



**Sonoma  
Water**

**SONOMA WATER**

**Capital Improvement Plan  
2021-2026**



## Overview

### Our Mission

The Sonoma County Water Agency (Sonoma Water), a special district, was created in 1949 by an act of the California State Legislature. Sonoma Water is a wholesale supplier of water to parts of Sonoma and Marin counties; provides flood control services and sanitation services; and has the authority to generate electricity and provide recreational facilities in connection with its facilities. Environmental regulations impacting its core functions have resulted in Sonoma Water's active engagement in natural resource (e.g., fisheries, wetlands, etc.) protection, recovery, and enhancement. Sonoma Water is implementing the Russian River Biological Opinion, issued by the National Marine Fisheries Service in September 2008, to improve operations for the benefit of endangered Coho salmon and threatened Steelhead and Chinook salmon.

### Mission Statement

*Effectively manage the water resources in our care for the benefit of people and the environment through resource and environmental stewardship, technical innovation and responsible fiscal management.*

This mission statement and Sonoma Water's values are reflected in its Strategic Plan – a five year plan of goals and strategies to address Sonoma Water's most pressing needs in the areas of Water Supply, Sanitation, Flood Protection, Energy, Climate Change and Internal Operations. This plan guides Sonoma Water as it addresses the challenges it faces in pursuing its mission. The projects in this Capital Improvement Plan are derived from the objectives in Sonoma Water's Strategic Plan and from its Water Supply Strategies Action Plan.

## Agency Objectives

### Water Transmission and Supply Systems

Sonoma Water provides high quality drinking water to more than 600,000 people in Sonoma and Marin counties. From its large collector wells near the Russian River, Sonoma Water distributes naturally filtered water to the cities of Santa Rosa, Rohnert Park, Cotati, Petaluma and Sonoma; the Town of Windsor; and Valley of the Moon, and North Marin water districts. These cities and water districts (water contractors) distribute the water to residents and businesses.

Transmission and supply goals outlined in Sonoma Water's strategic plan include: (1) protecting the drinking water supply and promoting water use efficiency; and (2) maintaining and improving the reliability of the Water Transmission System.

### Flood Control

Flood risks in most communities in Sonoma County have been reduced through the construction of flood protection facilities which include flood control channels and stormwater detention reservoirs. Sonoma Water maintains these flood protection facilities in a manner that balances public safety and environmental needs.

Flood control goal outlined in Sonoma Water's strategic plan includes strategies to: (1) assess, maintain, and upgrade flood protection facilities; (2) increase effectiveness of stream maintenance activities; (3) strengthen an integrated watershed management approach to flood protection; and (4) pursue new sources of funding.

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## Sanitation Systems

Sonoma Water manages and operates eight different sanitation districts and zones throughout Sonoma County that serve more than 50,000 people. These include the Sonoma Valley, Russian River, Occidental, and South Park County sanitation districts, and the Geyserville, Penngrove, Sea Ranch, and Airport-Larkfield-Wikiup sanitation zones. High-quality tertiary treated recycled water is an important source of water that helps offset potable water demands.

Sanitation goals as outlined in Sonoma Water's strategic plan include strategies to: (1) assess, maintain, and upgrade wastewater treatment, and reuse facilities to improve operational reliability; (2) decrease overflows from wastewater collection systems; and (3) improve financial health of wastewater treatment and water reuse systems.

## Purpose and Background of Funds

Sonoma Water's Capital Improvement Plan identifies projects to be constructed over the next five years, and designed to meet its mission and strategic objectives.

## Water Transmission

In order to reliably, safely, and efficiently supply potable water to its eight water contractors, Sonoma Water plans, performs environmental reviews, designs, and constructs capital improvement projects. Water transmission system improvements are guided by the terms and conditions of the Restructured Agreement for Water Supply (Agreement) between Sonoma Water and its water contractors. The water contractors' Water Advisory Committee and/or Technical Advisory Committee meets regularly (Water Advisory Committee quarterly and Technical Advisory Committee monthly) with Sonoma Water to discuss the scheduling and financing of water transmission system projects

and other water supply and transmission system issues.

Capital improvements made to the water transmission system are typically funded from the Storage Facilities Fund, the Aqueduct Capital Funds (Santa Rosa, Petaluma, Sonoma aqueducts), and the Common Facilities Fund to meet the needs of the water contractors for the facilities identified under the Agreement. Capital projects have been scheduled to accommodate funding limitations, to provide the least disruption to existing facilities and water contractors, and to allow an orderly and timely start-up to meet the conditions of the Agreement or any new laws or regulations governing drinking water suppliers.

## Water Supply

The Water Supply funds include the Russian River Projects Fund, the Recycled Water Fund, and the Warm Springs Dam Fund. These three funds are used: (1) to pay the costs for water supply and erosion control activities along the Russian River arising from assurances given by Sonoma Water for the construction of the Coyote Valley Dam Project and Warm Springs Dam Project; (2) to pay the costs incurred by Sonoma Water in securing and defending its appropriate water rights necessary for the realization of the full benefit of those projects; (3) to pay the costs incurred by Sonoma Water in operating the Coyote Valley Dam and Warm Springs Dam Projects; (4) to pay the costs for water supply issues arising from activities of the Potter Valley Project; and (5) for fishery enhancement programs to ensure compliance with environmental regulations and pay for recycled water projects.

## Flood Control Zones

Special Revenue Funds are used to construct and improve flood control facilities and to provide program support services for the flood

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control zones in Sonoma County. Common types of features constructed to help alleviate flooding are channelization works, bypass conduit systems, diversion and detention systems. In addition, natural systems are maintained to provide flood control capacity. Sonoma County is divided into nine major watershed areas. Flood control zones were created encompassing eight of these watersheds. Zone 1A (Laguna-Mark West), Zone 2A (Petaluma River), and Zone 3A (Valley of the Moon/Upper Sonoma Creek) have the most active flood control programs. Zone 4A (Upper Russian River) and Zone 6A (Dry Creek) are completely inactive. Zone 5A (Lower Russian River) and Zone 8A (South Coastal) are less active than Zones 1A, 2A, and 3A, with only ongoing maintenance of existing facilities being performed. Zone 7A (North Coastal) has minimal fund reserves earning interest. The ninth watershed area, covering the lower portions of Sonoma Creek and the Petaluma River, was never established as a zone.

Flood control zones were created to reduce the frequency of flooding within the zone through construction of facilities to safely handle projected storm flows. An appointed advisory committee for each active zone meets regularly to make recommendations to Sonoma Water's Board of Directors regarding priorities for flood protection projects within each zone. Proposed projects are evaluated in consideration of historical flooding problems, areas benefited, alternative funding available, special safety and health factors, coordination with other public projects, and environmental concerns.

Flood Control Zone 1A is the watershed area that drains into and includes the Laguna de Santa Rosa and Mark West Creek.

Flood Control Zone 2A is the watershed area in Sonoma County that drains into and includes the Petaluma River, with the exception of the most

southerly portion of the area, which consists primarily of reclaimed tidelands.

Flood Control Zone 3A is the watershed area in Sonoma County that drains into and includes Sonoma Creek, generally north of Highway 121.

The primary funding source for all three Zones is an ad valorem property tax. In the past, capital projects in Zone 1A and 2A were also funded by a voter-approved 10-year benefit assessment program for flood control, which ended June 30, 2007. Some additional funds are sometimes available from cities, the County, and community development sources to construct flood control projects. In more recent years, grants from state bond measures have also been a source of funding for flood control projects.

## Sanitation

Sonoma Water owns and operates four sanitation zones, which include Airport-Larkfield-Wikiup, Geyserville, Penngrove, and Sea Ranch. Sonoma Water is also responsible for the overall management (including operation) of four County Sanitation Districts. The four districts include Occidental, Russian River, Sonoma Valley, and South Park. Each County Sanitation District exists as a separate legal entity. The sanitation zones operate as zones of benefit, similar to Sonoma Water's flood control zones. Sanitation projects are scheduled according to the specific needs for each zone or district. Funding of projects may be accomplished by Federal and/or State grants, state revolving fund loans, certificates of participation, notes, revenue bonds, or on a pay-as-you-go basis.

### Airport-Larkfield-Wikiup Sanitation Zone

The Airport-Larkfield-Wikiup Sanitation Zone treatment facility was originally designed as a zero discharge facility with the ability to treat wastewater to secondary wastewater treatment

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standards. The treatment facility was initially constructed in 1983 and has been expanded twice since then (1989 and 1997). Tertiary filters were installed at the treatment facility in 2005 allowing expanded use of the recycled water produced by the Airport Sanitation Zone. The treatment facility currently has a dry weather capacity of 0.9 million gallons per day. In recent years, Sonoma Water has completed a sewer master plan, developed a computer model of the collection system, and recently conducted a multi-hazard vulnerability assessment of the Airport-Larkfield-Wikiup Sanitation Zone infrastructure.

## **Geyserville Sanitation Zone**

The Geyserville Sanitation Zone treatment facility became operational in 1981, and is designed to treat an average dry weather flow of up to 92,000 gallons per day. The current and future treatment facility inflows are expected to remain less than the treatment and disposal capacity of the Geyserville Sanitation Zone facilities. Sonoma Water conducted multi-hazard vulnerability assessment of the Geyserville Sanitation Zone infrastructure in 2018. Disinfection facilities changed from chlorine gas to sodium hypochlorite in 2019. Sodium hypochlorite is a safer material for plant operators to handle than chlorine gas.

## **Occidental County Sanitation District**

The Occidental County Sanitation District treatment plant first became operational in 1950, and was upgraded in 1970 and 1975. The plant was designed to treat an average daily dry weather flow of up to 50,000 gallons per day to secondary treatment standards. In 2018, the District commenced trucking of its wastewater to the Airport-Larkfield-Wikiup treatment plant for contracted treatment and beneficial reuse, and the Occidental County Sanitation District plant is now used for equalization storage of high flows. This operational change was implemented in

order to end discharges of secondary treated wastewater into Dutch Bill Creek, and comply with a cease and desist order issued by the North Coast Regional Water Quality Control Board.

The Occidental County Sanitation District faces serious financial and operational difficulties. Due to the district's small ratepayer base, operating revenues are not sufficient to fund ongoing operations, maintenance and administrative activities. Sonoma Water annually subsidizes from its General Fund the Occidental County Sanitation District. The ability to increase rates in this district is limited, and funding for any significant capital project would be financed mostly through outside funding, as available. Sonoma Water continues to seek solutions to improve the long-term financial viability of the District.

## **Penngrove Sanitation Zone**

Sonoma Water operations in the Penngrove Sanitation Zone are limited to administrative services and operation/maintenance of the collection system and pumping station. The wastewater collected by the Penngrove Sanitation Zone collection system flows through the City of Petaluma's collection system to the City of Petaluma's wastewater treatment facility, where it is treated to meet tertiary standards. Sonoma Water conducted a multi-hazard vulnerability assessment of the Penngrove Sanitation Zone infrastructure in 2018, and is currently implementing a project to enhance the operational reliability of the pumping station during flood events, and reduce the risk of sanitary sewer overflows.

## **Russian River County Sanitation District**

The Russian River County Sanitation District treatment plant was completed in September of 1980, and began operating in 1982. The Russian River County Sanitation District treatment plant

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is designed to treat an average dry weather flow of up to 0.71 million gallons per day to advanced (tertiary) wastewater treatment standards. The Russian River County Sanitation District has an easement on approximately 77 acres of forest area adjacent to the treatment plant (referred to as the Burch property). Seventeen acres of the easement are best suited for irrigation purposes and are currently used for spray irrigation. In addition, approximately 43 acres of turf at the Northwood Golf Course are irrigated with tertiary treated wastewater. Expansion of the dry weather disposal area is necessary in order to ensure adequate disposal of dry weather inflow.

The treatment plant has historically experienced operational difficulties associated with major flooding on the Russian River. Soon after Sonoma Water assumed operations of the facility in 1996, engineering and environmental documentation began to address operational problems associated with Russian River flood events, the irrigation system, and obsolete equipment at the Russian River County Sanitation District treatment plant.

The North Coast Regional Water Quality Control Board adopted a series of enforcement orders for the Russian River County Sanitation District, in response to violations associated with flood events. In response, the Russian River County Sanitation District began implementation of a series of short and long-term projects aimed at bringing the facility into compliance. The facility was brought into compliance with the completion of the Third Unit Process project in early 2005. This project, along with modifications to the lift station operations during flooding events in the Guerneville area, allows the treatment plant to pass all influent through the full treatment process. This was not possible during flood events prior to completion of the Third Unit Process Project.

In an effort to eliminate the discharge of

treated wastewater containing chlorine-based disinfection by-products into the Russian River, the District, in 2012, upgraded its treatment facility to utilize ultraviolet disinfection technology. In 2014, the treatment facilities were further enhanced to reduce nitrogen and phosphorus based nutrient discharges to the Russian River.

In addition, Russian River County Sanitation District has completed a Sanitary Sewer Capacity Assessment, and developed a computer model of its collection system. The District also conducted a multi-hazard vulnerability assessment and developed a Local Hazard Mitigation Plan for its collection, treatment, and recycled water systems.

## Sea Ranch Sanitation Zone

The Sea Ranch Sanitation Zone consists of two wastewater collection and treatment systems located in Central and North Sea Ranch. The Central and North treatment facilities are both designed to provide treatment to secondary wastewater treatment standards.

These collection and disposal systems operate independently and are isolated from each other. The Central and North treatment facilities are designed to treat average daily dry weather flows of up to 27,000 and 160,000 gallons per day, respectively. Treated wastewater from the Central treatment facility is disposed of through irrigation on land that is adjacent to the treatment facility. Currently, the North treatment facility pumps raw wastewater to the Gualala Community Services District's wastewater treatment facility, where it is combined with Gualala Community Services District's influent and treated to tertiary standards. The combined effluent of North and Gualala Community Services District's treatment facility is disposed of through irrigation on the Sea Ranch Golf Links. The Sea Ranch Water Company is under contract to operate and maintain the Sea Ranch



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Sanitation Zone facilities for Sonoma Water.

Sonoma Water and The Sea Ranch Association, owner of the Sea Ranch Water Company, continue to investigate options for the continued operation of the Sea Ranch Sanitation Zone. Options considered include executing an agreement between Sonoma Water and the Sea Ranch Association for the continued operation of the sewer facilities and/or the transfer of all assets, liabilities, and management responsibilities to the Association.

## **Sonoma Valley County Sanitation District**

The Sonoma Valley County Sanitation District provides wastewater collection, tertiary level treatment, and reuse and disposal service for the Sonoma Valley area. Wastewater is collected by a gravity system, and flows to the Sonoma Valley County Sanitation District wastewater treatment facility for processing. Recycled water is used to irrigate local crops during the summer. During the winter, treated wastewater is provided to the Napa-Sonoma Salt Ponds for environmental restoration of the ponds, or is otherwise discharged to San Pablo Bay via Schell Slough and Hudeman Slough. The Sonoma Valley County Sanitation District treatment facility is permitted to treat an average daily dry weather flow of up to 3.0 million gallons per day.

In April 2002, the Sonoma Valley County Sanitation District completed a wet weather overflow prevention study (a study that complied with a San Francisco Bay Regional Water Quality Control Board issuance of a Notice of Violation for sewer system overflows in April of 1999). This study identified areas within the collection system where repair and/or replacement projects were most needed, including numerous trunk main and collection system projects. The District is implementing a capital replacement program with the long-term intent of replacing these pipeline sections.

