

# Flood Protection Capital Improvements

## FLOOD PROTECTION OVERVIEW

Of the approximately 800 miles of creeks in Santa Clara County, Valley Water has jurisdiction over and manages approximately 275 miles to meet the Board's Ends Policy E-3, "Natural flood protection is provided to reduce risk and improve health and safety for residents, businesses, and visitors, now and into the future." Valley Water's goals are further defined in E-3.1, "Maintain flood protection facilities to design levels of protection" and E-3.2, "Assist people, businesses, schools, and communities to prepare for, respond to, and recover from flooding through equitable and effective engagement." The 275 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. Valley Water 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 throughout its useful life.

Fifty years of flood protection management has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005, Valley Water had provided flood protection to 93,253 of the 166,526 parcels in the floodplain and another approximately 10,445 have been protected since then.

The voters in Santa Clara County have supported Valley Water's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters also approved three special parcel taxes. In 2000, voters approved the Clean, Safe Creeks and Natural Flood Protection Plan (Clean, Safe Creeks). The Clean, Safe Creeks Plan was replaced by the Safe, Clean Water and Natural Flood Protection Program, which voters approved in 2012 (2012 Safe, Clean Water). In 2020, voters approved the renewal of the Safe, Clean Water Program, which replaced the 2012 Safe, Clean Water Program in entirety. Unlike the first two special parcel taxes, which were set to sunset in 15 years from the date of implementation, the renewed Safe, Clean Water Program will continue unless repealed by voters or if the Board determines the funding is no longer needed.

The renewed Safe, Clean Water Program - Fund 26, along with the Watershed and Stream Stewardship (1% ad valorem property tax) - Fund 12, are the two primary funding sources for flood protection projects. Listed by watershed are the completed and current flood protection capital improvements, 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*

- San Francisquito Creek, San Francisco Bay to Highway 101 (Safe, Clean Water)
- San Francisquito Creek, Highway 101 to Searsville Dam (Safe, Clean Water)
- Adobe Creek, El Camino to West Edith Avenue
- Matadero Creek, Palo Alto Flood Basin to Barron Creek

### *Major Capital Improvements Identified in the CIP*

- Permanente Creek, San Francisco Bay to Foothill Expressway (2012 Safe, Clean Water)

## West Valley Watershed

### *Major Capital Improvements Completed*

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

### *Major Capital Improvements Identified in the CIP*

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

## Guadalupe Watershed

### *Major Capital Improvements Completed*

- Guadalupe River-Lower, Alviso Marina to Interstate 880
- Guadalupe River-Downtown, Interstate 880 to Interstate 280

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## *Major Capital Improvements Identified in the CIP*

- Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (Safe, Clean Water)
- Guadalupe River, Tasman Drive to I-880

## **Coyote Watershed**

### *Major Capital Improvements Completed*

- Coyote Creek, San Francisco Bay to Montague Expressway
- Lower Penitencia Creek, Coyote Creek to Tasman Drive
- Lower Silver Creek, Coyote Creek to Cunningham Avenue (Reaches 1-6)
- Cunningham Flood Detention Certification
- Berryessa Creek, Calaveras Boulevard to Interstate 680 (2012 Safe, Clean Water)

### *Major Capital Improvements Identified in the CIP*

- Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (Safe, Clean Water)
- Coyote Creek, Montague Expressway to Tully Road (Safe, Clean Water)
- Lower Penitencia Creek Improvements, Berryessa to Coyote Creek
- Lower Silver Creek, Interstate 680 to Cunningham Avenue, (Reaches 4-6)
- Upper Penitencia Creek, Coyote Creek to Dorel Drive (Safe, Clean Water)

## **Uvas/Llagas Watershed**

### *Major Capital Improvements Completed*

- Llagas Creek–Lower, Pajaro River to Buena Vista Avenue
- Uvas Creek

### *Major Capital Improvements Identified in the CIP*

- Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River
- Llagas Creek–Upper, Buena Vista Avenue to Llagas Road (Safe, Clean Water)

## **Multiple Watersheds**

### *Major Capital Improvements Identified in the CIP*

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

## **CIP PLANNING PROCESS AND FINANCIAL ANALYSIS**

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

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

A financial analysis of the Watershed and Stream 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 CIP Final FY 2024-28 Five-Year Plan.

Funding required for portions of several CIP projects is contingent on grants and partnership agreements that are under development and not currently secured. As Valley Water works through the process to secure funding, the project schedules may be adjusted. Projects with unsecured funding include:

- San Francisquito Creek, upstream of Highway 101
- Upper Llagas, portions of Phase 2B (Reaches 6, 7b, 8, and 14)

Further, many of the flood protection projects under the renewed Safe, Clean Water Program include key performance indicators (KPIs) for a preferred project, which requires federal funding, and for a local-funding only version of the project, which can be constructed if federal funding is not received.

In addition to Valley Water funding sources, Valley Water has entered into a flexible, low cost Water Infrastructure Finance and Innovation Act (WIFIA) master loan agreement

# Flood Protection Capital Improvements

with the Environmental Protection Agency (EPA) that commits up to \$146 million to provide upfront funding for the Sunnyvale East and West Channels Flood Protection Project, the Coyote Creek Flood Protection Project, and the Upper Penitencia Creek Project with final payoff of the loan occurring in 2063.

## *Operations and Maintenance Costs*

It is understood that new capital projects have an impact on future operations and maintenance, and this is included in the financial analysis. Periodically throughout the project, projections of this impact are updated to reflect changes in the project elements.

## *Significant Project Updates from the Prior Year*

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

- The Palo Alto Flood Basin Tide Gate Structure Improvements Project decreased in cost by \$27.105 million. Per Board direction on January 10, 2023, the project will be put on hold. However, staff will continue to perform annual structural inspections, structural assessments, and will work with the USACE to try and have the tide gate structure replacement work incorporated into the San Francisco Bay Shoreline Project led by the USACE. Additionally, staff will evaluate the potential to pursue and implement a lesser scope interim seismic retrofit and rehabilitation project to ensure continued operation of the existing tide gate structure.
- The Permanente Creek, San Francisco Bay to Foothill Expressway increased in cost by \$2.602 million due to unexpected delays coordinating with Google, acquiring permits from City of Mountain View, volatile market conditions, and unforeseen real estate costs. The schedule completion date has been extended by two years.
- The San Francisquito Flood Protection Project (San Francisco Bay to Middlefield Road, Constuction) decreased in cost by \$2.349 million due to construction costs associated with channel widening and top-of-bank-improvements. The schedule has been extended by one year to accommodate coordination with other agencies, as well as acquiring state and federal regulatory permits.
- The Sunnyvale East and West Channels (E2) decreased in cost by \$12.445 million. Per Board direction on January 24, 2023, it was noted that infrastructure construction projects in the Safe, Clean Water Program are experiencing significant cost increases and impacting the financial health of the Safe, Clean Water Fund (Fund 26). To improve the financial health of Fund 26, on January 24, 2023, the Board held a Public Hearing on Proposed Modifications to Projects under Priorities D and E of the Safe, Clean Water and Natural Flood Protection Program. Following the close of the Public Hearing, the Board approved the staff recommendation and modified the Project E2 funding allocation to construct Sunnyvale West Channel (Phase 1), and putting funding for Sunnyvale East Channel (Phase 2) construction to be determined and reallocating Sunnyvale East Channel construction-related planned expenditures to the Fund 26 Operating and Capital Reserves.
- The Coyote Creek, Montague Expressway to Tully Road (E1) increased in cost by \$161.890 million due the design phase being extended to account for the time required to complete CEQA & NEPA requirements needed for the project. The right(s)-of-way, construction, and close-out phases are being extended to align with the extension of the design phase. The construction activities end in fiscal year 2028, but the plant establishment period ends in fiscal year 2031. The construction costs have increased as the result design refinement from the planning phase and increased material costs as well as increases in market conditions. The overall project completion date has been extended by five years.
- The Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4) decreased in cost by \$12.989 million. Per Board direction on January 24, 2023, it was noted that infrastructure construction projects in the Safe, Clean Water Program are experiencing significant cost increases and impacting the financial health of the Safe, Clean Water Fund (Fund 26). To improve the financial



# Flood Protection Capital Improvements

health of Fund 26 on January 24, 2023, the Board held a Public Hearing on Proposed Modifications to Projects under Priorities D and E of the Safe, Clean Water and Natural Flood Protection Program. Following the close of the Public Hearing, the Board modified the funding allocation for Project E4 and reallocated construction-related planned expenditures for the Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4) to Fund 26 Operating and Capital Reserves.

