

Santa Clara Valley Water District

Fiscal Years 2018-22 Capital Improvement Plan

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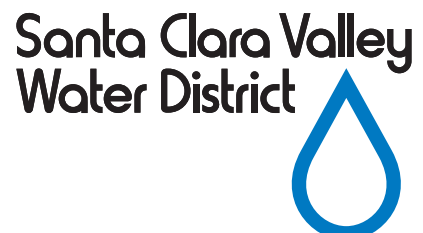


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Overview

OVERVIEW

The Santa Clara Valley Water District's (District) Fiscal Year 2018-22 Five-Year Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects from Fiscal Year 2017-18 through Fiscal Year 2021-22. The purpose of the CIP is to document planned District projects to help integrate District work with the larger community by aligning District planning with other local agency planning efforts.

The District's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within the District boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water related infrastructure to meet the needs of Santa Clara County.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officer Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and Public Contract Code definition of public works. They exceed \$50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories.

1. Acquisition of land for public purpose
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building
3. Addition to or expansion of an existing facility

4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than \$50,000
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue

over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than \$1.5 million
2. Project can be completed within 2 fiscal years
3. Rights-of-Way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Almaden Campus Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by the District that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of computers, vehicles and large equipment.

Mission

SANTA CLARA VALLEY WATER

The mission of the district is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

Overview

ALIGNMENT WITH ENDS POLICIES

The District plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under the District's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by District staff. Balancing the Ends Policies are the Executive Limitations, which set limits on staff activities in fulfilling the Ends.

Program plans or master plans are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operation staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Appendix E contains the project feasibility studies that are currently underway. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures the District's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP.

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations.
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
 - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
 - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

CIP PLANNING PROCESS

The District conducts an annual planning process for its Capital Improvement Program. The purpose of the planning process is to ensure the capital projects included in the CIP:

- meet the Board's priorities and contribute to the objectives of the District's various programs
- have identified funding for the duration of the projects
- are coordinated with the local jurisdiction's General Plans.

The CIP planning process is carried out in accordance with the following Executive Limitations.

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are aligned with the Board's capital priorities."

The annual CIP process is the responsibility of the CIP Committee comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution
- Prioritization of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities
- Financial analysis, to determine the capacity of the District's capital funding sources to fund the proposed capital projects
- Outreach to local jurisdictions within Santa Clara County, to coordinate the District's Capital Improvement Program with their General Plans

Overview

- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities
- Board adoption of the CIP plan

The annual CIP planning process starts with collecting information on proposed new capital projects in July, followed by preliminary scoping, priority and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, together with other long-term planning efforts of the District, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP is being reviewed by the cities and County the budget is being reviewed and finalized. The Board concludes the outreach on the CIP with a public hearing. The first year of the CIP is reconciled with the budget and the two documents are presented to the board for formal adoption in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the Capital Improvement Program. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board on three separate occasions for review and input. Early in the process the project list is presented to the board so they can provide direction to staff, ensuring that the document is developed in accordance with board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. The CIP is adopted by the Board in May following a public hearing.

The CIP Ad Hoc Committee met in May, July, September, October, and December of 2016 to review and discuss information related to the development of the CIP and provide input to staff. The Committee provided direction on issues ranging from resource utilization and funding requirements to the prioritization criteria that are applied to each capital project before it is added to the CIP. Over the course of 2016, the CIP Ad Hoc Committee's recommendations were incorporated into the CIP document or implemented by staff.

On January 10, 2017 the FY 2018-22 project list and prioritization criteria were reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2018-22 CIP:

- To fully fund the Water Supply projects in the FY 2018-22 CIP, an increase in the groundwater production charges of up to 9.9% in North County and 6.4% for South County will be required.
 - Two new projects with a combined cost of \$6.6 million were added to the CIP. They are; Berryessa Creek, from Lower Penitencia Creek to Calaveras Boulevard –Phase 3, planning and design only, and E. Discovery Management System.
 - The Expedited Purified Water Program has been separated into two projects. The first project would include expansion of the Silicon Valley Advanced Water Purification Center (SVAWPC) and the conveyance pipeline to the Los Gatos Recharge Ponds. The remaining potential elements of the Program address the District's long-term water supply portfolio beyond 2040. These elements have been removed from the five-year CIP, but will be included in the long-term forecast starting in FY2032. This has reduced the Water Utility category cost in the FY2018-22 CIP by \$345M.
- Resolution of several items in the Memorandum of Understanding being negotiated with the City of San Jose for the expansion of purified water production will require additional time. Staff estimates that an additional 1 to 2 years of collaborative effort may be needed. The Draft FY2018-22 CIP reflects this two-year shift.
- As work proceeds on the Anderson Dam Seismic Retrofit Project the investigations have shown that more extensive embankment retrofit is necessary, this will add about \$200M (2016 dollars) to the project cost.
 - The timing of the IRP2 line valves Project has been moved forward, staff plans to design and install these line valves in conjunction with the 10-year Pipeline Rehabilitation Project
 - The Watersheds Asset Rehabilitation Program (formerly the Erosion Repair Program), continues to be a priority. In addition to the approximately \$15M

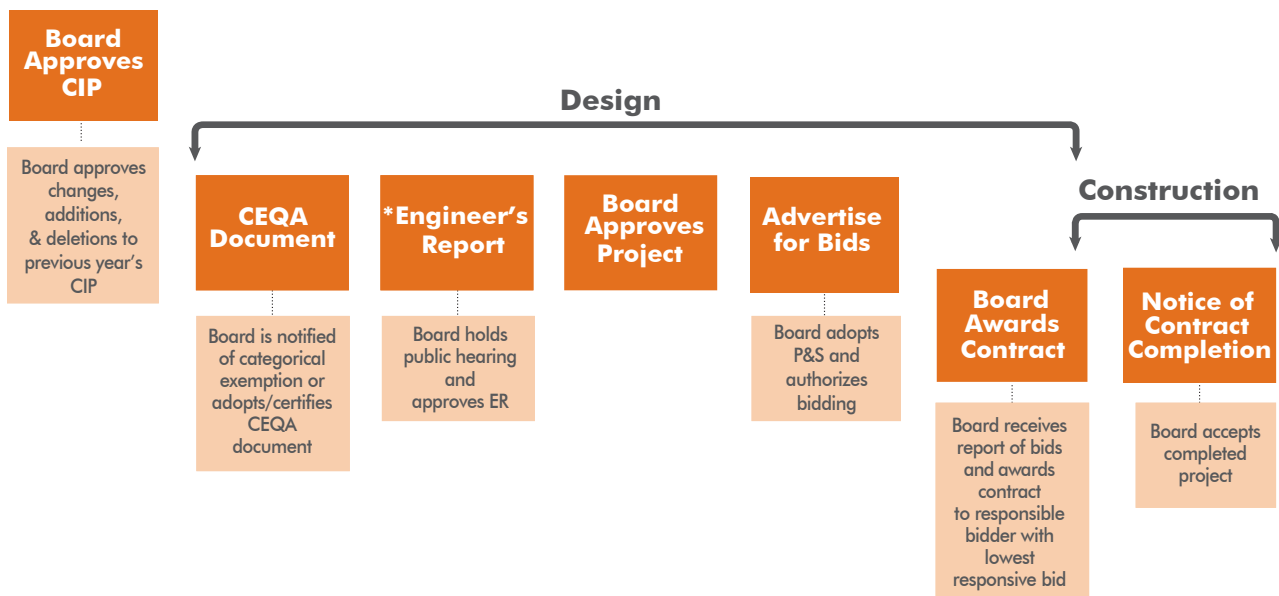
Overview

of work completed or currently underway, the FY 2018-22 CIP includes \$55M in funding for the program. More than 30 erosion sites along District-owned portions of creeks throughout the county would benefit from repair. Staff continues to monitor and evaluate the priority of individual sites and refine the multi-year program. Approximately \$80M to \$100M of Identified work remains unfunded.

6. To increase the visibility of the District's efforts to improve fish passage in local streams. Feasibility studies at Ogier Ponds, Metcalf Ponds and Stevens Creek are included in the Water Resources Stewardship section of the CIP.

Each project in the CIP goes through a planning phase, design phase and construction phase. The Board may determine to not implement a project based on various considerations such as financial constraints, environmental impacts or community desire during a project's planning or design phases. Approval of a capital project by the Board occurs at the end of the design phase when the Board approves the plans and specifications to solicit bids for construction of the project.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



* Board approval of the Engineer's Report is required only on projects with zone funding.

Overview

CIP PROCESS ALIGNMENT WITH ENDS POLICIES



Overview

FISCAL YEAR 2018-22 CIP SUMMARY

The recommended CIP for FY 2018-22 includes 63 priority projects to implement the goals and objectives of the District's program plans and master plans. These projects are grouped into five types of improvements.

- **Water Supply Capital Improvements**
29 projects contributing to Ends Policy E-2
- **Flood Protection Capital Improvements**
17 projects contributing to Ends Policy E-3
- **Water Resources Stewardship Capital Improvements**
8 projects contributing to Ends Policy E-4
- **Buildings and Grounds Capital Improvements**
3 projects supporting District efforts to achieve the Ends Policies
- **Information Technology Capital Improvements**
6 projects supporting District efforts to achieve the Ends Policies

Each of the 63 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for the District are property taxes, a special parcel tax and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. The District continues to receive a small amount of revenue from

benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

In November 2012 the voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water). This program replaced the Clean, Safe Creeks Program that would sunset in 2016. Safe, Clean Water has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water program will provide over \$750 million of special parcel tax revenue for operations and capital projects.

The District aggressively pursues external funding to supplement its principal revenue when practical. In recent years District projects benefited from \$43.4 million in American Recovery and Reinvestment Act (ARRA) funding. A number of District projects are receiving substantial State funding through grants from the Department of Water Resources (DWR) either directly or through local partner agencies. For a complete listing of grants and partnerships see Appendix C.

- \$25 million for Lower Silver Creek from DWR
- \$8 million for San Francisco Creek through the Joint Powers Authority
- \$30 million Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR
- \$2.5 million for Wolfe Road Recycled Water Pipeline from DWR

DISTRICT PRIORITIES	District Funds				
Type of Improvement	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
Water Supply	💧			💧	
Flood Protection		💧		💧	
Water Resources Stewardship	💧	💧		💧	
Buildings and Grounds			💧		
Information Technology	💧				💧

This chart identifies which types of improvement are associated with each of the District's five capital funds.

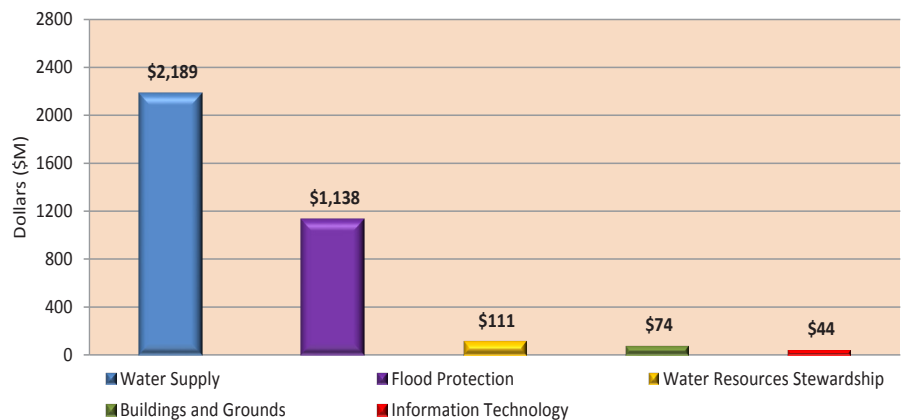
Overview

The estimated total funding required to implement the 63 projects defined in the CIP is \$4.03 billion. The District has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the \$4.03 billion total funding, \$691 million is expected from the District's various partners, such as the U.S. Army Corps of Engineers (USACE), and \$3.343 billion from the District. A list of projects that are funded cooperatively with the District's partners is summarized in Appendix C. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed, or
- Funds that are reimbursed by the partners after the District advances the needed funds.

Of the \$691 million that is expected from the District's partners, \$213 million is advanced by the District and reimbursed later. This \$213 million is included in the CIP, and increases the District's total funding requirement from \$3.343 billion to \$3.556 billion, to ensure that the District has adequate funding to advance the reimbursement.

CIP Funding by Type of Improvement

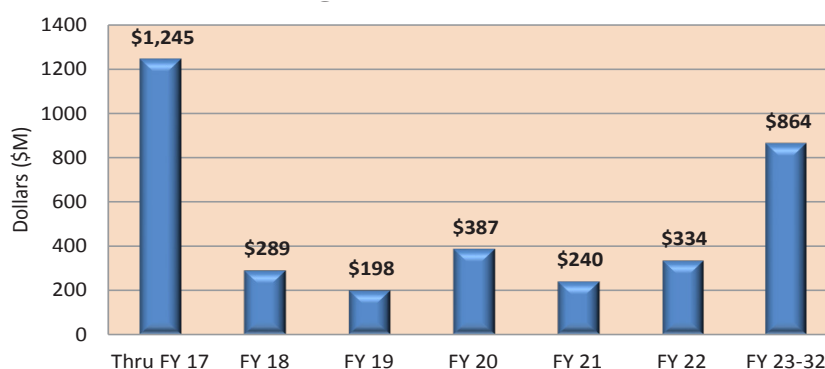


The chart above shows the distribution by type of improvement, of the \$3.556 billion total CIP funding as planned in the FY 2018-22 CIP.

The chart above shows how the \$3.556 billion to implement the 63 projects is allocated to each of the five Types of Improvements.

Of the \$3.556 billion in total funding for the 63 projects identified in the CIP, the Board has appropriated \$1.245 billion in prior years (through June 30, 2017 the end of Fiscal Year 2016-17). This year's CIP process identified additional funding needs of \$2.311 billion to complete the projects in the CIP, with \$289 million allocated in Fiscal Year 2017-18 and a total of \$2.023 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.

CIP Funding Schedule



The chart above shows how the \$3.556 billion is distributed by fiscal year.

Overview

CIP Funding Schedule by Type of Improvement and Funding Sources (\$K)

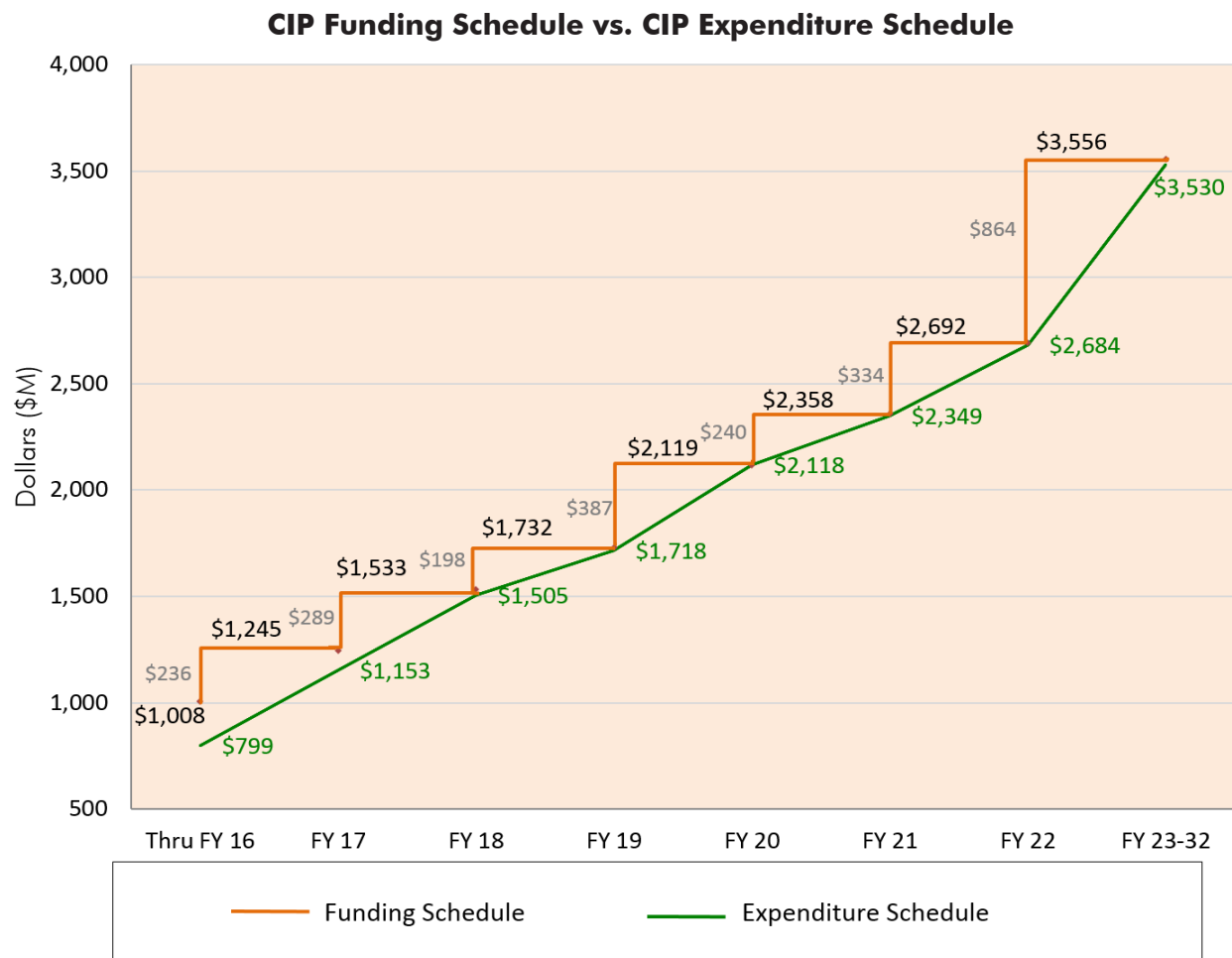
	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	306,513	119,084	24,451	99,677	113,488	328,801	175,507	283,992	734,513	2,161,575
Safe, Clean Water and Natural Flood Protection Fund	1,807	892	-	12,672	302	1,046	1,314	9,244	192	27,469
Water Supply Total	308,320	119,976	24,451	112,349	113,790	329,847	176,821	293,236	734,705	2,189,044
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	271,531	49,538	30,583	49,736	32,535	15,297	15,839	15,373	20,352	470,201
Safe, Clean Water and Natural Flood Protection Fund	385,116	48,632	14,028	113,180	29,938	18,277	24,475	13,031	34,660	667,309
Flood Protection Total	656,647	98,170	44,611	162,916	62,473	33,574	40,314	28,404	55,012	1,137,510
WATER RESOURCES STEWARDSHIP										
Water Utility Enterprise Fund	765	-	-	1,356	3,627	749	775	802	7,886	15,960
Watershed Stream Stewardship Fund	18,317	2,225	1	1,734	2,885	2,429	775	802	7,886	37,052
Safe, Clean Water and Natural Flood Protection Fund	5,124	3,784	396	5,134	10,980	15,033	9,510	802	7,886	58,253
Mitigation Total	24,206	6,009	397	8,224	17,492	18,211	11,060	2,405	23,658	111,265
BUILDINGS AND GROUNDS										
General Fund	10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804
Buildings and Grounds Total	10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	740	180	20	1,301	555	198	-	103	9,777	12,854
General Fund	1,199	-	-	-	-	-	-	-	-	1,199
Information Technology Fund	6,585	4,147	3,025	1,957	1,791	846	965	438	13,591	30,320
Information Technology Total	8,524	4,327	3,045	3,258	2,346	1,044	965	541	23,368	44,373
TOTAL	1,008,176	236,471	86,743	288,809	198,472	386,677	239,547	333,575	864,269	3,555,996
CUMULATIVE TOTAL	1,008,176	1,244,647		1,533,456	1,731,928	2,118,605	2,358,152	2,691,727	3,555,996	

FY 2016-17 Funds to be reappropriated

Overview

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately \$87 million of the already appropriated \$1.245 billion is not spent and is reappropriated to Fiscal Year 2017-18 for continued use

in those same projects in amounts consistent with the project expenditure schedule for Fiscal Year 2017-18. The following chart explains the relationship between the CIP Funding Schedule and Expenditure Schedule.



Overview

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Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

The District 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, "There is a reliable, clean water supply for current and future generations."

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, the District 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. Projects to replace and update the treated water valves and residuals management process, and to seismically retrofit the Operations Building are nearing completion. 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 2015 and will continue for approximately 5 years. It will be constructed in a phased approach that will allow the plant to continue operations throughout the construction process.

With a significant portion of the Water Supply infrastructure approaching fifty to sixty 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 Capital Improvement Program in recent years, as shown in the CIP.

The District 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 District dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability is critical for seismic stability. Several of the District reservoirs have operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how the District'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, the consultant

Water Supply Capital Improvements

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 (\$445 million) was initiated in January 2011.

The District 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.

Major Capital Improvements Identified in CIP

Storage:

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Calero Dam Seismic Retrofit
- Guadalupe Dam Seismic Retrofit

Transmission:

- 10-Year Pipeline Rehabilitation
- FAHCE Implementation
- Main and Madrone Pipeline Rehabilitation
- Penitencia Delivery Main/Force Main Seismic Retrofit
- Vasona Pumping Plant Upgrades

Treatment:

- IRP2 WTP Operations Buildings Seismic Retrofit
- PWTP Residuals Management
- RWTP Reliability Improvement

Recycled Water:

- South County Recycled Water Pipeline
- Expedited Purified Water Program

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new water supply projects proposed to be added to the Fiscal Year 2018-22 CIP reflect the Board's priorities. The priority criteria used to evaluate these projects is included in Appendix A.

A financial analysis of the Water Utility Enterprise Fund, the funding source for water supply capital improvements, was performed to determine the limitations to funding the projects proposed for the Fiscal Year 2018-22 capital program. Results of this year's prioritization process and financial analysis are summarized in Appendix B.

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 the District has one Water Utility fund, the District has two 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

Water Supply Capital Improvements

the imported water, the District chose to build 3 water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. The south zone on the other hand overlays the Coyote and Llagas groundwater subbasins and is more sparsely populated. South County relies primarily on groundwater to serve roughly 50% agricultural and 50% non-agricultural water needs. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County. A small amount of imported water is used to recharge the groundwater subbasins in the South County. The groundwater subbasins have the ability to absorb the recharge and remain healthy under normal water usage levels unlike the North County where several sections of the groundwater basin are very sensitive, which is the main reason for building the treatment plant system long ago.

To fully fund the Water Supply projects in the FY 2018-22 CIP an increase in the groundwater production charges up to 9.9% in Zone W-2 (North County) and 6.4%

in Zone W-5 (South County) will be required in FY 2017-18. Preliminary projections indicate the need for annual rate increases of 10.9% on average in subsequent years for North County and 5.7% on average for South County.

The majority of capital projects included in the 5-Year CIP 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 proof source of water.

The District 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 including updating the Water Supply Master Plan, which is scheduled to be presented to the Board in December 2017. These studies will likely identify a number of new capital projects, some of which may require significant capital investment.



Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's priority process and 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 2016-17.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
STORAGE FACILITY											
91854001	Almaden Dam Improvements	10,038	2,621	-	520	541	562	538	27,590	17,184	59,594
91864005	Anderson Dam Seismic Retrofit (C1)	31,236	29	-	7,979	3,452	147,292	83,915	107,297	63,341	444,541
91084020s	Calero and Guadalupe Dams Seismic Retrofits	17,533	9,267	1,954	810	23,925	67,786	27,036	7,533	-	153,890
91C40377	Coyote Pumping Plant ASD Replacement	-	-	-	-	541	1,879	9,289	4,872	-	16,581
91234011	Coyote Pumping Plant Warehouse	713	2,227	2,156	2,904	546	-	-	-	-	6,390
91084019	Dam Seismic Stability Evaluation	18,812	-	1,145	-	-	422	468	-	-	19,702
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	3,608	-	679	1,179	-	726	94	24,905	31,191
TRANSMISSION FACILITY											
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	15,965	20,157	11,474	4,502	8,231	36,899	97,228
92C40357	FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
26C40349	IRP2 Additional Line Valves (A3)	-	-	-	-	-	1,046	1,314	9,244	192	11,796
26564001	Main & Madrone Pipelines Restoration (A1)	1,807	892	-	12,672	302	-	-	-	-	15,673
91214001	Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	12	-	-	-	-	-	-	6,934
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	1,469	1,255	251	1,639	317	-	-	-	4,818
94384002s	Penitencia Delivery Main/Force Main Seismic Retrofit	24,940	9,647	-	681	-	-	-	-	-	35,268
92374005	SCADA Remote Architecture & Communications Upgrade	402	374	521	-	382	180	936	852	3,909	7,035
92764009	Small Capital Improvements, Raw Water Transmission	n/a	-	-	110	-	51	-	94	3,213	3,468
94764006	Small Capital Improvements, Treated Water Transmission	n/a	-	-	58	81	-	-	-	-	139
92264001	Vasona Pumping Plant Upgrade	-	119	-	1,270	1,720	17,130	82	-	-	20,321
TREATMENT FACILITY											
93084011	Fluoridation at WTPs	6,875	3,009	56	32	-	-	-	-	-	9,916
93764003	IRP2 WTP Ops Bldgs Seismic Retrofit	20,992	1,167	-	346	-	-	-	-	-	22,505
93234043	PWTP Clearwell Recoating & Repair	5,919	550	84	-	-	-	-	-	-	6,469
93234044	PWTP Residuals Management	-	-	-	676	1,406	7,597	-	-	-	9,679
93294051	RWTP FRP Residuals Management Modifications	26,096	5,403	-	17,601	2,169	403	-	-	-	51,672
93294057	RWTP Reliability Improvement	71,509	45,040	-	44,192	44,496	45,970	140	-	-	251,347
93294056	RWTP Treated Water Valves Upgrade	8,369	191	-	343	-	22	-	-	-	8,925
93764004	Small Capital Improvements, Water Treatment	n/a	2,831	-	2,132	6,444	7,565	7,875	3,950	17,154	47,951
RECYCLED WATER FACILITY											
91304001s	Expedited Purified Water Program (EPWP)	18,482	9,669	8,891	-	-	15,422	25,309	108,789	461,299	638,970
91094007s	South County Recycled Water Pipeline	27,784	15,772	8,235	2,930	71	350	-	-	-	46,907
91244001	Wolfe Road Recycled Water Pipeline	14,171	657	142	198	-	-	-	-	-	15,026
TOTAL		308,320	119,976	24,451	112,349	113,790	329,847	176,821	293,236	734,705	2,189,044

FY 2016-17 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 FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	306,513	119,084	24,451	99,677	113,488	328,801	175,507	283,992	734,513	2,161,575
26	Safe, Clean Water and Natural Flood Protection Fund	1,807	892	-	12,672	302	1,046	1,314	9,244	192	27,469
TOTAL		308,320	119,976	24,451	112,349	113,790	329,847	176,821	293,236	734,705	2,189,044

FY 2016-17 Funds to be reappropriated

Water Supply Capital Improvements

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Project	Almaden Dam Improvements
Program	Water Supply – Storage
Priority No.	50
Project No.	91854001
District Contact	Katherine Oven koven@valleywater.org



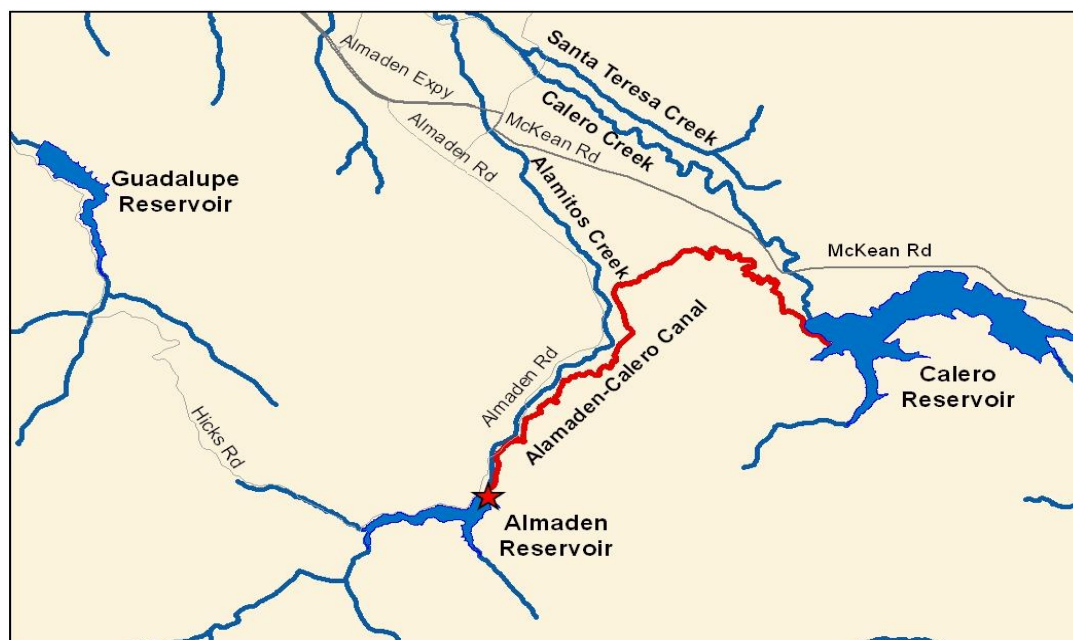
Aerial view of Almaden Dam and spillway, with a portion of the reservoir

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 (cfs) 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



★ Project Location

SCHEDULE & STATUS

July 1995 to June 2024

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	4,957											
Design	5,567											
Construct	38,082											
Closeout	302											
	48,908											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91854001-Almaden Dam Improvements	10,177	2,482	500	500	500	460	21,710	16,672	53,001
with inflation	10,177	2,482	520	541	562	538	27,590	17,184	59,594

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91854001-Almaden Dam Improvements	10,038	2,621	0	520	541	562	538	27,590	17,184	59,594

Adjusted Budget includes adopted budget plus a planned budget adjustment for \$139,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	59,594
Other Funding Source	0
Total	59,594

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately \$2,000 per year, beginning in FY 2025. Manually flushing the control valves during the winter months to remove silt will no longer be required.

USEFUL LIFE: 50+ Years

Project	Anderson Dam Seismic Retrofit
Program	Water Supply – Storage
Priority No.	100
Project No.	91864005
District Contact	Katherine Oven koven@valleywater.org



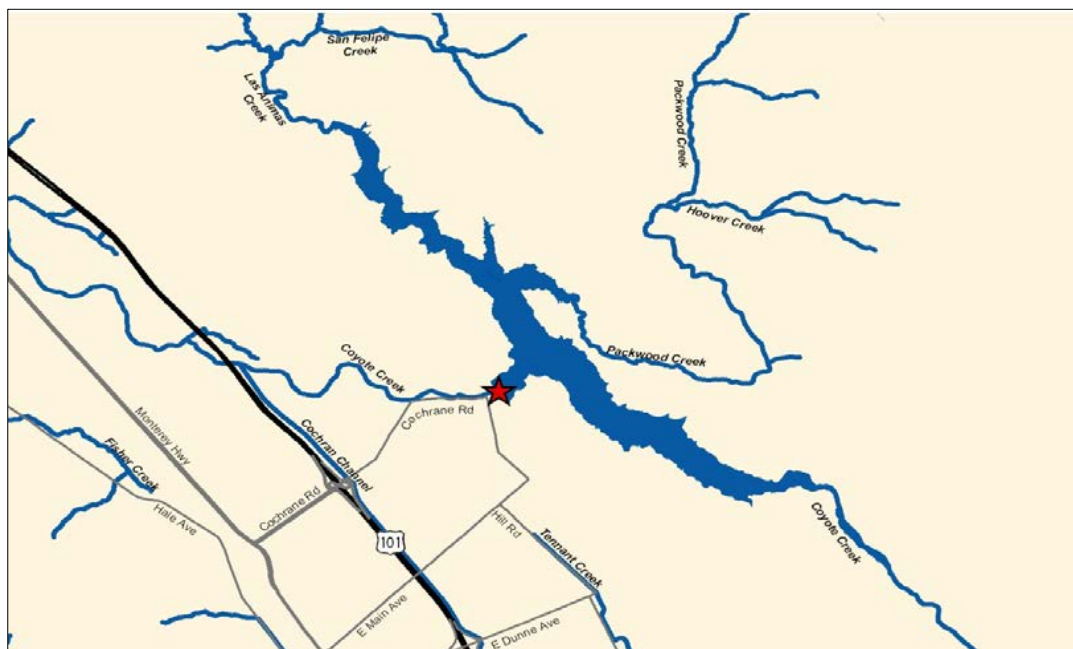
Aerial view of Anderson Dam and spillway, with a portion of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic retrofit or replacement of outlet works at Anderson Dam, pending completion of a field investigation that will determine whether the Coyote Fault is determined to be "active". Seismic stability improvements will accomplish the following objectives:

- ♦ Resolve seismic stability deficiencies to ensure public safety.
- ♦ Restore lost reservoir storage capacity resulting from the operational restriction issued by Division of Safety of Dams (DSOD).
- ♦ Resolve the DSOD/FERC (Federal Energy Regulatory Commission) requirements in a timely manner.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

January 2011 to June 2021

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	13,973											
Design	26,413											
Construct	355,837											
Closeout	1,100											
	397,323											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91864005-Anderson Dam Seismic Retrofit	29,001	2,264	7,672	3,192	115,311	82,664	105,161	61,363	406,628
with inflation	29,001	2,264	7,979	3,452	147,292	83,915	107,297	63,342	444,542

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91864005-Anderson Dam Seismic Retrofit	31,236	29	0	7,979	3,452	147,292	83,915	107,297	63,342	444,542

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$29,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	378,489
SCVWD Safe Clean Water Fund	66,053
Other Funding Sources	0
Total	444,542

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 Calero and Guadalupe Dams Seismic Retrofits

Program Water Supply - Storage

District Contact Katherine Oven koven@valleywater.org

Priority No. 92

Project No. 91084020s



Aerial view of the Calero Dam and reservoir



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

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Calero and Guadalupe Dams to accomplish the following objectives:

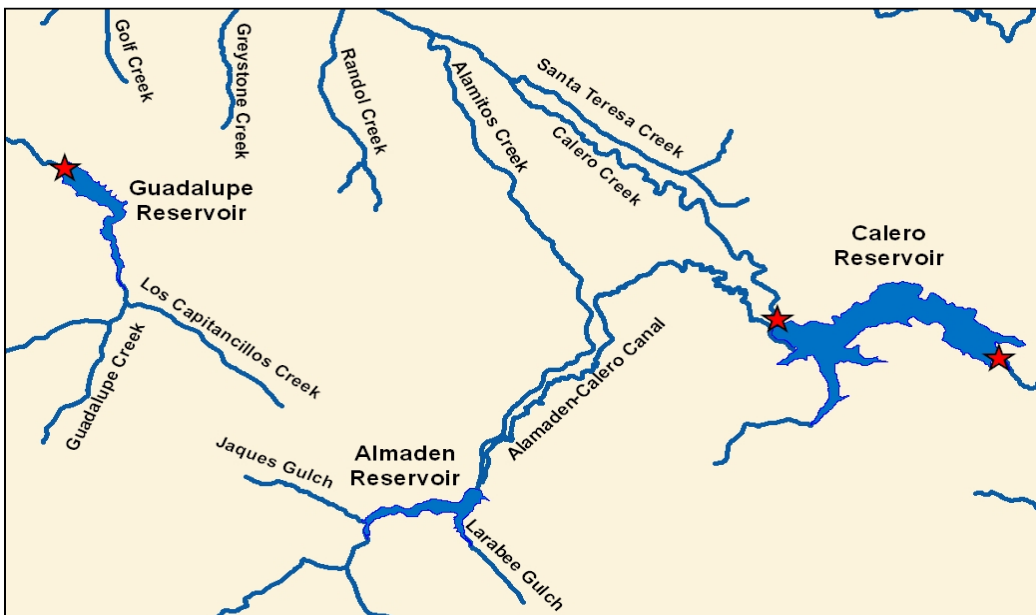
Calero Dam

- 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 (DSOD) 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



★ Project Location

SCHEDULE & STATUS

July 2012 to March 2022

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	6,091											
Design	12,236											
Construct	117,300											
Closeout	360											
	135,987											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	7,194	333	150	150	0	0	0	0	7,827
with inflation	7,194	333	156	162	0	0	0	0	7,845
91874004 - Calero Dam Seismic Retrofit-Design & Construct	3,814	5,397	430	11,500	46,000	5,750	1,438	0	74,329
with inflation	3,814	5,397	447	15,032	46,749	5,877	1,533	0	78,850
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	3,273	4,835	362	6,010	20,700	20,700	5,822	0	61,702
with inflation	3,273	4,835	376	8,893	21,037	21,159	6,000	0	65,574
TOTAL	14,281	10,565	942	17,660	66,700	26,450	7,260	0	143,858
with inflation	14,281	10,565	980	24,088	67,786	27,036	7,534	0	152,269

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	9,468	0	1,941	0	0	0	0	0	0	9,468
91874004 - Calero Dam Seismic Retrofit-Design & Construct	4,630	4,593	12	435	15,032	46,749	5,877	1,533	0	78,850
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	3,435	4,674	1	375	8,893	21,037	21,159	6,000	0	65,574
TOTAL	17,533	9,267	1,954	811	23,925	67,786	27,036	7,534	0	153,892

Adjusted Budget includes adopted budget plus approved budget adjustments. Total allocated funding exceeds current planned expenditures by approximately \$1,623,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	153,892
Other Funding Source	0
Total	153,892

OPERATING COST IMPACTS

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

USEFUL LIFE: 50+ Years

Project	Coyote Pumping Plant ASD Replacement
Program	Water Supply – Storage
Priority No.	70
Project No.	91C40377
District Contact	Katherine Oven koven@valleywater.org



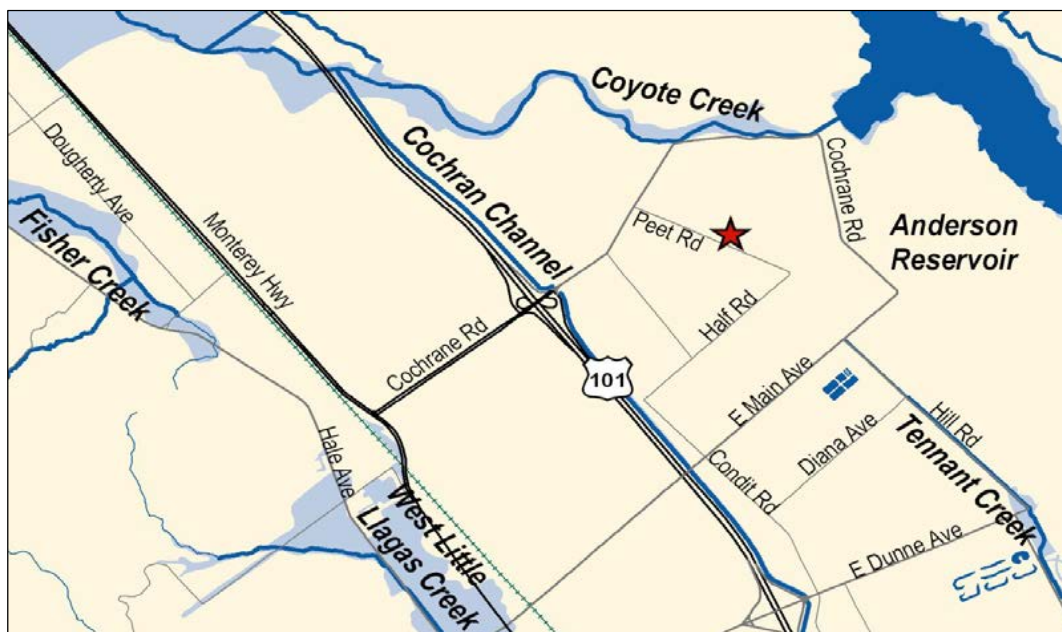
ASD Motors at the Coyote Pumping Plant

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 HVAC system to support the additional cooling requirements.
- Modify/upgrade Supervisory Control and Data Acquisition (SCADA) control and instrumentation systems, and control strategy to support the new ASDs.
- Replace two main medium voltage circuit breaker and one medium voltage tie circuit breaker (switch) which are at the end of service life.
- Replace motor control equipment line-up (MCE) with new switchgears.
- Installation of a pump motor vibration and a power monitoring systems and motor control center.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2018 to June 2022

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	520											
Design	1,650											
Construct	12,285											
Closeout	65											
	14,520											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91C40377-Coyote Pumping Plant ASD Replacement	0	0	0	500	1,670	8,190	4,160	0	14,520
with inflation	0	0	0	541	1,879	9,289	4,872	0	16,580

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
91C40377-Coyote Pumping Plant ASD Replacement	0	0	0	541	1,879	9,289	4,872	0		16,580

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	12,932
San Benito County Water District	3,648
Total	16,580

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately \$60,000 per year beginning in FY 2023.