In 2012, construction was completed on a new 100 acre-foot storage pond for recycled water. This pond, which was funded by a combination federal Bureau of Reclamation and district funds, allows recycled water to be used for increased agricultural irrigation, restoration of the Napa-Sonoma salt marsh, and urban uses. In addition, in 2013, construction was completed on the Napa Sonoma Salt Marsh pipeline, which allowed delivery of 1,700 acre feet annually of recycled water to help restore a 640-acre former salt pond. In 2014, construction was completed on a new sludge dewatering facility that reduces the District's expenses for disposing of biosolids. In 2017, the Sonoma Valley County Sanitation District completed a new pipeline that allows the District to also provide recycled water for urban reuse purposes, including school and park facilities. In 2018, pumping and piping improvements within the treatment plant were completed to enhance the District's operational flexibility to manage the storage and distribution of recycled water.

A cease and desist order was issued to the Sonoma Valley County Sanitation District by the San Francisco Bay Regional Water Quality Control Board in 2015 for wet weather discharges from its collection system between 2010 and 2015. The order requires the District to complete certain capital improvements by 2024 to address capacity deficiencies in the collection system. This Capital Improvement Plan includes substantial investment in trunk main replacement/rehabilitation projects to comply with this order.

The District has completed a master plan and computer model of its collection system, and is currently updating its multi-hazard vulnerability assessment for its collection, treatment, and recycled water systems. The Local Hazard Mitigation Plan, originally approved by the Federal Emergency Management Agency in



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2016, provides the District eligibility for certain federal disaster mitigation funding, including grant funds the District is currently utilizing to seismically retrofit to secondary treatment clarifies at the Districts treatment plant.

## **South Park County Sanitation District**

The South Park County Sanitation District provides service to the South Park area using a gravity collection system that discharges to the City of Santa Rosa's collection system. Wastewater from the South Park County Sanitation District is treated and disposed of by the City of Santa Rosa at the Laguna Sub-regional Treatment Plant on Llano Road. In July of 1996, the City of Santa Rosa accepted responsibility for the operation and routine maintenance of the collection system.

An agreement for transfer of responsibility to the City of Santa Rosa of collection system operation and maintenance, and subsequent dissolution of the South Park County Sanitation District, was finalized on February of 1996. The agreement has been amended several times in the subsequent years. Under this agreement, the South Park County Sanitation District was to be dissolved and transferred to the City of Santa Rosa, subject to certain conditions that included the replacement, slip-line, or repair of 41,610 feet of the collection system, and upgrade of the Todd Road lift station before transfer of the South Park County Sanitation District to the City of Santa Rosa.

In 2012, an amended and restated agreement recognized that dissolution of the District and transfer to the City of Santa Rosa could not occur without annexation by the City, and therefore, a specific schedule for dissolution was removed from the agreement, along with specific targets for collection system improvements. Nonetheless, the District and City are continuing to work collaboratively in addressing needed collection system upgrades

with the understanding that dissolution and transfer to the City will ultimately occur. A 2017 amendment to the 2012 amended and restated agreement further set forth specific measures to allow the eventual transfer of all District operation and function to the City.

On December 22, 1998, the North Coast Regional Water Quality Control Board released a draft Cleanup and Abatement Order for halogenated volatile organic compounds found in soil and groundwater in the vicinity of Sebastopol Road and West Avenue in the South Park County Sanitation District service area. The draft Cleanup and Abatement Order specified that halogenated volatile organic compounds found in the soil and groundwater are the result of a release from the South Park County Sanitation District collection system. Potential costs for investigation, remediation, and legal work related to halogenated volatile organic compounds in soil and groundwater are substantial (\$2-10 million in 1999 dollars) and have not been included in this capital plan. Rather than finalize the draft Cleanup and Abatement Order, the South Park County Sanitation District, County of Sonoma, and the North Coast Regional Water Quality Control Board entered into a cooperative agreement in July of 1999 referred to as the "Plan of Action for Halogenated Volatile Organic Compounds Investigation and Mitigation in the Roseland Area" (Plan of Action). As part of the Plan of Action, South Park County Sanitation District has performed an investigation of the extent of halogenated volatile organic compounds in groundwater in the vicinity of West Avenue and Sebastopol Road. A final report summarizing the results of this investigation was submitted to the North Coast Regional Water Quality Control Board in February of 2002. The South Park County Sanitation District and the County of Sonoma have worked with the North Coast Regional Water Quality Control Board

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to coordinate groundwater studies by other parties for related groundwater contamination issues in the Roseland area. Upon completion of these studies, it is anticipated that remediation strategies will be developed by the South Park County Sanitation District, County of Sonoma, North Coast Regional Water Quality Control Board, and other parties associated with these groundwater issues.

In recent years, South Park County Sanitation District had been continuing capital improvement efforts required under a 2007 Cleanup and Abatement Order issued by the North Coast Regional Water Quality Control Board to replace/rehabilitate deteriorated and sub-standard portions of the collection system that threaten to cause unpermitted discharges of wastewater. These collection system improvements were completed in 2018.

## Administration and General

These funds include the General Fund, the Spring Lake Park Fund, and the Sustainability-Renewable Energy Fund. The Spring Lake Park Fund provides for occasional construction projects in Spring Lake Park. Spring Lake Park is a public park owned by Sonoma Water and operated under contract by the Sonoma County Regional Parks Department. The Sustainability-Renewable Energy Fund provides for the Agency's Renewable Energy, Efficiency and Sustainability efforts.

## Internal Service

The Internal Service Fund provides for: (1) building improvements to the Administration building at the Agency's 404 Aviation Boulevard site; (2) building improvements to the Operations and Maintenance facility at 204 Concourse Blvd; (3) building improvements to the Maintenance Center facility located at the Airport Treatment Plant; (4) funding of new building sites and

other land purchases; and (5) electric power development and sales for the various enterprises owned and managed by Sonoma Water.

## Water Transmission System

### Current Five-Year Plan

This five-year plan includes funding for 51 projects related to the water transmission system. This list of projects also includes construction projects required by the Biological Opinion. The projects identified in this section of the plan support the objectives in Water Supply Goals and Strategies of Sonoma Water's Strategic Plan.

### Common Facilities

There are 29 projects identified for funding in the Common Facilities Fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Chlorine Line Replacement for Collectors 1 and 2 project was completed in 2020.

### Aqueduct Facilities

There are 12 projects identified for funding in the Capital Aqueduct Funds. Four new projects, consisting of Sonoma Creek Crossing (Verano Ave), Sonoma Creek Crossing (Madrone Road), Sonoma Creek Crossing (Lawndale Ave), and Sooma Creek Crossing near Heaven Hill Road were added to the FY 2021-22 through FY 2025-26 capital plan.

### Storage Facilities

There are four projects identified for funding in the Capital Storage Funds. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

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## Water Transmission Operations & Maintenance (O&M) Fund

There are four projects identified for funding in the Operations & Maintenance Fund. No new projects, were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Forestville Tanks Recoating and Tank Level Emergency Backup Power projects were completed in 2020.

## Watershed Planning & Restoration Fund

There are three projects identified for funding in the Watershed Planning & Restoration Fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

## Water Supply

### Current Five-Year Plan

This five-year plan includes funding for one project related to water supply and associated with implementation of the Biological Opinion. The projects identified in this section of the plan meet the objectives of Water Supply and Flood Control Goals and Strategies of Sonoma Water's Strategic Plan.

### Russian River Projects Fund

There are no projects identified for funding in the FY 2021-22 through FY 2025-26 capital plan for the Russian River Projects Fund.

### Recycled Water Fund

There are no projects identified for funding in the FY 2021-22 through FY 2025-26 capital plan for the Recycled Water Fund.

### Warm Springs Dam Fund

There is one project identified for funding in the Warm Springs Dam Fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Dry Creek

Habitat Enhancement Project (Phase 2) project was completed in 2020.

## Flood Control Zones

### Current Five-Year Plan

This five-year plan includes funding for five projects related to the flood control zones. Sonoma Water will not take the lead on all of these projects, but will provide administration services and funding for some of these projects through the flood control zones. Funding provided by partner entities are not included in the project costs presented in this plan. The projects identified in this section of the plan support the Objectives of Flood Control Goals and Strategies of Sonoma Water's Strategic Plan.

### Zone 1A (Laguna-Mark-West Creek)

There are three projects identified for funding in the Zone 1A fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

### Zone 2A (Petaluma)

There is one project identified for funding in the Zone 2A fund. One new project was added to the FY 2021-22 through FY 2025-26 capital plan.

### Zone 3A (Valley of the Moon)

There are no projects identified for funding in the FY 2021-22 through FY 2025-26 capital plan for Zone 3A.

### Zone 5A (Lower Russian River)

There is one project identified for funding in the Zone 5A fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

## Sanitation Districts/Zones

### Current Five-Year Plan

This five-year plan includes funding for 37 projects related to the sanitation zones and districts managed by Sonoma Water. The projects in this section of the plan support the objectives in Sanitation Goals and Strategies in Sonoma Water's Strategic Plan.

#### Airport-Larkfield-Wikiup Sanitation Zone

There are nine projects identified for funding in the Airport-Larkfield-Wikiup Sanitation Zone. Three new projects, consisting Equalization Basins, Tertiary Backwash Piping Improvements, and Chemical Feed Tanks were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Larkfield Estates Sewer Main project was completed in 2020.

#### Geyserville Sanitation Zone

There are no projects identified for funding in the FY 2021-22 through 2025-26 capital plan for the Geyserville Sanitation Zone.

#### Occidental County Sanitation District

There is one project identified for funding in the Occidental County Sanitation District. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

#### Penngrove Sanitation Zone

There are 2 projects identified for funding in the Penngrove Sanitation Zone. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

#### Russian River County Sanitation District

There are eight projects identified for funding in the Russian River County Sanitation District. Three new projects, consisting of the Supervisory Control and Data Acquisition Upgrade Pilot Project, Collection System Repair

(M31-4/M36-14), and UV System Retrofit were added to the FY 2021-22 through FY 2025-26 capital plan.

#### Sea Ranch Sanitation Zone

There are two projects identified for funding in the Sea Ranch Sanitation Zone. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Helm Lift Station Control Panel Replacement project was completed in 2020.

#### Sonoma Valley County Sanitation District

There are 13 projects identified for funding in Sonoma Valley County Sanitation District. Four new projects, consisting of Replace Lookout Supervisory Control and Data Acquisition, 8th St East Recycled Water Pipeline, Effluent Recycled Water Line Replacement, and Influent/Effluent Pumping and Piping Upgrade were added to the FY 2021-22 through FY 2025-26 capital plan. The formerly identified Sonoma Valley Treatment Plant Electrical Resiliency and Trunk Sewer Replacement, Phase 4B.2 projects were completed in 2020.

#### South Park County Sanitation District

There are two projects identified for funding in the South Park County Sanitation District. Two new projects were added to the FY 2021-22 through FY 2025-2026 capital plan.

## Administration and General Fund

### Current Five-Year Plan

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This five year capital plan includes no General Fund, Spring Lake Park Fund, or Sustainability-Renewable Energy Fund projects.

## Internal Service

### Current Five-Year Plan

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In this five year plan, there are five projects identified for funding in the Internal Services Fund. The projects in this section of the plan meet the objectives in Organizational and Energy Goals and Strategies in Sonoma Water's Strategic Plan.

### Facilities Fund

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There is one project identified for funding in the Facilities Fund. No new projects were added to the FY 2021-22 through FY 2025-26 capital plan.

### Power Resources Fund

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There are four projects identified for funding in the Power Resources Fund. One new project, consisting of Geyserville Treatment Plant Solar Inverter Replacement was added to the FY 2021-22 through FY 2025-26 capital plan.

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## Funding Source Report

Division/Section	Funding Source	Prior FYs	Current FY 2020-21	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future FYs	Cumulative Project Total
Water Transmission System	Sonoma Aqueduct Capital Fund and Storage Fund	0	400	925	2,780	2,596	250	0	6,551	0	6,951
Water Transmission System	Common Facilities Fund, FEMA	5,400	11,153	14,980	3,783	4,826	8,006	12,842	44,437	18,841	79,831
Water Transmission System	Petaluma Aqueduct Capital Fund, FEMA	363	402	302	4,812	2,417	1,050	26,075	34,656	27,000	63,121
Water Transmission System	Santa Rosa Aqueduct Capital Fund, FEMA	1,059	9,878	800	734	308	0	0	1,842	0	12,779
Water Transmission System	Sonoma Aqueduct Capital Fund	5,455	617	615	1,740	2,816	6,537	2,105	13,813	246	20,131
Water Transmission System	Storage Fund	865	653	0	1,546	753	2,660	6,570	11,529	500	13,547
Water Transmission System	O&M Fund	1,268	6,379	7,119	5,873	4,200	4,026	3,982	25,200	15,203	48,050
Water Transmission System	Watershed Planning & Restoration Fund, ACOE	7,102	5,027	2,699	1,898	201	191	89	5,078	702	17,909
Water Supply - Warm Springs Dam	Other, ACOE	13,159	4,418	269	0	0	0	0	269	0	17,846
Zone 1A Flood Control	Zone 1A, NRCS	629	1,717	568	1,052	473	250	250	2,593	0	4,939
Zone 2A Flood Control	Zone 2A, DWR	0	0	614	2,998	491	0	0	4,103	0	4,103
Zone 5A Flood Control	Zone 5A, FEMA	0	363	650	1,319	0	0	0	1,969	0	2,332
Airport-Larkfield-Wikiup Sanitation Zone	ALWSZ	429	580	548	1,311	971	234	3,849	6,913	0	7,922
Occidental County Sanitation District	OCSD	232	51	0	355	0	0	0	355	0	638
Penngrove Sanitation Zone	PSZ, FEMA	373	1,000	193	30	30	30	30	313	30	1,716
Russian River County Sanitation District	RRCSD	482	2,861	1,375	1,989	6,563	884	3,000	13,811	0	17,154
Sea Ranch Sanitation Zone	SRSZ	0	100	125	480	75	75	75	830	125	1,055
Sonoma Valley County Sanitation District	SVCS	1,834	11,329	10,823	11,940	18,214	669	880	42,526	1,262	56,951
South Park County Sanitation District	SPCSD	0	0	700	526	511	11,067	1,376	14,180	0	14,180
Internal Services Fund	Power Resources	152	145	3,073	419	102	353	79	4,026	254	4,577



## Dry Creek Habitat Enhancement Project (Phase 4)

### Function Area:

Development Services

Request: WA20012

### Department/Division:

Sonoma Water / Water Transmission System - Watershed Planning & Restoration

### Project Description



To address fish habitat issues associated with high flows in Dry Creek, as indicated in the Biological Opinion, this project will construct modifications designed to enhance fish habitat in Dry Creek Mile 4 while accommodating stream flows necessary to support water supply.

Project Cost	
Acquisition:	1,476
Design/PM:	2,787
Construction:	2,691
Furniture/Reloc:	0
Other:	211
<b>Project Total:</b>	<b>7,165</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Watershed Planning and Restoration Fund	2,936	3,558	252	61	50	44	30	437	234	7,165
<b>TOTALS:</b>	<b>2,936</b>	<b>3,558</b>	<b>252</b>	<b>61</b>	<b>50</b>	<b>44</b>	<b>30</b>	<b>437</b>	<b>234</b>	<b>7,165</b>

All Values are presented in Thousands (1 x 1000)

## Dry Creek Habitat Enhancement Project (Phase 5)

### Function Area:

Development Services

Request: WA20013

### Department/Division:

Sonoma Water / Water Transmission System - Watershed Planning & Restoration

### Project Description



To address fish habitat issues associated with high flows in Dry Creek, as indicated in the Biological Opinion, this project will construct modifications designed to enhance fish habitat in Dry Creek Mile 5 while accommodating stream flows necessary to support water supply.

