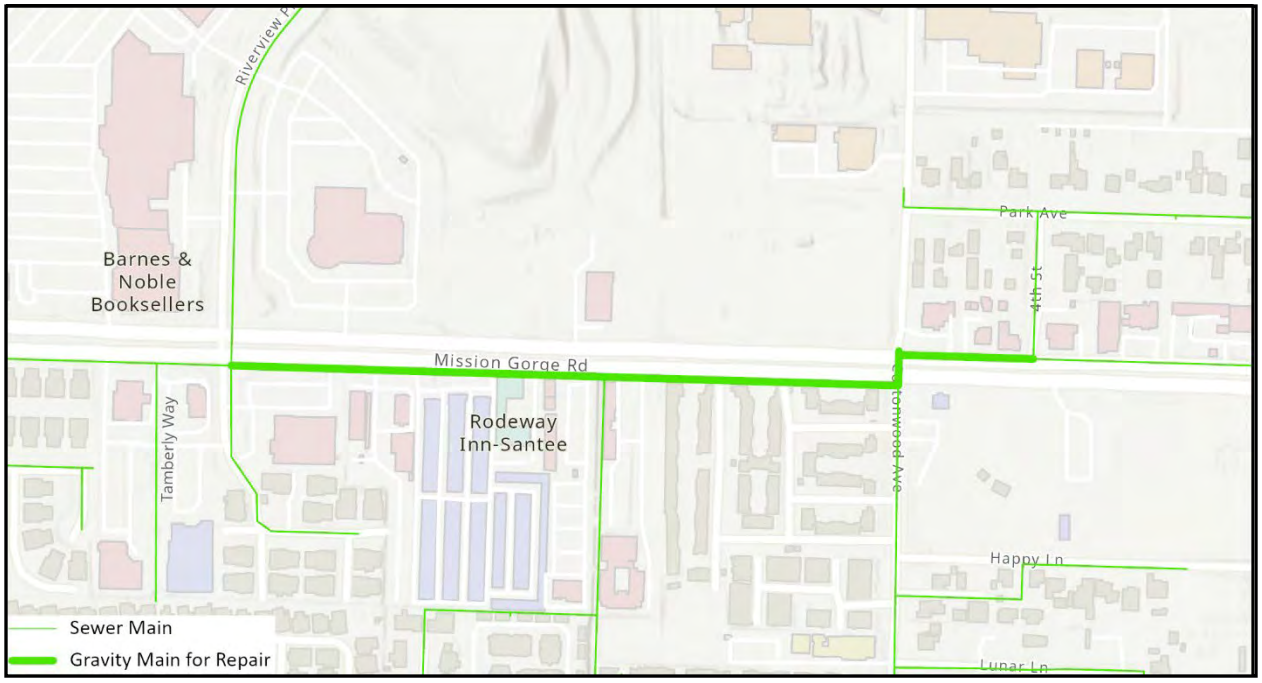
Sewer Master Plan Capacity Project – Mission Gorge Sewer

Priority: High
Masterplan No: WWC-5
Department: Engineering
Project Type: Sewer, Capacity
Schedule: Preliminary analysis and design will be completed in FY26 and construction is anticipated to be completed in FY27.

Total Budget: $1,500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning level.
District Fund Allocation: Preliminary analysis - 100% Expensed Sewer. Design and construction - 84% CRF Sewer and 16% CEF Sewer

Description
The Master Plan Update identified capacity deficiencies of existing 8-inch and 10-inch diameter vitrified clay pipe sewers of approximately 3,130 feet under the assumed peak wet weather conditions. The 8-inch and 10-inch segments shall be replaced with 12-inch and 15-inch respectively.

Location: Mission Gorge Road between 4th St to Tamberly Way intersection.