USEFUL LIFE: Not Available

Project	Coyote Pumping Plant Warehouse
Program	Water Supply - Storage
Priority No.	48
Project No.	91234011
District Contact	Katherine Oven koven@valleywater.org



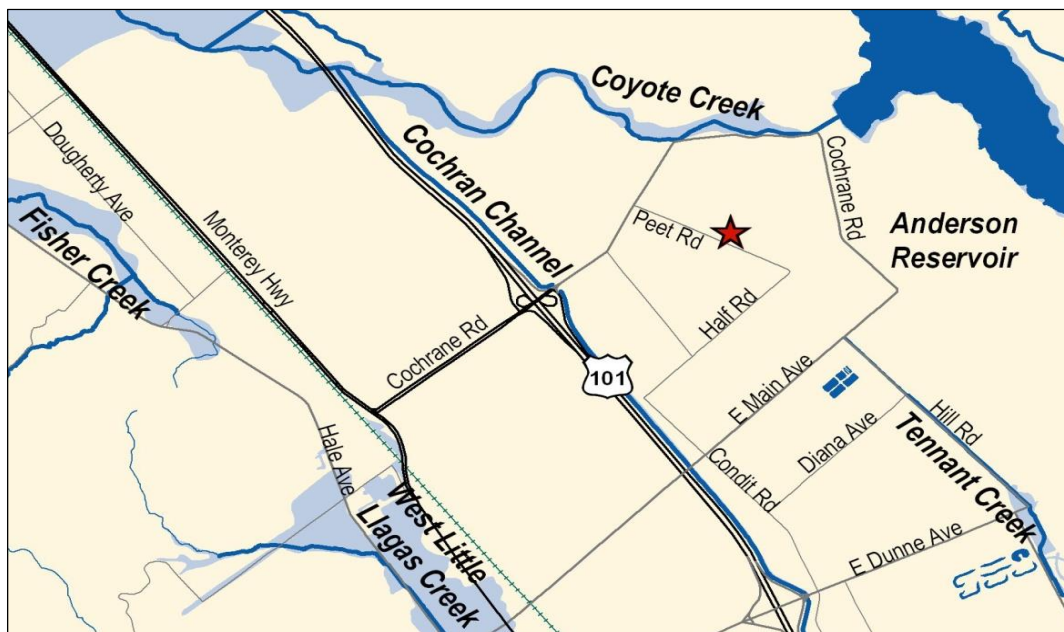
Existing storage containers being used to secure equipment and spare parts

PROJECT DESCRIPTION

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

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

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to February 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	33											
Design	442											
Construct	5,657											
Closeout	60											
	6,192											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
91234011-Coyote Pumping Plant Warehouse	525	259	4,903	505	0	0	0	0		6,192
with inflation	525	259	5,060	546	0	0	0	0		6,391

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
91234011-Coyote Pumping Plant Warehouse	713	2,227	2,156	2,904	546	0	0	0	0	6,391

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	6,391
Other Funding Sources	0
Total	6,391

OPERATING COST IMPACTS

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

USEFUL LIFE: 50 years

Project	Dam Seismic Stability Evaluations
Program	Water Supply – Storage
Priority No.	92
Project No.	91084019
District Contact	Hemang Desai hdesai@valleywater.org



Field exploration for seismic stability evaluations

PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for 9 dams (shown on the map) to accomplish the following objectives:

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

Site specific planning, design, and construction of dam seismic stability improvements will be funded separately. This project funds preliminary planning (seismic stability evaluation, to determine the need for seismic stability improvements) for eight dams. The seismic stability evaluation for Anderson Dam was completed in a separate project. The seismic analysis for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams has been completed. The analysis for Coyote, Chesbro and Uvas is continuing through 2020.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

August 2009 to December 2020

(Planning Phase Only)
Dam Safety Evaluation Report
will take 5 years to complete,
starting in 2015

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	13,462											
Design	-											
Construct	-											
Closeout	-											
	13,462											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91084019-Dam Seismic Stability Evaluations	16,968	699	500	500	450	400	0	0	19,517
with inflation	16,968	699	520	541	506	468	0	0	19,702

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91084019-Dam Seismic Stability Evaluations	18,812	0	1,145	0	0	422	468	0	0	19,702

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	19,702
Other Funding Source	0
Total	19,702

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
Priority No.	76
Project No.	91214010s
District Contact	Angela Cheung acheung@valleywater.org



Suction wear ring bacterial corrosion of Impeller. Similar rehabilitation projects will be done in this project.

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 equipment replacement and renewal at facilities contained within San Felipe Division by designing and constructing improvements identified through the District's 10-year asset management program. Infrastructure within this project includes tunnels, large diameter pipelines and valve structures, pumps and associated equipment, as well as a large above ground storage tank. The Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors, partner cities, and other agencies. Planned projects for FY 2017 include:

- 91214010–Reach 1: Replace Pacheco Pumping Plant Fire Pump
- 91224010–Reach 2: Fix Calaveras Fault Inlet/Outlet road access; Fix Santa Clara Tunnel leakage, grouting and lining ; Cathodic protection for 2 rectifiers and Anodes Well.
- 91234010–Reach 3: Cathodic protection for 2 rectifiers and Anodes Well; Replace Coyote pump discharge valve operator, flowmeter, HVOS air compressor, and isolation vavle control valve operator.

All three projects have positive NPV saving at feasibility study phase 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

22,826

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,497	563	780	0	0	77	5,200	8,117
with inflation	n/a	1,497	586	844	0	0	94	7,645	10,665
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	1,145	46	0	0	0	0	0	1,191
with inflation	n/a	1,145	48	0	0	0	0	0	1,193
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	966	43	310	0	621	0	11,578	13,518
with inflation	n/a	966	45	335	0	726	0	17,260	19,333
TOTAL	0	3,608	652	1,090	0	621	77	16,778	22,826
with inflation	0	3,608	678	1,179	0	726	94	24,905	31,191

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,497	0	586	844	0	0	94	7,645	10,665
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	1,145	0	48	0	0	0	0	0	1,193
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	966	0	45	335	0	726	0	17,260	19,333
TOTAL	0	3,608	0	678	1,179	0	726	94	24,905	31,191

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	28,212
San Benito County Water District	2,978
Total	31,191

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	10-Year Pipeline Inspection & Rehabilitation
Program	Water Supply – Transmission
Priority No.	78
Project No.	95084002
District Contact	Jim Crowley jcrowley@valleywater.org



A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

This project involves the inspection, planning, design, and renewal of the District's pipelines and tunnels to accomplish the following objectives:

- Perform dewatering and internal inspections of District's pipelines and tunnels.
- Renew distressed pipe sections as required. Renewal encompasses the actions of repair, rehabilitation, and replacement.
- Perform maintenance and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as appropriate.
- Modify failure prone pipeline appurtenance connections.

This project funds inspection and renewal work along the various pipelines and tunnels as identified below:

- 2018: Cross Valley Pipeline, Calero Pipeline, Central Pipeline
- 2019: Almaden Valley Pipeline, Santa Teresa Force Main, Rinconada Force Main, Santa Clara Conduit (SC Tunnel to SV1), West Pipeline (RWTP to Cox LV)
- 2020: Parallel East Pipeline, West Pipeline, Santa Clara Distributary, Santa Clara Conduit, Anderson Force Main
- 2021: Almaden Valley Pipeline, Santa Teresa Force Main, Rinconada Force Main, Santa Clara Conduit, West Pipeline (Cox LV to Grainger)
- 2022: Pacheco Conduit, Pacheco Tunnel Reach 2, Santa Clara Tunnel, Penitencia Force Main, Penitencia Delivery Main, South Bay Aqueduct Retrofit Inspection

PROJECT LOCATION



 Project Location

SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	-
Design	-
Construct	85,300
Closeout	-

85,300

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	15,500	19,000	10,500	4,000	7,100	29,200		85,300
with inflation	0	0	15,965	20,157	11,474	4,502	8,231	36,900		97,228

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	0	15,965	20,157	11,474	4,502	8,231	36,900	97,228

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	97,228
Other Funding Sources	0
Total	97,228

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project	FAHCE Implementation
Program	Water Supply - Transmission
Priority No.	73
Project No.	92C40357
District Contact	Katherine Oven koven@valleywater.org



Fish habitats such as this will be developed for Habitat Conservation. Actual locations will differ.

PROJECT DESCRIPTION

This project funds habitat improvement projects to be implemented as part of the Three Creeks Fish Habitat Restoration Plan (FHRP), associated water rights orders and associated federal and state permits. The Three Creeks FHRP grew out of the 1996 Water Rights Complaint and subsequent Fish and Aquatic Habitat Collaborative Effort (FAHCE). The capital project components of the restoration measures are likely to include projects such as: upgrades for operational adaptability and flexibility; instream channel enhancements; new fish screens, and instream barrier removals. When implemented, the Three Creeks FHRP currently under development will contain conservation measures designed to provide:

- ♦ Instream flows and fish passage to support salmonid spawning, rearing and migration.
- ♦ Other aquatic habitat improvement, e.g., gravel augmentation for instream complexity to support salmonid spawning and rearing
- ♦ Monitoring and adaptive management

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 2018 to June 2024

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	145,108											
Design	-											
Construct	-											
Closeout	-											
	145,108											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92C40357-FAHCE Implementation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108
with inflation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
92C40357-FAHCE Implementation	0	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

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 vary, depending on the requirements for maintenance 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
Program	Water Supply – Transmission
Priority No.	63
Project No.	26C40349
District Contact	Katherine Oven koven@valleywater.org



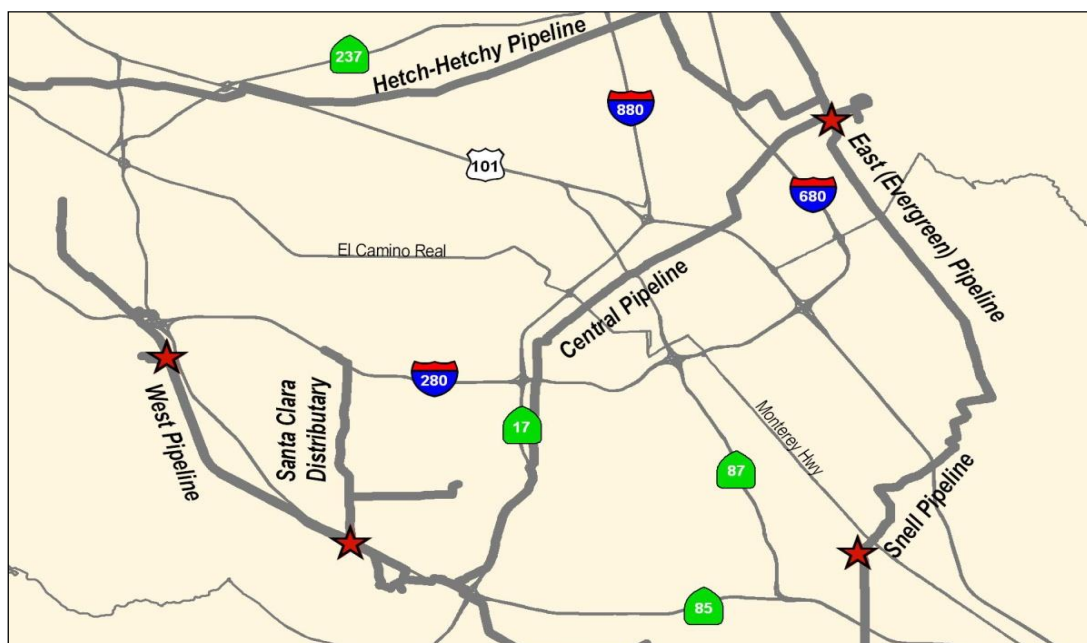
New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

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 the district to isolate sections of the treated water pipeline to prevent water from bleeding out damaged sections following a major seismic event.
- ♦ Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2019 to June 2023

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	930											
Design	1,123											
Construct	7,898											
Closeout	152											
	10,103											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26C40349-IRP2 Additional Line Valves	0	0	0	0	930	1,123	7,898	152	10,103
with inflation	0	0	0	0	1,046	1,314	9,244	192	11,796

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26C40349-IRP2 Additional Line Valves	0	0	0	0	1,046	1,314	9,244	192		11,796

FUNDING SOURCES

(in thousands \$)

SCVWD Safe Clean Water Fund	11,796
Other Funding Source	0
Total	11,796

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: 35 Years

Project Main & Madrone Pipelines Restoration

Program Water Supply - Transmission

District Contact Katherine Oven koven@valleywater.org

Priority No. 70

Project No. 26564001



Main Avenue Ponds facing North



Madrone Pipeline Outlet into Madrone Channel looking North along Northbound Interstate 101

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on the full length of the Madrone Pipeline and rehabilitates the Main Avenue Pipeline to accomplish the following objectives:

- Provide the means to utilize another reliable water source, (e.g. Anderson Reservoir) to supply water to the Main Avenue Ponds and the Madrone Channel.
- Allow for greater flows to the Main Avenue Ponds and the Madrone Channel.
- Maximize imported water flows to the treatment plants.

PROJECT LOCATION



SCHEDULE & STATUS

July 2014 to December 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	248											
Design	1,606											
Construct	22,639											
Closeout	90											
	24,583											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26564001-Main & Madrone Pipelines Restoration	1,179	1,520	12,300	279	0	0	0	0	15,278
with inflation	1,179	1,520	12,672	302	0	0	0	0	15,673

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26564001-Main & Madrone Pipelines Restoration	1,807	892	0	12,672	302	0	0	0	0	15,673

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$372,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Safe, Clean Water Fund	6,323
SCVWD Water Utility Enterprise Fund	9,349
Total	15,673

OPERATING COST IMPACTS

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

USEFUL LIFE: 40 Years

Project	Pacheco Conduit Inspection & Rehabilitation
Program	Water Supply – Transmission
Priority No.	75
Project No.	91214001
District Contact	Jim Crowley jcrowley@valleywater.org



A typical line valve assembly to be rehabilitated

PROJECT DESCRIPTION

This project plans, designs, and constructs major repairs and improvements to the District's pipelines and tunnels to accomplish the following objectives:

- Perform internal inspections, maintenance, and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as appropriate.
- Upgrade pipeline air valve venting in accordance with CA Department of Public Health (CDPH) guidelines.
- Modify failure prone pipeline appurtenance connections.

The project also funds the development of the Pipeline Maintenance Program document for Fiscal Years 2018 to 2027 and CEQA/NEPA documentation and permit acquisitions.

PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to June 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	427											
Design	3,512											
Construct	26,992											
Closeout	89											
	31,020											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91214001-Pacheco Conduit Inspection and Rehabilitation	677	6,246	0	0	0	0	0	0	6,923
with inflation	677	6,246	0	0	0	0	0	0	6,923
TOTAL	677	6,246	0	0	0	0	0	0	6,923
with inflation	677	6,246	0	0	0	0	0	0	6,923

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91214001-Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	12	0	0	0	0	0	0	6,934
TOTAL	1,500	5,434	12	0	0	0	0	0	0	6,934

Adjusted Budget includes adopted budget plus approved budget adjustments. Total funding allocation exceeds total project cost by approximately \$12,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	6,934
San Benito County Water District	1,520
Total	8,454

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/Santa Clara Conduit Right of Way Acquisition
Program	Water Supply – Transmission
Priority No.	75
Project No.	92144001
District Contact	Katherine Oven koven@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 Pipeline to accomplish the following objectives:

- ♦ Provide unlimited access to District owned pipeline.
- ♦ Reduce conflicts with local land owners and improve response time for emergency repairs or operations.

PROJECT LOCATION



SCHEDULE & STATUS

July 2009 to February 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	729											
Design	2,798											
Construct	1,004											
Closeout	35											
	4,566											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,129	227	1,452	1,516	283	0	0	0	4,607
with inflation	1,129	227	1,506	1,639	317	0	0	0	4,819

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	1,469	1,255	251	1,639	317	0	0	0	4,819

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	4,800
San Benito County Water District	19
Total	4,819

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$8,000 per year, beginning in FY 2020, for vegetation control and/or maintenance of fences, gates and locks for the access roads.

USEFUL LIFE: 15-20 Years

Project	Penitencia Delivery Main/Force Main Seismic Retrofit
Program	Water Supply – Transmission
Priority No.	83
Project No.	94384002s
District Contact	Katherine Oven koven@valleywater.org



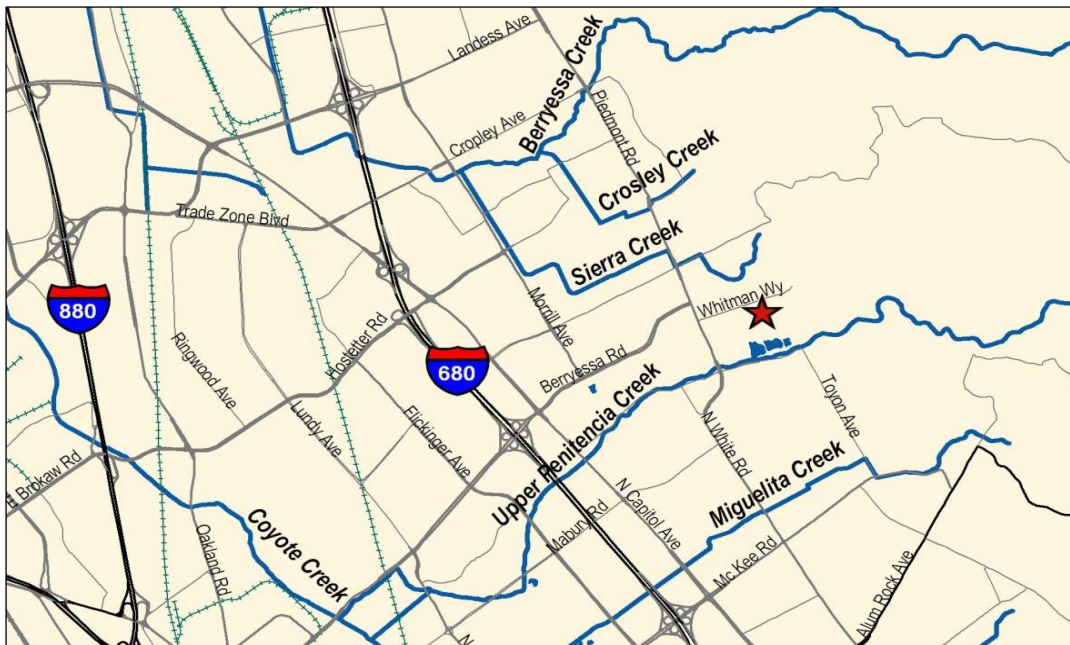
View of the Delivery Main for the Penitencia Water Treatment Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic improvements to the delivery main and force main junctions to prevent catastrophic failure due to an earthquake by accomplishing the following objectives:

- ♦ Perform a structural survey of the Penitencia Vault and Penitencia Delivery Main (PDM) Effluent Vault to ascertain the existing condition, their life expectancy, and whether any changes are necessary to accommodate the seismic retrofit project.
- ♦ Perform a seismic retrofit to the PDM, Penitencia Force Main (PFM), South Bay Aqueduct (SBA), and the Finished Water Meter Vault to accommodate both the creeping and potentially extensive seismically-induced movements of the active landslide over a 50-year design life. The Penitencia Vault is no longer necessary and will be demolished.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2012 to September 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,821											
Design	2,414											
Construct	13,654											
Closeout	20											
	17,909											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	8,022	3,697	223	0	0	0	0	0	11,942
with inflation	8,022	3,697	232	0	0	0	0	0	11,951
92224001-Penitencia Force Main Seismic Retrofit	14,003	8,865	432	0	0	0	0	0	23,300
with inflation	14,003	8,865	449	0	0	0	0	0	23,317
TOTAL:	22,025	12,562	655	0	0	0	0	0	35,242
Total with inflation	22,025	12,562	681	0	0	0	0	0	35,268

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	10,832	887	0	232	0	0	0	0	0	11,951
92224001-Penitencia Force Main Seismic Retrofit	14,108	8,760	0	449	0	0	0	0	0	23,317
TOTAL	24,940	9,647	0	681	0	0	0	0	0	35,268

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$475,000.

FUNDING SOURCES

(in thousands \$)

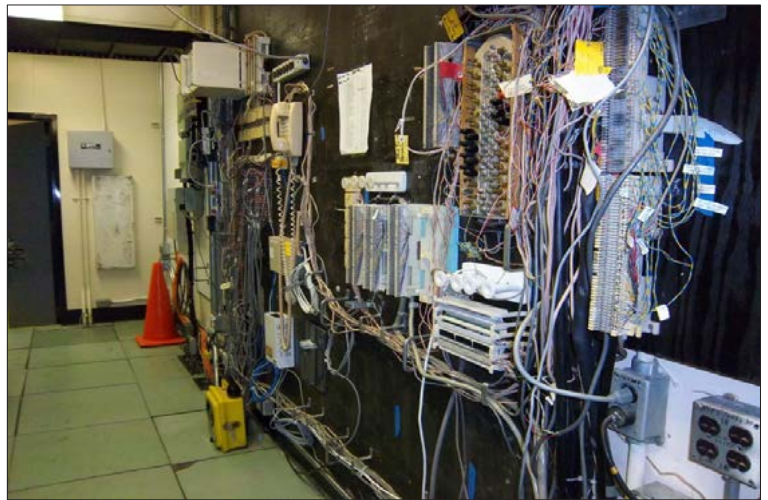
SCVWD Water Utility Enterprise Fund	35,268
Other Funding Source	0
Total	35,268

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	SCADA Remote Architecture and Communications Upgrade
Program	Water Supply – Transmission
Priority No.	74
Project No.	92374005
District Contact	Katherine Oven koven@valleywater.org



Raw Water Control Center Hub at Rinconada Water Treatment Plant similar to what will be installed at other facilities

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the back-up raw water control center and Process Control Systems (SCADA) telemetry to accomplish the following objectives:

- Complete the mobilizable raw water control center so it can be operated at any of the water treatment plants, pumping plants, or at District Headquarters/Almaden Campus.
- Upgrade the SCADA telemetry system to remove the single points of failure and to provide a robust and reliable telemetry system.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2015 to June 2025

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	550											
Design	710											
Construct	4,300											
Closeout	100											
	5,660											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	155	100	296	550	160	800	700	2,900	5,661
with inflation	155	100	308	595	180	936	852	3,909	7,034

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	402	374	521	0	382	180	936	852	7,034

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	5,487
San Benito County Water District	1,548
Total	7,034

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$80,440 per year, beginning in FY 2026 for operational support provided by control technicians, IT technicians, and SCADA engineers.

USEFUL LIFE: 25 Years

Project	Small Capital Improvements, Raw Water Transmission
Program	Water Supply – Transmission
Priority No.	73
Project No.	92764009
District Contact	Angela Cheung acheung@valleywater.org



Major repair and replacement of turnout roofs and similar small raw water capital projects will be done, per 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 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 the District's 10-year asset management program. No activities planned for FY 2017.

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 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	0	106	0	45	0	77	2,163	2,391
with inflation	n/a	0	110	0	51	0	94	3,212	3,466

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	0	0	110	0	51	0	94	3,466

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	3,466
Other Funding Source	0
Total	3,466

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
Priority No.	73
Project No.	94764006
District Contact	Angela Cheung acheung@valleywater.org

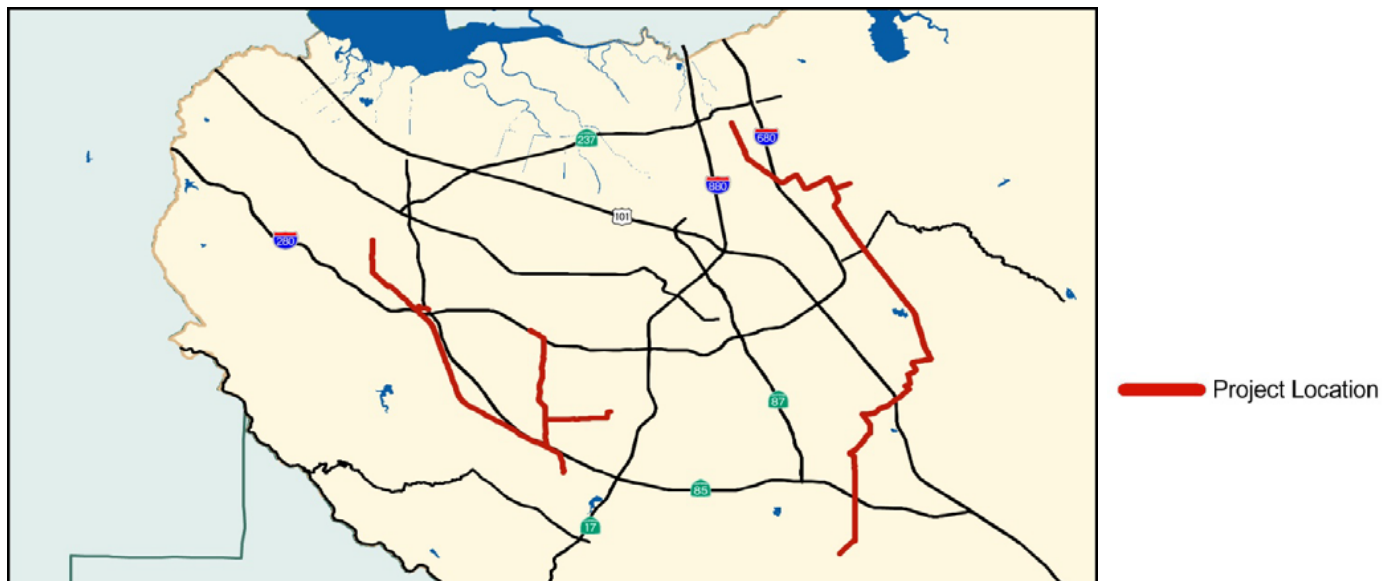


Small Capital projects at treated water transmission facilities, similar to this new valve installation in the Piedmont Line Valve Vault, will be done, per the asset management plan.

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 the District's 10-year asset management program.

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	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	n/a											
Design	n/a											
Construct	n/a											
Closeout	n/a											
	n/a											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	56	75	0	0	0	0	131
with inflation	n/a	0	58	81	0	0	0	0	139

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	58	81	0	0	0	0	139

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	139
Other Funding Source	0
Total	139

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	Vasona Pumping Plant Upgrades
Program	Water Supply – Transmission
Priority No.	67
Project No.	92264001
District Contact	Katherine Oven koven@valleywater.org



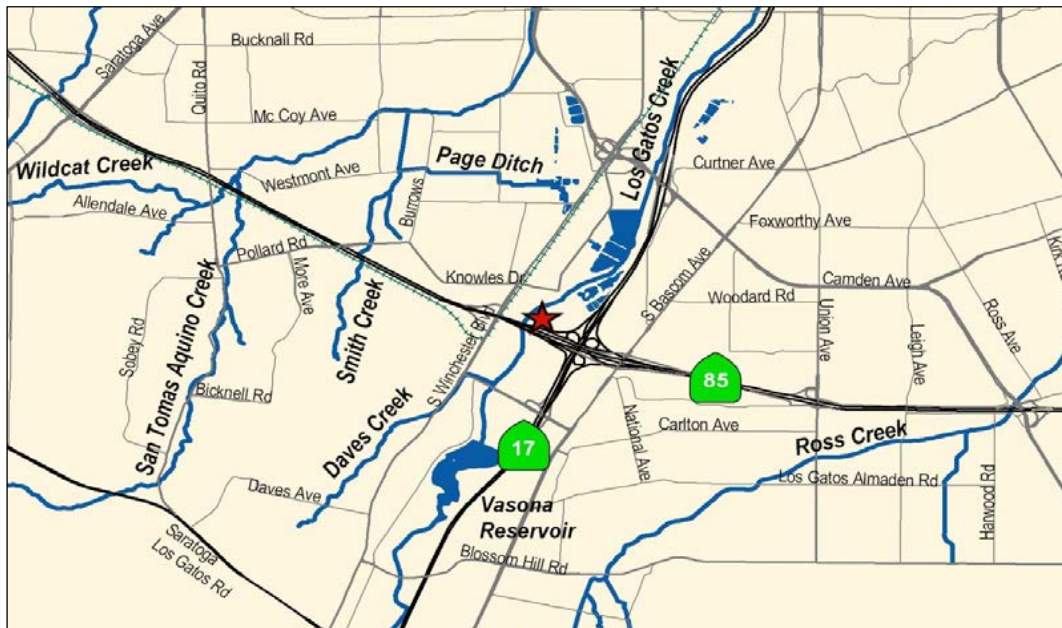
Vasona Pumping Plant Pump

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 the two 200 horsepower pumps.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2016 to September 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	570											
Design	2,360											
Construct	15,600											
Closeout	70											
	18,600											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92264001-Vasona Pumping Plant Upgrades	0	119	1,221	1,590	15,600	70	0	0	18,600
with inflation	0	119	1,270	1,720	17,130	82	0	0	20,321

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
92264001-Vasona Pumping Plant Upgrades	0	119	0	1,270	1,720	17,130	82	0	0	20,321

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	20,321
Other Funding Sources	0
Total	20,321

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$70,000 per year beginning in FY 2021.

USEFUL LIFE: 50 years

Project	Fluoridation at Water Treatment Plants
Program	Water Supply – Treatment
Priority No.	47
Project No.	93084011
District Contact	Katherine Oven koven@valleywater.org



Chemical storage tank and associated hardware will be installed at the water treatment plants for the fluoridation process

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements at the water treatment plants to provide fluoridation facilities that will include fluorosilicic acid storage tanks, tank foundations, chemical feed facilities, spill containment, storage and feed equipment areas, piping, online fluoride analyzers, and accessories.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

September 2013 to June 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	230											
Design	1,634											
Construct	7,906											
Closeout	85											
	9,855											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93084011-Fluoridation at Water Treatment Plants	6,956	2,872	85	0	0	0	0	0	9,913
with inflation	6,956	2,872	88	0	0	0	0	0	9,916

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93084011-Fluoridation at Water Treatment Plants	6,875	3,009	56	32	0	0	0	0	0	9,916

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	7,516
The Health Trust	1,000
First 5 of Santa Clara County	900
California Dental Association Foundation	500
Total	9,916

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$1,000,000 per year, beginning in FY 2018.

USEFUL LIFE: Fluoride System: 10 years
Bulk Storage Tanks: 20 years



The RWTP control building is one of the four buildings that will be studied and possibly retrofitted to meet safety requirements



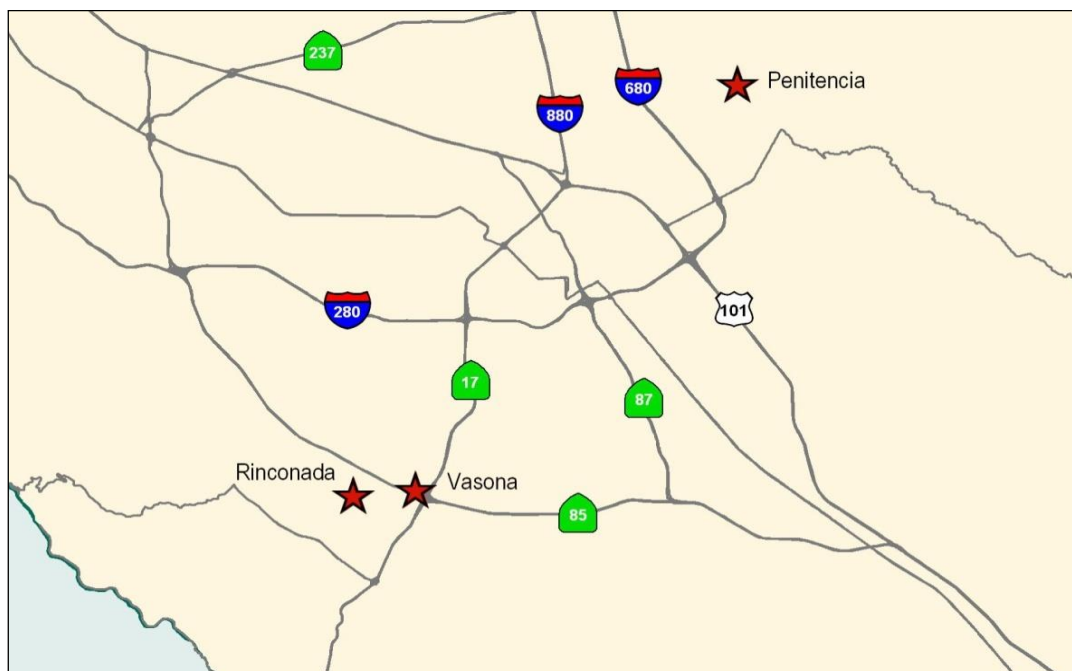
The PWTP control building is another of the four buildings that will be studied and possibly retrofitted to meet safety requirements

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements, including seismic retrofitting of two water treatment plant operations buildings and two buildings at the Vasona Pump Station that were built prior to 1980, as defined in the Water Infrastructure Reliability Plan, Portfolio 2 (IRP2), to ensure a healthy and safe work environment for employees and provide for continued functionality of these critical facilities after a major earthquake.