Project Cost	
Acquisition:	1,646
Design/PM:	1,859
Construction:	775
Furniture/Reloc:	0
Other:	100
Project Total:	4,380

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Watershed Planning and Restoration Fund	2,045	694	1,132	153	48	44	30	1,407	234	4,380
TOTALS:	2,045	694	1,132	153	48	44	30	1,407	234	4,380

All Values are presented in Thousands (1 x 1000)

## Dry Creek Habitat Enhancement Project (Phase 6)

### Function Area:

Development Services

Request: WA20014

### Department/Division:

Sonoma Water / Water Transmission System - Watershed Planning & Restoration

### Project Description



To address fish habitat issues associated with high flows in Dry Creek, as indicated in the Biological Opinion, this project will construct modifications designed to enhance fish habitat in Dry Creek Mile 6 while accommodating stream flows necessary to support water supply.

Project Cost	
Acquisition:	2,305
Design/PM:	2,110
Construction:	1,819
Furniture/Reloc:	0
Other:	130
<b>Project Total:</b>	<b>6,364</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Watershed Planning and Restoration Fund	2,121	775	1,315	1,684	103	103	29	3,234	234	6,364
<b>TOTALS:</b>	<b>2,121</b>	<b>775</b>	<b>1,315</b>	<b>1,684</b>	<b>103</b>	<b>103</b>	<b>29</b>	<b>3,234</b>	<b>234</b>	<b>6,364</b>

All Values are presented in Thousands (1 x 1000)

## Bennett Valley Fault Crossing

Function Area:

Development Services

Department/Division:

Sonoma Water / Water Transmission System

Request: WA10106

### Project Description



Implement measures to increase water supply reliability and mitigate the risk of pipeline rupture in the vicinity where the 20" diameter Sonoma Aqueduct and 24" diameter Oakmont Pipeline traverse the Bennett Valley Fault system in Rincon Valley. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	99
Design/PM:	1,272
Construction:	5,156
Furniture/Reloc:	0
Other:	424
<b>Project Total:</b>	<b>6,951</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	200	463	1,390	1,298	125	0	3,276	0	3,476
Storage Fund	0	200	462	1,390	1,298	125	0	3,275	0	3,475
<b>TOTALS:</b>	<b>0</b>	<b>400</b>	<b>925</b>	<b>2,780</b>	<b>2,596</b>	<b>250</b>	<b>0</b>	<b>6,551</b>	<b>0</b>	<b>6,951</b>

All Values are presented in Thousands (1 x 1000)

## 48 Inch Mainline Valve at Vinehill Ranch

### Function Area:

Development Services

Request: WA18001

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Install mainline valve at Vinehill Ranch at location where AQ was hit by pipe driller in 2013. This will be a 48 inch butterfly valve and be utilized as an isolation valve.

Project Cost	
Acquisition:	35
Design/PM:	302
Construction:	308
Furniture/Reloc:	0
Other:	0
Project Total:	645

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	0	337	308	645	0	645
TOTALS:	0	0	0	0	0	337	308	645	0	645

All Values are presented in Thousands (1 x 1000)

## Collector 6 Valves and Vault Replacement

### Function Area:

Development Services

Request: WA15008

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



This project proposes to install a new vault around two existing shutoff valves located along the 20 inch and 24 inch discharge pipes at collector 6. This new vault is required to facilitate needed repairs and maintenance on the valves.

Project Cost	
Acquisition:	0
Design/PM:	166
Construction:	209
Furniture/Reloc:	0
Other:	0
Project Total:	375

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	375	0	0	375	0	375
TOTALS:	0	0	0	0	375	0	0	375	0	375

All Values are presented in Thousands (1 x 1000)



## Mirabel - River Road Fiber Optic Line

### Function Area:

Development Services

Request: WA14028

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Install new fiber optic cable within existing conduit (abandoned chlorine solution line), between River Road Chlorine building and Collector 5, in order to upgrade the information and signal expansion that is needed for the Wohler and Mirabel area.

Project Cost	
Acquisition:	12
Design/PM:	113
Construction:	470
Furniture/Reloc:	0
Other:	0
Project Total:	595

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	125	470	0	0	0	0	470	0	595
TOTALS:	0	125	470	0	0	0	0	470	0	595

All Values are presented in Thousands (1 x 1000)

## Mirabel Chlorine Building Water Line

### Function Area:

Development Services

Request: WA15010

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Construct new waterline from Collector well No. 3 to service the Mirabel Chlorination Building. The project will replace the existing water line which has reached the end of its useful life.

Project Cost	
Acquisition:	0
Design/PM:	153
Construction:	165
Furniture/Reloc:	0
Other:	35
Project Total:	353

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
	0	0	0	0	0	0	0	0	0	0
Common Facilities Fund	0	0	188	165	0	0	0	353	0	353
TOTALS:	0	0	188	165	0	0	0	353	0	353

All Values are presented in Thousands (1 x 1000)

## Mirabel Collector 3 Blowoff

### Function Area:

Development Services

Request: WA19007

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



This project provides a way to separately blow off to the pond after any disinfection of the Caisson. This will reduce the chance of introducing issues to the main line. The project will install a separate valve and piping, directed to the pond. Adding a blow off at each Caisson would allow isolation of the Caisson being worked on and the ability to blow off the disinfected water without having to isolate other Caissons and Pipeline in the process. This will facilitate the ability to pump water from all other Caissons in order to disinfect a single Caisson.

Project Cost	
Acquisition:	11
Design/PM:	197
Construction:	176
Furniture/Reloc:	0
Other:	0
Project Total:	384

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
		0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0
Common Facilities Fund	0	0	0	0	208	176	0	384	0	384
TOTALS:	0	0	0	0	208	176	0	384	0	384

All Values are presented in Thousands (1 x 1000)

## Mirabel Collector 4 Blowoff

### Function Area:

Development Services

Request: WA19008

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



This project provides a way to separately blow off to the pond after any disinfection of the Caisson. This will reduce the chance of introducing issues to the main line. The project will install a separate valve and piping, directed to the pond. Adding a blow off at each Caisson would allow isolation of the Caisson being worked on and the ability to blow off the disinfected water without having to isolate other Caissons and Pipeline in the process. This will facilitate the ability to pump water from all other Caissons in order to disinfect a single Caisson.

Project Cost	
Acquisition:	11
Design/PM:	197
Construction:	176
Furniture/Reloc:	0
Other:	0
Project Total:	384

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	208	176	0	0	384	0	384
TOTALS:	0	0	0	208	176	0	0	384	0	384

All Values are presented in Thousands (1 x 1000)

## Mirabel Inflatable Dam Fabric Replacement

### Function Area:

Development Services

Request: WA16001

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Replace the Mirabel Dam's inflatable rubber bladder, which is reaching the end of its 25-30 year useful life. The rubber dam is an essential element of the Wohler/Mirabel water production facilities, controlling diversion flows and enhancing groundwater recharge in the area.

Project Cost	
Acquisition:	0
Design/PM:	998
Construction:	2,803
Furniture/Reloc:	0
Other:	147
Project Total:	3,948

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	1,532	2,161	255	0	0	0	0	255	0	3,948
TOTALS:	1,532	2,161	255	0	0	0	0	255	0	3,948

All Values are presented in Thousands (1 x 1000)

## Mirabel Maintenance Building

### Function Area:

Development Services

Request: WA15012

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Provide a pre-engineered metal storage building at the Mirabel site for water transmission/supply maintenance related operations.

Project Cost	
Acquisition:	0
Design/PM:	80
Construction:	875
Furniture/Reloc:	0
Other:	5
Project Total:	960

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	60	900	0	0	0	0	900	0	960
TOTALS:	0	60	900	0	0	0	0	900	0	960

All Values are presented in Thousands (1 x 1000)



## Mirabel Pump 6 Replacement

### Function Area:

Development Services

Request: WA21007

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Mirabel Pump 6 consist of a 1000 horsepower motor, discharge head, column set, drive shafts and bowl assembly (pump). When the motor is started, it turns the shafts and pump to start pumping water to the pipeline. These pumps are an integral part of the water delivery system and need to be kept in good running condition at all times. The pumps are routinely monitored, maintained, and rebuilt as necessary. However, the rubber bearings in the pump columns are vulnerable to degradation in chlorinated water, particularly the lower portions of the pump column that are normally submerged within the collector well caissons with elevated chlorine concentrations. These pump's column sets are past their useful life and need to be replaced.

Project Cost	
Acquisition:	0
Design/PM:	140
Construction:	418
Furniture/Reloc:	0
Other:	0
Project Total:	558

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	558	0	0	0	0	558	0	558
TOTALS:	0	0	558	0	0	0	0	558	0	558

All Values are presented in Thousands (1 x 1000)

## Mirabel Pump 8 Replacement

### Function Area:

Development Services

Request: WA19004

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Mirabel Pump 8 consists of a 1250 hp motor, discharge head, column set, drive shafts and bowl assembly (pump). When the motor is started, it turns the shafts and pump to start pumping water to the pipeline. This pump is an integral part of the water delivery system and need to be kept in good running condition at all times. The pump is routinely monitored, maintained, and rebuilt as necessary. However, the rubber bearings in the pump columns are vulnerable to degradation in chlorinated water, particularly the lower portions of the pump column that are normally submerged within the collector well caissons with elevated chlorine concentrations. This pump's column set is past its useful life and needs to be replaced.

Project Cost	
Acquisition:	0
Design/PM:	140
Construction:	418
Furniture/Reloc:	0
Other:	0
Project Total:	558

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	558	0	0	0	558	0	558
TOTALS:	0	0	0	558	0	0	0	558	0	558

All Values are presented in Thousands (1 x 1000)

## Mirabel Surge Tanks

### Function Area:

Development Services

Request: WA08053

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



To reduce the risks of pipeline damage/leaks due to transient pressures in the water transmission system following power failures, construct surge control system at the Mirabel production facilities, including three 8,000 gallon surge tanks and appurtenant equipment and controls-one each at collectors 3, 4 & 5.

Project Cost	
Acquisition:	0
Design/PM:	317
Construction:	2,166
Furniture/Reloc:	0
Other:	97
Project Total:	2,580

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	200	0	0	280	2,100	0	2,380	0	2,580
TOTALS:	0	200	0	0	280	2,100	0	2,380	0	2,580

All Values are presented in Thousands (1 x 1000)

**pH Systems Upgrade**

**Function Area:** Development Services  
**Department/Division:**

Sonoma Water / Water Transmission System - Common Facilities Fund

**Project Description**

Upgrade the pumps and programmable logic controls in both Wohler and Mirabel caustic soda (pH) buildings, to make them more efficient and program-compatible with forthcoming electronic and supervisory control and data acquisition (SCADA) master plans. The pumps and programmable logic controls will replace existing equipment.



Project Cost	
Acquisition:	35
Design/PM:	319
Construction:	505
Furniture/Reloc:	0
Other:	0
Project Total:	859

**Service Impact:**

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0
Personnel:	0
Revenue/Refund:	0

Available Funding Sources	Prior FYs	Current FY	FY1	FY2	FY3	FY4	FY5	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	354	505	0	0	0	859	0	859
TOTALS:	0	0	354	505	0	0	0	859	0	859

All Values are presented in Thousands (1 x 1000)

## Pump Replacements: Mirabel 10 & Wohler 12

### Function Area:

Development Services

Request: WA20020

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Mirabel Pump 10 and Wohler Pump 12 consist of a motor, discharge head, column set, drive shafts and bowl assembly (pump). When the motor is started, it turns the shafts and pump to start pumping water to the pipeline. These pumps are an integral part of the water delivery system and need to be kept in good running condition at all times. The pumps are routinely monitored, maintained, and rebuilt as necessary. However, the rubber bearings in the pump columns are vulnerable to degradation in chlorinated water, particularly the lower portions of the pump column that are normally submerged within the collector well caissons with elevated chlorine concentrations. These pump's column sets are past their useful life and need to be replaced.

Project Cost	
Acquisition:	0
Design/PM:	280
Construction:	836
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>1,116</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	0	0	558	558	558	1,116
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>558</b>	<b>558</b>	<b>558</b>	<b>1,116</b>

All Values are presented in Thousands (1 x 1000)

# River Diversion Structure Motor Control Center, Pump, and Seismic Upgrade

Function Area:

Request: WA20015

Development Services

Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

## Project Description



The purpose of the RDS facility is to transfer water from the Russian River to a series of infiltration ponds that recharge the groundwater basins for Collectors 3, 4, and 5. Several issues have been identified at the RDS facility including the need for replacement of the pumps, the motor control center, and a seismic and structural retrofit project. This project rolls all of those issues into one capital improvement project that will take a holistic look at the system and address the issues listed above.

Project Cost	
Acquisition:	11
Design/PM:	432
Construction:	993
Furniture/Reloc:	0
Other:	24
<b>Project Total:</b>	<b>1,460</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	99	50	197	1,059	55	0	0	1,311	0	1,460
<b>TOTALS:</b>	<b>99</b>	<b>50</b>	<b>197</b>	<b>1,059</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>1,311</b>	<b>0</b>	<b>1,460</b>

All Values are presented in Thousands (1 x 1000)



## Russian River Wellfield Optimization Upgrade

### Function Area:

Development Services

Request: WA19016

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



This project will include hydrogeologic and engineering analyses to maximize the water supply benefit of the existing Russian River Well Field, located at the Mirabel Facility. The project is preliminarily assumed to include the retrofit of four existing wells (1 stand-by), as high-head, winterized wells to provide combined capacity of 7 mgd.

Project Cost	
Acquisition:	0
Design/PM:	334
Construction:	2,713
Furniture/Reloc:	0
Other:	223
Project Total:	3,270

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	340	2,830	100	3,270	0	3,270
TOTALS:	0	0	0	0	340	2,830	100	3,270	0	3,270

All Values are presented in Thousands (1 x 1000)

## Seismic Hazard Mitigation at the Mark West Creek Crossing

### Function Area:

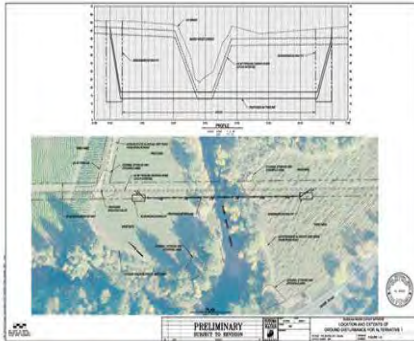
Development Services

Request: WA09051

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Project will mitigate the risk of pipe failure due to seismic induced ground deformation by installing a new pipeline crossing at greater depth. The primary element of the proposed project is approximately a 750-foot long, 48-inch diameter steel pipeline segment that would be installed beneath the Mark West Creek. The new pipeline segment would be installed parallel to the existing pipeline and approximately 8 feet below the creek bed, 6 feet deeper than the existing pipe's depth. The existing pipeline would be disconnected and abandoned in place.