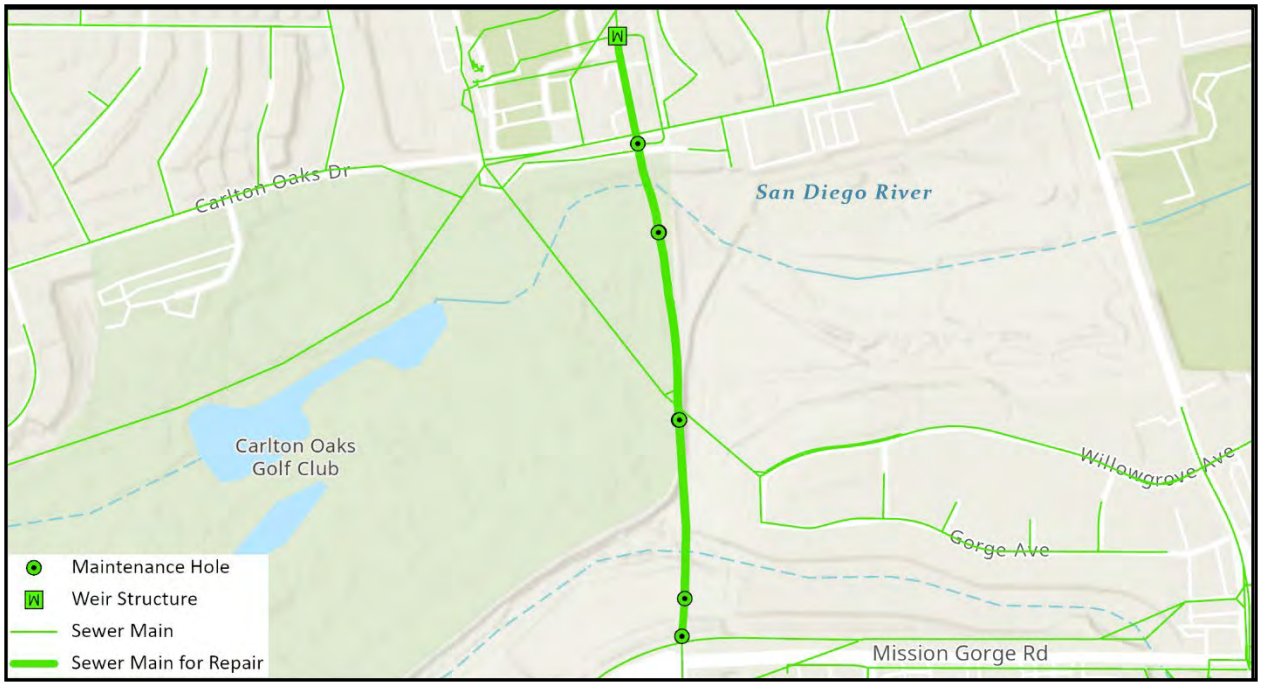
Inverted Siphon and Sludge Main Improvements

Priority: Highest
Masterplan No: WWR-14
Department: Engineering
Project Type: Sewer, R&R
Schedule: Design and construction will be completed in FY23 and 26 respectively.

Total Budget: $3,500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Design and construction - 80% CRF Sewer, 20% CEF Sewer

Description: The critical sewer pipelines included as part of this evaluation generally include (from downstream to upstream): parallel 14-inch and 16-inch diameter inverted sewer siphons (asbestos cement pipe), and 16-inch ductile iron (DI). A 24-inch asbestos cement (AC) pipeline conveying return flows from the District's Ray Stoyer Water Reclamation Facility (WRF) is to be rehabilitated as part of East County AWP Package 3 Project. It is noted that the inverted siphons and sludge main are considered critical facilities for the District, since they receive flows from facilities that operate continuously in a 24/7/365 schedule. The inverted siphon alignment crosses beneath the San Diego River which is considered an impaired water body and is 303(d) listed. The District performed condition assessments on the pipelines to forecast end of useful service life and identify deficiencies for rehabilitation or replacement. The preferable design alternatives to rehabilitate or replace the critical pipelines was selected, and the design plan is being developed in FY22-23. The construction is anticipated to be completed by FY 26.

Location: Sewer under the San Diego River between Carlton Oaks Drive and Mission Gorge Road Santee.