- The Llagas Creek-Upper, USACE Coordination Project is being constructed in phases. The Phase 2B portion of the project is being funded through a grant from NRCS. In order to track grant funding and expenditures a separate project number was created for Phase 2B and the associated planned expenditures were removed from the USACE Coordination Project, resulting in a decrease in cost by \$80 million.

## *The Safe, Clean Water Program*

The renewed Safe, Clean Water Program, approved by voters in 2020, began in FY 2021-22 and includes the following flood protection projects:

- San Francisquito Creek, San Francisco Bay to Middlefield Road
- Sunnyvale East and West Channels

- Upper Guadalupe River, I-280 to Blossom Hill Road
- Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3 - Planning and Design
- Coyote Creek, Montague Expressway to I-280
- Upper Penitencia Creek, Coyote to Dorel Drive
- Llagas Creek-Upper, Buena Vista Avenue to Llagas Road
- San Francisco Bay Shoreline - EIA's 1-4 and Planning and Design for EIA's 5-9

With the exception of the Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3, each of these projects were also included in the 2012 Safe, Clean Water Program.

Additionally, the following projects are considered complete under the 2012 Safe, Clean Water Program, as the KPIs had been delivered, but is still included in the CIP, as it is in the close-out phase:

- Permanente Creek, San Francisco Bay to Foothill Expressway (2012 Safe, Clean Water)
- Berryessa Creek, Calaveras Boulevard to Interstate 680 (2012 Safe, Clean Water)

For more information about the Safe, Clean Water Program visit [valleywater.org](http://valleywater.org). Please see Appendix C for the implementation schedule for the Renewed Program.



# Flood Protection Capital Improvements

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

## Flood Protection Capital Improvements (\$K)

Project Number	PROJECT NAME	Through FY22	FY23*	FY23 Unspent	FY24	FY25	FY26	FY27	FY28	FY29-38	TOTAL
<b>LOWER PENINSULA WATERSHED</b>											
10394001	Palo Alto Flood Basin Tide Gate Structure Replacement	7,537	-	443	-	412	456	477	498	2,849	12,229
10244001s	Permanente Creek, SF Bay to Foothill Expressway	112,731	2,493	-	481	22	-	-	-	-	115,726
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	75,778	-	10,971	4,917	25,433	9,955	447	455	121	117,107
<b>WEST VALEY WATERSHED</b>											
26074002	Sunnyvale East and West Channels (E2)	37,471	931	9,481	-	13,785	5,513	238	-	-	57,938
<b>GUADALUPE WATERSHED</b>											
30154019	Guadalupe River Tasman Dr - I-880	5,613	-	-	1,342	1,100	32,465	31,238	31,338	-	103,096
26154001s	Guadalupe River—Upper, I-280 to Blossom Hill Road (E8)	135,204	30	20,519	-	-	-	17,928	19,113	4,342	176,617
<b>COYOTE WATERSHED</b>											
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	53,264	-	11,465	1,147	-	-	-	-	-	54,411
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	135,771	1,907	3,221	345	257	-	-	-	34,478	172,757
26174043	Coyote Creek, Montague Expressway to Tully Road (E1)	18,857	6,373	2,199	1,604	14,439	99,497	79,982	3,364	603	224,719
40334005	Lower Penitencia Ck Improvements, Coyote Ck to Berryessa Ck	26,718	8,150	-	78	82	86	-	-	-	35,113
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	101,498	52	1,967	-	-	-	-	-	-	101,550
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	23,029	-	4,060	-	-	-	-	-	-	23,029
<b>UVAS LLAGAS WATERSHED</b>											
50284010	Llagas Creek—Lower, Capacity Restoration, Buena Vista Road to Pajaro River	6,947	-	2,287	-	2,124	3,452	358	-	-	12,880
26174051s	Llagas Creek—Upper, Buena Vista Avenue to Llagas Road (E6)	232,896	16,885	27,537	22,421	56,756	11,485	-	-	-	340,443
<b>MULTIPLE WATERSHEDS</b>											
00044026s	San Francisco Bay Shoreline (E7)	107,674	18,697	1	6,548	4,451	26,162	9,779	6,480	-	179,791
62084001	Watersheds Asset Rehabilitation Program	50,273	6,741	-	8,387	6,645	6,858	9,849	10,181	77,979	176,913
<b>TOTAL</b>		<b>1,131,261</b>	<b>62,259</b>	<b>94,151</b>	<b>47,269</b>	<b>125,505</b>	<b>195,928</b>	<b>150,296</b>	<b>71,429</b>	<b>120,372</b>	<b>1,904,319</b>

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 FY22	FY23	FY23 Unspent	FY24	FY25	FY26	FY27	FY28	FY29-38	TOTAL
12	Watershed Stream Stewardship Fund	452,732	35,235	7,918	12,968	10,697	60,121	41,922	42,017	106,782	762,473
26	Safe, Clean Water and Natural Flood Protection Fund	678,529	27,024	86,233	34,301	114,808	135,807	108,374	29,412	13,590	1,141,846
<b>TOTAL</b>		<b>1,131,261</b>	<b>62,259</b>	<b>94,151</b>	<b>47,269</b>	<b>125,505</b>	<b>195,928</b>	<b>150,296</b>	<b>71,429</b>	<b>120,372</b>	<b>1,904,319</b>

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

FY 2022-23 Funds to be reappropriated

## Flood Protection Capital Improvements

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<b>Project</b>	<b>Palo Alto Flood Basin Tide Gate Structure Replacement</b>
<b>Program</b>	Flood Protection – Lower Peninsula Watershed
<b>Project No.</b>	10394001
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



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

## PROJECT DESCRIPTION

This project plans and designs a replacement tide gate structure for the Palo Alto Flood Basin to accomplish the following objectives:

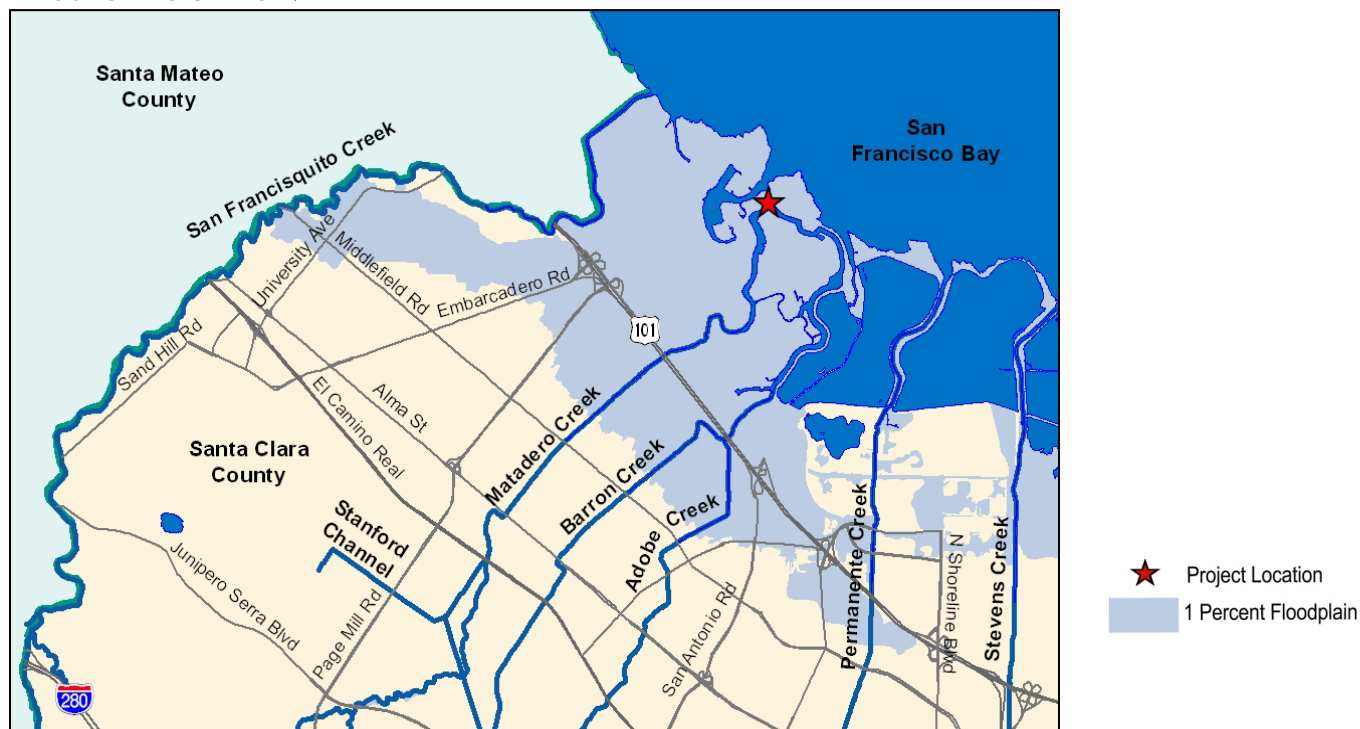
### Phase 1

- Retrofit the existing tide gate structure to reduce seismic vulnerabilities
- Rehabilitate the existing tide gate structure to extend the service life of the structure

### Phase 2

- Work with United States Army Corps of Engineers for a long-term replacement tide gate structure as part of the San Francisco Bay Shoreline Project

## PROJECT LOCATION





SCHEDULE & STATUS

November 2018 to August 2032

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	1,156											
Permits	1,754											
Design	7,600											
Construct	547											
Closeout	-											
	11,111	Total project cost may include expenditures not yet allocated to a specific phase.										

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Replacement	5,363	1,731	418	400	400	400	400	1,999	11,111
with inflation	5,363	1,731	418	437	456	477	498	2,848	12,229

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Replacement	7,537	0	443	0	412	456	477	498	12,229

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	12,229
Other Funding Sources	0
Total	12,229

OPERATING COST IMPACTS

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

USEFUL LIFE: 50 Years



<b>Project</b>	<b>Permanente Creek, San Francisco Bay to Foothill Expressway</b>
<b>Program</b>	Flood Protection – Lower Peninsula Watershed
<b>Project No.</b>	10244001s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



McKelvey Ball Park upon completion in February 2020

## 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

This project meets the commitments of the voter-approved 2012 Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



## SCHEDULE & STATUS

July 2001 to June 2025

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

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	10,051											
Permits	3,948											
Design	18,567											
Construct	82,930											
Closeout	228											
	115,725											

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
10244001-Permanente Ck, S.F. Bay to Foothill Expwy – Lower Peninsula Fund	17,669	2,637	21	20	0	0	0	0	20,347
with inflation	17,669	2,637	21	22	0	0	0	0	20,348
26244001-Permanente Ck, S.F. Bay to Foothill Expwy	94,408	510	460	0	0	0	0	0	95,378
with inflation	94,408	510	460	0	0	0	0	0	95,378
<b>TOTAL</b>	112,077	3,147	481	20	0	0	0	0	115,725
with inflation	112,077	3,147	481	22	0	0	0	0	115,726

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
10244001-Permanente Ck, S.F. Bay to Foothill Expwy – Lower Peninsula Fund	17,813	2,493	0	21	22	0	0	0	0	20,348
26244001-Permanente Ck, S.F. Bay to Foothill Expwy	94,918	0	0	460	0	0	0	0	0	95,378
TOTAL	112,731	2,493	0	481	22	0	0	0	0	115,726

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	20,348
SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	94,355
City of Mountain View	1,023
<b>Total</b>	<b>115,726</b>

## OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approx \$240,000 per year, beginning in FY24.

**USEFUL LIFE:** 30+ Years

<b>Project</b>	<b>San Francisquito Creek, San Francisco Bay through Searsville Dam (E5)</b>
<b>Program</b>	Flood Protection – Lower Peninsula Watershed
<b>Project No.</b>	10284007s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Upstream face of Pope/Chaucer Street with water surface approximately two 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

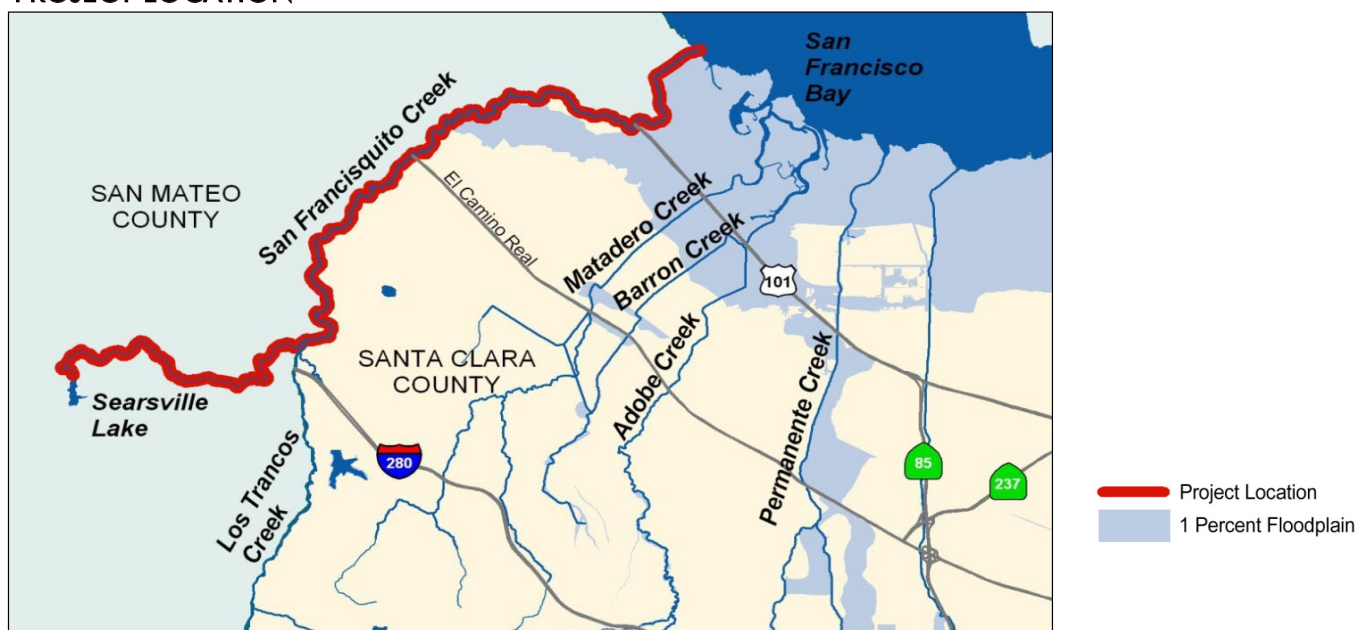
The San Francisquito Flood Protection project will provide 100-year flood protection from San Francisco Bay to Highway 101 and replace two bridges between Highway 101 and Middlefield Road.