In addition, this Project will consider some non-structural elements of the Rinconada Water Treatment Plant (RWTP) Control Building, such as space reallocation, Americans with Disabilities Act (ADA) improvements, and heating, ventilation, and air conditioning (HVAC) system rehabilitation.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

January 2008 to September 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,423											
Design	2,978											
Construct	14,443											
Closeout	55											
	18,899											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	20,868	1,291	333	0	0	0	0	0	22,492
with inflation	20,868	1,291	346	0	0	0	0	0	22,505

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	20,992	1,167	0	346	0	0	0	0	0	22,505

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$369,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	21,801
Federal Emergency Management Agency (FEMA)	704
Total	22,505

OPERATING COST IMPACTS

Completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not alter the existing modes of operation. However, seismic retrofit will reduce or avoid structural damages and reduce the cost of post-earthquake repairs.

USEFUL LIFE: 50+ Years

Project	PWTP Clearwell Recoating and Repair
Program	Water Supply – Treatment
Priority No.	66
Project No.	93234043
District Contact	Katherine Oven koven@valleywater.org



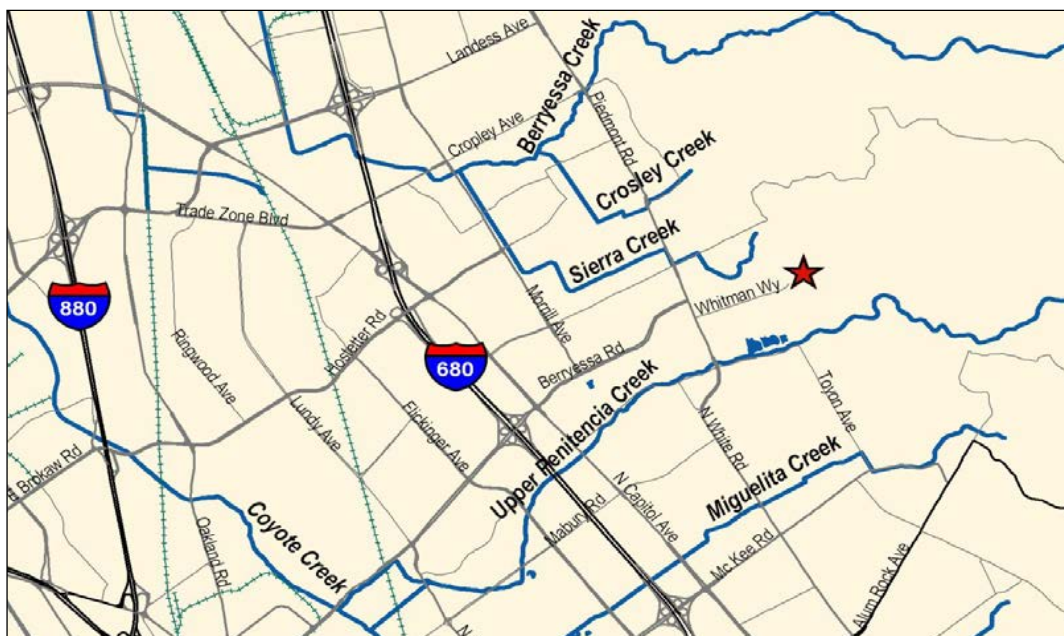
Active corrosion of the rafters and rafter support

PROJECT DESCRIPTION

This project plans, designs, and constructs corrosion repairs to the existing clearwell at Penitencia Water Treatment Plant (PWTP) to accomplish the following objectives:

- Extend the life of the PWTP Clearwell by replacing the roof and removing as much corrosion as possible from the walls and recoating surfaces as necessary.
- Replace the existing roof and supports to address the corrosion as identified in the January 2009 report by Bay Area Coating Consultants.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2010 to June 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	530											
Design	552											
Construct	986											
Closeout	15											
	2,083											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93234043-PWTP Clearwell Recoating and Repair	5,567	818	59	0	0	0	0	0	6,444
with inflation	5,567	818	61	0	0	0	0	0	6,446

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93234043-PWTP Clearwell Recoating and Repair	5,919	550	84	0	0	0	0	0	0	6,469

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately \$23,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	6,469
Other Funding Source	0
Total	6,469

OPERATING COST IMPACTS

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

USEFUL LIFE: 15 Years

Project No. 93234044



Existing belt press to be replaced with new residuals management facility

- 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.

★ Project Location

SCHEDULE & STATUS

January 2018 to June 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	650											
Design	1,300											
Construct	6,925											
Closeout	-											
	8,875											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93C40390-PWTP Residuals Management	0	0	650	1,300	6,925	0	0	0	8,875
with inflation	0	0	676	1,406	7,597	0	0	0	9,679

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93C40390-PWTP Residuals Management	0	0	0	676	1,406	7,597	0	0	0	9,679

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	9,679
Other Funding Sources	0
Total	9,679

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project RWTP FRP Residuals Management

Program Water Supply - Treatment

District Contact Katherine Oven koven@valleywater.org

Priority No. 84

Project No. 93294051



Centrifuge for mechanical dewatering of sludge



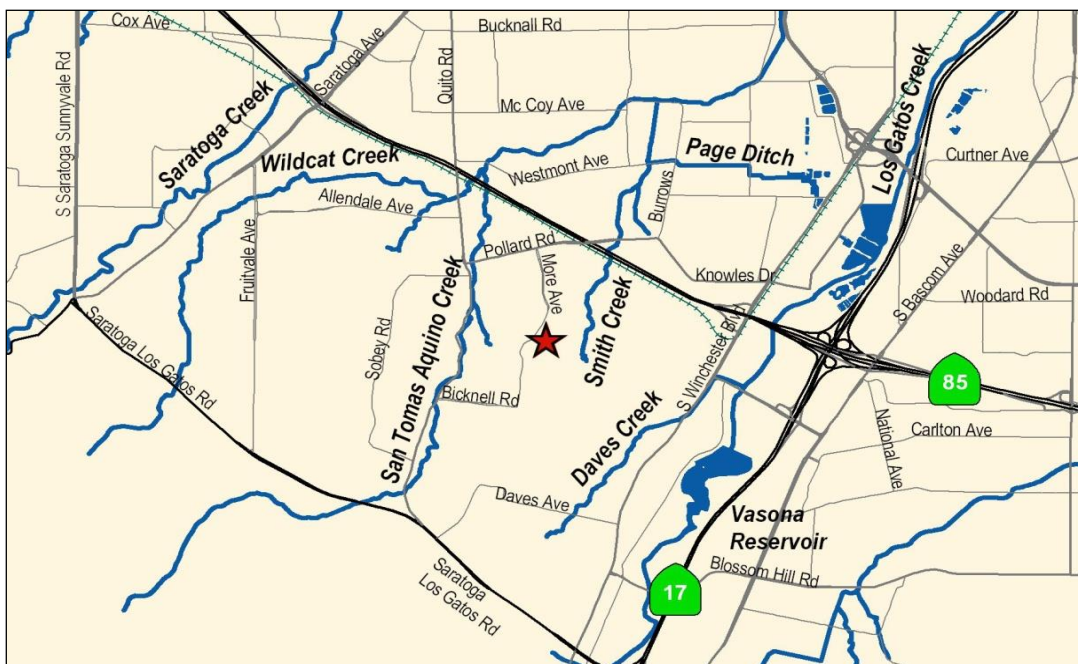
New Gravity Thickeners and Mix Tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes, consistent with the Facility Renewal Program (FRP) to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize risk of discharge violations.
- Improve the reliability of RWTP.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2008 to March 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,484											
Design	5,142											
Construct	43,873											
Closeout	380											
	50,879											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294051-RWTP FRP Residuals Management	25,911	5,588	17,030	2,005	358	0	0	0	50,892
with inflation	25,911	5,588	17,601	2,169	403	0	0	0	51,672

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93294051-RWTP FRP Residuals Management	26,096	5,403	0	17,601	2,169	403	0	0	0	51,672

Adjusted Budget includes adopted budget plus a planned budget adjustment for \$3,335,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	51,672
Other Funding Source	0
Total	51,672

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease annual operating costs by approximately \$200,000 per year starting in 2021.

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

Project RWTP Reliability Improvement

Program Water Supply - Treatment

District Contact Katherine Oven koven@valleywater.org

Priority No. 91

Project No. 93294057



Aerial view of the Rinconada Water Treatment Plant facing west



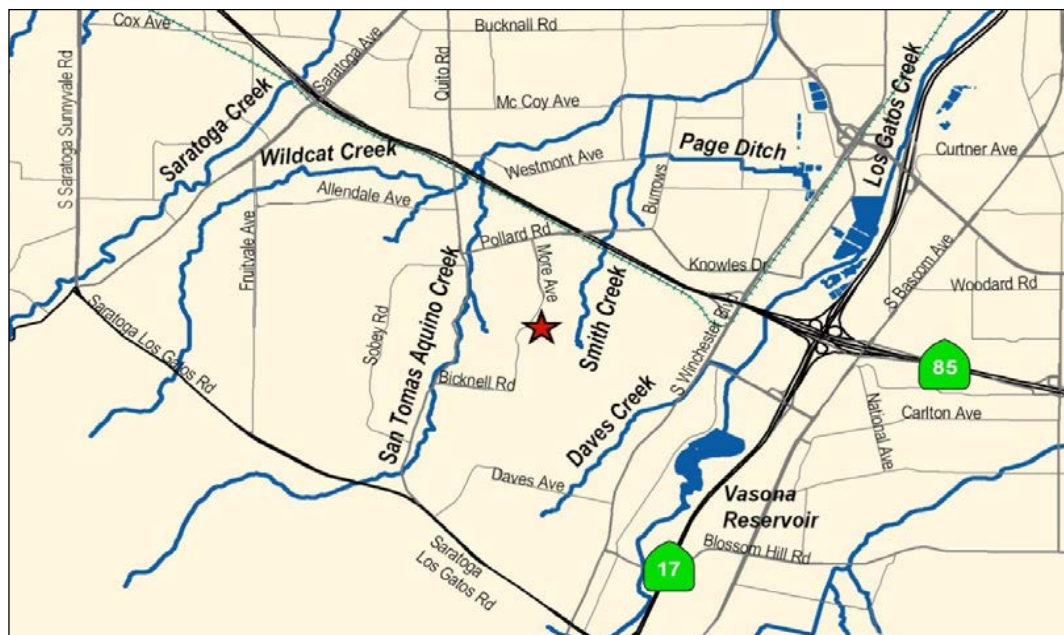
Artist rendering of the aerial view of the Rinconada Water Treatment Plant facing south after construction

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 raw water ozonation facility.
- ♦ Construct a new flocculation and plate settler clarification facility.
- ♦ Implement a dual media filtration system.
- ♦ Increase plant capacity to 100 million gallons per day (MGD).

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2009 to June 2021

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,848											
Design	19,158											
Construct	216,273											
Closeout	120											
	237,399											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294057-RWTP Reliability Improvement	71,786	44,763	43,900	43,900	44,930	120	0	0	249,399
with inflation	71,786	44,763	44,192	44,496	45,970	140	0	0	251,347

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93294057-RWTP Reliability Improvement	71,509	45,040	0	44,192	44,496	45,970	140	0	0	251,347

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$328,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	251,347
Other Funding Source	0
Total	251,347

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$1.4 million per year, beginning in FY 2022. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE: Media – 20 Years; Structures – 50 Years; Equipment – 15 Years

Project	RWTP Treated Water Valves Upgrade
Program	Water Supply – Treatment
Priority No.	84
Project No.	93294056
District Contact	Katherine Oven koven@valleywater.org



Example of a valve to be replaced or upgraded

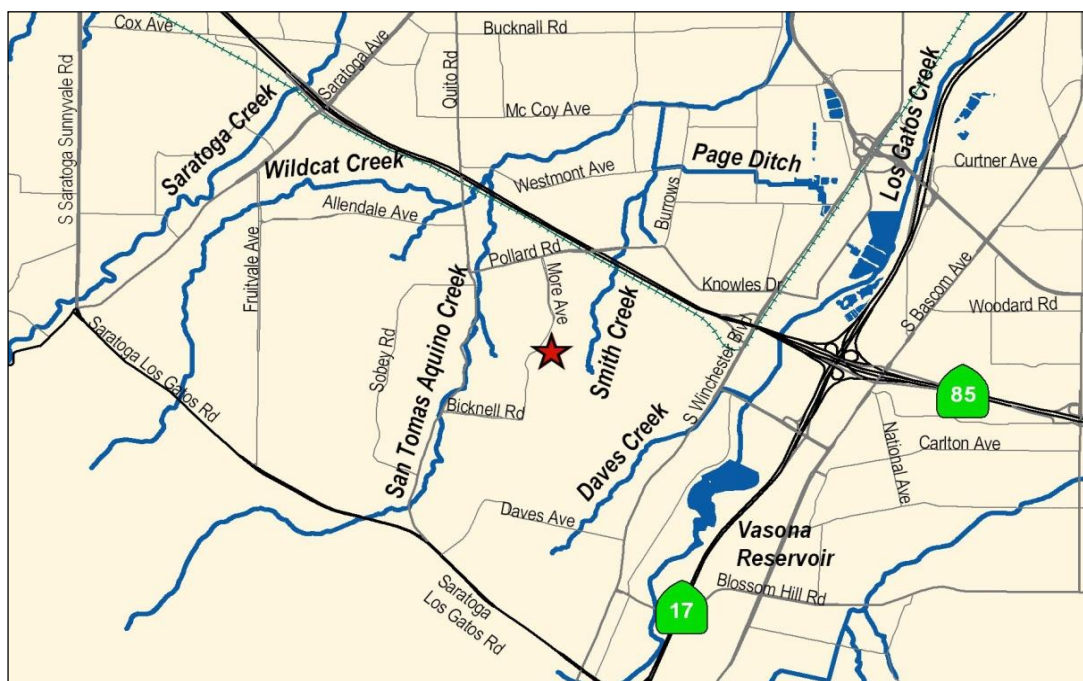
PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) including seismically strengthening the chemical storage structures; replacing/upgrading the valves and appurtenances used to control treated water at the clearwells and the Ronconada Reservoir; repairing a damaged baffle wall in the Rinconada Reservoir; and installing a 48-inch magnetic flow meter on the treatment plant's treated water effluent pipeline.

Consistent with the Facility Renewal Program (FRP), this project will accomplish the following objectives:

- ♦ Ensure plant operational reliability.
- ♦ Improve ability to maintain the plant.
- ♦ Allow for better isolation of the treated water control valves for future work.
- ♦ Achieve greater accuracy in measuring treated water deliveries.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2009 to March 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	465											
Design	1,476											
Construct	6,829											
Closeout	113											
	8,883											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294056-RWTP Treated Water Valves Upgrade	8,030	530	330	0	20	0	0	0	8,910
with inflation	8,030	530	343	0	22	0	0	0	8,926

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294056-RWTP Treated Water Valves Upgrade	8,369	191	0	343	0	22	0	0	8,926

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$136,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	8,926
Other Funding Source	0
Total	8,926

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 operations.

USEFUL LIFE: 40 Years

Project	Small Capital Improvements, Water Treatment
Program	Water Supply – Treatment
Priority No.	73
Project No.	93764004
District Contact	Angela Cheung acheung@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 the District's 10-year asset management program. Typical activities included in 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 in FY 2017 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 (SVAWPC) include:

- Provide electrical and control system engineering services for District SCADA standards development, Operational Data Management System Upgrade, and other HMI and PLC technical upgrades.
- Purchase and install Water Quality Lab Instrumentation.
- 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	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	n/a											
Design	n/a											
Construct	n/a											
Closeout	n/a											
	n/a											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	2,831	2,050	5,958	6,725	6,732	3,247	11,461	39,004
with inflation	n/a	2,831	2,132	6,444	7,565	7,875	3,950	17,154	47,952

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	2,831	0	2,132	6,444	7,565	7,875	3,950	17,154	47,952

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	47,952
Other Funding Source	0
Total	47,952

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	Expedited Purified Water Program
Program	Water Supply – Recycled Water
Priority No.	71
Project No.	91304001s
District Contact	Katherine Oven koven@valleywater.org



Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

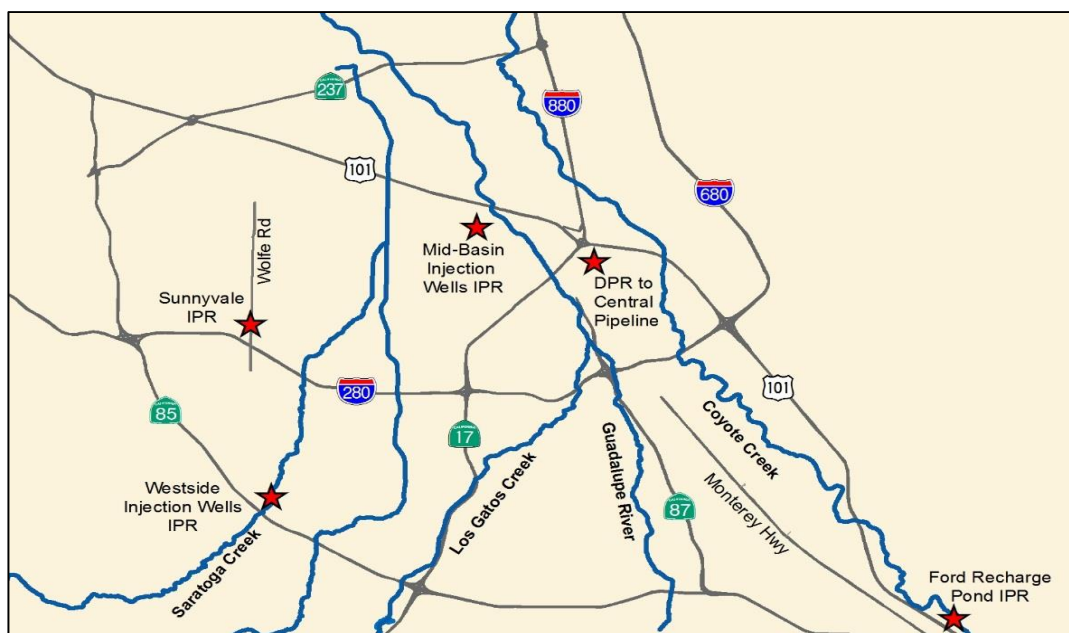
This project plans, designs, and constructs new infrastructure, proposed in the District's 2012 Water Supply Master Plan, to accomplish the following objectives:

- ♦ Expand the District's long-term water supply portfolio.
- ♦ Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- ♦ Expansion of the Silicon Valley Advanced Water Purification Center to produce up to an additional 24 million gallons per day (MGD) of advanced purified water.
- ♦ Installation of pipelines to convey advanced purified water to the District's existing groundwater recharge ponds for indirect potable reuse, or to the District's conventional surface water treatment plants for use as raw water augmentation (direct potable reuse).
- ♦ Installation of purified water injection wells at strategic locations to improve groundwater basin management.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

April 2015 to June 2027

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	10,788											
Design	53,348											
Construct	469,749											
Closeout	850											
	534,735											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91304001 - Indirect Potable Water Reuse Projects - Planning	15,286	3,120	500	0	0	0	0	0	18,906
with inflation	15,286	3,120	520	0	0	0	0	0	18,926
91284009 - Silicon Valley Advanced Water Purification Center Expansion	654	100	150	150	10,861	14,583	21,034	254,848	302,380
with inflation	654	100	156	162	12,217	17,060	62,024	262,658	355,032
91384001 - Purified Water Pipelines	0	100	150	150	9,402	7,051	14,920	194,400	226,173
with inflation	0	100	156	162	10,576	8,249	46,765	198,642	264,650
TOTAL	15,940	3,320	800	300	20,263	21,634	35,954	449,248	547,459
with inflation	15,940	3,320	832	324	22,793	25,309	108,789	461,300	638,608

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91304001 - Indirect Potable Water Reuse Projects - Planning	17,200	2,090	884	0	0	0	0	0	0	19,290
91284009 - Silicon Valley Advanced Water Purification Center Expansion	1,282	4,228	4,756	0	0	7,779	17,060	62,024	262,658	355,032
91384001 - Purified Water Pipelines	0	3,351	3,251	0	0	7,643	8,249	46,765	198,642	264,650
TOTAL	18,482	9,669	8,891	0	0	15,423	25,309	108,789	461,300	638,972

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funds exceed planned expenditures by approximately \$364,000. Excess funds will be returned to fund reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	638,972
Other Funding Sources	0
Total	638,972

OPERATING COST IMPACTS

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

USEFUL LIFE: Not Available

Project	South County Recycled Water Pipeline
Program	Water Supply – Recycled Water
Priority No.	52
Project No.	91094007s
District Contact	Katherine Oven koven@valleywater.org



Recycled water purple pipeline waiting to be laid during construction of Immediate Term project

PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan accepted in December 2004 to improve system redundancy, reliability, and capacity. The current Master Plan report presents a 20-year capital program for expanding water recycling in South County in three phases; Immediate Term, Short Term, and Long Term:

Completed:

- 91094007 Gilroy Pipelines and Reservoir (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the SCRWA treatment plant.
- 91094008 Gilroy Pipelines (Short Term) Phase 1A, installation of approximately 3000 feet of 30-inch and 36-inch pipeline.

Currently Underway:

- 91094009 Gilroy Pipelines (Short Term) Phase 1B/2A will construct an additional 14,000 linear feet of pipeline.
- 91094010 Gilroy Pipelines (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 Gilroy Pipelines (Long-Term) Phase 1 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

July 2009 to June 2020

The schedule chart shows Short-Term Phase 1B and Phase 2 projects only. The Immediate-Term and Short-Term Phase 1A projects are complete.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,801											
Design	8,019											
Construct	31,915											
Closeout	155											
	42,890											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91094007-Recycled Water South County Masterplan - 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 Masterplan - 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	8,043	11,240	10,124	15	0	0	0	0	29,422
with inflation	8,043	11,240	10,447	16	0	0	0	0	29,747
91094010-South County Recycled Water Pipeline - Short Term 2	3,782	3,608	420	320	320	0	0	0	8,450
with inflation	3,782	3,608	433	340	350	0	0	0	8,513
TOTAL	20,473	14,848	10,544	335	320	0	0	0	46,520
with inflation	20,473	14,848	10,880	356	350	0	0	0	46,908

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	11,028	15,772	7,517	2,930	16	0	0	0	0	29,747
91094010-South County Recycled Water Pipeline - Short Term 2	8,108	0	718	0	55	350	0	0	0	8,513
TOTAL	27,784	15,772	8,235	2,930	71	350	0	0	0	46,908

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	40,905
South County Regional Wastewater Authority	708
United States Bureau of Reclamation (USBR) ARRA	1,295
United States Bureau of Reclamation (USBR) Title 16	4,000
Total	46,908

OPERATING COST IMPACTS

Estimated District share of the operating and maintenance costs are \$8,000 per year for the Immediate-Term phase, beginning in FY 2007 and an additional \$25,000 for the Short-Term Phase 1, beginning in FY 2019. Increases for Immediate Term are primarily labor costs for operating the new 3mg reservoir and its pump station. Increases for Short Term are labor and materials to maintain the 42,000 feet of new pipeline, exercising valves and cathodic protection.

USEFUL LIFE: Pipelines – 50 Year; Pumps – 20 Years

Project	Wolfe Road Recycled Water Facility
Program	Water Supply – Recycled Water
Priority No.	61
Project No.	91244001
District Contact	Katherine Oven koven@valleywater.org



Artist's rendering of the new Apple campus and surrounding grounds that will be maintained using recycled water supplied by the Wolfe Road pipeline

PROJECT DESCRIPTION

This project plans, designs, and constructs approximately 13,300 linear feet of pipeline along Wolfe Road to deliver recycled water to the west side of Sunnyvale and the new Apple campus in Cupertino.

PROJECT LOCATION



SCHEDULE & STATUS

September 2013 to January 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	6											
Design	2,102											
Construct	2,907											
Closeout	17											
	5,032											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91244001-Wolfe Road Recycled Water Facility	13,042	1,644	327	0	0	0	0	0	15,013
with inflation	13,042	1,644	340	0	0	0	0	0	15,026

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91244001-Wolfe Road Recycled Water Facility	14,171	657	142	198	0	0	0	0	0	15,026

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	4,126
Apple Inc.	4,800
California Department of Water Resources	2,500
Cal Water	1,500
City of Sunnyvale	2,100
Total	15,026

OPERATING COST IMPACTS

The operating budget impact to operate and maintain the Wolfe Rd. Recycled Water Facilities is estimated to be \$25,000 per year beginning in FY18, plus power costs of approximately \$56 per each acre-foot of water delivered.

USEFUL LIFE: 50 Years

Flood Protection Capital Improvements

FLOOD PROTECTION OVERVIEW

The District manages approximately 800 miles of creeks in Santa Clara County to meet the Board's Ends Policy E-3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations." The district's goals are further defined in E-3.1, "Provide natural flood protection for residents, businesses, and visitors" and E-3.2, "Reduce potential for flood damages." The 800 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. The District administers an asset management program for its flood protection infrastructure. The program includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

Fifty years of working for flood protection has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005 the District had provided flood protection to 93,253 of the 166,526 parcels in the flood plain and another 6,642 have been protected since then.

The voters in Santa Clara County have supported the District's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters approved a special parcel tax in 2000 and 2012 to fund the continuation of the District's flood protection capital improvements, specifically, moving upstream from the completed downstream work or starting new work on creeks that have not had flood protection work.

Lower Peninsula Watershed

Major Capital Improvements Completed

- Adobe Creek from El Camino to West Edith Ave.
- Barron Creek
- Matadero Creek from Palo Alto Flood Basin to Barron Creek
- Stevens Creek from Highway 101 to Homestead Road

Major Capital Improvements Identified in the CIP

- Palo Alto Flood Basin Structure Improvements
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)
- San Francisquito Creek from S.F. Bay to Searsville Dam (Clean, Safe Creeks/Safe, Clean Water)

West Valley Watershed

Major Capital Improvements Completed

- Calabazas Creek from Guadalupe Slough to Wardell Road
- San Tomas Creek from Southern Pacific Railroad to Cabrillo Avenue
- Saratoga Creek from San Tomas Creek to Lawrence Expressway

Major Capital Improvements Identified in the CIP

- Sunnyvale East and West Channels (Clean, Safe Creeks)

Guadalupe Watershed

Major Capital Improvements Completed

- Alamitos Creek
- Guadalupe River-Lower from Alviso Marina to Interstate 880
- Guadalupe River-Downtown from Interstate 880 to Interstate 280

Major Capital Improvements Identified in the CIP

- Guadalupe River-Upper, Interstate 280 to Blossom Hill Road (Clean, Safe Creeks/Safe, Clean Water)

Coyote Watershed

Major Capital Improvements Completed

- Coyote Creek from S.F. Bay to Montague Expressway
- Lower Penitencia Creek from Coyote Creek to Tasman Drive
- Lower Silver Creek from Coyote Creek to Interstate 680 (Reaches 1-3, 4, 5 & 6A)
- Wrigley Ford Creek

Major Capital Improvements Identified in the CIP

- Berryessa Creek from Calaveras Boulevard to Old Piedmont Road (Clean, Safe Creeks)
- Berryessa Creek from Lower Penitencia Creek to Calaveras Boulevard
- Coyote Creek Montague Expressway to Interstate 280 (Clean, Safe Creeks)
- Lower Silver Creek from Interstate 680 to Lake Cunningham (Reaches 6B)
- Upper Penitencia Creek from Coyote Creek to Dorel Drive (Safe, Clean Water)

Flood Protection Capital Improvements

Uvas/Llagas Watershed

Major Capital Improvements Completed

- Llagas Creek–Lower from Pajaro River to Buena Vista Road
- Uvas Creek

Major Capital Improvements Identified in the CIP

- Llagas Creek Capacity Restoration from Buena Vista Road to Pajaro River
- Llagas Creek–Upper, Buena Vista Road to Llagas Road (Clean, Safe Creeks/Safe, Clean Water)

Multiple Watersheds

Major Capital Improvements Identified in the CIP

- Watershed Asset Rehabilitation Program
- San Francisco Bay Shoreline (Safe, Clean Water)

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new flood protection projects proposed to be added to the Fiscal Year 2018-22 CIP reflect the Board's priorities. The priority criteria used are included in Appendix A.

A financial analysis of the Watershed and Steam Stewardship Fund and Safe, Clean Water Fund, the funding sources for flood protection capital improvements, was conducted to determine if there are limitations to funding all of the projects proposed for the Fiscal Year 2018-22 CIP. Results of the prioritization process and financial analysis are summarized in Appendix B.

The watersheds have benefited from higher than projected property tax revenue in fiscal years 2013 through 2016. The District will also receive \$55 million from DWR to assist with construction of Lower Silver, Lower Berryessa, Upper Berryessa, and Lower Penitencia.

The voter approved Safe, Clean Water program will provide funding for some of the highest priority unfunded projects including:

- San Francisco Bay Shoreline - Design and Partial Construction of EIA 11 and Planning for other EIAs
- San Francisquito Creek, SF Bay to Middlefield Road
- Upper Guadalupe River, I-280 to Blossom Hill Road
- Upper Llagas Creek, Buena Vista Road to Wright Avenue
- Upper Penitencia Creek, Coyote to Dorel Drive

An implementation schedule for the Safe, Clean Water projects is available in Appendix G.

Delays in the federal funding for many of the USACE projects have extended the schedules beyond the dates committed by the District. Therefore, the District is evaluating the option of proceeding with the local funding option on several of these projects. Construction on a number of flood protection projects have been delayed due to either Federal funding issues or delays in receiving environmental permits.

The following high priority flood protection projects, unfunded or partially funded, are of major concern to meet the Board's Ends Policy E-3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."

Partially Funded and Unfunded CIP Projects

- Coyote Creek, Montague Expressway to Interstate 280 (Construction is unfunded)
- San Francisco Bay Shoreline Project - except EIA 11 (Design and Construction is unfunded)
- San Francisquito Creek 100 year flood protection upstream of Highway 101
- Upper Berryessa Creek, Interstate 680 to Old Piedmont Road (unfunded; \$20 million)
- Berryessa Creek, Lower Penitencia Creek to Calavers Blvd–Phase 3 and Tularcitos Creeks (construction is unfunded \$50M)

Flood Protection Capital Improvements

The following table is a project funding schedule for flood protection capital improvements resulting from this year's priority process and 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 2015-16.

Flood Protection Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
LOWER PENINSULA WATERSHED											
10394001	Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	-	234	458	-	-	-	-	-	1,658
10244001s	Permanente Creek, SF Bay to Foothill Expressway	62,569	12,072	178	5,878	4,947	-	-	-	-	85,466
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	44,882	536	575	12,260	1,298	-	-	-	-	58,976
WEST VALEY WATERSHED											
20194005	San Tomas Creek, Quito Road Bridge Replacement	563	-	1	123	-	-	-	-	-	686
26074002	Sunnyvale East and West Channels	26,177	10,309	-	31,940	54	-	-	-	-	68,480
GUADALUPE WATERSHED											
26154001s	Guadalupe River-Upper, I-280 to Blossom Hill Road (E8)	112,881	8,615	-	24,811	9,741	11,577	8,222	3,529	3,021	182,397
COYOTE WATERSHED											
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	45,403	14,747	4,062	-	-	441	-	-	-	60,591
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	86,417	27,176	11,468	15,685	4,068	2,364	374	426	-	136,510
26174043	Coyote Creek, Montague Expressway to Interstate 280	11,486	-	632	-	-	-	1,021	852	23,227	36,586
40264011	Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	-	-	-	10,734
40334005	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	6,800	2,891	1,871	14,385	8,018	337	351	384	-	33,166
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	96,788	2,471	348	265	54	11	-	-	-	99,589
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	17,899	-	4,213	4,445	5,898	6,134	15,232	8,650	8,412	66,670
UVAS LLAGAS WATERSHED											
50284010	Llagas Creek-Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,475	2,185	2,338	-	-	-	-	11,569
26174051s	Llagas Creek-Upper, Buena Vista Avenue to Llagas Road	104,552	2,353	8,374	33,846	25,000	6,125	-	-	-	171,876
MULTIPLE WATERSHEDS											
00044026s	San Francisco Bay Shoreline (E7)	24,798	8,166	9,038	-	408	4,519	4,434	-	-	42,325
62,084,001	Watersheds Asset Rehabilitation Program	2,728	5,005	608	14,961	-	1,942	10,680	14,563	20,352	70,231
TOTAL		656,647	98,170	44,611	162,916	62,473	33,574	40,314	28,404	55,012	1,137,510

The following table shows funding requirements from each funding source for flood protection capital improvements.

Flood Protection - Funding Sources (\$K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
12	Watershed Stream Stewardship Fund	271,531	49,538	30,583	49,736	32,535	15,297	15,839	15,373	20,352	470,201
26	Safe, Clean Water and Natural Flood Protection Fund	385,116	48,632	14,028	113,180	29,938	18,277	24,475	13,031	34,660	667,309
TOTAL		656,647	98,170	44,611	162,916	62,473	33,574	40,314	28,404	55,012	1,137,510

FY 2016-17 Funds to be reappropriated

Flood Protection Capital Improvements

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Project	Palo Alto Flood Basin Tide Gate Structure Improvements
Program	Flood Protection - Lower Peninsula Watershed
Priority No.	56
Project No.	10394001
District Contact	Melanie Richardson mrichardson@valleywater.org



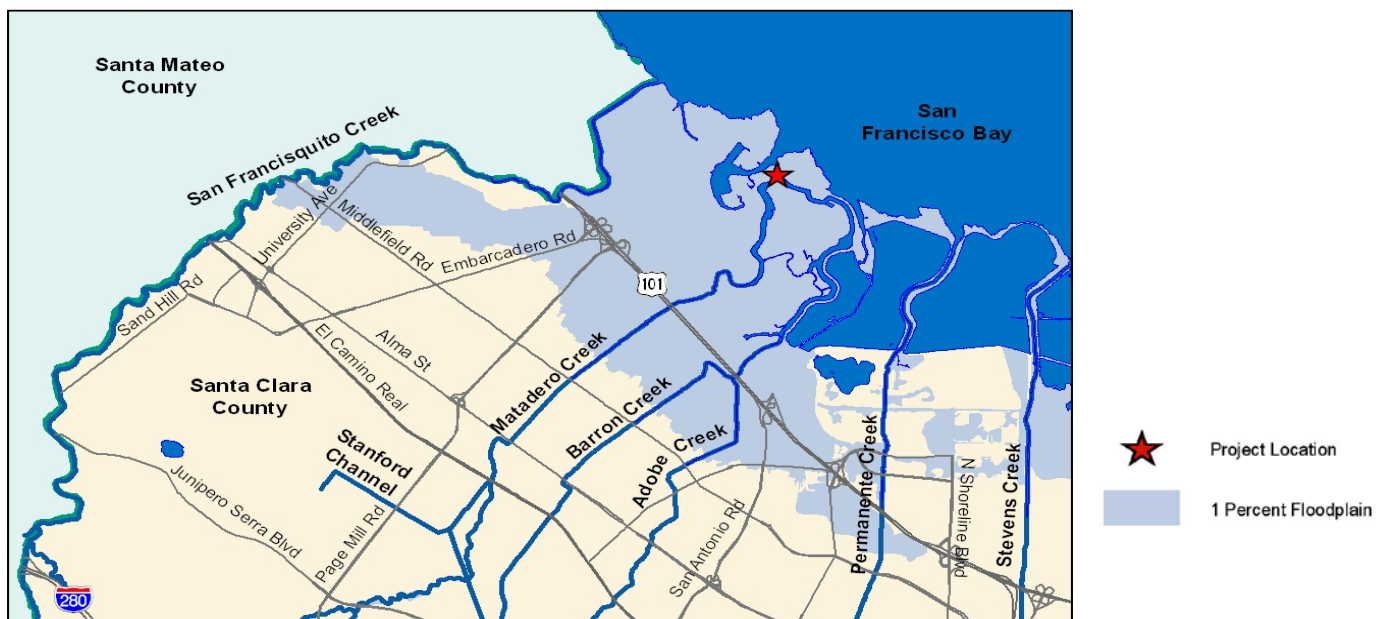
View from the west side of the Palo Alto tide gates facing east

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Palo Alto Flood Basin structure to accomplish the following objectives:

- ♦ Replace or repair the existing tide gate structure to improve the functionality of the flood barrier system.
- ♦ Reduce the possibility of flooding in lower reaches of Matadero, Adobe, and Barron Creeks.
- ♦ Prevent environmental impacts due to submergence of habitat areas within the Basin for Salt Marsh Harvest Mouse, California Clapper Rail bird and the Black Rail bird.
- ♦ Prevent impacts due to sea level rise or a 100-year fluvial flood.