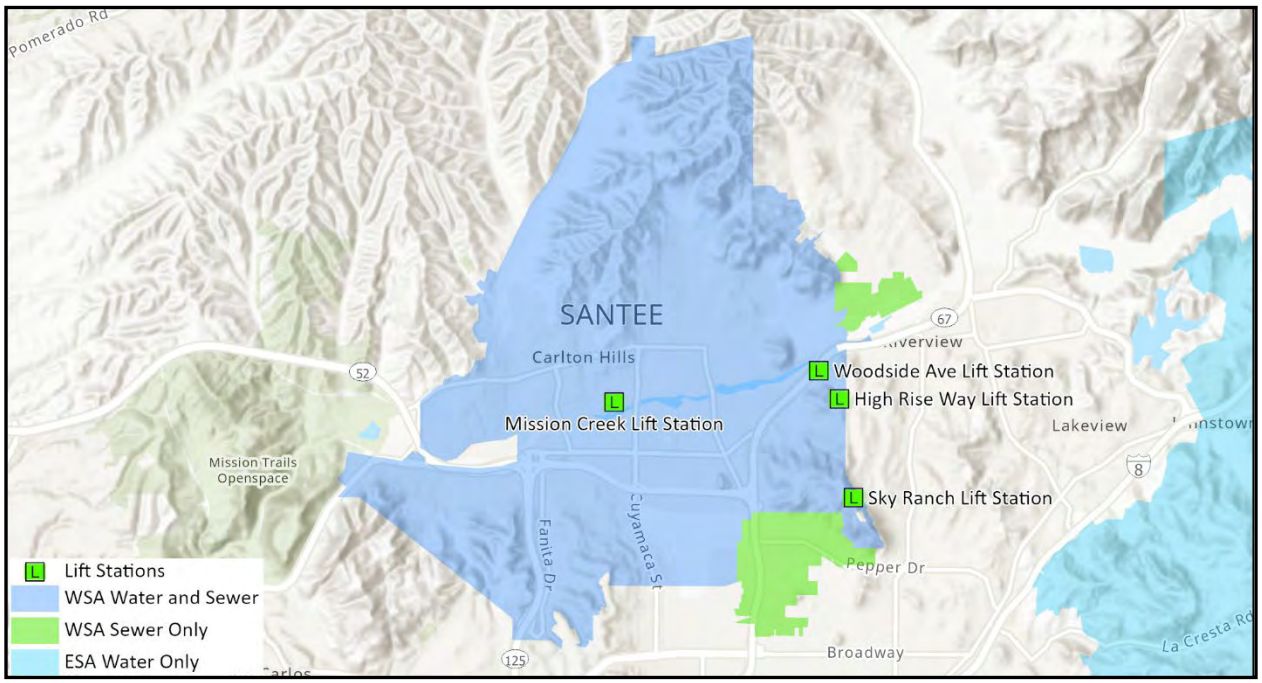
Sewer Lift Stations Rehabilitation

Priority: Medium
Masterplan No: WWR-13
Department: Engineering
Project Type: Sewer, R&R
Schedule: Preliminary analysis and design will be completed in FY26 and construction will be completed in FY 24.

Total Budget: $580,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis - 100% Expensed Sewer. Design and construction - 100% CRF Sewer

Description: As part of the evaluation completed during development of the 2015 Master Plan, condition assessments were completed for various sewer lift stations. This project will upgrade the existing mechanical and/or electrical equipment that is original and aging.

Location: Various locations in the Western Service Area sewer collection system.



11. CIP GENERAL RECYCLED

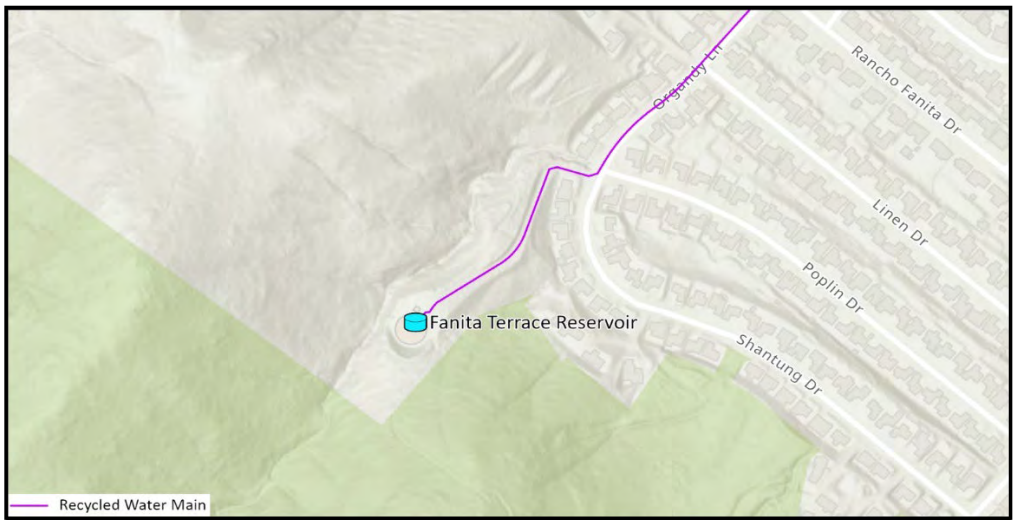
Fanita Terrace Reservoir Refurbishment / Coating

