

# Goleta Water District Infrastructure Improvement Plan 2025-2030



Amended by the Board of Directors on May 12, 2026

## **Goleta Water District**

### **2026 Board of Directors**

Lauren Hanson, President

Susan Klein-Rothschild, Vice-President

Tom Evans

David Linville

Kathleen Werner

David Matson, General Manager

#### *Staff contributors:*

Daniel Brooks, Engineering and Infrastructure Manager

KK Holland, Assistant to the General Manager

Paula Butcher, Engineering Supervisor

Benjamin Schmidt, Senior Design Engineer

Richard Armstrong, Operations Supervisor

Chris Borges, Treatment Supervisor

Brooke Welch, Principal Policy Analyst

David Cowan, Chief Communications Administrator

Xavier Valls, GIS/Asset Management Specialist

Brianna Wiley, Project Lead

Shannon Eminhizer, Project Lead

Jen Burt, Associate Analyst

Daniel Hill, Associate Analyst

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## Executive Summary

The Infrastructure Improvement Plan (IIP) 2025-2030 identifies the level of capital investment needed to accomplish the District's top priorities: fulfill legal obligations, maintain levels of service, address system deficiencies, and improve reliability and resiliency while controlling expenditures. This IIP also implements goals set forth in Board-adopted planning documents, including the Water Supply Management Plan, Urban Water Management Plan, Sustainability Plan, and Groundwater Management Plan.

As the District celebrates the 80th Anniversary of its founding, capital investment has never been more important. Similar to other utilities across the country, aging infrastructure assets (including the District's groundwater wells, pipes, valves, hydrants, meters, electrical systems, pumps, and treatment facilities) pose a continuing challenge and are at increasing risk of becoming inoperable. The replacement cost of the District's capital assets is estimated to exceed \$1.3 billion. These assets include: approximately 270 miles of water mains; 1,520 fire hydrants; 17,300 meters; 6,800 valves; eight reservoirs; six pump stations; and numerous other assets. As full infrastructure replacement is financially infeasible, key projects are prioritized through a combination of asset management and careful planning to ensure investments address the most pressing needs to maintain current levels of service. Federal and state grants, as well as projects that achieve cost savings, provide further financial offsets.

The IIP 2025-2030 identified 74 projects totaling approximately \$408M and recommends funding for 33 projects at a cost of approximately \$82.6M. All projects include a summarized description and cost estimates. Projects proposed for funding also state the need for the project, consequences of not funding the project, and a projected five-year cost schedule.

The introduction of the IIP 2025-2030 highlights the accomplishments of the IIP 2020-2025 and provides an overview of the District's current state of infrastructure. Section 1 provides a summary of the background information and approach used to identify projects, estimate costs, and prioritize needs. Section 2 lists all capital projects recommended for the next five years. Completing the recommended projects will allow the District to continue to meet legal obligations, maintain current levels of service, and address critical deficiencies.

Lastly, Section 3 includes descriptions for all projects considered for the 2025-2030 planning period. The combination of projects, priorities, and related funding needs described in the IIP 2025-2030 help ensure the capital investment necessary to manage the District's infrastructure in the face of a dynamically changing water supply. The IIP is designed to be flexible and responsive to new information that becomes available, actual project costs instead of estimated costs, and changing conditions in the environment and in the District's treatment and distribution systems. Accordingly, the IIP is amended annually, which helps ensure that funds are spent wisely and effectively.

**COMPLETED**

## ACCOMPLISHMENTS AT A GLANCE

### Infrastructure Improvement Plan 2020-2025

Despite significant challenges unanticipated at the time of its initial approval, the IIP 2020-2025 was adapted to invest in capital projects to meet customer demand, modify the distribution system, and maintain water quality, following the most severe drought in the region’s history. Funding included \$50M in projects to fulfill regulatory and legal obligations, maintain levels of service, and address critical deficiencies, and the District **successfully completed** 36 projects, six of which are highlighted below:

#### Corona Aeration and Pump Station

To mitigate trihalomethane (THM) levels resulting from increased chlorine usage due to drought conditions and wildfires in the Lake Cachuma watershed, an aeration treatment system consisting of 12 floating aerators, three air handling units, and a mixer was installed in the Corona del Mar (Corona) Reservoir. The aeration system was commissioned in fall 2022, and subsequent performance testing showed a 40% reduction in THM levels as a result of this project. A permanent pump station was also installed at Corona Reservoir to provide emergency backup capability to feed the higher elevation Ellwood zone, increase the movement of water throughout the distribution system to improve water quality, and provide more reliable pumping for domestic water supply at CDMWTP.



#### University Well Treatment

The University Well Treatment upgrades included installation of additional filtration technology to remove increasing levels of naturally occurring iron and manganese. Incorporating a modular filtration system to reduce costs, as well as a backwash tank and reclamation system to minimize water loss, the project is on track to be commissioned in early 2025.

#### Transmission Main Relocation

The District’s 42-inch transmission main is its largest diameter pipeline and supplies water to 80% of District customers. This transmission main was built in the 1970s and traverses steep hillsides and creek banks that are subject to landslides and erosion. Rainstorms in 2018 and 2019 resulted in substantial earth movement and creek bank erosion that could have resulted in catastrophic pipeline failure. In 2023 the District relocated a 200-foot section of the transmission main, significantly reducing the risk of landslide-related damage to this critical pipeline.



## Solids Handling Upgrades

A new solids drying bed (SDB3) was constructed at CDMWTP and commissioned in 2024. The new drying bed is 30% larger than either of the two existing drying beds and provides additional solids drying capacity but also the ability to store water in the treatment process during periods of high turbidity Lake Cachuma. Additionally, the reclaimed water pipeline was relocated to the beginning of the treatment system so that all reclaimed water is mixed with raw water at Lake Cachuma and subject to the entire treatment process. This improvement will ensure higher efficiency of treatment and allow the District to reclaim water from the filter backwash and sedimentation processes.



## Hope Well

The Hope Well was drilled in 2023 at the District Headquarters Operations Yard to offset groundwater production lost due to reduced capacity and water quality changes elsewhere in the Goleta Groundwater Basin. This new replacement well is now the District's best producing well, providing critical backup water supplies during periods of drought and both planned and unplanned shutdowns of treatment and distribution facilities. A \$2 million grant from the U.S. Bureau of Reclamation offset a substantial portion of the project costs.

## Fleet Electrification and Charging Stations

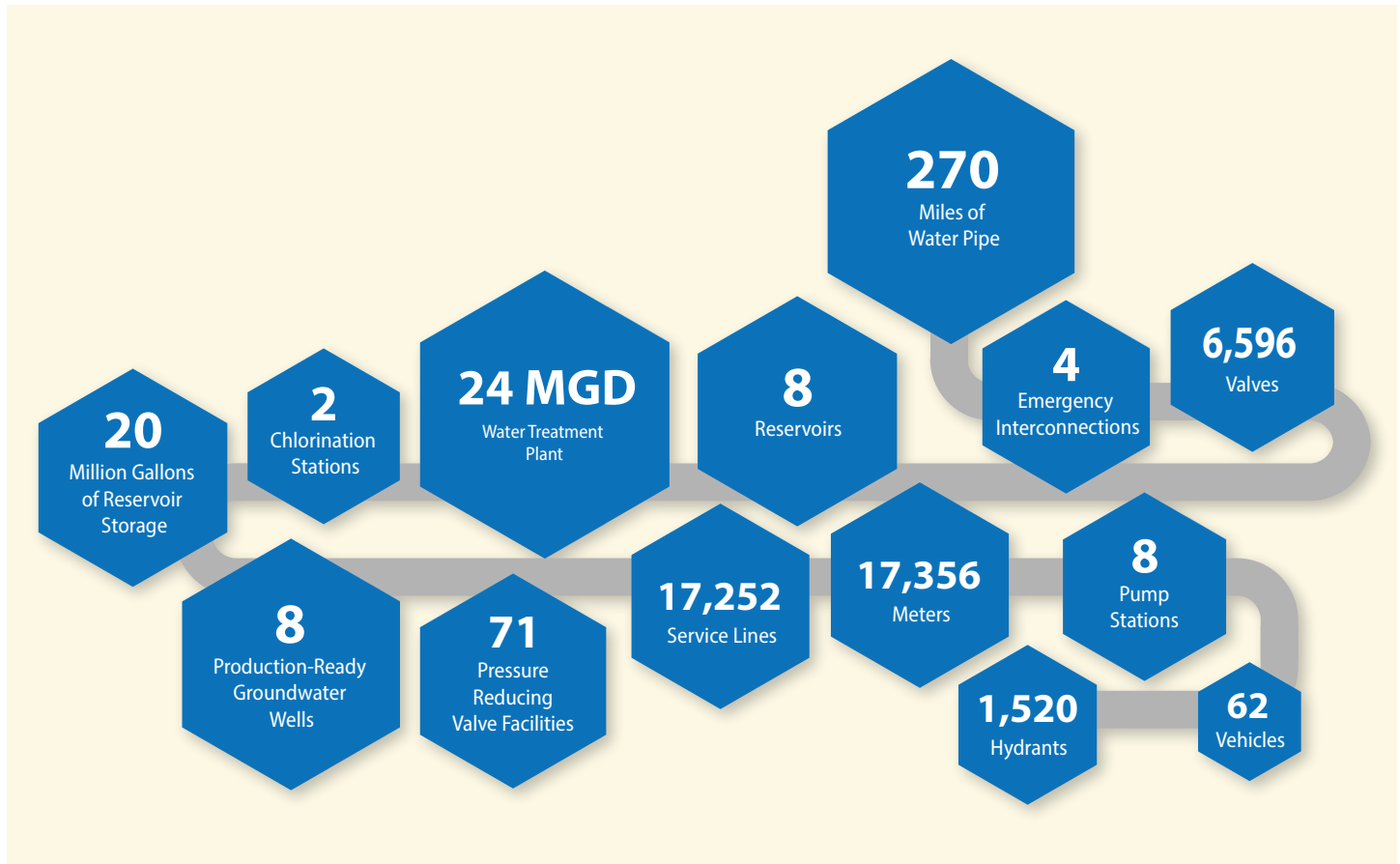
Since 2020, aging and inoperable vehicles in the District's fleet have been replaced with 23 new electric vehicles, including 10 light-duty electric vehicles, 3 electric service vans, 3 electric sedans, 3 electric SUVs, two electric forklifts, and two utility carts. To support this strategic investment in electric vehicles, five charging stations have been installed at CDMWTP and 16 at the District Headquarters. Replacing the fleet with electric or hybrid vehicles cuts fuel costs, maintenance costs, and emissions, lowering the District's carbon footprint and achieving goals set forth in the Board-adopted Sustainability Plan.



## Current State of the District’s Infrastructure

Past infrastructure investments over the District’s 80-year history have provided the necessary resources to draw from its diverse water supply portfolio. However, these assets do not have unlimited service lives. Accordingly, the District is increasingly having to devote more attention to the maintenance of aging infrastructure to ensure continued operation of the District’s complex water system. This system includes 270 miles of pipelines, a 24 million-gallon-per-day surface water treatment plant, nine groundwater wells, eight pump stations, eight reservoirs, and other facilities to serve a population of 87,000 people in the Goleta Valley.

**Figure 1: District Infrastructure at a Glance.**



To ensure continued reliability of the water treatment, groundwater production, and distribution systems, and to balance rising costs associated with infrastructure nearing the end of its service life, the District compiled a comprehensive inventory of all of its capital assets. The asset inventory identifies the age and estimated replacement costs of all the District’s facilities and equipment, which is estimated at \$1.3 billion. Like most public agencies, the District has never funded depreciation of its infrastructure. It is estimated that additional funding of \$15M to \$18M per year for the next 30 years would be needed to address the total of \$512M in infrastructure that will reach the end of its theoretical expected service life between now and 2055.

This IIP does not include funding for proactive infrastructure replacement or establishing a financial reserve to cover the cost of replacement. Instead, projects have been included in this IIP 2025-2030 that allow the District to meet the level of investment necessary to maintain service when assets become inoperable. Additional funding beyond that required to replace inoperable infrastructure in the next five years will be addressed in future Board-adopted budgets as well as capital planning and reserve policies.

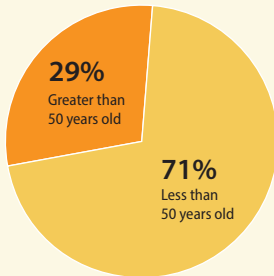
## Aging Infrastructure

### Hydrants

Hydrants provide emergency water service for firefighting. Although the expected service life of a hydrant is 50 years, almost 450 of the 1,520 hydrants (29%) are older than 50 years and at increased risk of potential inoperability during an emergency. Increased annual testing and inspection helps mitigate risk.



**1,520**  
Hydrants in System

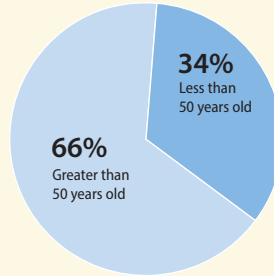


### Pipes

The District has installed and maintained 240 miles of potable water pipelines and 30 miles of non-potable water pipelines since 1944. Depending on material, water pipelines have an expected life of 60 to 105 years. Two-thirds of the District's pipelines have exceeded the expected service life. Cathodic protection systems help prolong the life of steel pipes.



**240**  
Miles of Potable Pipeline



### Valves

Valves control where water moves in the system and allow operators to isolate portions of the distribution system during emergency repairs, which reduces the number of customers affected by a service outage. The District maintains approximately 6,600 valves and exercises them yearly to reduce risk.



**6,596**  
Valves in System



## Maximizing Infrastructure Service Life

The District balances the costs associated with maintaining and replacing critical assets with the risk of service interruptions through its Asset Management Program. This systematic approach allows the District to make data-driven decisions, prioritizing investment in critical components that are at the highest risk of failure. Since age alone is not a reliable predictor of potential asset failure, the District uses conditions assessments, performance data, reliability metrics, and real-time monitoring to better understand and maximize remaining expected life, thereby targeting future investments effectively.



To enhance its asset management capabilities, the District has implemented systematic data collection and developed in-house expertise. This includes a major upgrade of the Geographic Information System (GIS) and ongoing efforts to update asset and data layers. New field data collection portals will help digitize conditions assessment data, while digital tools currently under development will enhance data analysis, streamline inspections, and improve workflow processes. Effective asset management is key to prolonging the service life of existing assets while ensuring smart investments and reliable delivery of quality water to the community.

# Section 1: Infrastructure Improvement Plan Overview

## 1.1 Introduction

The IIP 2025-2030 serves as a tool for describing, prioritizing, and scheduling the District's infrastructure upgrades and replacements. The IIP accounts for the need to address failing infrastructure and changing regulatory standards. Since the IIP is designed to be a dynamic planning tool, the prioritization of projects is likely to shift over time due to changing conditions and external factors beyond the District's control.

This IIP also identifies funding needs for replacing inoperable infrastructure based on recently documented inoperability and replacement rates. Additionally, this IIP incorporates findings of the District's recently updated asset inventory to address the funding needs for assets that will likely reach the end of their expected service lives by the end of the 2025-2030 planning period.

The IIP 2025-2030 is divided into three sections: (1) Infrastructure Improvement Plan Overview; (2) 5-Year Capital Project Plan; and (3) Project Summaries.

## 1.2 Background

The projects included in the IIP represent the investment needed to meet legal and regulatory obligations, maintain existing levels of service, address deficiencies, build emergency resilience, improve system reliability, save money, and enhance levels of service when it is cost-effective to do so. The list also includes projects identified in the following Board-adopted plans:

- Water Supply Management Plan
- Urban Water Management Plan
- Groundwater Management Plan
- Sustainability Plan

The IIP identifies project needs, costs, and schedules to effectively manage resources and capital investment.

## 1.3 Project Evaluation Methodology to Prioritize Infrastructure Projects

To effectively prioritize infrastructure improvement and replacement projects, the District created project priorities and ranked projects in order of criticality. The first 33 projects were identified as critical investments that could accomplish one or more of the following goals:

### 1. Fulfill Legal Requirements

Recommended for funding to meet local, state, and federal regulations for worker safety, water metering, and water quality and to resolve utility conflicts with other agencies.

### 2. Maintain Level of Service

Recommended for funding to replace infrastructure that has become inoperable or mitigate anticipated failure. Cost estimates are based on recent historically observed failure rates or known dates of obsolescence.

### 3. Address Deficiency

Recommended for funding to address deficient systems that could jeopardize water quality, water production, and/or system reliability.

**4. Prepare for Emergencies**

Recommended for funding to provide redundancy of critical operations such as electrical power, groundwater production, system controls, isolating portions of the distribution system in case of main break, reducing risk of infrastructure failure due to earthquakes, and delivering more water to portions of the distribution system that might otherwise not have enough during emergencies.

**5. Improve Reliability**

Recommended for funding to increase system reliability not only during emergencies but also during routine operation. System interruptions and some rare events such as power outages, main breaks, and dramatic water quality changes at Lake Cachuma have the potential to interrupt water service to customers, delay staff response to urgent system needs, and pose treatment challenges.

**6. Save Money**

Recommended for funding to decrease operating costs. For example, strategic investments in hydrokinetic generators and solar power systems will allow the District to offset commercial power costs.