PROJECT LOCATION



SCHEDULE & STATUS

October 2014 to December 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	401											
Permits	150											
Design	183											
Construct	1,035											
Closeout	10											
	1,779											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	256	710	665	0	0	0	0	0		1,631
with inflation	256	710	692	0	0	0	0	0		1,658

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	0	234	458	0	0	0	0		1,658

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed and Stream Stewardship Fur	1,658
Other Funding Sources	0
Total	1,658

OPERATING COST IMPACTS

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

USEFUL LIFE: 50 Years

Project	Permanente Creek, San Francisco Bay to Foothill Expressway
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	62
Project No.	10244001s
District Contact	Melanie Richardson mrichardson@valleywater.org



Permanente Creek, looking downstream at the golf course foot bridge

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, Hale Creek from Foothill Expressway to its confluence with Permanente Creek, and the diversion structure between Permanente and Stevens Creeks, to accomplish the following objectives:

- Provide flood protection to 1,664 parcels, including Middlefield Road and Central Expressway.
- Reduce erosion and sedimentation, reduce maintenance costs, and improve safety and stability of the failing channel on Permanente Creek from the San Francisco Bay to Foothill Expressway.
- Provide environmental restoration and enhancement benefits, where opportunities exist.
- Provide recreation enhancements, where opportunities exist.
- Provide natural flood protection by taking a multiple-objective approach.

PROJECT LOCATION



SCHEDULE & STATUS

July 2001 to June 2019

Construction includes multiple contract phases and three years of plant establishment monitoring.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	10,048											
Permits	3,610											
Design	15,035											
Construct	51,141											
Closeout	50											
	79,884											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,363	0	0	0	0	0	0	0	17,363
with inflation	17,363	0	0	0	0	0	0	0	17,363
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	16,800	40,300	5,700	4,650	0	0	0	0	67,450
with inflation	16,800	40,300	5,878	4,947	0	0	0	0	67,925
TOTAL	34,163	40,300	5,700	4,650	0	0	0	0	84,813
with inflation	34,163	40,300	5,878	4,947	0	0	0	0	85,288

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,541	0	178	0	0	0	0	0	0	17,541
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	45,028	12,072	0	5,878	4,947	0	0	0	0	67,925
TOTAL	62,569	12,072	178	5,878	4,947	0	0	0	0	85,466

Adjusted Budget includes adopted budget plus a planned budget adjustment for \$350,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	17,541
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	67,925
Total	85,466

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$100,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include sediment removal at three flood detention sites, and bypass channel inlet and outlet operations and maintenance.

USEFUL LIFE: 30+ Years

Project	San Francisquito Creek, San Francisco Bay through Searsville Dam
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	78
Project No.	10284007s
District Contact	Melanie Richardson mrichardson@valleywater.org



Upstream face of Pope/Chaucer Street with water surface approximately 2 feet below the soffit

PROJECT DESCRIPTION

This project provides coordination and support to the San Francisquito Joint Powers Authority, in partnership with the U.S. Army Corps of Engineers, to complete planning and design documents for an approved project alternative on San Francisquito Creek, from San Francisco Bay through Searsville Dam. This project will accomplish the following objectives:

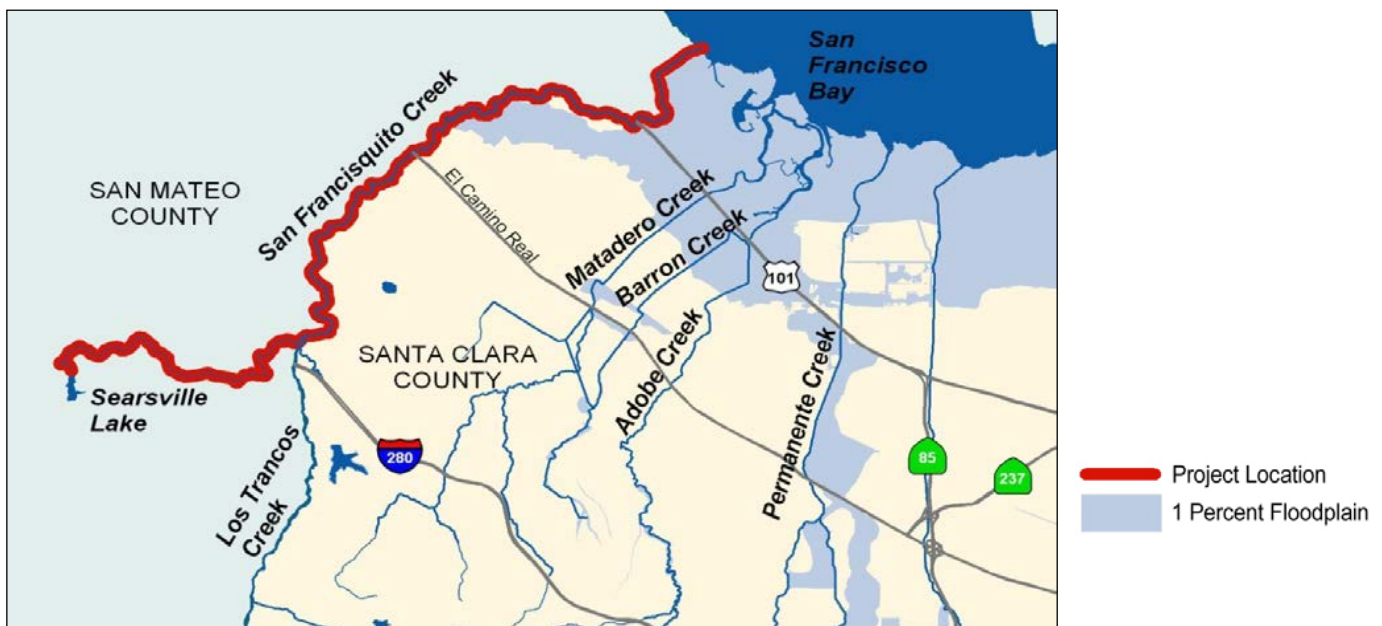
- Provide flood protection.
- Reduce bank erosion and sedimentation-related impacts along San Francisquito Creek.
- Avoid potential adverse impacts on fish and wildlife habitats.
- Minimize impacts to the creek's environmental resources and restore the riparian corridor where feasible.
- Develop public support for the preferred alternative.

The San Francisquito construction project will provide 100-year flood protection from San Francisco Bay to Highway 101 starting in FY16 and replace two bridges between Highway 101 and Middlefield Road with construction starting in FY16.

This project is accounted for in the following job numbers:

- 10284007 – SF Bay through Searsville Dam
- 10284008 – Early Implementation
- 26284001 – SF Bay through Searsville Dam
- 26284002 – Construction - San Francisco Bay to Middlefield Rd.

PROJECT LOCATION



SCHEDULE & STATUS

June 2003 to June 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	4,448											
Permits	1,356											
Design	11,973											
Construct	39,826											
Closeout	100											
	57,703											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	4,064
with inflation	4,064	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	1,614
with inflation	1,614	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	5,775	550	410	0	0	0	0	0	6,735
with inflation	5,775	550	426	0	0	0	0	0	6,751
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	31,520	1,320	12,000	1,200	0	0	0	0	46,040
with inflation	31,520	1,320	12,378	1,298	0	0	0	0	46,516
TOTAL	42,973	1,870	12,410	1,200	0	0	0	0	58,453
with inflation	42,973	1,870	12,804	1,298	0	0	0	0	58,945

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,782	0	457	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	32,422	536	118	12,260	1,298	0	0	0	0	46,516
TOTAL	44,882	536	575	12,260	1,298	0	0	0	0	58,976

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately \$31,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	53,298
Total	58,976
San Francisquito Joint Powers Authority (DWR)	8,000
U.S. Army Corps of Engineers - In-kind Services	3,000
County of San Mateo - In-kind Services	1,500

County and Corps participation are for Feasibility Study activities only.
Additional funding will be negotiated during subsequent phases.

OPERATING COST IMPACTS

No operating budget impacts are expected from the construction of this project.

USEFUL LIFE: Not Available

Project	San Tomas Creek, Quito Road Bridges Replacement
Program	Flood Protection - West Valley Watershed
Priority No.	63
Project No.	20194005
District Contact	Liang Lee llee@valleywater.org

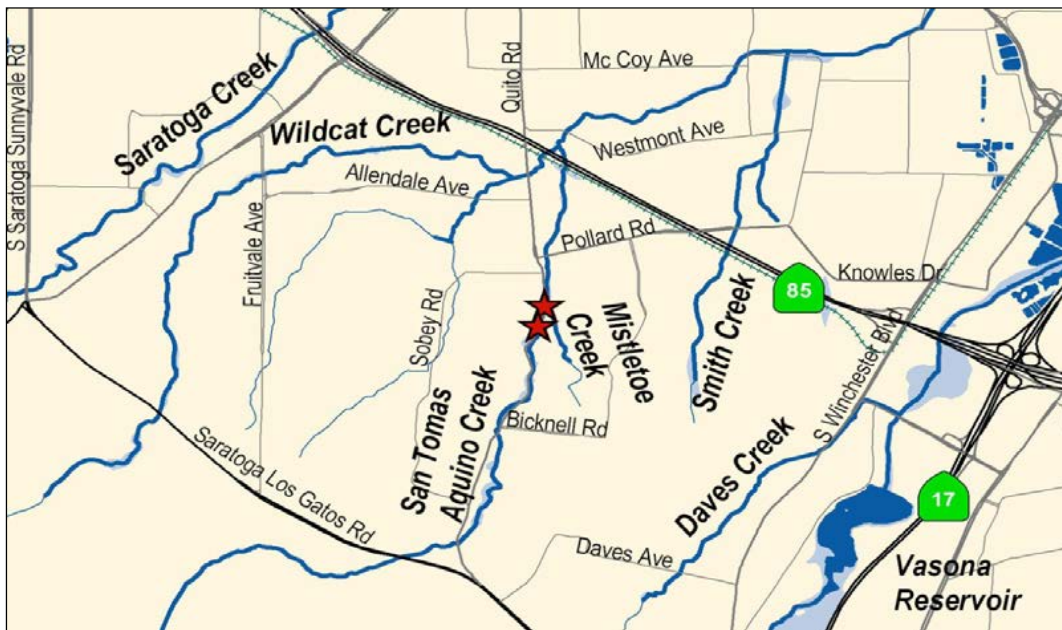


San Tomas Aquino Creek, looking upstream at one of the Quito Road bridge crossings and an adjacent pedestrian footbridge.

PROJECT DESCRIPTION

This project partners with the City of Saratoga, the Town of Los Gatos, and Caltrans to plan, design, and construct two bridge replacements on San Tomas Aquino Creek at Quito Road, to provide one-percent flood protection.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2001 to September 2017

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Permits	-											
Design	-											
Construct	387											
Closeout	24											
	411											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	562	0	119	0	0	0	0	0	681
with inflation	562	0	124	0	0	0	0	0	686

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	563	0	1	123	0	0	0	0	0	686

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	686
Other Funding Sources	0
Total	686
City of Saratoga	300
Town of Los Gatos	300
Caltrans (Highway Bridge Replacement and Rehabilitation Program) - 80%	4,115

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease District operating costs as the facility is owned by the City of Saratoga.

USEFUL LIFE: 30+ Years

Project	Sunnyvale East and West Channels Improvement
Program	Flood Protection – West Valley Watershed
Priority No.	65
Project No.	26074002
District Contact	Ngoc Nguyen nnguyen@valleywater.org



Sunnyvale West Channel looking upstream from Java Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to approximately 6.4 miles of the Sunnyvale East Channel, from Guadalupe Slough to Interstate 280, and 2.3 miles of the Sunnyvale West Channel, from Guadalupe Slough to Highway 101, to accomplish the following objectives:

- Provide flood protection to over 1,600 parcels along Sunnyvale East and West Channels.
- Provide environmental enhancement benefits where opportunities exist.
- Provide recreation enhancements where opportunities exist.
- Reduce erosion, sedimentation, and maintenance costs.
- Protect fish and wildlife habitat.

The Sunnyvale East and Sunnyvale West Channels were originally identified as separate projects. In order to improve efficiency by combining efforts, the planning, design and construction phases for both projects will be performed as a single effort.

PROJECT LOCATION



SCHEDULE & STATUS

March 2006 to December 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	5,765											
Permits	908											
Design	7,799											
Construct	52,881											
Closeout	50											
	67,403											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26074002-Sunnyvale East and West Channels Improvement	14,622	21,864	31,000	50	0	0	0	0		67,536
with inflation	14,622	21,864	31,940	54	0	0	0	0		68,480

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26074002-Sunnyvale East and West Channels Improvement	26,177	10,309	0	31,940	54	0	0	0		68,480

Adjusted Budget includes adopted budget plus a planned budget adjustment for \$10,309,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	68,480
Other Funding Source	0
Total	68,480

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$50,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include graffiti removal, mowing and weed control under the levees, and for operation and maintenance of the Pond A4 detention basin.

USEFUL LIFE: 30+ Years

Project	Guadalupe River–Upper, Interstate 280 to Blossom Hill
Program	Flood Protection – Guadalupe Watershed
Priority No.	68
Project No.	26154001s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Flooding from Guadalupe River on Willow Street near the Southern Pacific Railroad Bridge

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 6 miles of the Guadalupe River, from Interstate 280 to Blossom Hill Road, to accomplish the following objectives:

- Provide one-percent flood protection to nearly 7,000 parcels along the Guadalupe River, from I-280 to Blossom Hill Road, including portions of Ross Creek and Canoas Creek.
- Provide long-term net gains of 15 acres in riparian forest acreage, quality, and continuity of wildlife habitat, and conditions favoring Chinook salmon and steelhead trout.
- Provide access to an additional 19 miles of suitable upstream spawning and rearing habitat, which would result in significant long-term beneficial impacts on fisheries resources.
- Coordinate with the City of San Jose and the community to establish a continuous maintenance road suitable for trail development between Interstate 280 and Los Alamitos Creek.
- Improve water quality by reducing bank erosion and sedimentation-related impacts along the river and tributaries.
- Address and resolve permit coordination activities and watershed integration issues through the Guadalupe Watershed Integration Working Group.

This project is accounted for in the following job numbers:

- 26154001—Fish Passage Modification (Completed)
- 26154002—I-280 to Southern Pacific Railroad Bridge (Reach 6)
- 26154003—Southern Pacific Railroad Bridge to Blossom Hill Road (Reaches 7-12)

PROJECT LOCATION



SCHEDULE & STATUS

July 2001 to June 2025

Planning phase is complete.
Design and construction of
eight individual reaches are
being done sequentially.

Phase	Cost
Plan	9,004
Permits	2,540
Design	85,737
Construct	80,025
Closeout	167
	n/a

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

Project	Actuals Thru	Planned Expenditures							Total
	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mod	2,651	0	0	0	0	0	0	0	2,651
with inflation	2,651	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6-12)	32,448	2,171	0	0	1,250	1,270	0	30	37,169
with inflation	32,448	2,171	0	0	1,406	1,439	0	38	37,502
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	39,785	36,554	24,035	9,035	9,085	5,855	2,995	2,470	129,814
with inflation	39,785	36,554	24,811	9,741	10,171	6,783	3,529	2,983	134,358
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	7,887
with inflation	7,887	0	0	0	0	0	0	0	7,887
TOTAL	82,771	38,725	24,035	9,035	10,335	7,125	2,995	2,500	177,521
with inflation	82,771	38,725	24,811	9,741	11,577	8,222	3,529	3,021	182,398

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

Project	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26154001-Guadalupe Rv—Upr, Fish Passage Mod	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6-12)	34,503	116	0	0	1,406	1,439	0	38	37,502	
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	67,840	8,499	0	24,811	9,741	10,171	6,783	3,529	2,983	134,358
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	112,881	8,615	0	24,811	9,741	11,577	8,222	3,529	3,021	182,398

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	124,052
SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood Protection Fund	20,961
State of California	21,600
City of San Jose	3,785
Total	182,398
U.S. Army Corps of Engineers - In-kind Services	188,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$480,000 per year, beginning in FY 2025, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and operations and maintenance in accordance with the Corps Operations and Maintenance Manual.

USEFUL LIFE: 30+ Years

Project	Berryessa Creek, Calaveras Boulevard to Interstate 680
Program	Flood Protection – Coyote Watershed
Priority No.	76
Project No.	26174041s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



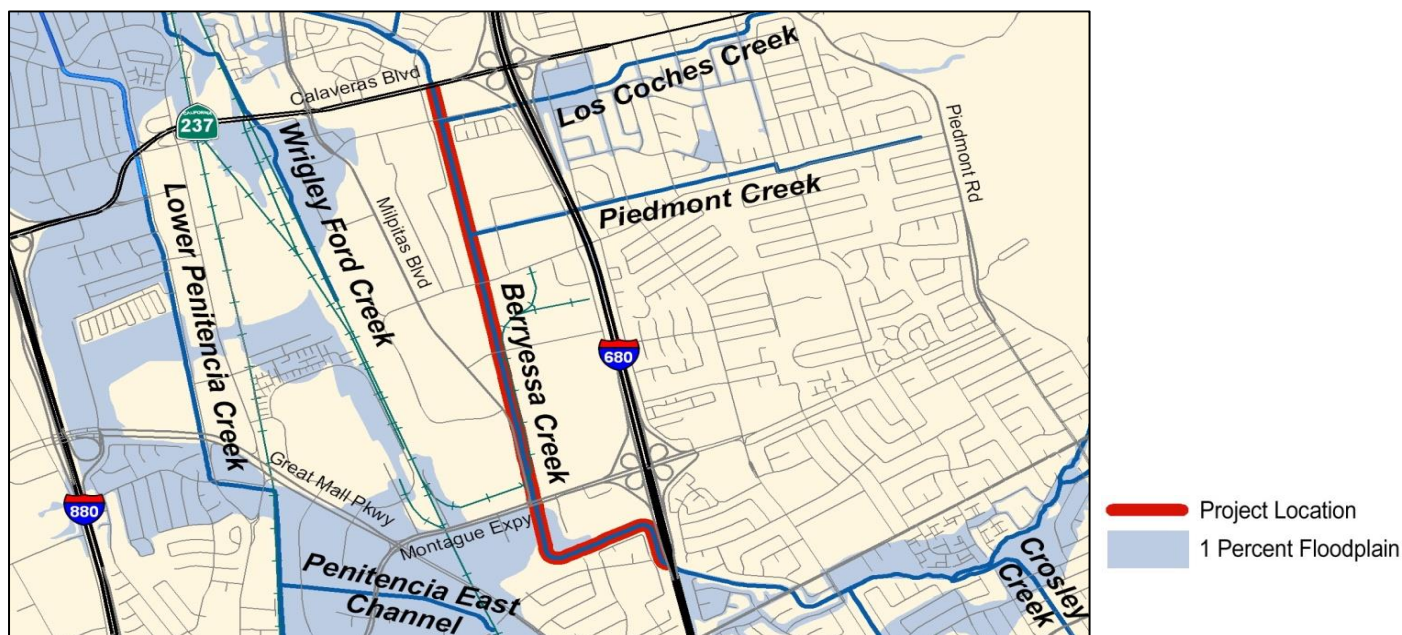
Berryessa Creek near flood stage at Piedmont Road in San Jose

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 2 miles of Berryessa Creek, from Calaveras Boulevard to Interstate 680, to accomplish the following objectives:

- Provide one-percent flood protection to more than 1,100 homes, businesses, and public buildings.
- Reduce sedimentation and maintenance requirements.
- Mitigate for project impacts.
- Improve stream habitat values.
- Coordinate with the cities of San Jose and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection Program Objectives.

PROJECT LOCATION



SCHEDULE & STATUS

January 2000 to June 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	8,232											
Design	644											
Design	11,507											
Construct	38,398											
Closeout	50											
	58,831											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26174041-Berryessa Creek, Corps Coordination	22,016	14,747	1,396	850	724	0	0	0	39,733
with inflation	22,016	14,747	1,447	909	798	0	0	0	39,917
26174042-Berryessa Creek, LERRDs	19,325	0	0	0	0	0	0	0	19,325
with inflation	19,325	0	0	0	0	0	0	0	19,325
TOTAL	41,341	14,747	1,396	850	724	0	0	0	59,058
with inflation	41,341	14,747	1,447	909	798	0	0	0	59,242

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26174041-Berryessa Creek, Corps Coordination	24,729	14,747	2,713	0	0	441	0	0	0	39,917
26174042-Berryessa Creek, LERRDs	20,674	0	1,349	0	0	0	0	0	0	20,674
TOTAL	45,403	14,747	4,062	0	0	441	0	0	0	60,591

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately \$1,349,000. Excess funds will be returned to Fund Reserves at the end of the project.

FUNDING SOURCES

(in thousands \$)

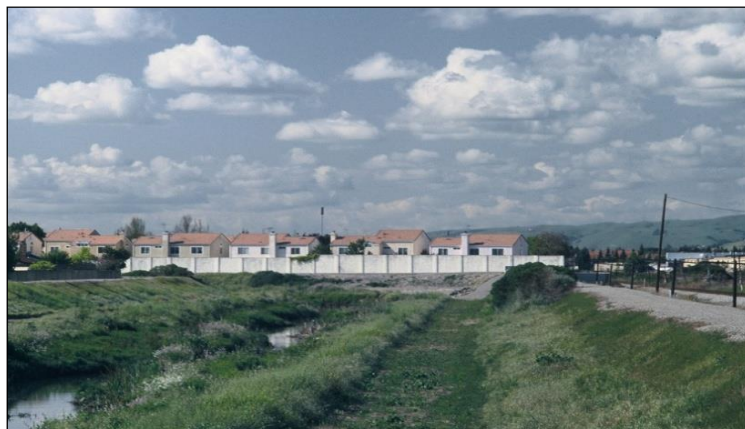
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,800
State of California	32,791
Department of Water Resources (Prop 1E)	10,000
Total	60,591
U.S. Army Corps of Engineers - In-kind Services	13,600

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$80,000 per year, beginning in FY 2021, to maintain approximately 2 miles of new levees and flood walls, and for activities such as vegetation spraying and graffiti removal.

USEFUL LIFE: 30+ Years

Project	Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard
Program	Flood Protection – Coyote Watershed
Priority No.	68
Project No.	40174004s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



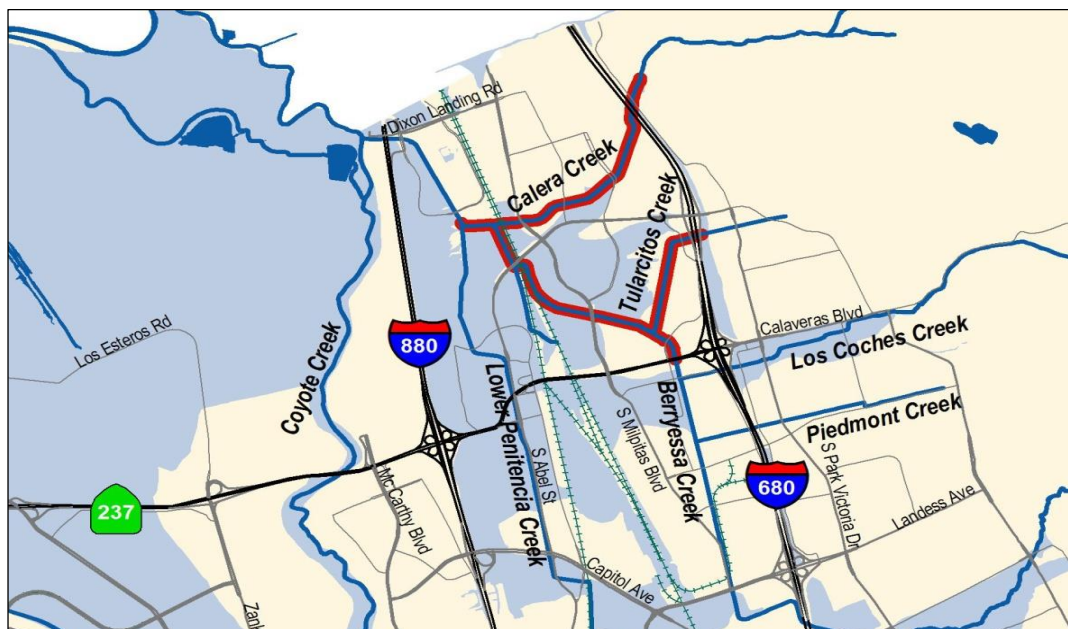
Berryessa Creek upstream of the confluence with Lower Penitencia Creek

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 3 miles of Berryessa Creek and its tributaries, from the confluence with Lower Penitencia Creek to Calaveras Boulevard (Phase 1 and 2) and both Calera and Tularcitos Creeks (Phase 3), to accomplish the following objectives:

- Provide one-percent flood protection to 1,823 homes, businesses, and public buildings in the surrounding area.
- Improve the structural integrity of the levees.
- Improve maintenance access and safety for District staff.
- Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.

PROJECT LOCATION

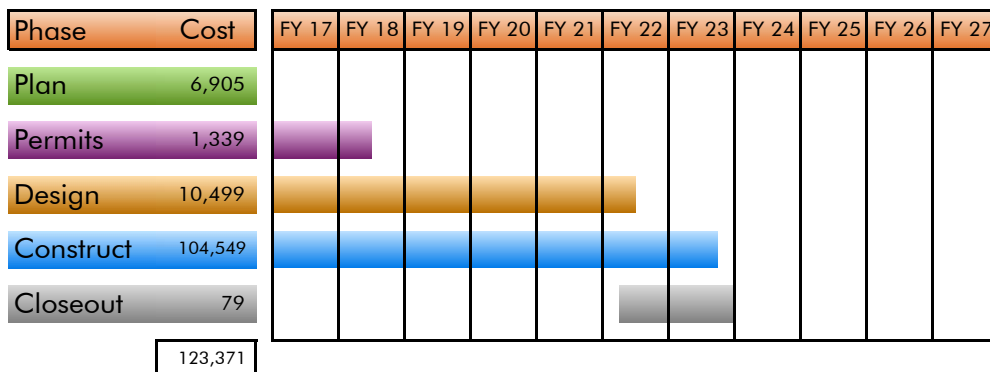


- Project Location
- 1 Percent Floodplain

SCHEDULE & STATUS

March 2001 to June 2023

Planning phase is complete.
Construction includes three phases
and three years of plant
establishment monitoring.



EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	48,322	705	30	20	15	0	0	0	49,092
with inflation	48,322	705	31	22	17	0	0	0	49,097
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	29,223	23,875	18,401	1,911	320	320	350	0	74,400
with inflation	29,223	23,875	18,987	2,067	360	374	426	0	75,312
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	1,925	1,850	1,810	0	0	0	5,585
with inflation	0	0	2,002	2,001	2,004	0	0	0	6,007
TOTAL	77,545	24,580	20,356	3,781	2,145	320	350	0	129,077
with inflation	77,545	24,580	21,020	4,090	2,381	374	426	0	130,416

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	55,191	0	6,164	0	0	0	0	0	0	55,191
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	31,226	27,176	5,304	13,683	2,067	360	374	426	0	75,312
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	2,002	2,001	2,004	0	0	0	6,007
TOTAL	86,417	27,176	11,468	15,685	4,068	2,364	374	426	0	136,510

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately \$6,094,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	121,510
Department of Water Resources (Prop 1E)	15,000
Total	136,510

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately \$70,000 per year. Operating costs will increase with completion of construction of each of 3 phases: beginning with a \$35,000 increase in FY 2018 (1 year after completion of Phase 1), increasing to \$45,000 in FY 2020 (1 year after completion of Phase 2), and finally increasing to \$70,000 (1 year after completion of Phase 3). These costs will be for increased maintenance activities such as sediment removal, vegetation management, levee maintenance, graffiti abatement, and trash & debris cleanup.

USEFUL LIFE: 30+ Years

Project	Coyote Creek, Montague Expressway to Interstate 280
Program	Flood Protection – Coyote Watershed
Priority No.	62
Project No.	26174043
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Flooding from Coyote Creek on 17th Street near downtown San Jose in January 1997

PROJECT DESCRIPTION

This project plans, designs, and partially constructs improvements along approximately 6.1 miles of Coyote Creek, from Montague Expressway to Interstate 280, to accomplish the following objectives:

- Complete planning and design for flood protection of 1,400 businesses and homes from a one percent flood for Coyote Creek from Montague Expwy to I-280.
- Improve water quality, enhance stream habitat, and provide recreational opportunities.
- Incorporate revegetation and aesthetic elements of the Coyote Creek park chain.
- Minimize long term maintenance needs.

PROJECT LOCATION

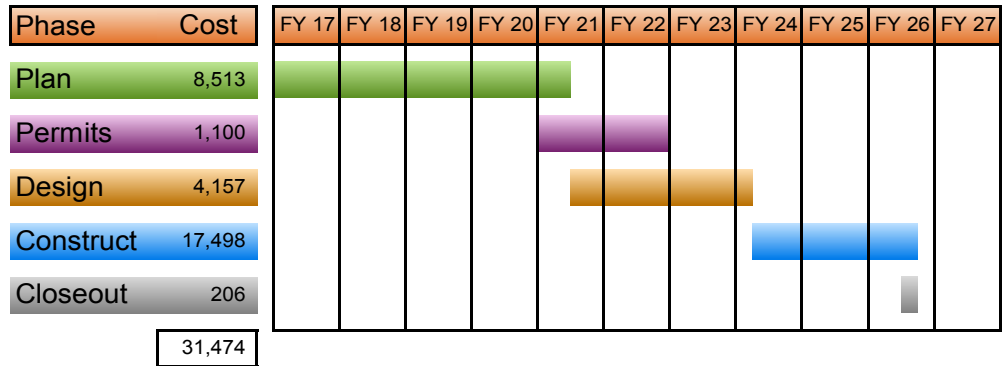


- Project Location
- 1 Percent Floodplain

SCHEDULE & STATUS

September 2002 to March 2026

Project is on hold and will resume in 2019.



EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	10,854	0	0	180	360	900	700	18,480	31,474
with inflation	10,854	0	0	195	405	1,053	852	23,227	36,585

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	11,486	0	632	0	0	0	1,021	852	23,227	36,585

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	36,585
Other Funding Source	0
Total	36,585

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$100,000 per year, beginning in FY 2027. Currently the District has limited and sporadic property rights within the project limits along the creek, and ongoing maintenance costs are relatively small. Project implementation may include acquisition of continuous right of way for construction and future operations and maintenance.

USEFUL LIFE: 30+ Years

Project	Cunningham Flood Detention Certification
Program	Flood Protection – Coyote Watershed
Priority No.	83
Project No.	40264011
District Contact	Ngoc Nguyen nnguyen@valleywater.org



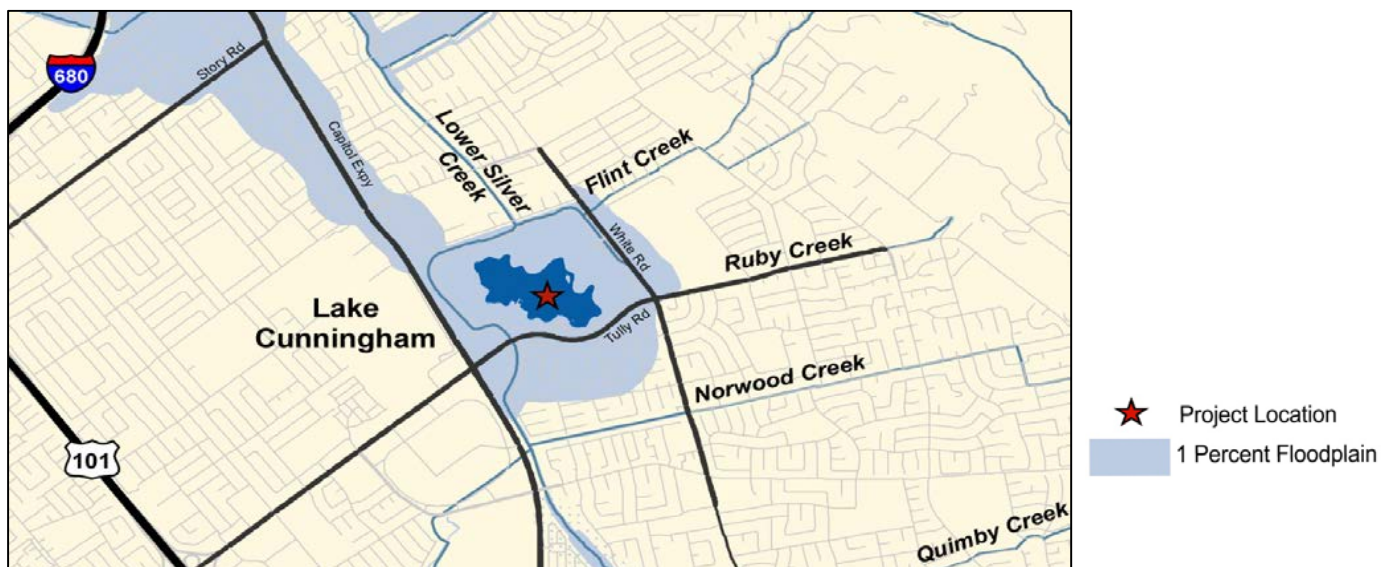
Flooding from Lower Silver Creek in February 1969 at the future site of Lake Cunningham Regional Park

PROJECT DESCRIPTION

This project plans, designs, and constructs final improvements at Lake Cunningham Regional Park (Park) to ensure the site operates as a flood detention facility in accordance with the 1978 agreement with the City of San Jose (City) and to ensure the Lower Silver Creek Project (LSC Project) improvements downstream of Cunningham Avenue function as designed. This project will accomplish the following objectives:

- Validate that the flood detention facility can attenuate the volume of water associated with 2,249 cfs below the park land elevation as stipulated in the 1978 Joint Use Agreement between the City and the District.
- Obtain Federal Emergency Management Agency (FEMA) certification of the flood detention facility and Lower Silver Creek improvements north of the Park to revise the applicable flood insurance rate maps in the Lower Silver Creek 1-percent floodplain near the north of the Park.
- Update the 1978 Joint Use Agreement between the City and the District to meet the flood detention facility's validated condition.

PROJECT LOCATION



SCHEDULE & STATUS

August 1999 to June 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,231											
Permits	96											
Design	1,986											
Construct	6,323											
Closeout	10											
	10,646											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40264011-Cunningham Flood Detention Certification	2,741	5,012	2,200	600	110	0	0	0	10,663
with inflation	2,741	5,012	2,208	649	124	0	0	0	10,734

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40264011-Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	0	0	0	10,734

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	10,734
Other Funding Source	0
Total	10,734

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operations costs. The project is within District jurisdiction and it is designed to minimize maintenance activities such as sediment removal, so as to have minimal or no additional impact to the operating budget.

USEFUL LIFE: 30+ Years

Project	Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks
Program	Flood Protection – Coyote Watershed
Priority No.	65
Project No.	40334005
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Lower Penitencia Creek, looking downstream from Milmont Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 1 mile of Lower Penitencia Creek from the downstream confluence with Coyote Creek to the downstream face of San Andreas Drive, to accomplish the following objectives:

- Convey the Lower Berryessa Creek 1-percent design flow.
- Meet required water surface elevations at Coyote Creek and Berryessa Creek confluences.
- Minimize the need for seasonal removal of sediment and non-woody vegetation.
- Maintain existing FEMA accreditation along the east levee located between California Circle and Berryessa
- Enable FEMA certification of the improvements.

PROJECT LOCATION



SCHEDULE & STATUS

October 2010 to June 2022

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	3,051											
Permits	1,126											
Design	3,903											
Construct	23,928											
Closeout	16											
	32,024											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	5,820	2,000	15,765	7,528	300	300	316	0	32,029
with inflation	5,820	2,000	16,256	8,018	337	351	384	0	33,166

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	6,800	2,891	1,871	14,385	8,018	337	351	384	0
									33,166

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	28,166
Department of Water Resources (Prop 1E)	5,000
Total	33,166

OPERATING COST IMPACTS

Operating cost impacts will be established during the design phase.

USEFUL LIFE: 50 Years

Project	Lower Silver Creek, I-680 to Cunningham Avenue (R4-6)
Program	Flood Protection – Coyote Watershed
Priority No.	98
Project No.	40264007s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Lower Silver Creek looking upstream from Capital Expressway

PROJECT DESCRIPTION

This project is part of a flood control project that partners with the Natural Resource Conservation Service (NRCS) to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement from the state and federal governments to accomplish the following objectives:

- Increase flood protection to 3,800 parcels in the surrounding area.
- Allow for on-site mitigation of project impacts, and in some cases enhancement of existing habitat values by increased wetlands and riparian habitat.
- Improve vehicle and pedestrian bridges crossing Lower Silver Creek.
- Develop the footprint for a future trail project between Capitol Avenue-Frontage Road and Jackson Avenue that ensures pedestrians and bicyclists may travel beneath the Dobern Pedestrian Bridge.