This project is accounted for in the following:

- ♦ 10284007 – S.F. Bay-Searsville Dam - Completed
- ♦ 10284008 – Early Implementation - Completed
- ♦ 26284001 – S.F. Bay-Searsville Dam - Completed
- ♦ 26284002 – S.F. Bay to Middlefield Road, Construction

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E5. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



## SCHEDULE & STATUS

June 2003 to June 2029

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	4,637											
Permits	2,085											
Design	26,749											
Construct	76,949											
Closeout	126											
	112,343											

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
10284007-San Francisquito Ck, S.F. 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, S.F. Bay-Searsville Dam	6,411	0	0	0	0	0	0	0	6,411
with inflation	6,411	0	0	0	0	0	0	0	6,411
26284002-San Francisquito Ck - S.F. Bay to Middlefield Road, Construction	50,702	2,016	15,888	22,369	8,445	375	365	93	100,254
with inflation	50,702	2,016	15,888	25,433	9,955	447	455	121	105,018
<b>TOTAL</b>	<b>62,791</b>	<b>2,016</b>	<b>15,888</b>	<b>22,369</b>	<b>8,445</b>	<b>375</b>	<b>365</b>	<b>93</b>	<b>112,343</b>
with inflation	62,791	2,016	15,888	25,433	9,955	447	455	121	117,107

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
10284007-San Francisquito Ck, S.F. 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, S.F. Bay-Searsville Dam	6,411	0	0	0	0	0	0	0	0	6,411
26284002-San Francisquito Ck - S.F. Bay to Middlefield Road, Construction	63,689	0	10,971	4,917	25,433	9,955	447	455	121	105,018
TOTAL	75,778	0	10,971	4,917	25,433	9,955	447	455	121	117,107

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	75,840
JPA and Member Agencies (D/S Funding)	5,558
Unsecured Grants and Partnerships (U/S Funding)	30,031
<b>Total</b>	<b>117,107</b>
San Francisquito Joint Powers Authority	11,040
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

These projects will increase annual operating costs by approximately \$250,000, beginning in FY27.

**USEFUL LIFE:** 30+ Years



<b>Project</b>	<b>Sunnyvale East and West Channels Flood Protection Project (E2)</b>
<b>Program</b>	Flood Protection – West Valley Watershed
<b>Project No.</b>	26074002
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Sunnyvale West Channel looking south at Carl Road

## PROJECT DESCRIPTION

The West Channel extends approximately three miles and upgrades existing channel capacity to provide 1% (or 100-year) riverine flood protection for 47 acres of highly valuable industrial lands. The East Channel extends approximately 6.4 miles and upgrades existing channel capacity to provide 1% riverine flood protection for 1,618 parcels. The project is being constructed in two phases. Sunnyvale West Channel constitutes Phase 1 and Sunnyvale East Channel is Phase 2. Both projects decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality. The project will accomplish the following objectives:

- Provide 1% flood capacity for approximately 6.4 miles of channel along Sunnyvale East and approximately three miles of channel along Sunnyvale West within the City of Sunnyvale, protecting 1,618 properties (Sunnyvale East) and 47 acres (11 properties) of industrial land (Sunnyvale West)
- Improve channel water quality by providing erosion control measures to decrease sediment and turbidity
- Identify opportunities to integrate recreation improvements with the City of Sunnyvale and others as appropriate

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E2. Funding for Phase 1 construction is fully secured. Phase 2 remains a commitment under the SCW Program and Valley Water is determining additional funding sources to advance construction. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION





## SCHEDULE & STATUS

March 2006 to June 2027

\*Construction schedule reflects Phase 1 construction activities (West Channel).

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	5,770											
Permits	1,663											
Design	16,195											
Construct*	31,755											
Closeout	200											
	55,639	Total project cost may include expenditures not yet allocated to a specific phase.										

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project (E2)	21,419	7,502	7,533	14,100	4,887	200	0	0	55,639
with inflation	21,419	7,502	7,533	15,733	5,513	238	0	0	57,937

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project (E2)	37,471	931	9,481	0	13,785	5,513	238	0	0	57,937

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	57,937
Other Funding Source	0
<b>Total</b>	<b>57,937</b>

Valley Water estimates total debt service payment for this project's portion of the WIFIA loan would be \$30,700,000 in principal, plus \$46,600,000 in interest, for a total of \$77,300,000 with final loan payoff occurring in 2063.

## OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$210,000 per year, beginning in FY27.

**USEFUL LIFE:** 30+ Years



## SCHEDULE & STATUS

March 2019 to April 2028

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	3,229											
Design	4,420											
Construct	79,923											
Closeout	50											
	87,935											

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
30154019-Guadalupe River, Tasman Dr. to I-880	3,427	2,186	1,342	1,007	27,407	26,283	26,283	0	87,935
with inflation	3,427	2,186	1,342	1,100	32,465	31,238	31,338	0	103,096

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
30154019-Guadalupe River, Tasman Dr. to I-880	5,613	0	0	1,342	1,100	32,465	31,238	31,338	0	103,096

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	103,096
Other Funding Sources	0
<b>Total</b>	<b>103,096</b>

## OPERATING COST IMPACTS

Operating cost impacts will be determined during the design phase.

**USEFUL LIFE:** 30 Years

<b>Project</b>	<b>Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (E8)</b>
<b>Program</b>	Flood Protection – Guadalupe Watershed
<b>Project No.</b>	26154001s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@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 (USACE) 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 1% flood protection to nearly 7,000 parcels along the Guadalupe River, from Interstate 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 José 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:

- 26154001 – Fish Passage Modification - Completed
- 26154002 – I-280 to Southern Pacific Railroad Bridge, Reach 6 - Completed
- 26154003 – Southern Pacific Railroad Bridge to Blossom Hill Road, Reaches 7-12: The USACE is conducting a General Re-Evaluation Report, which is expected to be completed in fiscal year 2025

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E8. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



— Project Location  
 1 Percent Floodplain

## SCHEDULE & STATUS

September 1985 to June 2031

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

Phase	Cost
Plan	9,131
Permits	2,704
Design	77,739
Construct	72,825
Closeout	273

166,631

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

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	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)	34,622	31	31	30	30	30	200	2,015	36,990
with inflation	34,622	31	31	33	34	36	249	2,650	37,687
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	68,636	888	314	100	8,725	22,940	16,000	1,500	119,103
with inflation	68,636	888	314	109	10,086	27,294	19,113	1,953	128,393
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
<b>TOTAL</b>	<b>113,796</b>	<b>919</b>	<b>345</b>	<b>130</b>	<b>8,755</b>	<b>22,970</b>	<b>16,200</b>	<b>3,515</b>	<b>166,631</b>
with inflation	<b>113,796</b>	<b>919</b>	<b>345</b>	<b>142</b>	<b>10,120</b>	<b>27,330</b>	<b>19,362</b>	<b>4,603</b>	<b>176,618</b>

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	35,267	30	644	0	0	0	0	0	2,390	37,687
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	89,399	0	19,875	0	0	0	17,928	19,113	1,953	128,393
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	135,204	30	20,519	0	0	0	17,928	19,113	4,343	176,618

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood Protection Fund	130,142
State of California	29,885
City of San José	4,591
<b>Total</b>	<b>176,618</b>

## OPERATING COST IMPACTS

The operating cost impacts are anticipated to increase by approximately \$360,000 per year, beginning in FY21, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and O&M in accordance with the USACE O&M Manual.