**7. Enhance Level of Service**

Recommended for funding to not only decrease costs but to provide improved service to customers, from new advanced metering technology to improvements to buildings and support systems.

Additional projects deemed not to be critical are not recommended for funding. While these projects could still provide value to the District and meet a number of the District goals, they are not anticipated to be needed during the 2025-2030 planning period.

**1.4 Cost Estimates**

Comprehensive cost estimates have been prepared for all projects and are inclusive of:

- Project planning, research, and preliminary design work
- Administration, project management, and procurement
- 100% design and specification development
- Construction, materials, testing, and inspection
- Commissioning and project close out

For some of the projects identified in the IIP, planning and design work may already be underway or completed. For these projects, more is known about the scope of the project, and cost estimates are more detailed and therefore include less contingency funding. For replacement projects, costs were determined based on fully loaded costs of replacement, including material, labor, procurement, design, construction management, inspection, testing, and administration costs.

## Section 2: 5-Year Capital Project Plan

This IIP identifies 74 capital projects totaling \$407,710,000. Recognizing that resources are finite, projects have been prioritized and a recommendation provided for funding the most critical capital projects during the five-year period. A total of 33 projects are recommended for funding totaling \$82,575,000. These projects are anticipated to fulfill legal requirements, maintain levels of service, address critical deficiencies, prepare for emergencies, improve reliability, save money, and enhance levels of service. At this level of funding, the District does not have sufficient resources to address non-critical deficiencies, proactive infrastructure replacement, or other non-critical projects that could otherwise enhance levels of service or improve operating performance, sustainability, and/or reliability.

**Table 1: 5-Year Capital Project Priorities**

Ref.	Capital Category	Fulfill Legal Requirement	Maintain Level of Service	Address Deficiency	Prepare for Emergencies	Improve Reliability	Save Money	Enhance Level of Service
P-1	Worker Safety Electrical Upgrades	X						
P-2	City, County, Caltrans Relocations Required Projects	X						
P-3	Hope Well Treatment System		X					
P-4	New Replacement Well		X		X			
P-5	SCADA Upgrade and Replacements		X	X	X	X		
P-6	Fleet and Heavy Equipment Replacements		X			X	X	X
P-7	CDMWTP Solids Handling MCC Replacement		X	X		X		
P-8	Meter Replacements	X	X	X		X	X	X
P-9	Treatment Facility Replacements		X					
P-10	Pipeline and Service Line Replacements		X					
P-11	Cathodic Protection System Replacements and Upgrades		X			X		
P-12	Reservoir and Reservoir Component Replacements		X					
P-13	Electrical Power System Replacements		X	X		X		
P-14	Pump Station and Motor Replacements		X					
P-15	Facility Security Upgrades		X	X				
P-16	Well Facility Replacements		X					
P-17	Valve and Hydrant Replacements		X		X	X		
P-18	Computer and Electronic Hardware Replacements		X					
P-19	Pavement Replacements		X				X	X
P-20	Building Component Replacements		X				X	X
P-21	Generators for Pump Stations and Well Sites				X	X		
P-22	Corona Reservoir Rehabilitation		X	X				
P-23	Filter Washtrough Replacements		X					
P-24	Transmission Main 36-Inch Parallel Pipeline - Phase 1		X	X		X		
P-25	Seismic Upgrades		X	X	X	X		
P-26	Upsize Hollister Main between San Antonio and San Marcos Rds			X		X		
P-27	La Riata Booster Pump Station			X	X	X		
P-28	Transmission Main Emergency Highline			X	X			
P-29	CDMWTP Access Road Pavement and Hillside Slump Mitigation			X			X	X
P-30	San Antonio Well Aboveground Facilities Upgrades			X	X	X		
P-31	Upsize Pipeline at Edison Booster Pump Station			X	X			
P-32	Microturbine Power Generation					X	X	X
P-33	Headquarters Public Lot Solar and EV Chargers					X	X	X

**Table 2: 5-Year Capital Project Spending Schedule (2026-27 Forecast)**

Ref.	Project Name	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
P-1	Worker Safety Electrical Upgrades	\$330,000	\$570,000	\$120,000	\$130,000	\$140,000	\$1,290,000
P-2	City, County, Caltrans Relocations Required Projects	\$720,000	\$620,000	\$250,000	\$260,000	\$270,000	\$2,120,000
P-3	Hope Well Treatment System	\$1,550,000	\$3,420,000				\$4,970,000
P-4	New Replacement Well	\$2,800,000	\$920,000	\$3,600,000	\$4,100,000		\$11,420,000
P-5	SCADA Upgrade and Replacements	\$9,070,000	\$1,230,000	\$75,000	\$75,000	\$75,000	\$10,525,000
P-6	Fleet and Heavy Equipment Replacements	\$65,000		\$300,000	\$300,000	\$450,000	\$1,115,000
P-7	CDMWTP Solids Handling MCC Replacement	\$200,000					\$200,000
P-8	Meter Replacements	\$980,000	\$2,600,000	\$6,100,000	\$5,100,000	\$4,000,000	\$18,780,000
P-9	Treatment Facility Replacements	\$100,000	\$105,000	\$110,000	\$115,000	\$120,000	\$550,000
P-10	Pipeline and Service Line Replacements	\$200,000	\$590,000	\$600,000	\$610,000	\$620,000	\$2,620,000
P-11	Cathodic Protection System Replacements and Upgrades	\$300,000	\$310,000	\$320,000	\$330,000	\$340,000	\$1,600,000
P-12	Reservoir and Reservoir Component Replacements	\$770,000	\$190,000	\$90,000	\$75,000	\$70,000	\$1,195,000
P-13	Electrical Power System Replacements	\$120,000	\$160,000	\$220,000	\$230,000	\$240,000	\$970,000
P-14	Pump Station and Motor Replacements	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
P-15	Facility Security Upgrades			\$200,000	\$310,000		\$510,000
P-16	Well Facility Replacements	\$340,000	\$160,000	\$170,000	\$180,000	\$190,000	\$1,040,000
P-17	Valve and Hydrant Replacements	\$600,000	\$510,000	\$520,000	\$530,000	\$100,000	\$2,260,000
P-18	Computer and Electronic Hardware Replacements	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000
P-19	Pavement Replacements	\$20,000	\$20,000	\$20,000	\$300,000	\$890,000	\$1,250,000
P-20	Building Component Replacements	\$240,000	\$740,000	\$530,000	\$120,000	\$110,000	\$1,740,000
P-21	Generators for Pump Stations and Well Sites			\$790,000		\$200,000	\$990,000
P-22	Corona Reservoir Rehabilitation	\$15,000	\$10,000	\$2,030,000			\$2,055,000
P-23	Filter Washtrough Replacements	\$35,000	\$10,000	\$2,160,000			\$2,205,000
P-24	Transmission Main 36-Inch Parallel Pipeline - Phase 1		\$140,000	\$360,000	\$930,000	\$10,000	\$1,440,000
P-25	Seismic Upgrades			\$70,000	\$500,000	\$830,000	\$1,400,000
P-26	Upsize Hollister Main between San Antonio and San Marcos Rds	\$170,000	\$310,000	\$3,650,000	\$2,070,000		\$6,200,000
P-27	La Riata Booster Pump Station	\$80,000	\$190,000	\$1,800,000	\$1,720,000		\$3,790,000
P-28	Transmission Main Emergency Highline		\$10,000	\$1,070,000	\$1,110,000		\$2,190,000
P-29	CDMWTP Access Road Pavement and Hillside Slump Mitigation				\$800,000	\$200,000	\$1,000,000
P-30	San Antonio Well Aboveground Facilities Upgrades	\$80,000	\$190,000	\$2,420,000	\$500,000		\$3,190,000
P-31	Upsize Pipeline at Edison Booster Pump Station					\$300,000	\$300,000
P-32	Microturbine Power Generation	\$160,000	\$1,610,000				\$1,770,000
P-33	Headquarters Public Lot Solar and EV Chargers				\$160,000	\$1,500,000	\$1,660,000
	<b>Total</b>	<b>\$19,055,000</b>	<b>\$14,725,000</b>	<b>\$27,685,000</b>	<b>\$20,665,000</b>	<b>\$10,765,000</b>	<b>\$92,895,000</b>

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# Worker Safety Electrical Upgrades

Project Number: P-1

## The Project

The mitigation of arc flash and other electrical hazards, including those identified in the District’s periodic Arc Flash Study, is required to help the District meet Occupational Safety and Health Administration (OSHA) requirements and National Electrical Code (NEC) changes. Per OSHA, the District is obligated to provide a safe workplace for District employees. Many electrical facilities were installed years ago and no longer meet current NEC safe electrical wiring and equipment codes. Projects to be completed include panel replacements and rectifier repairs and/or replacements. Electrical upgrades are also recommended by the District’s insurance provider, the Joint Powers Insurance Association, to protect personnel from potential risk of high voltage electrical hazards.



## Need for Project

OSHA requires employers to assess the workplace for flame and electric arc hazards, estimate the available heat energy from electrical arcs exposed to employees, and ensure proper clothing and equipment to protect against arc flash hazards (OSHA 1910.269 App E). The District’s most recent Arc Flash Study identified several electrical hazards and recommended mitigation measures.

**Consequence of Not Doing the Project:** Without upgrades, worker safety could be at risk, and the District could violate OSHA requirements.

## Capital Category

*Fulfill Legal Requirements*

## Schedule and Costs

FY 2025-26	Upgrades	\$750,000
FY 2026-27	Upgrades	\$110,000
FY 2027-28	Upgrades	\$120,000
FY 2028-29	Upgrades	\$130,000
FY 2029-30	Upgrades	\$140,000

## Summary

*Mitigate arc flash and other electrical hazards to ensure worker safety and regulatory compliance.*

**\$1,250,000**

# City, County, Caltrans Relocations

Project Number: P-2

## The Project

The District must relocate infrastructure to accommodate future City, County, and California Department of Transportation (Caltrans) infrastructure improvement projects each year. The relocations must be performed at the District’s expense, except where the District holds prior rights. When the District holds prior rights, the other agency is responsible for reimbursing the District’s relocation costs. For all water facility relocation projects, the District will engage in a thorough review to establish whether it holds prior rights. The District will design and oversee construction of the required relocations. Because projects have not yet been identified, the funding level is based on historical costs observed from 2020-2024.



## Need for Project

While the District has a right for its infrastructure to be located in public rights of way, the District must relocate its infrastructure if an infrastructure conflict arises with the owner.

**Consequence of Not Doing the Project:** The District is legally obligated to relocate infrastructure due to external agency conflicts. Where the District has prior rights, relocations will be reimbursed by the project owner.

## Capital Category

*Fulfill Legal Requirement*

## Schedule and Costs

FY 2025-26	Relocate	\$230,000
FY 2026-27	Relocate	\$ 240,000
FY 2027-28	Relocate	\$ 250,000
FY 2028-29	Relocate	\$260,000
FY 2029-30	Relocate	\$270,000

## Summary

*Required water facility relocations for City, County, and Caltrans construction projects.*

**\$1,250,000**

# Hope Well Treatment

Project Number: P-3

## The Project

The District has successfully completed the planning, drilling, and construction to Hope Well, which is expected to produce 750 GPM, adding up to 1,080 AFY to the District’s water supply. Instead of building an additional treatment system next to the well, the Hope Well will be connected to the nearby San Marcos Well treatment and distribution system. This project will expand and upsize treatment capacity at San Marcos Well, install two new filter vessels, replace and upsize existing piping and equipment, and equip Hope Well with a submersible pump. Consolidation of treatment facilities will also preserve usable space in the Operations Yard.



## Need for Project

Enhancing the treatment capacity will allow the District to manage water from both wells, thereby maintaining a high standard of water quality while maintaining production capacity. This project will also offset production declines associated with an aging well field.

**Consequence of Not Doing the Project:** The District may not have enough groundwater production capacity to meet health and safety needs during a water shortage or unplanned emergency.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Construction	\$3,200,000
FY 2026-27	Construction	\$370,000
FY 2027-28		\$0
FY 2028-29		\$0
FY 2029-30		\$0

## Summary

*Construct a new treatment system to serve Hope Well and San Marcos well to enhance water quality and meet future demand.*

**\$3,570,000**

# New Replacement Well

Project Number: P-4

## The Project

The project will include installation of a new well in the Central sub-basin. Site selection is currently underway and will be based in part on favorable hydrogeological conditions, avoiding interference with other District wells, and distance from known environmental contamination sites. The well is anticipated to produce at least 500 gallons per minute, providing an additional 720 acre-feet per year of production and offset production declines observed in the District’s aging well field. The project also includes the design and construction treatment facilities, pump and motor, and a pipeline to connect to the distribution system. The District has applied for up to \$3M in grant funding to offset project costs.



## Need for Project

A new replacement well is needed to offset declining production at existing wells, increase injection capacity, and begin to replace a well field whose oldest wells are nearly 50 years old. Groundwater provides a critical backup water supply during emergencies, periods of drought, and planned shutdowns of CDMWTP and transmission mains.

**Consequence of Not Doing the Project:** The District may not have enough groundwater production capacity to meet water demands during a water shortage or unplanned emergency.

## Capital Category

*Maintain Level of Service  
Prepare for Emergencies  
Improve Reliability*

## Schedule and Costs

FY 2025-26	Drilling	\$2,800,000
FY 2026-27	Design	\$920,000
FY 2027-28	Construction	\$3,600,000
FY 2028-29	Construction	\$400,000
FY 2029-30		\$0

## Summary

*Construct a new replacement groundwater well and treatment system to offset declining groundwater capacity due to well aging.*

**\$7,720,000**

# SCADA Upgrade and Replacements

Project Number: P-5

## The Project

This project completes upgrades designed in 2024 and 2025 for the Supervisory Control and Data Acquisition (SCADA) system, a complex network of electronic monitoring and control equipment located at all of the District’s facilities. SCADA equipment includes visualization, alarms, operational set points, and recording of historical data for pumps, valves, reservoirs, and treatment equipment. The existing SCADA system is obsolete, with some portions being more than 25 years old, and many replacement components must be purchased as after-market parts since they are no longer supported by their manufacturers. These parts are very expensive and may come from overseas. Furthermore, the existing SCADA does not have the capacity to accommodate automated operation of the water quality treatment projects identified for 2025-2030.



## Need for Project

A functioning SCADA system is essential to the District’s automated operation and continued regulatory compliance. The existing SCADA system is functionally obsolete and requires that components no longer supported by manufacturers be replaced with used parts purchased online, including from overseas suppliers.

**Consequence of Not Doing the Project:** Water quality standards and production may not be met without functioning and supported SCADA equipment, putting at risk the District’s level of service and regulatory compliance. Loss of automation would require a conversion to manual operation, which would require a significantly larger Operations staff to manually operate the District’s facilities around the clock.

## Capital Category

- Maintain Level of Service*
- Address Deficiencies*
- Prepare for Emergencie*
- Improve Reliability*

## Schedule and Costs

FY 2025-26	Installation	\$6,900,000
FY 2026-27	Installation	\$375,000
FY 2027-28	Installation	\$75,000
FY 2028-29	Installation	\$75,000
FY 2029-30	Installation	\$75,000

## Summary

*Replace SCADA system to maintain the District’s automated operations and regulatory compliance.*

**\$7,500,000**

# Fleet and Heavy Equipment Replacements

Project Number: P-6

## The Project

This project replaces aging District fleet vehicles and heavy equipment required to meet new California Air Resource Board (CARB) emissions standards. Vehicle replacements are prioritized based on condition, intended use, frequency of maintenance issues, and accumulated expenses. The District owns two backhoes that need replacement to meet CARB regulations by 2026 and 2029 and two dump trucks requiring replacement due to high maintenance costs. Additionally, purchasing electric or hybrid vehicles when possible lowers maintenance and operating costs, reduces fossil fuel consumption, lowers the District’s carbon footprint, and meets goals of the Board-adopted Sustainability Plan.



## Need for Project

District staff rely on functioning vehicles to perform essential tasks related to 1) the repair and replacement of pipes, service lines, meters, valves, and hydrants, 2) water quality sampling, 3) well operations, and 4) pump station and reservoir maintenance. Large construction equipment is used to maintain the District’s aging infrastructure and respond to emergencies.

**Consequence of Not Doing the Project:** Failure to replace aging vehicles and heavy equipment limits operational capacity to respond to emergencies and perform daily regulatory requirements and other routine operations due to high frequency and cost of maintenance.

## Capital Category

- Maintain Level of Service*
- Improve Reliability*
- Save Money*
- Enhance Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$150,000
FY 2026-27	Replacement	\$300,000
FY 2027-28	Replacement	\$300,000
FY 2028-29	Replacement	\$300,000
FY 2029-30	Replacement	\$450,000

## Summary

*Replace inoperable fleet and heavy equipment for uninterrupted daily operations and to meet CARB regulations.*

**1,500,000**

# CDMWTP Solids Handling MCC Replacement

Project Number: P-7

## The Project

The project consists of replacing the motor control center (MCC) at CDMWTP’s solids handling area to improve worker safety, replace a piece of equipment that is at the end of its expected life, and improve reliability for the critical SCADA communications tower as well as pumps for the backwash basin and solids drying beds. The existing MCC is 20 years old and does not meet current electrical code. Variable frequency drives (VFDs) will be included to regulate flow and improve energy efficiency. VFDs will also prolong the expected life of the existing pumps by reducing the number of starts and stops and reducing heat build-up in the motors.