Project Cost	
Acquisition:	279
Design/PM:	1,113
Construction:	7,060
Furniture/Reloc:	0
Other:	128
<b>Project Total:</b>	<b>8,580</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund, FEMA	1,258	220	6,331	771	0	0	0	7,102	0	8,580
<b>TOTALS:</b>	<b>1,258</b>	<b>220</b>	<b>6,331</b>	<b>771</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,102</b>	<b>0</b>	<b>8,580</b>

All Values are presented in Thousands (1 x 1000)

## Seismic Hazard Mitigation at the Russian River Crossing

### Function Area:

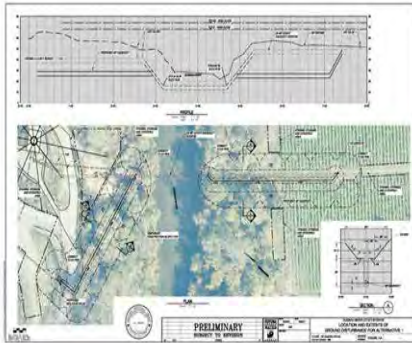
Development Services

Request: WA09055

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The proposed project is located on the Cotati Intertie Pipeline under the Russian River to the South of Caisson 5 on the Mirabel site. The purpose of the Russian River-Cotati Intertie Pipeline Seismic Hazard Mitigation at the Russian River Crossing Project is to reduce potential pipe failure and maintain safe and reliable water service during a seismic event resulting from the permanent ground deformation caused by a moderate or severe earthquake along the Rodger's Creek/Hayward Fault. The proposed project will evaluate environmental constraints and assess subsurface soil conditions for mitigating liquefaction induced lateral spread hazard. The Russian River Crossing project proposes to modify and replace portions of the existing crossing, including approximately 1400 feet of concrete cylinder pipe ranging in size between 36" and 48" diameter. The project includes trenching within the river banks to replace portions of the pipeline at risk.

Project Cost	
Acquisition:	286
Design/PM:	1,458
Construction:	7,898
Furniture/Reloc:	0
Other:	138
<b>Project Total:</b>	<b>9,780</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund, FEMA	1,652	7,419	709	0	0	0	0	709	0	9,780
<b>TOTALS:</b>	<b>1,652</b>	<b>7,419</b>	<b>709</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>709</b>	<b>0</b>	<b>9,780</b>

All Values are presented in Thousands (1 x 1000)

## Supervisory Control and Data Acquisition (SCADA) Software and Hardware

Function Area:

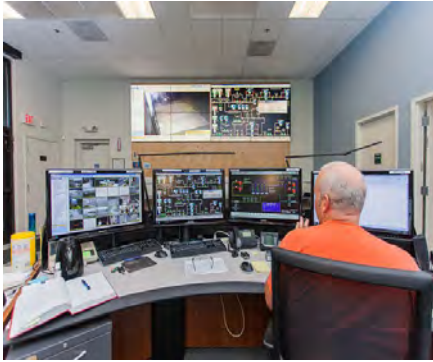
Request: WA15007

Development Services

Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The scope of the project is to upgrade Supervisory Control and Data Acquisition (SCADA) workstations and software to current supported versions. Other objectives include upgrades to field components such as Programmable Logic Controllers and Remote Telemetry devices.

Project Cost	
Acquisition:	0
Design/PM:	335
Construction:	165
Furniture/Reloc:	0
Other:	0
Project Total:	500

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	300	200	0	0	0	0	200	0	500
TOTALS:	0	300	200	0	0	0	0	200	0	500

All Values are presented in Thousands (1 x 1000)

## Supervisory Control and Data Acquisition (SCADA) Upgrade

### Function Area:

Development Services

Request: WA15005

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The scope of this project is to reassess and revamp programming standards to accommodate current technologies as well as implement these new standards to streamline maintenance and operations.

Project Cost	
Acquisition:	0
Design/PM:	2,500
Construction:	0
Furniture/Reloc:	0
Other:	0
Project Total:	2,500

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	200	2,300	0	0	0	0	2,300	0	2,500
TOTALS:	0	200	2,300	0	0	0	0	2,300	0	2,500

All Values are presented in Thousands (1 x 1000)

## Throttling Valves (SR AQ & RR-Cot Int.)

### Function Area:

Development Services

Request: WA20023

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



To provide increased operational flexibility to pump and/or divert water supply from the Wohler-Mirabel production facility to the portion of the service area where most needed during or following a major disaster (earthquake, fire, etc.) or emergency repair, this project proposes to install a 48-inch and a 36-inch diameter throttling valve on the Russian River-Cotati Intertie and Santa Rosa Aqueduct, respectively.

Project Cost	
Acquisition:	89
Design/PM:	745
Construction:	1,030
Furniture/Reloc:	0
Other:	0
Project Total:	1,864

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	417	417	1,030	0	1,864	0	1,864
TOTALS:	0	0	0	417	417	1,030	0	1,864	0	1,864

All Values are presented in Thousands (1 x 1000)

## Warm Springs Dam Hydroturbine Retrofit

### Function Area:

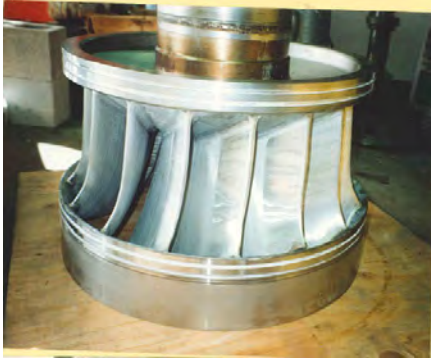
Development Services

Request: WA16016

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Sonoma Water owns, operates, and maintains the Warm Springs Dam Hydropower Facility (Hydropower Facility). The Hydropower Facility has been in operation since 1989 and produces approximately 9,000–16,000 megawatt-hour per year. The project will modernize and implement retrofits of outdated electrical, mechanical, instrumentation and control systems to extend the useful life of the system, and improve system efficiency and resiliency. The existing hydroturbine is oversized relative to near and long term flow rates. Therefore, this project will replace the hydroturbine runner (impeller) with a smaller one to operate more efficiently. The project, in combination with changing the power buyer from PWRPA to PG&E, will add annual revenue.

Project Cost	
Acquisition:	6
Design/PM:	900
Construction:	2,528
Furniture/Reloc:	0
Other:	11
<b>Project Total:</b>	<b>3,445</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	825	123	2,497	0	0	0	0	2,497	0	3,445
<b>TOTALS:</b>	<b>825</b>	<b>123</b>	<b>2,497</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,497</b>	<b>0</b>	<b>3,445</b>

All Values are presented in Thousands (1 x 1000)



## Wohler Access Road Retaining Wall

### Function Area:

Development Services

Request: WA18003

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



A portion of the embankment along the primary route to the water production facilities at the Wohler Plant is failing and requires repair. All-weather, continuous access to the Wohler Plant is essential. A retaining wall is proposed to be installed to shore up the embankment. The retaining wall is anticipated to be a steel beam and wood lagging retaining wall, approximately 100 feet in length with an exposed height no greater than 10 feet. This wall will provide support in an area of pavement distress and slope failure (creeping landslide) along a 60±-foot section of the access road to the plant.

Project Cost	
Acquisition:	0
Design/PM:	149
Construction:	192
Furniture/Reloc:	0
Other:	9
Project Total:	350

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	34	295	21	0	0	0	0	21	0	350
TOTALS:	34	295	21	0	0	0	0	21	0	350

All Values are presented in Thousands (1 x 1000)

## Wohler Pump 11 Replacement

### Function Area:

Development Services

Request: WA19012

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Wohler Pump 11 consists of a 1250 hp motor, discharge head, column set, drive shafts and bowl assembly (pump). When the motor is started, it turns the shafts and pump to start pumping water to the pipeline. This pump is an integral part of the water delivery system and need to be kept in good running condition at all times. The pump is routinely monitored, maintained, and rebuilt as necessary. However, the rubber bearings in the pump columns are vulnerable to degradation in chlorinated water, particularly the lower portions of the pump column that are normally submerged within the collector well caissons with elevated chlorine concentrations. This pump's column set is past its useful life and needs to be replaced.

Project Cost	
Acquisition:	0
Design/PM:	140
Construction:	418
Furniture/Reloc:	0
Other:	0
Project Total:	558

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	0	558	0	558	0	558
TOTALS:	0	0	0	0	0	558	0	558	0	558

All Values are presented in Thousands (1 x 1000)

## Wohler Pump 4 Replacement

### Function Area:

Development Services

Request: WA19011

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Wohler Pump 4 consists of a 1250 hp motor, discharge head, column set, drive shafts and bowl assembly (pump). When the motor is started, it turns the shafts and pump to start pumping water to the pipeline. This pump is an integral part of the water delivery system and need to be kept in good running condition at all times. The pump is routinely monitored, maintained, and rebuilt as necessary. However, the rubber bearings in the pump columns are vulnerable to degradation in chlorinated water, particularly the lower portions of the pump column that are normally submerged within the collector well caissons with elevated chlorine concentrations. This pump's column set is past its useful life and needs to be replaced.

Project Cost	
Acquisition:	0
Design/PM:	140
Construction:	418
Furniture/Reloc:	0
Other:	0
Project Total:	558

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	558	0	0	558	0	558
TOTALS:	0	0	0	0	558	0	0	558	0	558

All Values are presented in Thousands (1 x 1000)

## Wohler Road Fiber Optic

### Function Area:

Development Services

Request: WA16003

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Sonoma County Transportation & Public Works is rehabilitating the Wohler Bridge crossing the Russian River, which affects Sonoma Water's existing fiber optic communication cables. The cables will be either re-strung across the bridge or buried under the Russian River.

Project Cost	
Acquisition:	90
Design/PM:	675
Construction:	780
Furniture/Reloc:	0
Other:	0
Project Total:	1,545

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	600	165	780	1,545	0	1,545
TOTALS:	0	0	0	0	600	165	780	1,545	0	1,545

All Values are presented in Thousands (1 x 1000)

## Wohler-Forestville Pipeline 54 Inch Throttling Valve

### Function Area:

Development Services

Request: WA18002

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The motor operated valve located along the 54-inch Wohler-Forestville pipeline operates either fully open or fully closed, however it has been determined that a throttling valve would allow additional operational flexibility.

Project Cost	
Acquisition:	0
Design/PM:	67
Construction:	193
Furniture/Reloc:	0
Other:	0
Project Total:	260

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	0	260	0	260	0	260
TOTALS:	0	0	0	0	0	260	0	260	0	260

All Values are presented in Thousands (1 x 1000)

## Collector 3 & 5 Liquefaction Mitigation

**Function Area:**

Development Services

**Request: WA04048**

**Department/Division:**

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The project will address potential for structural failure of collector wells 3 & 5 at the Mirabel production facilities by mitigating the potential for liquefaction induced lateral spread. Ground improvements, structural upgrades or a combination of approaches will be used to increase the factor of safety for future seismic events. The proposed project will evaluate environmental constraints and assess subsurface soil conditions for mitigating liquefaction induced lateral spread hazards at collectors 3 & 5. Mitigation options may include regrading in the vicinity of the caissons, structural improvements, and structural retrofit of the caissons. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	0
Design/PM:	400
Construction:	10,800
Furniture/Reloc:	0
Other:	200
<b>Project Total:</b>	<b>11,400</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	500	100	5,400	6,000	5,400	11,400
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>500</b>	<b>100</b>	<b>5,400</b>	<b>6,000</b>	<b>5,400</b>	<b>11,400</b>

All Values are presented in Thousands (1 x 1000)

## Collector 6 Liquefaction Mitigation

### Function Area:

Development Services

Request: WA07046

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



The project will address potential for structural failure of collector well 6 at the Wohler production facilities by mitigating the potential for liquefaction induced lateral spread. Ground improvements, structural upgrades, or a combination of approaches will be used to increase the factor of safety for seismic events. The damage caused by such displacements could be so severe as to render the caisson irreparable. The Collector 6 Liquefaction Mitigation project is a natural hazard reliability project to decrease the structure's vulnerability to failure during a major seismic event. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	0
Design/PM:	396
Construction:	5,106
Furniture/Reloc:	0
Other:	248
Project Total:	5,750

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	0	450	100	5,200	5,750	0	5,750
TOTALS:	0	0	0	0	450	100	5,200	5,750	0	5,750

All Values are presented in Thousands (1 x 1000)



## Mirabel 12kV Seismic, Flood, and Fire Resiliency

### Function Area:

Development Services

Request: WA20022

### Department/Division:

Sonoma Water / Water Transmission System - Common Facilities Fund

### Project Description



Electrical power for the Mirabel pumping facilities is provided from the Wohler sub-station through a 12 kV power line. The overhead power line is susceptible to seismic, flooding, and fire hazards. This project proposes to mitigate that vulnerability by implementing relocation, undergrounding, and/or retrofit measures. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	417
Design/PM:	1,287
Construction:	12,796
Furniture/Reloc:	0
Other:	196
Project Total:	14,696

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Common Facilities Fund	0	0	0	100	867	350	496	1,813	12,883	14,696
TOTALS:	0	0	0	100	867	350	496	1,813	12,883	14,696

All Values are presented in Thousands (1 x 1000)

# Kawana to Sonoma Booster Station Pipeline, Phase 1

Function Area:

Development Services

Request: WA18005

Department/Division:

Sonoma Water / Water Transmission System - Storage Fund

## Project Description



Construction of the Kawana to Sonoma Booster Station (SBS) pipeline consists of approximately 3 miles of water transmission pipeline, between the Kawana Tanks, Ralphine tanks, and the Sonoma Booster Pump Station. The pipeline will provide operational redundancy and reliability to the system should repairs or replacement be necessary or if a catastrophic event occurs, such as a major earthquake on the Rodgers Creek Fault. Phase 1 of the project will replace the 0.3 mile segment between SBS and the Ralphine tanks. This portion of the existing pipeline traverses beneath Spring Lake, making any potential repairs difficult. The new pipeline will be located outside the footprint of the normally inundated area of the lake.

Project Cost	
Acquisition:	30
Design/PM:	710
Construction:	6,967
Furniture/Reloc:	0
Other:	205
<b>Project Total:</b>	<b>7,912</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Storage Fund	0	132	0	0	550	160	6,570	7,280	500	7,912
<b>TOTALS:</b>	<b>0</b>	<b>132</b>	<b>0</b>	<b>0</b>	<b>550</b>	<b>160</b>	<b>6,570</b>	<b>7,280</b>	<b>500</b>	<b>7,912</b>

All Values are presented in Thousands (1 x 1000)

## Ralphine Tanks - Flow Thru Conversion

**Function Area:**

Development Services

**Request: WA11072**

**Department/Division:**

Sonoma Water / Water Transmission System - Storage Fund

### Project Description



Reconfigure piping connecting the four above ground steel water reservoirs at the Ralphine Tank farm to improve water circulation/turnover for enhanced water quality, provide surge protection, and address over constrained structural conditions to reduce the risk of damage during a seismic event.

Project Cost	
Acquisition:	14
Design/PM:	1,182
Construction:	1,515
Furniture/Reloc:	0
Other:	24
<b>Project Total:</b>	<b>2,735</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Storage Fund	865	521	0	1,296	53	0	0	1,349	0	2,735
<b>TOTALS:</b>	<b>865</b>	<b>521</b>	<b>0</b>	<b>1,296</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>1,349</b>	<b>0</b>	<b>2,735</b>

All Values are presented in Thousands (1 x 1000)

## Seismic Retrofit of Storage Tanks (Cot1-3, Eld2, Kast, Son2, Ral1-4)

Function Area:

Development Services

Request: WA20021

Department/Division:

Sonoma Water / Water Transmission System - Storage Fund

### Project Description



Sonoma Water's transmission system includes 18 steel water storage tanks at nine independent locations. Seismic assessment of the tanks indicate that some tanks may be vulnerable to tensile hoop overstress in the bottom course of the tank shell, resulting from the sloshing of water during a major earthquake. This project proposes to implement operational or design measures to mitigate those structural vulnerabilities.