**USEFUL LIFE:** 30+ Years



<b>Project</b>	<b>Berryessa Creek, Calaveras Boulevard to Interstate 680</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	26174041s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Berryessa Creek near flood stage at Piedmont Road in San José

## PROJECT DESCRIPTION

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

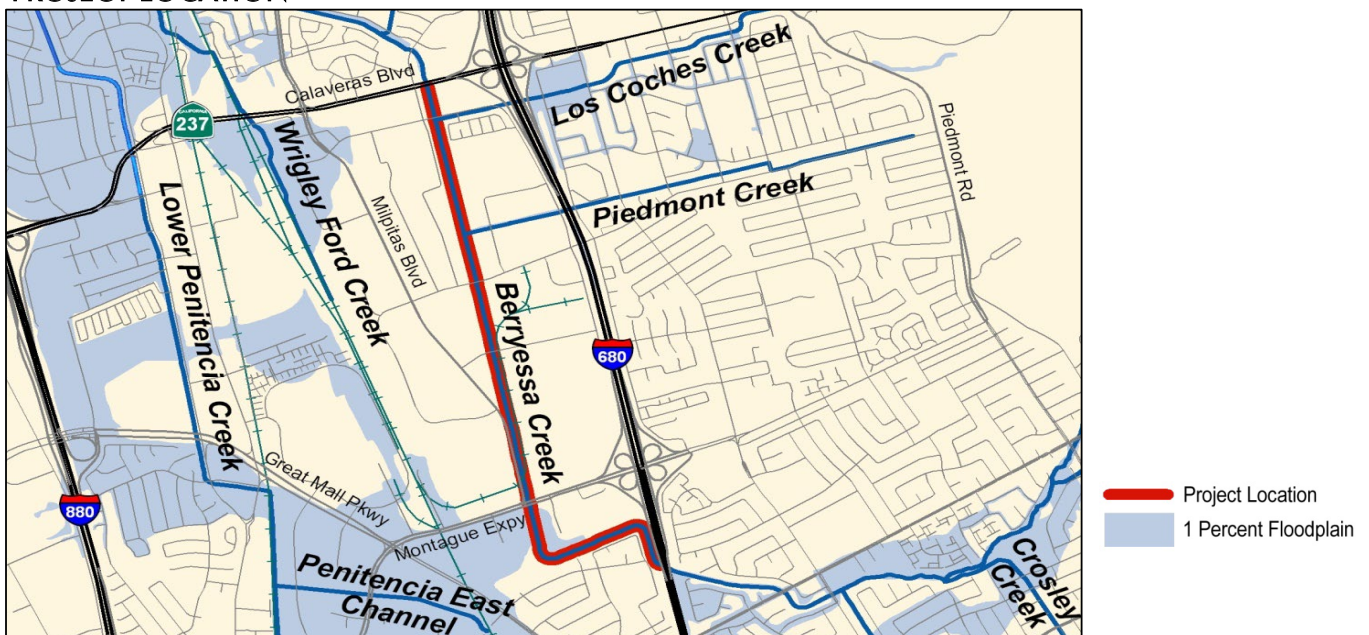
- Provide 1% flood protection to more than 1,100 homes, businesses, and public buildings
- Reduce sedimentation and maintenance requirements
- Mitigate for project impacts
- Improve stream habitat values
- Coordinate with the cities of San José and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency

This project is accounted for in the following:

- 26174041 – USACE Coordination
- 26174042 – Lands, Easements, Rights-of-Way, Relocations and Disposal (Reimbursable)

This project meets the commitments of the voter-approved 2012 Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



SCHEDULE & STATUS

January 2000 to June 2024

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	8,322											
Permits	1,854											
Design	14,019											
Construct	29,550											
Closeout	320											
	54,412											

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

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26174041-Berryessa Creek, USACE Coordination	23,731	398	12,612	0	0	0	0	0	36,741
with inflation	23,731	398	12,612	0	0	0	0	0	36,741
26174042-Berryessa Creek, LERRDs	17,670	0	0	0	0	0	0	0	17,670
with inflation	17,670	0	0	0	0	0	0	0	17,670
TOTAL	41,402	398	12,612	0	0	0	0	0	54,412
with inflation	41,402	398	12,612	0	0	0	0	0	54,412

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
26174041-Berryessa Creek, USACE Coordination	35,594	0	11,465	1,147	0	0	0	0	0	36,741
26174042-Berryessa Creek, LERRDs	17,670	0	0	0	0	0	0	0	0	17,670
TOTAL	53,264	0	11,465	1,147	0	0	0	0	0	54,411

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	18,811
State of California	25,600
Department of Water Resources (Prop 1E)	10,000
Total	54,411
USACE - In-kind Services	13,600

OPERATING COST IMPACTS

The operating cost impacts are anticipated to increase by approximately \$153,000 per year, beginning in FY24.

USEFUL LIFE: 30+ Years

<b>Project</b>	<b>Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3)</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	40174004s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Berryessa Creek upstream of the confluence with Lower Penitencia Creek

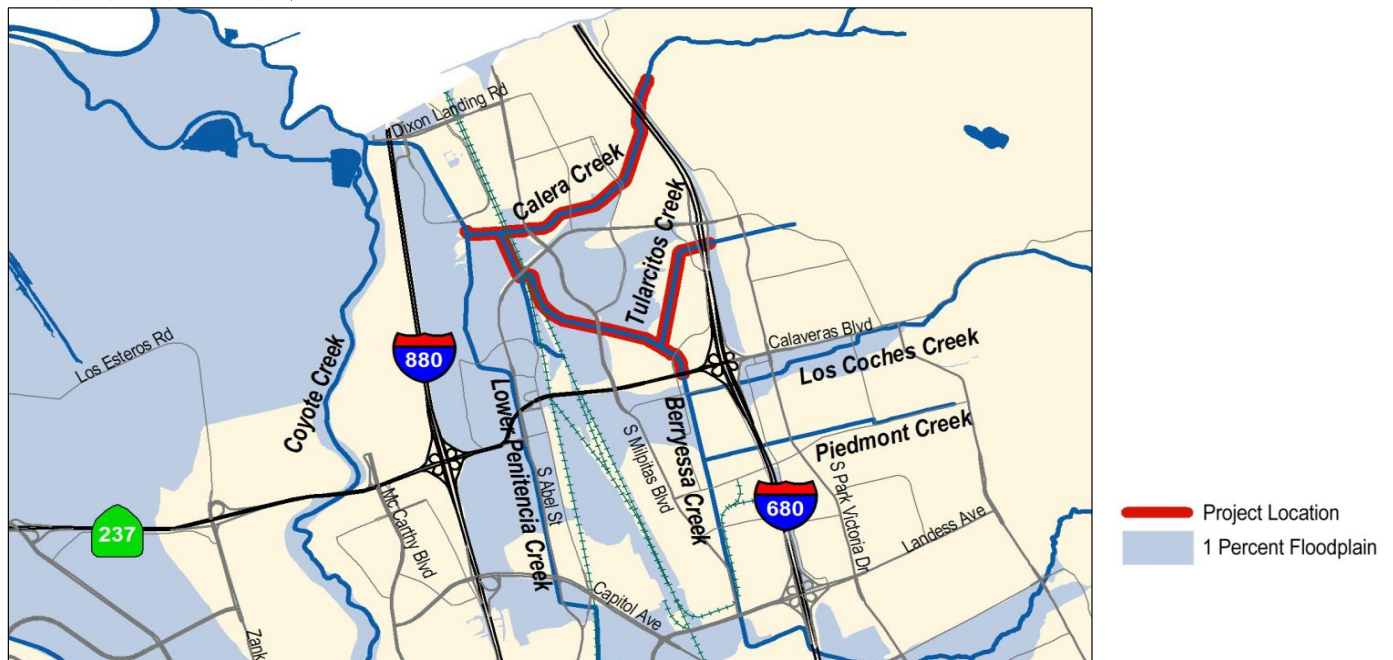
## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately three 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 1% 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 Valley Water staff
- ♦ Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan
- ♦ Obtain a Letter of Map Revision from the Federal Emergency Management Agency

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E3. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION





## SCHEDULE & STATUS

March 2001 to June 2041

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

Phase	Cost
Plan	7,957
Permits	1,986
Design	21,959
Construct	122,251
Closeout	115
	155,141

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

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 1	46,860	110	0	0	0	0	0	0	46,970
with inflation	46,860	110	0	0	0	0	0	0	46,970
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 2	84,753	2,734	345	235	0	0	0	0	88,067
with inflation	84,753	2,734	345	257	0	0	0	0	88,088
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 3	0	0	0	0	0	0	0	14,954	14,954
with inflation	0	0	0	0	0	0	0	25,954	25,954
26C40420-Phase 3 Planning/Design (only)	0	0	0	0	0	0	0	5,150	5,150
with inflation	0	0	0	0	0	0	0	8,523	8,523
<b>TOTAL</b>	<b>131,614</b>	<b>2,844</b>	<b>345</b>	<b>235</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,104</b>	<b>155,141</b>
with inflation	131,614	2,844	345	257	0	0	0	34,477	169,535

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 1	50,191	0	3,221	0	0	0	0	0	0	50,191
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 2	85,580	1,907	0	345	257	0	0	0	0	88,088
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard (E3), Phase 3	0	0	0	0	0	0	0	0	25,954	25,954
26C40420-Phase 3 Planning/Design (only)	0	0	0	0	0	0	0	0	8,523	8,523
TOTAL	135,771	1,907	3,221	345	257	0	0	0	34,477	172,756

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately \$3,221,000. Excess funds will be returned to Fund Reserves at the close of the project.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	157,756
SCVWD Safe, Clean Water Fund	8,523
Department of Water Resources (Prop 1E)	15,000
<b>Total</b>	<b>172,756</b>

## OPERATING COST IMPACTS

The operating cost impacts are anticipated to increase by approximately \$250,000 per year, beginning in FY24.