Priority: High
Masterplan No: RWS-1
Department: Engineering
Project Type: Recycled, R&R
Schedule: Preliminary analysis and design will be completed in FY25 and construction is anticipated to be completed in FY26.

Total Budget: $1,500,000
Operation Budget Impact: Preliminary analysis would be funded from the operating budget.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary Analysis - 100% Expensed Recycled. Design and Construction - 100% CRF Recycled

Description: The Fanita Terrace Reservoir is a 1.5 million gallons (mg) steel welded tank with an inside diameter of 100 feet, an exterior tank shell height of 28 feet, and an internal maximum water height of 25.5 feet. The tank was constructed in 1960 as part of the potable water system and was converted to a recycled water storage tank in 1997. Reservoir inspection reports completed by the District's corrosion specialist have indicated that the tank is exhibiting numerous coating failures. The interior and exterior surfaces were last painted in 1997. This project will include an assessment by a structural engineer to develop rehabilitation recommendations to extend the service life. The project also proposes to replace the existing interior and exterior coating systems and address any other refurbishment or upgrades required for the piping appurtenances.

Location: Shantung Drive and Organdy Lane in Santee.



12. CIP GENERAL MULTIPLE SERVICE TYPES

Energy Efficiency Projects

Priority: Medium
Masterplan No: WWO-10
Department: Engineering
Project Type: Water, Sewer, Recycling, Miscellaneous
Schedule: Preliminary analysis and design is anticipated to be completed in FY26 and the improvements in FY27

Total Budget: $815,000
Operation Budget Impact: Preliminary analysis would be funded from the operating budget. There would be energy savings in the future.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis – 46.9% Expensed Water, 42.4% Expensed Sewer, 10.7% Expensed Recycling. Design and Construction – 32.4% CRF Water, 29.3% CRF Sewer. 7.4% CRF Recycling, 14.5% CEF Water, 13.1% CEF Sewer, 3.3% CEF Recycling

Description: This project will evaluate the feasibility of using solar energy at District facilities while also exploring ways to reduce energy consumption as part of an initiative to increase energy efficiency, especially reducing pumping cost at IPS.

Location: Operations Yard on Carlton Oaks Drive in Santee.

Operation Yard Phase 3 Improvements

Priority: Medium
Masterplan No: PM-22, WWO-11, RWO-12
Department: Engineering
Project Type: Water, Sewer, Recycling, Miscellaneous
Schedule: Preliminary analysis and design is anticipated to be completed in FY26 and construction in FY28.

Total Budget: $1,351,000
Operation Budget Impact: Preliminary analysis would be funded from the operating budget. Long term O&M impacts are expected to be minimal.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis – 46.9% Expensed Water, 42.4% Expensed Sewer, 10.7% Expensed Recycling. Design and Construction – 32.4% CRF Water, 29.3% CRF Sewer. 7.4% CRF Recycling, 14.5% CEF Water, 13.1% CEF Sewer, 3.3% CEF Recycling

Description: The District's Operation yard requires improvements due to the relocation of the material storage and spoils areas resulting from implementation of the East County Advanced Water Purification Facilities.

Location: Operations Yard on Carlton Oaks Drive in Santee.