Project Cost	
Acquisition:	0
Design/PM:	200
Construction:	2,650
Furniture/Reloc:	0
Other:	50
Project Total:	2,900

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Storage Fund	0	0	0	250	150	2,500	0	2,900	0	2,900
TOTALS:	0	0	0	250	150	2,500	0	2,900	0	2,900

All Values are presented in Thousands (1 x 1000)

## Ely Booster Station Flood Protection

### Function Area:

Development Services

Request: WA16007

### Department/Division:

Sonoma Water / Water Transmission System - Petaluma Aqueduct Capital Fund

### Project Description



Ely Booster Station is part of Sonoma Water's water transmission system and supplies water to over 200,000 residents in Marin and Sonoma County by pumping potable water to the City of Petaluma, the North Marin Water District, and the Marin Municipal Water District. The site was inundated by flood water in December of 2014, nearly flooding the high voltage electrical equipment with similar events in 2016 and 2017. Sonoma Water is proposing to implement the Ely Road Flood Protection project to reduce the flood risks of future rain events. The project will lift the electrical equipment above the floodplain and it is expected that a number of electrical items will need to be replaced during the project. The project includes elevating the existing transformer, switchgear, and generator out of the floodplain. The project will also increase the structural integrity of the Station. All of the pipeline appurtenances (gates) associated with the pipeline at Ely Booster Station will also be lifted out of the floodplain.

Project Cost	
Acquisition:	18
Design/PM:	833
Construction:	3,109
Furniture/Reloc:	0
Other:	26
<b>Project Total:</b>	<b>3,986</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Petaluma Aqueduct Capital Fund, FEMA	185	370	202	3,187	42	0	0	3,431	0	3,986
<b>TOTALS:</b>	<b>185</b>	<b>370</b>	<b>202</b>	<b>3,187</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>3,431</b>	<b>0</b>	<b>3,986</b>

All Values are presented in Thousands (1 x 1000)

## Wilfred Booster Station

### Function Area:

Development Services

Request: WA16006

### Department/Division:

Sonoma Water / Water Transmission System - Petaluma Aqueduct Capital Fund

### Project Description



Wilfred Booster station built in 1972 needs to be upgraded to newer more efficient equipment. Replace Wilfred Booster Station's electrical building, motor, and other critical electrical components.

Project Cost	
Acquisition:	0
Design/PM:	310
Construction:	1,600
Furniture/Reloc:	0
Other:	0
Project Total:	1,910

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Petaluma Aqueduct Capital Fund	178	32	100	1,600	0	0	0	1,700	0	1,910
TOTALS:	178	32	100	1,600	0	0	0	1,700	0	1,910

All Values are presented in Thousands (1 x 1000)

## Cotati-Kastania Pipeline (Section 1-Cotati to Ely Booster Station)

Function Area:

Development Services

Request: WA17008

Department/Division:

Sonoma Water / Water Transmission System - Petaluma Aqueduct Capital Fund

### Project Description



Section 1 of the Cotati-Kastania Pipeline project will increase transmission system capacity to the portion of the Sonoma Water's southern service area. The pipeline begins at the existing Russian River-Cotati Intertie pipeline, near the intersection of Madrone Road and Stony Point Road, and ends at the Ely Booster Station. The diameter of the pipeline has been modeled at 48 inches and the length of the route is approximately 7 miles. Construction implementation is reliant on pending budget approvals.

Project Cost	
Acquisition:	1,150
Design/PM:	2,875
Construction:	52,850
Furniture/Reloc:	0
Other:	350
Project Total:	57,225

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Petaluma Aqueduct Capital Fund	0	0	0	25	2,375	1,050	26,075	29,525	27,700	57,225
TOTALS:	0	0	0	25	2,375	1,050	26,075	29,525	27,700	57,225

All Values are presented in Thousands (1 x 1000)



## Mainline Valve Replacement at Jennings

### Function Area:

Development Services

Request: WA18004

### Department/Division:

Sonoma Water / Water Transmission System - Santa Rosa Aqueduct Capital Fund

### Project Description



Mainline valve replacement at Jennings Avenue. Abandon existing location and acquire new location. The 36 inch mainline valve at Jennings Avenue is within SMART easement and thus Sonoma Water is unable to maintain the valve. The proposed new location will be downstream away from SMART easement and will include a mainline isolation butterfly valve of 36 inch diameter, and associated appurtenances.

Project Cost	
Acquisition:	58
Design/PM:	302
Construction:	308
Furniture/Reloc:	0
Other:	0
Project Total:	668

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Santa Rosa Aqueduct Capital Fund	0	0	0	360	308	0	0	668	0	668
TOTALS:	0	0	0	360	308	0	0	668	0	668

All Values are presented in Thousands (1 x 1000)

## Santa Rosa Creek Crossing

### Function Area:

Development Services

Request: WA14003

### Department/Division:

Sonoma Water / Water Transmission System - Santa Rosa Aqueduct Capital Fund

### Project Description



The 36-inch Santa Rosa aqueduct crosses Santa Rosa Creek near Sonoma Avenue. Although Santa Rosa Creek is deeply incised into the fan deposits at the pipeline undercrossing, the steep stream banks are above the groundwater level and composed predominately of fine-grained alluvial fan deposits. In addition, the creek has been locally modified. Due to the high level of ground shaking that can be expected from rupture on the nearby Rodgers Creek fault, local failure of stream banks and pipeline could occur. The project proposes to relocate the existing pipeline away from the open stream channel with an alignment that remains within the public roadway, including a trenchless crossing beneath the Santa Rosa Creek culvert. Hazard Mitigation Grant Funds from the Federal Emergency Management Agency (FEMA) will provide partial funding in the amount of \$3 million.

Project Cost	
Acquisition:	125
Design/PM:	1,331
Construction:	10,475
Furniture/Reloc:	0
Other:	180
Project Total:	12,111

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Santa Rosa Aqueduct Capital Fund, FEMA	1,059	9,878	800	374	0	0	0	1,174	0	12,111
TOTALS:	1,059	9,878	800	374	0	0	0	1,174	0	12,111

All Values are presented in Thousands (1 x 1000)

## Sonoma Booster Pump Station Upgrade

### Function Area:

Development Services

Request: WA08062

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



This project will improve the reliability and operability of the existing Sonoma Booster Pump Station. Reliability of the booster station will be increased by enhancing standby electrical power capacity, increasing pumping redundancy, modifying the electrical system and mitigating the seismic risks associated with the nearby Bennett Valley Fault. The operability of the Booster Station will be improved by developing a more robust and reliable surge protection system.

Project Cost	
Acquisition:	15
Design/PM:	1,203
Construction:	4,865
Furniture/Reloc:	0
Other:	14
Project Total:	6,097

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	5,455	617	25	0	0	0	0	25	0	6,097
TOTALS:	5,455	617	25	0	0	0	0	25	0	6,097

All Values are presented in Thousands (1 x 1000)

## Calabasas Creek Crossing

### Function Area:

Development Services

Request: WA15002

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



The 20-inch Sonoma aqueduct crosses Calabasas Creek near Sylvia drive off Sonoma Highway in Glen Ellen. The location has very high susceptibility to liquefaction and a high susceptibility to lateral spread hazard. The overall lateral spread potential is approximately 3 feet of displacement at the location of the pipeline. As a result, the pipeline has a high risk of failure. This natural hazard reliability project will modify the pipeline crossing to mitigate the risk of rupture during a major earthquake. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	73
Design/PM:	630
Construction:	2,941
Furniture/Reloc:	0
Other:	229
<b>Project Total:</b>	<b>3,873</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	0	0	0	710	2,863	300	3,873	0	3,873
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>710</b>	<b>2,863</b>	<b>300</b>	<b>3,873</b>	<b>0</b>	<b>3,873</b>

All Values are presented in Thousands (1 x 1000)

## Sonoma Creek Crossing (Lawndale Road)

### Function Area:

Development Services

Request: WA21004

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



The 20-inch diameter Sonoma Aqueduct crosses Sonoma Creek at Lawndale Road off Sonoma Highway utilizing overhead spans (pedestrian bridge steel truss) with structural connections that make the pipeline susceptible to failure during a major seismic event. Liquefaction and lateral spread displacements will likely cause the pipeline to fail due to minor differential movement or settlement. The proposed project is a natural hazard reliability project that will provide structural modifications to the support structures and pipeline in order to withstand a major seismic event. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	69
Design/PM:	472
Construction:	1,236
Furniture/Reloc:	0
Other:	209
<b>Project Total:</b>	<b>1,986</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	0	590	1,150	246	0	0	1,986	0	1,986
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>590</b>	<b>1,150</b>	<b>246</b>	<b>0</b>	<b>0</b>	<b>1,986</b>	<b>0</b>	<b>1,986</b>

All Values are presented in Thousands (1 x 1000)

## Sonoma Creek Crossing (Madrone Road)

### Function Area:

Development Services

Request: WA21005

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



The 16-inch diameter Sonoma Aqueduct crosses Sonoma Creek at Madrone Road off Sonoma Highway utilizing overhead spans (pedestrian bridge steel truss) with structural connections that make the pipeline susceptible to failure during a major seismic event. Liquefaction and lateral spread displacements will likely cause the pipeline to fail due to minor differential movement or settlement. The proposed project is a natural hazard reliability project that will provide structural modifications to the support structures and pipeline in order to withstand a major seismic event. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	69
Design/PM:	472
Construction:	1,236
Furniture/Reloc:	0
Other:	209
Project Total:	1,986

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	0	0	590	1,150	246	0	1,986	0	1,986
TOTALS:	0	0	0	590	1,150	246	0	1,986	0	1,986

All Values are presented in Thousands (1 x 1000)



## Sonoma Creek Crossing (Verano Ave)

### Function Area:

Development Services

Request: WA21003

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



The 16-inch Sonoma Aqueduct crosses Sonoma Creek near Verano Avenue off Sonoma Highway. The pipeline is suspended from the bridge deck. This location has a moderate to high susceptibility for liquefaction and a high susceptibility for lateral spread. The overall potential for lateral spread is also judged to be high at this location with lateral spread displacement on the order of 3 feet. As a result, the pipeline at this location is judged to be vulnerable with a high risk of failure. A new 16-inch pipeline, with length preliminarily estimated at up to 1000 feet of trenchless installation, is intended as a natural hazard reliability project designed to withstand a major seismic event. A smaller scale project to mitigate the hazard by adding flexibility to the pipeline joints may be determined to be feasible upon further investigation. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	73
Design/PM:	630
Construction:	2,941
Furniture/Reloc:	0
Other:	229
Project Total:	3,873

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	0	0	0	710	2,863	300	3,873	0	3,873
TOTALS:	0	0	0	0	710	2,863	300	3,873	0	3,873

All Values are presented in Thousands (1 x 1000)



## Sonoma Creek Crossing near Heaven Hill Road

### Function Area:

Development Services

Request: WA21006

### Department/Division:

Sonoma Water / Water Transmission System - Sonoma Aqueduct Capital Fund

### Project Description



This natural hazard reliability project will construct a seismic retrofit of the 16-inch Sonoma Aqueduct where it is spanning the small creek west of Sonoma Creek at Sta. 198+32 near Heaven Hill Road. Initial phase will develop a preliminary design to secure grant funding. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	69
Design/PM:	472
Construction:	1,566
Furniture/Reloc:	0
Other:	209
Project Total:	2,316

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Aqueduct Capital Fund	0	0	0	0	0	565	1,505	2,070	246	2,316
TOTALS:	0	0	0	0	0	565	1,505	2,070	246	2,316

All Values are presented in Thousands (1 x 1000)

## Mirabel Infiltration Ponds 2 & 3 Rehabilitation

### Function Area:

Development Services

Request: WA10058

### Department/Division:

Sonoma Water / Water Transmission System - O&M Fund

### Project Description



This project proposes to regrade infiltration ponds 2 and 3 toward the influent channel. This will allow the pond to drain back to the influent channel after flooding.

Project Cost	
Acquisition:	19
Design/PM:	204
Construction:	179
Furniture/Reloc:	0
Other:	0
Project Total:	402

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Operations & Maintenance Fund	0	0	0	0	0	223	179	402	0	402
TOTALS:	0	0	0	0	0	223	179	402	0	402

All Values are presented in Thousands (1 x 1000)

## Occidental Well Rehabilitation

### Function Area:

Development Services

Request: WA20002

### Department/Division:

Sonoma Water / Water Transmission System - O&M Fund

### Project Description



Occidental Plain Well pump no longer works and was removed. When that occurred, it was found that the Aquastream unit had broken and fallen to the bottom of the well. The aquastream is necessary for sand removal and the well needs rehabilitation prior to installation of a new pump.

Project Cost	
Acquisition:	0
Design/PM:	31
Construction:	229
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>260</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Operations & Maintenance Fund	0	0	0	0	260	0	0	260	0	260
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>260</b>	<b>0</b>	<b>0</b>	<b>260</b>	<b>0</b>	<b>260</b>

All Values are presented in Thousands (1 x 1000)

## Santa Rosa Aqueduct & Russian River-Cotati Intertie Cathodic Protection

Function Area:

Request: WA08064

Development Services

Department/Division:

Sonoma Water / Water Transmission System - O&M Fund

### Project Description



The Santa Rosa Aqueduct was installed between 1968 to 1985 and consists of approximately 83,100 feet (16 miles) of 36-inch and 42-inch diameter cement mortar lined and coated steel pipe. It runs from Ya-ka-ama to Summerfield in Santa Rosa. The Russian River/Cotati Aqueduct is a 48-Inch diameter steel pipeline that connects the southern and eastern aqueduct transmission lines and crosses the Russian River. This project will replace/rehabilitate the existing cathodic protection systems for these two aqueducts to improve corrosion protection of the steel pipelines. Due to the magnitude of the work, the project will be completed in phases.

Project Cost	
Acquisition:	331
Design/PM:	713
Construction:	4,896
Furniture/Reloc:	0
Other:	1,017
<b>Project Total:</b>	<b>6,957</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Operations & Maintenance Fund	1,222	194	3,319	2,073	140	3	3	5,538	3	6,957
<b>TOTALS:</b>	<b>1,222</b>	<b>194</b>	<b>3,319</b>	<b>2,073</b>	<b>140</b>	<b>3</b>	<b>3</b>	<b>5,538</b>	<b>3</b>	<b>6,957</b>

All Values are presented in Thousands (1 x 1000)

## Tank Recoating Program

### Function Area:

Development Services

Request: WA18008

### Department/Division:

Sonoma Water / Water Transmission System - O&M Fund

### Project Description



A maintenance program to protect the water transmission system's above grade welded steel storage tanks. The program will protect the system's 18 tanks, including recoating and relining the exterior and interior surfaces and replace the cathodic protection systems.