## Need for Project

The upgraded MCC is needed for worker safety and improved reliability for critical communications and treatment facilities.

**Consequence of Not Doing the Project:** Without a replacement MCC, a high risk exists that critical SCADA communications equipment and pumps at backwash basins and solids drying beds would fail, interrupting treatment and communications with all remote District facilities.

## Capital Category

*Maintain Level of Service  
Address Deficiency  
Improve Reliability*

## Schedule and Costs

FY 2025-26	Construction	\$25,000
FY 2026-27	Construction	\$925,000
FY 2027-28		\$0
FY 2028-29		\$0
FY 2029-30		\$0

## Summary

*Replace CDMWTP’s solids drying bed motor control center for worker safety, code compliance, and improved reliability.*

**\$950,000**

# Meter Replacements

Project Number: P-8

## The Project

The project consists of replacing all of the District’s more than 17,300 meters, thousands of which were installed in the 1980s and 1990s and are well beyond the 20-year expected service life of a water meter. Meters will be replaced with Advanced Metering Infrastructure (AMI), which was identified as the most cost-effective option for replacing aging meters that are under-reporting demand and result in unbilled usage. The AMI upgrade will include new meters that can more accurately measure high and low flows; expansion of a communications network to enable more frequent meter reads instead of manual reads once a month; and customer portal that will allow customers to check water usage at any time and promptly alert customers to potential leaks. The project also includes ongoing replacement of meters as they become inoperable. The District has applied for up to \$5M in grant funding to offset project costs.



## Need for Project

California Water Code requires that the District provide metered water service. As meters age they under report usage, which leads to underbilling of water usage and less accurate water loss data. This project was the least expensive option by several million dollars over the next 20 years for replacing aging infrastructure and capturing \$600,000 to \$800,000 of annual revenue that is currently being forfeited. This project will also facilitate customer-specific conservation messaging and allow customers to detect private side leaks promptly instead of relying on monthly meter readings.

**Consequence of Not Doing the Project:** Without the meter replacement project, the District’s meters will continue to under-report usage, and provide less accurate data for regulatory required water loss calculations. An estimated \$600,000 to \$800,000 of annually forfeited revenue will continue to increase as meters age.

## Capital Category

- Maintain Level of Service*
- Address Deficiency*
- Improve Reliability*
- Fulfill Legal Requirements*
- Save Money*
- Enhance Level of Service*

## Schedule and Costs

FY 2025-26	Installation	\$ 5,100,000
FY 2026-27	Installation	\$7,600,000
FY 2027-28	Installation	\$ 4,950,000
FY 2028-29	Commissioning	\$860,000
FY 2029-30	Installation	\$80,000

## Summary

*Replace aging meters for improved accuracy in customer billing and water loss reporting.*

**\$18,590,000**

# Treatment Facility Replacements

Project Number: P-9

## The Project

Drinking water standards require continuous monitoring of treatment equipment, and the District is required to notify the State if such treatment monitoring does not occur as a result of inoperable equipment. CDMWTP, groundwater well sites, and Goleta West Conduit all rely on functioning chlorination and treatment equipment to treat water. These facilities require periodic replacement of automated chemical feed equipment used to vary chemical dosing rates with flow rates. Examples of equipment to be replaced include chemical tubing, chemical metering pumps, valve actuators, and lab equipment.



## Need for Project

Water quality cannot be maintained without treatment equipment operating properly. These replacements maintain the District’s ability to meet water quality regulations.

**Consequence of Not Doing the Project:** Not replacing inoperable treatment facilities would result in violating drinking water standards and interruption of treated water production.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$100,000
FY 2026-27	Replacement	\$105,000
FY 2027-28	Replacement	\$110,000
FY 2028-29	Replacement	\$115,000
FY 2029-30	Replacement	\$120,000

## Summary

*Replace inoperable chlorination and treatment facilities to meet water quality standards.*

**\$550,000**

# Pipeline and Service Line Replacements

Project Number: P-10

## The Project

The District has historically experienced twelve main breaks and twenty-nine service line breaks annually across its 270 miles of pipeline. This rate is expected to increase as pipes age and 36% of the District’s water mains will be at least 70 years old by 2030. This project will replace pipelines and service lines as pipes break and will also address erosion on portions of large-diameter transmission mains and the 10-mile long Goleta West Conduit. This project does not address proactive replacement of aging pipelines.



## Need for Project

Replacing ruptured pipelines and service lines and maintaining sufficient ground cover over pipelines allows the District to maintain water service to District customers and minimize service disruptions. When water mains fail, they not only affect the customers served by that water main, but also surrounding customers.

**Consequence of Not Doing the Project:** Not repairing broken mains and service lines would interrupt water service to customers. Not repairing erosion over large-diameter pipelines jeopardizes the integrity of water service to large numbers of customers.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$580,000
FY 2026-27	Replacement	\$590,000
FY 2027-28	Replacement	\$600,000
FY 2028-29	Replacement	\$610,000
FY 2029-30	Replacement	\$620,000

## Summary

*Replace inoperable pipelines annually to minimize customer and community impacts.*

**\$3,000,000**

# Cathodic Protection System Replacements and Upgrades

Project Number: P-11

## The Project

The District’s active cathodic protection systems employ direct current to safeguard steel infrastructure against corrosion. These systems include sacrificial metal anode beds, rectifiers that supply electrical current, and test stations for monitoring performance. The District aims to expand its cathodic protection system to encompass large steel water storage tanks at CDMWTP and to address proactive replacement of 120 miles of aging steel pipe. The project involves annual inspections of existing systems, designing and constructing additional deep well anodes, rectifiers, and installing cathodic protection test stations at CDMWTP. Furthermore, a prioritized list of replacement projects for steel pipelines has been compiled based on assessments conducted over the past 20 years.



## Need for Project

Effective maintenance and replacement of cathodic protection systems extends the service life of this infrastructure, mitigates service interruptions, reduces the incidence of emergency main breaks caused by corrosion leaks, and lowers the overall expense of repairs.

**Consequence of Not Doing the Project:** Without proper maintenance of cathodic protection infrastructure, steel infrastructure is at risk of accelerated corrosion and premature failure, resulting in increased costs and more frequent repairs.

## Capital Category

*Maintain Level of Service  
Improve Reliability*

## Schedule and Costs

FY 2025-26	Installation	\$300,000
FY 2026-27	Installation	\$310,000
FY 2027-28	Installation	\$320,000
FY 2028-29	Installation	\$330,000
FY 2029-30	Installation	\$340,000

## Summary

*Design, implement, and proactively replace cathodic prevention systems to reduce corrosion and extend service life.*

**\$1,600,000**

# Reservoir and Reservoir Component Replacements

Project Number: P-12

## The Project

The District’s eight storage reservoirs provide critical water storage for peak demand and emergencies. These reservoirs are integral components of the District’s infrastructure, ensuring sufficient water supply is available to meet operational needs and meet peak demand. Six of the District’s reservoirs are over 50 years old. Initial conditions assessments have indicated interior and exterior surfaces and equipment upgrades are needed to address safety deficiencies. These upgrades and refurbishments include replacing telemetry, corroded pipe brackets, ladders, railings, and safe climbing fixtures, and inlet/outlet piping.



## Need for Project

Replacement of existing reservoir components are needed to maintain current levels of storage to meet operational, fire flow, and emergency demand, and to comply with Occupational Safety and Health Administration (OSHA) guidelines for worker safety.

**Consequence of Not Doing the Project:** Potential loss of reservoir use could result in insufficient water storage to meet operational, fire, and emergency demand. Not correcting documented safety deficiencies could result in worker injuries.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$400,000
FY 2026-27	Replacement	\$190,000
FY 2027-28	Replacement	\$90,000
FY 2028-29	Replacement	\$75,000
FY 2029-30	Replacement	\$70,000

## Summary

*Replace reservoir components to ensure safety and water storage reliability.*

**\$825,000**

# Electrical Power System Replacements

Project Number: P-13

## The Project

To maintain operations of treatment and distribution facilities, inoperable electrical equipment and systems need to be replaced. This project replaces inoperable electrical systems and components that no longer meet current electrical code requirements to ensure a safe work environment for employees who work on the equipment. Electrical power system replacements also provide the power necessary to operate mechanical and electrical equipment located throughout District facilities.



## Need for Project

Electrical power is critical for District operations. Replacement of malfunctioning and inoperable electrical power systems improves the safety of District employees and keeps the District in compliance with electrical code changes.

**Consequence of Not Doing the Project:** Not replacing inoperable or deteriorating electrical equipment would result in loss of function for critical treatment and distribution capabilities, which could result in service interruptions, water quality degradation, or safety risk.

## Capital Category

*Maintain Level of Service  
Address Deficiencies  
Improve Reliability*

## Schedule and Costs

FY 2025-26	Replacement	\$210,000
FY 2026-27	Replacement	\$500,000
FY 2027-28	Replacement	\$220,000
FY 2028-29	Replacement	\$230,000
FY 2029-30	Replacement	\$240,000

## Summary

*Replace electrical power systems for continued operations, efficiency, and safety.*

**\$1,400,00**

# Pump and Motor Replacements

Project Number: P-14

## The Project

Replacement of inoperable pumps and motors ensures water can continue to be moved through the treatment processes and distribution system. At CDMWTP, pumps are used for chemical dosing feeds, at the flash mix, and for moving solids and water to and from the solids drying beds. In the potable and recycled water distribution systems, the District operates nine pump stations that boost pressure and/or lift water to higher elevations of the distribution system. Lastly, the District relies on pumps and motors at each of its groundwater production wells to extract, treat, and distribute groundwater. This project will replace inoperable pumps and motors to maintain levels of service and pumping operations.



## Need for Project

Pumps are needed to deliver water treatment chemicals, produce groundwater, and move treated water through the distribution system.

**Consequence of Not Doing the Project:** Not replacing pumps and motors when they fail will result in service interruptions to customers and potential noncompliance with drinking water standards.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$80,000
FY 2026-27	Replacement	\$80,000
FY 2027-28	Replacement	\$80,000
FY 2028-29	Replacement	\$80,000
FY 2029-30	Replacement	\$80,000

## Summary

*Replace inoperable pumps and motors to maintain level of service and pumping operations.*

**\$400,000**

# Facility Security Upgrades

Project Number: P-15

## The Project

The project includes an evaluation of the current state of the District’s security infrastructure and subsequent implementation of upgrades that may include intrusion detection, additional cameras, and other site security technologies that offer better protection and are necessary to counter emerging risks. Existing security systems are aging and in need of replacement, and several facilities are in need of enhanced security measures.



## Need for Project

A security evaluation is necessary to identify vulnerabilities that could be exploited by individuals looking to cause harm to District infrastructure, employees, or customers. A robust, unified security system offers significant advantages over multiple, disconnected systems.

**Consequence of Not Doing the Project:** The District would remain more vulnerable to security threats, especially for remote sites.

## Capital Category

*Maintain Level of Service  
Address Deficiency*

## Schedule and Costs

FY 2025-26		\$70
FY 2026-27		\$0
FY 2027-28	Assess & Install	\$200,000
FY 2028-29	Installation	\$310,000
FY 2029-30		\$0

## Summary

*Evaluate and improve security and protection of key water facilities by unifying systems, enhancing threat detection, and improving visibility at local and remote sites.*

**\$510,000**

# Well Facility Replacements

Project Number: P-16

## The Project

This project will replace aboveground components at the District’s well facilities. Periodic replacements of backwash tanks, filter vessels, filter media, pumps and motors, gauges, valves, flow meters, and other appurtenances are needed to maintain the District’s current production capacity into the future and to protect past investments.



## Need for Project

To maintain existing levels of well production and treatment performance, aboveground components need to be replaced when inoperable. This project preserves the District’s past investment and ensures that the District continues to meet customer demand and water quality standards.

**Consequence of Not Doing the Project:** Groundwater production will be reduced or unavailable, including during emergencies.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$150,000
FY 2026-27	Replacement	\$160,000
FY 2027-28	Replacement	\$170,000
FY 2028-29	Replacement	\$180,000
FY 2029-30	Replacement	\$190,000

## Summary

*Replace inoperable aboveground well facilities to maintain groundwater production capacity.*

**\$850,000**

# Valve and Hydrant Replacements

Project Number: P-17

## The Project

The District owns and maintains nearly 6,800 valves and 1,520 fire hydrants throughout its system. Replacement of malfunctioning or inoperable valves and hydrants generally follow routine inspections, shutdowns, and flushing activities that reveal poor operating conditions. Inoperability occurs due to frozen or stuck valves, broken stems, sheared operating nuts, poor closing ability, excessive leak-by, and leaking packing. Inoperable fire hydrants can have flows reduced due to rust or other damage limiting access to the hydrant for firefighters. Replacement costs vary depending on the presence of surrounding utilities, need for traffic control, and potential for property damage from leaked water.



## Need for Project

Valves allow distribution operators to isolate leaks to minimize property damage during emergency repairs, reduce the number of customers impacted by shutdowns, and protect water resources. Hydrant replacements ensure emergency services personnel can access water for fighting fires.

**Consequence of Not Doing the Project:** Failure to replace aging infrastructure may result in more customers being impacted by service outages and insufficient fire protection flows available when needed.

## Capital Category

*Maintain Level of Service  
Prepare for Emergencies  
Improve Reliability*

## Schedule and Costs

FY 2025-26	Replacement	\$500,000
FY 2026-27	Replacement	\$510,000
FY 2027-28	Replacement	\$520,000
FY 2028-29	Replacement	\$530,000
FY 2029-30	Replacement	\$540,000

## Summary

*Replace inoperable valves and hydrants to limit the number of customers affected by outages and maintain access to fire flows.*

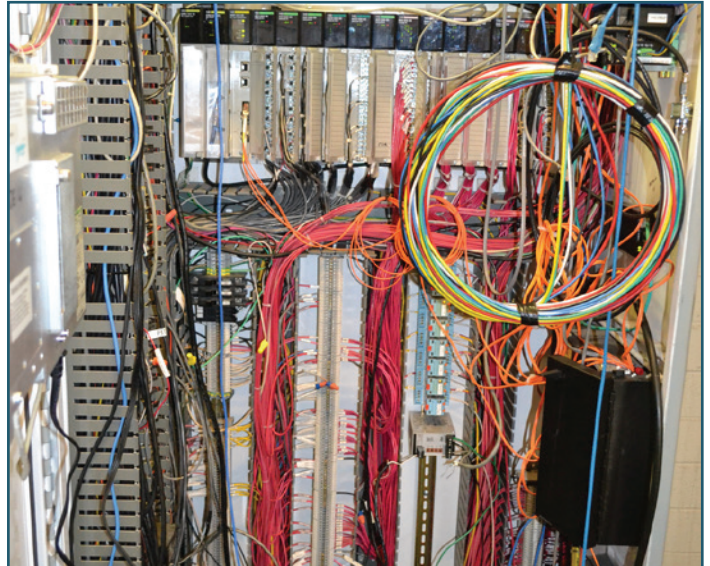
**\$2,600,000**

# Computer and Electronic Hardware Replacements

Project Number: P-18

## The Project

The District relies on well-functioning computer and electronic hardware to monitor the distribution system, treatment process, system pressures, as well as operate the District’s Geographic Information System, hydraulic model, billing, accounting and customer service programs. This includes electrical hardware at its facilities and desktop and laptop computers that require periodic replacement. This project will provide for the ongoing annual replacement of faulty or obsolete computer equipment (e.g., servers, routers, laptops, tablets, cables, etc.) and electric hardware (e.g., program logic centers, motor control centers). Replacements ensure that District staff have the tools necessary to maintain and operate the District’s water system as cost-effectively as possible.



## Need for Project

Computers and electronic hardware allow for maintenance of accurate facility records, billing, and customer information within various computer systems, and are vital to the efficient operation of the District’s water system and customer service. Computer systems support the District in collecting revenue, meeting industry standards, and providing customer service.

**Consequence of Not Doing the Project:** Inoperable or obsolete computer and electronic hardware limits the District’s ability to meet its level of service for system-wide functions, including customer service, revenue tracking, asset record management, monitor water quality, and maintain system pressures.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$30,000
FY 2026-27	Replacement	\$30,000
FY 2027-28	Replacement	\$30,000
FY 2028-29	Replacement	\$30,000
FY 2029-30	Replacement	\$30,000

## Summary

*Replace inoperable computer and electronic hardware systems to maintain District operations.*

**\$150,000**

# Pavement Construction and Replacement

Project Number: P-19

## The Project

Areas of the District’s 10.5 miles of paved assets at the treatment plant, reservoirs, pumping stations, chlorination stations, groundwater wells, and Operations Yard are deteriorating and require replacement and repairs. The main causes of pavement degradation are 1) water infiltrating pavement cracks and 2) wear caused by heavy truck traffic. This pavement replacement project includes the removal of the degraded road surface base material, replacing solid base foundations, and installing new pavement or repairing pavement due to earth movement. New pavement is expected to provide 30 years of service life with routine maintenance and sealing of cracks and surfaces every two to three years. This project is expected to include pavement of a gravel road at Corona Reservoir and replacement of pavement at the Operations Yard.