This project is accounted for in the following job numbers:

- 40264007–Lower Silver Creek, I-680 to N. Babb Rd. (Reach 4 Planning) - Completed
- 40264008–Lower Silver Creek, I-680 to Cunningham Rd. (Reaches 4-6)
- 40264012–Lower Silver Creek (Reaches 4-6) Reimbursable

PROJECT LOCATION



SCHEDULE & STATUS

August 1991 to March 2020

Planning and Design phases are complete

Phase	Cost
Plan	6,309
Permits	170
Design	10,840
Construct	80,496
Closeout	101
	97,916

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	2,371
with inflation	2,371	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	90,892	3,084	255	50	10	0	0	0	94,291
with inflation	90,892	3,084	265	54	11	0	0	0	94,306
40264012-Lower Silver Creek, LERRDs (R4-6)	1,815	749	50	50	40	0	0	0	2,704
with inflation	1,815	749	52	54	45	0	0	0	2,715
TOTAL	95,078	3,833	305	100	50	0	0	0	99,366
with inflation	95,078	3,833	317	108	56	0	0	0	99,392

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	91,505	2,471	0	265	54	11	0	0	0	94,306
40264012-Lower Silver Creek, LERRDs (R4-6)	2,912	0	348	0	0	0	0	0	0	2,912
TOTAL	96,788	2,471	348	265	54	11	0	0	0	99,589

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved budget exceeds planned expenditures by approximately \$197,000. Excess funds will be returned to fund reserves at the end of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	46,526
State of California	8,387
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	99,589

OPERATING COST IMPACTS

Operating budget impacts from construction of this project are expected to be insignificant. Repair of several erosion sites will reduce maintenance needs, but will not affect overall sediment removal or vegetation control practices.

USEFUL LIFE: 50+ Years

Project	Upper Penitencia Creek, Coyote Creek to Dorel Drive
Program	Flood Protection – Coyote Watershed
Priority No.	66
Project No.	40324003s
District Contact	Liang Lee LLee@valleywater.org



Flooding at King Road on Upper Penitencia Creek

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the following objectives.

- Provide one-percent flood protection to more than 5,000 homes, businesses, and public buildings.
- Mitigate for project impacts.
- Improve stream habitat values and fisheries potential.
- Reduce sedimentation and maintenance requirements.
- Identify opportunities to integrate recreation improvements consistent with the City of San Jose's Master Plans for Penitencia Creek Park Chain Reach 1 and Reach 2, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.
- Coordinate with local agencies to ensure that planned flood control improvements do not conflict with trail construction by the City of San Jose that is scheduled to begin in the latter part of 2013.

This project is accounted for in the following job numbers:

- 40324003—District coordination with Corps for Corps' work
- 40324005—District's Lands, Easements, Rights of Way, Relocation, and Disposal (LERRDs)
- 26324001—Safe Clean Water Program coordination with Corps for Corps' work

PROJECT LOCATION



SCHEDULE & STATUS

March 1996 to June 2027

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	8,594											
Permits	1,203											
Design	21,500											
Construct	26,867											
Closeout	20											
	58,184											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,851	0	0	0	0	0	0	0	8,851
with inflation	8,851	0	0	0	0	0	0	0	8,851
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	3,474	1,361	645	0	0	0	0	0	5,480
with inflation	3,474	1,361	671	0	0	0	0	0	5,506
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	0	0	4,644	5,453	5,453	11,736	8,588	7,990	43,864
with inflation	0	0	4,830	5,898	6,134	15,232	8,650	8,412	49,156
TOTAL	12,325	1,361	5,289	5,453	5,453	11,736	8,588	7,990	58,195
with inflation	12,325	1,361	5,501	5,898	6,134	15,232	8,650	8,412	63,512

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,970	0	119	0	0	0	0	0	0	8,970
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	8,544	0	3,709	0	0	0	0	0	0	8,544
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	385	0	385	4,445	5,898	6,134	15,232	8,650	8,412	49,156
TOTAL	17,899	0	4,213	4,445	5,898	6,134	15,232	8,650	8,412	66,670

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved Funding exceeds planned expenditures by approximately \$3,157,000. Excess funding will be returned to reserves at the end of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	17,514
SCVWD Safe, Clean Water Fund	49,156
Total	66,670
U.S. Army Corps of Engineers - In-kind Services	102,720

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not Available

Project	Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	65
Project No.	50284010
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Lower Llagas Creek near Pajaro River

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on approximately 7.15 miles of Lower Llagas Creek, from Buena Vista Avenue to Pajaro River, to accomplish the following objectives:

- Evaluate the current flood risk in the area surrounding the project versus the design level flood risk.
- Develop options to provide flood protection for Lower Llagas Creek Reaches 2 and 3 in accordance with Federal Emergency Management Agency (FEMA) criteria where applicable.
- Identify feasible opportunities for environmental restoration and corridor preservation.

PROJECT LOCATION



SCHEDULE & STATUS

July 2008 to June 2019

Project is "On Hold" until the Post-Project Hydraulic Analysis for the Upper Llagas Creek project is completed to address the City of Gilroy's request.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,913											
Permits	1,202											
Design	2,506											
Construct	4,600											
Closeout	50											
11,271												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,313	1,258	4,500	2,200	0	0	0	0		11,271
with inflation	3,313	1,258	4,660	2,338	0	0	0	0		11,569

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	7,046	0	2,475	2,185	2,338	0	0	0	0	11,569

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	6,449
State of California	5,120
Total	11,569

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 30+ Years

Project	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	70
Project No.	26174051s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Llagas Creek floods at Watsonville Road and the surrounding area

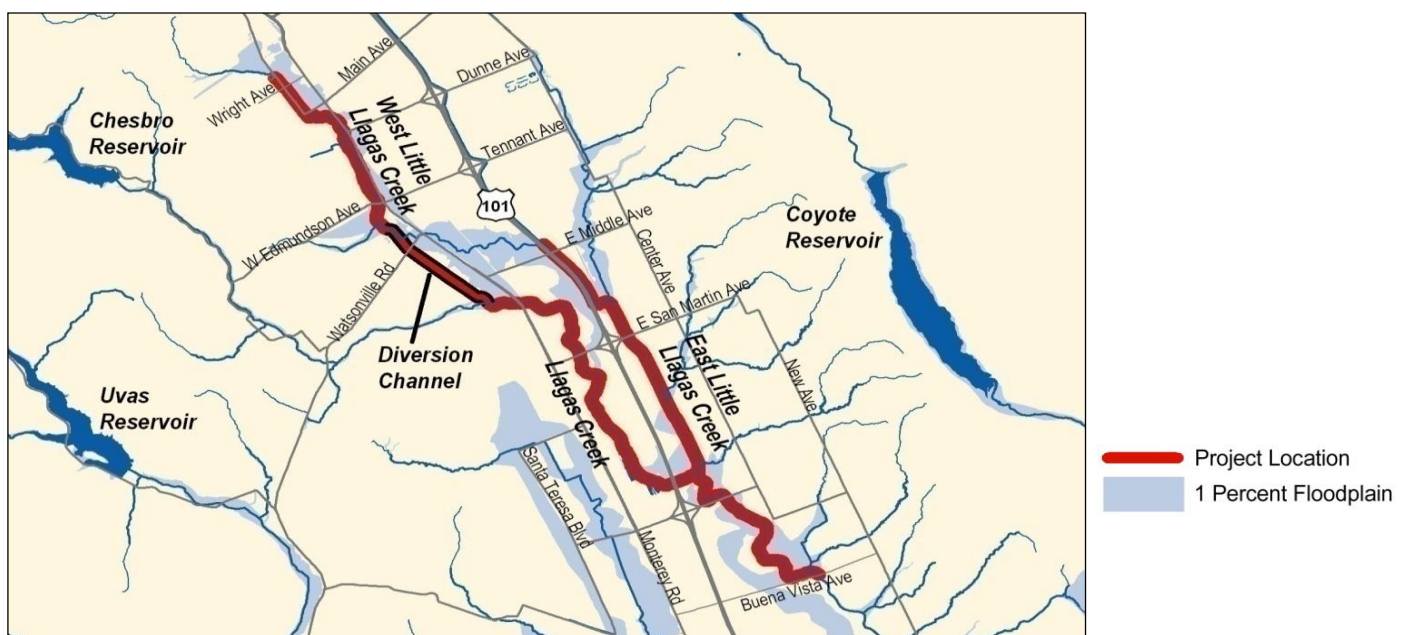
PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements on approximately 13.6 miles of Upper Llagas Creek, from Buena Vista Avenue to Llagas Road, to provide an increased level of flood protection with adequate freeboard. SCVWD shall coordinate with the County of Santa Clara and the City of Morgan Hill on public access and recreational trail opportunities within Reaches 7 and 8 of this project.

This project is accounted for in the following job numbers:

- 26174051 - Reaches 4-8 & 14 - Reimbursable - Lands, Easements, Rights of Way, Relocation, & Disposal (LERRDs)
- 26174052 - Reaches 4-8 & 14 - Coordination with the Corps
- 26174053 - Technical Studies (completed)
- 26174054 - Design
- 50C40335 - Construction, Reach 5, 6, & 7b

PROJECT LOCATION



SCHEDULE & STATUS

August 2000 to June 2020

Project schedule may vary considerably and is dependent upon the Corps and Congress.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	3,729											
Permits	3,578											
Design	60,684											
Construct	103,401											
Closeout	-											
	171,392											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26174051-Llagas Ck—Upper, LERRDs	20,793	22,157	0	0	0	0	0	0	42,950
with inflation	20,793	22,157	0	0	0	0	0	0	42,950
26174052-Llagas Ck—Upper, Corps Coordination	2,491	30,029	42,218	8,000	125	0	0	0	82,863
with inflation	2,491	30,029	42,219	8,000	125	0	0	0	82,864
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
with inflation	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	19,672	1,943	0	0	0	0	0	0	21,615
with inflation	19,672	1,943	0	0	0	0	0	0	21,615
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	17,000	6,000	0	0	0	23,000
with inflation	0	0	0	17,000	6,000	0	0	0	23,001
TOTAL	44,402	54,129	42,218	25,000	6,125	0	0	0	171,874
with inflation	44,402	54,129	42,219	25,001	6,125	0	0	0	171,875

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26174051-Llagas Ck—Upper, LERRDs	42,632	319	1	0	0	0	0	0	0	42,951
26174052-Llagas Ck—Upper, Corps Coordination	40,893	0	8,373	33,846	8,000	125	0	0	0	82,864
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	19,581	2,034	0	0	0	0	0	0	0	21,615
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	0	17,000	6,000	0	0	0	23,001
TOTAL	104,552	2,353	8,374	33,846	25,001	6,125	0	0	0	171,876

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$963,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe Clean Water Program Fund	90,852
Watershed Stream Stewardship Fund	23,001
State of California	36,783
City of Morgan Hill	3,341
Total	171,876
U.S. Army Corps of Engineers - In-kind Services	65,000

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the design phase.

USEFUL LIFE: 30+ Years

Project	San Francisco Bay Shoreline
Program	Flood Protection – Multiple Watersheds
Priority No.	74
Project No.	00044026s
District Contact	Melanie Richardson mrichardson@valleywater.org



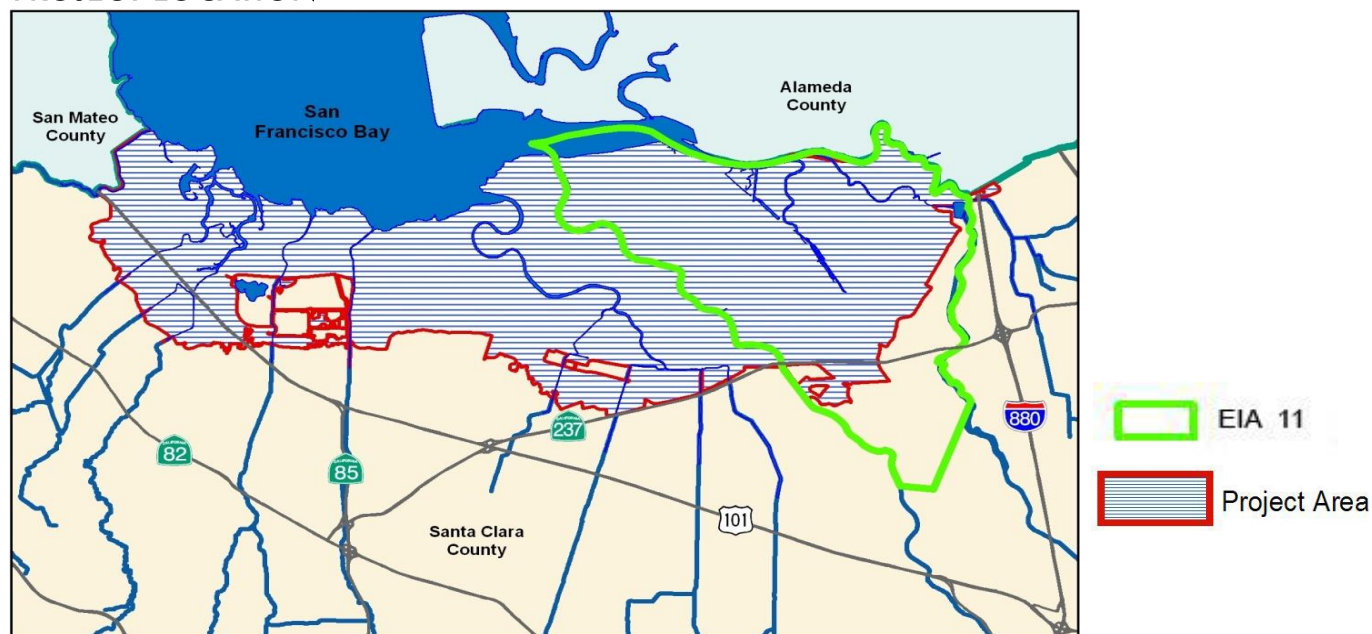
Typical natural tidal marshland in San Francisco Bay near the Shoreline project area

PROJECT DESCRIPTION

This project partners with the California Coastal Conservancy, U.S. Army Corps of Engineers (Corps), and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline. Project number 00044026 funded the Corps Feasibility Study effort for the North San Jose area, known as Economic Impact Area 11 (EIA 11) which was completed in FY 17; this project number will continue to fund other Shoreline effort outside of the Safe, Clean Water (SCW) project numbers. The District share of the EIA 11 design and construction is \$45.6M. It is expected that some Measure A will partially fund this project. SCW funds will provide \$15 million toward the District's cost share of the design and partial construction efforts for EIA 11 and \$5 million toward the District's cost share of the planning and design efforts for the remaining EIAs to accomplish the following objectives:

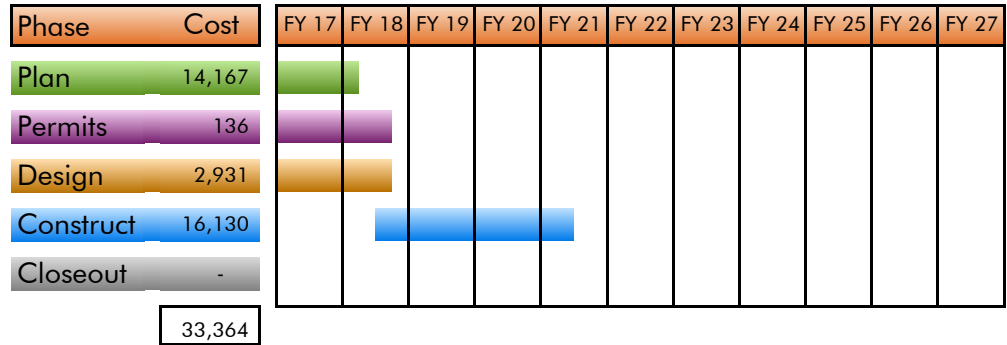
- Provide integrated fluvial and one-percent tidal flood protection.
- Provide protection for future sea level rise projections.
- Restore and/or enhance tidal marsh and related habitats.
- Provide recreational and public access opportunities throughout the tidal floodplain of Santa Clara County.
- Pursue continued federal funding.
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency at completion of the Construction Phase.
- Coordinate closely with the South Bay Salt Pond Restoration Project, City of San Jose, U.S. Fish and Wildlife Services, the community and key stakeholders.

PROJECT LOCATION



SCHEDULE & STATUS

July 2003 to June 2020



EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
00044026-San Francisco Bay Shoreline	14,225	1,829	0	0	0	0	0	0	16,054
with inflation	14,225	1,829	0	0	0	0	0	0	16,054
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	359
with inflation	359	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	21	5,450	3,480	3,300	3,300	2,900	0	0	18,451
with inflation	21	5,450	3,590	3,509	3,619	3,264	0	0	19,453
26444002-Other EIAs Planning	1,420	622	1,000	1,000	1,000	1,000	0	0	6,042
with inflation	1,420	622	1,040	1,082	1,125	1,170	0	0	6,458
TOTAL	16,025	7,901	4,265	4,300	4,300	3,900	0	0	40,906
with inflation	16,025	7,901	4,630	4,591	4,744	4,434	0	0	42,325

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
00044026-San Francisco Bay Shoreline	14,557	1,497	0	0	0	0	0	0	0	16,054
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	6,548	6,247	7,324	0	0	3,394	3,264	0	0	19,453
26444002-Other EIAs Planning	3,334	422	1,714	0	408	1,125	1,170	0	0	6,458
TOTAL	24,798	8,166	9,038	0	408	4,519	4,434	0	0	42,325

Adjusted Budget includes adopted budget plus a planned budget adjustment for \$1,497,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	13,982
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	25,912
California Department of Water Resources (Pending)	420
Total	42,325
Federal Partners, South Bay Salt Ponds (SBSP)	48,470
State, SBSP	14,720
Foundations, Packard-Hewlett-Goldman-Moore, SBSP	17,060
Coastal Conservancy, Shoreline	2,010
Federal, Corps of Engineers, Shoreline	8,990
Total Partnership Funding for In-kind Services	91,250

OPERATING COST IMPACTS

Operating costs will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	Watersheds Asset Rehabilitation Program
Program	Flood Protection - Multiple Watersheds
Priority No.	74
Project No.	62084001
District Contact	Ngoc Nguyen nnguyen@valleywater.org



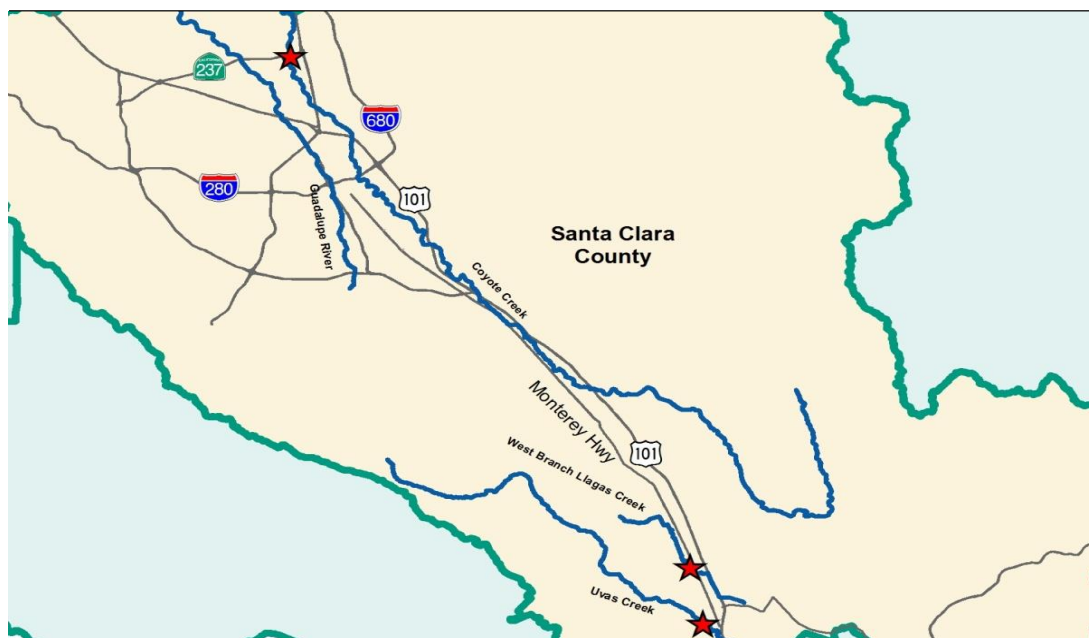
View of damage caused by burrowing animals along West Branch of Llagas Creek in the Uvas/Llagas Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to levee and stream bank sites that have erosion damage. Each site requires a different type of repair based on location, severity, and velocities in the creek. The objective of this project is to restore the stream bank or levee to a stable condition so as to reduce the risk of flooding and/or damage to adjacent properties and facilities. For facilities with animal conflict damage, the objective is to repair the damage caused by animals and where applicable, install deterrents for future animal activities. The repair work consists of, but is not limited to:

- ♦ Excavation and rebuilding of eroded soil material.
- ♦ Installation of rodent barriers such as mesh or fabric.
- ♦ Repairing the banks with methods commensurate with the extents of damage and environmental constraints.
- ♦ Geomorphic channel restoration with bed and bank repair.
- ♦ Outfall restoration and repair.
- ♦ Sediment removal and fish ladder and blockage repair.
- ♦ Fish ladder modifications and repairs.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

This project is part of a larger asset management program.

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

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,450											
Permits	3											
Design	2,112											
Construct	4,218											
Closeout	47											
	7,830											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
62084001-Watersheds Asset Rehabilitation Program	1,797	5,328	15,062	0	1,777	9,489	12,562	16,903		62,918
with inflation	1,797	5,328	15,569	0	1,942	10,680	14,563	20,352		70,230

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
62084001-Watersheds Asset Rehabilitation Program	2,728	5,005	608	14,961	0	1,942	10,680	14,563	20,352	70,230

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	70,230
Other Funding Sources	0
Total	70,230

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

Water Resources Stewardship Capital Improvements

WATER RESOURCES STEWARDSHIP OVERVIEW

The District plans, designs and constructs various capital projects to meet the Board's Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and improve the quality of life in Santa Clara County." These projects may fulfill environmental enhancement, mitigation or stewardship goals and priorities.

The District has placed an emphasis on stewardship since 1999 when the Water District's Board of Directors adopted a mission and policies that added a focus on environmental stewardship. In 2001, the California legislature added environmental stewardship to the Water District's purpose. Specifically, the Water District's environmental stewardship activities focus on these three areas:

- Healthy creek and bay ecosystems
- Clean, safe water in creeks and the bay
- Improved quality of life through trails, open space and water resources management

The Water District's stewardship work is extensive. Actions to protect the environment are woven into all we do. Some of the Districts stewardship accomplishments since 2000 are:

- Rehabilitated or restored 90 acres of riparian habitat and 600 acres of tidal wetland habitat
- Provided funding for 92 projects that resulted in 71 miles of public access
- Removed over 2,660 lbs of mercury from the Guadalupe Watershed
- Made 40 miles of streams accessible for fish
- In conjunction with the Open Space Authority, acquiring 1,300 acres of land for preservation of California Red Legged Frog and California Tiger Salamander habitat

Environmental Enhancement & Stewardship Projects

Environmental Enhancement projects are constructed at the direction of the Board either to meet the Safe, Clean Water and Natural Flood Protection program (SCW) obligations or to meet other Board priorities.

The District's Safe, Clean Water Program, approved by the voters of Santa Clara County in 2012, committed funding for environmental enhancement activities that create or restore tidal or riparian habitat. A selection process will be conducted to allocate the SCW funding to the enhancement opportunities that meet Board-defined characteristics.

Stewardship projects are implemented to promote water quality awareness; reduce pollutants in streams; support additional trails, parks and open space; support creek side recreation; and reduce green house gas. Stewardship projects are implemented at the discretion of the Board when reasonable and appropriate. These projects are often accomplished in partnership with or support of other agencies.

Major Capital Improvements Identified in the CIP

- Lake Almaden, Guadalupe River, Los Alamitos Creek Planning and Design
- South Bay Salt Ponds Restoration

Mitigation Projects

The District manages many mitigation sites and continues to plan, design, and construct new mitigation sites to fulfill CEQA and regulatory permit requirements for both capital projects and operations activities. Mitigation requirements for capital projects may be incorporated into the project scope or accomplished as a separate project.

Major Capital Improvements Identified in the CIP

- SMP Mitigation, Stream and Watershed Land Preservation

Water Resources Stewardship Capital Improvements

Feasibility Studies

In July 2016 the board provided direction for increased visibility and accelerated delivery of Environmental Stewardship Projects to meet Board priorities. The District has dedicated 4 additional fulltime positions to complete the feasibility studies that have been included in the FY2018-22 CIP. These feasibility studies will determine the viability of a number of projects that are of interest to the community.

Major Capital Improvements Identified in the CIP

- Alviso Slough Restoration
- FAHCE Stevens Creek Fish Passage Enhancement
- SCW Implementation Fund



PRIORITY PROCESS AND FINANCIAL ANALYSIS

Environmental Enhancement and Stewardship projects are implemented at the discretion of the Board.

Projects may go through a ranking process to compete for Safe, Clean Water funds or the board may direct that other available revenue be used to implement the proposed projects. The inclusion of these projects in the Fiscal Year 2017-21 CIP has been approved by the Board. The priority criteria used to evaluate these projects are included in Appendix A.

Implementation of Mitigation projects is considered non-discretionary since they are needed to meet California Environmental Quality Act (CEQA) or regulatory permit commitments. Funding for mitigation projects is allocated without a prioritization process.

Financial analysis of the following funding sources for Water Resources Stewardship capital improvements was conducted to determine if there are limitations to funding currently planned capital projects.

- Watershed and Stream Stewardship Fund
- Safe, Clean Water Fund
- Water Utility Enterprise Fund

Funding needs for approved Water Resources Stewardship projects can be met.



Water Resources Stewardship Capital Improvements

The following table is a project funding schedule for water resources stewardship 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 2016-17.

Water Resources Stewardship Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
ENVIRONMENTAL ENHANCEMENT & STEWARDSHIP											
Lower Peninsula Watershed											
00294001s	FAHCE Stevens Creek Fish Passage Enhancement D4.x	850	-	-	1,507	3,226	-	-	-	-	5,583
26164001	Hale Creek Enhancement Pilot Study (D6)	463	482	132	1,442	-	-	-	-	-	2,387
Guadalupe Watershed											
26044001	Almaden Lake Improvements (D4.1a)	2,665	1,099	-	832	16	-	-	-	-	4,612
Multiple Watersheds											
20444001	Salt Ponds A5-11 Restoration	2,518	1,715	-	754	1,838	1,680	-	-	-	8,505
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)	1,461	2,203	215	1,208	1,364	-	-	-	-	6,236
26C40370	SCW Implementation Fund	-	-	-	-	9,257	16,531	11,060	2,405	23,658	62,911
26444003	South Bay Salt Ponds Restoration (D8)	535	-	49	1,652	1,791	-	-	-	-	3,978
MITIGATION											
62184001	SMP Mitigation, Stream and Watershed Land Preservation	15,714	510	1	829	-	-	-	-	-	17,053
TOTAL		24,206	6,009	397	8,224	17,492	18,211	11,060	2,405	23,658	111,265

 FY 2016-17 Funds to be reappropriated

The following table shows funding requirements from each funding source for mitigation capital improvements.

Water Resources Stewardship – Funding Sources (\$K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	765	-	-	1,356	3,627	749	775	802	7,886	15,960
12	Watershed Stream Stewardship Fund	18,317	2,225	1	1,734	2,885	2,429	775	802	7,886	37,052
26	Safe, Clean Water and Natural Flood Protection Fund	5,124	3,784	396	5,134	10,980	15,033	9,510	802	7,886	58,253
TOTAL		24,206	6,009	397	8,224	17,492	18,211	11,060	2,405	23,658	111,265

 FY 2016-17 Funds to be reappropriated

The following table shows funding requirements for feasibility studies.

Water Resources Stewardship – Feasibility Studies (\$K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
62044001	Watershed Habitat Enhancements	-	244	-	1,007	1,119	-	-	-	-	2,370
TOTAL		-	244	-	1,007	1,119	-	-	-	-	2,370

 FY 2016-17 Funds to be reappropriated

Water Resources Stewardship Capital Improvements

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Project	FAHCE Stevens Creek Fish Passage Enhancement
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	72
Project No.	00294001s
District Contact	Melanie Richardson mrichardson@valleywater.org



Example of a fish ladder to be modified or reconstructed for better fish passage

PROJECT DESCRIPTION

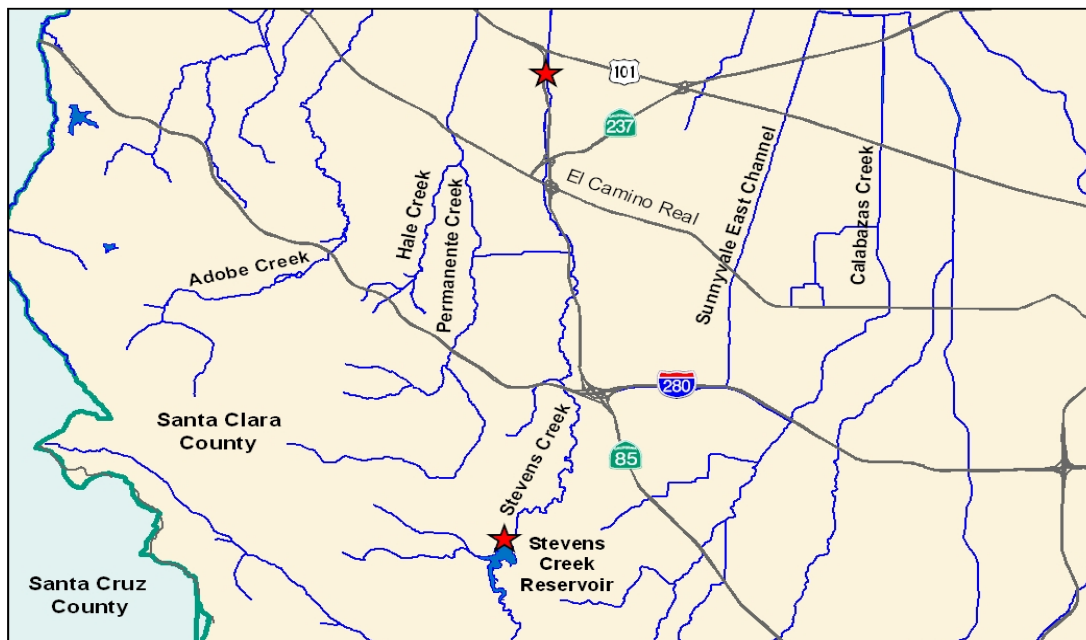
This project plans, designs, and constructs improvements to the Moffett Boulevard fish ladder to improve fish passage as well as a multiport outlet at Stevens Creek Dam to accomplish the following objectives:

- ♦ Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed.
- ♦ Provide a suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone determined on an annual basis through the development of an operations plan.
- ♦ Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles.

This project is accounted for in the following job numbers:

- ♦ 00294001—Fish Passage Planning
- ♦ 00C40145—Moffett Boulevard Fish Ladder
- ♦ 00C40198—Multi-Port Outlet at Dam

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2008 to June 2019

Planning phase is complete.
Project on hold pending completion of the Three Creeks Habitat Conservation Plan, to be done in a separate operating project.

Phase	Cost
Plan	850
Permits	108
Design	1,341
Construct	3,005
Closeout	35

5,339

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	850
with inflation	850	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	1,154	1,964	0	0	0	0	3,119
with inflation	0	0	1,201	2,084	0	0	0	0	3,284
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	294	1,076	0	0	0	0	1,370
with inflation	0	0	306	1,142	0	0	0	0	1,448
TOTAL	850	0	1,449	3,040	0	0	0	0	5,339
with inflation	850	0	1,507	3,226	0	0	0	0	5,582

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	1,201	2,084	0	0	0	0	3,284
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	306	1,142	0	0	0	0	1,448
TOTAL	850	0	0	1,507	3,226	0	0	0	0	5,582

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund–10%	558
SCVWD Water Utility Enterprise Fund–90%	5,024
Total	5,582

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	Hale Creek Enhancement Pilot
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	77
Project No.	26164001
District Contact	Melanie Richardson mrichardson@valleywater.org



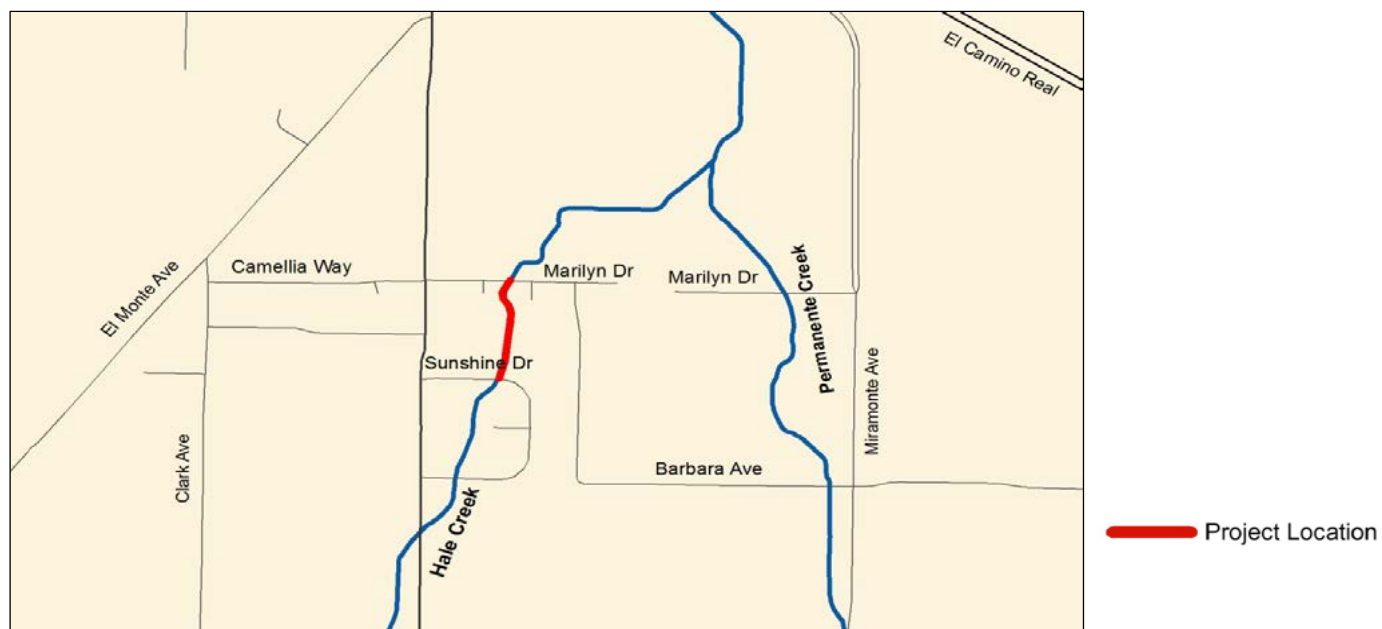
Reach to be modified downstream of 7th Day Adventist foot bridge between Marilyn Drive and North Sunshine Drive.

PROJECT DESCRIPTION

This pilot project plans, designs, and constructs improvements to an approximately 500-foot long reach in Hale Creek to accomplish the following objectives:

- ♦ Provide flood protection and enhance habitat values.
- ♦ Restore stream recharge capability to a concrete-lined portion.
- ♦ Remove existing concrete channel and replace with a vegetated soft-bottom channel.

PROJECT LOCATION



SCHEDULE & STATUS

May 2015 to June 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	33											
Permits	74											
Design	721											
Construct	1,500											
Closeout	-											
	2,328											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26164001-Hale Creek Enhancement Pilot Study	331	482	1,523	0	0	0	0	0	2,336
with inflation	331	482	1,574	0	0	0	0	0	2,387

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26164001-Hale Creek Enhancement Pilot Study	463	482	132	1,442	0	0	0	0	0	2,387

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Safe, Clean Water Fund	2,387
Other Funding Sources	0
Total	2,387

OPERATING COST IMPACTS

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

USEFUL LIFE: Not available

Project	Almaden Lake Improvements
Program	Water Resources Stewardship – Environmental Enhancement
Priority No.	85
Project No.	26044001
District Contact	Melanie Richardson mrichardson@valleywater.org



Looking southerly at Almaden Lake through which Alamitos Creek flows.

PROJECT DESCRIPTION

The project will separate Alamitos Creek from Almaden Lake and restore Alamitos Creek's stream function within the footprint of Almaden Lake. The goals are to improve water quality and physical habitat for steelhead and other anadromous fish by separating the creek from the lake while incorporating the principle of geomorphic design and to create a self-sustaining channel that requires little maintenance to keep it viable for fisheries and wildlife benefits. Benefits of this project will be creation of channel complexity in the restored stream channel such as instream riffle-pool habitat, cover for rearing fish, gravel to support spawning and plantings that will provide numerous ancillary wildlife benefits; reduction of high water temperatures released from Almaden Lake into Alamitos Creek; and removal of entrainment, predatory and methylmercury impacts to anadromous fish from Almaden Lake. The objectives are as follows:

- Separate Alamitos Creek from Almaden Lake.
- Reduce thermal barrier to migration of anadromous fish.
- Remove entrainment and impacts from predatory species to anadromous fish.
- Reduce mercury concentration in target fish to meet applicable water quality objectives.
- Minimize impacts to recreational features.

This project is funded for the planning and design phase from the Safe, Clean Water, Priority D4. Funding for construction may also be available from the Safe, Clean Water Program.

