Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

Valley Water manages and operates a complex and integrated water supply infrastructure, including storage, transmission, treatment, and recycled water facilities, to meet the Board's Ends Policy E-2, "Valley Water provides a reliable, safe, and affordable water supply for current and future generations in all communities served."

Storage Facilities

- 10 surface reservoirs
- 393 acres of recharge ponds
- 76 miles of in-stream recharge
- Ground water basins

Transmission Facilities

- 142 miles of pipelines
- 3 pump stations

Treatment Facilities

- 3 treatment plants

Recycled Water Facilities

- Silicon Valley Advanced Water Purification Center
- South County Recycled Water Distribution System

Planning, design and construction of the above facilities took decades of effort. Beginning in the 1930s, reservoirs and recharge ponds were built to halt depletion of the ground water basin and subsidence, followed by pipelines and treatment plants to bring in state and federal water to meet growing water demands in the County.

In the early 1990s, Valley Water embarked on new and challenging capital improvements to upgrade its three drinking water treatment plants in order to meet new Environmental Protection Agency rules for improved water quality required by 1996 amendments to the Safe Drinking Water Act. Fifteen years of effort and capital funding brought the upgrades at Penitencia and Santa Teresa Water Treatment Plants to completion. Delivery of ozonated water produced at these two treatment plants began in 2006.

The Rinconada Water Treatment Plant (RWTP) was built in the late 1960s and is reaching the end of its useful life. A number of projects to upgrade and improve operations have been completed. The RWTP Reliability Improvement Project will add raw water ozonation, construct new flocculation and plate settler clarification, and dual media filtration facilities. It will also increase plant capacity from 80 to 100 million gallons per day. Construction of this Project began in the summer of 2015. Phases 1 and 2 were completed in early 2021. For Phases 3 through 6, the design was completed in fiscal year 2023 and the construction contract will be awarded in fiscal year 2024.

With a significant portion of the Water Supply infrastructure approaching 50 to 60 years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply CIP in recent years.

Valley Water owns and operates ten dams. While these dams provide water supply, flood management, recreation, and environmental flow benefits, there are consequences and costs for dam ownership. Knowledge of seismic stability design and construction was very rudimentary during the design and construction of Valley Water dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability must be addressed for seismic stability. Several of Valley Water's reservoirs have had operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how Valley Water's dams would perform under a major seismic event is completed and appropriate corrective actions are implemented.

On November 26, 2010, the Board was informed that Anderson Dam will require a seismic retrofit and the operating restriction was increased to 45 feet below the crest of the dam. Since this briefing, a consultant has determined that a magnitude 7.2 Maximum Credible Earthquake on nearby Calaveras Fault could cause a deformation (slumping) of the dam crest by 25 feet. The Anderson Dam Seismic Retrofit Project was initiated in January 2011. While work on the project was underway, Valley Water received a directive on February 20, 2020 from the Federal Energy Regulatory Commission to implement interim risk reduction measures, including the Anderson Dam Tunnel Project to construct a diversion to augment the existing outlet.

Water Supply Capital Improvements

Valley Water completed a seismic stability evaluation of Almaden, Calero, and Guadalupe Dams in late 2010. Almaden Dam was found to be seismically stable; however both Calero and Guadalupe Dams will require seismic retrofitting to meet DSOD performance criteria. A project was initiated in fiscal year 2013 to address the Calero and Guadalupe Dams retrofit needs. A separate capital project to address outlet and spillway improvements at Almaden Dam is continuing. Seismic stability evaluations were conducted at Lenihan and Stevens Creek Dams. Both were found to be seismically stable.

In April 2017, the Governor of California ordered detailed evaluations of large spillway structures at all high-hazard dams. Spillway evaluations are required on 9 of Valley Water's 10 dams. The spillway evaluation for 7 dams have been incorporated into existing projects and a separate contract for the spillway evaluation of the Lenihan and Stevens Creek dams has been formed.

Valley Water is partnering with Pacheco Pass Water District and San Benito County Water District for the Pacheco Reservoir Expansion Project. This Project will encompass the acquisition and expansion of this reservoir from 6,000 AF to 140,000 AF and will provide water quality benefits, operational flexibility, emergency storage, flood protection, and ecosystem benefits. On July 24, 2018, the California Water Commission awarded $484.55 million to support the project, including an early funding award of $24.2 million. In February 2021, the maximum conditional eligibility determination was increased to $496.7 million to reflect an inflation adjustment of 1%.

The key driver for Water Supply projects is the Water Supply Master Plan, which includes three strategies to ensure sustainability: secure water supply; expand water supply through water conservation, stormwater capture and potable reuse projects; and optimize existing infrastructure.

Major Capital Improvements Identified in the CIP:

Storage

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Anderson Dam Tunnel
- Coyote Creek Flood Management Measure
- Coyote Creek Chillers
- Coyote Percolation Dam Replacement
- Cross Valley Pipeline Extension
- Calero and Guadalupe Dams Seismic Retrofits
- Coyote Pumping Plant ASD Replacement
- Coyote Warehouse
- Dam Seismic Stability Evaluation
- Pacheco Reservoir Expansion
- Small Capital Improvements, San Felipe Reaches 1-3

Transmission

- 10-Year Pipeline Rehabilitation
- Almaden Valley Pipeline Replacement
- Distribution System Master Plan Implementation
- FAHCE Implementation
- IRP2 Additional Line Valves (A3)
- Pacheco/Santa Clara Conduit Right of Way Acquisition
- SCADA Master Plan Implementation
- Small Capital Improvements, Raw Water Transmission
- Small Capital Improvements, Treated Water Transmission
- Treated Water Isolation Valves
- Vasona Pumping Station Upgrade

Water Treatment Plants (WTP)

- Penitencia WTP Residuals Management
- Rinconada WTP Residuals Remediation
- Rinconada Ammonia Storage and Metering Facility Upgrade
- Rinconada WTP Reliability Improvement
- Small Capital Improvements, Water Treatment
- Santa Teresa WTP Filter Media Replacement
- WTP Electrical Improvement
- WTP Master Plan Implementation

Recycled Water

- Purified Water Project
- Land Rights - South County Recycled Water Pipeline
- South County Recycled Water Pipeline

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting

information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a CIP Draft Five-Year Plan in February.

The Board then authorizes release of the CIP Draft Five-Year Plan to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the CIP Final Five-Year Plan in May.

Based on the feedback from the FY 2006-07 CIP and Board direction, a concerted effort was made to develop a multi-year water charge structure that would support the priority work of the water utility business. Staff analyzed both immediate requirements and anticipated future needs to support operations and the continued appropriations for capital investment needed to maintain infrastructure and comply with water quality regulations. Each year staff reviews Board priorities, the financial needs of the Water Utility Enterprise Fund, current political and economic factors and updates the multi-year structure. The rate structure for the first year is recommended to the Board for adoption during the annual rate setting process.

While Valley Water has one Water Utility Fund, Valley Water has multiple zones of benefit for the purposes of setting groundwater production charges. The North County Zone is very different from the South County Zone in that the water infrastructure is substantially separate and distinct with an entirely different cost of providing service. For example, the north zone overlays the Santa Clara groundwater subbasin and is much more densely populated, requiring a large amount of imported water from outside the county to provide a reliable water supply. To receive, filter and distribute the imported water, Valley Water chose to build three water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. Conversely, the South County overlays the Coyote Valley (southern Santa Clara subbasin) and the Llagas groundwater subbasins and is more sparsely populated. South County communities rely almost entirely on groundwater, with small amounts of raw surface water and recycled water. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County, so water utility infrastructure primarily supports the storage and distribution of local and imported surface water for groundwater recharge.

The financial analysis of the Water Utility Enterprise Fund, the funding source for the water supply capital improvements, is conducted in conjunction with the groundwater production charge process.

After reviewing a number of scenarios, on May 16, 2023, Valley Water's Board of Directors has approved and adopted staff-proposed changes in the municipal and industrial (M&I) groundwater production charges for FY 2023-24 of 14.5% in North County Zone W-2, 6.0% in South County Zone W-5, 12.9% in South County Zone W-7, and 8% for South County Zone W-8.

In addition to Valley Water funding sources, Valley Water has entered into a flexible, low cost Water Infrastructure Finance and Innovation Act (WIFIA) master loan agreement with the Environmental Protection Agency (EPA) that commits up to $580 million to provide upfront funding for the Anderson Dam Seismic Retrofit Project and the Coyote Percolation Dam Replacement Project with final payoff of the loan occurring in 2067.

Significant Project Updates From Prior Year

Listed below are the changes to projects from the CIP Adopted FY 2023-27 Five-Year Plan:

- The Pacheco Reservoir Expansion Project increased in cost by $319.045 million due to updated forecasting in the Planning, Environmental, Design, and Right-of-Way Phases extending the completion date by three years. Costs are associated to resources for address property access, complete tribal consultation, perform agency review, prepare EIR documents and acquire permits.

- The Anderson Dam Seismic Retrofit Project (ADSRP) decreased in cost by $14.325 million associated with the split of the ADSRP FOCP's from ADSRP in FY23. The decrease reflects shifts in construction contract and labor expenditures from FY23 to FY32.

- The Anderson Dam Tunnel Project (ADTP) increased in

cost by $84.968 million due to addition of right-of-way costs associated with Holiday Lake Estates, increase to construction costs, and additional funding for consultant agreement amendments, construction contract costs, Valley Water project labor and services & supplies.

- The Coyote Creek Flood Management Measures Project (CCFMMP) increased in cost by $87.554 million due to revised planning cost estimates for the construction phase, securing the necessary right of way, encampment abatement costs, and supply chain issues.

- The Coyote Chillers Project increased in cost by $16.650 million due to the delay of long lead items, extending the design phase by 1.5 years, and additional costs related to the re-bid resulting from bid results exceeding the Engineer's Estimate.

- The Coyote Percolation Dam Replacement Project (CPDRP) increased in cost by $3.872 million due to higher than anticipated labor costs for in-house design and construction staff and additional labor required to complete the as-built documents.

- The Almaden Dam Improvements Project decreased in cost by $3.388 million due to work on the canal improvements resuming and proceeding ahead of work on the dam improvements. Separate environmental and design documents will be prepared for the canal and dam improvements.

- The 10-Year Pipeline Rehabilitation Project increased in cost by $14.887 million due to changes to project scope, supply chain challenges, as well as additional labor hours for various work, such as updating the EIR, inspection and rehabilitation, securing permits and completing structural design.

- The Purified Water Project (PWP) increased in cost by by $458.130 million due to changes in scope, which resulted in additional project components required to complete the design and construction of the PWP, and regulatory feedback obtained from San Francisco Regional Water Quality Control Board and the Department of Drinking Water. Additional cost factors include revised material, services, and labor to reflect current market conditions, and the need for an independent engineer for the P3 entity. This program is planned to be delivered via a Public-Private Partnership (P3).

- The Rinconada Water Treatment Plant Reliability Improvement Project increased in cost by $166.104 million due to the schedule extension of three years and revised construction costs which were adjusted to reflect current market prices for equipment and labor to complete Phases 3-6.

- The Almaden Valley Pipeline Project increased in cost by $2.729 million due to new data provided during the Programmatic EIR and to accommodate the future fiscal year expenditures at the end of the CIP's 15-year projection. The 21-year total Project plan was initiated in FY21, and the CIP only provides a 15-year projection. Each CIP cycle will add the upcoming fiscal year expenditure plan until all 21 years of the total Project plan are incorporated into the CIP.

- The Vasona Pump Station Project increased in cost by $8.854 million due to changes in scope and revised design and construction schedules, as well as revised construction costs which were adjusted to reflect current market prices for equipment and labor.

- The Water Treatment Plant Electrical Improvement Project increased in cost by $6.887 million due to change in scope, extension of schedule by two years to align construction with concurrent projects to minimize impact to water retailers, pump capacity changes, and increased labor and equipment costs.

- The Santa Teresa Water Treatment Plant Filter Media Replacement Project increased in cost by $5.691 million due to changes in scope, supply chain challenges, and inclusion of construction contingency.

Water Supply Capital Improvements

- One new project was added to the Water Supply Capital Improvements in the CIP Final FY 2024-28 Five-Year Plan. The RWTP Ammonia Storage and Metering Facility (ASMF) at Rinconada Water Treatment Plant (RWTP) will be replaced for reliability and safety since it is a critical system for the Plant. The single ammonia storage tank will be replaced with two tanks. The four existing metering pumps will be replaced with new ones, and three new feed lines will be installed. The estimated project cost is $7.233 million and the project duration is expected to last five years.

  The majority of capital projects included in the CIP Five-Year Plan are related to asset management, which replaces aging equipment and facilities, infrastructure reliability, which protects the county's baseline water supply, or Advanced Purified Water, which produces a drought-resilient source of water.

Valley Water is currently engaged in several critical studies related to understanding the conditions of various water supply facilities and meeting future water supply needs of the county. This effort included updating the Water Supply Master Plan, which was approved by the Board on November 20, 2019. The Water Supply Master Plan update process was initiated in 2023 and is expected to conclude in 2024, with updated recommendations on water supply projects and portfolios.

Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2022-23.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY22	FY23*	FY23 Unspent	FY24	FY25	FY26	FY27	FY28	FY29-38	TOTAL
	STORAGE FACILITY										
91854001	Almaden Dam Improvements	14,772	-	257	57	384	19,193	119	187	26,615	61,326
91864005	Anderson Dam Seismic Retrofit (C1)	157,396	28,639	-	26,749	62,890	95,701	96,354	97,109	439,912	1,004,750
91864006	Anderson Dam Tunnel	47,493	102,110	417	59,590	35,691	1,437	-	-	-	246,321
91864007	Coyote Creek Flood Management Measures	5,112	24,070	9,380	53,991	31,791	585	125	37	-	115,712
91864008	Coyote Creek Chillers	13,664	6,023	5,424	3,229	11	-	-	-	-	22,927
91864009	Coyote Percolation Dam Replacement	1,116	4,051	-	12,496	77	-	-	-	-	17,740
91864010	Cross Valley Pipeline Extension	4,190	7,712	-	-	-	-	-	-	-	11,902
91084020s	Calero and Guadalupe Dams Seismic Retrofits	36,682	-	3,955	523	109	114	454	14,082	211,466	263,430
91234002	Coyote Pumping Plant ASD Replacement	4,368	9,294	-	13,060	1,115	95	-	-	-	27,932
91234011	Coyote Warehouse	9,718	126	-	-	-	-	-	-	-	9,844
91084019	Dam Seismic Stability Evaluation	22,653	417	291	127	314	528	417	436	6,975	31,867
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	6,181	-	7,005	1,175	103	3,616	14,381	48,645	81,106
91954002	Pacheco Reservoir Expansion Project (A1)	71,826	30,800	-	41,994	20,006	17,282	27,031	239,450	2,332,308	2,780,697
	TRANSMISSION FACILITY										
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	88,477	16,304	-	27,291	11,568	9,641	1,659	-	-	154,940
92304001	Almaden Valley Pipeline Replacement Project	1,509	79	462	1,677	2,235	2,336	2,674	2,401	100,417	113,328
95044001	Distribution System Master Plan Implementation	5,240	730	-	1,933	856	-	-	-	-	8,759
92C40357	FAHCE Implementation	-	-	-	-	-	-	4,739	4,379	135,990	145,108
26764001	IRP2 Additional Line Valves (A3)	2,593	1,220	-	3,559	3,609	3,465	2,199	101	91	16,837
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	4,993	847	1,360	74	216	-	-	-	-	6,129
95044002	SCADA Master Plan Implementation	3,749	1,571	337	389	757	-	-	-	-	6,466
92764009	Small Capital Improvements, Raw Water Transmission	n/a	1,010	-	1,020	2,442	970	775	922	8,352	15,491
94764006	Small Capital Improvements, Treated Water Transmission	n/a	297	-	276	350	48	-	50	333	1,354
94084007	Treated Water Isolation Valves	1,271	-	-	609	2,159	1,987	607	1,936	215	8,784
92264001	Vasona Pump Station Upgrade	3,828	922	2,002	-	9,094	14,110	3,167	-	-	31,122
	TREATMENT FACILITY										
93234044	PWTP Residuals Management	2,276	1,857	-	1,488	10,070	18,849	9,590	-	-	44,130
93294051s	RWTP Residuals Remediation	61,835	18,397	6,179	1,209	-	-	-	-	-	81,441
93294059	RWTP Ammonia Storage & Metering Facility Upgrade	-	-	-	630	502	575	3,105	2,421	-	7,233
93294057	RWTP Reliability Improvement	272,486	6,036	12,358	22,177	68,464	93,560	89,229	46,710	29,181	627,843
93764004	Small Capital Improvements, Water Treatment	n/a	4,509	-	3,397	6,240	6,167	6,339	1,287	18,641	46,580
93284013	STWTP Filter Media Replacement Project	3,460	11,464	-	5,100	-	-	-	-	-	20,024
93084004	Water Treatment Plant Electrical Improvement Project	1,526	2,412	1,712	-	6,198	4,310	4,067	-	-	18,513
93044001	WTP Master Plan Implementation	4,669	732	-	3,060	819	-	-	-	-	9,280
	RECYCLED WATER FACILITY										
91304001s	Purified Water Program (PWP)	28,618	10,934	-	48,959	408,080	325,101	275,327	113,981	197	1,211,197
91094001	Land Rights - South County Recycled Water PL	547	3,260	-	3,010	-	-	-	-	-	6,817
91094007s	South County Recycled Water Pipeline	52,115	7,306	488	374	24	-	-	-	-	59,819
	TOTAL	928,182	309,310	44,622	345,053	687,246	616,157	531,594	539,870	3,359,337	7,316,748

**FY 2023 Adjusted Budget includes adopted budget plus budget adjustments.*

FY 2022-23 Funds to be reappropriated

Water Supply Capital Improvements

The following table shows funding requirements from each funding source for water supply capital.