Project Cost	
Acquisition:	0
Design/PM:	0
Construction:	0
Furniture/Reloc:	0
Other:	40,431
<b>Project Total:</b>	<b>40,431</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Operations & Maintenance Fund	46	6,185	3,800	3,800	3,800	3,800	3,800	19,000	15,200	40,431
<b>TOTALS:</b>	<b>46</b>	<b>6,185</b>	<b>3,800</b>	<b>3,800</b>	<b>3,800</b>	<b>3,800</b>	<b>3,800</b>	<b>19,000</b>	<b>15,200</b>	<b>40,431</b>

All Values are presented in Thousands (1 x 1000)

## Dry Creek Habitat Enhancement Project (Phase 3)

### Function Area:

Development Services

Request: WA14023

### Department/Division:

Sonoma Water / Water Supply - Warm Springs Dam

### Project Description



As identified in the Russian River Biological Opinion (National Marine Fisheries Service, 2008), the Dry Creek Habitat Enhancement Project -phase 3 (Project) is the third phase of a 3-6 mile enhancement project within the main stem of Dry Creek. The Project site is within the Dry Creek channel and on private properties in an unincorporated area of Sonoma County, California. The objective of the Project is to increase the amount of high quality rearing habitat for juvenile Coho and steelhead by implementing enhancement practices that emulate natural geomorphic effects. The primary enhancement approaches planned for the Project include, but are not limited to the following: Backwater Channels & Ponds; Constructed Riffles; Pool Enhancement; Winter Refuge Enhancement; Log Jams and Large Woody Debris Placement; Boulder Clusters; and Streambank Stabilization, Repair and Construction.

Project Cost	
Acquisition:	2,007
Design/PM:	2,629
Construction:	12,312
Furniture/Reloc:	0
Other:	898
Project Total:	17,846

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Other, ACOE	13,159	4,418	269	0	0	0	0	269	0	17,846
TOTALS:	13,159	4,418	269	0	0	0	0	269	0	17,846

All Values are presented in Thousands (1 x 1000)

## Santa Rosa Creek Vortex Tube

### Function Area:

Development Services

### Department/Division:

Sonoma Water / Zone 1A Flood Control

Request: WA17015

### Project Description



This project will rehabilitate or replace the deteriorated 96-inch diameter Santa Rosa Creek vortex tube, which is a critical element of the Santa Rosa Creek diversion facilities and detention reservoir at Spring Lake, constructed in the 1960's. The project also includes the trenchless installation of a 36-inch diameter by-pass pipeline to facilitate future inspections and maintenance of the vortex tube.

Project Cost	
Acquisition:	0
Design/PM:	593
Construction:	1,301
Furniture/Reloc:	0
Other:	253
Project Total:	2,147

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Zone 1A	552	1,260	335	0	0	0	0	335	0	2,147
TOTALS:	552	1,260	335	0	0	0	0	335	0	2,147

All Values are presented in Thousands (1 x 1000)



## Matanzas Reservoir Outlet Improvement

### Function Area:

Development Services

Request: WA19033

### Department/Division:

Sonoma Water / Zone 1A Flood Control

### Project Description



The Matanzas Reservoir Outlet Improvement project is focused on identifying improvements needed to the reservoir's outlet structure to meet NRCS dam design guidelines set forth in Technical Release NO. 60. TR-60 requires that the principal spillway be designed to pass the 100-year rainfall without causing the auxiliary spillway to activate. A recent dam assessment performed by California NRCS found the current reservoir does not meet the TR-60 standard, and recommendations were made to coordinate with NRCS to explore options for bringing the reservoir into compliance and also investigate downstream flooding impacts from any proposed principal spillway improvements. Implementation of project relies on funding from Natural Resource Conservation Service.

Project Cost	
Acquisition:	0
Design/PM:	0
Construction:	0
Furniture/Reloc:	0
Other:	1,257
Project Total:	1,257

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Zone 1A, NRCS	57	50	150	250	250	250	250	1,150	0	1,257
TOTALS:	57	50	150	250	250	250	250	1,150	0	1,257

All Values are presented in Thousands (1 x 1000)

## Santa Rosa Creek Fish Passage

Function Area:

Development Services

Department/Division:

Sonoma Water / Zone 1A Flood Control

Request: WA06074

### Project Description



This project involves the repair of an extension to the fish ladder on Santa Rosa Creek that goes through the tunnel starting at E street and going under downtown Santa Rosa. The purpose of the extension is to limit the flow into the fish ladder in order to maximize the range of flows for which it is passable. The upstream end of the extension has settled and subsequently the weirs in the extension are not functioning as designed. The project design is to remove the extension and replace it with a shorter structure. The project also involves repair of bank erosion on the north bank of the creek adjacent to the extension, monitoring of the fish passage conditions in the ladder extension and upper part of the fish ladder, and cleanup of debris caught by the trash racks at the fish ladder extension inlet. The project also includes fish passage improvements to the existing fish ladder at the vortex tube, along Montgomery Drive, near Spring Lake Park, and a nearby grade control structure. Implementation is dependent on future grant funding. Design and environmental compliance work is partially funded by a Wildlife Conservation Board grant.

Project Cost	
Acquisition:	32
Design/PM:	426
Construction:	930
Furniture/Reloc:	0
Other:	147
<b>Project Total:</b>	<b>1,535</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Zone 1A	20	407	83	802	223	0	0	1,108	0	1,535
<b>TOTALS:</b>	<b>20</b>	<b>407</b>	<b>83</b>	<b>802</b>	<b>223</b>	<b>0</b>	<b>0</b>	<b>1,108</b>	<b>0</b>	<b>1,535</b>

All Values are presented in Thousands (1 x 1000)

# Upper Copeland & Lichau Creeks Flood Resiliency and Enhancement

Function Area:

Request: WA21002

Development Services

Department/Division:

Sonoma Water / Zone 2A Flood Control

## Project Description



Flood reduction project on Coyote Family Farms property located along the watershed divide between Copeland Creek and Roberts Creek (tributary to Lichau Creek) with potential flood benefit to both Flood Control Zones 1A & 2A. Project involves planning, design, environmental compliance, and construction of a detention basin with the objective of capturing all Copeland Creek out-of-bank flows during the 100-year event with a secondary objective of reducing peak flows along Roberts Creek as well. Project also incorporates seasonal wetland enhancement. Cost sharing between flood control zones will be determined at future date, as will grant funding opportunities be explored. Construction implementation is reliant in part on securing grant funding.

Project Cost	
Acquisition:	196
Design/PM:	564
Construction:	3,097
Furniture/Reloc:	0
Other:	246
<b>Project Total:</b>	<b>4,103</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Zone 2A	0	0	614	2,998	491	0	0	4,103	0	4,103
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>614</b>	<b>2,998</b>	<b>491</b>	<b>0</b>	<b>0</b>	<b>4,103</b>	<b>0</b>	<b>4,103</b>

All Values are presented in Thousands (1 x 1000)

## Green Valley Creek Flood Resiliency and Restoration

### Function Area:

Development Services

Request: WA19034

### Department/Division:

Sonoma Water / Zone 5A Flood Control

### Project Description



Located immediately upstream of the Green Valley Road bridge, the proposed project will reestablish the structure and function of the creek ecosystem, while simultaneously mitigating flood risks. The project will install a two-stage channel or pool habitat features to provide improved aquatic habitat and sediment transport capacity and relief channels will be restored to original configuration to provide habitat benefits. This project includes reducing peak flood stages, protecting Green Valley Road crossing and bridge, restoring ecological habitat for plants and aquatic species, and improving water quality through reduced farmland (vineyard) erosion. The project will be pursued in phases, with the first phase completing design. Implementation is reliant upon securing grant funding in partnership with Sonoma County Transportation and Public Works. Project scope may be reduced to align with available funding.

Project Cost	
Acquisition:	250
Design/PM:	716
Construction:	1,233
Furniture/Reloc:	0
Other:	133
Project Total:	2,332

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Zone 5A, FEMA	0	363	650	1,319	0	0	0	1,969	0	2,332
TOTALS:	0	363	650	1,319	0	0	0	1,969	0	2,332

All Values are presented in Thousands (1 x 1000)

## Aerator Replacement

### Function Area:

Development Services

### Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

Request: WA17011

### Project Description



The mechanical aerators used in the wastewater treatment plant's aeration basins, which provide the biological treatment, are reaching the end of their useful life and will be replaced. Additional biological loads due to the tertiary process backwash require additional aeration, which requires additional power supply. Project completion will include design and construction of the electrical improvements needed for the additional aeration requirements.

Project Cost	
Acquisition:	0
Design/PM:	139
Construction:	420
Furniture/Reloc:	0
Other:	0
Project Total:	559

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	224	239	96	0	0	0	0	96	0	559
TOTALS:	224	239	96	0	0	0	0	96	0	559

All Values are presented in Thousands (1 x 1000)

## Airport Treatment Plant Headworks Meter, Piping, and Chlorine Improvements

Function Area:

Request: WA19025

Development Services

Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



The existing Parshall flume which is used to measure the flow coming into the treatment plant often gets overwhelmed in a flooded condition during either high flows or operational changes. This issue causes the actual influent flow measurements to be inaccurate. To correct this issue, this project will excavate the existing pipelines and install a new flow meter, which will be located in a new vault, and includes some minor electrical work to bring power and signal to and from the flow meter, repaving the excavated area, and finally programming and commissioning. In this same area there are pipelines that transfer both wastewater and chlorine that are in need of replacement. These additional improvements will be done during the same period to reduce duplication of excavation and flow disturbance activities.

Project Cost	
Acquisition:	0
Design/PM:	35
Construction:	200
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>235</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	0	0	35	200	0	235	0	235
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>200</b>	<b>0</b>	<b>235</b>	<b>0</b>	<b>235</b>

All Values are presented in Thousands (1 x 1000)



## Chemical Feed Tanks

**Function Area:**

Development Services

**Request: WA21010**

**Department/Division:**

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



Chemical feed tanks are used to store Citric Acid, Sodium Hydroxide and Sodium Hypochlorite, all of which are used to conduct “clean-in-place” cleanings of the membrane modules used in the tertiary treatment process at the ALWSZ wastewater treatment plant. The original design of this system did not utilize secondary containment (ie tank within a tank) for any of these chemicals. The supply of the treatment chemicals has been adversely affected due to the potential hazardous conditions associated with the containment deficiency. This project involves moving the citric acid tank from its existing location to an area outside of the building to mitigate the safety concerns associated with the existing chemical tank layout. Additional project scope includes the decommissioning of a neutralization tank which is no longer in use and locating a new(double contained citric acid tank in the former location of the neutralization tank, rerouting piping, valving and new chemical feed pump(s) required for the new acid tank.

Project Cost	
Acquisition:	0
Design/PM:	50
Construction:	50
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>100</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	100	0	0	0	0	100	0	100
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>

All Values are presented in Thousands (1 x 1000)



## Equalization Basins

### Function Area:

Development Services

Request: WA21008

### Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



The Airport Treatment Facility does not currently have high flow or upset storage. In order to meet the winter inflow and possible bypass or upset without contaminating the tertiary storage ponds the facility must consider constructing an equalization basin. This may include additional features as the facility goes through a long term analysis.

Project Cost	
Acquisition:	0
Design/PM:	183
Construction:	3,610
Furniture/Reloc:	0
Other:	17
<b>Project Total:</b>	<b>3,810</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	0	0	186	34	3,590	3,810	0	3,810
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>186</b>	<b>34</b>	<b>3,590</b>	<b>3,810</b>	<b>0</b>	<b>3,810</b>

All Values are presented in Thousands (1 x 1000)

Filter Modules Replacement

Function Area:

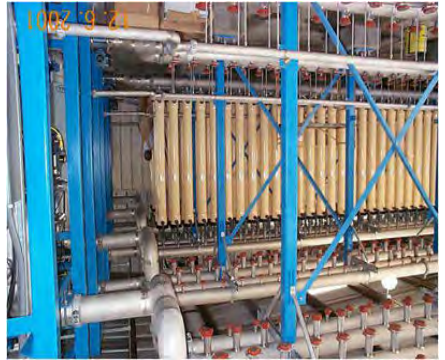
Development Services

Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

Project Description

The Airport Larkfield-Wikiup Sanitation Zone Waste Water Treatment Plant treats waste water to tertiary standards meeting Title 22 requirements for disinfected recycled water. A critical element of the treatment plant is the microfiltration filters. These filters require periodic replacement of the filter media. This project will replace microfiltration filter modules at end of useful life.



Project Cost	
Acquisition:	0
Design/PM:	30
Construction:	270
Furniture/Reloc:	0
Other:	0
Project Total:	300

Service Impact:

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0
Personnel:	0
Revenue/Refund:	0

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	0	300	0	0	0	300	0	300
TOTALS:	0	0	0	300	0	0	0	300	0	300

All Values are presented in Thousands (1 x 1000)

Request: WA14027

## Main Electrical Breaker and Switchgear Replacement

### Function Area:

Development Services

Request: WA19026

### Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



The Airport Treatment Plant, receives power from PG&E at 12,000 volts. However, the switchgear for the treatment plant does not have a main breaker. Consequently, the only way to de-energize the switchgear for routine maintenance is to request a shut down from PG&E. Further complicating the situation, the switchgear is fed from the same PG&E circuit as the Sonoma County Airport (STS), so a shutdown must be coordinated with the airport. With the lack of circuit breakers, working around the equipment is extremely hazardous. An electrical fault in the equipment must be cleared by the breaker in the PG&E substation. In November of 2018, the switchgear had a fault that disrupted power to the entire PG&E circuit, including the Sonoma County Airport. The purpose of this project is to install a new 12 kV-switchgear with a main breaker to resolve these issues. This project will increase the safety of the existing equipment, and will bring the current installation into compliance with current electrical code and PG&E requirements.

Project Cost	
Acquisition:	0
Design/PM:	390
Construction:	802
Furniture/Reloc:	0
Other:	8
Project Total:	1,200

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	5	191	202	802	0	0	0	1,004	0	1,200
TOTALS:	5	191	202	802	0	0	0	1,004	0	1,200

All Values are presented in Thousands (1 x 1000)

## Recycled Water Pipeline Improvements

### Function Area:

Development Services

Request: WA20016

### Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



The Airport Larkfield Wikiup Sanitation Zone's recycle water system is the only mechanism to dispose of the highly treated wastewater that leaves the treatment plant. The Zone's current roster of recycle water users only use about one-third of the available water and additional users could improve the beneficial use. This project would construct two additional recycle water turnouts to supply high volume users.

Project Cost	
Acquisition:	0
Design/PM:	100
Construction:	259
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>359</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	0	100	0	0	259	359	0	359
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>259</b>	<b>359</b>	<b>0</b>	<b>359</b>

All Values are presented in Thousands (1 x 1000)

## Tertiary Backwash Piping Improvements

Function Area:

Development Services

Request: WA21009

Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



The existing treatment processes are hampered by the commingling of the tertiary filter plant backwash and the influent to the wastewater facility. In order to improve this process and optimize the treatment and removal of solids, some piping improvements are needed around and in the exiting pond system. This project will isolate the backwash water and allow for the decant to enter the process stream without causing additional loading in the lagoon treatment process.

Project Cost	
Acquisition:	0
Design/PM:	109
Construction:	750
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>859</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	0	0	0	109	750	0	0	859	0	859
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>109</b>	<b>750</b>	<b>0</b>	<b>0</b>	<b>859</b>	<b>0</b>	<b>859</b>

All Values are presented in Thousands (1 x 1000)

## Treatment Plant Control Improvements (Pall Repair/Upgrade/Optimize)

Function Area:

Development Services

Request: WA20024

Department/Division:

Sonoma Water / Airport-Larkfield-Wikiup Sanitation Zone

### Project Description



Sonoma Water owns, operates, and maintains a control system (System) at Sonoma Water's Airport-Larkfield-Wikiup Sanitation Treatment Plant (Treatment Plant). The existing Treatment Plant was constructed in several phases beginning in the early 1980s on the site used for wastewater treatment by the Sonoma County Department of Transportation and Public works, which began in the 1940s. The fourth phase, completed in 2002, added a microfiltration process involving membrane technology with a capacity of up to three million gallons per day. The technology and electronics used for the microfiltration process have become obsolete and must be replaced with a modernized System that meets Sonoma Water's and industry standards and can comply with current State and Regional Water Quality Control Board regulatory requirements.