PROJECT LOCATION



SCHEDULE & STATUS

July 2011 to September 2018

Planning Phase and some Design tasks. Construction is not funded at this time.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,168											
Permits	1,778											
Design	631											
Construct	-											
Closeout	-											
4,577												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26044001-Almaden Lake Improvements	2,264	1,500	800	15	0	0	0	0	4,579
with inflation	2,264	1,500	832	16	0	0	0	0	4,612

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26044001-Almaden Lake Improvements	2,665	1,099	0	832	16	0	0	0	0	4,612

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$55,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	800
SCWD Safe Clean Water Fund	3,812
Total	4,612

OPERATING COST IMPACTS

No operating cost impacts are expected from the completion of the planning and design phases of the project.

USEFUL LIFE: 100 Years

Project	Salt Ponds A5-11 Restoration
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	50
Project No.	20444001
District Contact	Liang Lee llee@valleywater.org



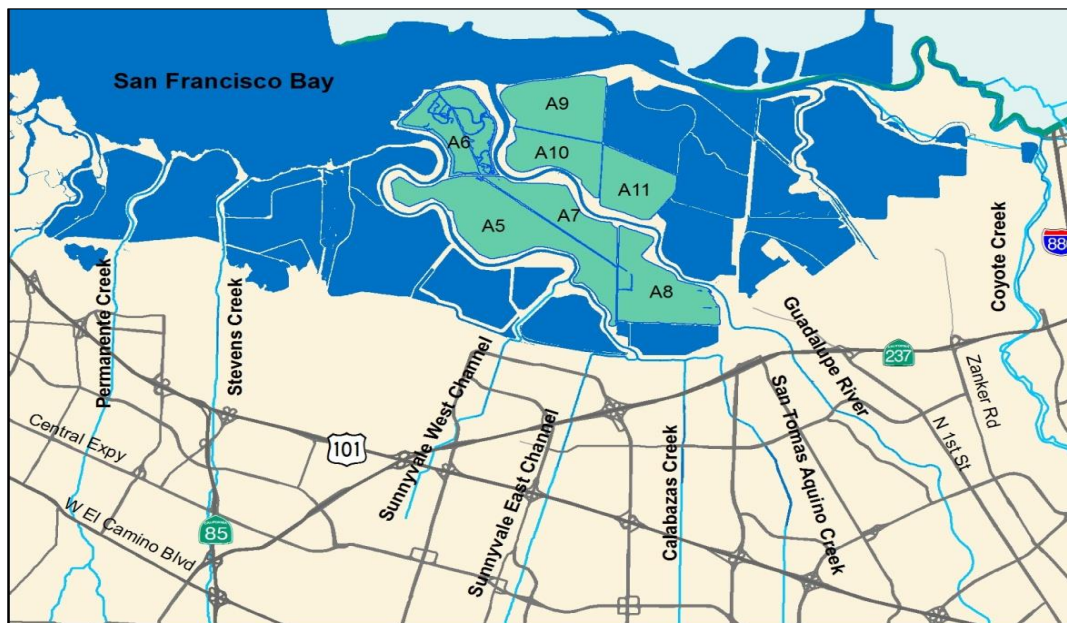
View of Notch Location at Pond A8

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the South Bay Salt Ponds (SBSP) and will collaborate with the SBSP Phase II restoration efforts to accomplish the following objectives:

- ♦ Realign Calabazas and San Tomas Creeks to flow directly into Pond A8
- ♦ Meet permitting requirements for the creek's realignment or further restoration efforts
- ♦ Fully open the Pond A8 Notch to increase tidal flow into the pond
- ♦ Restoration of Ponds A5 through A11 of the Alviso Complex

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 2015 to June 2020

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,521											
Permits	1,959											
Design	252											
Construct	3,974											
Closeout	5											
	7,711											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
20444001-Salt Ponds A5-11 Restoration	2,008	2,225	725	1,722	1,528	0	0	0	8,208
with inflation	2,008	2,225	754	1,838	1,680	0	0	0	8,505

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
20444001-Salt Ponds A5-11 Restoration	2,518	1,715	0	754	1,838	1,680	0	0	0	8,505

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed and Stream Stewardship Fund	8,505
Other Funding Sources	0
Total	8,505

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$4 million every 3 years, beginning in FY 2020, for on-going sediment removal.

USEFUL LIFE: Not Available

Project	SCW Fish Passage Improvements (Bolsa Rd.)
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	80
Project No.	26044002
District Contact	Vincent Gin vgin@valleywater.org



View of the Bolsa Road fish barrier removed will be allowing fish access to upstream habitat

PROJECT DESCRIPTION

This project plans, designs and constructs improvements for two high priority fish barriers in Santa Clara County. A third priority barrier, owned by the City of San Jose, will be remediated through a project partnership with funds allocated from this project. The project will accomplish the following objectives:

- Planning, design and construction for a passage impediment at the Evelyn Bridge preventing upstream/downstream movement of steelhead in the Stevens Creek watershed. Remediation of this barrier will facilitate movement to 8.8 miles of higher quality upstream habitat and allow for out-migrant fish to access San Francisco Bay unimpeded. (Completed in 2016)
- Planning, design and construction for a passage impediment at the Bolsa Road railroad bridge in the Uvas Watershed. Remediation of this site will allow access to approximately 22 miles of higher quality habitat upstream as well as unimpeded access for out-migrant fish through the project site.
- Prepare a partnership agreement and provide technical support to the City of San Jose for removal of the Singleton Road Bridge in Coyote Creek. Removal of this passage impediment will facilitate movement of migratory fish for approximately 17.6 miles creek above the site and allow for unimpeded access of out-migrant fish through the site.

PROJECT LOCATION



SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	425											
Permits	258											
Design	1,711											
Construct	2,967											
Closeout	75											
	5,436											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	1,246	2,203	1,375	1,275	0	0	0	0	6,099
with inflation	1,246	2,203	1,423	1,364	0	0	0	0	6,235

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	1,461	2,203	215	1,208	1,364	0	0	0	0	6,235

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Safe, Clean Water Fund	6,235
Other Funding Sources	0
Total	6,235

OPERATING COST IMPACTS

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

USEFUL LIFE: 50 Years

Project	SCW Implementation Fund
Program	Water Resources Stewardship
Priority No.	75
Project No.	26C40370
District Contact	Melanie Richardson Mrichardson@valleywater.org



View looking upstream at Almaden Lake from the Guadalupe Creek confluence. This is just one possible site under consideration.

PROJECT DESCRIPTION

This project is a placeholder for future capital projects that have not been fully defined. These projects will implement Safe Clean Water (SCW) objectives and are likely to include projects such as Comer Debris Basin, and construction of Lake Almaden-Guadalupe River-Alamitos Creek Restoration. Funds will be moved from this project into actual projects once they have been defined and vetted to ensure they meet the following program objectives:

- ♦ Create favorable stream conditions to restore and maintain fisheries.
- ♦ Increase the stability of stream channels through construction based on geomorphic principals.
- ♦ Acquisition of property for the conservation of habitat.

PROJECT LOCATION

No map is provided for this project

SCHEDULE & STATUS

July 2017 to June 2032

Data shown here is based on preliminary information. Specific projects identified to move forward will require further refinement. A Phase schedule will be defined in the planning phase.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	62,911											
Closeout	-											
62,911												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26C40370-SCW Implementation Fund	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911
with inflation	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26C40370-SCW Implementation Fund	0	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SOURCES

(in thousands \$)

SCVWD Safe, Clean Water Fund	41,039
SCVWD Water Utility Enterprise Fund	10,936
SCVWD Watershed and Stream Stewardship Fund	10,936
Total	62,911

OPERATING COST IMPACTS

Not Available

USEFUL LIFE: Not Available

Project	South Bay Salt Ponds Restoration
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	43
Project No.	26444003
District Contact	Vincent Gin vgin@valleywater.org



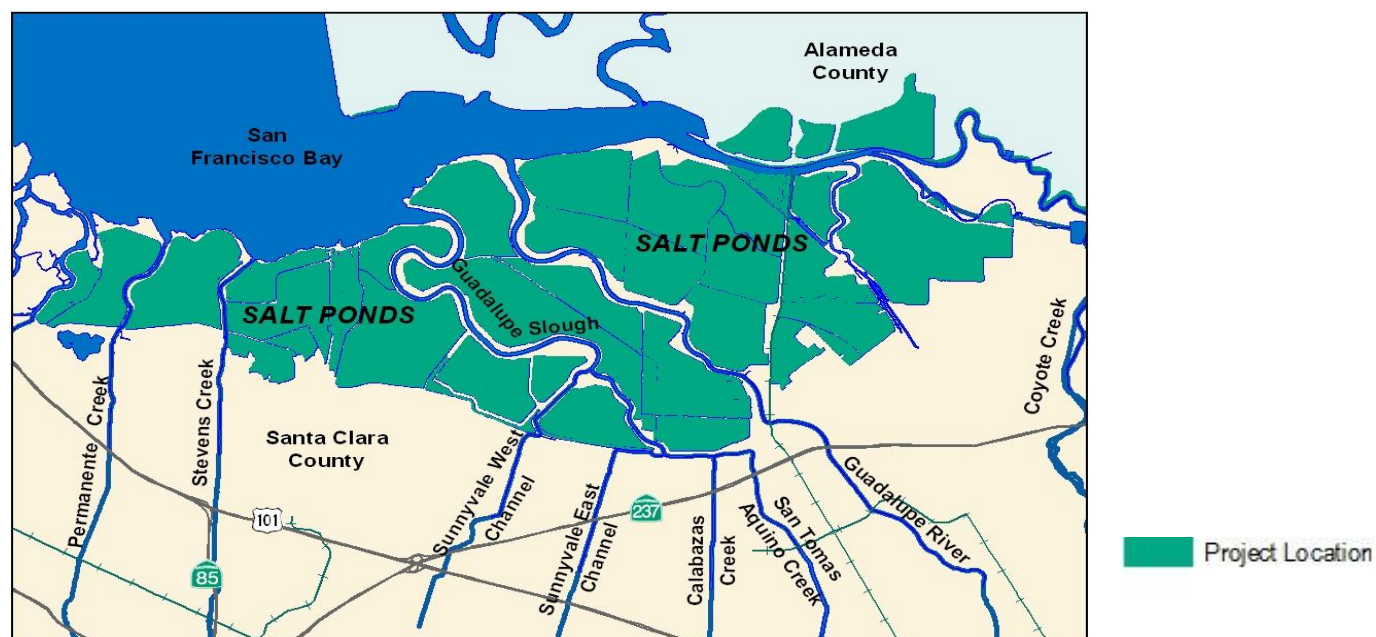
View of one of the former salt evaporator facilities near Alviso

PROJECT DESCRIPTION

This project plans, designs, and constructs roads or other improvements to the South Bay Salt Ponds to accomplish the following objectives:

- ♦ Repurpose of sediments removed from streams through the Stream Maintenance Program
- ♦ Improve or construct roads at new placement sites
- ♦ Restore the South Bay Salt Ponds to improve wildlife habitat and protect residents from tidal flooding

PROJECT LOCATION



SCHEDULE & STATUS

June 2013 to June 2019

Planning Study Only

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	3,660											
Permits	18											
Design	-											
Construct	76											
Closeout	-											
	3,754											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26444003-South Bay Salt Ponds Restoration	217	269	1,636	1,656	0	0	0	0	3,778
with inflation	217	269	1,701	1,791	0	0	0	0	3,979

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
26444003-South Bay Salt Ponds Restoration	535	0	49	1,652	1,791	0	0	0	0	3,979

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Safe, Clean Water Fund	3,979
Other Funding Sources	0
Total	3,979

OPERATING COST IMPACTS

Planning Phase Only: The completion of this phase of the project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE: Not Available

Project	SMP Mitigation Stream and Watershed Land Preservation
Program	Water Resources Stewardship – Mitigation
Priority No.	99
Project No.	62184001
District Contact	Melanie Richardson mrichardson@valleywater.org



Creek-side settings such as this will be used for stream and watershed land preservation. Actual locations will differ.

PROJECT DESCRIPTION

This project preserves streams and watershed lands in the Santa Clara Basin and implements appropriate restorations in these lands to accomplish the following objectives:

- Provide 71 acres of Stream Maintenance Program (SMP) mitigation credits through preservation of approximately 720 to 950 acres of streams and watershed lands to provide long-term protection of unique and valuable local stream resources and watersheds, in a largely self-sustaining setting. Approximately 108 acres of the total land preservation will be for protection of riparian and upland habitats that are known to support California red-legged frogs and Western pond turtles.
- Provide approximately 10 acres of SMP mitigation credits through environmental restoration on the lands acquired.
- Seek opportunities to partner with other organizations to accomplish the project objectives.

PROJECT LOCATION

The project will purchase multiple sites for preservation in Santa Clara Basin as they become available. No map is provided.

SCHEDULE & STATUS

July 2003 to June 2018

Some environmental tasks in the planning phase continue thru construction. Land acquisition is shown in the design phase, with restoration of site habitat shown in the construction phase.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,359											
Permits	996											
Design	9,610											
Construct	1,741											
Closeout	20											
	14,726											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	14,752	1,471	801	0	0	0	0	0	17,024
with inflation	14,752	1,471	830	0	0	0	0	0	17,053

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	15,714	510	1	829	0	0	0	0	0	17,053

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	17,053
Other Funding Source	0
Total	17,053

OPERATING COST IMPACTS

Operating cost will vary, depending on the type of acquisition ownership and requirements for maintenance of each site. The Stevens Canyon Ranch Conservation Easement was acquired in December 2006 and there are no operating impacts to the District. The property owner, Mid-Peninsula Regional Open Space District is responsible for maintenance and management of the site.

USEFUL LIFE: 50+ Years

Project	Watershed Habitat Enhancements
Program	Water Resources Stewardship
Priority No.	N/A
Project No.	62044001
District Contact	Ngoc Nguyen nnguyen@valleywater.org



Aerial view looking downstream of the Ogier Pond complex.
One of the sites being evaluated.

PROJECT DESCRIPTION

This project provides for feasibility studies of possible habitat enhancements at the Ogier Ponds and Metcalf Ponds along Coyote Creek and an evaluation and determination of priority for addressing various fish passage barriers along Stevens Creek. This project accomplishes the following objectives:

- ♦ Enhance a healthy steelhead trout and salmon population in the Coyote Creek watershed.
- ♦ Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles along Stevens Creek.

PROJECT LOCATION



★ Project Location
—

SCHEDULE & STATUS

April 2017 to December 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	2,247											
Permits	-											
Design	-											
Construct	-											
Closeout	-											
	2,247											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
62044001-Watershed Habitat Enhancements	0	244	968	1,035	0	0	0	0	2,247
with inflation	0	244	1,007	1,119	0	0	0	0	2,370

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
62044001-Watershed Habitat Enhancements	0	244	0	1,007	1,119	0	0	0	0	2,370

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$244,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed & Stream Stewardship Fund	2,370
Other Funding Sources	0
Total	2,370

OPERATING COST IMPACTS

No operating impacts are anticipated from this project because this is a feasibility study. New projects may be proposed as potential sites are evaluated.

USEFUL LIFE: N/A

Building and Grounds Capital Improvements

BUILDINGS AND GROUNDS OVERVIEW

The District's Almaden-Winfield campus occupies nearly 50 acres along Almaden Expressway in the City of San Jose. The District manages the campus to ensure a healthful and safe work environment for employees and visitors. The campus includes 10 buildings, multiple parking lots, a corporation yard, landscaping, and other appurtenances.

With most of the buildings on campus over 30 years old, the rehabilitation needs increased steadily in recent years. The District administers an asset management program for its buildings and grounds infrastructure that includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

In January of 2012 the Board approved implementation of the Campus Master Plan which includes the following:

- Repair and rehabilitate the existing Corporation yard.
- Repair Winfield Warehouse and Winfield Vegetation buildings.
- Replace the Maintenance Office and Ready Room buildings.

Major Capital Improvements Identified in the CIP

- Almaden & Winfield Campus Small Capital Improvements
- Winfield Capital Improvements
- Headquarters Operations Building

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the buildings and grounds projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the following funding sources for buildings and grounds capital improvements was conducted to determine if there are limitations to funding all the proposed capital projects.

- Watershed and Stream Stewardship Fund
- General Fund
- Water Utility Enterprise Fund

Results of this year's prioritization process and financial analysis are summarized in Appendix B. The process concluded that the Almaden and Winfield Campus Small Capital Improvements will continue to be funded at \$2 million per year to meet the higher priority Buildings and Grounds needs. The first of the projects from the Campus Master Plan began in FY 2012-13 and the Headquarters Operations Building was added to the FY 2015-19 CIP.

Building and Grounds Capital Improvements

The following table is a project funding schedule for buildings and grounds capital improvements resulting from this year's priority process and 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 2015-16.

Buildings and Grounds Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
60204016	Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	-	2,062	2,126	2,192	2,260	2,324	27,526	40,552
60204032	Headquarters Operations Building	1,176	0	1,060	-	245	1,809	8,127	6,665	-	18,022
60204021	Winfield Capital Improvements	9,303	5,927	13,179	-	-	-	-	-	-	15,230
TOTAL		10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804

 FY 2015-16 Funds to be reappropriated

The following table shows funding requirements from each funding source for buildings and grounds capital improvements.

Buildings and Grounds – Funding Sources (\$K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
11	General Fund	10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804
TOTAL		10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804

 FY 2015-16 Funds to be reappropriated

Project	Almaden and Winfield Campus, Small Capital Improvements
Program	Buildings and Grounds
Priority No.	73
Project No.	60204016
District Contact	Ravi Subramanian rsubramanian@valleywater.org

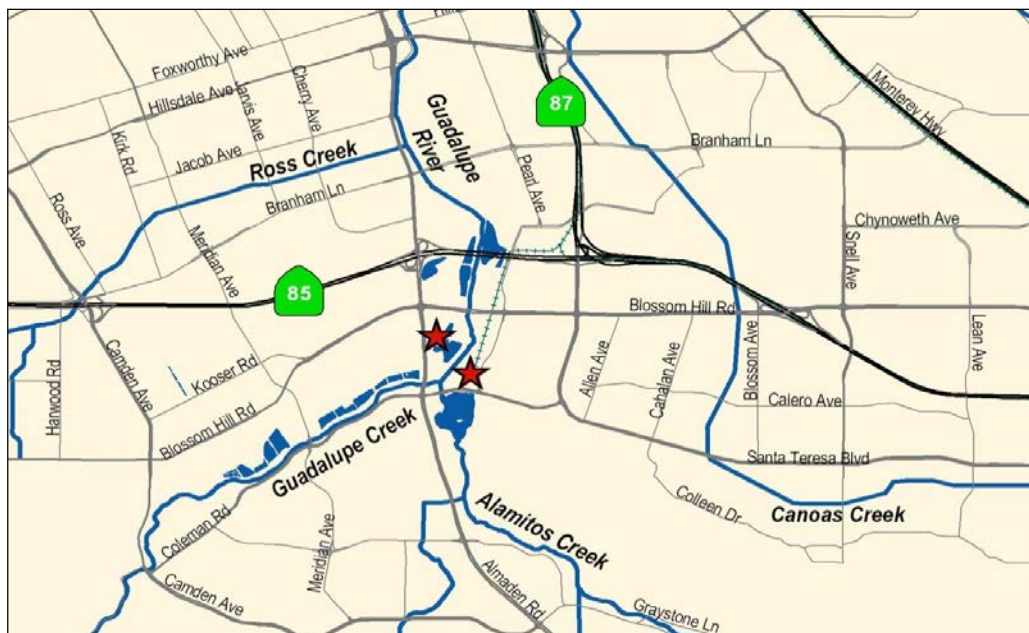


Front view of the Headquarters building at the Almaden Campus

PROJECT DESCRIPTION

This project reserves funding for capital maintenance and replacement of buildings, grounds, and facilities on the Almaden and Winfield campus, to provide a healthy and safe environment for staff and visitors.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

Improvements will be managed on an as-needed basis throughout the year.

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	n/a											
Design	n/a											
Construct	n/a											
Closeout	n/a											
	n/a											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	2,000	2,000	2,000	2,000	2,000	20,000	32,062
with inflation	n/a	2,062	2,062	2,126	2,192	2,260	2,324	27,527	40,553

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	0	2,062	2,126	2,192	2,260	2,324	27,527	40,553

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD General Fund	40,553
Other Funding Source	0
Total	40,553

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs. The purpose of these maintenance projects is to avoid unnecessary financial impact caused by building shut-down and work stoppage.

USEFUL LIFE: Not Available

Project	Headquarters Operations Building
Program	Buildings and Grounds
Priority No.	65
Project No.	60204032
District Contact	Katherine Oven koven@valleywater.org



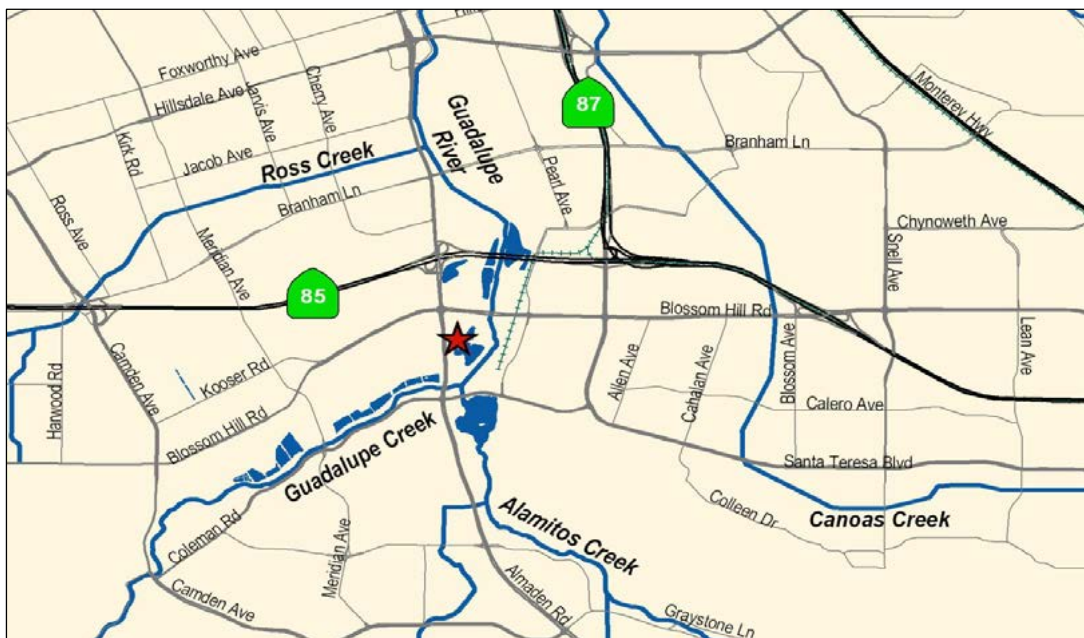
Existing Maintenance Building

PROJECT DESCRIPTION

This project plans, designs, and constructs a new operations building to replace the existing facility that has extensive deficiencies throughout. This project accomplishes the following objectives:

- Replace the Maintenance Office Building to provide a safe and healthy work environment and to meet code or regulatory requirements.
- Provide adequate and sufficient space to enable the District to efficiently perform its core business.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to June 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	1,830											
Design	1,500											
Construct	12,000											
Closeout	23											
	15,353											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60204032-Headquarters Operations Building	20	96	0	1,207	1,608	6,947	5,478	0	15,356
with inflation	20	96	0	1,305	1,809	8,127	6,665	0	18,022

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
60204032-Headquarters Operations Building	1,176	0	1,060	0	245	1,809	8,127	6,665	0	18,022

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD General Fund	18,022
Other Funding Sources	0
Total	18,022

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: Not Available

Project	Winfield Capital Improvements
Program	Buildings and Grounds
Priority No.	70
Project No.	60204021
District Contact	Katherine Oven koven@valleywater.org



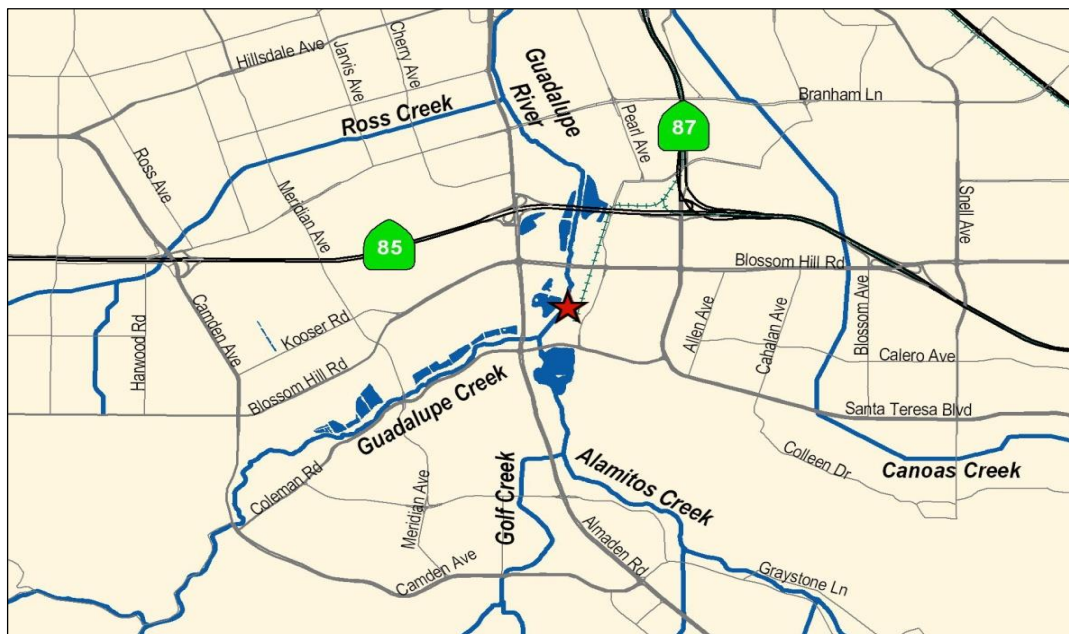
A view of the District's Vegetation Management building on Winfield Blvd

PROJECT DESCRIPTION

This project is to repair, maintain and improve the Winfield Warehouse and Winfield Vegetation Buildings, to provide a healthy and safe environment for staff and visitors. This includes improving restroom and shower facilities, enclosing the open section of the warehouse and providing a safe and fully functioning Class IV workshop, seismic upgrades and a new roof.

The Board declined to advertise the project for construction in August 2016. Subsequently, the District initiated a campus space planning assessment effort to review the overall need for office facilities and materials storage. Pending the outcome of this assessment staff will prepare a proposal for future use of the property for Board consideration.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

September 2012 to December 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	105											
Design	1,808											
Construct	96											
Closeout	25											
	2,034											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60204021-Winfield Capital Improvements	1,729	322	0	0	0	0	0	0	2,051
with inflation	1,729	322	0	0	0	0	0	0	2,051

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
60204021-Winfield Capital Improvements	9,303	5,927	13,179	0	0	0	0	0	0	15,230

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately \$13,179,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands \$)

SCVWD General Fund	15,230
Other Funding Source	0
Total	15,230

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE: Not Available

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

The District relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, the District completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects.

In 2014, the Information Technology Capital Fund was created, it accounts for the costs to acquire, and install capital information technology projects with District-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Information Technology Disaster Recovery
- PeopleSoft System Upgrade and Expansion
- Data Consolidation
- Software Upgrades & Enhancements
- WTP-WQL Network Equipment

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the information technology projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects. Results of this year's prioritization process and financial analysis are summarized in Appendix B. Funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's priority process and 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 2015-16.

Information Technology Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
73274009	Data Consolidation	336	325	440	279	270	-	-	-	-	1,210
73274011	E-Discovery Management System	-	5	-	545	-	-	-	-	-	550
73274001	IT Disaster Recovery	562	1,393	1	441	-	-	-	-	-	2,396
60274062s	PeopleSoft System Upgrade & Expansion	5,662	2,415	2,578	22	735	-	-	-	-	8,834
73274008	Software Upgrades & Enhancements	1,224	9	6	670	786	846	965	438	13,591	18,529
95274003	WTP-WQL Network Equipment	740	180	20	1,301	555	198	-	103	9,777	12,854
TOTAL		8,524	4,327	3,045	3,258	2,346	1,044	965	541	23,368	44,373

 FY 2016-17 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology – Funding Sources (\$K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	740	180	20	1,301	555	198	-	103	9,777	12,854
11	General Fund	1,199	-	-	-	-	-	-	-	-	1,199
73	Information Technology Fund	6,585	4,147	3,025	1,957	1,791	846	965	438	13,591	30,320
TOTAL		8,524	4,327	3,045	3,258	2,346	1,044	965	541	23,368	44,373

 FY 2016-17 Funds to be reappropriated

Project	Data Consolidation
Program	Information Technology
Priority No.	34
Project No.	73274009
District Contact	Sudhanshu Tikekar STikekar@valleywater.org

No Photo is provided for this project.

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data Consolidation to accomplish the following objectives:

- Implement a Enterprise Content Management system with strong Business Intelligence.
- Move from a applications centric model (current) to a data centric model thereby removing silos of data stores.
- Information management for big data. Manage data as a strategic, core asset, with ongoing process and management control for big data analytics.
- High-Performance analytics for big data. Gain rapid insights from big data and the ability to solve increasingly complex business problems.
- Reduce the overall data footprint. Identify duplicate, and unstructured data and delete it.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	1,162											
Closeout	-											

1,162

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274009-Data Consolidation	21	200	691	250	0	0	0	0	1,162
with inflation	21	200	719	270	0	0	0	0	1,210

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274009-Data Consolidation	336	325	440	279	270	0	0	0	0	1,210

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	1,210
Other Funding Sources	0
Total	1,210

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	E-Discovery Management System
Program	Information Technology
Priority No.	56
Project No.	73274011
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



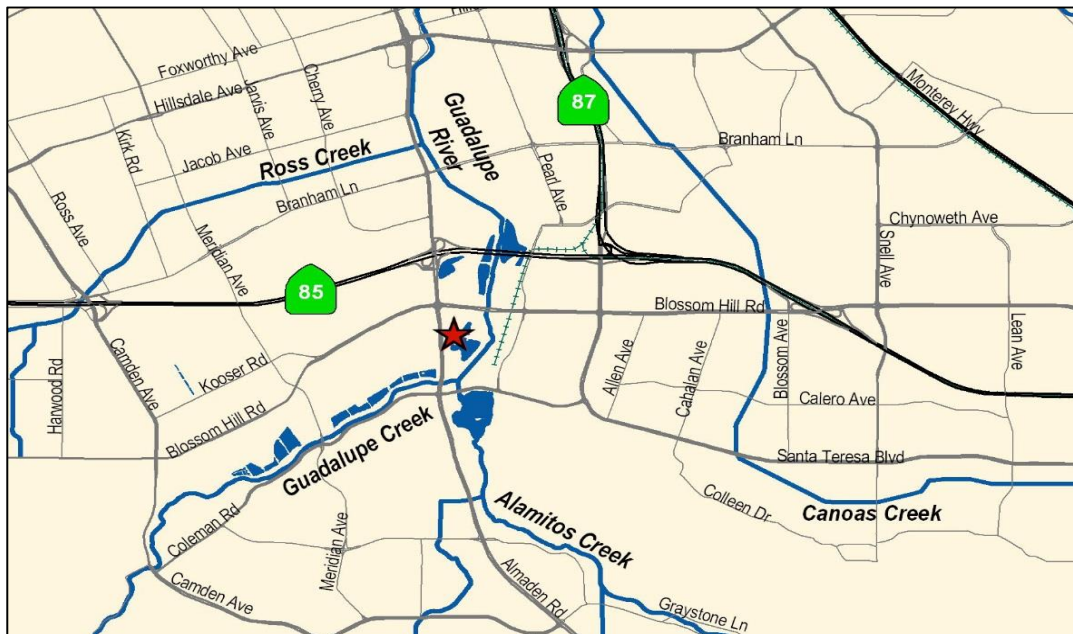
Screenshot of the SCVWD Public Records web page

PROJECT DESCRIPTION

This project plans, designs, and implements a software solution to accomplish the following objectives:

- Issue formal notification of litigation holds
- Search and locate/identify electronically stored information (ESI)
- Collect, preserve, process, review, and analyze ESI
- Produce ESI in context to litigation, in response to California Public Records Act (CPRA) requests, and other government investigations.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

April 2017 to June 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	529											
Closeout	-											
	529											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274011-E-Discovery Management System	0	5	524	0	0	0	0	0	529
with inflation	0	5	545	0	0	0	0	0	550

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future		
73274011-E-Discovery Management System	0	5	0	545	0	0	0	0	0	550

Adjusted Budget includes adopted budget plus a planned budget adjustment of \$5,000.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	550
Other Funding Sources	0
Total	550

OPERATING COST IMPACTS

Operation cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not available

Project	Information Technology Disaster Recovery
Program	Information Technology
Priority No.	46
Project No.	73274001
District Contact	Sudhanshu Tikekar stikekar@valleywater.org



Existing Data Center that houses critical servers supporting the District's normal operations

PROJECT DESCRIPTION

This project plans and designs improvements to Information Technology to accomplish the following objectives:

- ♦ Enable coordinated, rapid recovery from a disaster.
- ♦ Reduce the District's business risk exposure.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to December 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	2,355											
Closeout	-											
2,355												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274001-Information Technology Disaster Recovery	49	1,905	427	0	0	0	0	0	2,381
with inflation	49	1,905	442	0	0	0	0	0	2,396

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274001-Information Technology Disaster Recovery	562	1,393	1	441	0	0	0	0	0	2,396

FUNDING SOURCES

(in thousands \$)

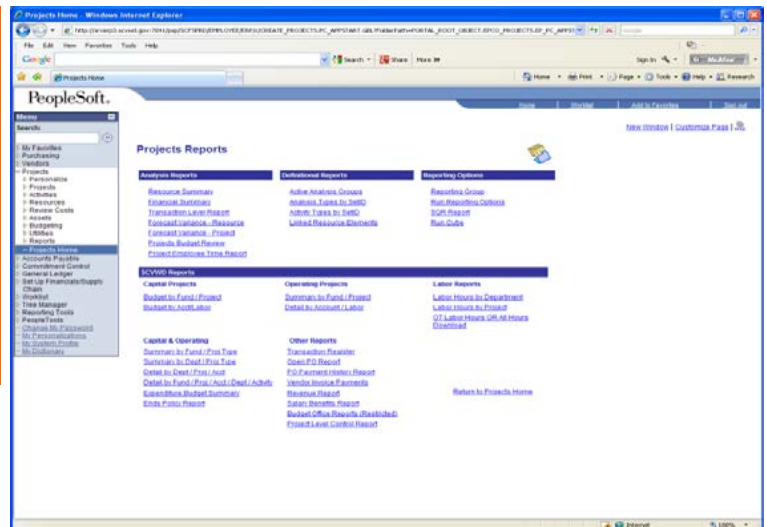
SCVWD Information Technology Fund	2,396
Other Funding Sources	0
Total	2,396

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	PeopleSoft System Upgrade and Expansion
Program	Information Technology
Priority No.	63
Project No.	60274062s
District Contact	Sudhanshu Tikekar stikekar@valleywater.org



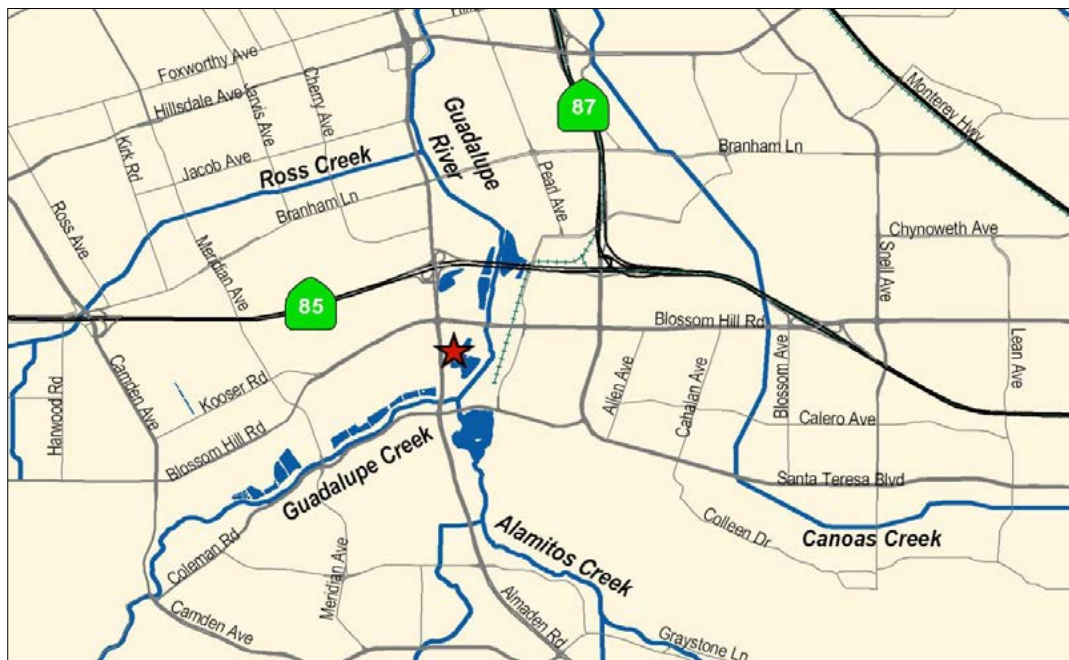
PeopleSoft Reports page from the District's intranet

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the existing PeopleSoft system in order to accomplish the following objectives:

- Ensure the District has a current and functionally robust enterprise resource planning (ERP) solution, incorporating finance/human resource, timekeeping, planning and budgeting, and procurement functionality.
- Fully automate the District's financial and human resources management functions.
- Automate the tracking and reporting of the District's labor effort and employee leave.
- Automatically apply the District's business rules to employee time records.