Water Supply - Funding Source ($K)

Fund Number	FUND NAME	Through FY22	FY23	FY23 Unspent	FY24	FY25	FY26	FY27	FY28	FY29-38	TOTAL
61	Water Utility Enterprise Fund	925,589	308,090	44,622	341,494	683,637	612,692	529,395	539,769	3,359,246	7,299,911
26	Safe, Clean Water and Natural Flood Protection Fund	2,593	1,220	0	3,559	3,609	3,465	2,199	101	91	16,837
	TOTAL	928,182	309,310	44,622	345,053	687,246	616,157	531,594	539,870	3,359,337	7,316,748

FY 2022-23 Funds to be reappropriated

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Project	**Almaden Dam Improvements**
Program	Water Supply – Storage
Project No.	91854001
Contact	Christopher Hakes chakes@valleywater.org

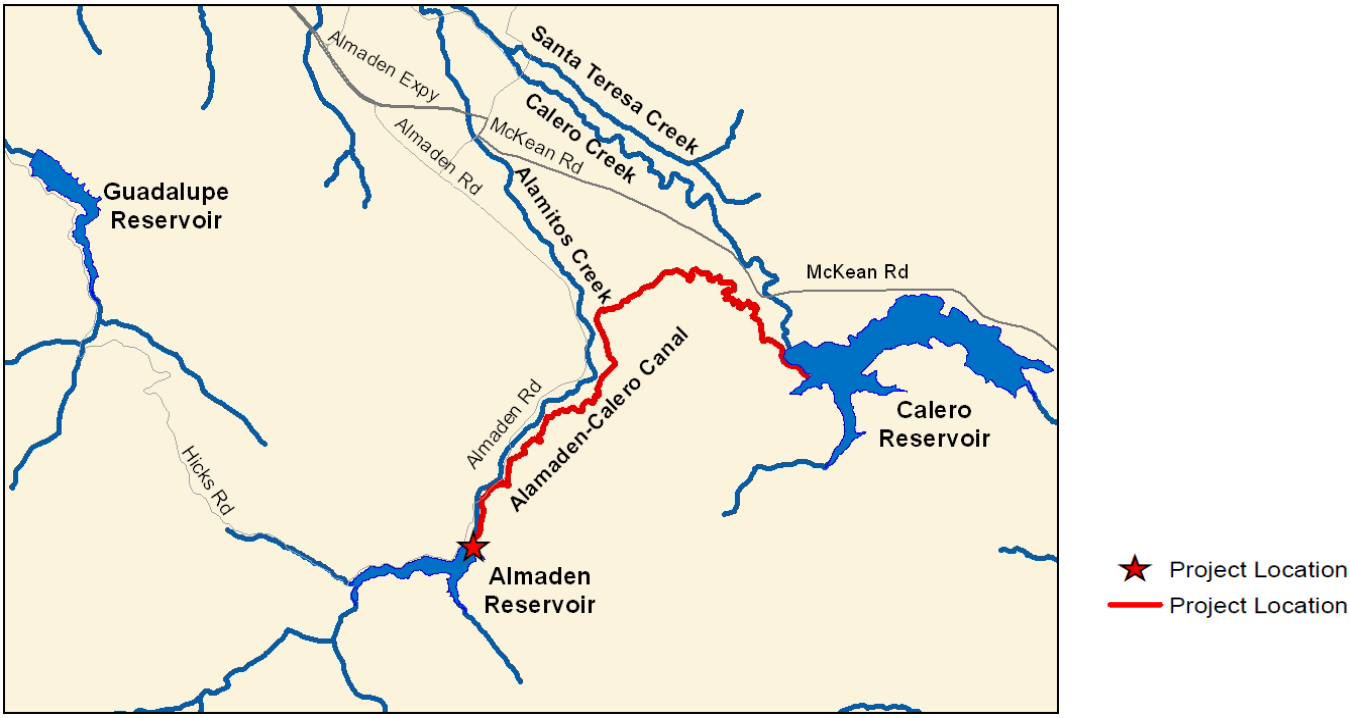
Aerial view of Almaden Dam and spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Almaden Dam outlet works to accomplish the following objectives:

- Modify or construct a new intake structure, capable of releasing 246 cubic feet-per-second of water without flushing of sediments through the outlet works
- Correct existing problems with the outlet energy dissipation structure, piping and valves
- Restore operational capacity to the Almaden-Calero Canal and stabilize and improve maintenance access

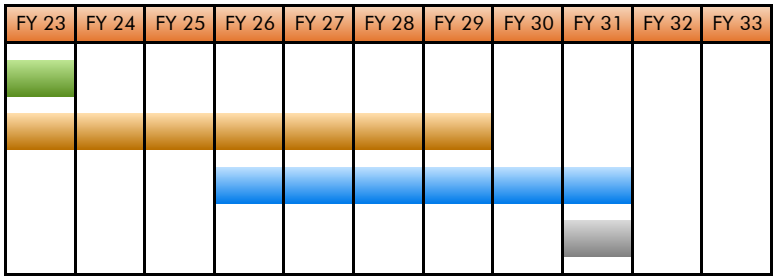
PROJECT LOCATION



SCHEDULE & STATUS

July 1995 to June 2031

Phase	Cost
Plan	5,590
Design	10,278
Construct	37,683
Closeout	4
	53,629



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91854001-Almaden Dam Improvements	14,041	474	314	352	16,209	100	150	21,990	53,629
with inflation	14,041	474	314	384	19,193	119	187	26,614	61,326

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91854001-Almaden Dam Improvements	14,772	0	257	57	384	19,193	119	187	26,614	61,326

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	61,326
Other Funding Source	0
Total	**61,326**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $2,000 per year, beginning in FY31.

USEFUL LIFE:

50+ Years

Project	**Anderson Dam Seismic Retrofit (C1)**
Program	Water Supply – Storage
Project No.	91864005
Contact	Christopher Hakes chakes@valleywater.org

Aerial view of Anderson Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

The project plans, designs, and constructs improvements to Anderson Dam to address seismic performance concerns and rehabilitate aging appurtenant facilities. The project will accomplish the following objectives:

- Replace most of the existing embankment dam with a well-compacted, zoned embankment dam to withstand the Maximum Credible Earthquake (MCE)
- Replace the existing outlet works to withstand the MCE and meet current California Department of Water Resources, Division of Safety of Dams (DSOD) emergency drawdown requirements
- Replace the existing spillway to convey the probable maximum flood
- Restore lost reservoir storage capacity from restrictions issued by DSOD and an order issued by Federal Energy Regulatory Commission (FERC)

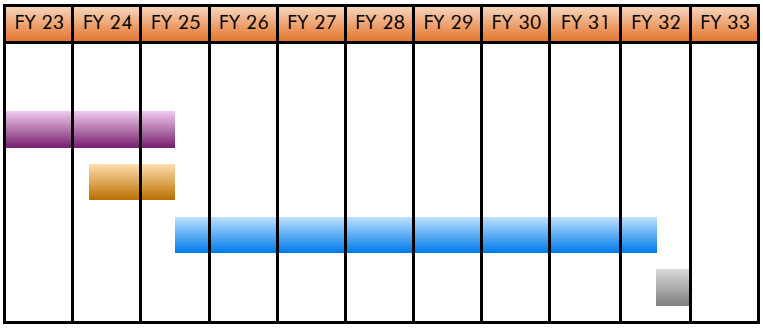
This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project C1. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

January 2011 to June 2032

Phase	Cost
Plan	16,368
Permits	33,566
Design	141,280
Construct	708,007
Closeout	1,100
	907,071



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864005-Anderson Dam Seismic Retrofit (C1)	149,268	36,767	26,749	56,993	85,181	85,120	85,120	381,871	907,071
with inflation	149,268	36,767	26,749	62,890	95,701	96,354	97,109	439,912	1,004,750

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864005-Anderson Dam Seismic Retrofit (C1)	157,396	28,639	0	26,749	62,890	95,701	96,354	97,109	439,912	1,004,750

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	936,696
SCVWD Safe Clean Water Fund	68,054
Other Funding Sources	0
Total	**1,004,750**

Valley Water estimates total debt service payment for this project's portion of the WIFIA loan would be $573,500,000 in principal, plus $1,100,000,000 in interest, for a total of $1,700,000,000 with final payoff of the loan occurring in 2067.

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Anderson Dam Tunnel**
Program	Water Supply – Storage
Project No.	91864006
Contact	Christopher Hakes chakes@valleywater.org

Aerial view of Anderson Dam Tunnel outlet portal work area

PROJECT DESCRIPTION

Valley Water is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020 directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the Anderson Dam Tunnel Project (ADTP).

The ADTP will construct a diversion system to augment the existing outlet, which will consist of a new diversion tunnel, an outlet structure, a micro-tunnel lake tap, and modifications to Coyote Creek just downstream of the base of the dam. The ADTP also includes reservoir bank and rim stability improvements and existing intake structure modification. The project objectives include:

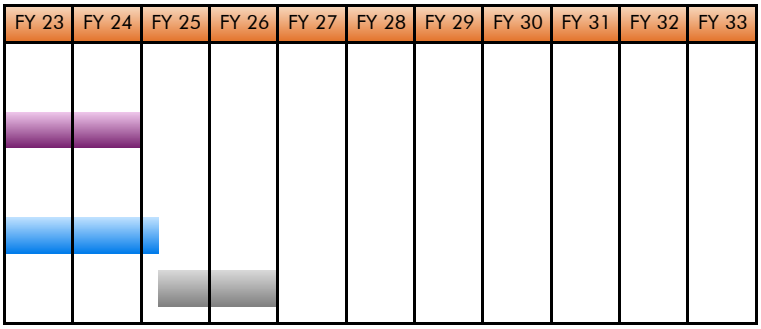
- Comply with the FERC February 20, 2020 order and construct a new outlet system to augment the existing outlet
- Reopen the historic northern channel to convey the diversion flows anticipated during the Anderson Dam Seismic Retrofit Project (ADSRP)
- Remediate existing landslides that are in close proximity to existing residential structures
- Reinforce the existing intake structure

PROJECT LOCATION

SCHEDULE & STATUS

February 2020 to June 2026

Phase	Cost
Plan	-
Permits	646
Design	12,988
Construct	226,450
Closeout	1,359
	241,444



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864006-Anderson Dam Tunnel	47,083	102,103	60,007	30,992	1,259	0	0	0	241,444
with inflation	47,083	102,103	60,007	35,691	1,437	0	0	0	246,321

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864006-Anderson Dam Tunnel	47,493	102,110	417	59,590	35,691	1,437	0	0	0	246,321

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	246,321
Other Funding Sources	0
Total	**246,321**

OPERATING COST IMPACTS

Operating costs impacts are anticipated and will be determined upon completion of the construction phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Creek Flood Management Measure**
Program	Water Supply – Storage
Project No.	91864007
Contact	Bhavani Yerrapotu byerrapotu@valleywater.org

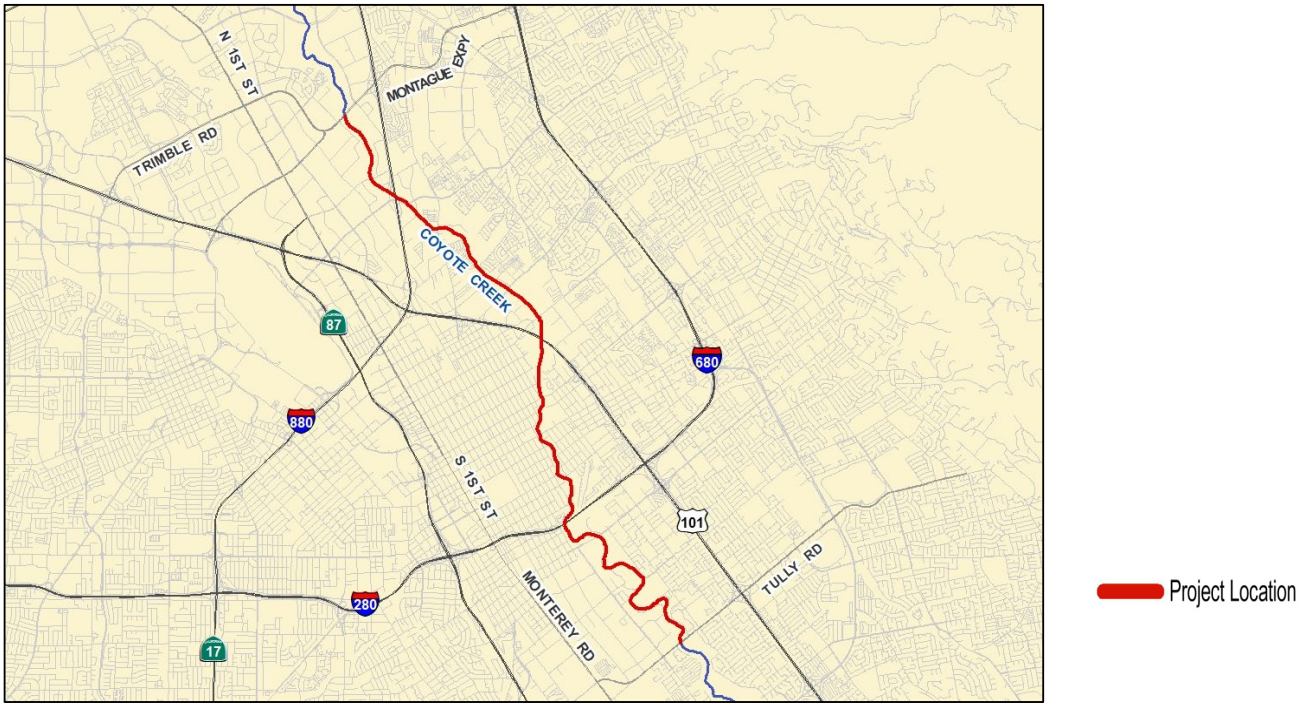
Floodwall surrounding Coyote Creek outdoor classroom

PROJECT DESCRIPTION

Valley Water is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020 directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the Coyote Creek Flood Management Measures Project (CCFMMP).

The goal of this project is to reduce the risk of flooding to homes, schools, businesses, and highways in the Coyote Creek floodplain from flows anticipated from the tunnel built as part of Anderson Dam Tunnel Project. This project plans, designs and constructs improvements for approximately 4 miles of Coyote Creek from Old Oakland Road to Interstate 280 in San José, California. Coyote Creek Flood Protection Project (CCFPP), when combined when combined with this project will provide flood protection from floods up to the level that occurred on February 2017, equivalent to approximately a 5% flood (20-year event) for 9 miles of Coyote Creek from Montague Expressway to Tully Road.

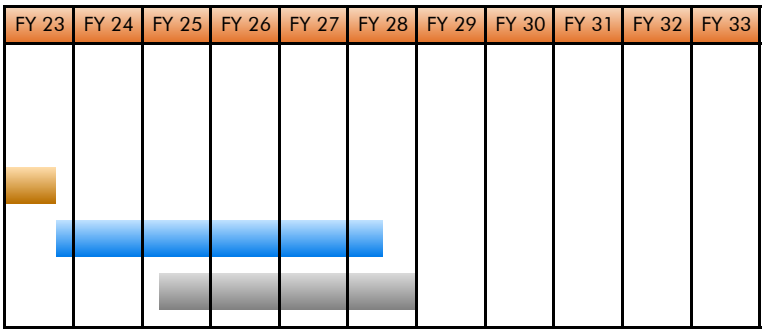
PROJECT LOCATION



SCHEDULE & STATUS

February 2020 to June 2028

Phase	Cost
Plan	-
Permits	199
Design	12,056
Construct	102,259
Closeout	440
	114,955



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864007-Coyote Creek Flood Management Measure	552	19,250	63,371	31,134	513	105	30	0	114,955
with inflation	552	19,250	63,371	31,791	585	125	37	0	115,712

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864007-Coyote Creek Flood Management Measure	5,112	24,070	9,380	53,991	31,791	585	125	37	0	115,712

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	115,712
Other Funding Sources	0
Total	**115,712**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $425,000 per year, beginning in FY28.

USEFUL LIFE: 30 Years

Project	**Coyote Creek Chillers**
Program	Water Supply – Storage
Project No.	91864008
Contact	Christopher Hakes chakes@valleywater.org

Example of Modular Chiller Plant

PROJECT DESCRIPTION

Valley Water is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020 directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the Coyote Creek Steam Augmentation Fish Project Measure Chillers Plan Project (Coyote Creek Chillers).

The Project includes installation of a Modular Chiller Plant (MCP) at the southwest corner of the existing Coyote Pumping Plant, which consists of three (3) 1,500-ton capacity water-cooler packaged chillers, with one (1) of the three (3) being used as a redundant chiller unit. A new 24-inch pipe will be installed to connect to an existing 36-inch nozzle on the Cross Valley Pipeline, to allow the chillers to receive imported water. The project objectives include:

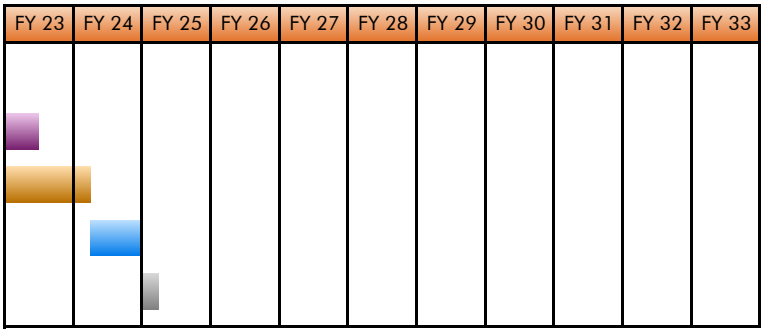
- Cool up to 10 cfs of raw water from 25°C to 16°C with the operation of two chillers units, which would be released at the end of the wet season and continue through the onset of the winter rains (four to five months per year)
- Chill imported water from the Cross Valley Pipeline and deliver the chilled water to the Coyote Creek to provide suitable cold-water habitat to support rainbow trout (Oncorhynchus mykiss) rearing, within the Creek's functional cold water management zone effectively ends at the upstream end of Ogier Ponds

PROJECT LOCATION

SCHEDULE & STATUS

July 2020 to July 2024

Phase	Cost
Plan	-
Permits	22
Design	370
Construct	22,524
Closeout	10
	22,927



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864008-Coyote Creek Chillers	13,664	599	8,653	10	0	0	0	0	22,927
with inflation	13,664	599	8,653	11	0	0	0	0	22,928

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864008-Coyote Creek Chillers	13,664	6,023	5,424	3,229	11	0	0	0	0	22,928

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	22,928
Other Funding Sources	0
Total	**22,928**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the construction phase.

USEFUL LIFE: 30 Years

Project	**Coyote Percolation Dam Replacement**
Program	Water Supply – Storage
Project No.	91864009
Contact	Bhavani Yerrapotu byerrapotu@valleywater.org

Downstream view of Coyote Percolation Dam, fish ladder, and rock slope protection

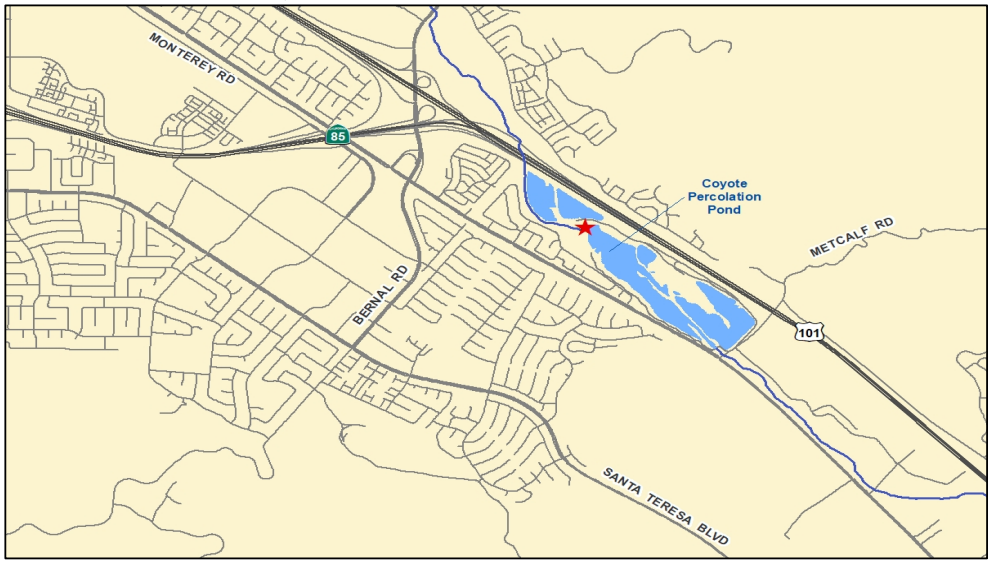
PROJECT DESCRIPTION

Valley Water is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020 directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the Coyote Creek Flood Management Measures Project (CCFMMP).