## Need for Project

Replacing failed pavement helps prevent storm runoff from eroding access roads to critical District facilities that require costly repairs and helps prevent violations of stormwater regulations. Although the District has performed some pavement maintenance, deferred repairs in many locations have resulted in needed pavement replacements.

**Consequence of Not Doing the Project:** Not replacing failed pavement increases the risk of access interruptions to District facilities, adversely impacting the District’s level of service and ability to maintain and operate various sites.

## Capital Category

- Maintain Level of Service*
- Save Money*
- Enhance Level of Service*

## Schedule and Costs

<i>FY 2025-26</i>	<i>Design &amp; Const.</i>	<i>\$20,000</i>
<i>FY 2026-27</i>	<i>Construction</i>	<i>\$20,000</i>
<i>FY 2027-28</i>	<i>Construction</i>	<i>\$20,000</i>
<i>FY 2028-29</i>	<i>Construction</i>	<i>\$300,000</i>
<i>FY 2029-30</i>	<i>Construction</i>	<i>\$890,000</i>

## Summary

*Replace and repair failed pavement to maintain critical access to District Facilities.*

**\$1,250,000**

# Building Component Replacements

Project Number: P-20

## The Project

The District owns 28 buildings that provide workspaces for employees and protect equipment from environmental exposure and vandalism. Buildings throughout the system include CDMWTP, nine well sites, two chlorination stations, pump stations, two storage facilities, and office, shop, and storage buildings at the District’s headquarters. Of the District’s 28 buildings, seven were built before 1970 and will be greater than 60 years old by 2030. This project will replace deficient building components, including roofs, doors, windows, heating and air conditioning units, drainage, lighting, flooring, fencing, hardscape, water- and termite-damaged structures, and other components.



## Need for Project

Periodic replacement of building components maintains building operability and protects District equipment and workers. Further, certain building components in need of replacement are required to comply with building codes and Occupational Safety and Health Administration regulations.

**Consequence of Not Doing the Project:** Neglecting building component repairs and replacements can result in more costly future repairs, create health and safety risks for workers, damage or shorten the service life of equipment, and reduce worker productivity and current levels of service.

## Capital Category

- Maintain Level of Service*
- Save Money*
- Enhance Level of Service*

## Schedule and Costs

FY 2025-26	Replacement	\$130,000
FY 2026-27	Replacement	\$440,000
FY 2027-28	Replacement	\$530,000
FY 2028-29	Replacement	\$120,000
FY 2029-30	Replacement	\$110,000

## Summary

*Replace building components for operability and worker and equipment protection.*

**\$1,330,000**

# Generators for Pump Stations and Well Sites

Project Number: P-21

## The Project

The project consists of purchasing at least two mobile generators to provide emergency backup power to pump stations and/or well sites. Backup power will help ensure that the District can provide groundwater to keep customers in service during a power outage or disaster. The District relies on groundwater when surface water supplies are interrupted and during water quality blending operations and requires power to access these water supplies and serve customers at higher elevations.



## Need for Project

Backup power generators are needed to sustain water service when surface water supplies are unavailable or commercial power supplies are interrupted, including during natural disasters or other emergencies.

**Consequence of Not Doing the Project:** The District may not be able to deliver water to some customers during emergencies or power outages.

## Capital Category

*Prepare for Emergencies  
Improve Reliability*

## Schedule and Costs

FY 2025-26		\$ 0
FY 2026-27		\$ 0
FY 2027-28	Purchase	\$ 790,000
FY 2028-29		\$ 0
FY 2029-30	Purchase	\$200,000

## Summary

*Purchase mobile generators to provide backup power to pump stations and well sites.*

**\$990,000**

# Corona Reservoir Rehabilitation

Project Number: P-22

## The Project

The project will include removal of the Corona Reservoir’s deteriorating interior liner, replacement of joint sealant, removal and replacement of the entry ladder, repair of concrete cracking and spalling, and repair of a suspected minor leak in the reservoir floor. Corona Reservoir is a 5-million gallon pre-stressed concrete reservoir located adjacent to the Corona Del Mar Water Treatment Plant. The reservoir has been in service for about 50 years and is home to an aeration treatment system and pump station that are used to reduce the presence of disinfection byproducts in treated water and allow the District to redirect flows to the Ellwood reservoir to better serve customers and create redundancies when the 42-inch transmission main is out of service.



## Need for Project

Corona Reservoir is one of the most important reservoirs in the GWD distribution system. Keeping the Reservoir operational is critical to the District’s ability to maintain the current level of service to 80% of the District’s customers.

**Consequence of Not Doing the Project:** Continued degradation of the reservoir interior and widening of the leak could result in water quality degradation, worker injury, and/or emergency shut-down of the reservoir, which could impact thousands of customers.

## Capital Category

*Maintain Level of Service  
Address Deficiency*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29	Procurement	\$80,000
FY 2029-30	Construction	\$1,600,000

## Summary

*Rehabilitate Corona Reservoir to address maintenance deficiencies and maintain its level of service.*

**\$1,680,000**

# Filter Washtrough Replacements

Project Number: P-23

## The Project

Filter troughs at CDMWTP are showing signs of deterioration due to constant exposure to water, sunlight, and treatment chemicals over 40 years and have been chipping during the periodic cleaning process. The troughs disperse water evenly over the top of filter media in each of six filters. During filter backwash, the troughs evenly remove water. Filter troughs are in near constant use, and the chipping problem will continue and worsen until troughs are replaced. This project will replace old fiberglass filter troughs with new stainless steel troughs.



## Need for Project

The District’s original filter troughs installed in 1974 are exposed to harsh environmental conditions and are approaching the end of their expected service life, necessitating replacement with durable, stainless steel troughs. Replacement will stop debris from entering the filter and will improve overall filter reliability.

**Consequence of Not Doing the Project:** The filter troughs will continue to deteriorate until inoperability causes filter malfunction, which would limit or interrupt treatment at CDMWTP.

## Capital Category

*Maintain Level of Service*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29	Replacement	\$100,000
FY 2029-30	Replacement	\$1,400,000

## Summary

*Replace the deteriorating filter troughs at CDMWTP to maintain current level of service and improve treatment reliability.*

**\$1,500,000**

# Transmission Main 36-Inch Parallel Pipeline – Phase 1

Project Number: P-24

## The Project

This project includes an alternatives analysis, design, and property acquisition for a parallel transmission to the District’s existing 42-inch transmission main that feeds a majority of the District’s reservoirs and customers. The existing transmission main is aging and has been subject to repeated earth movements. It is at increased risk of failure, raising the need for a parallel main to increase service reliability. A parallel 36-inch transmission main to the existing transmission main between CDMWTP and Cathedral Oaks can provide redundancy in the event of a transmission main failure. This second transmission main will also be used while the existing main is out of service for maintenance and/or inspection.



## Need for Project

A second, parallel main provides reliability and flexibility during planned and unplanned outages. This redundant pipeline will increase resiliency and emergency preparedness by preventing potential service interruption and boil water notices to 80% of the District’s customers that could result from a catastrophic failure of the 42-inch transmission main.

**Consequence of Not Doing the Project:** An unplanned outage of the existing main may require extensive emergency response, costly repairs, and reliance on backup supply through the Ellwood Zone, groundwater wells, and/or interconnections with the City of Santa Barbara. Depending on the time of year of such an event, water service could be interrupted to thousands of customers.

## Capital Category

- Maintain Level of Service*
- Address Deficiency*
- Improve Reliability*

## Schedule and Costs

FY 2025-26	\$0
FY 2026-27	\$140,000
FY 2027-28	\$360,000
FY 2028-29	\$930,000
FY 2029-30	\$10,000

## Summary

*Design and construct a parallel transmission main for resiliency and operational flexibility.*

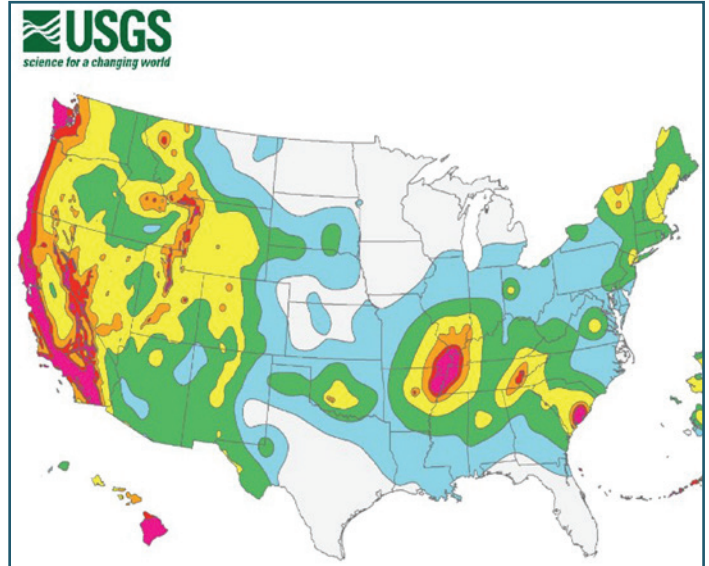
**\$1,440,000**

# Seismic Upgrades

Project Number: P-25

## The Project

The District lies in a high seismic hazard zone, and critical infrastructure, including the Corona Del Mar Water Treatment Plant, District reservoirs, pump stations, and several large-diameter pipelines were constructed decades ago before current seismic standards were developed. Water utilities are particularly vulnerable to earthquake damage due to extensive above and below ground pipelines, pumps, tanks, and treatment equipment. Initial seismic vulnerability assessments have indicated upgrades are needed to address seismic deficiencies and mitigate the risk of earthquake damage. These upgrades include, but are not limited to, bracing equipment, installing pipe supports, constructing retaining walls, and hillside stabilization.



## Need for Project

Seismic upgrades to existing District facilities are needed to mitigate potential Earthquake damage.

**Consequence of Not Doing the Project:** Potential loss of District facilities and pipelines could result in disruption of water service and insufficient water storage to meet operational, fire, and emergency demand.

## Capital Category

- Prepare for Emergencies*
- Maintain Level of Service*
- Address Deficiency*
- Improve Reliability*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28	Design	\$70,000
FY 2028-29	Design & Constr.	\$500,000
FY 2029-30	Construction	\$830,000

## Summary

*Seismic upgrades to District infrastructure at its most critically vulnerable assets.*

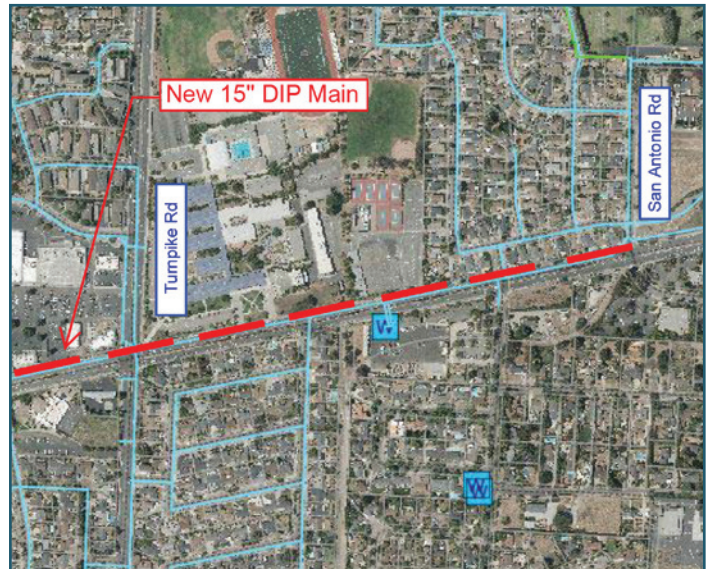
**\$1,400,000**

# Upsize Hollister Main between San Antonio and San Marcos Roads

Project Number: P-26

## The Project

This project involves upsizing 4,500 linear feet of the Hollister Main between San Antonio Road to San Marcos Road to a 16-inch ductile iron pipe to accommodate increased flows for the District’s new Hope Well. This will include the necessary service connections and valves to meet the maximum allowable flow velocities and pressures. The Hope Well, combined with San Marcos Well, have the ability to provide an increased delivery rate of 1,850 GPM. However, the volume of produced water is limited by the size of the Hollister Avenue Main, a 10-inch steel pipe that was installed in 1955. During drought conditions, to utilize the full capacity of both wells in combination with the nearby San Antonio Well, an upsized main is needed. Without upsizing the main, the existing pipeline would be subject to high velocities and turbulent flows that would result in premature pipeline failure on a busy roadway.



## Need for Project

Upsizing the Hollister Main is necessary to accommodate the increased water delivery rate from the new Hope Well and the existing San Marcos Well.

**Consequence of Not Doing the Project:** If the pipeline is not upsized, the District would be unable to deliver the full production capacity from Hope Well and San Marcos Well.

## Capital Category

*Distribution System Reliability  
Address Deficiency*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27	Design	\$260,000
FY 2027-28	Design & Constr.	\$3,600,000
FY 2028-29	Construction	\$1,300,000
FY 2029-30		\$0

## Summary

*Upsize the Hollister Main pipeline to handle increased water delivery rates from the Hope and San Marcos Well.*

**\$5,160,000**

# La Riata Booster Pump Station

Project Number: P-27

## The Project

The La Riata Booster Pump Station will eliminate flow restrictions to the San Marcos Reservoir and the San Marcos Pressure Zone. The project will help prevent the dewatering of the pressure zone during a wildfire event when the Fire Department may be using multiple hydrants faster than the pump station and reservoir can sustain. The pressure zone is currently fed by the San Antonio pump station, with a long section of under-sized 8-inch diameter pipelines and lower capacity pumps. The proposed new location is off La Riata Lane, near the existing La Riata Reservoir. The new 12-inch diameter piping and the new pump station will be fed by a short section of pipeline from the La Riata Reservoir and higher capacity pumps. The project will include the design and construction of a pitless pump station (comprised of underground submersible pumps) and associated pipeline. This project will reduce the need for additional reservoir storage in the San Marcos pressure zone, which is currently served by a 300,000-gallon concrete reservoir.



## Need for Project

Installing the La Riata Booster Pump Station and increasing the pipeline diameter will provide improved operational flexibility and fire flows in the San Marcos Zone.

**Consequence of Not Doing the Project:** The San Marcos pressure zone may dewater during a main break or wildfire when multiple hydrants are being used by the Fire Department, which would trigger a boil water notice to customers.

## Capital Category

*Address Deficiency  
Prepare for Emergency  
Improve Reliability*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27	Design	\$10,000
FY 2027-28	Design	\$500,000
FY 2028-29	Construction	\$1,800,000
FY 2029-30	Construction	\$1,250,000

## Summary

*Install La Riata Booster Pump Station to improve operational flexibility.*

**\$3,560,000**

# Transmission Main Emergency Highline

Project Number: P-28

## The Project

Portions of the District’s most critical pipeline were constructed in an area prone to landslides. Recent, shallow land sliding and ground movement has been observed along a segment of this 42-inch transmission main. This project includes designing and constructing valved, flanged connections to existing points of entry into the 42-inch transmission main, along with purchasing sufficient length of pipe and mechanical joints, to allow rapid installation of a temporary highline (an aboveground pipeline) in the event of a transmission main failure. A highline will provide short term resiliency to the District’s water supply network.



## Need for Project

The District’s most critical pipeline is at elevated risk of failure due to earth movement, and it does not have a backup pipeline. The current backup operation would rely on the smaller Ellwood transmission main, groundwater well production, and City of Santa Barbara interconnections, which may be insufficient in meeting customer demand. Constructing a temporary highline is needed to minimize service interruptions to a majority of District customers served by the 42-inch transmission main.

**Consequence of Not Doing the Project:** A transmission break could result in a prolonged water outage to customers as well as costly emergency repairs.

## Capital Category

*Address Deficiency  
Prepare for Emergencies*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27	Design	\$10,000
FY 2027-28	Construction	\$1,070,000
FY 2028-29	Construction	\$1,100,000
FY 2029-30		\$0

## Summary

*Design and construct a temporary emergency highline in the event of a transmission main failure.*

**\$2,190,000**

# CDMWTP Access Road Hillside Slump Mitigation and Pavement Restoration

Project Number: P-29

## The Project

The CDMWTP access road serves as the only paved road to the plant for chemical deliveries, staff, contractors, and emergency personnel. The road is 1.25 miles long, with an average width of 18 feet (about 119,000 square feet of pavement) and has sustained wear associated with daily truck travel, weather, and minor erosion along some edges. Recent assessments indicate some cracking and approximately 2,000 square feet of hillside and dike that must be excavated and rebuilt. This project involves stabilization of eroding hillsides, removal and grinding the degraded asphalt dikes, installation of new HMA dike, and a preventative treatment to protect the portion of asphalt that was paved in 2023.



## Need for Project

CDMWTP access road improvements minimize the potential for a pavement failure and interrupted access on the only paved road to CDMWTP for staff, contractors, chemical delivery trucks, and emergency crews.

**Consequence of Not Doing the Project:** Neglected pavement may result in increased repair costs in the future and worsening erosion. Neglected pavement also increases the risk of a road closure for emergency repairs, interrupting chemical deliveries and access to the treatment plant.