PROJECT LOCATION



SCHEDULE & STATUS

July 2013 to February 2018

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	8,679											
Closeout	-											
	8,679											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	1,884	2,416	2,500	680	0	0	0	0	7,480
with inflation	1,884	2,416	2,600	735	0	0	0	0	7,635
TOTAL	3,083	2,416	2,500	680	0	0	0	0	8,679
with inflation	3,083	2,416	2,600	735	0	0	0	0	8,834

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	4,463	2,415	2,578	22	735	0	0	0	0	7,635
TOTAL	5,662	2,415	2,578	22	735	0	0	0	0	8,834

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	7,635
Total	8,834

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be needed for expanded technical support for new system modules and features and to continue with operational refinements, enhancements, integrations, report development, etc. on an on-going annual basis. PeopleSoft software maintenance fees are required on an annual recurring basis and projected to increase by three percent each year. The projected annual software maintenance fee for FY 2019 is approximately \$164,324.

Project	Software Upgrades & Enhancements
Program	Information Technology
Priority No.	54
Project No.	73274008
District Contact	Sudhanshu Tikekar stikekar@valleywater.org



Existing District Systems to be upgraded and enhanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing District systems including GIS, Maximo, Oracle Development system, internal and external District websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate upgrade activities into a single project for better organization, planning and budgeting purposes (the exception is Peoplesoft which has its own upgrade project).

The objective of this project is to regularly upgrade existing software packages to:

- ♦ Reduce current risks associated with being on a software version that is no longer supported by the vendor and is running on outdated operating systems.
- ♦ Increase the level of service provided by the software with new functionalities.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2031

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	13,643											
Closeout	-											
	13,643											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274008-Software Upgrades & Enhancements	701	526	650	727	752	825	360	9,160	13,701
with inflation	701	526	676	786	846	965	438	13,591	18,529

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274008-Software Upgrades & Enhancements	1,224	9	6	670	786	846	965	438	13,591	18,529

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Information Technology Fund	18,529
Other Funding Sources	0
Total	18,529

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	WTP-WQL Network Equipment
Program	Information Technology
Priority No.	46
Project No.	95274003
District Contact	Sudhanshu Tikekar stikekar@valleywater.org



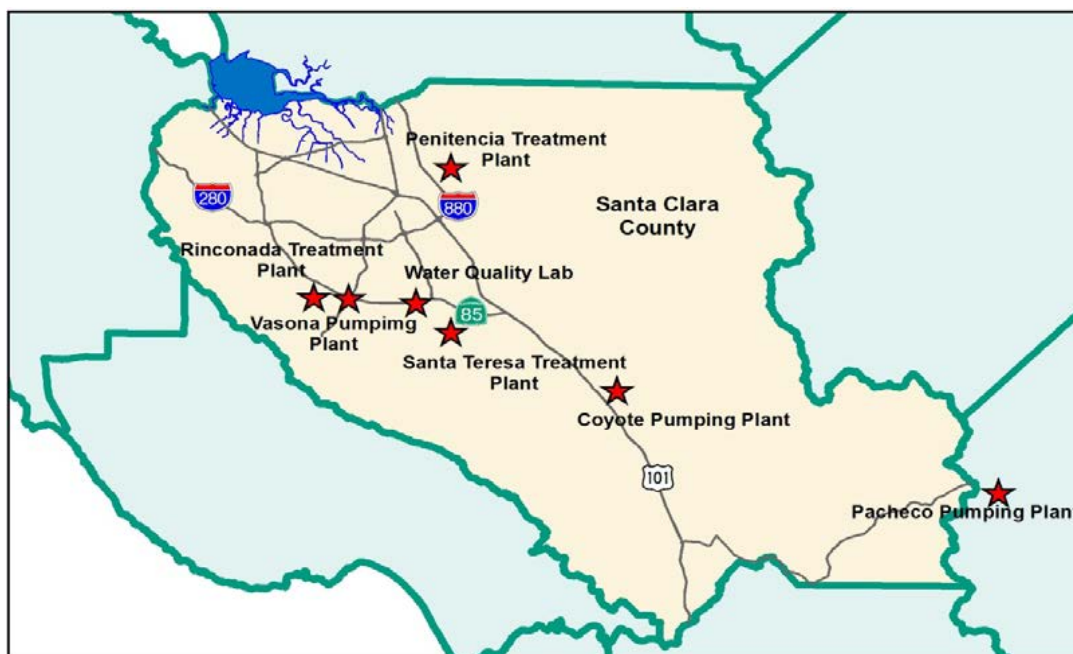
View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that the District has a current and robust computer network to accomplish the following objectives:

- ♦ Deliver greater access speeds.
- ♦ Restore vendor maintenance.
- ♦ Improve software application performance.
- ♦ Provide a path to meet future data communications needs.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to June 2032

Phase	Cost	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Plan	-											
Design	-											
Construct	9,867											
Closeout	-											
9,867												

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
95274003-WTP-WQL Network Equipment	708	192	1,270	513	176	0	85	6,923	9,867
with inflation	708	192	1,321	555	198	0	103	9,777	12,854

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future
95274003-WTP-WQL Network Equipment	740	180	20	1,301	555	198	0	103	9,777
									12,854

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Water Utility Enterprise Fund	12,854
Other Funding Sources	0
Total	12,854

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by \$37,000 beginning in FY2033 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years

Financial Planning and Summary

CIP FINANCIAL PLANNING

Board policy regarding financial planning and budgeting provides the foundation for CIP financial planning. The policy states:

Executive Limitation EL-4, “Financial planning for any fiscal year shall be aligned with the Board’s Ends, not risk fiscal jeopardy, and be derived from a multi-year plan.”

Executive Limitation EL-4.3, “A BAO shall include credible projection of revenues and expenses, separation of capital and operational items, cash flow, and disclosure of planning assumptions.”

Executive Limitation EL-4.4, “A BAO shall plan the expenditure in any budget period within the funds that are conservatively projected to be received or appropriated from reserves in that period.”

KEY REVENUES SOURCES

Water Charges

- Water charges include a ground water production charge, which is equivalent to the basic user charge, and is associated with the benefit of managing groundwater supplies. The groundwater charge is applied to water extracted from the groundwater basin in Zones W-2 and W-5. The basic user charge is applied to other types of water delivered by the District. There are two rates: one for agricultural water and one for municipal and industrial water.
- A treated water surcharge, which is associated with the benefit of receiving treated water, is levied in addition to the basic user charge on water delivered from the District’s water treatment plants.

Property Tax

Santa Clara County allocates property tax revenue to the District from ad valorem taxes levied on land within the county.

Special Parcel Tax

A special parcel tax, with a 2016 sunset, was approved by the voters in Santa Clara County in November 2000. This revenue source was restricted to financing the costs of the District’s Clean, Safe Creeks and Natural Flood Protection Program. In November 2012 the special parcel tax was continued by voter approval to 2028. This revenue can be used for both the continuing Clean, Safe Creeks and new Safe, Clean Water programs.

Benefit Assessments

Benefit assessment revenue consists of levies approved by voters in 1986 and 1990 to support financing for flood control capital improvements. The current FY 2015-16 budget amount is approximately 1.25 times the duly authorized annual debt service requirements for each Watershed.

Capital Reimbursements

Capital reimbursement revenues are from local, state and federal partners for capital projects carried on cooperatively by the District and its partners. The District fronts the partners’ shares of capital expenditures and receives reimbursements from the partners at a later time.

Interest

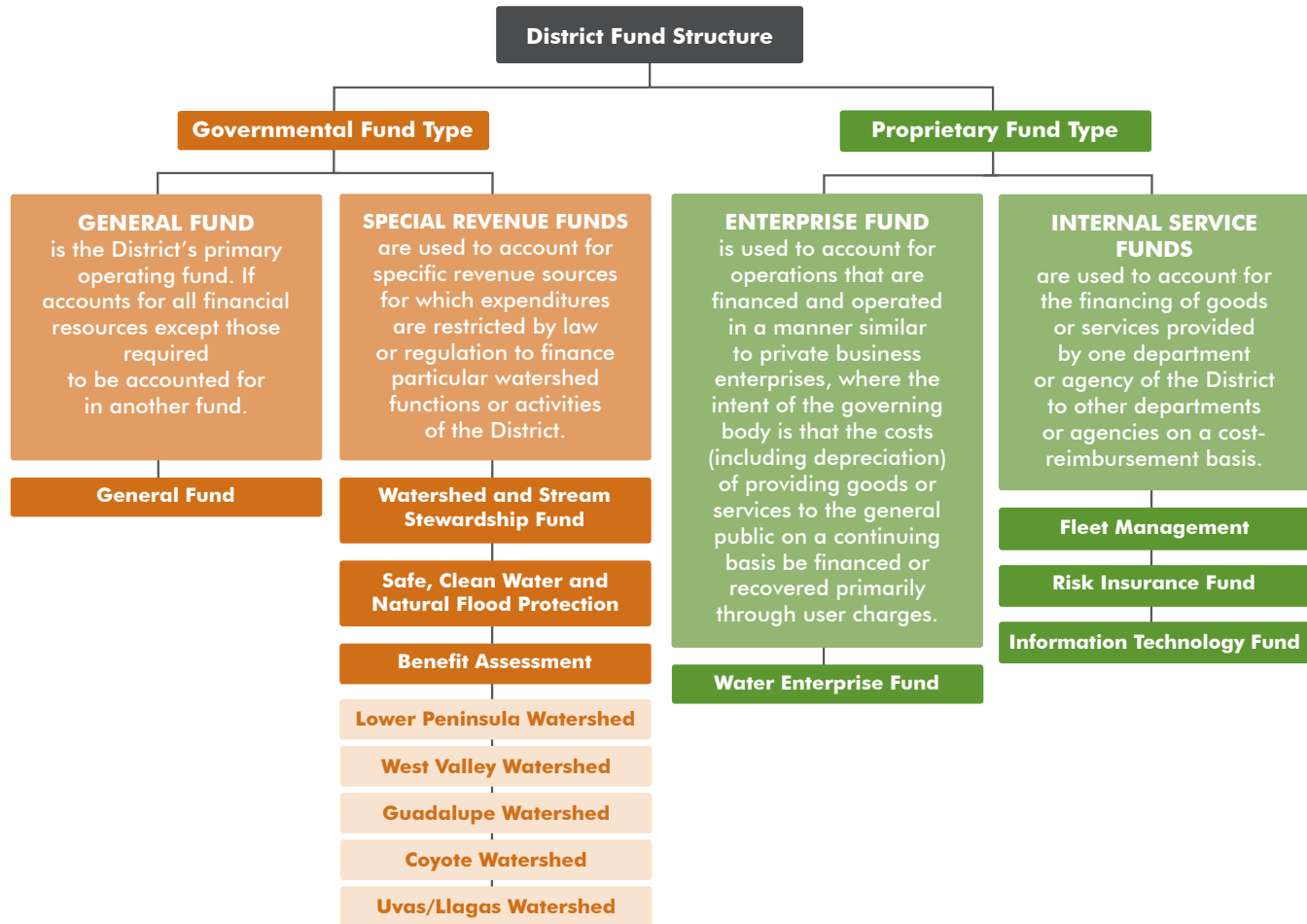
Interest is earned from the District’s investment portfolio.

Financial Planning and Summary

District Fund Structure

The District's revenue sources are organized into eight funds. Each fund has specific revenue sources according to their intended purposes, and each fund

is an independent accounting entity with a self-balancing set of accounts comprised of its assets, liabilities, fund equity, revenue, and expenditures or expenses, as appropriate.



Revenue by Fund (\$K)

FUND NAME	FY16 Budget	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Water Utility Enterprise	205,319	237,761	276,553	319,272	381,526	438,264	474,441	515,022	536,897	559,504	585,594
Watershed Stream Stewardship	79,823	96,930	88,350	76,748	78,154	80,977	83,961	86,993	90,097	93,362	97,197
Safe, Clean Water and Natural Flood Protection	49,063	62,410	60,661	77,225	54,876	50,650	50,378	52,242	54,285	56,585	58,826
Benefit Assessment	14,778	14,785	14,778	14,778	13,447	13,458	13,457	13,448	13,443	6,850	6,855
General	6,405	6,596	6,828	7,067	7,316	7,572	7,838	8,114	8,399	8,694	8,999
Internal Service	155	230	227	236	246	256	264	276	289	299	309
TOTAL	355,542	418,712	447,395	495,326	535,565	591,177	630,341	676,094	703,410	725,295	757,781

Note: Internal Service Funds (ISF) is the combination of the Fleet Management, IT Capital, and Risk Funds

Financial Planning and Summary

Revenue Projections

The District regularly updates the projected revenues based on the best information available.

- Revenues from water charges are estimated based on projections of water demand for residential, commercial and industrial, and agricultural consumption combined with rates per acre-foot. Rates are set at a level that will provide revenue needed to meet operating and capital needs.
- Revenues from property taxes, special parcel taxes, and benefit assessments are estimated based on projection of growth in assessed value and number of developed parcels in Santa Clara County.
- Interest earnings are estimated based on the projected average cash balances during the fiscal year and expected yield from the District's investment portfolio.
- Revenue from capital reimbursements partnerships are estimated based on the terms of agreements executed by the District and its partners.

Expenditure Projections

The District regularly updates the operation and capital expenditures based on the best information available.

Each capital project cost estimate includes the yearly expenditures through completion based on the project's scope and schedule. The expenditures are monitored regularly and updated when necessary, e.g. expenditures are updated when a project's scope changes. A management review process is enforced to ensure only justified expenditure changes are approved.

Operation cost projections for the next 15 years are updated annually and are based on assumptions derived from the District's strategic plans, including the impact of completed capital projects. Capital and operations expenditure projections are the foundation for the development of the District's budget.

Financial Analysis

The District regularly performs financial analysis to comply with the Board's Financial Planning/Budgeting Policy. The District uses sophisticated financial models

to perform the analysis for each fund. The projected operation expenditures, capital expenditures, and revenues for the next ten years are incorporated into the financial models to analyze the health of each fund under various economic scenarios. This process assures that funds will be available when needed to implement the CIP.

The financial analysis generates alternatives for funding capital projects based on the available yearly revenues, from all sources, allocated to the capital program, and the debt financing capacity of each fund. The financial analysis establishes the parameters within which the capital project schedule is developed.

Debt Projections and Debt Ratios

Debt is managed at the District depending on the type of District business involved. The SCW program approved by the voters in 2012 includes the authority to issue debt against future revenue in order to accelerate completion of projects sooner. Debt service on outstanding benefit assessment debt is funded by benefit assessments levied on property owners in the county.

The water utility business, on the other hand, uses a combination of short-term and long-term debt financing in conjunction with pay-as-you-go financing to lessen impacts to the water rate caused by fluctuations in capital funding needs. In the 1984 general election, Measure B was passed by the voters, which gave the District's water utility the authority to issue bonds on an "as required" basis. Debt service on outstanding debt is paid from water revenues. Bond covenants stipulate that the District must maintain a 1.25 debt coverage ratio on all parity bonds. The long-term financial analysis targets a debt coverage ratio of 2.0, which helps establish the parameters for capital planning that ensure bond covenants will be met.

The District currently enjoys credit ratings that are among the highest for a water-related governmental entity in the state of California, which helps keep interest costs borne by the District at a minimum.

Financial Planning and Summary

Relationship between the Operating Budget and CIP

Whenever the District commits to capital improvements, there is a potential for associated long-range commitment of operating funds. For example, if 20-year bonds are issued to finance capital needs, then the operating funds will need to budget debt service payments for the next two decades. For this reason, it is important to evaluate capital commitments in the context of their long-range operating impact.

In addition to the long-range debt service payments, some capital projects affect future operating budgets either positively or negatively due to an increase or decrease in maintenance and operation costs. Such impacts vary widely from project to project and, are evaluated individually during the project development stage. The District is committing to a potential change in the operating budget when a capital project is approved.

The projected debt service payments and the positive or negative operating budget impacts are important factors considered in the District's financial analysis.

This chart identifies the operating budget impacts to each fund from projected debt service payments. The debt service payment in the Watershed Stream Stewardship Fund is a total of payments associated with each individual watershed.

Debt Payment Schedule (\$K)

Fund	FY17	FY18	FY19	FY20	FY21
General Fund	538	538	538	539	539
Benefit Assessment Fund	12,168	12,162	12,162	11,085	11,094
Safe, Clean Water and Natural Flood Protection Fund	212	7,539	7,539	7,539	7,539
Water Utility Enterprise Fund	27,309	42,597	65,164	90,115	110,424
Information Technology Fund	-	-	-	-	-
TOTAL	40,227	62,835	85,403	109,278	129,595

This chart identifies the net operating budget impacts to each fund resulting from annual maintenance and/or operating cost for newly completed capital projects. Additional information regarding operating impacts related to individual projects can be found on the project pages.

Estimated Operating Impacts (\$K)

Fund	FY17	FY18	FY19	FY20	FY21	BEYOND
General Fund	-	-	-	-	-	-
Watershed Stream Stewardship Fund	35	35	4,045	45	70	70
Safe, Clean Water and Natural Flood Protection Fund	-	-	50	150	150	730
Water Utility Enterprise Fund	1,025	1,050	1,058	928	2,326	2,383
Information Technology Fund	-	164	169	174	179	184
TOTAL	1,060	1,249	5,322	1,297	2,725	3,367

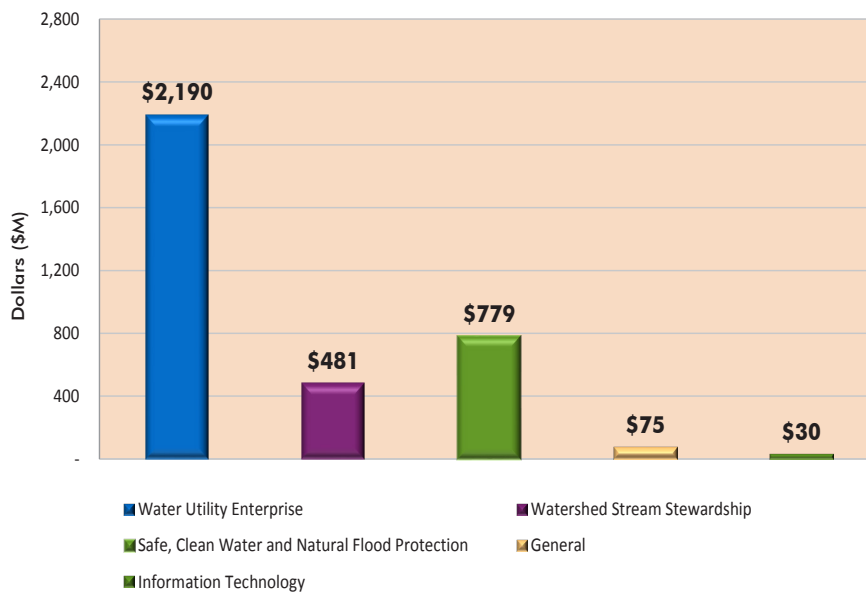
Financial Planning and Summary

CIP FUNDING SUMMARY

Of the \$3.556 billion in total District funding for current and future projects, the Board appropriated \$1.245 billion in prior years through June 30, 2017 (the end of Fiscal Year 2016-17). This year's CIP process identified

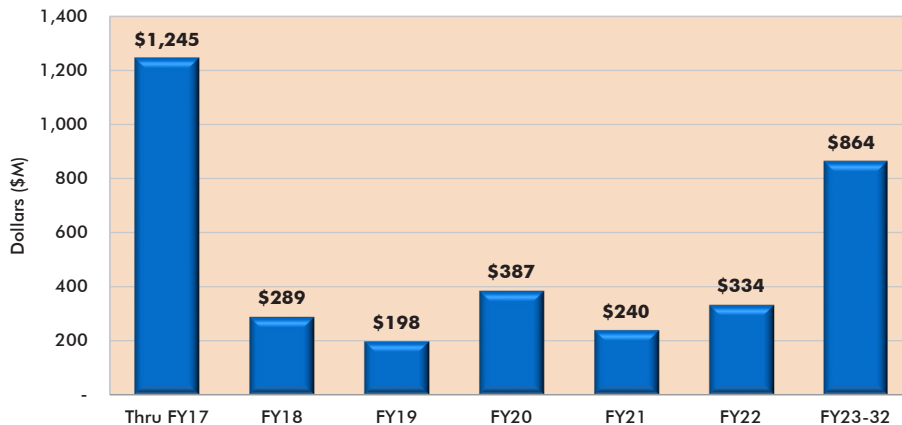
additional funding needs of \$2.311 billion to complete the projects in the CIP, with \$289 million allocated in Fiscal Year 2017-18 and a total of \$2.023 billion proposed for future years.

CIP Total Funding by Fund



The needed \$3.556 billion to implement the 63 projects as defined in the CIP are funded by four of the District's seven Funds.

CIP Funding Schedule



The following chart shows the funding schedule for the \$3.556 billion to implement the 63 projects.

Financial Planning and Summary

CIP Project Funding Schedule for Water Utility Enterprise Fund (\$K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Almaden Dam Improvements	10,038	2,621	-	520	541	562	538	27,590	17,184	59,594
Anderson Dam Seismic Retrofit (C1)	31,236	29	-	7,979	3,452	147,292	83,915	107,297	63,341	444,541
Calero and Guadalupe Dams Seismic Retrofits	17,533	9,267	1,954	810	23,925	67,786	27,036	7,533	-	153,890
Coyote Pumping Plant ASD Replacement	-	-	-	-	541	1,879	9,289	4,872	-	16,581
Coyote Pumping Plant Warehouse	713	2,227	2,156	2,904	546	-	-	-	-	6,390
Dam Seismic Stability Evaluation	18,812	-	1,145	-	-	422	468	-	-	19,702
Small Capital Improvements, San Felipe Reach 1-3	n/a	3,608	-	679	1,179	-	726	94	24,905	31,191
10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	15,965	20,157	11,474	4,502	8,231	36,899	97,228
FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	12	-	-	-	-	-	-	6,934
Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	1,469	1,255	251	1,639	317	-	-	-	4,818
Penitencia Delivery Main/Force Main Seismic Retrofit	24,940	9,647	-	681	-	-	-	-	-	35,268
SCADA Remote Architecture & Communications Upgrade	402	374	521	-	382	180	936	852	3,909	7,035
Small Capital Improvements, Raw Water Transmission	n/a	-	-	110	-	51	-	94	3,213	3,468
Small Capital Improvements, Treated Water Transmission	n/a	-	-	58	81	-	-	-	-	139
Vasona Pumping Plant Upgrade	-	119	-	1,270	1,720	17,130	82	-	-	20,321
Fluoridation at WTPs	6,875	3,009	56	32	-	-	-	-	-	9,916
IRP2 WTP Ops Bldgs Seismic Retrofit	20,992	1,167	-	346	-	-	-	-	-	22,505
PWTP Clearwell Recoating & Repair	5,919	550	84	-	-	-	-	-	-	6,469
PWTP Residuals Management	-	-	-	676	1,406	7,597	-	-	-	9,679
RWTP FRP Residuals Management Modifications	26,096	5,403	-	17,601	2,169	403	-	-	-	51,672
RWTP Reliability Improvement	71,509	45,040	-	44,192	44,496	45,970	140	-	-	251,347
RWTP Treated Water Valves Upgrade	8,369	191	-	343	-	22	-	-	-	8,925
Small Capital Improvements, Water Treatment	n/a	2,831	-	2,132	6,444	7,565	7,875	3,950	17,154	47,951
Expedited Purified Water Program (EPWP)	18,482	9,669	8,891	-	-	15,422	25,309	108,789	461,299	638,970
South County Recycled Water Pipeline	27,784	15,772	8,235	2,930	71	350	-	-	-	46,907
Wolfe Road Recycled Water Pipeline	14,171	657	142	198	-	-	-	-	-	15,026

FY 2016-17 Funds to be reappropriated

Financial Planning and Summary

CIP Project Funding Schedule for Water Utility Enterprise Fund (\$K) (cont'd)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
FAHCE Stevens Creek Fish Passage Enhancement - 90%	765	-	-	1,356	2,903	-	-	-	-	5,025
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
WTP-WQL Network Equipment	740	180	20	1,301	555	198	-	103	9,777	12,854
TOTAL	308,018	119,264	24,471	102,334	117,670	329,748	176,282	284,897	752,176	2,190,389

 FY 2016-17 Funds to be reappropriated

Financial Planning and Summary

Project Funding Schedule for Watershed and Stream Stewardship Fund (\$K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	-	234	458	-	-	-	-	-	1,658
Permanente Creek, SF Bay to Foothill Expressway	17,541	-	178	-	-	-	-	-	-	17,541
San Francisquito Creek, SF Bay thru Searsville Dam	4,064	-	-	-	-	-	-	-	-	4,064
San Francisquito Creek, Early Implementation	1,614	-	-	-	-	-	-	-	-	1,614
San Tomas Creek, Quito Road Bridge Replacement	563	-	1	123	-	-	-	-	-	686
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 1	55,191	-	6,164	-	-	-	-	-	-	55,191
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 2	31,226	27,176	5,304	13,683	2,067	360	374	426	-	75,312
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 3	-	-	-	2,002	2,001	2,004	-	-	-	6,007
Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	-	-	-	10,734
Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	6,800	2,891	1,871	14,385	8,018	337	351	384	-	33,166
Lower Silver Creek, I-680 to N. Babb Rd (Reach 4 Planning)	2,371	-	-	-	-	-	-	-	-	2,371
Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	91,505	2,471	-	265	54	11	-	-	-	94,306
Lower Silver Creek, I-680 to Cunningham, Reimbursable (Reach 4-6)	2,912	-	348	-	-	-	-	-	-	2,912
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps	8,970	-	119	-	-	-	-	-	-	8,970
Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs	8,544	-	3,709	-	-	-	-	-	-	8,544
Llagas Creek-Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,475	2,185	2,338	-	-	-	-	11,569
Llagas Creek-Upper, R5,6,&7b	-	-	-	-	17,000	6,000	-	-	-	23,000
San Francisco Bay Shoreline	14,067	1,497	-	-	-	-	-	-	-	15,564
San Francisco Bay Shoreline - Contribution	490	-	-	-	-	-	-	-	-	490
Shoreline Early Implementation	359	-	-	-	-	-	-	-	-	359
Watersheds Asset Rehabilitation Program	2,728	5,005	608	14,961	-	1,942	10,680	14,563	20,352	70,231
SMP Mitigation, Stream and Watershed Land Preservation	15,714	510	1	829	-	-	-	-	-	17,053
FAHCE Stevens Creek Fish Passage Enhancement - 10%	85	-	-	151	323	-	-	-	-	558
Salt Ponds A5-11 Restoration	2,518	1,715	-	754	1,838	1,680	-	-	-	8,505
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
TOTAL	279,966	45,094	21,546	51,470	35,012	13,207	12,180	16,175	28,238	481,341

FY 2016-17 Funds to be reappropriated

Financial Planning and Summary

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund (\$K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
IRP2 Additional Line Valves (A3)	-	-	-	-	-	1,046	1,314	9,244	192	11,796
Main & Madrone Pipelines Restoration (A1)	1,807	892	-	12,672	302	-	-	-	-	15,673
Permanente Creek, SF Bay to Foothill Expressway	45,028	12,072	-	5,878	4,947	-	-	-	-	67,925
San Francisquito Creek, SF Bay thru Searsville Dam (E5)	6,782	-	457	-	-	-	-	-	-	6,782
San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)	32,422	536	118	12,260	1,298	-	-	-	-	46,516
Sunnyvale East and West Channels	26,177	10,309	-	31,940	54	-	-	-	-	68,480
Guadalupe River-Upper, I-280 to Blossom Hill Road (E8)	112,881	8,615	-	24,811	9,741	11,577	8,222	3,529	3,021	182,397
Berryessa Creek, Calaveras Boulevard to Interstate 680	45,403	14,747	4,062	-	-	441	-	-	-	60,591
Coyote Creek, Montague Expressway to Interstate 280	11,486	-	632	-	-	-	1,021	852	23,227	36,586
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)	385	-	385	4,445	5,898	6,134	15,232	8,650	8,412	49,156
Llagas Creek-Upper, Reimbursable (E6b)	42,632	319	1	-	-	-	-	-	-	42,951
Llagas Creek-Upper, Corps Coordination (E6a)	40,893	-	8,373	33,846	8,000	125	-	-	-	82,864
Llagas Creek-Upper, Technical Studies	1,446	-	-	-	-	-	-	-	-	1,446
Llagas Creek-Upper, Design	19,581	2,034	-	-	-	-	-	-	-	21,615
San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)	6,548	6,247	7,324	-	-	3,394	3,264	-	-	19,453
San Francisco Bay Shoreline - Other EIAs Planning (E7)	3,334	422	1,714	-	408	1,125	1,170	-	-	6,459
Hale Creek Enhancement Pilot Study (D6)	463	482	132	1,442	-	-	-	-	-	2,387
Almaden Lake Improvements (D4.1a)	2,665	1,099	-	832	16	-	-	-	-	4,612
SCW Fish Passage Improvements (D4.3; Bolsa Road)	1,461	2,203	215	1,208	1,364	-	-	-	-	6,236
SCW Implementation Fund, Comer Debris Basin (D6.2)	-	-	-	-	290	1,184	218	-	-	1,692
SCW Implementation Fund, Creek Bank Stability (D6.1)	-	-	-	-	4,277	4,540	6,210	-	-	15,027
SCW Implementation Fund, Ogier Ponds Separation from Coyote Creek (D4.1b)	-	-	-	-	2,518	8,560	2,307	-	-	13,385
SCW Implementation Fund, Regionally Significant Habitat Land Acquisition (D7)	-	-	-	-	724	749	775	802	7,886	10,936
South Bay Salt Ponds Restoration (D8)	535	-	49	1,652	1,791	-	-	-	-	3,978
TOTAL	401,929	59,977	23,462	130,986	41,628	38,875	39,733	23,077	42,738	778,943

 FY 2016-17 Funds to be reappropriated

Financial Planning and Summary

Project Funding Schedule for General Fund (\$K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	-	2,062	2,126	2,192	2,260	2,324	27,526	40,552
Headquarters Operations Building	1,176	-	1,060	-	245	1,809	8,127	6,665	-	18,022
Winfield Capital Improvements	9,303	5,927	13,179	-	-	-	-	-	-	15,230
PeopleSoft System Upgrade & Expansion	1,199	-	-	-	-	-	-	-	-	1,199
TOTAL	11,678	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	75,003

FY 2016-17 Funds to be reappropriated

Project Funding Schedule for Information Technology Fund (\$K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Data Consolidation	336	325	440	279	270	-	-	-	-	1,210
E-Discovery Management System	-	5	-	545	-	-	-	-	-	550
IT Disaster Recovery	562	1,393	1	441	-	-	-	-	-	2,396
PeopleSoft System Upgrade & Expansion	4,463	2,415	2,578	22	735	-	-	-	-	7,635
Software Upgrades & Enhancements	1,224	9	6	670	786	846	965	438	13,591	18,529
TOTAL	6,585	4,147	3,025	1,957	1,791	846	965	438	13,591	30,320

FY 2016-17 Funds to be reappropriated

CIP Funding Schedule Summary for All Funds (\$K)

FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Water Utility Enterprise	308,018	119,264	24,471	102,334	117,670	329,748	176,282	284,897	752,176	2,190,389
Watershed Stream Stewardship	279,966	45,094	21,546	51,470	35,012	13,207	12,180	16,175	28,238	481,341
Safe, Clean Water and Natural Flood Protection	401,929	59,977	23,462	130,986	41,628	38,875	39,733	23,077	42,738	778,943
General	11,678	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	75,003
Information Technology	6,585	4,147	3,025	1,957	1,791	846	965	438	13,591	30,320
TOTAL #####	236,471	86,743	288,809	198,472	386,677	239,547	333,575	864,269	3,555,996	

FY 2016-17 Funds to be reappropriated

Appendix A - CIP Priority Criteria

WATER SUPPLY CAPITAL PROJECTS Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

RAW SCORE = 0

Project Name Here

PRIMARY OBJECTIVE (75%)	Water Supply (E 2)		0
	A1	☐ I ☐ P Project maintains existing water utility infrastructure or is required to meet the current and future water supply demand, comply with water quality standards or meet other regulatory requirements. I = Impact (H, M, L); P = Probability (H, M, L)	
	A2	☐ I ☐ P Project expands water utility infrastructure or provides additional water supply to meet current or near future demand. I = Impact (H, M, L); P = Probability (H, M, L)	
	B	☐ Project increases water supply portfolio, increases operation flexibility, improves maintenance capabilities, adds efficiency, or improves post-disaster reliability of water utility infrastructure [Example: improving the systematic reliability of water utility infrastructure to continually perform during and after a devastating event; improving the systematic flexibility of water utility infrastructure to utilize various source water; or adding redundancy so infrastructure can be taken off-line for maintenance]. (H, M, L)	
	C	☐ Timing of when project is needed to meet water supply demands, water quality standards, or other regulations. (I = Immediately (0-3 yrs.); S = Short-term (3-5 yrs.); L = Long-term (5+ yrs.))	
COMMUNITY ENGAGEMENT (7.5%)	Social Factor - Check if applicable ☐ Promotes Emergency Recovery ☐ Addresses projected water supply demand identified by Cities/County		0
	Positive Interaction (E 4) - Check all that apply ☐ With the Community ☐ With other agencies		
ENVIRONMENTAL SUSTAINABILITY (7.5%)	Water Quality (E 3.2) - Check if applicable		0
	☐	Promotes drinking water quality	☐ Protects Ground Water
	☐	Protects Surface Water	☐ Addresses Storm Water issues
	Natural Resources Sustainability (E 3.2) - Check all that apply		
	☐	Promotes water use efficiency	☐ Reduces reliance on imported water
☐	Promotes stream management	☐ Encourages Water Conservation	
☐	Protects Upland or Wetland Habitat	☐ Expands or Improves Fish Habitat	
☐	Includes Climate Change Elements	☐ Promotes energy efficiency or incorporates energy efficient features	
COST RECOVERY (10%)	Lifecycle costs are minimized - Check One		0
	☐	Annual cost savings of more than \$500,000	
	☐	Annual cost savings of \$200,000 to \$500,000	
	☐	Annual cost savings of less than \$200,000 (reference 1/2 PY)	
	Funding Available from Other Agencies - Check One		
☐	Over 50% of project costs available from other agencies		
☐	26% to 50% of project costs available from other agencies		
☐	Up to 25% of project costs available from other agencies		

Appendix A - CIP Priority Criteria

FLOOD PROTECTION PROJECTS Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

RAW SCORE = 0

Project Name Here

PRIMARY OBJECTIVE (60%)	Flood Protection (E 3) ☐ I ☐ P Project restores existing watershed infrastructure to its intended level of flood protection. I = Impact on home, school, or business parcels (H = 1000+, M = 200 to 1000, L = <200); P = Probability based on frequency of flooding (H = every 10 yrs, M = every 25 yrs, L = every 50+ yrs) ☐ Project is a Board or USACE priority, improves watershed infrastructure to achieve the committed level of flood protection, or provides flood protection beyond the level of commitment. (H, M, L) ☐ Timing of when the flood protection benefit will be realized by the community. I = Immediate (0-3 years); S = Short-term (3-5 years); L = Long-term (more than 5 years)	0									
COMMUNITY ENGAGEMENT (10%)	Positive Interaction (E 4) - Check all that apply ☐ With the Community ☐ With other agencies ☐ Environmental Justice Good Neighbor (E 4) - Check all that apply ☐ Graffiti removal or Prevention Features ☐ Improves aesthetics of project location ☐ Trash removal features (vortex weirs)	0									
ENVIRONMENTAL SUSTAINABILITY (15%)	Ecological Function (E 3.1, 4.1) ☐ Project incorporates at least one of the following: removal of fish barrier; structural improvements to fish habitat; inclusion of riparian habitat (planting, setback or protect in place); inclusion of SRA plantings and/or features designed to improve water temperature; improvements to facilitate habitat connectivity, upland habitat and/or wetland habitat protection or preservation; or reduction of hardscape elements. Physical Function (E 3.2) ☐ Project incorporates at least one of the following: a holistic watershed approach; energy efficiency; geomorphic design elements; erosion control (sediment source reduction); floodplain connectivity; or protection from sea level rise. Water Quality and Supply (E 3.2) ☐ Project incorporates TMDL improvements or provides opportunity for recharge Trails & Open Space (E4.2, E4.3) - Check all that apply ☐ Project incorporates trail friendly features, provides protection or preservation of open space, or provides/improves Bicycle Commute Route	0									
COST RECOVERY (15%)	Funding Available from Other Agencies - Put an "X" in the % column based on the percentage eligible for cost sharing; Put an "H", "M", or "L" in the C column based on the level of confidence <table border="0"> <tr> <td>☐ %</td> <td>☐ C</td> <td>50% or more of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)</td> </tr> <tr> <td>☐ %</td> <td>☐ C</td> <td>26% to 49% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)</td> </tr> <tr> <td>☐ %</td> <td>☐ C</td> <td>Up to 25% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)</td> </tr> </table>	☐ %	☐ C	50% or more of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)	☐ %	☐ C	26% to 49% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)	☐ %	☐ C	Up to 25% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)	0
☐ %	☐ C	50% or more of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)									
☐ %	☐ C	26% to 49% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)									
☐ %	☐ C	Up to 25% of project costs available from other agencies % = Percentage of cost provided; C = Confidence Level (H, M, L)									