The current Coyote Percolation Dam is a flashboard dam used to impound water in the Coyote Percolation Pond, an in-stream pond in Coyote Creek just north of Metcalf Road. Operation of the proposed Anderson Dam tunnel would result in flows well beyond the safe operating capabilities of Coyote Percolation Dam. The maximum release capacity of 2,500 cfs (new tunnel and existing outlet capacity combined) would overwhelm the Coyote Percolation Dam and removing the dam altogether would compromise Valley Water's ability to recharge the groundwater basins. To protect against risks to groundwater recharge and water supply reliability, this Project would replace the existing flashboard dam with an inflatable bladder dam that could quickly be raised when inflows are low (to facilitate percolation) and then lowered to allow higher flows to pass safely. Completion of the bladder dam facilities is necessary by 2024, when the Anderson Dam outlet tunnel would be finished. This project designs and constructs to accomplish the following objectives:

- Maximize the use of the pond without increasing the the risk of flooding by efficiently and safely deflating the bladder dam during high flow events
- Preserve Valley Water's ability to impound water and maximize percolation into the groundwater basin
- Improve fish passage during low pond level events by replacing stationary panels with adjustable panels
- Perform operations and maintenance in a more environmentally sensitive manner by minimizing the need for instream construction equipment or activities

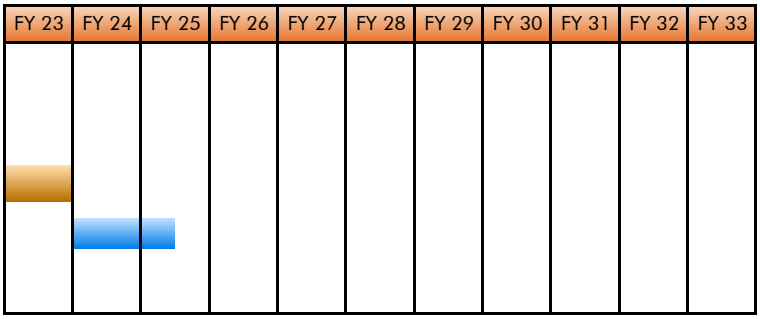
PROJECT LOCATION



SCHEDULE & STATUS

June 2020 to December 2024

Phase	Cost
Plan	-
Permits	-
Design	1,836
Construct	15,898
Closeout	-
	17,733



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864009-Coyote Percolation Dam Replacement	1,116	4,051	12,496	70	0	0	0	0	17,733
with inflation	1,116	4,051	12,496	77	0	0	0	0	17,740

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864009-Coyote Percolation Dam Replacement	1,116	4,051	0	12,496	77	0	0	0	0	17,740

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	17,740
Other Funding Sources	0
Total	**17,740**

Valley Water estimates total debt service payment for this project's portion of the WIFIA loan would be $6,500,000 in principal, plus $12,000,000 in interest, for a total of $18,500,000 with final loan payoff occuring in 2067.

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the construction phase.

USEFUL LIFE: Rubber Dam - 25 Years / Concrete Structures - 50 Years

Project	**Cross Valley Pipeline Extension**
Program	Water Supply – Storage
Project No.	91864010
Contact	Christopher Hakes chakes@valleywater.org

View looking downsteam of Coyote Creek at the outfall of CVPE

PROJECT DESCRIPTION

Valley Water is undertaking the Anderson Dam Federal Energy Regulatory Commission Order Compliance Project (FOCP) as a result of the February 20, 2020 directive from the Federal Energy Regulatory Commission (FERC) to implement interim risk reduction measures at Anderson Dam. One of those measures is the Cross Valley Pipeline Extension Project (CVPEP).

The CVPEP entails constructing a new pipeline to convey imported water from the Cross Valley Pipeline to Coyote Creek to supplement flows during construction of the ADSRP downstream of Ogier Ponds. The Project scope includes constructing an outfall which will include an energy dissipator, and creek bank improvements. The project objectives include:

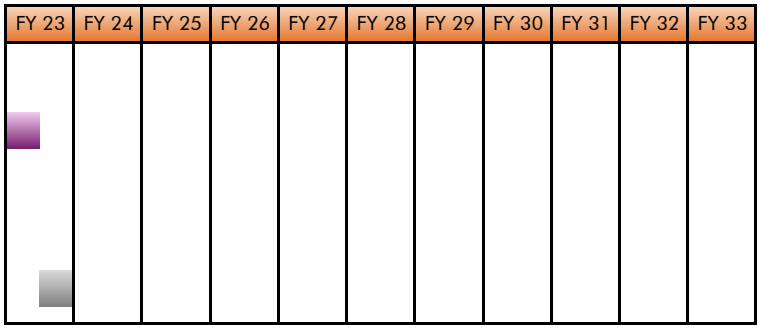
- Construct 7,100-feet of 36-inch diameter welded steel pipeline between the existing Cross Valley Pipeline, at the intersection of Hale Avenue and San Bruno Avenue, and Coyote Creek
- Deliver imported water though the new pipeline extension to supplement flows in Coyote Creek during drought, dry seasons, and during the 10-year construction of the Anderson Dam Seismic Retrofit Project (ASDRP)

PROJECT LOCATION

SCHEDULE & STATUS

June 2020 to April 2023

Phase	Cost
Plan	-
Permits	21
Design	202
Construct	11,287
Closeout	10
	11,902



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91864010-Cross Valley Pipeline Extension	4,190	7,712	0	0	0	0	0	0	11,902
with inflation	4,190	7,712	0	0	0	0	0	0	11,902

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91864010-Cross Valley Pipeline Extension	4,190	7,712	0	0	0	0	0	0	0	11,902

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,085
Department of Water Resources (DWR)	5,817
Other Funding Sources	0
Total	**11,902**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the closeout phase.

USEFUL LIFE: 50+ Years

Project	**Calero and Guadalupe Dams Seismic Retrofits**		
Program	Water Supply – Storage		
Project No.	91084020 & 91894002	**Contact**	Christopher Hakes chakes@valleywater.org

Aerial view of the Calero Dam and reservoir

Aerial view of the Guadalupe Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

Project 91084020: Performs planning (engineering and environmental) for the Calero and Guadalupe Dams
Project 91894002: Designs and constructs improvements to Guadalupe Dam
The projects will accomplish the following objectives:

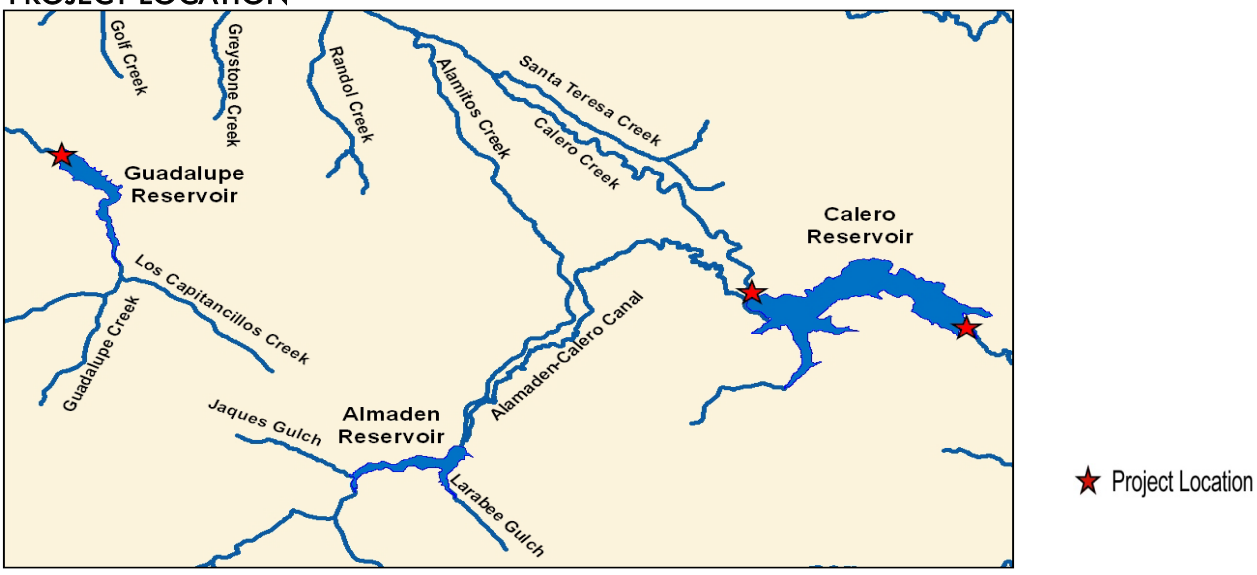
Calero Dam

- Stabilize the embankment to withstand a Maximum Credible Earthquake (MCE)
- Modify or replace the outlet works if determined to be inadequate
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood (PMF)
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike

Guadalupe Dam

- Stabilize the embankment to withstand a MCE
- Implement improvements as necessary for the dam system to safely pass the PMF
- Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams requirements
- Relocate the intake structure out of the upstream berm in a timely manner
- Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process

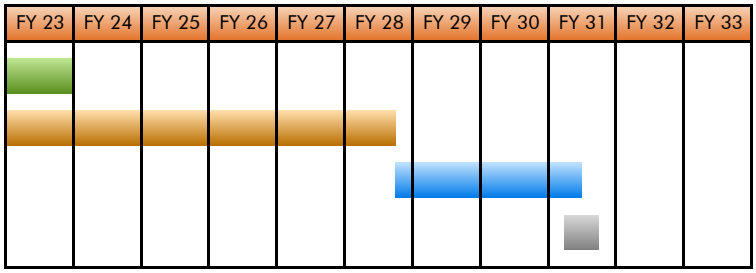
PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to January 2031

Phase	Cost
Plan	12,817
Design	10,192
Construct	62,662
Closeout	72
	87,908



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91084020-Calero and Guadalupe Dams Seismic Retrofits-Planning	10,687	100	105	115	115	1,672	743	0	13,537
with inflation	10,687	100	105	126	131	1,994	926	0	14,068
91894002-Guadalupe Dam Seismic Retrofit-Design & Construct	9,706	1,022	523	100	100	100	11,300	51,520	74,371
with inflation	9,706	1,022	523	109	114	119	13,156	60,668	85,417
TOTAL	**20,393**	**1,122**	**628**	**215**	**215**	**1,772**	**12,043**	**51,520**	**87,908**
with inflation	**20,393**	**1,122**	**628**	**235**	**245**	**2,113**	**14,082**	**60,668**	**99,486**

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91084020-Calero and Guadalupe Dams Seismic Retrofits-Planning	12,807	0	2,020	0	0	0	335	926	0	14,068
91894002-Guadalupe Dam Seismic Retrofit-Design & Construct	10,728	0	0	523	109	114	119	13,156	60,668	85,417
TOTAL	**23,535**	**0**	**2,020**	**523**	**109**	**114**	**455**	**14,082**	**60,668**	**99,486**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	99,486
Other Funding Source	0
Total	**99,486**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50+ Years

Project	**Calero Dam Seismic Retrofit-Design & Construction**
Program	Water Supply – Storage
Project No.	91874004
Contact	Christopher Hakes chakes@valleywater.org

Aerial view of the Calero Dam and reservoir

PROJECT DESCRIPTION

This project designs and constructs improvements to the Calero Dam to accomplish the following objectives:

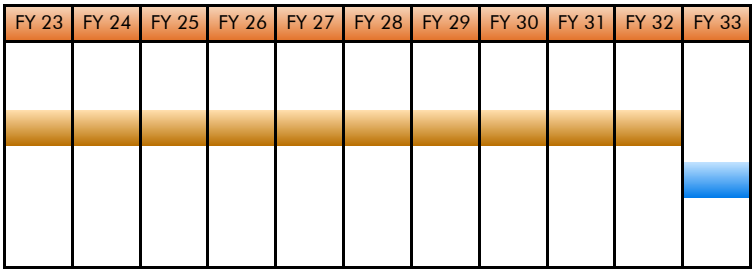
- Stabilize the embankment to withstand a Maximum Credible Earthquake
- Modify or replace the outlet works if determined to be inadequate
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike

PROJECT LOCATION

SCHEDULE & STATUS

January 2015 to June 2035

Phase	Cost
Plan	8
Design	13,636
Construct	103,502
Closeout	8
	117,294



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91874004-Calero Dam Seismic Retrofit-Design & Construct	10,902	310	84	30	30	30	30	105,878	117,294
with inflation	10,902	310	84	33	34	36	37	152,509	163,945

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91874004-Calero Dam Seismic Retrofit-Design & Construct	13,147	0	1,935	0	0	0	0	0	150,798	163,945

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	163,945
Other Funding Source	0
Total	**163,945**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Pumping Plant ASD Replacement**
Program	Water Supply – Storage
Project No.	91234002
Contact	Emmanuel Aryee earyee@valleywater.org

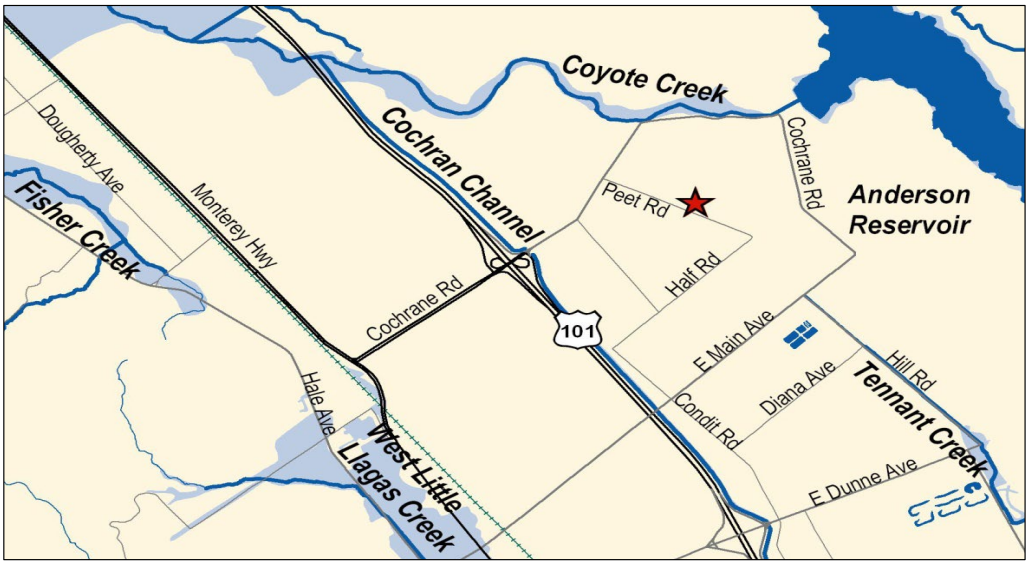
ASD motors at the Coyote Pumping Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Coyote Pumping Plant Adjustable Speed Drives (ASD) to accomplish the following objectives:

- Replace existing outdated and unsupported ASDs with the latest technology
- Modify/convert existing six wound rotor motors to be compatible with new stator fed ASD
- Upgrade the heating, ventilation and air conditioning system to support the additional cooling requirements
- Modify/upgrade supervisory control and data acquisition control and instrumentation systems, and control strategy to support the new ASDs
- Replace two main medium voltage circuit breakers and one medium voltage tie circuit breaker (switch) which are near the end of their service life
- Replace motor control equipment line-up with new switchgears
- Installation of a pump motor vibration and a power monitoring system and motor control center

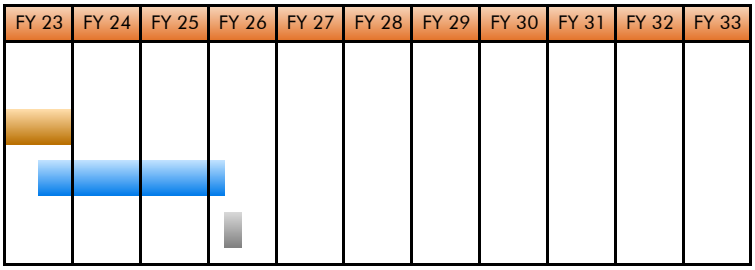
PROJECT LOCATION



SCHEDULE & STATUS

July 2017 to November 2025

Phase	Cost
Plan	971
Design	3,924
Construct	22,096
Closeout	84
	27,776



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91234002-Coyote Pumping Plant ASD Replacement	2,912	10,750	13,060	970	84	0	0	0	27,776
with inflation	2,912	10,750	13,060	1,115	95	0	0	0	27,932

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91234002-Coyote Pumping Plant ASD Replacement	4,368	9,294	0	13,060	1,115	95	0	0	0	27,932

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	27,932
Other Funding Sources	0
Total	**27,932**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $60,000 per year, beginning in FY26.

USEFUL LIFE:

Not Available

Project	**Coyote Warehouse**
Program	Water Supply – Storage
Project No.	91234011
Contact	Emmanuel Aryee earyee@valleywater.org

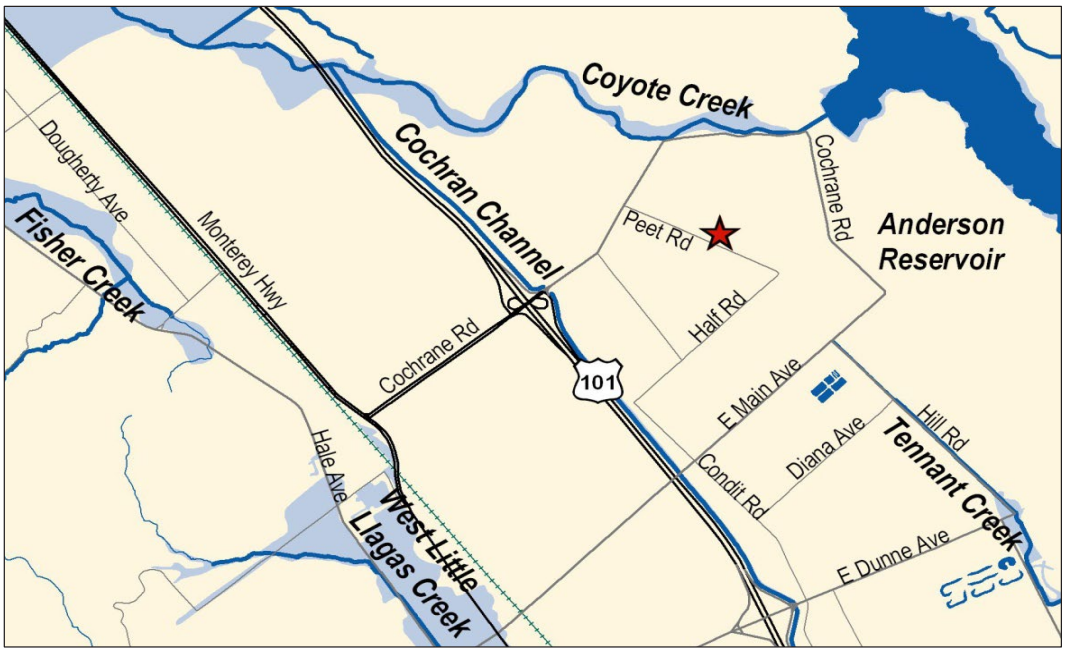
Newly constructed warehouse will be used to secure equipment and spare parts

PROJECT DESCRIPTION

This project plans, designs, and constructs the Coyote Warehouse to accomplish the following objectives:

- Provide suitable storage space for pipeline spare parts and appurtenances, and to protect such materials from weather
- Improve Valley Water's staff efficiency and effectiveness in pipeline maintenance work

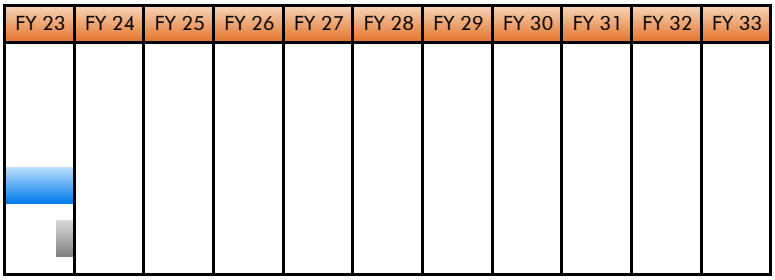
PROJECT LOCATION



SCHEDULE & STATUS

July 2015 to June 2023

Phase	Cost
Plan	157
Design	784
Construct	8,344
Closeout	60
	9,844



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91234011-Coyote Warehouse	9,729	115	0	0	0	0	0	0	9,844
with inflation	9,729	115	0	0	0	0	0	0	9,844

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91234011-Coyote Warehouse	9,718	126	0	0	0	0	0	0	0	9,844

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	9,844
Other Funding Sources	0
Total	**9,844**

OPERATING COST IMPACTS

The completion of this project increased operating costs by approximately $3,000 per year, beginning in FY22.