**USEFUL LIFE:** 30+ Years

<b>Project</b>	<b>Coyote Creek, Montague Expressway to Tully Road (E1)</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	26174043
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



February 2017 flood event, Rock Springs Drive looking northeast towards Rocksprings Park

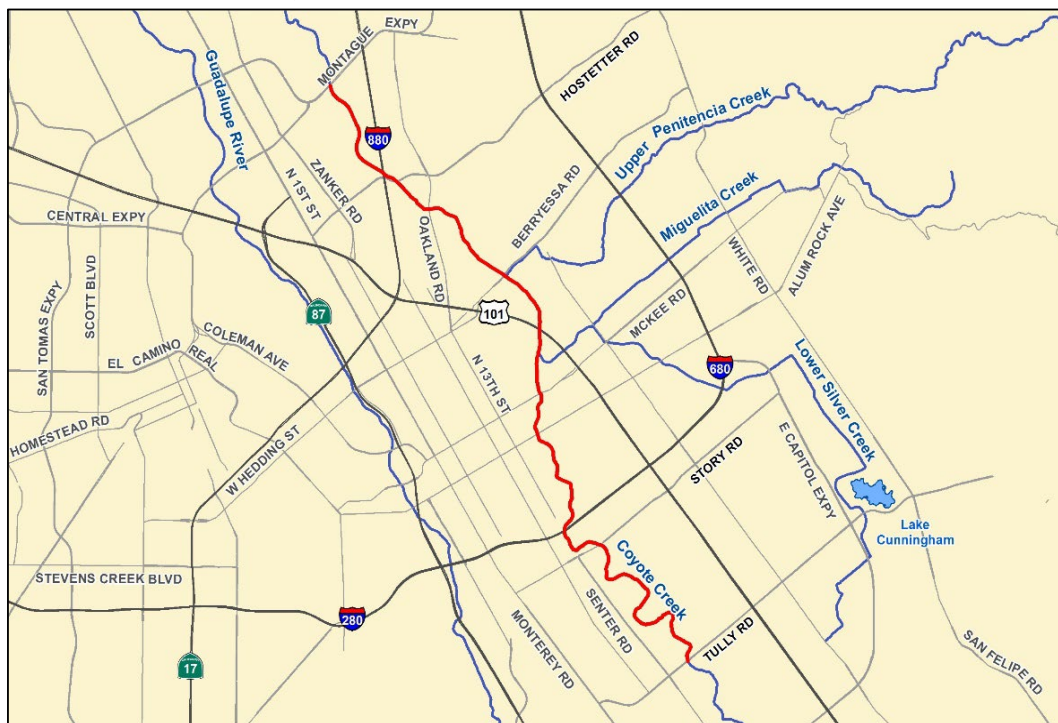
## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately nine miles of Coyote Creek, from Montague Expressway to Tully Road, to accomplish the following objectives:

- To reduce the risk of flooding to homes, schools, businesses, and highways from approximately a 20-year flood event (February 2017 event), from Montague Expressway to Tully Road
- Improve water quality, enhance stream habitat, and provide recreational opportunities
- Incorporate aesthetic elements of the Coyote Creek park chain
- Minimize long-term maintenance needs

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E1. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION

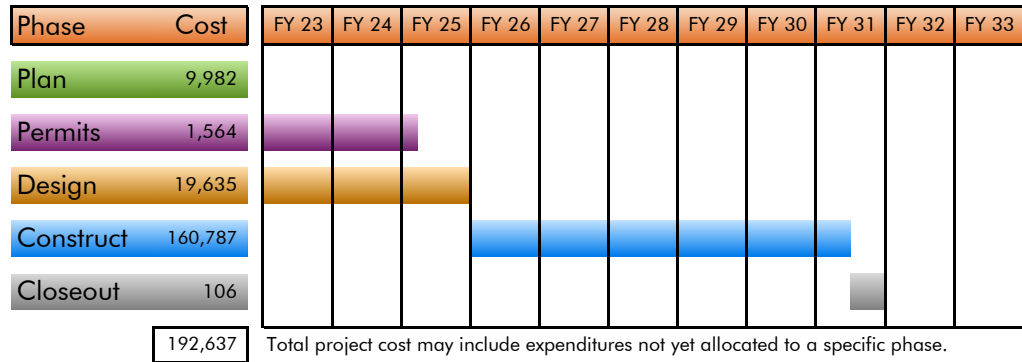


 Project Location



## SCHEDULE & STATUS

November 2017 to June 2031



## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26174043-Coyote Creek, Montague Expressway to Tully Road (E1)	18,201	4,830	3,803	12,877	84,200	65,602	2,694	430	192,637
with inflation	18,201	4,830	3,803	14,439	99,497	79,982	3,364	602	224,718

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26174043-Coyote Creek, Montague Expressway to Tully Road (E1)	18,857	6,373	2,199	1,604	14,439	99,497	79,982	3,364	602
									224,718

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	224,718
Other Funding Sources	0
<b>Total</b>	<b>224,718</b>

Valley Water estimates total debt service payment for this project's portion of the WIFIA loan would be \$103,700,000 in principal, plus \$157,800,000 in interest, for a total of \$261,500,000 with final loan payoff occurring in 2063.

## OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$1,000,000 per year, beginning in FY31.

**USEFUL LIFE:** 30+ Years

<b>Project</b>	<b>Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	40334005
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



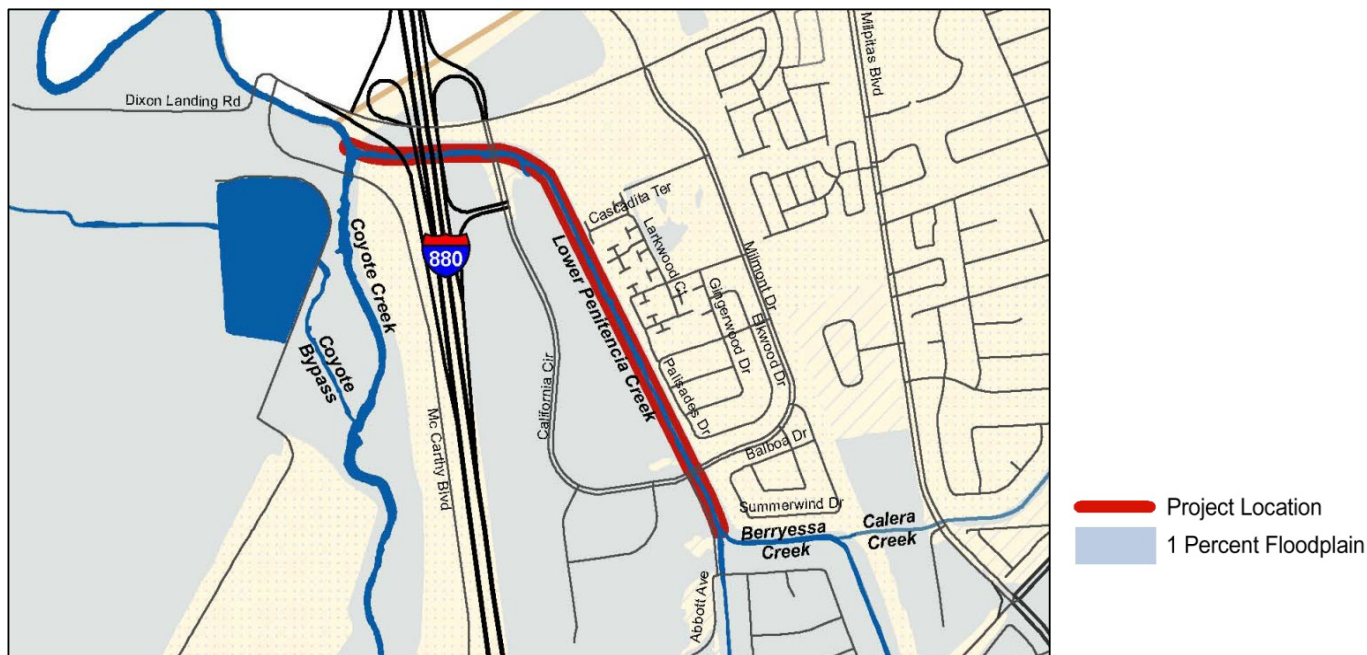
Lower Penitencia Creek, looking downstream from Milmont Drive

## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately one 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% 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 Federal Emergency Management Agency (FEMA) accreditation along the east levee located between California Circle and Berryessa Creek
- Enable FEMA certification of the improvements

## PROJECT LOCATION



## SCHEDULE & STATUS

October 2010 to December 2025

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	3,631											
Permits	973											
Design	6,776											
Construct	23,684											
Closeout	20											
	35,096	Total project cost may include expenditures not yet allocated to a specific phase.										

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
40334005-Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek	26,107	8,761	78	75	75	0	0	0	35,096
with inflation	26,107	8,761	78	82	86	0	0	0	35,113

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
40334005-Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek	26,718	8,150	0	78	82	86	0	0	0	35,113

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	30,113
Department of Water Resources (Prop 1E)	5,000
<b>Total</b>	<b>35,113</b>

## OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$264,000 per year, beginning in FY26.

**USEFUL LIFE:** 50 Years



<b>Project</b>	<b>Lower Silver Creek, I-680 to Cunningham Avenue (Reaches 4-6)</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	40264008s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Lower Silver Creek looking downstream from Moss Point

## PROJECT DESCRIPTION

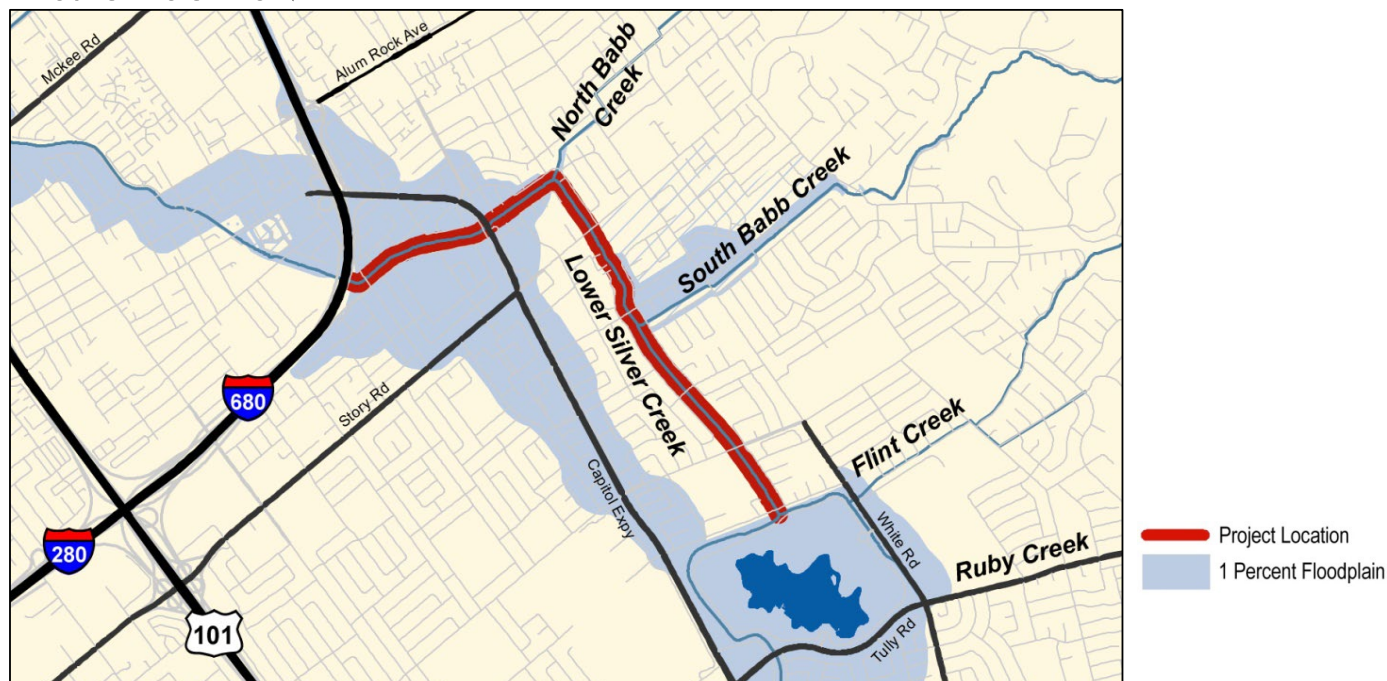
This project is part of a flood control project that partners with the Natural Resource Conservation Service to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement 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 with the City of San José 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:

- 40264007 – I-680 to N. Babb Creek, Reach 4 Planning - Completed
- 40264008 – I-680 to Cunningham Avenue, Reaches 4-6 (Non-reimbursable)
- 40264012 – Lands, Easements, Rights-of-Way, Relocations and Disposal, Reaches 4-6 (Reimbursable) - Completed

## PROJECT LOCATION



SCHEDULE & STATUS

August 2008 to June 2023

Planning and Design phases are complete.

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	6,309											
Permits	235											
Design	10,924											
Construct	80,028											
Closeout	26											
	99,583											

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

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
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 Creek, R4-6 (Non-reimbursable)	95,232	52	0	0	0	0	0	0	95,284
with inflation	95,232	52	0	0	0	0	0	0	95,284
40264012-Lower Silver Creek, LERRDs, R4-6	1,928	0	0	0	0	0	0	0	1,928
with inflation	1,928	0	0	0	0	0	0	0	1,928
TOTAL	99,531	52	0	0	0	0	0	0	99,583
with inflation	99,531	52	0	0	0	0	0	0	99,583

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Creek, R4-6 (Non-reimbursable)	97,199	52	1,967	0	0	0	0	0	0	97,251
40264012-Lower Silver Creek, LERRDs, R4-6	1,928	0	0	0	0	0	0	0	0	1,928
TOTAL	101,498	52	1,967	0	0	0	0	0	0	101,550

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately \$1,967,000. Excess funding will be returned to reserves upon project completion.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	48,124
State of California and City of San José	8,750
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	101,550

OPERATING COST IMPACTS

The operating cost impacts are estimated to be \$230,000 per year, beginning in FY20.