Project Cost	
Acquisition:	0
Design/PM:	0
Construction:	500
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>500</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Airport Larkfield Wikiup Sanitation Zone	200	150	150	0	0	0	0	150	0	500
<b>TOTALS:</b>	<b>200</b>	<b>150</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>500</b>

All Values are presented in Thousands (1 x 1000)



## Automation Project

### Function Area:

Development Services

Request: WA18013

### Department/Division:

Sonoma Water / Occidental County Sanitation District

### Project Description



The Automation Project will remotely monitor and control wastewater storage between the Occidental lift station and equalization facility. Replace existing pump control panels and instruments at Lift station; install a slide gate and actuator, lighting and disconnect switches and PLC and communication at the Lift Station. Provide two valve actuators, flow meter, PLC and communication at the EQ Facility.

Project Cost	
Acquisition:	0
Design/PM:	283
Construction:	355
Furniture/Reloc:	0
Other:	0
Project Total:	638

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Occidental County Sanitation District	232	51	0	355	0	0	0	355	0	638
TOTALS:	232	51	0	355	0	0	0	355	0	638

All Values are presented in Thousands (1 x 1000)



## Future Capital Replacements

### Function Area:

Development Services

Request: WA15003

### Department/Division:

Sonoma Water / Penngrove Sanitation Zone

### Project Description



Construct improvements to repair, rehabilitate, or replace portions of the collection and/or pumping system that are determined to be deficient or have insufficient capacity for existing flows.

Project Cost	
Acquisition:	10
Design/PM:	25
Construction:	100
Furniture/Reloc:	0
Other:	15
<b>Project Total:</b>	<b>150</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Penngrove Sanitation Zone	0	0	0	30	30	30	30	120	30	150
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>120</b>	<b>30</b>	<b>150</b>

All Values are presented in Thousands (1 x 1000)

## Lift Station Flood Protection Project

### Function Area:

Development Services

Request: WA18014

### Department/Division:

Sonoma Water / Penngrove Sanitation Zone

### Project Description



The Penngrove Lift Station serves the Penngrove Sanitation Zone, 475 acres and 500 Equivalent Single Family Dwellings, and pumps wastewater from the Penngrove collection system to the City of Petaluma for treatment and disposal. In December 2014, a rain event occurred that flooded the Penngrove Lift Station and the Ely Booster Station. The Penngrove Lift Station was shut down to avoid electrical failure and permanent damage. Sonoma Water is proposing to implement the Penngrove Lift Station Flood Protection Project to counteract the effects of possible future rain events similar to the December 2014 incident. Electrical equipment will be elevated above the 500-year flood plain and housed on a platform outside the lift station to allow adequate working space. These platforms will meet the requirements set by the National Electrical Code (NEC) for electrical systems.

Project Cost	
Acquisition:	4
Design/PM:	500
Construction:	1,060
Furniture/Reloc:	0
Other:	2
Project Total:	1,566

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Penngrove Sanitation Zone, FEMA	373	1,000	193	0	0	0	0	193	0	1,566
TOTALS:	373	1,000	193	0	0	0	0	193	0	1,566

All Values are presented in Thousands (1 x 1000)

## Collection System Repair (M31-4/M36-14)

### Function Area:

Development Services

Request: WA21011

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



Replacement of approximately 40-60 feet of a structurally compromised segment of the trunk main in the vicinity of the Safeway grocery store.

Project Cost	
Acquisition:	24
Design/PM:	72
Construction:	128
Furniture/Reloc:	0
Other:	5
Project Total:	229

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District	0	100	129	0	0	0	0	129	0	229
TOTALS:	0	100	129	0	0	0	0	129	0	229

All Values are presented in Thousands (1 x 1000)

## Electrical Service Replacement (3 Lift Stations)

### Function Area:

Development Services

Request: WA20005

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



The purpose of this project is to replace the electrical services at three RRCSD Lift Stations that are currently powered by Sonoma Water's existing Medium Voltage Power feed; Guernwood Park, Guerneville, and Beanwood. The Medium voltage electrical feed has presented numerous challenges related to the maintenance and reliability of the power feeds. Replacing these feeds with new PG&E feeds will mitigate the need to maintain the services.

Project Cost	
Acquisition:	19
Design/PM:	134
Construction:	166
Furniture/Reloc:	0
Other:	0
Project Total:	319

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District	0	200	119	0	0	0	0	119	0	319
TOTALS:	0	200	119	0	0	0	0	119	0	319

All Values are presented in Thousands (1 x 1000)

## Lift Station Electrical Resiliency Project (Vacation Beach)

### Function Area:

Development Services

Request: WA20006

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



Vacation Beach Lift Station currently is powered off of a 5kV underground electrical feed. The splices in the underground electrical feed are vulnerable to failure, resulting in the loss of power to the lift station. The purpose of this project is to replace the existing 5kV feed with an underground 480V feed that will power the Lift Station. The existing platform and controls onsite will be relocated to the Treatment plant so the site can be remote controlled.

Project Cost	
Acquisition:	72
Design/PM:	429
Construction:	1,432
Furniture/Reloc:	0
Other:	228
Project Total:	2,161

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District	0	0	200	414	1,463	84	0	2,161	0	2,161
TOTALS:	0	0	200	414	1,463	84	0	2,161	0	2,161

All Values are presented in Thousands (1 x 1000)

## Supervisory Control and Data Acquisition Upgrade Pilot Project

### Function Area:

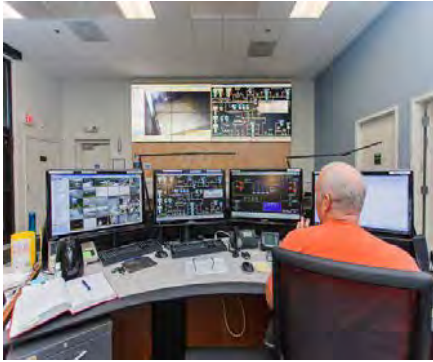
Development Services

Request: WA21014

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



The scope of this project is to pilot the standardized Supervisory Control and Data Acquisition (SCADA) software developed for the software platform and Programmable Logic Controllers (PLCs) and upgrade the software and hardware to supported versions.

Project Cost	
Acquisition:	0
Design/PM:	223
Construction:	110
Furniture/Reloc:	0
Other:	0
Project Total:	333

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District	0	0	333	0	0	0	0	333	0	333
TOTALS:	0	0	333	0	0	0	0	333	0	333

All Values are presented in Thousands (1 x 1000)

## Clarifier Seismic Retrofit

### Function Area:

Development Services

Request: WA18015

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



The project entails replacement of the interior mechanical components of three clarifier tanks at the Russian River CSD WWTP to meet current seismic design requirements. Two existing clarifiers measure 40- feet in diameter, while the third clarifier measures 60 feet in diameter. Construction will predominantly entail removal and replacement of mechanical components within the concrete tanks. Following removal of all interior mechanical components, existing grout on the floor within the clarifiers will be removed, any cracks filled, and new concrete grout will be applied on the floors of the clarifiers. Following surface preparation, the new mechanical components will be installed within the clarifiers.

Project Cost	
Acquisition:	0
Design/PM:	508
Construction:	1,776
Furniture/Reloc:	0
Other:	10
Project Total:	2,294

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District, FEMA	433	1,492	369	0	0	0	0	369	0	2,294
TOTALS:	433	1,492	369	0	0	0	0	369	0	2,294

All Values are presented in Thousands (1 x 1000)



## Force Main, Headworks, and Lift Station

### Function Area:

Development Services

Request: WA19019

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



This project entails replacement of the approximately 9,000 foot force main between the lift station on Riverside Drive and the treatment plant. Additionally the project will include condition assessment of the treatment plant headworks and the 11 lift stations throughout the service area to determine improvements to provide operational and process flow stabilization. Project implementation relies upon securing prop 1 grant funding.

Project Cost	
Acquisition:	85
Design/PM:	950
Construction:	9,548
Furniture/Reloc:	0
Other:	85
Project Total:	10,668

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
	0	0	0	0	0	0	0	0	0	0
Russian River County Sanitation District, SWRCB	49	1,069	200	850	4,700	800	3,000	9,550	0	10,668
TOTALS:	49	1,069	200	850	4,700	800	3,000	9,550	0	10,668

All Values are presented in Thousands (1 x 1000)

## Main Lift Diesel Tank Replacement

Function Area:

Development Services

Request: WA19028

Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



The current underground diesel tank at Russian River main lift station provides fuel for the back up power supply generator. This project proposes to replace the underground diesel tank by 2025 to meet current health and safety code requirements. Construction implementation is reliant on outside funding.

Project Cost	
Acquisition:	0
Design/PM:	104
Construction:	546
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>650</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
	0	0	0	0	0	0	0	0	0	0
Russian River County Sanitation District	0	0	0	250	400	0	0	650	0	650
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250</b>	<b>400</b>	<b>0</b>	<b>0</b>	<b>650</b>	<b>0</b>	<b>650</b>

All Values are presented in Thousands (1 x 1000)

## UV System Retrofit

### Function Area:

Development Services

Request: WA21015

### Department/Division:

Sonoma Water / Russian River County Sanitation District

### Project Description



The ultraviolet (UV) disinfection system was constructed at the Russian River County Sanitation District treatment plant in 2012 and began operation that same year. Since this time many of the electrical and control components have reached end of life and are no longer supported or manufactured. This is not a unique reality as UV systems are a technology that advances along with the larger "computer" industry in general. As such, the UV system is in need of upgrades that while supported by the manufacturer do not have a simple plug and play path for the needed improvements. The project will involve the installation and integration of new components allowing for the UV system to function into the next decade while continuing to meet strict regulatory requirements. Construction implementation is reliant on outside funding.

Project Cost	
Acquisition:	0
Design/PM:	50
Construction:	450
Furniture/Reloc:	0
Other:	0
Project Total:	500

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Russian River County Sanitation District	0	0	25	475	0	0	0	500	0	500
TOTALS:	0	0	25	475	0	0	0	500	0	500

All Values are presented in Thousands (1 x 1000)

## Future Capital Replacements

### Function Area:

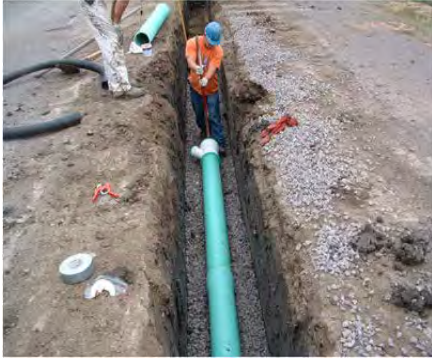
Development Services

Request: WA08025

### Department/Division:

Sonoma Water / Sea Ranch Sanitation Zone

### Project Description



Construction of improvements to repair, rehabilitate, or replace portions of the collection and/or treatment systems that are deteriorated or have insufficient capacity for existing flows.

Project Cost	
Acquisition:	25
Design/PM:	100
Construction:	425
Furniture/Reloc:	0
Other:	50
<b>Project Total:</b>	<b>600</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sea Ranch Sanitation Zone	0	100	75	75	75	75	75	375	125	600
<b>TOTALS:</b>	<b>0</b>	<b>100</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>375</b>	<b>125</b>	<b>600</b>

All Values are presented in Thousands (1 x 1000)

## Sea Ranch Sanitation Creek Crossing

### Function Area:

Development Services

Request: WA19027

### Department/Division:

Sonoma Water / Sea Ranch Sanitation Zone

### Project Description



The influent carrier pipe at Sea Ranch Central Waste Water Treatment Plant is nearing the end of its useful life and will be assessed for necessary rehabilitation or replacement. This project will include the rehabilitation and/or replacement of the 8-inch carrier pipe and the 14-inch casing pipe as it crosses the creek adjacent to the treatment plant.

Project Cost	
Acquisition:	55
Design/PM:	109
Construction:	229
Furniture/Reloc:	0
Other:	62
<b>Project Total:</b>	<b>455</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sea Ranch Sanitation Zone	0	0	50	405	0	0	0	455	0	455
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>405</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>455</b>	<b>0</b>	<b>455</b>

All Values are presented in Thousands (1 x 1000)

## Chase St Bridge Sewer Pipe Replacement

**Function Area:**

Development Services

**Request: WA18021**

**Department/Division:**

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



City of Sonoma is replacing the Chase St bridge over Nathanson Creek, and during the process removing the District's above-grade sewer line and casing and replacing it with a siphon. Project is funded by Federal transportation funding. The District has supported the City with funding and review of plans for the siphon.

Project Cost	
Acquisition:	0
Design/PM:	87
Construction:	142
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>229</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	190	2	3	34	0	0	0	37	0	229
<b>TOTALS:</b>	<b>190</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>0</b>	<b>229</b>

All Values are presented in Thousands (1 x 1000)

## Influent/Effluent Pumping and Piping Upgrade

### Function Area:

Development Services

Request: WA21019

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The proposed project is located at the Sonoma Valley County Sanitation District treatment plant. The project includes the following within Influent/Effluent Pumping Building; replacing the piping, pumps, valves, meters, and electrical controls (MCC, VFD's, soft starts, etc.), permanently sealing the inlet from the wet well and other modifications related to changing the former swing pump into dedicated effluent pump #3, and upgrading the crane to increase the range to cover the entire building. This project will modify the existing Influent-Effluent building, constructed in 1965 with significant modifications in 1978, 1990 and 2000.

Project Cost	
Acquisition:	11
Design/PM:	978
Construction:	5,491
Furniture/Reloc:	0
Other:	0
Project Total:	6,480

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	0	400	590	5,490	0	0	6,480	0	6,480
TOTALS:	0	0	400	590	5,490	0	0	6,480	0	6,480

All Values are presented in Thousands (1 x 1000)



## Local Hazard Mitigation Projects

### Function Area:

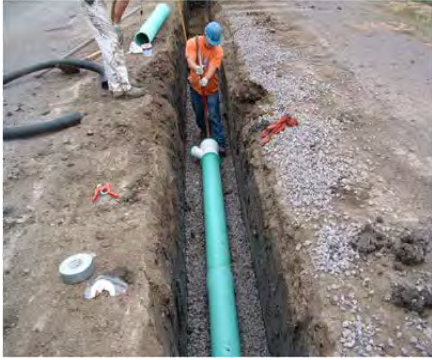
Development Services

Request: WA17013

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



Implement measures to increase resiliency of collection and treatment systems against natural hazards, such as seismic, wildfire, or flooding events.

Project Cost	
Acquisition:	0
Design/PM:	267
Construction:	836
Furniture/Reloc:	0
Other:	67
<b>Project Total:</b>	<b>1,170</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	260	150	150	150	150	150	750	160	1,170
<b>TOTALS:</b>	<b>0</b>	<b>260</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>750</b>	<b>160</b>	<b>1,170</b>

All Values are presented in Thousands (1 x 1000)

## Replace Lookout Supervisory Control and Data Acquisition

### Function Area:

Development Services

Request: WA21016

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The scope of this project is to upgrade the Supervisory Control and Data Acquisition (SCADA) software platform, and necessary workstation and Programmable Logic Controller hardware to supported versions.