USEFUL LIFE: 50 years

Project	**Dam Seismic Stability Evaluations**
Program	Water Supply – Storage
Project No.	91084019
Contact	Christopher Hakes chakes@valleywater.org

Field exploration for seismic stability evaluations

PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for nine dams to accomplish the following objectives:

- Address seismic stability issues
- Provide for public safety
- Ensure operational availability of reservoirs
- Address protection of the assets

This project funds preliminary planning activities to determine the need for seismic stability improvements for eight of the nine dams identified on the map below. The evaluations for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams have been completed as part of this project, while the evaluations for Coyote, Chesbro and Uvas are scheduled to continue through 2029. (The seismic stability evaluation for Anderson Dam was completed in a separate project.) Planning, design, and construction of identified seismic improvements, will be funded in the future as site-specific projects.

PROJECT LOCATION

SCHEDULE & STATUS

August 2009 to June 2029

Phase	Cost
Plan	29,838
Design	-
Construct	-
Closeout	-
	29,838

FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33

Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91084019-Dam Seismic Stability Evaluations	22,362	417	418	288	463	350	350	5,191	29,838
with inflation	22,362	417	418	314	528	417	436	6,975	31,867

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91084019-Dam Seismic Stability Evaluations	22,653	417	291	127	314	528	417	436	6,975	31,867

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	31,867
Other Funding Source	0
Total	**31,867**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE:

50+ Years

Project	**Small Capital Improvements, San Felipe**
Program	Water Supply – Storage
Project No.	91214010s
Contact	Greg Williams gwilliams@valleywater.org

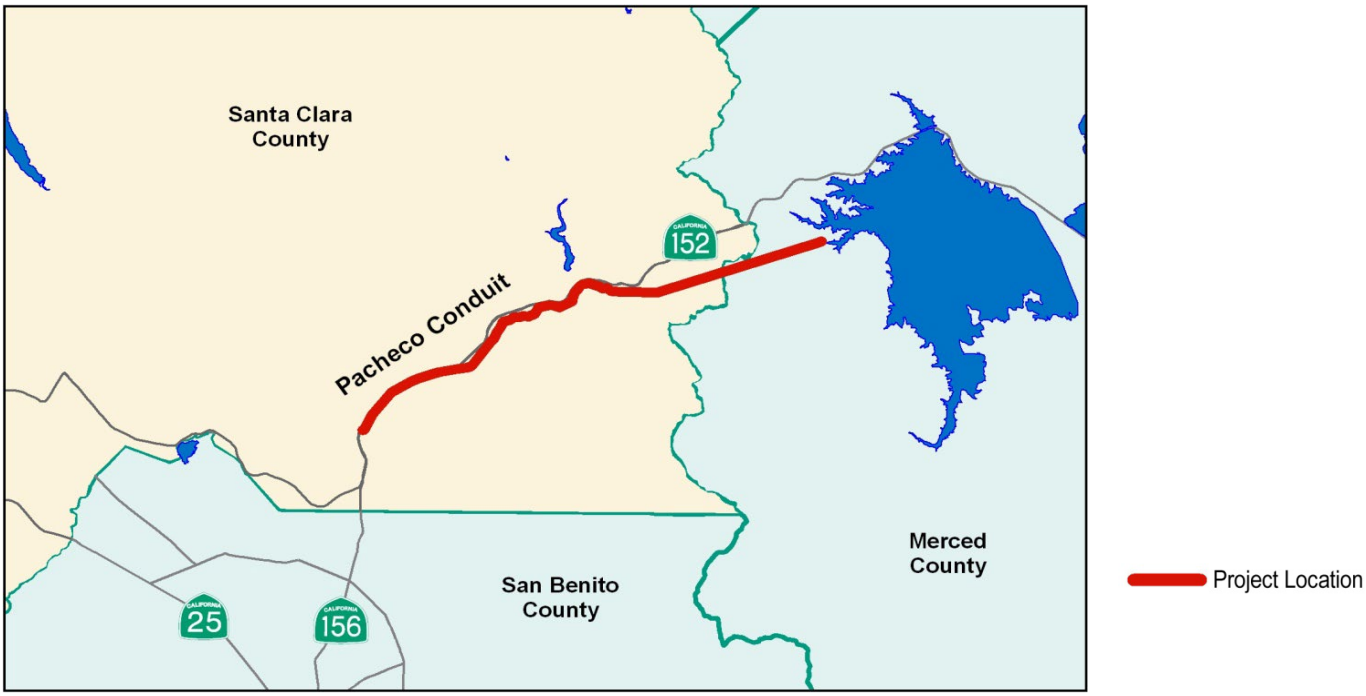
Example of bacterial corrosion on a suction wear ring of an impeller

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project implements a systematic approach to the renewal and replacement of equipment at facilities within the San Felipe Division, by designing and constructing improvements identified through Valley Water's 10-year Asset Management Program. Infrastructure within this project includes tunnels, large diameter pipelines, valve structures, pumps, and associated support equipment. Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors and other agencies. Projects for FY24 include:

- 91214010 – Reach 1: Completion of a fire suppression system; electrical current limit fuse & hydraulic valve operating system (HVOS) upgrade
- 91224010 – Reach 2: Calaveras Fault Inlet/Calaveras Fault Outlet road access fix (culvert replacements)
- 91234010 – Reach 3: Replace existing end-of-life staff trailers, Coyote Discharge Line – Replace meter vault instrumentation, Overhaul and recoat 2 pumps at Coyote Pumping Plant
- All active projects have positive net present value savings at the time of the feasibility study and are subject to design phase validation

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and Asset Management Program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	3,821	2,072	885	90	742	11,540	34,039	53,189
with inflation	n/a	3,821	2,072	966	103	885	14,381	47,371	69,599
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	0	0	0	0	10	0	362	372
with inflation	n/a	0	0	0	0	12	0	514	526
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	2,360	4,933	191	0	2,280	0	511	10,275
with inflation	n/a	2,360	4,933	209	0	2,719	0	760	10,981
TOTAL	**0**	**6,181**	**7,005**	**1,076**	**90**	**3,032**	**11,540**	**34,912**	**63,836**
with inflation	**0**	**6,181**	**7,005**	**1,175**	**103**	**3,616**	**14,381**	**48,645**	**81,105**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	3,821	0	2,072	966	103	885	14,381	47,371	69,599
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	0	0	0	0	0	12	0	514	526
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	2,360	0	4,933	209	0	2,719	0	760	10,981
TOTAL	**0**	**6,181**	**0**	**7,005**	**1,175**	**103**	**3,616**	**14,381**	**48,645**	**81,105**

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	61,895
San Benito County Water District	19,211
Total	**81,105**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Pacheco Reservoir Expansion Project (A1)**
Program	Water Supply – Storage
Project No.	91954002
Contact	Christopher Hakes chakes@valleywater.org

Aerial view of Pacheco Reservoir

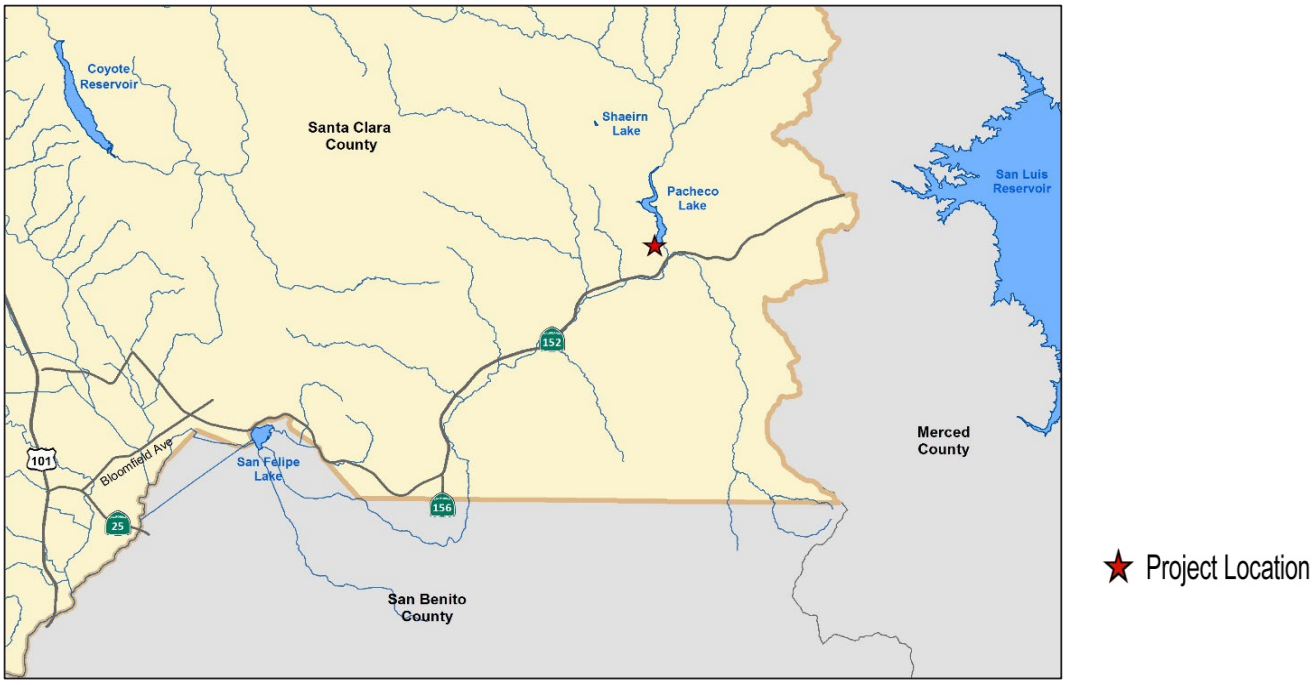
PROJECT DESCRIPTION

This project will include expanding the storage capacity of the existing Pacheco Reservoir to 140,000 acre-feet through construction and operation of a new dam, conveyance facilities, and related appurtenant structures. The project objectives include:

- Increase suitable habitat in Pacheco Creek for federally threatened steelhead
- Increase water supply reliability to help meet municipal and industrial water demands in Santa Clara County during drought periods and emergencies, or to address shortages due to regulatory and environmental restrictions
- Develop water supplies for environmental water management that support habitat management and other environmental water needs

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project A1. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

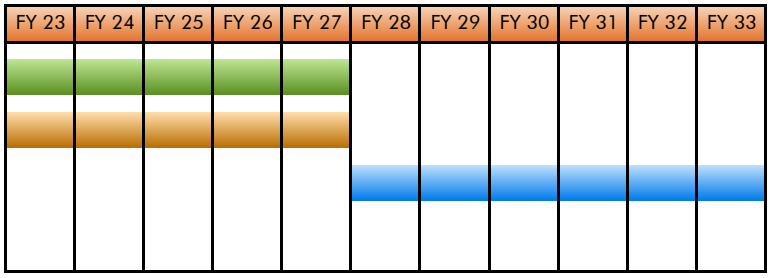
PROJECT LOCATION



SCHEDULE & STATUS

December 2018 to June 2035

Phase	Cost
Plan	45,878
Design	151,565
Construct	2,006,769
Closeout	360
	2,207,880



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
91954002-Pacheco Reservoir Expansion Project (A1)	71,102	31,524	41,994	18,320	15,144	22,667	190,180	1,816,949	2,207,880
with inflation	71,102	31,524	41,994	20,006	17,282	27,031	239,450	2,332,308	2,780,697

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
91954002-Pacheco Reservoir Expansion Project (A1)	71,826	30,800	0	41,994	20,006	17,282	27,031	239,450	2,332,308	2,780,697

Adjusted Budget includes adopted budget, plus a planned budget adjustment of $6,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	1,469,853
California Water Commission	504,000
SCVWD Safe, Clean Water Fund	10,000
Partnership Contributions (Unsecured)	796,844
Total	**2,780,697**

OPERATING COST IMPACTS

Operating cost impacts are anticipated to be approximately $2,500,000 per year, beginning in FY36. Closer analysis will be determined at the completion of the design phase.

USEFUL LIFE: 50+ Years

Project	**10-Year Pipeline Inspection & Rehabilitation**
Program	Water Supply – Transmission
Project No.	95084002
Contact	Emmanuel Aryee earyee@valleywater.org

A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

The project develops Valley Water's large diameter Pipeline Management Strategy and a 10-year program for implementation tasks associated with the strategy. This program involves the inspection, planning, and design activities required for renewal of Valley Water's large pipelines and tunnels. The project includes the following objectives:

- Perform dewatering and internal inspections of Valley Water's pipelines and tunnels
- Renew distressed pipe sections as required; Renewal encompasses the actions of repair, rehabilitation, and replacement
- Perform condition assessment, maintenance, repair, coating, and other activities as required
- Replace line valves, flow meters, pipeline appurtenance assemblies, and piping as required
- Improve system performance by installing cathodic protection systems, acoustic fiber optic monitoring of prestressed concrete cylinder pipe, and transient pressure monitoring systems
- Development of a pipeline asset risk management system that includes geographic information system, databases, algorithms, models, data acquisition, program documents, and decision support systems
- Update Valley Water's Pipeline Maintenance Program and its associated Programmatic Environmental Impact Report for future inspection and rehabilitation efforts to Valley Water's pipeline system

The project schedule includes inspection and renewal work along the various pipelines and tunnels as identified below:

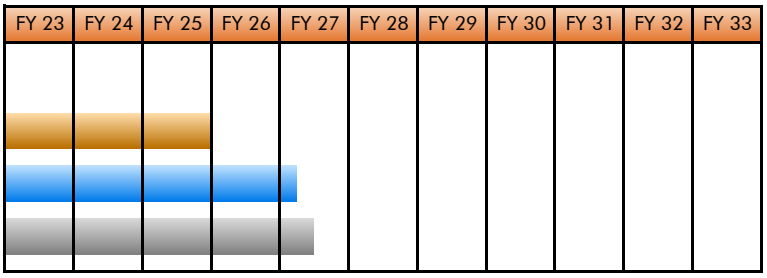
- FY 2024: West Pipeline Phase I
- FY 2025: West Pipeline Phase II
- FY 2026: East Pipeline
- FY 2027: Milpitas Pipeline

PROJECT LOCATION

SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	2,893
Design	21,837
Construct	125,261
Closeout	560
	151,915



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	82,540	22,241	27,291	10,225	8,227	1,391	0	0	151,915
with inflation	82,540	22,241	27,291	11,568	9,641	1,659	0	0	154,940

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	88,477	16,304	0	27,291	11,568	9,641	1,659	0	0	154,940

Adjusted Budget includes adopted budget plus any planned budget adjustment.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	154,940
Other Funding Sources	0
Total	**154,940**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Almaden Valley Pipeline Replacement**
Program	Water Supply – Transmission
Project No.	92304001
Contact	Emmanuel Aryee earyee@valleywater.org

Almaden Valley Pipeline Replacement work is underway

PROJECT DESCRIPTION

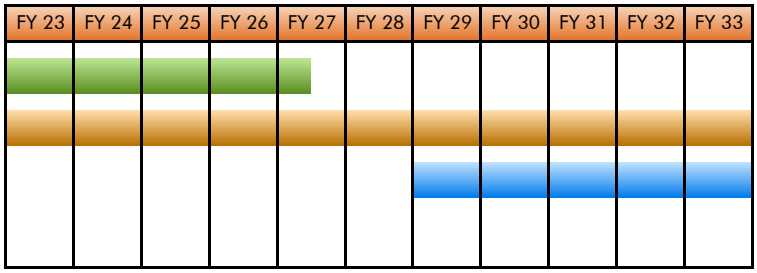
The Almaden Valley Pipeline (AVP) is a part of the Valley Water raw water delivery system. This pipeline is used to supply raw water to Valley Water's water treatment plants and groundwater recharge facilities. This pipeline provides access, with no redundancy, to local raw water sources from Valley Water's Anderson and Calero Reservoirs and imported water from the United States Bureau of Reclamation San Luis Reservoir and San Felipe system. The AVP was constructed in two major units/phases: Unit 1 was constructed in the 1960s and Unit 2 was constructed in the 1980s. The AVP is approximately 12 miles in length consisting of 72-inch up to 78-inch diameter prestressed concrete cylinder pipe (approximately 7.5 miles), welded steel pipe and bar wrapped pipe (approximately 4.2 miles).

PROJECT LOCATION

SCHEDULE & STATUS

July 2022 to November 2040

Phase	Cost
Plan	3,990
Design	16,444
Construct	58,809
Closeout	-
	79,252



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
92304001-Almaden Valley Pipeline Replacement	132	994	2,139	2,047	2,047	2,242	1,927	67,724	79,252
with inflation	132	994	2,139	2,235	2,336	2,674	2,401	100,417	113,329

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
92304001-Almaden Valley Pipeline Replacement	1,509	79	462	1,677	2,235	2,336	2,674	2,401	100,417	113,329

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	113,329
Other Funding Sources	0
Total	**113,329**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the design phase.