## Capital Category

- Address Deficiency
- Save Money
- Enhance Level of Service

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29	Design & Constr	\$800,000
FY 2029-30	Construction	\$ 200,000

## Summary

*Repair the hillside along the CDMWTP Access Road to maintain access for uninterrupted operations.*

**\$1,000,000**

# San Antonio Well Above Ground Facilities Upgrades

Project Number: P-30

## The Project

To maintain facility capacity and operability, recommended aboveground improvements include 1) replacing the deteriorating backwash tank to maintain treatment capacity; 2) upgrading the filtration system; 3) upsizing the chemical storage tank to hold a 21-day chemical supply to increase emergency resilience and reduce frequency of chemical deliveries; 4) replacing the lift station to eliminate overflows and accidental releases; 5) replacing rusted electrical gear and corroded concrete pad; 6) upgrading the inefficient storm water drainage system; and 7) building improvements. San Antonio Well is one of the District’s best producing groundwater wells. San Antonio Well was drilled in 1973 and currently produces up to 730 gallons per minute.



## Need for Project

The District’s Groundwater Management Plan recognizes the need to maintain the ability to extract water from the Basin during times of drought and to mitigate variable water quality conditions. These upgrades will help sustain the reliable operation and maximum treatment capacity of San Antonio Well.

**Consequence of Not Doing the Project:** The current backwash tank, chemical storage, filtration capacity, lift station, electrical switch board, storm water drainage system, termite damage, and pipe conditions will continue to limit San Antonio Well’s production and treatment capacity and reliability.

## Capital Category

- Address Deficiency*
- Improve Reliability*
- Improve Water Quality*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29	Design	\$400,000
FY 2029-30	Construction	\$1,900,000

## Summary

*Install recommended above ground facilities at San Antonio Well to improve the well’s operation.*

**\$2,300,000**

# Upsize Pipeline at Edison Booster Pump Station

Project Number: P-31

## The Project

This project upsizes the Edison PRV line near the Edison Pump Station from 12 inches to 16 inches to accommodate increased flows, which will deliver two benefits. First, the upsized line will ease the current flow limitation during emergencies and allow more water to be delivered to the Reduced Ellwood Pressure Zone as well as filling Ellwood Reservoir. Second, increased flows will improve blending operations and water quality when the District is operating groundwater wells during periods of drought.



## Need for Project

Upsizing the pipeline 1) allows for movement of water, which is needed during emergencies, 2) improves water quality, and 3) helps continue to meet THM drinking water standards.

**Consequence of Not Doing the Project:** Emergency flows to the Ellwood Zone and Reduced Ellwood Zone would continue to be limited by flow capacity, and blending groundwater with surface water would remain limited to current flow restrictions.

## Capital Category

Address Deficiency  
Prepare for Emergencies

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29		\$0
FY 2029-30	Construction	\$300,000

## Summary

*Upsize the Edison BPS pipeline to increase water deliveries during emergencies and improve system water quality during blending operations.*

**\$300,000**

# Microturbine Power Generation

Project Number: P-32

## The Project

This project involves installing power-generating hydroturbines at District reservoirs and PRVs to take advantage of gravity fed distribution. As part of the District’s sustainability efforts and to offset rising energy expenses, a 2013 study outlined various potential locations for new hydroelectric turbine installations within the District’s distribution system. The study considered factors such as power generation potential, proximity to the electrical grid, and noise attenuation in residential neighborhoods. By installing hydroelectric turbines at District reservoirs and PRVs, the District aims to harness energy from its gravity-fed operations and offset energy Costs and improve system reliability. The project will include an updated feasibility analysis, and design, permitting, construction, and coordination with Southern California Edison, the Western Renewable Energy Generation Information System, and the California Energy Commission to meet regulatory and operational requirements.



## Need for Project

Hydroelectric turbines utilize pressure and flowing water to spin turbines and generate electricity. Installing turbines at District reservoirs and PRVs has the potential to generate up to \$118,000 per year in additional revenue, depending on the type of system selected at each site. This additional revenue would mitigate increasing energy costs and contribute to the District’s overall goal to reduce carbon emissions. Up to \$2.6M in outside funding is anticipated, which will offset most of the costs of the project. The estimated payback period with outside funding is less than 12 months.

**Consequence of Not Doing the Project:** The District will not realize cost savings at these potential hydroturbine locations.

## Capital Category

- Improve Reliability*
- Save Money*
- Enhance Level of Services*

## Schedule and Costs

FY 2025-26	Installation	\$2,000,000
FY 2026-27	Installation	\$800,000
FY 2027-28		\$0
FY 2028-29		\$0
FY 2029-30		\$0

## Summary

*Design and construct microturbines to generate power and reduce energy costs.*

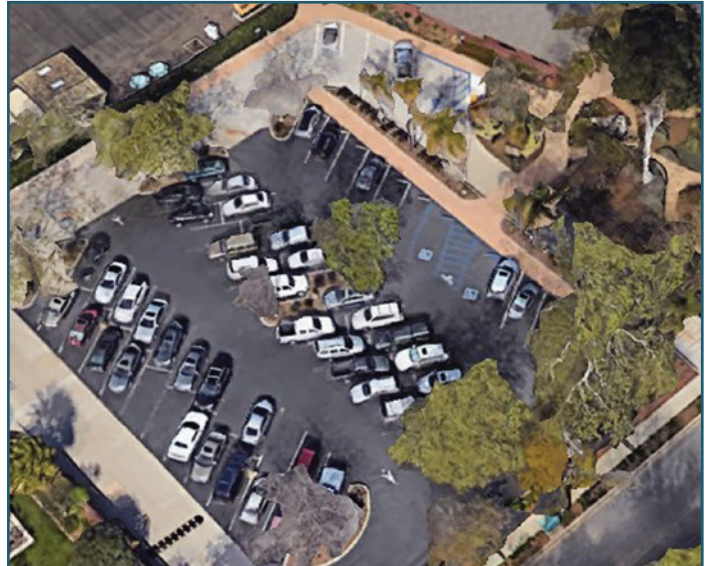
**\$2,800,000**

# Headquarters Public Lot Solar and EV Chargers

Project Number: P-33

## The Project

Solar energy generation at the Headquarters’ public lot will provide renewable power and lower energy costs for the District. Solar carports installed at the District’s public parking lot are projected to generate approximately 363,703 kWh of energy in the first year of production. This project involves designing and constructing solar systems at the District’s Headquarters, alongside identifying rebates and incentives to mitigate project costs. In addition, electric vehicle (EV) chargers will accompany the carports, enhancing sustainability efforts and reducing operational expenditures. The proposed solar installation promises significant long-term energy savings and fosters the District’s path towards energy independence.



## Need for Project

Revenue generated from solar carports and EV chargers will offset rising energy costs and align with the District’s objective to decrease carbon emissions. Additionally, onsite power generation can mitigate the impacts of potential public safety power shutdowns, enhancing overall resilience and reliability.

**Consequence of Not Doing the Project:** The District will pay \$1.7M in commercial electricity over the next 20 years if not offset by this project. Additionally, fewer electric vehicle charging stations will be available to customers and employees.

## Capital Category

- Improve Reliability*
- Save Money*
- Enhance Level of Services*

## Schedule and Costs

FY 2025-26		\$0
FY 2026-27		\$0
FY 2027-28		\$0
FY 2028-29	Design	\$160,000
FY 2029-30	Construction	\$1,500,000

## Summary

*Install solar carports and EV chargers at the District’s Headquarters to generate clean energy and offset energy costs.*

**\$1,660,000**

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# CDMWTP Deteriorating Chlorine Tanks

Project Number: P-34

## The Project

Sodium hypochlorite tanks, installed as part of the 2006 Phase 2 CDMWTP Upgrade Project, are showing early signs of deterioration and will need to be replaced as the corrosion progresses. Both tanks are experiencing corrosion-induced degradation of the inner protective linings. To facilitate tank replacement, the project will involve dismantling the current chemical tank platforms, disconnecting and reconnecting related chemical pipelines, and temporarily removing sections of the Chemical Building walls and/or roof.



## Need for Project

The secure storage of water treatment chemicals is crucial for continuous potable water production at CDMWTP. The degradation of the tanks' inner lining heightens the likelihood of leaks or spills, posing risks to worker safety and the potential for disruptions in water treatment operations.

**Consequence of Not Doing the Project:** Chlorine will continue to corrode the tank lining and may corrode the tank itself, resulting in a possible chemical spill, worker safety hazards, and treatment interruption at the plant.

## Capital Category

*Maintain Level of Service*

## Summary

*Replace two chlorine storage tanks at CDMWTP that are near their expected service life.*

**\$3,500,000**

# Upsize Waste Line and Pump at CDMWTP

Project Number: P-35

## The Project

The Corona Del Mar Water Treatment Plant (CDMWTP) has six filters, all of which require routine maintenance, frequent backwashes, and filter media exchanges. The current 2-inch waste line spans the entire filter gallery and should be upsized to four inches, with the sump pump upgraded to empty the filters of wash water faster. This improvement will also significantly reduce the time required for filter media change-outs and eliminate the need for additional portable pumps, especially during infrequent high turbidity events that accompany heavy rainstorms and inflow into Lake Cachuma. The new system will streamline operations and support more efficient maintenance, helping ensure CDMWTP reliability during extreme weather events.



## Need for Project

Replacement of the CDMWTP filter gallery waste line will improve filter drainage efficiency, reduce maintenance time, and enhance peak flow management, especially during high turbidity events.

**Consequence of Not Doing the Project:** Without this upgrade, high turbidity events will continue to necessitate temporary shut down of flows to CDMWTP, which can interrupt water production and create the need for accessing other emergency water supplies such as wells and interconnections.

## Capital Category

*Distribution System Reliability*

## Summary

*Upgrading the filter waste line at CDMWTP will significantly improve filter drainage efficiency.*

**\$1,040,000**

# CDMWTP Flexible Covers for Treatment Basins

Project Number: P-36

## The Project

Low-lying, flexible, and structurally supported flexible covers for CDMWTP's exposed sedimentation, flocculation, and filtration basins will improve water quality and reduce maintenance needs. Covers can reduce algae growth by better limiting heat gain and provide a barrier to wind, animals, and airborne organic matter that can adversely impact water quality and treatment processes. The covers are comprised of retractable fabric spanning aluminum frames, along with aluminum gangways for operator access. Aluminum gangways allow access to clean the basins from above, eliminating the need for confined space procedures. More cost-effective than a large enclosure structure, these covers will be custom designed to fit the CDMWTP dimensions.



## Need for Project

Covering the CDMWTP flocculation, sedimentation, and filter basins will improve water quality by reducing algae growth, off-gassing treatment chemicals, and blocking wind that adversely impacts treatment performance. Lower algae growth and cooler temperatures may allow for lower chlorine dosage and save \$10,000 per year in chemical costs.

**Consequence of Not Doing the Project:** Basins will continue to be exposed, requiring increased operations maintenance and temporary shutdowns to remove debris and algae, and the increased use of treatment chemicals.

## Capital Category

*Improve Water Quality*

## Summary

*Install Covers over CDMWTP treatment basins to improve water quality.*

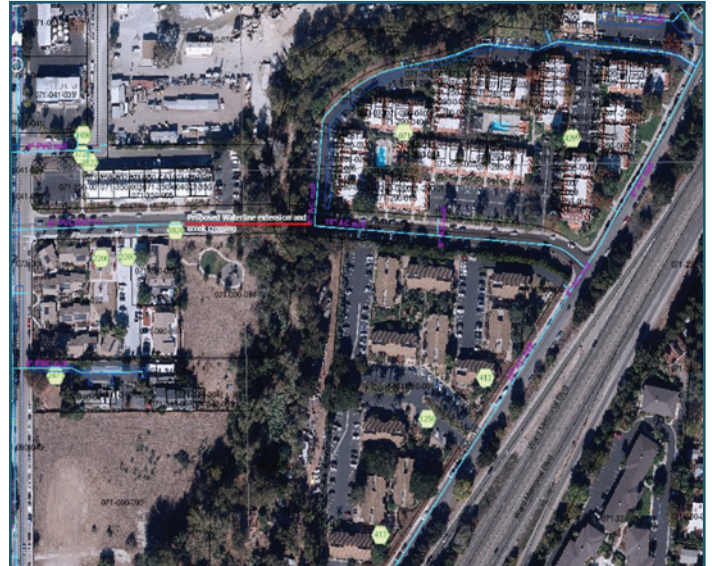
**\$8,350,000**

# Armitos Avenue Crossing of San Jose Creek

Project Number: P-37

## The Project

This project includes the design, permitting, and construction of a pipeline that connects the 8-inch Armitos Avenue pipeline on the west side of San Jose Creek to a larger 10-inch pipeline on the east side of the creek. District customers near Dearborn Place and Armitos Avenue are presently vulnerable to outages when Hollister or Dearborn water mains require repair and outages. Adding a pipeline connection across San Jose Creek on Armitos Avenue can reduce service interruptions to hundreds of area residents.



## Need for Project

Over 200 homes in the Dearborn area are fed by a single pipeline and are subject to service outages when repairs are needed upstream. The new pipeline provides a second connection that increases operational flexibility and reduces service interruptions.

**Consequence of Not Doing the Project:** Customers on Dearborn Place will continue to be subject to service outages during planned or unplanned work on Dearborn Place or Hollister Avenue.

## Capital Category

*Prepare for Emergencies  
Improve Reliability*

## Summary

*Connect two pipelines at Armitos Avenue and San Jose Creek to increase service reliability.*

**\$1,890,000**

# Railroad Crossing at Kellogg Avenue

Project Number: P-38

## The Project

This project includes encroachment permitting and construction of a main on Kellogg beneath the Southern Pacific Railroad tracks. The District has an existing pipeline across Highway 101 that terminates at the railroad track. This project extends the pipeline under the railroad and connects it to the existing pipeline at Kellogg Avenue. Connecting the two pipelines will improve system-wide distribution reliability and create another freeway crossing at North Kellogg Avenue for overall system reliability. A looped connection will also improve water quality and fire flow for a portion of Old Town Goleta. Design for this pipeline connection was completed in 2019.



## Need for Project

Connecting pipelines on either side of the railroad track at North Kellogg Avenue will increase distribution reliability, improve water quality and fire flow, and reduce service interruptions to a portion of Old Town Goleta.

**Consequence of Not Doing the Project:** Portions of Old Town Goleta will continue to be subject to existing limitations on fire flow, water quality, and service outages.

## Capital Category

- Prepare for Emergencies*
- Improve Reliability*

## Summary

*Connect two pipelines at the railroad and Kellogg Avenue to reduce water service interruptions.*

**\$735,000**

# PRV Facility Monitoring

Project Number: P-39

## The Project

The project consists of adding automated SCADA-connected monitoring devices to pressure relief valve (PRV) facilities that will help the District monitor water movement, validate its hydraulic model, improve blending operations for water quality, and comply with water loss regulations. Monitoring may also assist in pinpointing causes of transient pressures caused by private pump or hydrant usage within the system that can damage infrastructure. The District operates more than 100 PRVs in the distribution system, which facilitates movement from areas of higher pressure to areas of lower pressure.



## Need for Project

Pressure monitoring and management are fundamental activities to maintaining reliable water delivery to customers. Real time monitoring can help prevent a high-pressure event caused by a PRV failure. PRVs help maintain adequate pressure and reliable asset performance and reduce operating costs.

**Consequence of Not Doing the Project:** The District will continue to rely on manual system pressure reads rather than automated reads, may be limited in its ability to monitoring PRV operability, and will be more vulnerable to high pressure events.

## Capital Category

*Improve Reliability*

Summary

*Install SCADA-connected PRV monitoring through the distribution system.*

\$2,050,000

# Garrett Van Horne Emergency Pump Station Improvement

Project Number: P-40

## The Project

This project will upgrade the Garrett Van Horne (GVH) Pump Station to double its capacity and provide a backup to Patterson Booster Pump Station during emergencies or planned maintenance outages. GVH Pump Station delivers water from GVH Reservoir to customers and storage reservoirs at higher elevations. Upgrades will include adding a second pump to double the station’s pumping capacity, with the second pump acting as a backup to the first pump. Upgrades will increase energy efficiency, control, and reliability of the facility.



## Need for Project

GVH Pump Station cannot currently serve as a reliable backup to Patterson Booster Pump Station. The station currently relies on a single pump, with limited pumping capacity. A second pump will provide the necessary reliability for continuous operations, should the Patterson Booster Pump Station be out of service.

**Consequence of Not Doing the Project:** GVH Pump Station will be unable to serve as a backup to Patterson Booster Pump Station during emergencies or planned maintenance outages potentially interrupting water service during an emergency outage.

## Capital Category

*Prepare for Emergencies  
Improve Reliability*

## Summary

*Upgrade the GVH Pump Station to deliver water continuously during well operations or emergencies.*

**\$1,030,000**

# Edison Emergency Pump Station Improvements

Project Number: P-41

## The Project

Edison Emergency Pump Station improvements will allow the District to reliably provide water to the Reduced Ellwood Zone over sustained periods when surface water is not available. During water shortages, the pump station is positioned to move groundwater produced in the Central Groundwater Basin up to higher elevations in the Ellwood Zone. The District has completed an engineering design to install two larger pumps with backup generator power to function in case of a power outage. This project includes the purchase and installation of two new, larger replacement pumps, variable frequency drives (VFDs), piping, electrical, controls, and hook-up for emergency backup generator power.