Project Cost	
Acquisition:	0
Design/PM:	201
Construction:	99
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>300</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	0	300	0	0	0	0	300	0	300
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>300</b>

All Values are presented in Thousands (1 x 1000)

## Sonoma Creek Bank Repair

### Function Area:

Development Services

Request: WA14021

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



Repair eroding banks in 3 locations that are posing a risk to Sanitation structures. Two locations along Sonoma Creek and one along Kohler Creek at 13965 Arnold Drive in Glen Ellen. Site A is adjacent to Sonoma Valley sanitation sewer trunk line. Site B is adjacent to manhole and siphon under Sonoma Creek. Site C is a manhole on the trunk line adjacent to eroding bank in Kohler Creek.

Project Cost	
Acquisition:	319
Design/PM:	679
Construction:	1,353
Furniture/Reloc:	0
Other:	107
Project Total:	2,458

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	264	407	362	1,425	0	0	0	1,787	0	2,458
TOTALS:	264	407	362	1,425	0	0	0	1,787	0	2,458

All Values are presented in Thousands (1 x 1000)

## Sonoma Valley Treatment Plant Blower Improvement Project

### Function Area:

Development Services

Request: WA17006

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



Wastewater treatment is a biological process which requires oxygen. Oxygen is supplied to the aeration basin by large high volume blowers through fine bubble diffusers. The District is pursuing a project to complete a comprehensive technical evaluation and based on the results of the evaluation the District plans to rehabilitate or replace the five existing 150 horsepower centrifugal blowers that are 40 years old and at the end of their useful life.

Project Cost	
Acquisition:	0
Design/PM:	0
Construction:	300
Furniture/Reloc:	0
Other:	0
<b>Project Total:</b>	<b>300</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	0	50	50	50	50	50	250	50	300
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>	<b>50</b>	<b>300</b>

All Values are presented in Thousands (1 x 1000)

# Sonoma Valley Treatment Plant Headworks Rehabilitation

**Function Area:**

Development Services

**Request: WA17005**

**Department/Division:**

Sonoma Water / Sonoma Valley County Sanitation District

## Project Description



The headworks at Sonoma Valley treatment plant are reaching end of life and are requiring significant maintenance. The headworks are important as the first step in the process of treating wastewater and helps to remove large material before continuing on to other treatment processes.

Project Cost	
Acquisition:	0
Design/PM:	637
Construction:	3,217
Furniture/Reloc:	0
Other:	13
<b>Project Total:</b>	<b>3,867</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	563	3,157	147	0	0	0	3,304	0	3,867
<b>TOTALS:</b>	<b>0</b>	<b>563</b>	<b>3,157</b>	<b>147</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,304</b>	<b>0</b>	<b>3,867</b>

All Values are presented in Thousands (1 x 1000)

## Trunk Sewer Replacement, Phase 4C

### Function Area:

Development Services

Request: WA20019

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The proposed project is located in a mixture of public streets and within easements through private property. It will replace the existing 58 year old 21 inch diameter reinforced concrete pipe trunk sewer main from the north end of the Agua Caliente Creek Crossing Project (near the south end of Buena Vida Court) to manhole M90-3 in Happy Lane (north of Thompson Avenue). This project will install approximately 2,700 feet of new 27-inch and 300 feet of new 24-inch diameter trunk sewer, and includes associated manholes, re-attachment of existing connecting sewer lines, and the abandonment in place, or removal of approximately 2,800 feet of the existing 21- inch diameter trunk sewer main.

Project Cost	
Acquisition:	669
Design/PM:	1,011
Construction:	7,813
Furniture/Reloc:	0
Other:	307
Project Total:	9,800

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	957	7,701	1,142	0	0	0	0	1,142	0	9,800
TOTALS:	957	7,701	1,142	0	0	0	0	1,142	0	9,800

All Values are presented in Thousands (1 x 1000)

## Trunk Sewer Replacement, Phase 5

### Function Area:

Development Services

Request: WA19023

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The Sonoma Valley County Sanitation District phase 5 project involves the replacement of approximately 8,245 linear feet of existing 21 inch and 18 inch reinforced concrete pipe trunk main in the SVCSD collection system with a larger sized trunk main to accommodate existing peak flows without overflows. This project is being built in response to a cease and desist order issued by the California Regional Water Quality Control Board to the SVCSD on June 10, 2015 (CDO No.R2-2015-0032).

Project Cost	
Acquisition:	456
Design/PM:	2,660
Construction:	21,373
Furniture/Reloc:	0
Other:	520
Project Total:	25,009

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	363	1,782	1,538	9,006	11,851	469	0	22,864	0	25,009
TOTALS:	363	1,782	1,538	9,006	11,851	469	0	22,864	0	25,009

All Values are presented in Thousands (1 x 1000)



## Wastewater Treatment Plant Roof Replacement Project

### Function Area:

Development Services

Request: WA16013

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



This project is for roof replacements on the following buildings at the Wastewater Treatment Plant: 1. Administration 2. Maintenance 3. Influent

Project Cost	
Acquisition:	0
Design/PM:	360
Construction:	175
Furniture/Reloc:	0
Other:	0
Project Total:	535

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	60	300	175	0	0	0	0	175	0	535
TOTALS:	60	300	175	0	0	0	0	175	0	535

All Values are presented in Thousands (1 x 1000)

## Clarifier Seismic Retrofit

### Function Area:

Development Services

Request: WA18020

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The project entails replacement of the interior mechanical components of two 140-foot diameter concrete clarifier tanks at the Sonoma Valley CSD WWTP to meet current seismic design requirements. Construction will be predominantly limited to work within the concrete tanks for removal of existing, interior mechanical components and some foundation work. Following foundation work and surface preparation of the concrete floor, the new mechanical components will be installed within the clarifiers. Project is partially funded with a FEMA grant.

Project Cost	
Acquisition:	0
Design/PM:	455
Construction:	3,395
Furniture/Reloc:	0
Other:	10
Project Total:	3,860

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District, FEMA	0	314	3,546	0	0	0	0	3,546	0	3,860
TOTALS:	0	314	3,546	0	0	0	0	3,546	0	3,860

All Values are presented in Thousands (1 x 1000)

## 8th Street East Recycled Water Pipeline

### Function Area:

Development Services

Request: WA21017

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The 8th Street East recycled water project will allow the District to supply recycled water for commercial use at the Sonoma Valley Airport Business Park, in addition, supply recycled water to agricultural users along 8th Street East. This project could assist in the reduction of over drafting of the groundwater in the area. The project would consist of up to 12-inch diameter recycled water pipeline extending from the District's Wastewater Treatment Plant, on 8th Street East, north on 8th Street East for approximately 4000 feet. Construction implementation is reliant in part on securing Bureau of Reclamation grant funding.

Project Cost	
Acquisition:	19
Design/PM:	519
Construction:	673
Furniture/Reloc:	0
Other:	0
Project Total:	1,211

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	0	0	538	673	0	0	1,211	0	1,211
TOTALS:	0	0	0	538	673	0	0	1,211	0	1,211

All Values are presented in Thousands (1 x 1000)

## Effluent Recycled Water Line Replacement

### Function Area:

Development Services

Request: WA21018

### Department/Division:

Sonoma Water / Sonoma Valley County Sanitation District

### Project Description



The project would consist of installing approximately 5000 feet of new 24-inch diameter PVC pipeline that would parallel the existing effluent line from the District's Wastewater Treatment Plant (WWTP) to the District's B1 pump station. The new effluent pipeline would run from the existing effluent meter within the WWTP, then head east along the WWTP access road, then south down 8th Street East; then east on State Highway 12 crossing under the existing rail road tracks, then south down an existing gravel access road to the District's B1 Pump station. The existing pipeline would be abandoned in place.

Project Cost	
Acquisition:	35
Design/PM:	655
Construction:	1,052
Furniture/Reloc:	0
Other:	0
Project Total:	1,742

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Sonoma Valley County Sanitation District	0	0	0	0	0	0	680	680	1,052	1,732
TOTALS:	0	0	0	0	0	0	680	680	1,052	1,732

All Values are presented in Thousands (1 x 1000)

## Barbara-Winston Collection System Replacement Project

### Function Area:

Development Services

Request: WA21012

### Department/Division:

Sonoma Water / South Park County Sanitation District

### Project Description



Significant portions of the sanitary sewers located in the neighborhoods and side streets along the Moorland Avenue corridor, between Bellevue Avenue and West Robles Avenue are asbestos concrete pipe (ACP) constructed in the 1960's. The pipes have a variety of observed structural defects, including joint offsets, line deviations, and cracks which make them susceptible to failure and increased infiltration. The project will replace these pipes that are nearing the end of their useful life, including approximately 3200 feet of 6-inch and 8-inch pipe with new polyvinyl chloride (PVC) pipe, along with approximately 60 laterals, 12 manholes and appurtenant facilities and surface restoration.

Project Cost	
Acquisition:	208
Design/PM:	455
Construction:	3,950
Furniture/Reloc:	0
Other:	26
Project Total:	4,639

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
South Park County Sanitation District	0	0	0	308	226	3,605	500	4,639	0	4,639
TOTALS:	0	0	0	308	226	3,605	500	4,639	0	4,639

All Values are presented in Thousands (1 x 1000)

## Santa Rosa Ave Sewers - Todd to E. Robles

### Function Area:

Development Services

Request: WA21013

### Department/Division:

Sonoma Water / South Park County Sanitation District

### Project Description



Wastewater collection from the properties located along Santa Rosa Avenue, between E. Todd Avenue and E. Robles Avenue, is served by two sewers located along the eastern and western portions of Santa Rosa Avenue. These existing sewer pipes predominantly consist of vitrified clay and asbestos concrete pipe (VCP & ACP) constructed in the 1950's and 60's, respectively. The clay pipes are characterized by an abundance of cracks and roots, with a few more severe hinge fractures and one observation of "broken, soil visible". The asbestos pipe has some cracks and two sags which can adversely affect operations. These pipe segments, which are nearing the end of their useful life, total approximately 6650 feet of 6-inch, 8-inch, and 12-inch pipe that are susceptible to failure and infiltration leading to increased wastewater overflow risks. The project will replace these pipes with new polyvinyl chloride (PVC) pipe, in addition to approximately 20 manholes, numerous laterals serving approximately 35 mostly-commercial properties, and appurtenant facilities and surface restoration.

Project Cost	
Acquisition:	230
Design/PM:	1,062
Construction:	8,176
Furniture/Reloc:	0
Other:	73
Project Total:	9,541

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
South Park County Sanitation District	0	0	700	218	285	7,462	876	9,541	0	9,541
TOTALS:	0	0	700	218	285	7,462	876	9,541	0	9,541

All Values are presented in Thousands (1 x 1000)



## 404 HVAC Retrofit

### Function Area:

Development Services

### Department/Division:

Sonoma Water / Internal Services Fund

Request: WA19032

### Project Description



Heating Ventilating and Air Conditioning (HVAC) system at 404 Aviation Blvd is at the end of useful life and becoming more expensive to operate and maintain. This project will replace the existing HVAC system with a more energy efficient system, with lower greenhouse gas emission footprint, and with better comfort levels for occupants of the building.

Project Cost	
Acquisition:	10
Design/PM:	263
Construction:	2,022
Furniture/Reloc:	0
Other:	14
Project Total:	2,309

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Facilities Fund	143	129	2,037	0	0	0	0	2,037	0	2,309
TOTALS:	143	129	2,037	0	0	0	0	2,037	0	2,309

All Values are presented in Thousands (1 x 1000)



## Airport Treatment Plant Solar Inverter Replacement

**Function Area:**

Development Services

**Request: WA20011**

**Department/Division:**

Sonoma Water / Internal Services Fund

### Project Description



Sonoma Water owns solar photovoltaic power systems that generate renewable electric power used by Sonoma Water enterprises. Sonoma Water requires a service provider to assess, inspect, test, clean, and perform maintenance on Sonoma Water Systems to ensure functionality at the Airport Treatment Plant facility. Inverters are at the end of their useful life and will be replaced as part of this maintenance work.

Project Cost	
Acquisition:	9
Design/PM:	115
Construction:	305
Furniture/Reloc:	0
Other:	13
<b>Project Total:</b>	<b>442</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

**Service Impact:**

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Power Resources Fund	0	6	17	408	11	0	0	436	0	442
<b>TOTALS:</b>	<b>0</b>	<b>6</b>	<b>17</b>	<b>408</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>436</b>	<b>0</b>	<b>442</b>

All Values are presented in Thousands (1 x 1000)

## Geyserville Treatment Plant Solar Inverter Replacement

Function Area:

Development Services

Department/Division:

Sonoma Water / Internal Services Fund

Request: WA21001

### Project Description



Sonoma Water owns solar photovoltaic power systems that generate renewable electric power used by Sonoma Water enterprises. Sonoma Water requires a service provider to assess, inspect, test, clean, and perform maintenance on Sonoma Water Systems to ensure functionality at the Geyserville Treatment Plant facility. Inverters are at the end of their useful life and will be replaced as part of this maintenance work.

Project Cost	
Acquisition:	9
Design/PM:	71
Construction:	254
Furniture/Reloc:	0
Other:	8
Project Total:	342

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Power Resources Fund	9	0	0	0	0	0	79	79	254	342
TOTALS:	9	0	0	0	0	0	79	79	254	342

All Values are presented in Thousands (1 x 1000)

## Solar Photovoltaic Inverter Replacement - 404 Aviation Blvd

### Function Area:

Development Services

Request: WA20009

### Department/Division:

Sonoma Water / Internal Services Fund

### Project Description



Sonoma Water owns solar photovoltaic power systems that generate renewable electric power used by Sonoma Water enterprises. Sonoma Water requires a service provider to assess, inspect, test, clean, and perform maintenance on Sonoma Water Systems to ensure functionality at the 404 Aviation Blvd facility. Inverters are at the end of their useful life and will be replaced as part of this maintenance work.

Project Cost	
Acquisition:	9
Design/PM:	115
Construction:	330
Furniture/Reloc:	0
Other:	13
Project Total:	467

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
OM Total:	0

Personnel:	0
Revenue/Refund:	0

### Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Power Resources Fund	0	6	6	11	91	353	0	461	0	467
TOTALS:	0	6	6	11	91	353	0	461	0	467

All Values are presented in Thousands (1 x 1000)

# Sonoma Valley Treatment Plant Solar Inverter Replacement

Function Area:

Development Services

Department/Division:

Sonoma Water / Internal Services Fund

Request: WA20010

## Project Description



Sonoma Water owns solar photovoltaic power systems that generate renewable electric power used by Sonoma Water enterprises. Sonoma Water requires a service provider to assess, inspect, test, clean, and perform maintenance on Sonoma Water Systems to ensure functionality at the Sonoma Valley Treatment Plant facility. Inverters are at the end of their useful life and will be replaced as part of this maintenance work.

Project Cost	
Acquisition:	9
Design/PM:	115
Construction:	880
Furniture/Reloc:	0
Other:	13
<b>Project Total:</b>	<b>1,017</b>

Operation and Maintenance Cost	
Utilities:	0
Maintenance:	0
Other:	0
<b>OM Total:</b>	<b>0</b>

<b>Personnel:</b>	0
<b>Revenue/Refund:</b>	0

Service Impact:

Available Funding Sources	Prior FYs	Current FY	FY1 2021-22	FY2 2022-23	FY3 2023-24	FY4 2024-25	FY5 2025-26	5YR Total	Future YRs	Project Total
Power Resources Fund	0	4	1,013	0	0	0	0	1,013	0	1,017
<b>TOTALS:</b>	<b>0</b>	<b>4</b>	<b>1,013</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,013</b>	<b>0</b>	<b>1,017</b>

All Values are presented in Thousands (1 x 1000)