USEFUL LIFE: 50+ Years

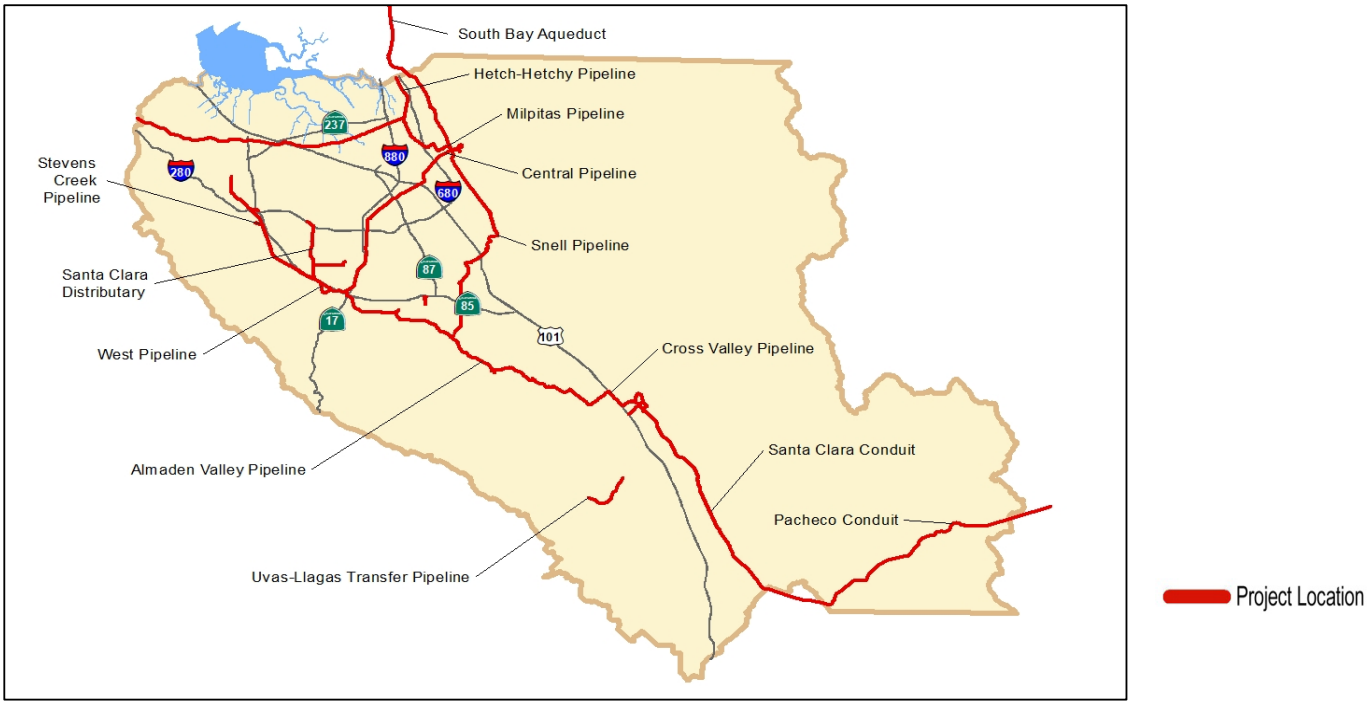
Project	**Distribution System Master Plan Implementation Project**
Program	Water Supply – Transmission
Project No.	95044001
Contact	Aaron Baker abaker@valleywater.org

Distribution System Master Plan Implementation

PROJECT DESCRIPTION

This project will develop a comprehensive 30-year implementation master plan to identify improvements to Valley Water's raw and treated water systems based on current demands, future growth, and emergencies. The project will optimize our raw and treated water distribution systems, evaluate retailer needs, recommend direct capital actions needed to protect existing distribution systems, and result in a programmatic EIR.

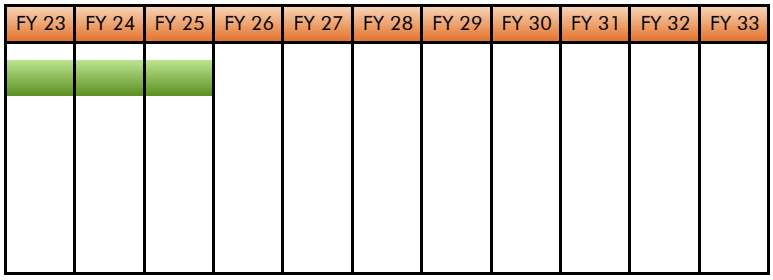
PROJECT LOCATION



SCHEDULE & STATUS

June 2020 to June 2025

Phase	Cost
Plan	8,519
Design	-
Construct	-
Closeout	-
	8,687



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
95044001-Distribution System Master Plan Implementation Project	5,053	917	1,933	784	0	0	0	0	8,687
with inflation	5,053	917	1,933	856	0	0	0	0	8,759

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
95044001-Distribution System Master Plan Implementation Project	5,240	730	0	1,933	856	0	0	0	0	8,759

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,759
Other Funding Sources	0
Total	8,759

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning effort. Projects and programs identified through the implementation plan will have their own operating cost impacts identified as they come online.

USEFUL LIFE: Not Available

Project	**FAHCE Implementation**
Program	Water Supply – Transmission
Project No.	92C40357
Contact	John Bourgeois jbourgeois@valleywater.org

Fish habitats, such as the one shown here, will be developed for habitat conservation

PROJECT DESCRIPTION

In 1996, Guadalupe-Coyote Resource Conservation District (GCRCD) filed a water rights complaint against the district alleging degraded fish, wildlife, water quality and other beneficial uses in Coyote Creek, Guadalupe River and Stevens Creek. The 1997 listing of Central California Coast Steelhead as a threatened species under Federal Endangered Species Act requires Valley Water to obtain permits to address the impacts of its water supply activities on aquatic habitat and instream flows.
In 2003, a settlement agreement was initialed by parties involved. Valley Water is the process of preparing a Fish Habitat Restoration Plan (FHRP) and associated environmental impact report to complete the water rights change petitions, resolve the water rights complaint and address issues raised in the 2003 Settlement Agreement. The Fish and Aquatic Habitat Collabrative Effort (FAHCE) consists of reservoir reoperations to support salmonid spawning, rearing and migration; provisions for fish passage and aquatic habitat restoration measures, and to adaptively manage FHRP implementation in the Guadalupe River, Coyote Creek and Stevens Creek watersheds (Three Creeks).

PROJECT LOCATION

Project sites will be located at reservoirs and streams within the Three Creeks Project Area, in the Guadalupe, Coyote and Stevens Creek Watersheds. Project site locations are yet to be determined and no map is provided.

SCHEDULE & STATUS

July 2027 to June 2035

Phase	Cost
Plan	145,108
Design	-
Construct	-
Closeout	-
	145,108

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total*
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
92C40357-FAHCE Implementation	0	0	0	0	0	4,739	4,379	135,990	145,108
with inflation	0	0	0	0	0	4,739	4,379	135,990	145,108

*Total Project Cost (TPC) updated from $122,420,000 to $145,108,000 to reflect the Board approved TPC on May 16, 2023 and update the project total. Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
92C40357-FAHCE Implementation	0	0	0	0	0	0	4,739	4,379	135,990	145,108

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	145,108
Other Funding Source	0
Total	**145,108**

OPERATING COST IMPACTS

Operating cost impacts will be dependent on the maintenance requirements of each site. Once the sites have been identified, operating costs will be determined based on the existing conditions and maintenance identified for each site.

USEFUL LIFE:

Not Available

Project	**IRP2 Additional Line Valves (A3)**
Program	Water Supply – Transmission
Project No.	26764001
Contact	Emmanuel Aryee earyee@valleywater.org

New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

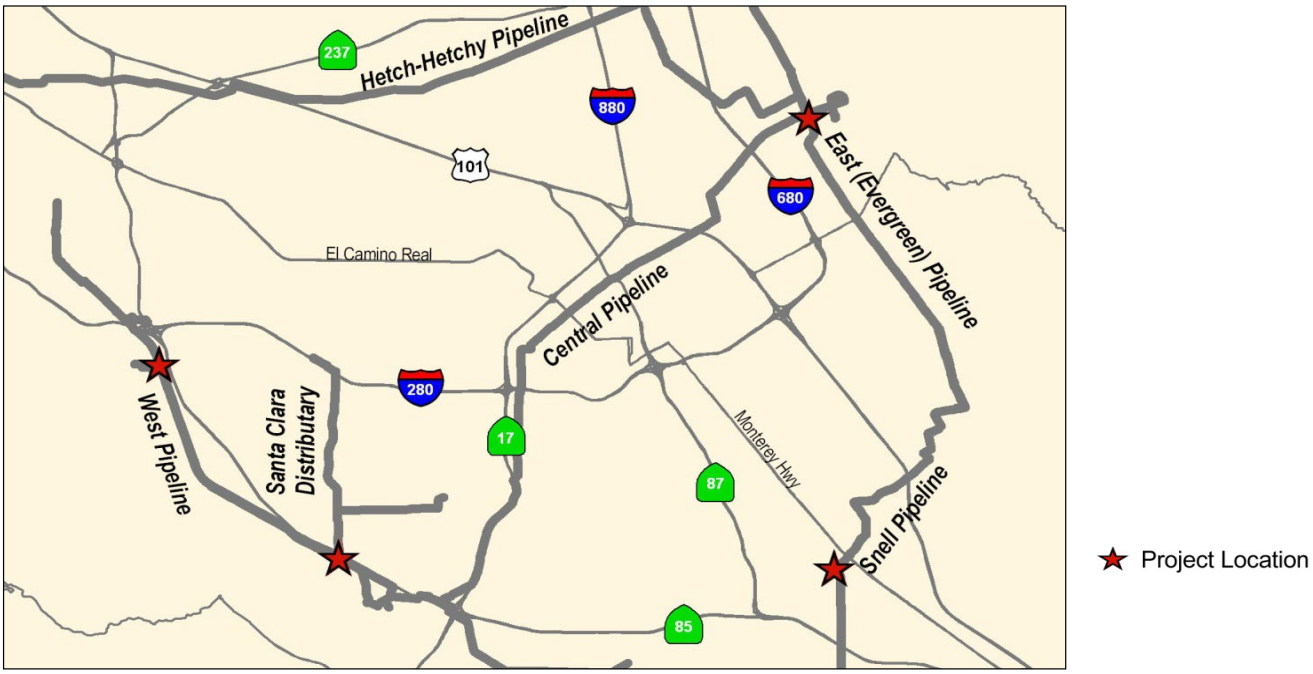
PROJECT DESCRIPTION

This project plans, designs, and constructs four additional line valves in the treated water distribution system, as defined in the Water Infrastructure Reliability Plan, Phase 2 (IRP2). Design and construction of this project will be in conjunction with work on the same pipelines under the 10-year Pipeline Inspection and Rehabilitation Project. The new line valves will be at various locations along the East, West, and Snell pipeline to accomplish the following objectives:

- Allow Valley Water to isolate sections of the treated water pipeline for general maintenance or to repair activities following a major seismic event
- Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project A3. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

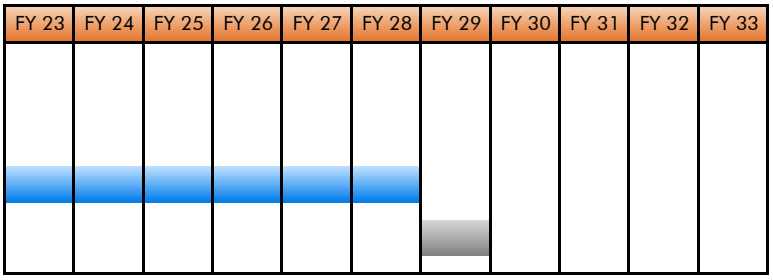


SCHEDULE & STATUS

July 2018 to June 2029

Line valve construction to be coordinated with pipeline maintenance and rehabilitation projects.

Phase	Cost
Plan	294
Design	1,916
Construct	12,192
Closeout	70
	15,453



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26764001-IRP2 Additional Line Valves (A3)	2,689	1,124	3,559	3,176	2,943	1,811	81	70	15,453
with inflation	2,689	1,124	3,559	3,609	3,465	2,199	101	91	16,837

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
26764001-IRP2 Additional Line Valves (A3)	2,593	1,220	0	3,559	3,609	3,465	2,199	101	91	16,837

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe Clean Water Fund	16,837
Other Funding Source	0
Total	**16,837**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately $28,000 per year, beginning in FY28.

USEFUL LIFE: 35 Years

Project	**Pacheco/Santa Clara Conduit Right of Way Acquisition**
Program	Water Supply – Transmission
Project No.	92144001
Contact	Emmanuel Aryee earyee@valleywater.org

Access to much of the San Felipe Division pipelines must currently be made through private property, due to a lack of easements, such as Bloomfield access at Vault 21-23

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements related to the acquisition of right-of-way along the South County pipelines to accomplish the following objectives:

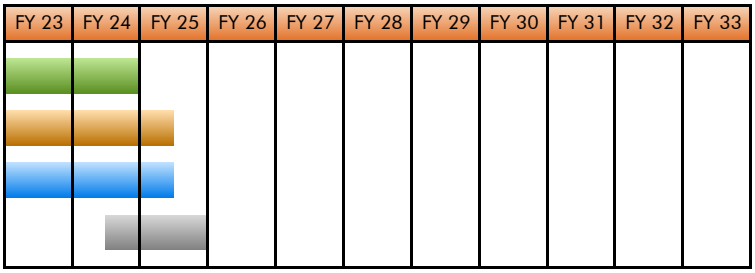
- Provide unlimited access to Valley Water-owned pipelines
- Reduce conflicts with local land owners and improve response time for emergency repairs or operations

PROJECT LOCATION

SCHEDULE & STATUS

July 2009 to June 2025

Phase	Cost
Plan	1,998
Design	2,385
Construct	1,572
Closeout	35
	6,109



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	2,180	2,300	1,433	195	0	0	0	0	6,109
with inflation	2,180	2,300	1,433	216	0	0	0	0	6,130

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	4,993	847	1,360	74	216	0	0	0	0	6,130

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,111
San Benito County Water District	19
Total	**6,130**

OPERATING COST IMPACTS

The completion of the project is anticipated to increase operating costs by approximately $8,000 per year, beginning in FY26.

USEFUL LIFE:

15-20 Years

Project	**SCADA Master Plan Implementation**
Program	Water Supply – Transmission
Project No.	95044002
Contact	Melanie Richardson mrichardson@valleywater.org

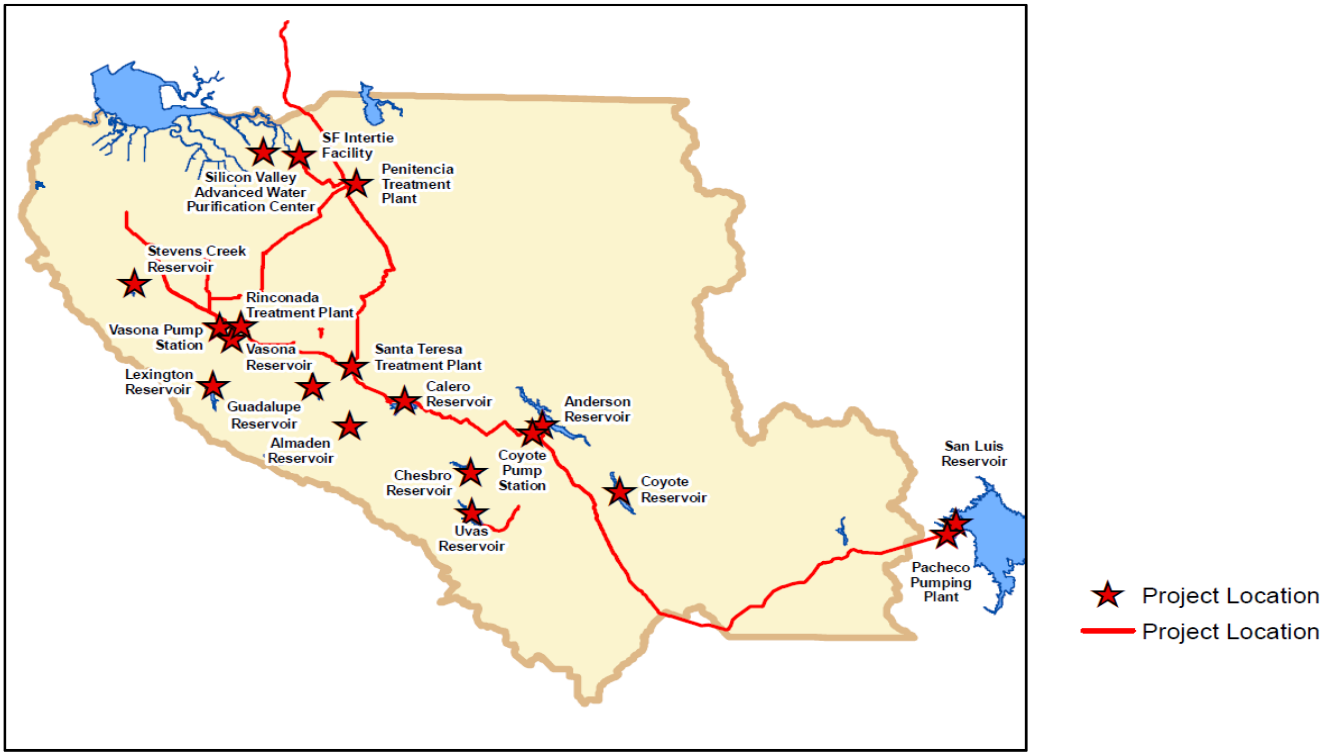
Process control / SCADA system

PROJECT DESCRIPTION

The process control/supervisory control and data acquisition (SCADA) systems, which serve a pivotal role in monitoring and controlling Valley Water's raw water conveyance system (including reservoirs and pumping plants), treatment plants, and distribution systems, are aging and in need of a coordinated replacement and upgrade.

The proper functioning of these systems is essential for meeting water demand, maintaining water quality, achieving regulatory compliance, and satisfying customer expectations. In addition, the process control/SCADA systems provide important data used accross the organization in the Operations, Maintenance, Water Quality, and Management divisions. Improved access to the data provided by this project will allow for more efficient management and operation of all the complex facilities and systems involved.

PROJECT LOCATION



SCHEDULE & STATUS

July 2020 to June 2025

Phase	Cost
Plan	4,245
Design	-
Construct	-
Closeout	-
	6,402

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
95044002-SCADA Master Plan Implementation	2,157	2,826	726	693	0	0	0	0	6,402
with inflation	2,157	2,826	726	757	0	0	0	0	6,466

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
95044002-SCADA Master Plan Implementation	3,749	1,571	337	389	757	0	0	0	0	6,466

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,466
Other Funding Sources	0
Total	**6,466**

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning and design effort. Projects identified through this implementation project will have their own operating cost impacts identified as they come online.

USEFUL LIFE: Not Available

Project	**Small Capital Improvements, Raw Water Transmission**
Program	Water Supply – Transmission
Project No.	92764009
Contact	Greg Williams gwilliams@valleywater.org

Major repair and replacement of turnout roofs and similar small raw water capital projects

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing raw water distribution facilities. These activities include identifying and fixing corrosion problems, replacing valves and other appurtenances and modifying water recharge facilities to avoid failure of the raw water transmission system and extend the life of the infrastructure. This project is part of Valley Water's 10-year Asset Management Program. Planned projects for FY24 include:

- Gilroy Reclamation Line rehab & replacement
- Dams operating system (valves, etc.) rehab & replacement
- Turnout roof replacements
- Stock spare parts for inventory
- Permanent Valley Habitat Plan buyout of all work areas within District Fee (for Cross Valley Pipeline and Recharge sites)
- Unanticipated pipeline repairs

PROJECT LOCATION

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and Asset Management Program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	1,010	1,020	2,236	850	650	740	5,932	12,438
with inflation	n/a	1,010	1,020	2,442	970	775	922	8,353	15,492

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	1,010	0	1,020	2,442	970	775	922	8,353	15,492

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	15,492
Other Funding Source	0
Total	**15,492**

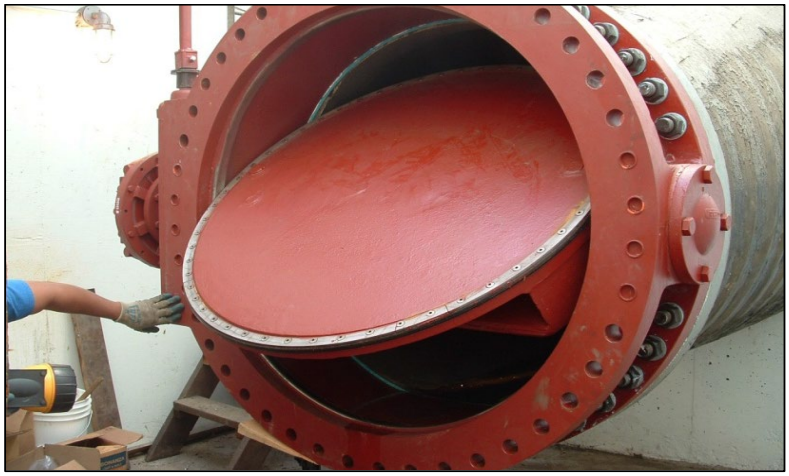
OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE:

Not Available

Project	**Small Capital Improvements, Treated Water Transmission**
Program	Water Supply – Transmission
Project No.	94764006
Contact	Greg Williams gwilliams@valleywater.org



Valve installation in the Piedmont Line Valve Vault; Similar small capital projects will be carried out at treated water transmission facilities according to the asset management plan

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing treated water distribution facilities, such as identifying and treating corrosion problems, replacing valves and other appurtenances and repairing or adding turnouts to avoid failure of the treated water transmission system and to extend the life of the infrastructure. This project is part of Valley Water's 10-year Asset Management Program. Planned projects for FY24 include:

- Install treated water meters
- Unanticipated pipeline repair(s)

PROJECT LOCATION

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and Asset Management Program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	297	276	321	42	0	40	233	1,209
with inflation	n/a	297	276	350	48	0	50	334	1,355

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	297	0	276	350	48	0	50	334	1,355

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	1,355
Other Funding Source	0
Total	**1,355**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Treated Water Isolation Valves**
Program	Water Supply – Transmission
Project No.	94084007
Contact	Emmanuel Aryee earyee@valleywater.org

New line valves similar to this will be installed at three locations within the treated water system

PROJECT DESCRIPTION

This project plans, designs, and constructs three (3) additional line valve appurtenances to accomplish the following objectives:

- Improve service levels to treated water system customers in a major hazard event or system outage
- Improve Valley Water's ability to take sections of the treated water distribution system out of service for maintenance activities

PROJECT LOCATION

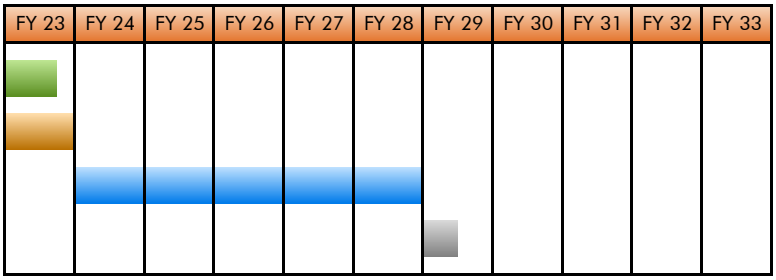
★ Project Location

SCHEDULE & STATUS

December 2018 to December 2028

Line valve construction to be coordinated with other pipeline maintenance and rehabilitation projects.