## Need for Project

Upgrades to the Edison Emergency Pump Station will help ensure sufficient capacity to meet demand in the Reduced Ellwood Zone if surface water were to become unavailable. The existing pump station is limited in its pumping capacity and was not designed for continuous use.

**Consequence of Not Doing the Project:** The 2,000 people served by the Reduced Ellwood Zone and several schools may experience service interruptions if groundwater cannot be delivered to the zone or if there is a break on the pipeline between CDMWTP and the Ellwood Zone.

## Capital Category

*Prepare for Emergencies  
Improve Reliability*

Summary

*Upgrade the Edison Pump Station to operate continuously during well operations or emergencies.*

\$2,190,000

# University Well Onsite Hypochlorite Generation

Project Number: P-42

## The Project

This project includes the installation of a new, advanced onsite hypochlorite generator at University Well to eliminate the dependence on higher cost deliveries of sodium hypochlorite via small truck on a narrow creek-side road. Currently, hypochlorite delivery occurs on a scheduled basis, involving logistical coordination and fluctuating chemical costs. The new generator will incorporate new advancements in onsite hypochlorite generation and safety, which are commonly used at other water utilities where chlorine deliveries are impractical and expensive. Installation will also maintain adequate chlorine feed rates for groundwater production, stabilize the cost for chlorine disinfection, and decrease maintenance costs.



## Need for Project

Hypochlorite is critical to the water treatment disinfection process for the groundwater wells. The existing chlorine storage unit at University Well requires deliveries on a bi-monthly frequency, which creates issues with coordination and the stability of chlorine cost.

**Consequence of Not Doing the Project:** The District will continue to provide chlorine through bi-monthly deliveries and will be subject to cost fluctuations for chemicals and trucking costs.

## Capital Category

- Prepare for Emergencies*
- Improve Reliability*
- Save Money*

## Summary

*Install an onsite chlorine generator at University Well for improved reliability and safety.*

**\$1,175,000**

# Los Carneros Pipe Upsize (Covington Way to Calle Real)

Project Number: P-43

## The Project

This project includes design and construction to upsize the Los Carneros Road main pipeline from 14 inches to 20 inches between Covington Way and Calle Real. Because the area is fed by a pipeline undersized for current demand, flow capacities can exceed the recommended maximum velocities, resulting in interior scouring of the pipe and ultimately a shorter service life for the pipeline. Upsizing the main will eliminate the flow limitation for areas downstream, including Isla Vista and UCSB, and will facilitate increased injection as part of the District's Aquifer Storage and Recovery Program.



## Need for Project

Upsizing the Los Carneros pipeline will double the current flow capacity and eliminate a bottleneck during peak demand or fire flow demand to a densely populated area of the District.

**Consequence of Not Doing the Project:** If high fire flows are required in the area fed by the Los Carneros pipeline, the high water flow velocity may scour the pipe, resulting in possible pipeline failure.

## Capital Category

*Improve Reliability*

Summary

*Upsize the Los Carneros pipeline to increase flows and meet fire flow needs.*

\$1,840,000

# Loop at La Vista-Alta Mira Booster Stations

Project Number: P-44

## The Project

This project will install 850 feet of new pipeline at the north ends of La Vista Road and Alta Mira Drive to connect and loop existing pipelines. This connection will eliminate the need for one of the two pump stations that currently serve the two streets and reduce long term operation and maintenance costs.



## Need for Project

The existing pipelines in La Vista Road and Alta Mira Drive come to dead ends several hundred feet short of creating a looped water system. This project improves water system reliability and water quality for the area.

**Consequence of Not Doing the Project:** The District will continue to bear the costs of two pump stations to serve a limited number of customers on La Vista Road and Alta Mira Drive.

## Capital Category

- Improve Reliability*
- Save Money*
- Enhance Level of Service*

## Summary

*Install a new pipeline at La Vista and Alta Mira to loop dead ends and improve service reliability and cost effectiveness.*

**\$510,000**

# CDMWTP Filter Building Catwalk

Project Number: P-45

## The Project

Currently, the Corona Del Mar Water Treatment Plant (CDMWTP) has four filters that require periodic maintenance and replacement of filter media. To increase worker safety, a new catwalk system will be installed over the filters to enable more controlled loading of filter media and create safe access for washing filter building windows. This project includes the design and installation of a filter building catwalk that will feature stable platforms, railings, and non-slip surfaces, ensuring a safe and efficient working environment. By facilitating regular maintenance and swift responses to operational needs, this installation will also minimize downtime and enhance the overall efficiency of the water treatment process.



## Need for Project

Industrial catwalks are essential for ensuring worker safety and facilitating access during maintenance tasks on the filter building and the filtration systems.

**Consequence of Not Doing the Project:** Without the filter catwalk, accessing and maintaining the filtration units and washing filter building windows will remain a higher safety risk.

## Capital Category

*Improve Reliability*

## Summary

*Design and install an industrial catwalk at CDMWTP to enhance safety and accessibility.*

**\$285,000**

# El Camino Well Aboveground Facilities Upgrades

Project Number: P-46

## The Project

El Camino Well currently produces approximately 370 gallons per minute, or up to 537 AFY of groundwater. This project will implement recommendations from an engineering report for improved reliability. Aboveground improvements include upsizing chemical storage tanks and the backwash tank, adding a backwash tank level indicator, adding piping to route well-to-waste water into the backwash tank, adding cathodic protection to slow the corrosion of the steel well casing, and upgrading flow meters.



## Need for Project

The existing El Camino Well backwash tank is aging, and several major components do not meet standard volume specifications. A larger chemical storage tank will reduce the frequency of chemical deliveries, which can be compromised during emergencies. A larger backwash tank will improve the efficiency of the reclamation of filter backwash water.

**Consequence of Not Doing the Project:** Lack of chemical storage lessens operational capacity and reliability if chemical deliveries are interrupted. Backwash tank inoperability could require an extended outage until repairs are made, temporarily limiting available water supply.

## Capital Category

*Improve Reliability*

## Summary

*Install the recommended above ground facilities at El Camino Well to improve operational capacity.*

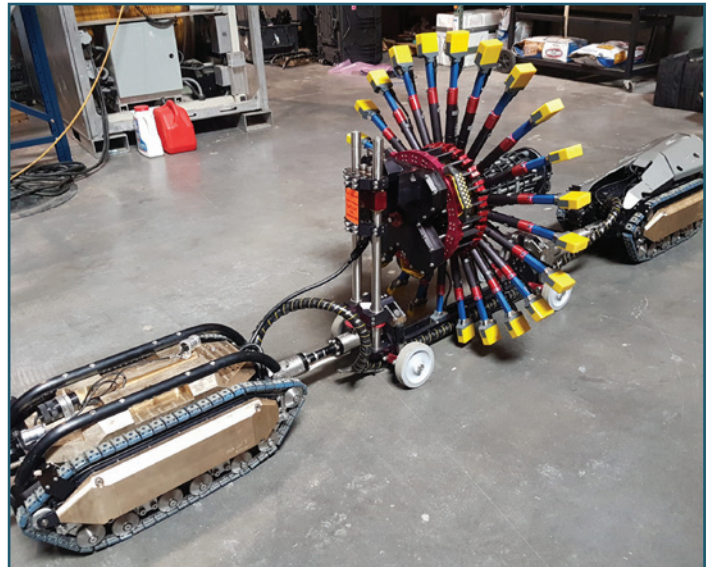
**\$1,500,000**

# Transmission Main Conditions Assessment

Project Number: P-47

## The Project

A pipeline conditions assessment will identify needed repairs on the District’s critical transmission main and mitigate potential failure. The transmission main was constructed nearly 50 years ago and conveys water to most of the District’s customers. Conditions assessments can identify repairs that can extend pipe service life without total replacement. Robot-collected video inspection of the transmission main section nearest CDMWTP revealed the pipeline to be in good condition. Additional video is needed for the remaining transmission main, and inspection with magnetic arrays is needed to provide information about what cannot be observed via video, including potential corrosion of the steel pipe cylinder and the metal reinforcing bars in the concrete pipe wrapping.



## Need for Project

The District’s transmission main is critical for delivering water to a majority of District customers. Conditions assessments are proactive measures that are key to extending service life and maintaining the existing transmission mains.

**Consequence of Not Doing the Project:** Waiting for transmission mains to fail may result in an uncontrolled release of up to one million gallons of water, which could cause substantial erosion, reduced fire flow protection, and higher repair and damage costs. Such a failure may also result in an extended outage and reliance on groundwater wells and interconnects with the City of Santa Barbara until repairs can be completed.

## Capital Category

*Improve Reliability*

Summary

*Inspect 14 miles of transmission mains to assess the need for repair or replacement.*

**\$4,000,000**

# Goleta West Conduit 10-Mile Conditions Assessment

**Project Number: P-48**

## The Project

The Goleta West Conduit was constructed in 1963 and conveys non-potable water to agricultural customers in the western half of the District’s service area. This project will conduct a conditions assessment of the Goleta West Conduit to identify needed pipeline repairs and extend pipe service life without total replacement. Inspection with video and electromagnetic arrays is needed to provide information about potential problems that cannot be observed via video, such as potential corrosion of the steel pipe cylinder and condition of the metal reinforcing bars in the concrete pipe wrapping. The project will identify necessary repairs and vulnerabilities that can increase the pipeline’s reliability while reducing the potential for failure.



## Need for Project

The Goleta West Conduit is nearing 60 years old. Corrosion and the pipeline’s location in canyons have made it increasingly vulnerable to leaks. The Goleta West Conduit system lacks a backup water supply as customers can only temporarily rely on limited supply from the El Capitan interconnect in the event of an outage.

**Consequence of Not Doing the Project:** A pipeline failure could result in an uncontrolled release of water, causing substantial erosion, reduced fire flow protection, and costly repairs. Due to its remote location, a pipeline failure could also result in an extended outage for the Goleta West Conduit.

## Capital Category

*Improve Reliability*

**Summary**

*Inspect 10 miles of Goleta West Conduit to identify need for repairs.*

**\$3,650,000**

# Recycled Water Main 10-Mile Conditions Assessment

Project Number: P-49

## The Project

Conditions assessments are a cost-effective tool to prioritize pipeline repairs and extend pipe service life without total replacement. Installed in the early 1990s, the District’s steel recycled water mains have been subject to greater corrosion due to the higher chlorine levels required for recycled water. Recycled water pipelines were also installed without cathodic protection. The District’s recycled water main conveys 1.5 million gallons per day of recycled water, so a pipeline failure could cause significant damage. Recycled water service for landscape irrigation and other purposes offsets potable demand and the need to secure additional water supplies. This project will employ video inspection and potentially electromagnetic technology to identify potential problems and needed repairs.



## Need for Project

Recycled water mains are at higher risk of failure due to lack of cathodic protection and higher chlorine levels, which increase the rate of corrosion.

**Consequence of Not Doing the Project:** Waiting for the recycled water mains to fail could result in an uncontrolled release of large amounts of chlorinated water, along with higher repair and damage costs. Depending on the location of a pipeline failure, the entire recycled system may experience a prolonged outage until repairs and/or replacements can be completed.

## Capital Category

*Improve Reliability*

## Summary

*Inspect 10 miles of recycled water pipelines to identify corrosion and repair needs.*

**\$3,650,000**

# Emergency Water Distribution Trailer

Project Number: P-50

## The Project

Purchasing an emergency water fill trailer to stage at different sites can help distribute potable water to customers in event of an emergency. Water will be provided via several fill stations to fill customer containers or to truck water to the community. The emergency water distribution trailer has the ability to move throughout the District to best serve the community in the event of a disaster without being tied to a single location. This project includes the procurement of the filling station.



## Need for Project

A filling station will provide emergency water supply to the public in the event the distribution system is affected.

**Consequence of Not Doing the Project:** The District will remain dependent on the existing distribution system to supply potable water during emergencies, when well or treatment facilities may be damaged or backup power generators for wells and pump stations or generator fuel may not be available.

## Capital Category

*Prepare for Emergencies*

Summary

*Design and procure an emergency water distribution trailer.*

\$300,000

# Onsite Chlorine Generation for CDMWTP

Project Number: P-51

## The Project

Onsite chlorine generation is a process that involves the electrolysis of salt solution to produce chlorine, a common disinfectant used to purify water that the District implements at all facilities. This project will replace the large chlorine storage tanks with an onsite chlorine generator at CDMWTP. A new generator will incorporate advancements in onsite generation and safety, which are commonly used at other water utilities where chlorine deliveries are impractical or expensive. The project will help ensure adequate chlorine feed rates, compliance with drinking water standards during natural disasters, and fix the price of sodium hypochlorite, which is subject to frequent unilateral price increases due to a lack of manufacturer competition. The price has increased by 250% between 2020-2024 alone. The estimated payback period is estimated to be 30 years due to the cost of importing salt, offsite disposal of brine, constructing new storage for salt, and contract operating and maintenance costs for a complex new chemical plant.



## Need for Project

The District is subject to frequent unilateral price increases for its primary water disinfectant. Also, natural disasters could prevent deliveries of this critical chemical. Onsite chlorine generation would provide price stability and ensure its supply, even during natural disasters.

**Consequence of Not Doing the Project:** Without this upgrade, the plant may face escalating chlorine prices and interruptions to deliveries.

## Capital Category

*Treatment Plant Reliability*

Summary

*Install an onsite chlorine generator at CDMWTP to provide disinfection.*

**\$5,400,000**

# Potable Water Backup for Recycled Water System

Project Number: P-52

## The Project

Constructing a direct pipeline to the Goleta Sanitary District from the District’s distribution system will provide greater emergency backup water supply to the recycled water system and eliminate a capacity bottleneck. The Goleta Sanitary District is currently served potable water from the City of Santa Barbara’s Airport distribution system and is limited by pipeline capacity. This project consists of extending the water main from Hollister Avenue to Goleta Sanitary District and constructing a new meter for direct service. The transmission main along Fairview Avenue from Carson Street to Placencia Street will also be upsized as part of the project for improved system hydraulics. Several isolation valves and hydrants will also be installed along the new main.



## Need for Project

Potable backup to the recycled water system is currently limited by the capacity of the City of Santa Barbara’s service line and meter that serves the Goleta Sanitary District. Should there ever be a break or cross connection on the service line, the recycled water system may be out of service. This project constructs a potable water pipeline directly to the Goleta Sanitary District to provide backup water to the recycled water system.

**Consequence of Not Doing the Project:** The District will continue to depend on water deliveries through an aging network of City of Santa Barbara-owned pipelines at the Airport that may be insufficient for peak demands.

## Capital Category

*Improve Reliability*

## Summary

*Increase the reliability of the recycled water system via a direct service line to the Goleta Sanitary District.*

**\$4,600,000**

# Transmission Main Protection

Project Number: P-53

## The Project

Following a recent relocation of a 200-foot segment of the 42-inch transmission main due to an eroding hillside, another shallow landslide and erosion area were observed nearby, which necessitate the improvement of another key segment of the pipeline. A geotechnical assessment confirmed a high risk of future soil movement, which could jeopardize the continued delivery of water. This project provides the landslide monitoring, engineering design, and construction of either a retaining structure or relocated portion of pipeline.



## Need for Project

The District's 42-inch transmission main conveys treated surface water supply to a majority of the District's distribution system. Because the District does not have a backup pipeline, a transmission main break may force the District to limit customer usage while temporarily relying on groundwater and interconnections with the City of Santa Barbara. Pipeline failure may also result in the sudden release of more than 1 million gallons of water, causing significant property damage in nearby areas.

**Consequence of Not Doing the Project:** A transmission break may would require costly emergency repairs and an extended outage to District customers.

## Capital Category

*Improve Reliability*

Summary

*Protect a portion of transmission main from geologic hazards.*

\$1,820,000

# CDMWTP Chain-and-Flight Scraper Installation

Project Number: P-54

## The Project

The District’s existing solids handling equipment in the sedimentation basins at CDMWTP has limited capacity, which requires significant upgrades to meet peak flow and handle higher rates of organic removal treatment. This project includes the design and installation of a chain-and-flight scraper solids handling system that can accommodate continuous flows of 16.5 million gallons per day. A chain-and-flight scraper system will remove bottom sludge from the sedimentation basin and transfer it to the solids drying basin for removal and water reclamation.



## Need for Project

The District currently has four super-scrapers that are insufficient to handle the amount of powdered activated carbon currently being used to remove organic matter from surface water supplies when Lake Cachuma organic levels are elevated. Changing water quality conditions at Lake Cachuma may require additional capacity for solids handling, especially during periods of high customer water demand.

**Consequence of Not Doing the Project:** Limited solids handling capacity directly limits CDMWTP production capacity, and compromises the District’s ability to reliably treat water during peak flow or fire protection needs if water quality at Lake Cachuma declines.