13. CIP RESERVE FUNDED PROJECTS

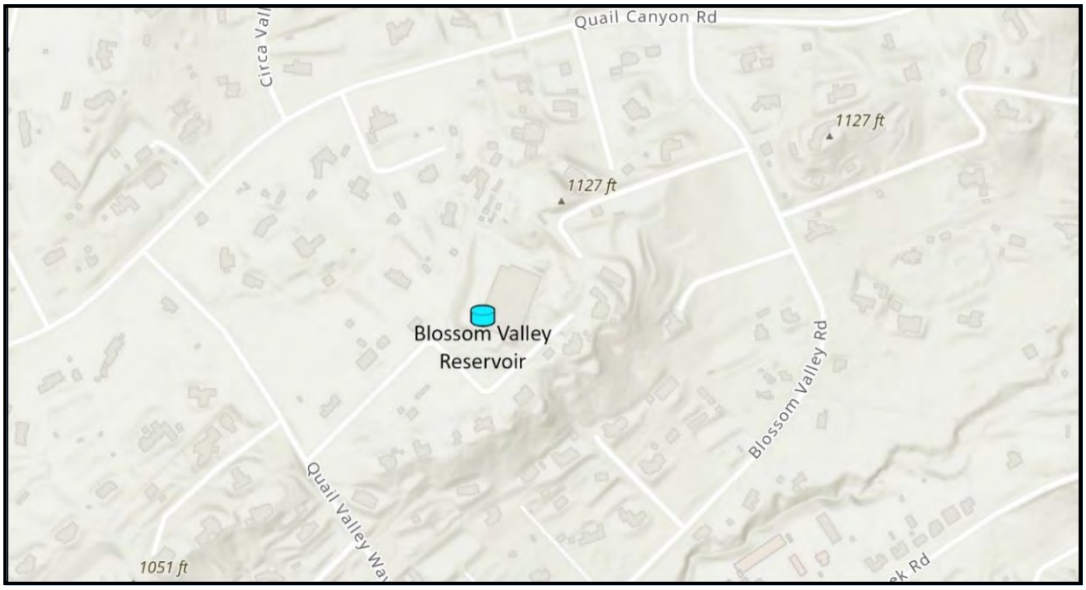
Blossom Valley Reservoir Improvements

Priority: Highest
Masterplan No: WRS-4
Department: Engineering
Project Type: Water, R&R
Schedule: Preliminary analysis and design is anticipated to be completed in FY24 and construction in FY25

Total Budget: $13,500,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: Preliminary analysis 100% Expensed Water. Design and Construction 100% CRF Water
Funding Source: Padre Dam has reserve funds for each service type in addition to a CIP specific reserve fund. The reserve funds may be utilized for unforeseen circumstances or large CIP projects. The use of reserve funding requires Board authorization and minimizes the need for short term rate increases. The Board has established maximum and minimum target fund balance for each reserve fund. The Blossom Valley Reservoir Improvements will utilize funding from the CIP Reserve Fund.

Description
Blossom Valley Reservoir, is an existing 7.9 million Gallon drinking water storage facility, built in the early 1960's, that requires replacement in order to meet current California Building Code requirements. To evaluate the feasibility of various options for improving the Blossom Valley Reservoir, a consultant engineer performed an alternatives analysis and feasibility study to develop and submit a feasibility study to determine the most technically, financially, and operationally viable improvement alternative. After staff ranked the alternatives using a scoring criteria established by Dudek, the highest scoring alternative consisted of installing a new prestressed concrete tank with up to 4.4 MG capacity. The project is now in the detailed design phase and construction is anticipated to be completed in FY25.

Location: Valle Caballo Lane in Blossom Valley.



East County AWP Projects

Pond C Work

Priority: Highest
Masterplan No: RWO-1
Department: East County AWP Engineering
Project Type: Recycling, Other
Schedule: The project will be completed in FY25.

Total Budget: $531,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Recycling

Description: This project will be completed under Package 1 of the East County AWP Project. Pond C improvements include subdividing existing Pond C to create a 4.7 MG basin that can be used for off-spec East County AWP effluent storage prior to its release to Santee Lakes. The remaining portion of Pond C will continue to be used to store recycled water and will be provided new piping including new inlet pipe from the reclaimed water sewer, a new drain to the Metro sewer through a new air gap structure, and a new valve on one of the existing outlet pipes and a new cap on the other existing outlet pipe. Four replacement valves are needed on the existing reclaimed water sewer, and all new pond inlets and drains will require a valve; two valves will be needed for all air gap vaults. In addition, a few sections of sewer piping, both Metro and reclaimed will require replacement. This project's scope only includes items related to the remaining portion of Pond C improvements. Off-spec pond related work will be funded by East County AWP JPA.