Phase	Cost
Plan	993
Design	456
Construct	6,164
Closeout	53
	7,667



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
94084007-Treated Water Isolation Valves	308	963	609	1,891	1,691	501	1,539	165	7,667
with inflation	308	963	609	2,159	1,987	607	1,936	215	8,784

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
94084007-Treated Water Isolation Valves	1,271	0	0	609	2,159	1,987	607	1,936	215	8,784

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,784
Other Funding Sources	0
Total	**8,784**

OPERATING COST IMPACTS

The operating budget impact for the three proposed line valve facilities is estimated to be $21,000 per year, beginning in FY28.

USEFUL LIFE: 50 Years

Project	**Vasona Pump Station Upgrade**
Program	Water Supply – Transmission
Project No.	92264001
Contact	Emmanuel Aryee earyee@valleywater.org

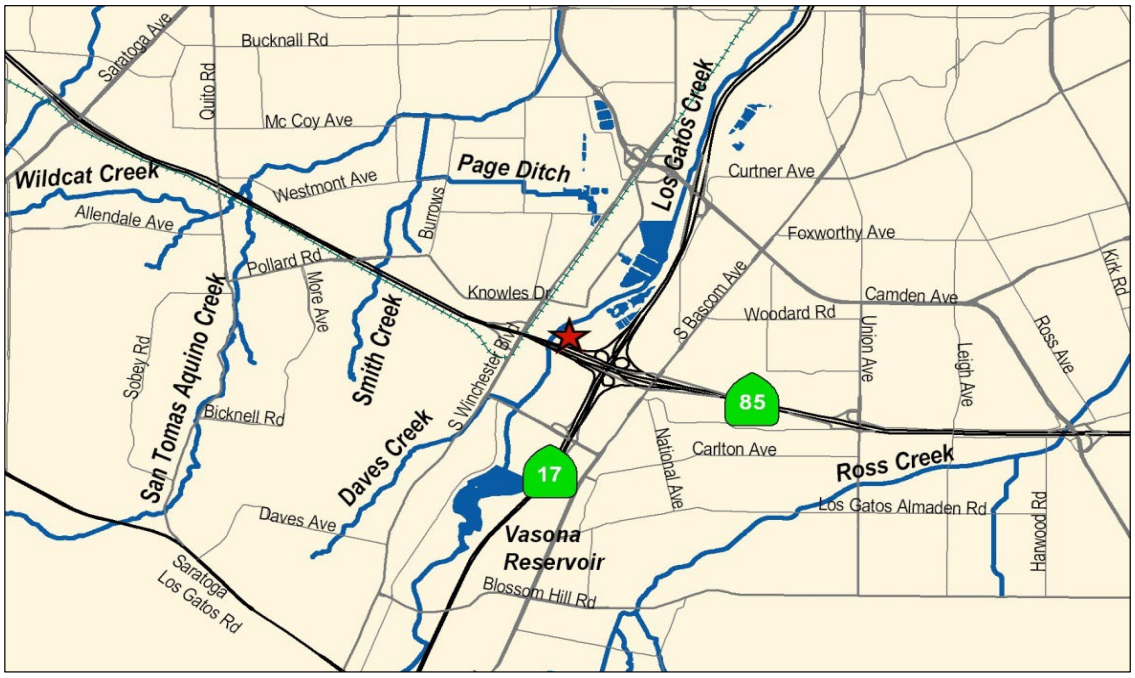
Vasona Pump Station

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Vasona Pump Station, including replacing aging pumps, motors, drives, valves, actuators, and electrical and control systems that have reached the end of their useful life; and adding one redundant pump. The project will accomplish the following objectives:

- Eliminate the risk of failure by replacing assets that have reached the end of their useful life, including four pumps (two 200 horsepower, two 400 horsepower) and associated motors, drives, electrical and control systems, as well as pump discharge and suction valves and actuators
- Increase operational flexibility and prepare for future capacity needs by adding one redundant pump and increasing the size of all pumps

PROJECT LOCATION

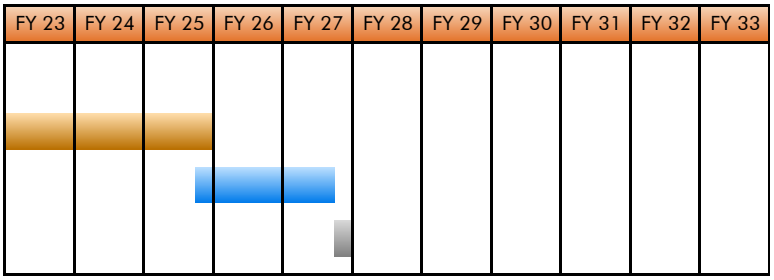


★ Project Location

SCHEDULE & STATUS

October 2019 to May 2027

Phase	Cost
Plan	1,448
Design	3,125
Construct	22,922
Closeout	70
	27,603



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
92264001-Vasona Pump Station Upgrade	1,998	750	1,463	8,419	12,284	2,690	0	0	27,603
with inflation	1,998	750	1,463	9,633	14,110	3,167	0	0	31,122

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
92264001-Vasona Pump Station Upgrade	3,828	922	2,002	0	9,094	14,110	3,167	0	0	31,122

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	31,122
Other Funding Sources	0
Total	**31,122**

OPERATING COST IMPACTS

The completion of this project is anticipated to reduce operating costs by approximately $70,000 per year, beginning in FY27.

USEFUL LIFE: 50 Years

Project	**PWTP Residuals Management**		
Program	Water Supply – Treatment		
Project No.	93234044	**Contact**	Emmanuel Aryee earyee@valleywater.org

Existing settling pond and residuals building to be replaced with new residuals management facility

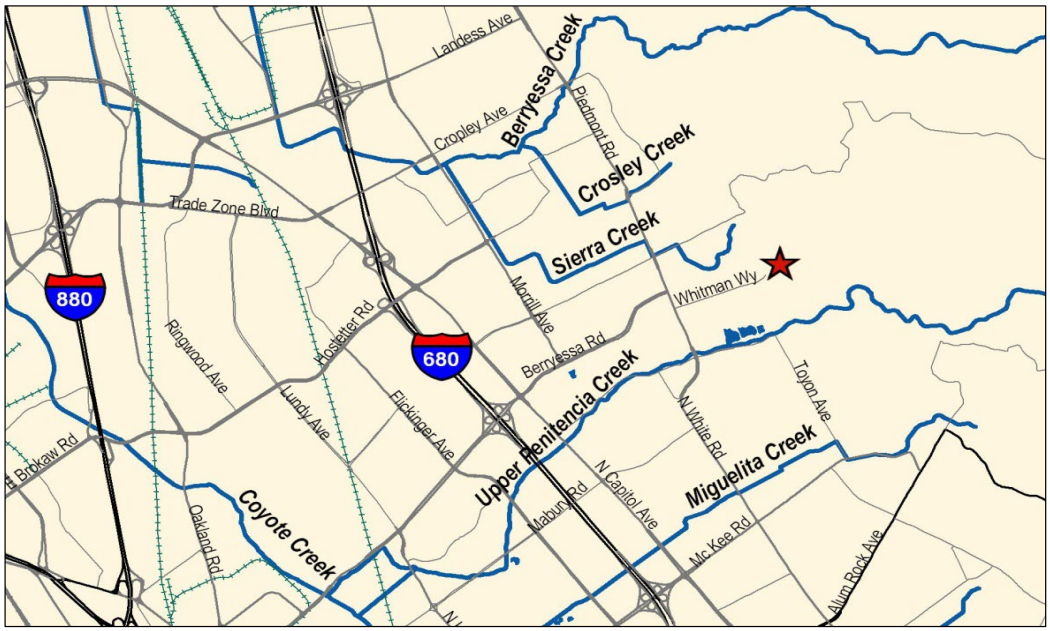
Existing belt press to be replaced with new residuals management facility

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Penitencia Water Treatment Plant (PWTP) residuals management process to accomplish the following objectives:

- Extend the useful life of the treatment plant
- Improve the efficiency of the residual management processes
- Minimize or eliminate (existing) operational constraints and impacts to the drinking water treatment process
- Minimize risk of discharge violations
- Improve the reliability of PWTP
- Install new washwater clarification and residuals management facilities

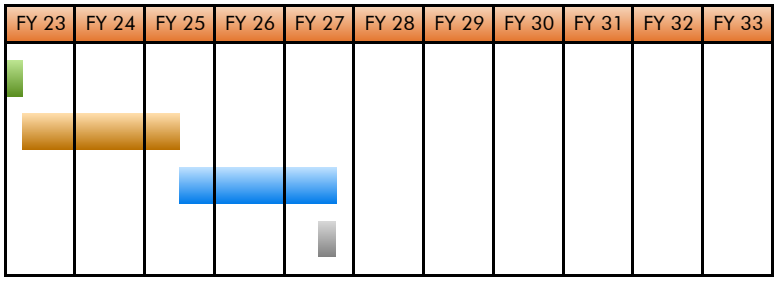
PROJECT LOCATION



SCHEDULE & STATUS

July 2020 to March 2027

Phase	Cost
Plan	1,324
Design	4,877
Construct	32,743
Closeout	75
	39,096



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93234044-PWTP Residuals Management	2,214	1,919	1,488	8,843	16,371	8,261	0	0	39,096
with inflation	2,214	1,919	1,488	10,070	18,849	9,590	0	0	44,130

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93234044-PWTP Residuals Management	2,276	1,857	0	1,488	10,070	18,849	9,590	0	0	44,130

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	44,130
Other Funding Sources	0
Total	**44,130**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE:

Not Available

Project	**RWTP Residuals Remediation**		
Program	Water Supply – Treatment		
Project No.	93294051s	**Contact**	Emmanuel Aryee earyee@valleywater.org

Centrifuge for mechanical dewatering of sludge

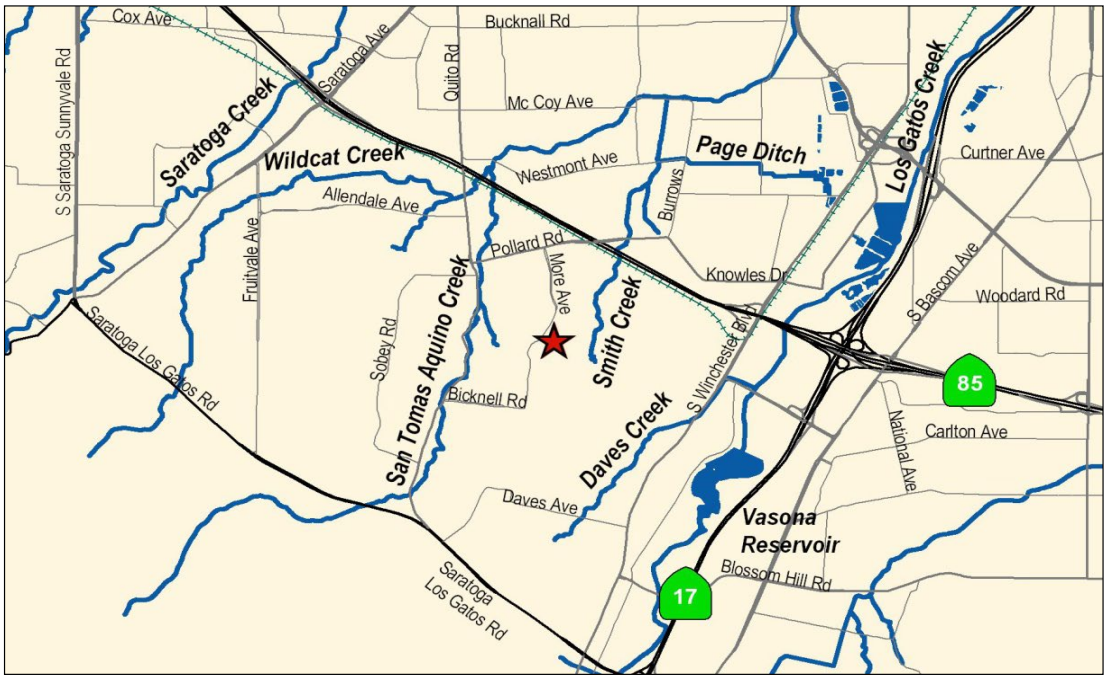
New gravity thickeners and mix tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes and will accomplish the following objectives:

- Extend the useful life of the treatment plant
- Improve the efficiency of the residual management processes
- Improve the reliability of RWTP

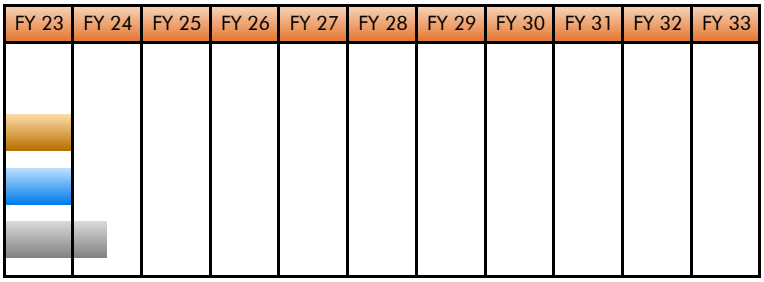
PROJECT LOCATION



SCHEDULE & STATUS

May 2018 to January 2024

Phase	Cost
Plan	2,238
Design	10,487
Construct	62,544
Closeout	181
	75,786



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
93294051-RWTP FRP Residuals Management	31,871	523	523	0	0	0	0	0	32,917
with inflation	31,871	523	523	0	0	0	0	0	32,917
93294058-RWTP Residuals Remediation	22,219	19,439	1,210	0	0	0	0	0	42,868
with inflation	22,219	19,439	1,210	0	0	0	0	0	42,868
TOTAL	**54,091**	**19,962**	**1,732**	**0**	**0**	**0**	**0**	**0**	**75,786**
with inflation	**54,091**	**19,962**	**1,732**	**0**	**0**	**0**	**0**	**0**	**75,786**

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
93294051-RWTP FRP Residuals Management	38,573	0	6,179	0	0	0	0	0	0	38,573
93294058-RWTP Residuals Remediation	23,262	18,397	0	1,209	0	0	0	0	0	42,868
TOTAL	61,835	18,397	6,179	1,209	0	0	0	0	0	81,441

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $5,655,000. Excess funding will be returned to reserves upon project completion.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	81,441
Other Funding Source	0
Total	**81,441**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease annual operating costs by approximately $200,000 per year, beginning in FY24.

USEFUL LIFE: Structures – 50 Years / Mechanical Equipment – 15 Years / Electrical Equipment – 10 Years

Project	**RWTP Ammonia Storage and Metering Facility Upgrade**
Program	Water Supply – Treatment
Project No.	93294059
Contact	Emmanuel Aryee earyee@valleywater.org

Rinconada Water Treatment Plant Aqua Ammonia Tank

PROJECT DESCRIPTION

The existing ammonia storage and metering facility (ASMF) at the Rinconada Water Treatment Plant (RWTP) in Los Gatos, California, includes a single ammonia storage tank, four metering pumps and associated instrumentation and control equipment. The existing ammonia storage tank was installed in the mid-1990s as part of the Toxic Gas Ordinance Compliance Project (TGO), and has a nominal capacity of 6,700 gallons for aqua ammonia (19% concentration). The current tank is reaching its end of life and will be replaced with two (2) tanks for reliability and safety. The four existing metering pumps will be replaced with new ones, and three new feed lines will be installed from the existing ASMF to the new Raw Water (RW) influent pipelines (north and south) and to the new chlorine contact basin (CCB), respectively.