## Capital Category

*Improve Reliability*

## Summary

*Replace Super Scrapers with chain-and-flight systems to increase solids handling capacity.*

**\$5,170,000**

# CDMWTP Clarifier Improvements

Project Number: P-55

## The Project

Plate settlers and piping modifications to the clarifier at CDMWTP will optimize water treatment performance by increasing the effective settling area of the existing sedimentation basins. Plate settlers reduce water turbidity and distribute water entering the clarifier effluent channel (CEC). Plate settlers move water through variably sized inlets to the settling zone where water velocity is controlled to increase particle settling. The project includes the design and construction of plate settlers and piping modifications that will better remove turbidity from the sedimentation process during high turbidity events and extend filter run times for better filtration rates.



## Need for Project

Installing plate settlers and piping modifications at the CEC improves water quality by slowing the flow and can prolong the service life of filter media.

**Consequence of Not Doing the Project:** The performance of the CEC will remain the same and the level of turbidity and filter run times will not be improved.

## Capital Category

*Enhance Level of Service*

## Summary

*Construct and install modifications at CDMWTP's clarified effluent channel to improve water quality.*

**\$9,480,000**

# Remote Distribution System Water Quality Sensors

Project Number: P-56

## The Project

The District is required to monitor water quality at CDMWTP and 28 designated sampling locations throughout the distribution system. This currently includes manual monitoring of pH, temperature, chlorine residual, and conductivity. This project will install sensors in areas not currently monitored by manual sampling to detect leaks, potential contamination, or other changes in water quality in remote areas of the distribution system. These areas include remotes sites where access may be limited, where pipe or facility malfunctions may go unnoticed, or where increased monitoring would allow the District to respond quickly to changing conditions. Water quality sensors may include pH, temperature, chlorine residual, blue-green algae, organic content, and/or total suspended solids.



## Need for Project

Remote water quality monitoring allowed for early detection of pipe breaks, cross-connection contamination, and other unpredictable events in the distribution system. In emergencies, remote water quality monitoring can allow the targeted restoration of impacted areas of the distribution system and significantly reduce response time following an emergency.

**Consequence of Not Doing the Project:** The District will continue to rely on manual water quality sampling for remote areas of the system, requiring more travel time in the field for operators. In an emergency, diagnosis of poor water quality and restoration of service may take longer.

## Capital Category

- Prepare for Emergencies*
- Water Quality*
- Improve Reliability*
- Enhance Level of Service*

## Summary

*Install SCADA-connected water quality sensors in remote areas of the distribution system.*

**\$1,000,000**

# Recycled Water Slough Crossing

Project Number: P-57

## The Project

Constructing a new recycled water crossing at the Goleta Slough will mitigate the risk of failure in the steel pipeline along Moffet Place and Sandspit Road near Goleta Beach. Relocating this main will also mitigate the need to relocate the pipeline in the future, which may potentially occur as a result of the Goleta Beach managed retreat effort by Santa Barbara County. The District delivers approximately 1.5 million gallons per day to recycled water customers to offset potable water demand, and all of the recycled water supply is conveyed through this pipeline. The project will include the design, permitting, and construction of the new slough crossing.



## Need for Project

The existing pipeline is deteriorating and is at increased risk of failure. The County of Santa Barbara may compel the District to relocate a portion of the recycled water line for the managed retreat of Goleta Beach.

**Consequence of Not Doing the Project:** An eventual break of the recycled water main would mean a sustained outage of the recycled water system, as replacement would require a lengthy process of design, permitting, and construction. Additionally, a pipeline and/or valve rupture at this location could cause accidental and uncontrolled discharge of a significant volume of highly chlorinated water into the Goleta Slough.

## Capital Category

*Improve Reliability*

Summary

*Design and construct the relocation of the recycled water line at Goleta Slough.*

**\$3,650,000**

# Recycled Water 1 MG Reservoir

Project Number: P-58

## The Project

A one million gallon (MG) recycled water reservoir will increase recycled water storage, providing increased operational flexibility. Currently, recycled water is distributed through the booster pump stations located at Goleta Sanitary District and at Hollister Avenue. During power outages, recycled water deliveries are interrupted. The proposed reservoir site is within the Ellwood 440 Pressure Zone and the proposed tie-in to the existing recycled water distribution system would be located at Cathedral Oaks Road. This project will also ensure adequate supplies of recycled water are available for customers during periods of peak recycled water demand.



## Need for Project

A recycled water storage reservoir will reduce service interruptions by providing continued recycled water during short term recycled water system outages.

**Consequence of Not Doing the Project:** Recycled water system customers will continue to experience service interruptions when equipment malfunctions or power outages occur.

## Capital Category

*Improve Reliability*

## Summary

*Install a 1 million-gallon recycled water storage reservoir to improve operational flexibility.*

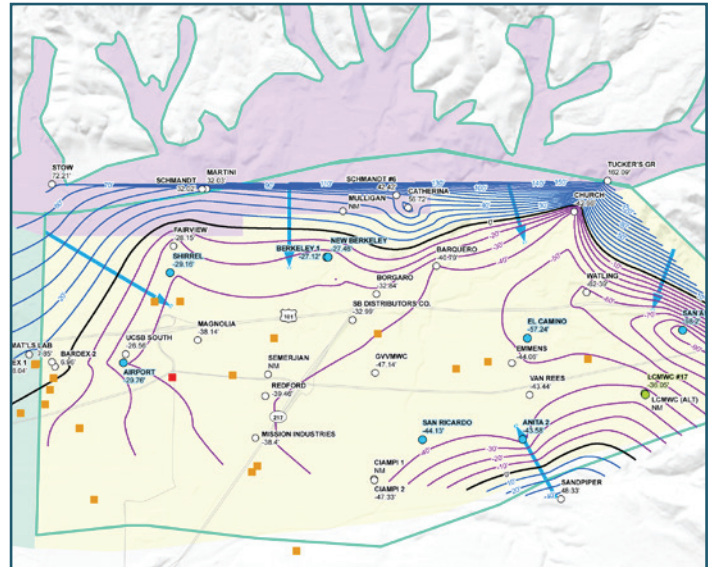
**\$9,700,000**

# Additional Injection Wells

Project Number: P-59

## The Project

The maximum combined capacity of the District’s injection wells is roughly 8.3 acre-feet per day (AFD). Constructing additional injection wells will augment the District’s groundwater basin replenishment to meet the objectives of its Aquifer Storage and Recovery (ASR) program. This project involves identifying existing and new injection well sites, analyzing the optimal rechargeable zones, determining the distribution system capacity to deliver additional injected water, permitting, and drilling new injection wells.



## Need for Project

The District has increasingly relied on groundwater to offset drought and water quality impacts to surface water supplies. When the Bradbury Dam at Lake Cachuma spills, the District has historically injected water into the groundwater basin. This accelerates the recovery of groundwater in the basin and allows the District to make use of this excess water at a later time.

**Consequence of Not Doing the Project:** The District will maintain its limited injection capacity, and basin recovery will be slower than if the new injection wells were built.

## Capital Category

*Enhance Level of Service*

## Summary

*Install groundwater injection wells to accelerate recharge of the Goleta Groundwater Basin.*

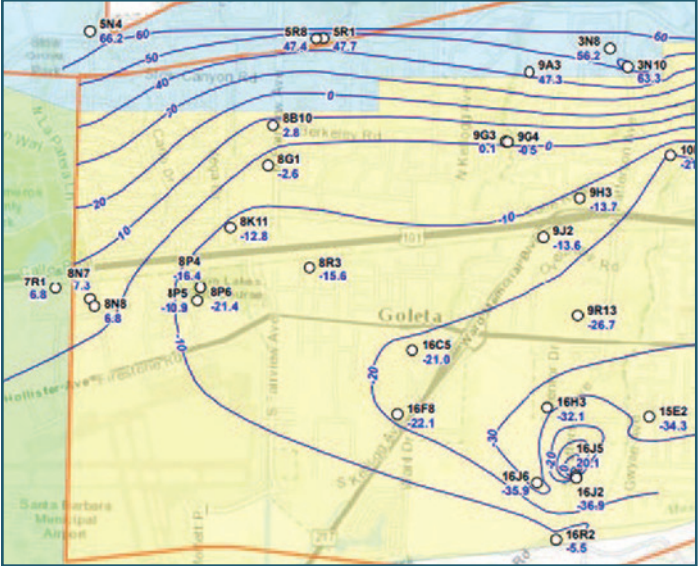
**\$3,700,000**

# New Groundwater Monitoring Wells

Project Number: P-60

## The Project

This project will install up to two new monitoring wells in the Goleta Groundwater Basin. The District currently monitors groundwater elevations semi-annually. Groundwater elevation data is used to inform groundwater management and planning as well as to meet the legal requirements of the Wright Judgement and SAFE Ordinance. This project will identify sites for additional groundwater monitoring wells in areas of the basin that currently lack sufficient monitoring data. The District will evaluate optimal locations based on subsurface geology, land availability, and potential for adverse aquifer impacts from drawdown.



## Need for Project

The District’s 2024 Groundwater Management Plan recommended that additional monitoring well data be collected from areas of the basin lacking sufficient information. This data would support groundwater management and planning and be especially helpful during periods of low groundwater storage to avoid negative impacts such as deteriorating water quality, land subsidence, and other risks.

**Consequence of Not Doing the Project:** The District will continue to base its modeling of groundwater levels and elevation changes on existing monitoring wells in the Goleta Groundwater Basin.

## Capital Category

*Enhance Level of Service*

**Summary**

*Drill additional monitoring wells to provide improved data on groundwater basin levels.*

**\$2,000,000**

# Cathedral Oaks Transmission Main Extension

Project Number: P-61

## The Project

This project involves the installation of 8,500 feet of 20-inch pipeline on Cathedral Oaks between Glen Annie Road and Camino Laguna Vista. This new installation will provide emergency backup capacity in case either the Ellwood transmission main or the 42-inch transmission main rupture or are taken out of service for a planned outage. Thousands of people could experience a water service interruption without this pipeline extension. The new pipeline will loop the two transmission mains to provide a redundant connection between these two zones to support service reliability.



## Need for Project

A new pipeline provides emergency backup water and operational flexibility if either of the two main transmission pipelines from CDMWTP become unavailable. These two major pipelines are at elevated risk of rupture due to earth movement, corrosive soil, and high water pressure. Erosion and hill creep has already been observed at a section of the 42-inch transmission main above Van Horne Reservoir.

**Consequence of Not Doing the Project:** A failure of either the 42-inch transmission main or Ellwood transmission may result in service interruption to thousands of District customers. Operators would be dependent on backup supplies delivered via groundwater wells, Edison Booster Pump Station, and/or interconnections with the City of Santa Barbara.

## Capital Category

*Prepare for Emergencies  
Improve Reliability*

## Summary

*Construct a Cathedral Oaks bypass as a backup to the Ellwood and 42-inch Transmission Mains.*

**\$8,280,000**

# Goleta West Conduit Potable Connection

**Project Number: P-62**

## The Project

The District currently receives a waiver from the Federal Surface Water Treatment Rule to provide chlorinated non-potable water to customers served by the Goleta West Conduit (GWC) pipeline. This project identifies alternatives to provide potable water to GWC customers. One method consists of a dedicated potable pipeline from CDMWTP, operated and maintained by the District. Other alternatives may include individual point-of-use treatment systems for each customer, a small water treatment plant along the GWC, or new wells to pump and treat groundwater in the GWC area.



## Need for Project

The State Water Resources Control Board Division of Drinking Water has allowed the District to provide bottled water to GWC customers as an alternative source of potable water. Should this no longer be allowed, this project will provide potable water directly to GWC customers.

**Consequence of Not Doing the Project:** State or Federal regulators may compel the District to convert the nonpotable pipeline to potable service for Goleta West Conduit customers.

## Capital Category

*Regulatory Compliance*

**Summary**

*Evaluate and construct a potable water supply alternative for the Goleta West Conduit Customers.*

**\$23,700,000**

# Cathedral Oaks and Highway 101 Overcrossing: Phase 2A

Project Number: P-63

## The Project

Phase 1 of the Cathedral Oaks and Highway 101 Overcrossing (completed in 2012) installed sleeves for the potable and recycled water lines in the overcrossing bridge. Phase 2A includes a realignment by the City of Goleta of a portion of Hollister Avenue. The District's portion would include a replacement of 500 feet of recycled water pipeline. This project will also install several hundred feet of new pipeline to connect potable water pipelines on either side of the highway. This will loop a dead-end of the potable distribution system.



## Need for Project

The District often needs to relocate and replace facilities due to outside agency projects. The City of Goleta is conducting its Cathedral Oaks Road/Highway 101 Overcrossing Project, which realigned sections of Hollister Avenue. To take advantage of relocations, the District will also loop the potable water pipeline system in this area to decrease water age and improve local water quality.

**Consequence of Not Doing the Project:** An unplanned outage of the existing pipeline may require extensive emergency response, costly repairs, and backup water supplies to the Ellwood Zone.

## Capital Category

*Improve Reliability*

## Summary

*Install a new pipeline in conjunction with the City of Goleta's Highway 101 Overcrossing project.*

**\$620,000**

# Recycled Waterline at Fairview Road to Hollister Avenue

Project Number: P-64

## The Project

Constructing a looped recycled water system will improve operational reliability. A new pipeline will start at Goleta Sanitary District and continue along Fairview Avenue towards Hollister Avenue. The recycled pipeline will continue west on Hollister Avenue as part of the first phase of the recycled water pipeline extension. Future phases will continue to construct a recycled water pipeline in Hollister Avenue until it connects with the existing pipeline at Storke Avenue.



## Need for Project

Currently, if the recycled pipeline breaks or needs repair, recycled water service will be interrupted to all customers downstream of the leak. A looped recycled water system will allow water to be supplied from a different pipeline. This recycled water extension would reduce service interruptions to recycled water customers, who rely on recycled water for toilet flushing and landscape irrigation.

**Consequence of Not Doing the Project:** A break of the recycled water line would put downstream recycled water customers out of service until the break is repaired.

## Capital Category

*Improve Reliability*

## Summary

*Begin construction of a second recycled water pipeline to hydraulically loop the system.*

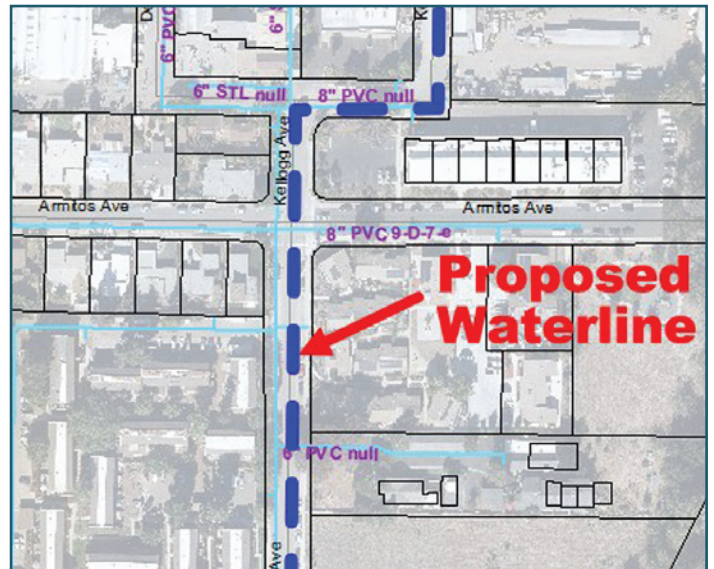
**\$5,070,000**

# Kellogg Pipeline Upsizing

Project Number: P-65

## The Project

This project upsizes the pipeline on Kellogg Avenue after completion of the Railroad Crossing at Kellogg. The pipeline will be upsized and extended to install a new major transmission pipeline along Kellogg Avenue. This will accommodate future pipeline upsizing projects in the Old Town Goleta area, while also providing a more reliable water system for meeting peak demand and fire suppression flows.



## Need for Project

Old Town is served by a number of smaller 6-inch pipelines. Upsizing the transmission pipeline along Kellogg Avenue to Hollister Avenue would allow future upsizing of the existing, smaller water lines in the area to accommodate increased demand and water pressures.

**Consequence of Not Doing the Project:** The Old Town Goleta area may continue to experience limited water flows and pressure due to undersized pipelines.

## Capital Category

*Improve Reliability*

## Summary

*Upsize a pipeline on Kellogg Avenue to increase service reliability in Old Town Goleta.*

**\$920,000**

# Covington Pipeline Upsizing (Valdez to Fairview)

Project Number: P-66

## The Project

The pipeline along Covington Way between Valdez Avenue and Fairview Avenue is undersized for current demand in the area. This project upsizes the existing pipeline to meet recommended flow velocities and pressures. The length of the proposed pipeline is approximately 2,800 feet on Covington Way. Existing service lines, water meters, and fire hydrants on Covington Way and Berkeley Road will be disconnected and reconnected to the new pipeline. Three new fire hydrants will also be added to increase fire protection.



## Need for Project

The existing pipeline on Covington Way between Fairview Avenue and Valdez Avenue is undersize for projected fire flows. Upsizing the pipeline will decrease friction losses, which will allow for improved fire flows.

**Consequence of Not Doing the Project:** The existing water line may be undersized, resulting in turbulent flow and interior pipe scouring during fire flows.