Related Project: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

Ray Stoyer WRF Demolition

Priority: Highest
Masterplan No: WWO-6, RWO-2
Department: East County AWP Engineering
Project Type: Sewer, Recycling, Other
Schedule: The demolition work will be completed in FY26.

Total Budget: $5,778,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 50% CRF Sewer, 50% CRF Recycling

Description: This project consists of demolition of existing Ray Stoyer WRF upon the completion of construction of newly upgraded WRF as part of East County AWP projects.

Related Projects: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

Ray Stoyer WRF Electrical Improvements

Priority: Highest
Masterplan No: RWO-10
Department: East County AWP Engineering
Project Type: Recycling, Other
Schedule: The work will begin in FY24 and is anticipated to be completed in FY25.

Total Budget: $2,107,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Recycling

Description: This project will be completed under Package 1 of the East County AWP Project. This project consists of replacing the aging electrical infrastructure (transformer, switchgear) and design a new MCC and new wiring for existing electrical services that will remain in-service after abandonment of Ray Stoyer WRF (hypochlorite mixing, Chlorine Contact Basin, influent and effluent cabinets, irrigation pumps, Title 22 system pumps, existing dechlorination facility power and lighting, and site lighting). Project scope items also include a new 250KW diesel generator within non-walk-in enclosure. The existing PLC-5 will be used for new and transferred I/O from existing PLC-4. Additional I/O modules to be provided as needed. HMI screens will be generated in the new SCADA system for the East Couny AWP Facility for the processes being monitored and controlled by PLC-5.

Related Projects: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

Ray Stoyer WRF Electric Pole Relocation

Priority: Highest
Masterplan No: RWO-1
Department: East County AWP Engineering
Project Type: Recycling, Other
Schedule: Most work accomplished in FY25.

Total Budget: $300,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Recycling

Description: This project will be completed as part of Package 1 of the East County AWP Project. This project consists of the relocation of 5 existing overhead poles along Sycamore Canyon Road, along Ponds A and B, that interfere with the East County AWP Facility construction. The poles are required to continue serving the remaining Title 22 facilities after abandonment of the Ray Stoyer WRF. Collaboration with SDG&E will occur for the pole relocations.

Related Projects: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

Ray Stoyer WRF Title 22 Improvements

Priority: Highest
Masterplan No: RWO-1
Department: East County AWP Engineering
Project Type: Recycling, Other
Schedule: Work to be accomplished in FY24 and FY25.

Total Budget: $2,791,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Recycling

Description: This project will be completed as part of Package 1 of the East County AWP Project. With implementation of the East County AWP Project, a new WRF will be constructed including a new granular media filter to generate water source to feed both the East County AWP Facility for production of purified water for surface water augmentation at Lake Jennings and to feed Ray Stoyer CCB for production of Title 22 irrigation water for Padre Dam customers. New tertiary filters will be located near north end of Pond B area. The tertiary effluent will need to be conveyed to the Ray Stoyer CCB and several improvements are needed to provide disinfection to the tertiary effluent to be able to continue serving Title 22 irrigation customers. This project scope items cover these improvements including a new 2.5 mgd capacity tertiary effluent pump station to convey tertiary effluent to the Ray Stoyer CCB, a new pipeline between the tertiary filter influent pump station to the Ray Stoyer CCB, a new chemical storage and dosing station near CCB, and mechanical improvements to the CCB along with the required electrical and SCADA modifications.

Related Projects: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

Ray Stoyer WRF Tertiary Filters

Priority: Highest
Masterplan No: RWO-1
Department: East County AWP Engineering
Project Type: Recycling, Other
Schedule: Work to be accomplished in FY24 and FY25.