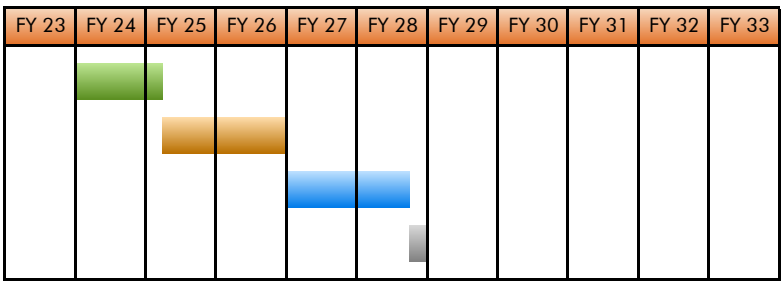
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2023 to June 2028

Phase	Cost
Plan	630
Design	1,424
Construct	4,100
Closeout	75
	6,229



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93294059-RWTP Ammonia Storage and Metering Facility Upgrade	0	0	630	460	504	2,610	2,025	0	6,229
with inflation	0	0	630	502	575	3,105	2,421	0	7,233

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93294059-RWTP Ammonia Storage and Metering Facility Upgrade	0	0	0	630	502	575	3,105	2,421	0	7,233

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	7,233
Other Funding Sources	0
Total	**7,233**

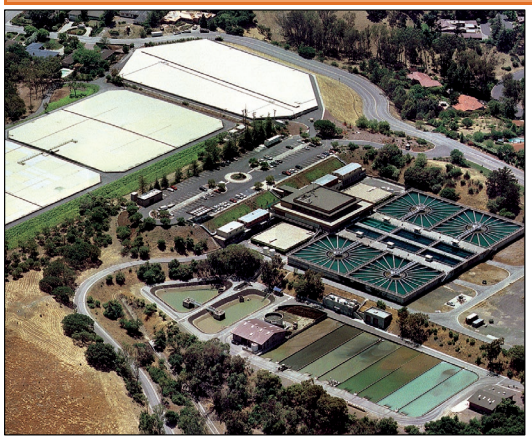
OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 40+ Years

Project	**RWTP Reliability Improvement**
Program	Water Supply – Treatment
Project No.	93294057

Contact Emmanuel Aryee earyee@valleywater.org



Aerial view of the Rinconada Water Treatment Plant facing west

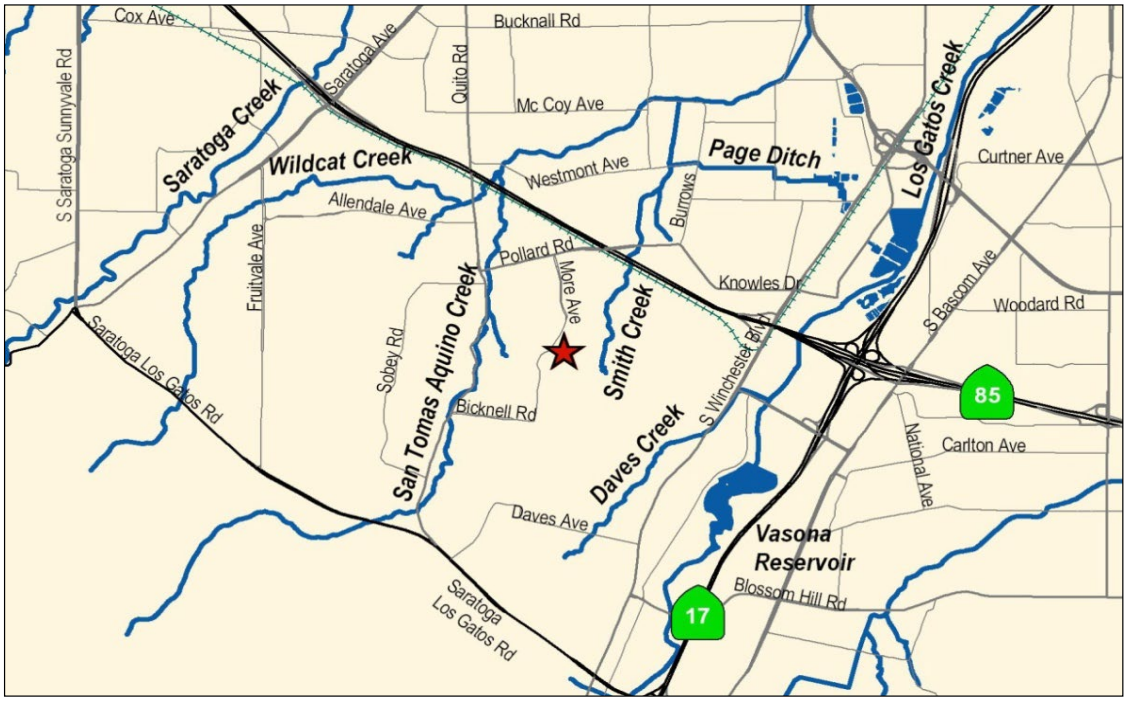
Artist rendering of the aerial view of the Rinconada Water Treatment Plant facing south after construction

PROJECT DESCRIPTION

This project plans, designs, and constructs new facilities at Rinconada Water Treatment Plant (RWTP) that will improve plant reliability by accomplishing the following objectives:

- Construct a new filter building
- Implement raw water ozonation
- Increase RWTP capacity to 100 million gallons per day

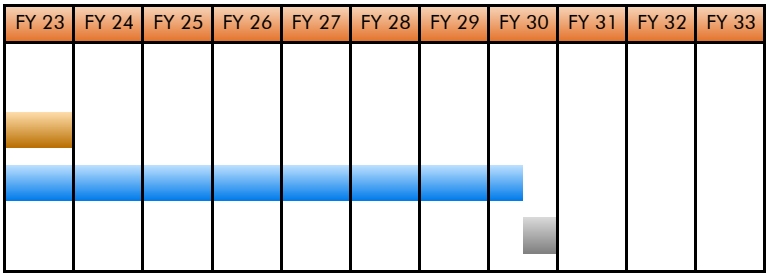
PROJECT LOCATION



SCHEDULE & STATUS

July 2009 to June 2030

Phase	Cost
Plan	1,984
Design	20,366
Construct	575,925
Closeout	120
	607,580



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93294057-RWTP Reliability Improvement	263,053	3,111	34,535	65,072	88,376	84,492	42,944	25,997	607,580
with inflation	263,053	3,111	34,535	68,464	93,560	89,229	46,710	29,181	627,843

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93294057-RWTP Reliability Improvement	272,486	6,036	12,358	22,177	68,464	93,560	89,229	46,710	29,181	627,843

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	627,843
Other Funding Source	0
Total	**627,843**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1,400,000 per year, beginning in FY31. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE:

Media – 20 Years / Structures – 50 Years / Equipment – 15 Years

Project	**Small Capital Improvements, Water Treatment**
Program	Water Supply – Treatment
Project No.	93764004
Contact	Greg Williams gwilliams@valleywater.org

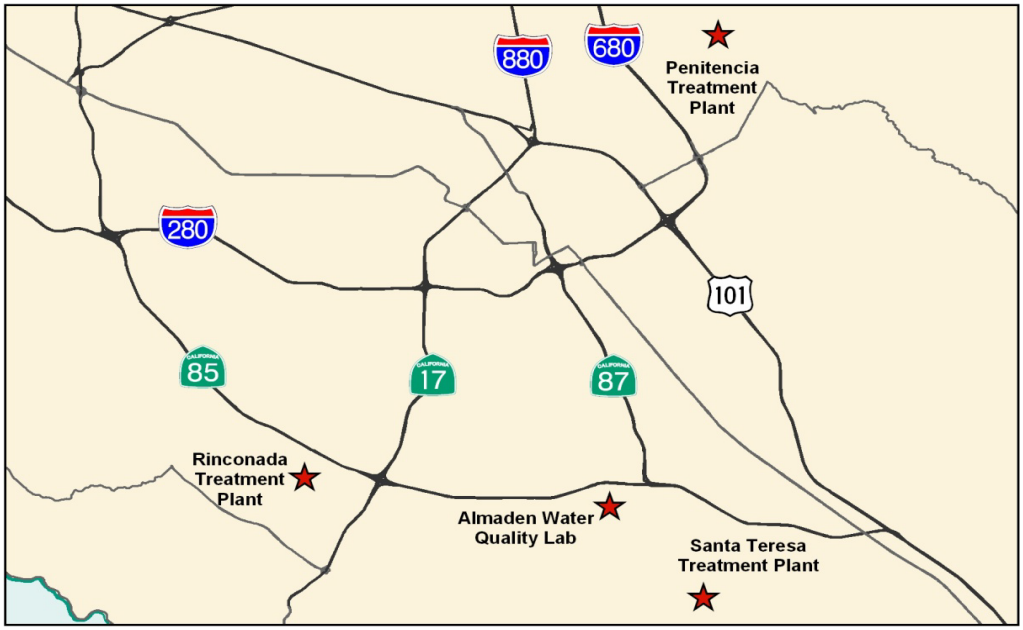
Sludge pond sediment removal at Santa Teresa Water Treatment Plant

PROJECT DESCRIPTION

This project provides resources for small capital improvements that replace or extend the life of an asset. This project implements a systematic approach of equipment replacement and renewal at the three water treatment plants and laboratory by designing and constructing improvements identified as part of Valley Water's 10-year Asset Management Program. Typical activities of this project include pump, motor, instrumentation and valve replacement; chemical tank repairs; and large-scale renewal and replacement activities like clarifier mechanism overhaul and replacement. Planned projects to complete for Santa Teresa Water Treatment Plant (STWTP), Penitencia Water Treatment Plan (PWTP), Rinconada Water Treatment Plant (RWTP), West Pipeline, and Silicon Valley Advanced Water Purification Center include:

- Provide engineering, supplies, and services support for the Sulfuric Acid Water Quality project
- Purchase Laboratory Information Management System
- Complete Small Capital Projects at STWTP, RWTP, PWTP and Campbell Well Field

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and Asset Management Program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	4,509	3,397	5,714	5,404	5,316	1,033	12,911	38,284
with inflation	n/a	4,509	3,397	6,240	6,167	6,339	1,287	18,641	46,580

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	4,509	0	3,397	6,240	6,167	6,339	1,287	18,641	46,580

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement Projects do not carry forward unspent funds from one fiscal year to the next. Excess funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	46,580
Other Funding Source	0
Total	**46,580**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**STWTP Filter Media Replacement**
Program	Water Supply – Treatment
Project No.	93284013
Contact	Emmanuel Aryee earyee@valleywater.org

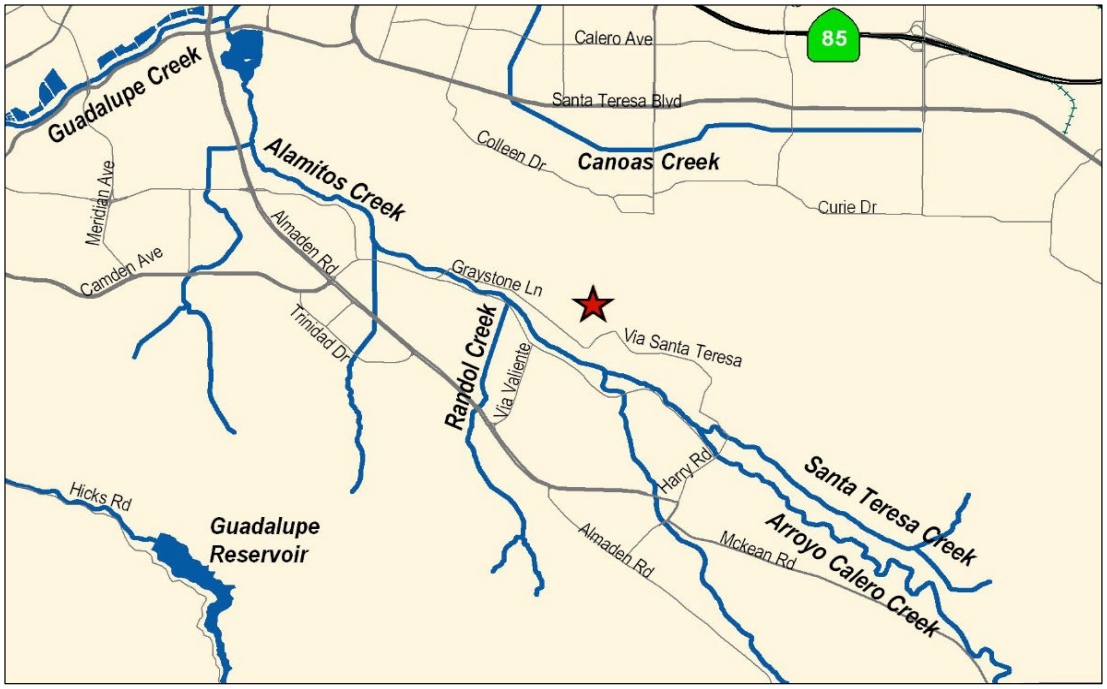
Santa Teresa Water Treatment Plant Filter Media Replacement

PROJECT DESCRIPTION

This project plans, designs and constructs improvements to the Santa Teresa Water Treatment Plant (STWTP) filter basins to ensure that STWTP maintains its operational capacity and continues to effectively serve customers, retailers, and the public with safe and high-quality drinking water. This project will accomplish the following objectives:

- Extend the service life of STWTP filter system
- Replace the filter media in all twelve filters with sand and granular activated carbon
- Replace the filter's damaged or deteriorated collection nozzles

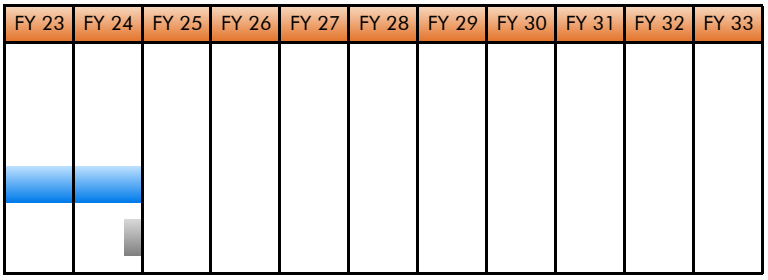
PROJECT LOCATION



SCHEDULE & STATUS

June 2019 to June 2024

Phase	Cost
Plan	85
Design	1,141
Construct	18,687
Closeout	75
	20,024



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93284013-STWTP Filter Media Replacement	2,381	12,543	5,100	0	0	0	0	0	20,024
with inflation	2,381	12,543	5,100	0	0	0	0	0	20,024

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93284013-STWTP Filter Media Replacement	3,460	11,464	0	5,100	0	0	0	0	0	20,024

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	20,024
Other Funding Sources	0
Total	**20,024**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE:

10-15 Years

Project	**Water Treatment Plant Electrical Improvement**
Program	Water Supply – Treatment
Project No.	93084004
Contact	Emmanuel Aryee earyee@valleywater.org

Motor control center switchboard

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to ensure the safety, operational reliability and maintainability of electrical systems at Penitencia Water Treatment Plant (PWTP) and Santa Teresa Water Treatment Plant (STWTP). The electrical systems will be upgraded to accomplish the following objectives:

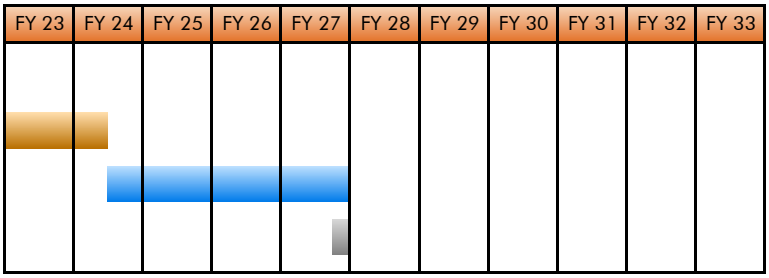
- Extend the service life of PWTP's and STWTP's electrical distribution systems
- Improve reliability and reduce maintenance at PWTP and STWTP

PROJECT LOCATION

SCHEDULE & STATUS

March 2020 to June 2027

Phase	Cost
Plan	314
Design	2,323
Construct	13,517
Closeout	75
	16,318



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93084004-Water Treatment Plant Electrical Improvement	1,311	915	1,150	5,929	3,663	3,350	0	0	16,318
with inflation	1,311	915	1,150	6,760	4,310	4,067	0	0	18,512

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93084004-Water Treatment Plant Electrical Improvement	1,526	2,412	1,712	0	6,198	4,310	4,067	0	0	18,512

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	18,512
Other Funding Sources	0
Total	**18,512**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease annual operating costs and will be determined during the construction phase.

USEFUL LIFE: 30+ Years

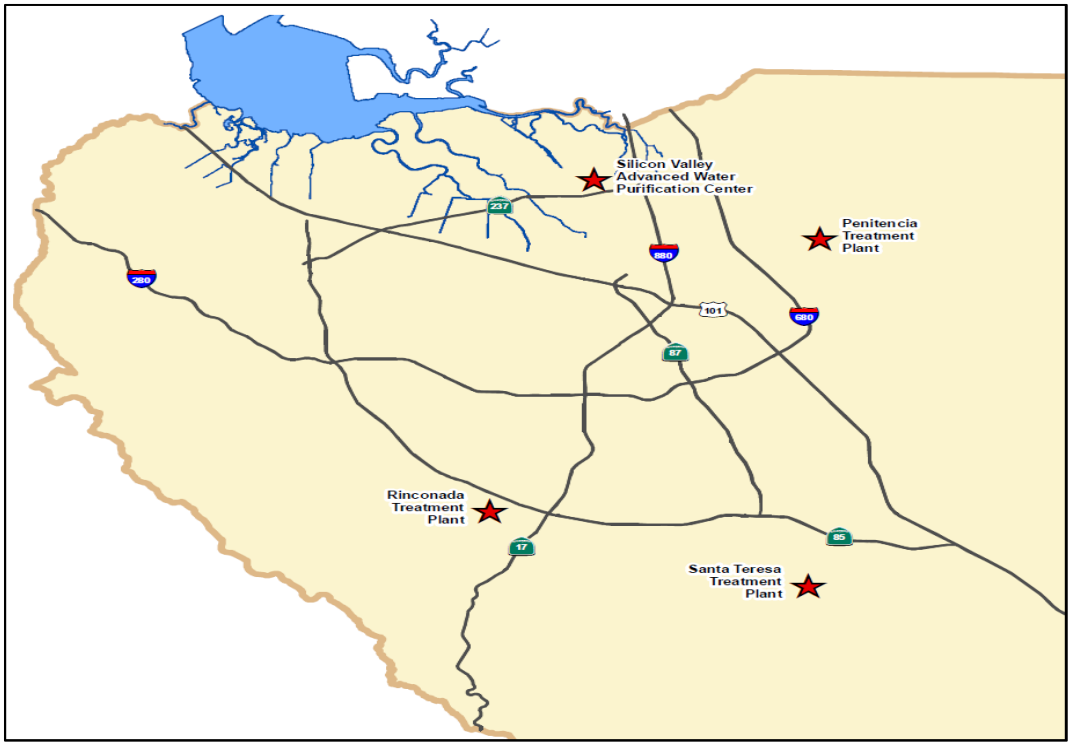
Project	**WTP Master Plan Implementation Project**
Program	Water Supply – Treatment
Project No.	93044001
Contact	Samuel Bogale sbogale@valleywater.org

Improvements in four water treatment facilities operated by Valley Water

PROJECT DESCRIPTION

This project will develop a comprehensive 30-year implementation master plan to determine the projects needed to repair, replace and/or upgrade Valley Water's water treatment plant infrastructure, address the increasingly stringent water quality regulations, and integrate with the recently completed Water Supply Master Plan. The implementation project will conclude with a programmatic environmental impact report. Facilities will include the Rinconada, Santa Teresa, Penitencia Water Treatment Plants and the Advanced Water Purification Center.