Appendix A - CIP Priority Criteria

WATER RESOURCES STEWARDSHIP PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

RAW SCORE = 0

Project Name

PRIMARY OBJECTIVE (55%)	Stewardship Projects		0
	A ☐	Project creates Stewardship features to achieve stewardship commitments. (H, M, L)	
B ☐	Stewardship activities beyond the current commitment. (H, M, L)		
COMMUNITY ENGAGEMENT (15%)	Positive Interaction (E 4) - Check all that apply		0
	☐ With the Community	☐ With other agencies	
	☐ Environmental Justice		
	Good Neighbor (E 4) - Check all that apply	Education Element	
	☐ Graffiti removal or Prevention Features	☐ Promotes stream stewardship	
	☐ Trash removal features (vortex weirs)	☐ Promotes flood protection	
	☐ Improves aesthetics of project location	☐ Promotes Bay protection	
	☐ Promotes water conservation		
ENVIRONMENTAL SUSTAINABILITY (15%)	Ecological Function (E 3.2) - Check all that apply		0
	☐ Fish Barrier Removal / Structural or nonstructural improvement to fish habitat	☐ Upland Habitat Protection/Preservation	
	☐ Riparian Habitat (planting, setback or protect in place)	☐ Wetland Habitat Protection/Preservation	
	☐ SRA Plantings or Improved water temperature	☐ Hardscape Reduction	
	Physical Stream Function (E 3.2) - Check all that apply		
	☐ Holistic Watershed Approach	☐ Erosion Control or Sediment Source Reduction	
	☐ Geomorphologic Design Elements		
	Water Quality (E 3.2) - Check all that apply		
	☐ Storm Water Treatment (pervious pavement, green roofs, etc.)	☐ Hazardous Material Removal (Asbestos, Lead, Hydrocarbons, etc.)	
	☐ TMDL Improvements		
	Trails & Open Space (E3.3) - Check all that apply		
	☐ Trail friendly features	☐ Open Space Protection / Preservation	
	☐ Provides/Improves Bicycle Commute Route	☐ Climate change elements	
COST RECOVERY (15%)	Funding Available from Other Agencies - Check One		0
	% ☐ C ☐	Over 50% of project costs available from other agencies	
		% = Percentage of cost provided; C = Confidence Level (H, M, L)	
	☐ ☐	26% to 50% of project costs available from other agencies	
		% = Percentage of cost provided; C = Confidence Level (H, M, L)	
☐ ☐	Up to 25% of project costs available from other agencies		
		% = Percentage of cost provided; C = Confidence Level (H, M, L)	

Appendix A - CIP Priority Criteria

BUILDINGS & GROUNDS PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)	Buildings and Grounds (EL 3.4)		0
	A	☐ I ☐ P Project maintains or replaces existing building infrastructure to provide continuous housing of existing functions and/or to comply with employer safety standards. I = Impact (H, M, L); P = Probability (H, M, L)	
	B	☐ Project enhances building infrastructure to address treatment of staff issues.	
	C	☐ Project positions the District to meet projected future space needs.	
COMMUNITY ENGAGEMENT (10%)	Positive Interaction (E 4) - Check all that apply		0
	☐ With the Community	☐ With other agencies	
	Good Neighbor (E 4) - Check all that apply		
	☐ Graffiti removal or Prevention Features ☐ Trash removal features (vortex weirs) ☐ Improves esthetics of project location		
ENVIRONMENTAL SUSTAINABILITY (15%)	Natural Resources Sustainability (E 3.2) - Check all that apply		0
	☐ Air Quality & Visibility Improvement	☐ Recycled Water, rain water or gray water utilized	
	☐ Energy Efficient Features (Lighting, HVAC, maximize daylight use, etc.)	☐ Construction Site Waste Management	
	☐ Renewable Energy Use	☐ Recycle/Re-use Solid Waste	
	☐ Water Efficient Features: Plumbing fixtures, Landscaping, etc.	☐ Reduce Solid Waste Production	
	☐ Use of Recycled or Alternative Building Materials		
Trails & Open Space (E3.3) - Check all that apply			
☐ Trail friendly features	☐ Open Space Protection / Preservation		
☐ Provides/Improves Bicycle Commute Route			
COST RECOVERY (15%)	Funding Available from Other Agencies (Grants & Cost-share) - Check One		0
	☐ Over 50% of project costs available from other agencies		
	☐ 26% to 50% of project costs available from other agencies		
	☐ Up to 25% of project costs available from other agencies		

Appendix A - CIP Priority Criteria

INFORMATION TECHNOLOGY PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

SCORE = 0

Project Name

PRIMARY OBJECTIVE (75%)	Information Technology (EL 7.5)		0
	A	I P ☐ ☐ Project maintains existing mission critical software systems and/or Information Technology infrastructure to improve reliability for business continuity; protection of intellectual property information and files from loss or damage. I = Impact (H, M, L); P = Probability (H, M, L)	
	B	☐ Project enhances mission critical software systems and/or IT infrastructure to improve user functionality. (H, M, L)	
	C	☐ Project enhances mission critical software systems and/or IT infrastructure to meet projected future needs. (H, M, L)	
	D	☐ Ties into IT Master Plan finding and/or recommendations (10 pts.)	
COMMUNITY ENGAGEMENT (15%)	Good Neighbor - Check all that apply		0
	☐ Program promotes the distribution of information to the community (public transparency) ☐ Program provides an opportunity for community interaction with the District.		
COST RECOVERY (10%)	Funding Available from Other Agencies - Check One		0
	☐ Over 50% of project costs available from other agencies		
	☐ 26% to 50% of project costs available from other agencies		
	☐ Up to 25% of project costs available from other agencies		

Appendix A - CIP Priority Criteria

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Appendix B - Project List By Priority

Water Supply Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value (\$K)	Remaining Cost (\$K) (FY-17 to Completion)	Phase
100	Anderson Dam Seismic Retrofit	\$444,541	\$413,276	PIng/Des
92	Dam Seismic Stability Evaluation	\$19,702	\$2,035	PIng
92	Calero and Guadalupe Dams Seismic Retrofits	\$152,267	\$127,421	PIng/Des
91	RWTP Reliability Improvement	\$251,347	\$134,798	Construction
84	RWTP FRP Residuals Management Modifications	\$51,672	\$20,173	Construction
84	RWTP Treated Water Valves Upgrade	\$8,925	\$365	Construction
83	Penitencia Delivery Main/Force Main Seismic Retrofit	\$35,268	\$681	Construction
78	10-Year Pipeline Rehabilitation	\$97,228	\$97,228	PIng/Des
76	Small Capital Improvements, San Felipe Reach 1-3	\$31,191	\$27,583	Continuing
75	Pacheco/Santa Clara Conduit Right of Way Acquisition	\$4,818	\$3,462	Des
75	Pacheco Conduit Inspection and Rehabilitation	\$6,923	\$0	Construction
74	PWTP Residuals Management	\$9,679	\$9,679	PIng
74	SCADA Remote Architecture & Communications Upgrade	\$7,035	\$6,780	PIng
73	Small Capital Improvements, Raw Water Transmission	\$3,468	\$3,468	Continuing
73	Small Capital Improvements, Water Treatment	\$47,951	\$45,120	Continuing
73	Small Capital Improvements, Treated Water Transmission	\$139	\$139	Continuing
73	FAHCE Implementation	\$145,108	\$145,108	PIng
71	Expedited Purified Water Program	\$638,606	\$619,346	PIng/Des
70	Coyote Pumping Plant ASD Replacement	\$16,581	\$16,581	FY19
70	Main & Madrone Pipelines Restoration	\$15,673	\$12,974	Des
67	IRP2 WTP Ops Bldgs Seismic Retrofit	\$22,505	\$346	Const/Close
67	Vasona Pumping Plant Upgrade	\$20,321	\$20,202	PIng
66	PWTP Clearwell Recoating & Repair	\$6,446	\$61	Const/Close
62	IRP2 Additional Line Valves	\$11,796	\$11,796	PIng
61	Wolfe Road Recycled Water Pipeline	\$15,026	\$340	Const/Close
52	South County Recycled Water Pipeline	\$46,907	\$11,586	Des/Const
50	Almaden Dam Improvements	\$59,594	\$46,935	PIng/Des
48	Coyote Pumping Plant Warehouse	\$6,390	\$5,606	Des/Const
47	Fluoridation at WTPs	\$9,916	\$88	Construction

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

72	Dam Seismic Retrofit at 2 Dams (Chesbro & Uvas)	\$89,500	\$89,500	N/A
62	SCADA Small Capital Improvements	\$19,612	\$19,612	N/A
32	South County Recycled Water Reservoir Expansion	\$7,000	\$7,000	N/A
28	Alamitos Diversion Dam Improvements	\$3,183	\$2,345	On Hold
28	Coyote Diversion Dam Improvements	\$2,461	\$2,138	On Hold
25	Land Rights - South County Recycled Water PL	\$5,816	\$5,816	N/A

Appendix B - Project List By Priority

Flood Protection Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value (\$K)	Remaining Cost (\$K) (FY-17 to Completion)	Phase
98	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	\$99,392	\$481	Construction
83	Cunningham Flood Detention Certification	\$10,734	\$2,981	Construction
78	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	\$58,945	\$14,102	Des/Const
76	Berryessa Creek, Calaveras Boulevard to Interstate 680	\$59,242	\$3,154	Design
74	San Francisco Bay Shoreline (E7)	\$42,325	\$18,399	Des/Const
74	Watersheds Asset Rehabilitation Program	\$70,231	\$63,106	Construction
70	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	\$171,875	\$73,344	Construction
68	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	\$130,416	\$33,291	Des/Const
68	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	\$182,397	\$60,901	Des/Const
66	Upper Penitencia Creek, Coyote Creek to Dorel Drive	\$63,513	\$49,827	Plng/Des
65	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	\$11,569	\$6,998	Design
65	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	\$33,166	\$25,346	Des/Const
65	Sunnyvale East and West Channels	\$68,480	\$31,994	Construction
63	San Tomas Creek, Quito Road Bridge Replacement	\$686	\$124	Const/Close
62	Permanente Creek, SF Bay to Foothill Expressway	\$85,288	\$10,825	Construction
62	Coyote Creek, Montague Expressway to Interstate 280	\$36,586	\$25,732	Plng
56	Palo Alto Flood Basin Tide Gate Structure Improvements	\$1,658	\$692	Construction

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

74	SF Bay Shoreline EIA 11 (Construction)	\$35,000	\$35,000	N/A
68	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 3	\$50,000	\$50,000	N/A
58	Watersheds Asset Rehabilitation Program - Unfunded Work	\$104,051	\$104,051	N/A
56	Permanente Creek, Hale Creek Construction	\$16,525	\$16,525	N/A

Appendix B - Project List By Priority

Water Resources Stewardship Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value (\$K)	Remaining Cost (\$K) (FY-17 to Completion)	Phase
Mitigation				
(All Mitigation projects are required per CEQA or other Regulation and therefore do not receive a score)				
	SMP Mitigation, Stream and Watershed Land Preservation	\$17,053	\$830	Continuing
Environmental Enhancement & Stewardship				
Lower Peninsula Watershed				
77	Hale Creek Enhancement Pilot Study	\$2,387	\$1,574	Const/Close
72	FAHCE Stevens Creek Fish Passage Enhancement	\$5,583	\$4,733	PIng
Guadalupe Watershed				
85	Almaden Lake Improvements	\$4,612	\$848	Des
Multiple Watersheds				
80	SCW Fish Passage Improvements	\$6,236	\$2,787	Des/Const
75	SCW Implementation Fund	\$62,911	\$62,911	PIng
50	Salt Ponds A5-11 Restoration	\$8,505	\$4,272	PIng/Des
43	South Bay Salt Ponds Restoration	\$3,978	\$3,492	PIng

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

66	Permanente Creek Riparian Channel Restoration	\$5,989	\$5,989	N/A
39	Almaden Lake Improvements - Construction	\$17,585	\$17,585	N/A

Appendix B - Project List By Priority

Buildings and Grounds Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value (\$K)	Remaining Cost (\$K) (FY-17 to Completion)	Phase
73	Almaden and Winfield Campus, Small Capital Improvements	\$40,552	\$38,490	Continuing
70	Winfield Capital Improvements	\$2,051	\$0	On Hold
65	Headquarters Operations Building	\$18,022	\$17,906	FY19

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

70	Fleet and Facility Annex Improvements	\$4,719	\$4,719	\$0
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Information Technology Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value (\$K)	Remaining Cost (\$K) (FY-17 to Completion)	Phase
63	PeopleSoft System Upgrade & Expansion	\$8,834	\$3,335	Construction
56	E-Discovery Management System	\$550	\$545	Plng/Des/Const
54	Software Upgrades & Enhancements	\$18,529	\$17,302	Construction
46	IT Disaster Recovery	\$2,396	\$442	Construction
46	WTP-WQL Network Equipment	\$12,854	\$11,954	Construction
34	Data Consolidation	\$1,210	\$989	Construction

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

None

Appendix C - District Partnership Summary

Partnership Reimbursements are funds that are reimbursed by the District's partners after the District advances the needed funds. The following table identifies capital projects that are funded cooperatively with the District's partners through reimbursements.

Partnership Reimbursement

Reimbursements for Current Projects (\$K)			Actuals																		
Project Number	Project Name	Agency	Thru FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	Total	
91C40377	Coyote Pumping Plant ASD Replacement	Total	0	0	0	0	119	413	2,044	1,072	0	0	0	0	0	0	0	0	0	3,648	
	San Benito Water Dist		0				119	413	2,044	1,072										3,648	
91214010	Small Capital Improvements, San Felipe - Rch 1	Total	882	311	329	124	172	0	0	17	0	242	88	66	407	110	116	116	0	2,980	
	San Benito Water Dist		882	311	329	124	172	0	0	17	0	242	88	66	407	110	116	116	0	2,980	
91214001	Pacheco Conduit Inspection & Rehabilitation	Total	15	0	325	1,195	0	0	0	0	0	0	0	0	0	0	0	0	0	1,535	
	San Benito Water Dist		15		325	1,195														1,535	
92144001	Pacheco/Santa Clara Conduit ROW Acquisition	Total	17	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	23	
	San Benito Water Dist		17					6												23	
92374005	SCADA Remote Architecture & Comm. Upg	Total	0	0	34	22	68	131	40	206	187	195	203	211	219	33	0	0	0	1,548	
	San Benito Water Dist		0	0	34	22	68	131	40	206	187	195	203	211	219	33				1,548	
93084011	Fluoridation at WTPs	Total	1,110	2,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,400	
	The Health Trust		110	890																1,000	
	First 5 of Santa Clara County		0	900																900	
	California Dental Association Foundation		0	500																500	
	Santa Clara County		1,000																	1,000	
93764003	IRP2 WTP Ops Bldg Seismic Retrofit	Total	633	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	704	
	FEMA Grant (California Office of Environmental Services)		633	71																704	
94384002	Penitencia Delivery Main Seismic Retrofit	Total	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	417	
	Department of Water Resources (A3904)		417																	417	
92224001	Penitencia Force Main Seismic Retrofit	Total	983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	983	
	Department of Water Resources (A3904)		983																	983	
91094007s	South County Recycled Water Pipeline	Total	2,106	0	2,000	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	6,106	
	SCRWA		811																	811	
	USBR - ARRA		1,295																	1,295	
	USBR - Title 16		0	2,000	2,000															4,000	
91244001	Wolfe Road Recycled Water Pipeline	Total	1,250	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,900	
	Apple Computer		0	4,800																4,800	
	Cal Water		150	1,350																1,500	
	City of Sunnyvale		720	1,380																2,100	
	DWR - Prop 84		380	2,120																2,500	
26154001s	Guadalupe River--Upper, I-280 - Blossom Hill Rd	Total	17,370	7,189	4,500	5,800	7,700	2,000	0	0	0	0	0	0	0	0	0	0	0	44,559	
	State Subventions		13,585	7,189	4,500	5,800	7,700	2,000												40,774	
	City of San Jose		3,785																	3,785	
26174041s	Berryessa Ck, Calaveras Bvd to I-680	Total	292	3,944	8,890	3,558	0	0	0	0	0	0	0	0	0	0	0	0	0	16,684	
	State Subventions		0	236	2,890	3,558														6,684	
	DWR - Prop 1E		292	3,708	6,000															10,000	
40174004	Berryessa Ck, Lwr Penitencia Ck - Calaveras Bvd	Total	3,414	5,586	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,000	
	DWR - Prop 1E		3,414	5,586	6,000															15,000	
40264011	Cunningham Flood Detention Certification	Total	0	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	
	DWR - Prop 1E		0		1,000															1,000	
40334005	Lwr Penitencia Ck Imp, Berryessa to Coyote Cks.	Total	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000	
	DWR - Prop 1E		0	1,000	4,000															5,000	
40264008s	Lwr Silver Ck, I-680 to Cunningham, Rchs 4-6	Total	26,940	9,258	12,000	4,865	0	0	0	0	0	0	0	0	0	0	0	0	0	53,063	
	State Subventions		6,264	1,258	0	865														8,387	
	DWR - Prop 1E		0	8,000	12,000	4,000														24,000	
	NRCS-ARRA		20,676																	20,676	
50284010	Llagas Ck--Lwr, Capacity Restoration	Total	120	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120	
	State Subventions		120	0	5,000															5,120	
26174051s	Llagas Creek--Upr, Buena Vista to Wright	Total	9,430	4,984	5,768	19,654	0	0	0	0	0	0	0	0	0	0	0	0	0	39,836	
	State Subventions		6,089	4,984	5,768	19,654														36,495	
	City of Morgan Hill		3,341																	3,341	
26444002	San Francisco Bay Shoreline (EIA 1-10a)	Total	0	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420	
	State Bond - DWR		0	420																420	
SUBTOTAL - Reimbursements from Current Projects			64,979	44,703	49,846	37,218	8,059	2,550	2,084	1,295	187	437	291	277	626	143	116	116	0	212,926	

Appendix C - District Partnership Summary

Partnership Reimbursement (cont'd)

Pending Reimbursements for Closed Projects			Actuals																		
Project Number	Project Name	Agency	Thru FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	Total	
91184008	Silicon Valley Advanced Water Purification Ctr	Total	22,046	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,169	
	City of San Jose		8,500	123																8,500	
	DWR - Prop 50		2,935																	2,935	
	DWR - Prop 84		2,486																	2,609	
	USBR - ARRA		8,125																	8,125	
30154013s	Guadalupe River-DT, I-880 to I-280	Total	39,480	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39,590	
	State Subventions		27,618	110																27,728	
	City of San Jose		1,654																	1,654	
	San Jose Redev Agency		10,208																	10,208	
SUBTOTAL - Reimbursements for Closed Projects			61,526	123	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61,759	
TOTAL REIMBURSEMENTS			126,505	44,826	49,956	37,218	8,059	2,550	2,084	1,295	187	437	291	277	626	143	116	116	0	274,685	

Appendix C - District Partnership Summary

Partnership Funding is funds that are made available by the District's partners, when needed. The following table identifies capital projects that receive partnership funding. This may occur through either cost sharing agreements or as in-kind services.

Partnership Funding

Project Number	Project Name	Amount (\$K)	Partnering Agency
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	13,600	U.S. Army Corps of Engineers
26154001s	Guadalupe River–Upper, Interstate 280 to Blossom Hill Road	188,000	U.S. Army Corps of Engineers
26174051s	Llagas Creek–Upper, Buena Vista Road to Wright Avenue	65,000	U.S. Army Corps of Engineers
00044026s	San Francisco Bay Shoreline	91,250	USACE, Coastal Conservancy, US Fish & Wildlife, CA Wildlife Conservation, Packard-Hewlett-Goldman-Moore Foundations
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	3,000	U.S. Army Corps of Engineers
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	8,000	San Francisquito Joint Powers Authority (DWR)
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	1,500	County of San Mateo
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	City of Saratoga
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	Town of Los Gatos
20194005	San Tomas Creek, Quito Road Bridge Replacement	4,115	CALTRANS
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	102,720	U.S. Army Corps of Engineers
TOTAL		\$ 477,785	

Appendix C - District Partnership Summary

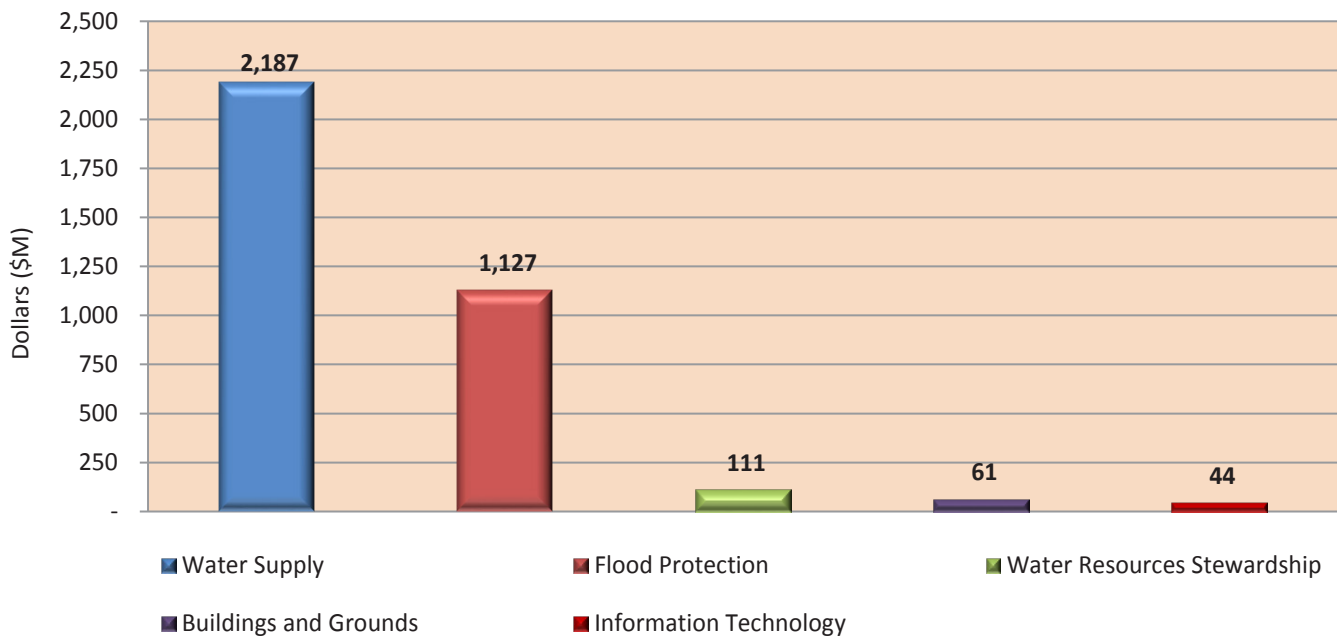
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Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Type of Improvement (\$K)

	THRU FY16 (Actuals)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28-32	TOTAL
Water Supply	284,690	119,156	130,537	114,955	347,614	176,820	294,404	307,254	150,287	151,165	76,080	14,883	19,178	2,187,023
Flood Protection	486,588	218,618	195,076	67,836	34,623	40,346	28,404	22,795	20,186	11,014	702	315	-	1,126,503
Water Resources Stewardship	21,668	8,150	17,878	24,766	12,740	2,405	2,490	2,577	2,368	2,463	2,562	2,664	8,534	111,265
Buildings and Grounds	1,749	2,480	2,062	3,431	4,001	10,387	8,989	2,395	2,468	2,544	2,621	2,701	14,797	60,625
Information Technology	4,562	5,244	6,303	2,346	1,044	965	541	4,006	4,735	1,409	946	731	11,541	44,373
TOTAL	799,257	353,648	351,856	213,334	400,022	230,923	334,828	339,027	180,044	168,595	82,911	21,294	54,050	3,529,789

CIP Expenditures by Type of Improvement

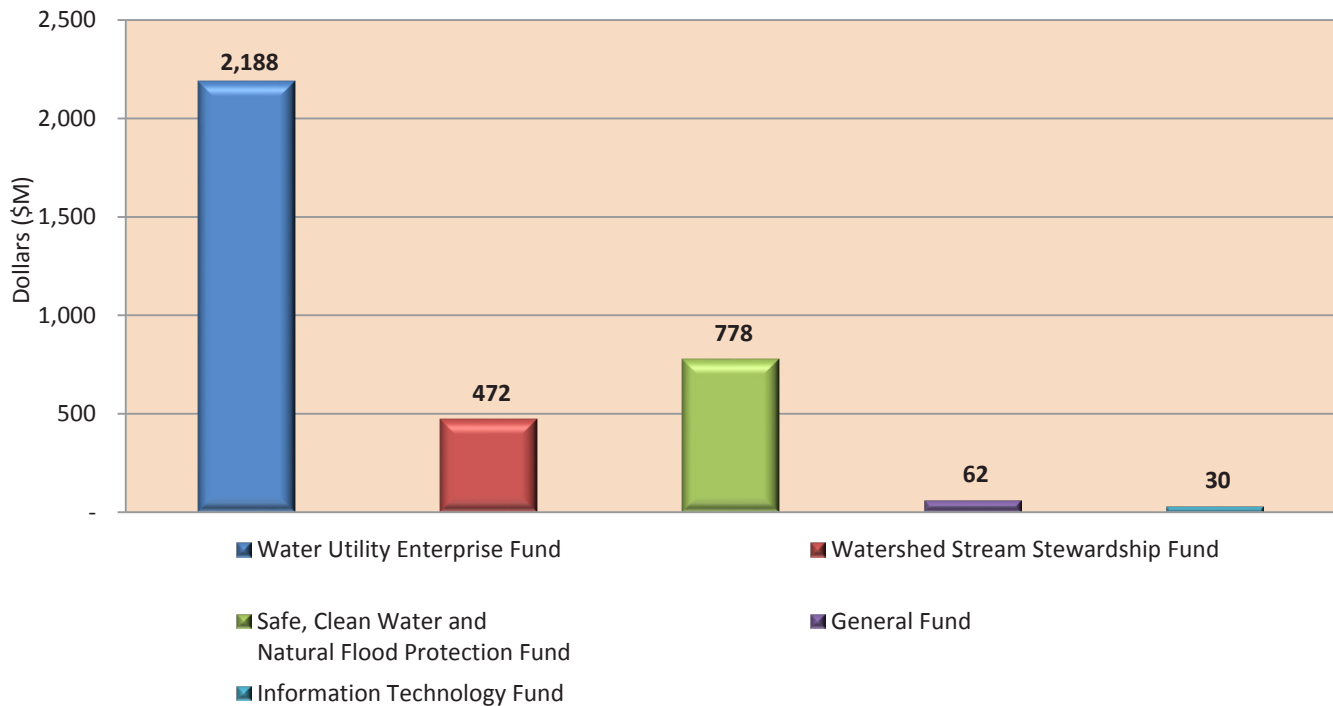


Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Fund (\$K)

	THRU FY16 (Actuals)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28-32	TOTAL
Water Utility Enterprise Fund	284,984	117,828	121,266	118,860	347,541	176,308	286,093	309,533	154,308	152,902	77,261	15,925	25,559	2,188,368
Watershed Stream Stewardship Fund	253,907	44,607	68,976	35,113	13,295	12,207	16,203	15,422	6,578	821	854	888	2,845	471,715
Safe, Clean Water and Natural Flood Protection Fund	254,763	183,681	154,570	54,139	34,339	31,057	23,105	9,283	15,186	11,835	1,556	1,203	2,845	777,562
General Fund	2,948	2,480	2,062	3,431	4,001	10,387	8,989	2,395	2,468	2,544	2,621	2,701	14,797	61,824
Information Technology	2,655	5,052	4,982	1,791	846	965	438	2,394	1,503	493	619	577	8,005	30,320
TOTAL	799,257	353,648	351,856	213,334	400,022	230,923	334,828	339,027	180,044	168,595	82,911	21,294	54,050	3,529,789

CIP Expenditures by Fund



Appendix E - Safe Clean Water Project Schedules

The following tabel is an overview schedule for water supply capital projects identified in the FY 2018-22 CIP. Detailed information for each project can be found in this document in their respective chapters in the order presented in this table.

Safe, Clean Water Capital Improvement Project Schedules

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
WATER SUPPLY								
26C40349	IRP2 Additional Line Valves (A3)							
26564001	Main & Madrone Pipelines Restoration (A1)							
FLOOD PROTECTION								
10244001	Permanente Creek, SF Bay to Foothill Expressway							
26244001	Permanente Creek, SF Bay to Foothill Expressway							
10284007	San Francisquito Creek, SF Bay thru Searsville Dam							
10284008	San Francisquito Creek, Early Implementation							
26284001	San Francisquito Creek, SF Bay thru Searsville Dam (E5)							
26284002	San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)							
26074002	Sunnyvale East and West Channels							
26154001	Guadalupe Rv-Upper, Fish Passage Mods							
26154002	Guadalupe Rv-Upper, I-280 to SPRR (R6)							
26154003	Guadalupe Rv-Upper, SPRR-Blossom Hill (R7-12)							
26154004	Guadalupe Rv-Upper, Actuals chg to other proj numbers							
26174041	Berryessa Ck, Calaveras-I-680 - Corps							
26174042	Berryessa Ck, Calaveras-I-680 - Reimbursable							
26174043	Coyote Creek, Montague Expressway to Interstate 280							
40324003	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps							
40324005	Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs							
26324001	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)							
26174051	Llagas Creek-Upper, Reimbursable (E6b)							
26174052	Llagas Creek-Upper, Corps Coordination (E6a)							
26174053	Llagas Creek-Upper, Technical Studies							
26174054	Llagas Creek-Upper, Design							
50C40335	Llagas Creek-Upper, R5,6,&7b							

Appendix E - Safe Clean Water Project Schedules

Safe, Clean Water Capital Improvement Project Schedules (cont'd)

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
FLOOD PROTECTION (cont'd)								
00044026	San Francisco Bay Shoreline							
62044042	Shoreline Early Implementation							
26444001	San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)							
26444002	San Francisco Bay Shoreline - Other EIAs Planning (E7)							
WATER RESOURCES STEWARDSHIP								
26044001	Almaden Lake Improvements (D4.1a)							
26164001	Hale Creek Enhancement Pilot Study (D6)							
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)							
26444003	South Bay Salt Ponds Restoration (D8)							

Legend

	Planning Phase
	Design Phase
	Construction Phase
	Close-out Phase

Appendix F - Glossary

Ad Valorem Tax

A tax based on value (e.g., a property tax).

Appropriation

An appropriation is a legal authorization granted by the Santa Clara County Board of Supervisors which allows the District to expend cash and incur obligations for specific purposes. An appropriation is usually limited in amount and the time it may be expended.

Assessment

The process of setting the official valuation of property for taxation; the valuation placed upon property as a result of this process.

Asset

A probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events. Examples of assets are cash, receivables, and equipment.

Benefit Assessment

Determination of the benefits derived from District activities within particular watersheds and levying a proportionate share of taxes to each parcel subject to voter-approved limitations.

Bonds

Bonds are a long-term source of debt that provides a source of borrowed monies that can be used to pay for specific capital facilities. Bonds are a written promise to pay a specified sum of money at a predetermined date or dates in the future, called the maturity date(s), together with periodic interest at a specific rate.

Capital Expenditure

Capital expenditures fall into several categories. In general, they should create assets or extend the useful lives of existing assets. The work product results in a long-term benefit greater than two years and for budgeting purposes involved a major expenditure of district resources greater than \$50,000. They can be made with regard to tangible and intangible assets.

The general categories of capital expenditures are: rehabilitation, major repairs, improvements/betterments/ upgrades, replacements, expansions/ additions, and ancillary expenditures.

Capital Projects

Projects are budgeted within the Capital budget and fall within the definition of Capital Expenditures; which means they (1) create or extend the life of an asset, (2) their work products have a useful life of greater than two years, and (3) they involve an expenditure of District resources in excess of \$50,000.

Certificates of Participation (COPs)

A security in the general form of a bond, which evidences a proportionate participation in a flow of lease or other payments between two parties.

CEQA

California Environmental Quality Act

CIP

Capital Improvement Program

Cost Center

Cost Centers are separate financial accounting centers in which costs are accumulated because of legal and accounting requirements, the first two digits of a project number identifies the cost center.

DPR

Direct Potable Reuse

DWR

State Department of Water Resources

EIR

Environmental Impact Report

Encumbrances

Commitments related to unperformed (executory) contracts for goods or services. Encumbrances represent the estimated amount of expenditures that will result if unperformed contracts in process are completed.

Appendix F - Glossary

Enterprise Fund

Enterprise Funds are used to account for operations including debt service (a) that are financed and operated in a manner similar to private business, where the intent of the government body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a accounting basis is financed or recovered primarily through user charges; or (b) where the governing body has determined that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control accountability, or other purposes.

Expenditure/Expense

Decreases in net financial resources. Expenditures include current operating expenses requiring the present or future of net current assets, debt service and capital outlays, and intergovernmental grants, entitlements, and shared revenues. The major expenditure categories used by the District are labor and overhead, land and structures, equipment, and debt service.

Facility

Defined as a creek, reservoir, dam, water treatment plant, pipeline, canal, etc.

Fixed Assets

Fixed Assets are defined as long-lived tangible assets such as automobiles, computers and software, furniture, communications equipment, hydrologic equipment, office equipment, and other equipment, with a value of \$2,000 or more, or the combined value of like or related units (aggregate value) is greater than \$5,000 if the unit value is less than \$2,000.

Fiscal Year

A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. The District's fiscal year is July 1 through June 30.

Fund

A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

General Fund

A fund used to account for major operating revenues and expenditures, except for those financial transactions that are required to be accounted for in another fund. General Fund revenues are derived primarily from property and other taxes.

Grants

Contributions or gifts of cash or other assets from another government entity to be used or expended for a specified purpose, activity, or facility.

IPR

Indirect Potable Reuse

Levy

(1. Verb) To impose taxes, special assessments, or service charges for the support of government activities;
(2. Noun) The total amount of taxes, special assessments, or service charges imposed by a government agency.

Long-Term Debt

Debt with a maturity date of more than one year after the date of issuance.

MGD

Million Gallons per Day

One Percent Flood or 100 Year Flood

Has a 1% chance of occurring in a given year. Water District projects are usually designed for the 1% flood, a national standard established by the Federal Emergency Management Agency (FEMA).

Appendix F - Glossary

Operating Expenditure

Operating expenditures are system costs required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services.

Operating expenditures are costs necessary to maintain the systems in good operating condition. This includes the repair and replacement of minor property components. The American Waterworks Association (AWWA) says that these priority components should be smaller than a retirement unit; a retirement unit is a readily separable and separately useful item that is part of a larger assembly. The benefit and life of such repairs should be less than two years. Any repairs that recur on an annual basis are considered operating activities of a maintenance nature.

Operating expenditures are often separated into fixed and variable costs for purposes of understanding operating leverage and structuring service charge rates.

Operations

Expenditures required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services. Operations include work that is generally of an ongoing or recurring nature. Any District work that is not a project is, by definition, an Operation. Operations, although recurring, require close coordination and a high degree of management oversight; however, they can be accomplished without the application of the full range of tools and processes used for managing projects.

Projects

At the Santa Clara Valley Water District, a project is any undertaking which has (1) a beginning and an ending, (2) a one-time occurrence. Projects can require expenditure of capital or operating funds and, at the District, are called Capital or Operating Projects, accordingly. Project usually, but not always, relate to a District facility or facilities (a creek, a reservoir, a dam, a water treatment plant, a pipeline,, etc.). Projects may include studies, design, construction, maintenance, or implementation of systems such as Records Management or Financial Management System.

Revenue

Monies the District receives in exchange for services or sales provided. Revenue items include water sales, property tax revenues, benefit assessment revenues, interest income, intergovernmental reimbursement, and other.

Revenue Bonds

Bonds, whose principal and interest are payable exclusively from earnings of an enterprise fund. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprise fund's property.

Reserve

An account used to indicate that a portion of a fund's assets are legally restricted for a specific purpose and is, therefore, not available for general appropriation.

WTP

Water Treatment Plant

WQL

Water Quality Lab

Appendix F - Glossary

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