Total Budget: $1,023,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Recycling

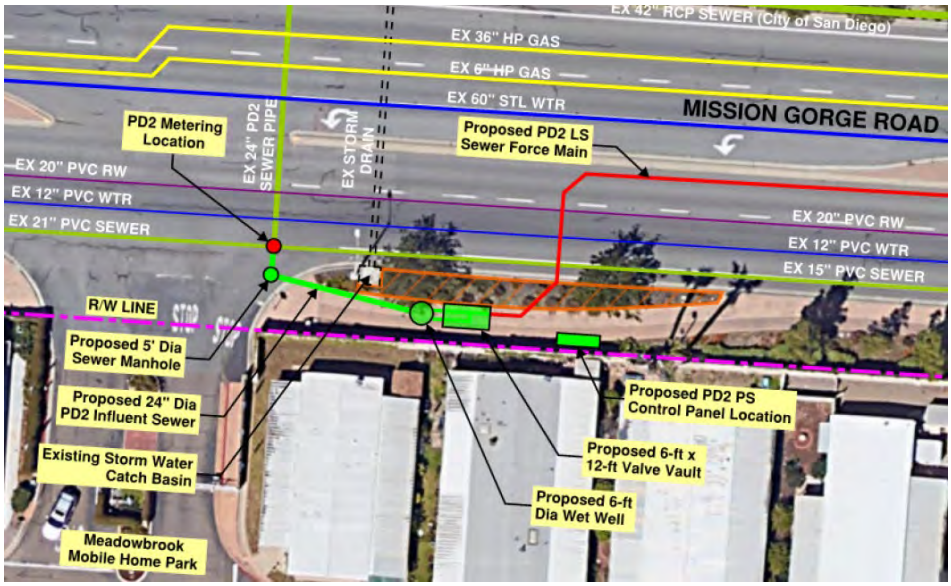
Description: This project will be completed as part of Package 1 of the East County AWP Project. With implementation of the East County AWP Project, a new WRF will be constructed including a new granular media filter to generate water source to feed both the East County AWP Facility for production of purified water for surface water augmentation at Lake Jennings and to feed Ray Stoyer CCB for production of Title 22 irrigation water for Padre Dam customers. Approximately 8 % of the filter effluent will be used for generating Title 22 irrigation water for Padre Dam customers. Therefore, this specific project was created to provide funding for 8% of the design and construction cost for the tertiary filters to be completed by Package 1.

Related Projects: East County Advanced Water Purification Project – Package 1

Location: Ray Stoyer Water Recycling Facility north of Fanita Parkway in Santee.

PD2 Forcemain & Lift Station

Priority: Highest
Masterplan No: WWO-1
Department: East County AWP Engineering
Project Type: Sewer, Other
Schedule: Work to be accomplished in FY24 and FY25.



Total Budget: $2,888, 000
Operation Budget Impact: TBD.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Sewer

Description: This project includes a sewer lift station and force main to redirect sewer flows from the 01A and 01B basins to the East Mission Gorge Pump Station where they may be pumped to the East County Advanced Water Purification treatment facility.

The sewer flows collected from sewer basins 01A and 01B converge at the driveway to the Meadowbrook Mobile Home Park on Mission Gorge Road in western Santee, where they are then conveyed through an existing 24-inch sewer to the City of San Diego's 42-inch Mission Gorge Trunk Sewer. This project would install a sewer lift station, inclusive of diversion manhole, influent piping, wet well, valve vault, discharge piping, and control panel, at the convergence of the 01A and 01B basins and the existing 24-inch sewer. The PD2 Lift Station should be designed with a pump capacity capable of handling peak dry weather flow from the 01A and 01B basins, or approximate 600 gpm.

The PD2 Force Main will be completed as part of the East County AWP Package 4 project and will include installation of approximately 4,000 linear feet of 8-inch PVC pipeline in Mission Gorge Road in Santee. The pipeline will be installed in a joint trench with the proposed East Mission Gorge Force Main and Regional Brine Line as part of the East County AWP Package 4 project and will connect from the PD2 Lift Station to an influent diversion structure at the East Mission Gorge Pump Station site.

In FY 2020, a technical memorandum evaluating the feasibility of redirecting the 01A and 0aB sewer flows to the East Mission Gorge Pump Station was prepared as part of JN 215011.