## Capital Category

*Improve Reliability*

Summary

*Upsize pipeline on Covington Way to improve fire flows.*

**\$2,770,000**

# Cathedral Oaks Pipeline Upsizing (Paseo Del Pinon to Northgate)

Project Number: P-67

## The Project

This project increases the size of the Cathedral Oaks pipeline between Paseo Del Pinon and Northgate Drive to improve hydraulics. The project will design and construct approximately 1,900 feet of new, upsized 20-inch pipeline to replace an existing 12-inch pipeline. Fire flows to the area will be improved, and flow velocities will be reduced, which may help extend the service life of the pipeline.



## Need for Project

Installed in 1969, the Cathedral Oaks pipeline between Paseo del Pinon and Northgate is currently undersized for current conditions. A larger pipeline will increase fire flow and reduce flow velocities to the area, preventing interior pipe scouring.

**Consequence of Not Doing the Project:** This segment of pipeline may experience premature deterioration from scouring caused by elevated flow velocities.

## Capital Category

*Improve Reliability*

## Summary

*Install a larger pipeline along Cathedral Oaks for improved fire flow.*

**\$2,000,000**

# Cathedral Oaks and Highway 101 Overcrossing Project: Phase 2B

Project Number: P-68

## The Project

Phase 2B of the City of Goleta’s Cathedral Oaks Highway 101 Overcrossing Project extends the District’s recycled water distribution system to the north side of Highway 101. This project installs a recycled water pipeline at the Cathedral Oaks Highway 101 overcrossing, achieving the goal of carrying recycled water across the highway for expanded use. Phase 1 was completed in 2012 and consisted of installing sleeves for potable and recycled water lines in the Highway 101 overcrossing bridge. Phase 2A relocates facilities along a portion of Hollister Avenue being realigned by the City of Goleta.



## Need for Project

The final phase of the Highway 101 Overcrossing project extends recycled water service to the northwestern portion of the City of Goleta. Recycled water offsets potable water use and increases the District’s water supply flexibility during water shortages. This project also provides an opportunity for potential recycled water landscape irrigation at the Winchester Commons and surrounding neighborhoods.

**Consequence of Not Doing the Project:** Recycled water use remains limited to the southern side of Highway 101 at Cathedral Oaks and Calle Real.

## Capital Category

*Improve Reliability*

## Summary

*Install a recycled water pipeline across Highway 101 to Cathedral Oaks for new recycled water customers.*

**\$630,000**

# CDMWTP Creek Crossing Improvements

Project Number: P-69

## The Project

During past winter storm events, the section of the CDMWTP access road at the creek crossing has flooded and prevented access for CDMWTP personnel and chemical deliveries until flooding recedes. This project modifies the access road creek crossing to ensure access to the treatment plant remains open at all times for emergency responders, plant personnel, and critical chemical deliveries. This project will include design, construction, and permitting after review of multiple creek crossing alternatives.



## Need for Project

The CDMWTP access road contains a short, low fair-weather creek crossing, which can become flooded during heavy winter storm events. Treatment plant staff, plant deliveries, and emergency personnel cannot access the treatment plant when the road is flooded.

**Consequence of Not Doing the Project:** The CDMWTP access road may be inaccessible during intense flash flood events, disrupting plant access and potentially leaving the plant understaffed until flooding subsides.

## Capital Category

*Improve Reliability  
Prepare for Emergencie*

Summary

*Analyze and mitigate periodic inaccessibility of the CDMWTP Access Road due to flooding*

\$1,800,000

# Additional Fire Hydrants

**Project Number: P-70**

## The Project

This project installs up to ten fire hydrants in areas that would benefit most from increased fire protection. Fire protection codes for new construction requires new hydrants to be located no further than 500 feet apart in single family residential areas and 300 feet apart in multi-family residential or industrial/commercial areas. Given the pattern of development over the last 65 years, there are areas that could benefit from shorter gaps between hydrants. While these hydrants are not required by the current fire protection regulation for existing construction, recent wildfires close to residential areas serve as reminders of the potential benefits of increased fire protection. This project will apply the requirements for new construction to areas of older construction to improve hydrant access for the fire department.



## Need for Project

Increased wildfire incidence and updated fire protection codes for new construction require closer spacing of fire hydrants. This project would improve fire hydrant coverage in areas of older construction to improve fire-fighting capabilities within the District.

**Consequence of Not Doing the Project:** The Fire Department will rely on existing fire hydrant spacing to respond to emergency events.

## Capital Category

*Enhance Level of Service*

**Summary**

*Install additional hydrants in areas most vulnerable to fire.*

**\$250,000**

# Recycled Water PRV Vault Relocation

Project Number: P-71

## The Project

This project will relocate the recycled water pressure reducing valve (PRV) vault within the Glen Annie Golf Course property to improve access for District operators and contractors. The District currently has limited access to this private property, and vehicular and heavy equipment access is frequently restricted, with District staff compelled to use golf carts as alternative transportation. Thus, District operators are limited in their ability to bring tools and equipment to maintain the vault.



## Need for Project

Due to limited access to the recycled water PRV vault at Glen Annie Golf Course, a relocation can increase service reliability, maintenance, and repairs to the PRV.

**Consequence of Not Doing the Project:** District staff will continue to access the site by permission of the Glen Annie Golf Course using their golf carts, potentially delaying necessary repairs and interrupting recycled water service to customers.

## Capital Category

*Enhance Level of Service*

Summary

*Relocate the Recycled Water Pressure Reducing Vault to improve accessibility and service reliability.*

**\$280,000**

# CDMWTP Corroded Filter Pipe Replacement

Project Number: P-72

## The Project

Proactively replacing the deteriorating 36-inch filter influent pipelines at CDMWTP would minimize disruptions to essential water treatment processes. The pipelines are currently showing early signs of corrosion-related deterioration. Failure of these pipes would result in unexpected shutdowns of any single filter; during peak summer demand or wildfire emergencies, such a failure would significantly reduce CDMWTP's treatment capacity and restrict operational flexibility. Proactive replacement enables the District to undertake this task under controlled conditions, particularly crucial given the pipelines' underground placement at CDMWTP. The project includes designing and constructing replacement pipelines and fittings to maintain reliable water treatment operations.



## Need for Project

Filter infrastructure at CDMWTP is vital to the surface water treatment process. By proactively re-placing the corroded 36-inch pipe feeding each of the six filters, the District can maintain maximum treatment capacity to meet peak summer demand and fire protection flows. This approach also mitigates the risk of pipeline failure, which could otherwise lead to flooding and damage to critical pumping and electrical equipment, necessitating additional outages and repairs.

**Consequence of Not Doing the Project:** Each filter taken out of service at CDMWTP could reduce the District's total surface water treatment capacity by up to 6 million gallons per day.

## Capital Category

*Maintain Level of Service*

## Summary

*Proactively replace filter influent pipes to maintain reliable water treatment operations.*

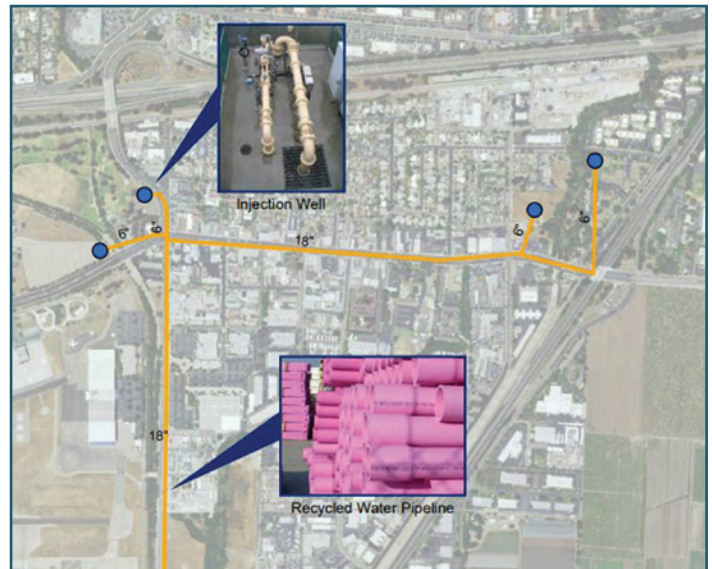
**\$5,300,000**

# Indirect Potable Reuse

Project Number: P-73

## The Project

This project consists of design and construction of a treatment facility, pipelines, and injection facilities for indirect potable reuse (IPR) of treated water from Goleta Sanitary District. Goleta Water District’s 2016 Recycled Water Feasibility Study examined options to expand the use of recycled water. The study identified IPR as the most cost-beneficial and feasible potable reuse alternative water supply. IPR involves additional treatment of the District’s existing recycled water supply from Goleta Sanitary District and injecting purified water into the Goleta Groundwater Basin, where it mixes with existing groundwater supplies prior to its extraction for treatment and delivery.



## Need for Project

Future droughts and changing State and Federal regulations may affect the availability of groundwater and surface water supplies to meet customer demand in the coming decades. Additionally, to support sustainable basin management and the District’s Aquifer Storage and Recovery program, the District is actively looking at injection opportunities to recharge the basin.

**Consequence of Not Doing the Project:** The District will remain reliant on existing surface water and groundwater supplies.

## Capital Category

*Enhance Level of Service*

## Summary

*Design and construct a full-scale indirect potable reuse facility Design and construct a full-scale indirect potable reuse facility.*

**\$183,000,000**

# CDMWTP Solids Drying Bed #1 Rehabilitation

Project Number: P-74

## The Project

Rehabilitation of the first solids drying bed installed in 1972 at CDMWTP will improve treatment operations, increase the efficiency of the solids handling process, and allow greater flexibility to operations when other beds are out of service. As solids are removed from the basin, sand is continuously removed which leads to inefficiencies in the system. Leaks developed over time in the underdrain and liner may result in water loss. This project will include removing sand from the existing drying bed one and installing a new sub-drain pipeline system, impermeable bed liner, sand filter, and collection pipes.



## Need for Project

The proposed rehabilitation of solids drying bed #1 will supply the solids storage and water storage necessary to reduce risk of violating permit requirements.

**Consequence of Not Doing the Project:** Water leaking from the liner and underdrains could adversely affect nearby treatment units and water loss, and reduction of sand would reduce the effectiveness of solids removal, leading to higher turbidities in reclaimed water and higher treatment costs.

## Capital Category

*Maintain Level of Service*

Summary

*Rehabilitate deteriorating solids drying bed critical for water treatment operations.*

\$6,300,000

## INDEX

Ref.	Project Name	Section 3	Cost Estimate	Page
P-1	Worker Safety Electrical Upgrades	Funded	\$1,290,000	11
P-2	City, County, Caltrans Relocations Required Projects	Funded	\$2,120,000	12
P-3	Hope Well Treatment System	Funded	\$4,970,000	13
P-4	New Replacement Well	Funded	\$11,420,000	14
P-5	SCADA Upgrade and Replacements	Funded	\$10,525,000	15
P-6	Fleet and Heavy Equipment Replacements	Funded	\$1,115,000	16
P-7	CDMWTP Solids Handling MCC Replacement	Funded	\$200,000	17
P-8	Meter Replacements	Funded	\$18,780,000	18
P-9	Treatment Facility Replacements	Funded	\$550,000	19
P-10	Pipeline and Service Line Replacements	Funded	\$2,620,000	20
P-11	Cathodic Protection System Replacements and Upgrades	Funded	\$1,600,000	21
P-12	Reservoir and Reservoir Component Replacements	Funded	\$1,195,000	22
P-13	Electrical Power System Replacements	Funded	\$970,000	23
P-14	Pump Station and Motor Replacements	Funded	\$400,000	24
P-15	Facility Security Upgrades	Funded	\$510,000	25
P-16	Well Facility Replacements	Funded	\$1,040,000	26
P-17	Valve and Hydrant Replacements	Funded	\$2,260,000	27
P-18	Computer and Electronic Hardware Replacements	Funded	\$150,000	28
P-19	Pavement Replacements	Funded	\$1,250,000	29
P-20	Building Component Replacements	Funded	\$1,740,000	30
P-21	Generators for Pump Stations and Well Sites	Funded	\$990,000	31
P-22	Corona Reservoir Rehabilitation	Funded	\$2,055,000	32
P-23	Filter Washtrough Replacements	Funded	\$2,205,000	33
P-24	Transmission Main 36-Inch Parallel Pipeline - Phase 1	Funded	\$1,440,000	34
P-25	Seismic Upgrades	Funded	\$1,400,000	35
P-26	Upsize Hollister Main between San Antonio and San Marcos Rds	Funded	\$6,200,000	36
P-27	La Riata Booster Pump Station	Funded	\$3,790,000	37
P-28	Transmission Main Emergency Highline	Funded	\$2,190,000	38
P-29	CDMWTP Access Road Pavement and Hillside Slump Mitigation	Funded	\$1,000,000	39
P-30	San Antonio Well Aboveground Facilities Upgrades	Funded	\$3,190,000	40
P-31	Upsize Pipeline at Edison Booster Pump Station	Funded	\$300,000	41
P-32	Microturbine Power Generation	Funded	\$1,770,000	42
P-33	Headquarters Public Lot Solar and EV Chargers	Funded	\$1,660,000	43
P-34	CDMWTP Deteriorating Chlorine Tanks	Unfunded	\$3,500,000	45
P-35	Upsize Waste Line and Pump at CDMWTP	Unfunded	\$1,040,000	46
P-36	CDMWTP Flexible Covers for Treatment Basins	Unfunded	\$8,350,000	47
P-37	Armitos Avenue Crossing of San Jose Creek	Unfunded	\$1,890,000	48
P-38	Railroad Crossing at Kellogg Avenue	Unfunded	\$735,000	49

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Ref.	Project Name	Section 3	Cost Estimate	Page
P-39	Pressure Relief Valve Monitoring	Unfunded	\$2,050,000	50
P-40	Garrett Van Horne Emergency Pump Station Improvement	Unfunded	\$1,030,000	51
P-41	Edison Emergency Pump Station Improvements	Unfunded	\$2,190,000	52
P-42	University Well Onsite Hypochlorite Generation	Unfunded	\$1,175,000	53
P-43	Los Carneros Pipe Upsize (Covington Way to Calle Real)	Unfunded	\$1,840,000	54
P-44	Loop at La Vista-Alta Mira Booster Stations	Unfunded	\$510,000	55
P-45	CDMWTP Filter Building Catwalk	Unfunded	\$285,000	56
P-46	El Camino Well Above Ground Facilities Upgrades	Unfunded	\$1,500,000	57
P-47	Transmission Main Conditions Assessment	Unfunded	\$4,000,000	58
P-48	Goleta West Conduit 10-Mile Conditions Assessment	Unfunded	\$3,650,000	59
P-49	Recycled Water Main 10-Mile Conditions Assessment	Unfunded	\$3,650,000	60
P-50	Emergency Water Distribution Trailer	Unfunded	\$300,000	61
P-51	Onsite chlorine generation for CDMWTP	Unfunded	\$5,400,000	62
P-52	Potable Water Backup for Recycled Water System	Unfunded	\$4,600,000	63
P-53	Transmission Main Protection	Unfunded	\$1,820,000	64
P-54	CDMWTP Chain-and-Flight Scraper Installation	Unfunded	\$5,170,000	65
P-55	CDMWTP Clarifier Improvements	Unfunded	\$9,480,000	66
P-56	Remote Distribution System Water Quality Sensors	Unfunded	\$1,000,000	67
P-57	Recycled Water Slough Crossing	Unfunded	\$3,650,000	68
P-58	Recycled Water 1 MG Reservoir	Unfunded	\$9,700,000	69
P-59	Additional Injection Wells	Unfunded	\$3,700,000	70
P-60	New Groundwater Monitoring Wells	Unfunded	\$2,000,000	71
P-61	Cathedral Oaks Transmission Main Extension	Unfunded	\$8,280,000	72
P-62	Goleta West Conduit Potable Connection	Unfunded	\$23,700,000	73
P-63	Cathedral Oaks and Highway 101 Overcrossing: Phase 2A	Unfunded	\$620,000	74
P-64	Recycled Waterline at Fairview Road to Hollister Avenue	Unfunded	\$5,070,000	75
P-65	Kellogg Pipeline Upsizing	Unfunded	\$920,000	76
P-66	Covington Pipeline Upsizing (Valdez to Fairview)	Unfunded	\$2,770,000	77
P-67	Cathedral Oaks Pipeline Upsizing (Paseo del Pinon to Northgate)	Unfunded	\$2,000,000	78
P-68	Cathedral Oaks and Highway 101 Overcrossing: Phase 2B	Unfunded	\$630,000	79
P-69	CDMWTP Creek Crossing Improvements	Unfunded	\$1,800,000	80
P-70	Additional Fire Hydrants	Unfunded	\$250,000	81
P-71	Recycled Water PRV Vault Relocation	Unfunded	\$280,000	82
P-72	CDMWTP Corroded Filter Pipe Replacement	Unfunded	\$5,300,000	83
P-73	Indirect Potable Reuse	Unfunded	\$183,000,000	84
P-74	Rehabilitate CDMWTP Sludge Drying Bed #1	Unfunded	\$6,300,000	85

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4699 Hollister Avenue  
Goleta, California 93110  
[www.GoletaWater.com](http://www.GoletaWater.com)