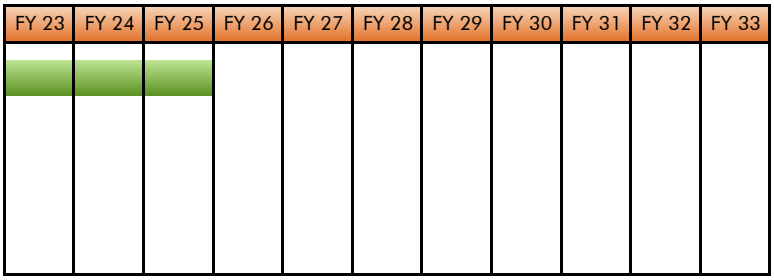
PROJECT LOCATION



SCHEDULE & STATUS

July 2020 to June 2025

Phase	Cost
Plan	5,767
Design	-
Construct	-
Closeout	-
	9,211



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
93044001-WTP Master Plan Implementation Project	4,191	1,210	3,060	750	0	0	0	0	9,211
with inflation	4,191	1,210	3,060	819	0	0	0	0	9,280

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
93044001-WTP Master Plan Implementation Project	4,669	732	0	3,060	819	0	0	0	0	9,280

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

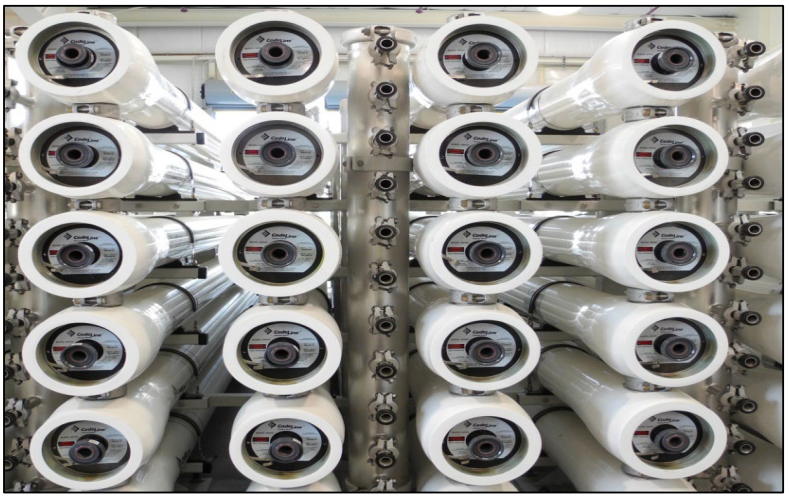
SCVWD Water Utility Enterprise Fund	9,280
Other Funding Sources	0
Total	9,280

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning effort that will be used to identify future repair and upgrade projects to Water Treatment Plants. Projects identified through this implementation project will have their own operating cost impacts identified as they come online.

USEFUL LIFE: Not Available

Project	**Purified Water Project**
Program	Water Supply – Recycled Water
Project No.	91304001s
Contact	Vincent Gin vgin@valleywater.org



Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

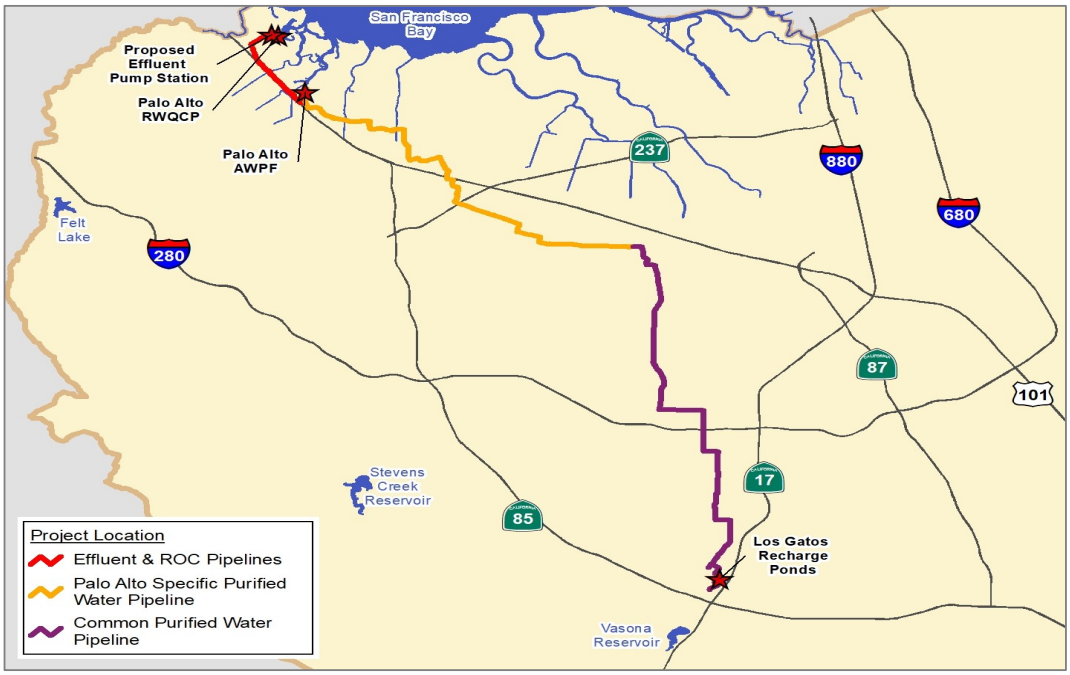
This project plans, designs, and constructs new infrastructure, proposed in Valley Water's 2040 Water Supply Master Plan, to accomplish the following objectives:

- Expand Valley Water's long-term water supply portfolio
- Ensure a drought-proof and reliable water supply for Silicon Valley
- In fiscal year 2023-24, a $1,000,000 reserve (San Jose Water Purification Reserve – Water Utililty Enterprise Fund) was created to advance a potential future potable reuse project at the Silicon Valley Advanced Water Purification Facility in San José

Project elements may include, but are not limited to:

- Design and construction of an Advanced Water Purification Facility (AWPF) located in Palo Alto, pump station, water conveyance pipelines to the existing Los Gatos Recharge System (LGRS) complex located in the City of Campbell, lateral pipelines and associated facilities
- The AWPF will produce up to 11,200 acre-feet per year (AFY) of purified water for indirect potable reuse at the LGRS

PROJECT LOCATION

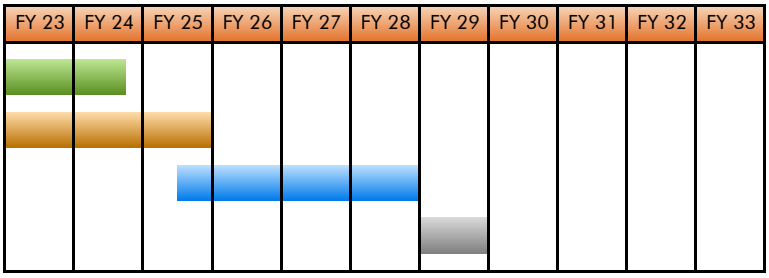


SCHEDULE & STATUS

April 2015 to June 2029

This expenditure plan excludes the P3 costs.

Phase	Cost
Plan	14,116
Design	19,236
Construct	14,079
Closeout	151
	63,172



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91304001-Purified Water Project	27,697	11,341	10,178	5,588	5,117	1,293	1,293	151	62,658
with inflation	27,697	11,341	10,178	6,102	5,839	1,542	1,611	197	64,507
P3 Entity	0	0	38,781	354,710	271,375	225,127	89,388	0	979,381
with inflation	0	0	38,781	401,978	319,262	273,785	112,370	0	1,146,175
91284009-Silicon Valley Advanced Water Purification Center Expansion	479	0	0	0	0	0	0	0	479
with inflation	479	0	0	0	0	0	0	0	479
91384001-Purified Water Pipelines	35	0	0	0	0	0	0	0	35
with inflation	35	0	0	0	0	0	0	0	35
TOTAL	**28,211**	**11,341**	**48,959**	**360,298**	**276,492**	**226,420**	**90,681**	**151**	**1,042,553**
with inflation	**28,211**	**11,341**	**48,959**	**408,080**	**325,101**	**275,327**	**113,981**	**197**	**1,211,196**

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91304001-Purified Water Project	28,104	10,934	0	10,178	6,102	5,839	1,542	1,611	197	64,507
P3 Entity	0	0	0	38,781	401,978	319,262	273,785	112,370	0	1,146,175
91284009-Silicon Valley Advanced Water Purification Center Expansion	479	0	0	0	0	0	0	0	0	479
91384001-Purified Water Pipelines	35	0	0	0	0	0	0	0	0	35
TOTAL	**28,618**	**10,934**	**0**	**48,959**	**408,080**	**325,101**	**275,327**	**113,981**	**197**	**1,211,196**

Adjusted Budget includes adopted budget plus a planned budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund*	1,211,196
Other Funding Sources	0
Total	**1,211,196**

*The Purified Water Project is planned to be delivered via a Public-Private Partnership (P3); the P3 entity will finance the costs upfront; the capital cost estimate made in the CIP is for informational purposes only.

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: Not Available

Project	**Land Rights - South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Project No.	91094001
Contact	Emmanuel Aryee earyee@valleywater.org

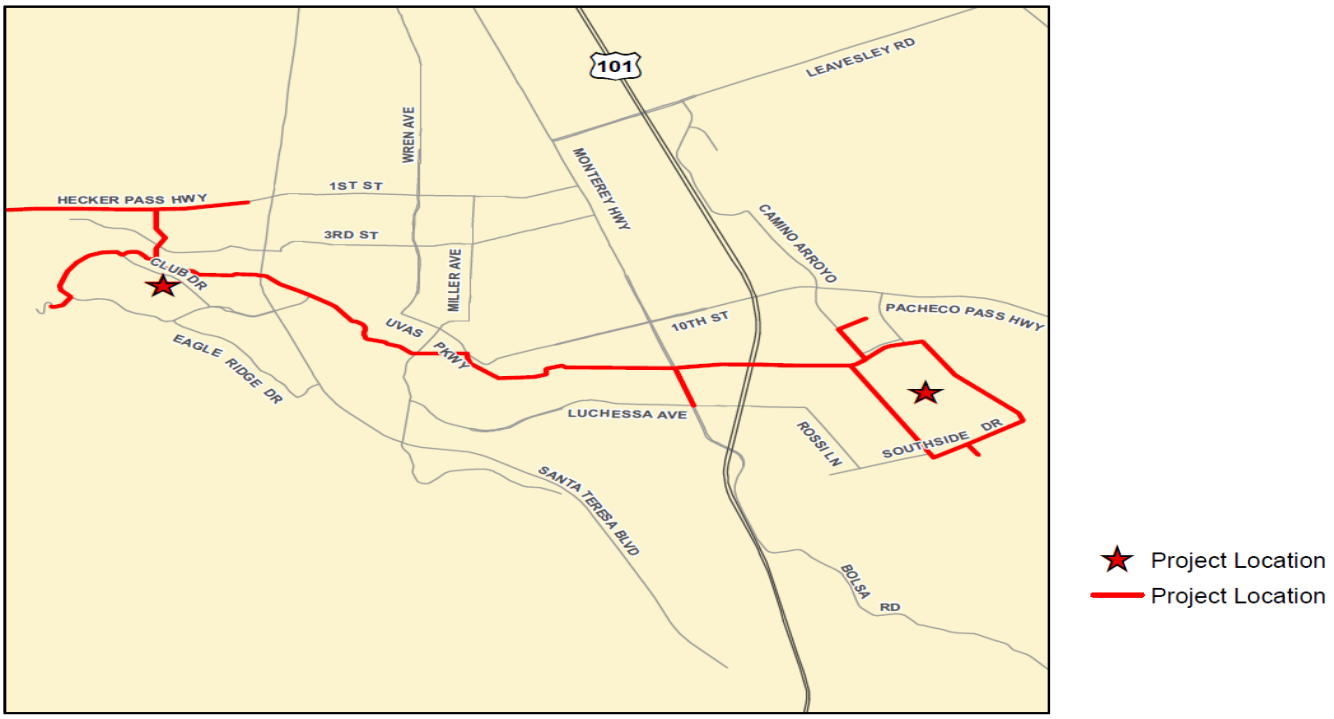
Restricted land access puts recycled water delivery at risk

PROJECT DESCRIPTION

Valley Water is contractually required to maintain and operate the recycled water pipeline in South County as a part of an agreement with the South County Regional Wastewater Authority (SCRWA). It has been determined that there are insufficient and expired land rights to Valley Water's recycled water pipeline in segments near the Eagle Ridge Golf Course and along Hecker Pass Road, which places Valley Water in a precarious legal position. In the event of a pipe failure, Valley Water's rights to legally operate and maintain the recycled water conveyance system may be challenged; thus, our commitment to deliver recycled water to its South County customers is at risk.

Valley Water's ongoing implementation of the SCRWA Recycled Water Master Plan is impetus to affirm the pipeline easements and Valley Water access rights. Delaying resolution of this outstanding issue may cause difficulties in maintaining the pipelines, and will negatively impact our long-term commitment to increase recycled water use in South County.

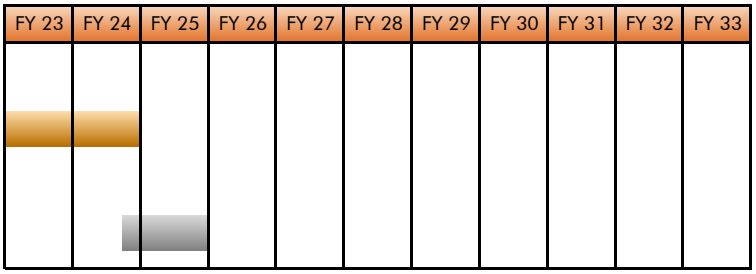
PROJECT LOCATION



SCHEDULE & STATUS

July 2020 to June 2025

Phase	Cost
Plan	321
Design	6,457
Construct	-
Closeout	28
	6,817



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91094001-Land Rights - South County Recycled Water Pipeline	116	3,691	3,010	0	0	0	0	0	6,817
with inflation	116	3,691	3,010	0	0	0	0	0	6,817

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91094001-Land Rights - South County Recycled Water Pipeline	547	3,260	0	3,010	0	0	0	0	0	6,817

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,817
Other Funding Sources	0
Total	**6,817**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: All land rights obtained will be held in perpetuity.

Project	**South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Project No.	91094007s
Contact	Emmanuel Aryee earyee@valleywater.org

12" RCW turnout connection at the intersection of Monterey Rd. and Luchessa Ave. in Gilroy, CA

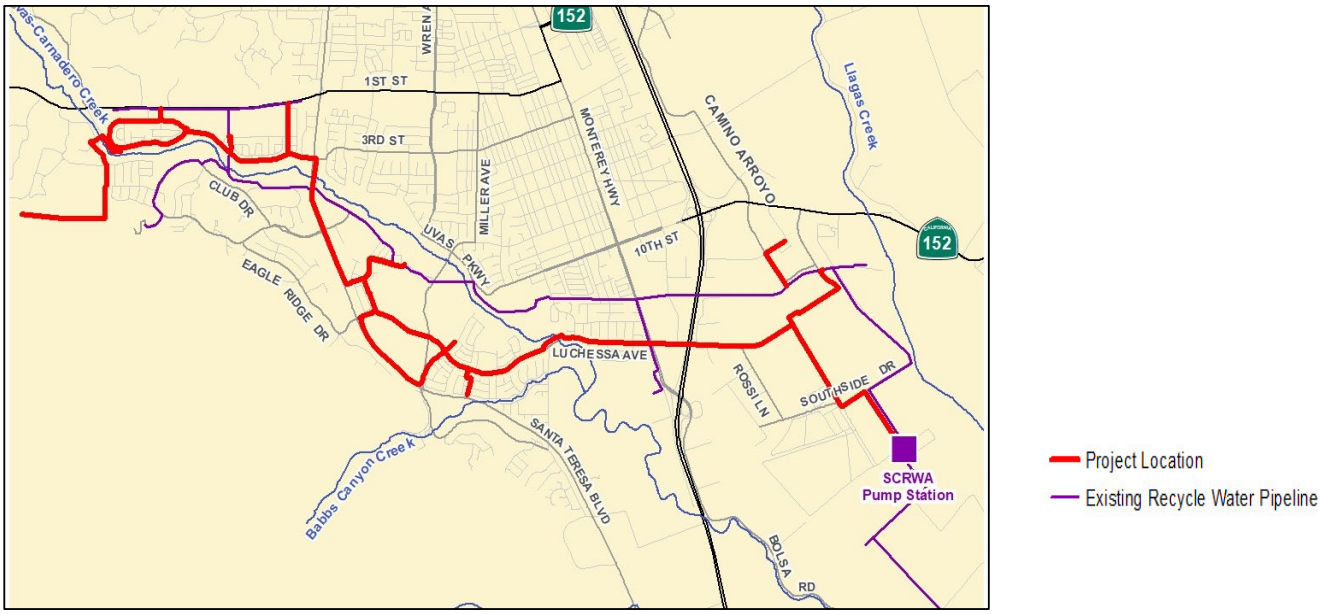
PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan (SCRWMP) accepted in December 2004, and updated in 2015, to improve system redundancy, reliability, and capacity. The current SCRWMP report presents a 20-year capital program for expanding water recycling in South County:

This project is accounted for in the following:

- 91094007 – Recycled Water South County Master Plan (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the South County Regional Wastewater Authority (SCRWA) treatment plant - Completed
- 91094008 – Recycled Water South County Master Plan (Short Term Phase 1A), installation of approximately 3,000 feet of 30-inch and 36-inch pipeline - Completed
- 91094009 – South County Recycled Water Pipeline (Short Term Phase 1B) will construct an additional 18,500 linear feet of pipeline
- 91094010 – South County Recycled Water Pipeline (Short Term Phase 2) will be completed through cost-sharing opportunities with the City of Gilroy and land developers to construct approximately 3,900 linear feet of 30-inch diameter pipe
- 91094010 – South County Recycled Water Pipeline (Long Term Phase 3) to be completed through cost-sharing opportunities with the land developers through coordination by the City of Gilroy to construct approximately 9,200 linear feet of 24-inch diameter pipe

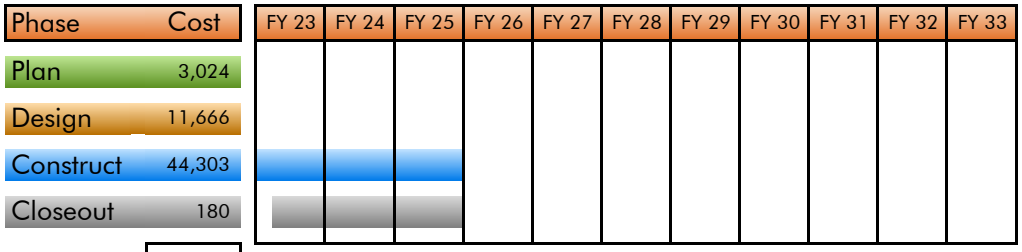
PROJECT LOCATION



SCHEDULE & STATUS

January 2012 to June 2025

The schedule chart shows Short Term Phase 1B and 2, plus Long Term Phase 3 projects only. The Immediate Term and Short Term Phase 1A projects are complete.



Total project cost may include expenditures not yet allocated to a specific phase.

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91094007-Recycled Water South County Master Plan - Immediate Term	3,257	0	0	0	0	0	0	0	3,257
with inflation	3,257	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Master Plan - Short Term 1A	5,391	0	0	0	0	0	0	0	5,391
with inflation	5,391	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	26,004	16,151	374	0	0	0	0	0	42,528
with inflation	26,004	16,151	374	0	0	0	0	0	42,528
91094010-South County Recycled Water Pipeline - Short Term 2, Long Term 3	7,589	543	484	25	0	0	0	0	8,640
with inflation	7,589	543	484	27	0	0	0	0	8,643
TOTAL	**42,241**	**16,693**	**858**	**25**	**0**	**0**	**0**	**0**	**59,817**
with inflation	**42,241**	**16,693**	**858**	**27**	**0**	**0**	**0**	**0**	**59,819**

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY22**	**FY23**		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Future**	
91094007-Recycled Water South County Master Plan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Master Plan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	35,359	6,795	0	374	0	0	0	0	0	42,528
91094010-South County Recycled Water Pipeline - Short Term 2, Long Term 3	8,108	511	488	0	24	0	0	0	0	8,643
TOTAL	**52,115**	**7,306**	**487**	**374**	**24**	**0**	**0**	**0**	**0**	**59,819**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	52,013
South County Regional Wastewater Authority	811
United States Bureau of Reclamation (USBR) - ARRA	1,295
United States Bureau of Reclamation (USBR) Title 16	5,700
Total	**59,819**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately $33,000 per year, beginning in FY26.

USEFUL LIFE: Pipelines – 50 Years / Pumps – 20 Years