Related Projects: East County Advanced Water Purification Project – Package 3, 4, PD2 Sewer Conveyance Feasibility Study (JN 215011)

Location: Mission Gorge Road between Meadowbrook Mobile Home Community and the East Mission Gorge Pump Station in Santee.

Influent Pump Station Improvements

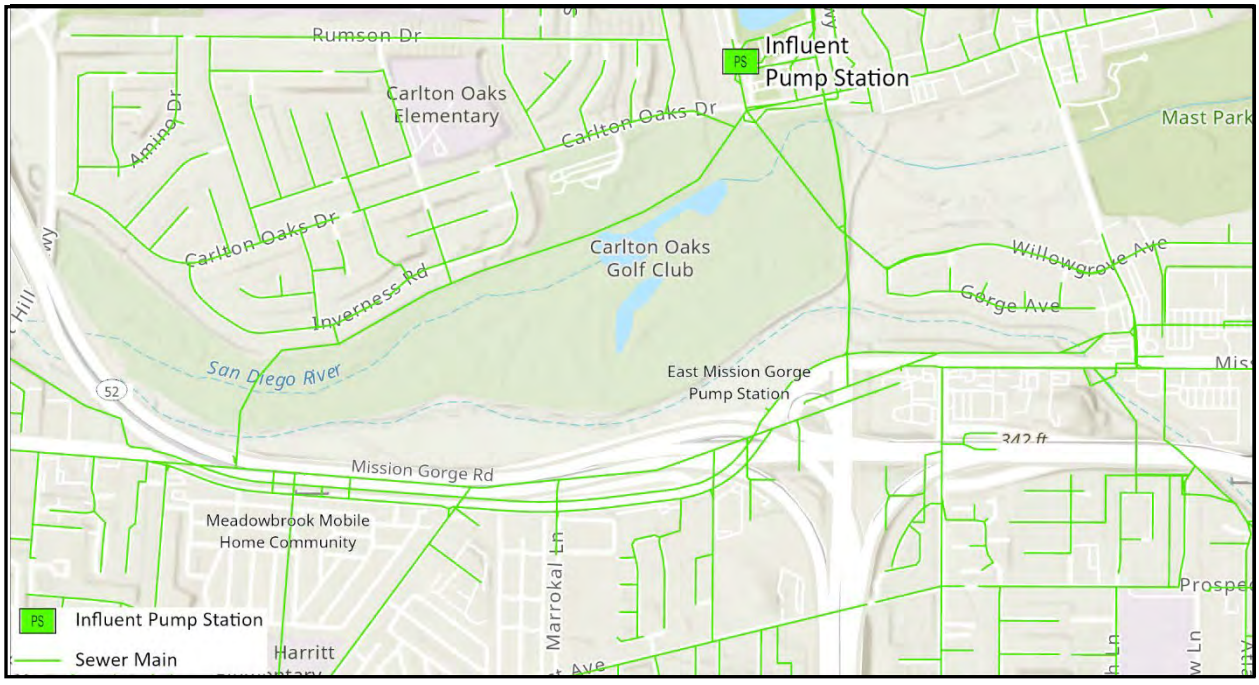
Priority: Highest
Masterplan No: WWO-1
Department: East County AWP Engineering
Project Type: Sewer, Other
Schedule: Work to be accomplished in FY 25.

Total Budget: $2,400,000
Operation Budget Impact: None.
Cost Estimate Accuracy: Planning Level.
District Fund Allocation: 100% CRF Sewer

Description: The Influent Pump Station (IPS), a critical District facility, a portion of which will be dedicated to East County JPA as part of the East County AWP facility. Improvements have been identified as either required for the East County AWP facility or are based on synergy between the IPS repair and replacement schedule and the East County AWP Package 3 construction schedule. Improvements include the replacement of low lift pumps, a new odor control system, HVAC and surge protection improvements, VFD replacements, control system and lighting improvements, and piping and fittings replacement. A new flowmeter vault will also be constructed to allow water from Lake 1 to flow to the IPS as needed.

Related Projects: East County Advanced Water Purification Project – Package 3

Location: Influent Pump Station located at the Operations Yard in Santee.



14. INDEX