USEFUL LIFE: 50+ Years



<b>Project</b>	<b>Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4)</b>
<b>Program</b>	Flood Protection – Coyote Watershed
<b>Project No.</b>	40324003s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Flooding at King Road on Upper Penitencia Creek

## PROJECT DESCRIPTION

Initially, this project partnered with the U.S. Army Corps of Engineers (USACE) to plan and design improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the objectives listed below. In 2016, the USACE decided that the multi-objective project which is appropriate for this creek could not be funded under the existing single-purpose authorization. The project has not been included in the USACE workplan since 2017. As Federal funding has not been secured and the local funding is insufficient to construct the project, Valley Water will reassess the availability of funding on an annual basis as part of the Capital Improvement Program's financial planning process. This project will accomplish the following objectives:

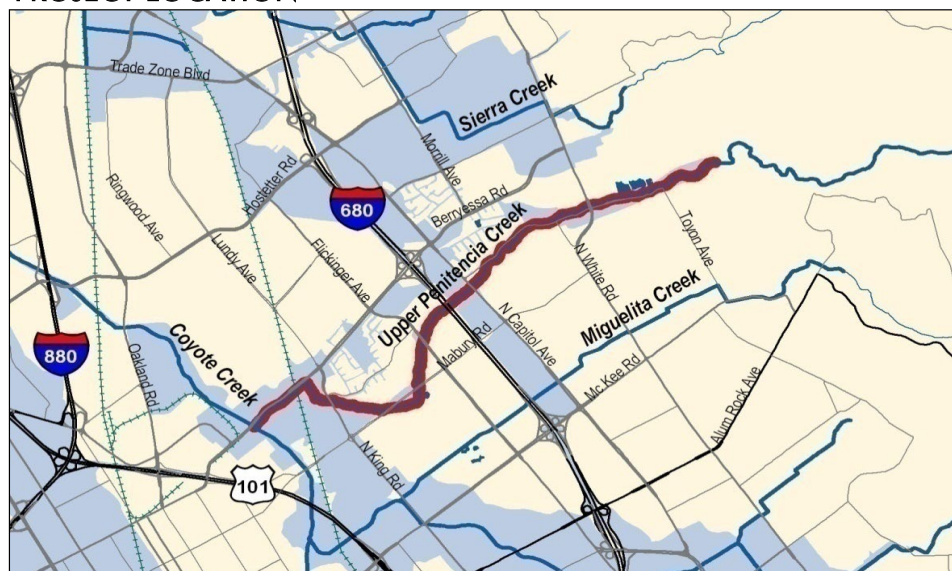
- Provide 1% flood protection to more than 8,000 parcels
- Improve stream habitat values and fisheries potential
- Reduce sedimentation and maintenance requirements
- Identify opportunities to integrate recreation improvements consistent with the City of San José's Master Plans, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan

This project is accounted for in the following:

- 40324003 – USACE Coordination - Completed
- 40324005 – Lands, Easements, Rights-of-Way, Relocations and Disposal - Completed
- 26324001 – Planning and Design

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E4. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



— Project Location  
 1 Percent Floodplain

## SCHEDULE & STATUS

July 2000 to June 2025

\*Construction phase includes prior year construction costs for projects that are now closed.

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	8,635											
Permits	861											
Design	8,493											
Construct*	1,479											
Closeout	-											
	19,797											

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, USACE Coordination	9,467	0	0	0	0	0	0	0	9,467
with inflation	9,467	0	0	0	0	0	0	0	9,467
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	2,309	0	0	0	0	0	0	0	2,309
with inflation	2,309	0	0	0	0	0	0	0	2,309
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	2,723	4,470	418	410	0	0	0	0	8,021
with inflation	2,723	4,470	418	447	0	0	0	0	8,058
<b>TOTAL</b>	<b>14,499</b>	<b>4,470</b>	<b>418</b>	<b>410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,797</b>
with inflation	14,499	4,470	418	447	0	0	0	0	19,834

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, USACE Coordination	9,467	0	0	0	0	0	0	0	0	9,467
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	2,309	0	0	0	0	0	0	0	0	2,309
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	11,253	0	4,060	0	0	0	0	0	0	11,253
TOTAL	23,029	0	4,060	0	0	0	0	0	0	23,029

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately \$3,194,000. Excess funding will be returned to reserves upon project completion.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	11,776
SCVWD Safe, Clean Water Fund	11,253
<b>Total</b>	<b>23,029</b>

Valley Water estimates total debt service payment for this project's portion of the WIFIA loan would be \$11,700,000 in principal, plus \$17,800,000 in interest, for a total of \$29,500,000 with final loan payoff occurring in 2063.

## OPERATING COST IMPACTS

No operating cost impacts are anticipated from this project, as it includes only the planning and design phase.

**USEFUL LIFE:** Not Available

<b>Project</b>	<b>Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River</b>
<b>Program</b>	Flood Protection – Uvas/Llagas Watershed
<b>Project No.</b>	50284010
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



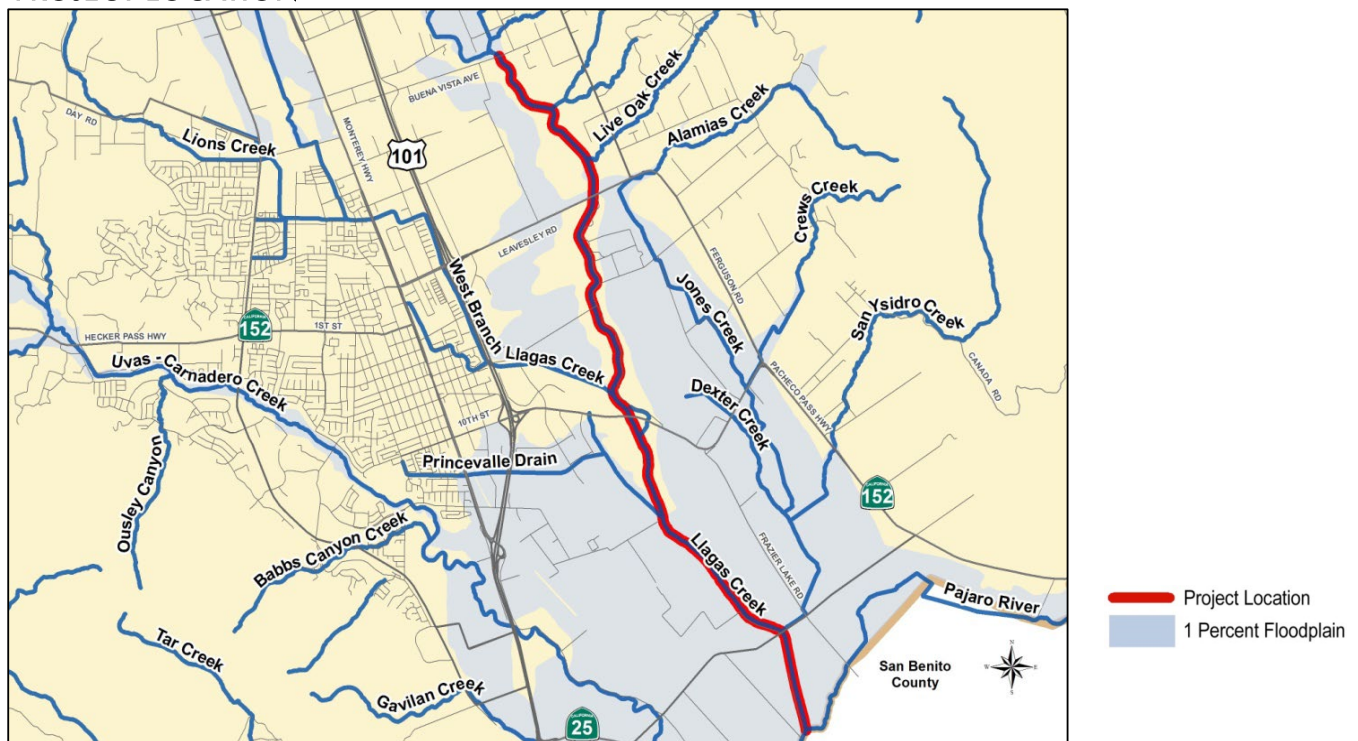
Lower Llagas Creek near the Pajaro River

## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on 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 criteria where applicable
- Identify feasible opportunities for environmental restoration and corridor preservation
- Coordinate planning, design, and construction efforts with the South County Regional Wastewater Authority

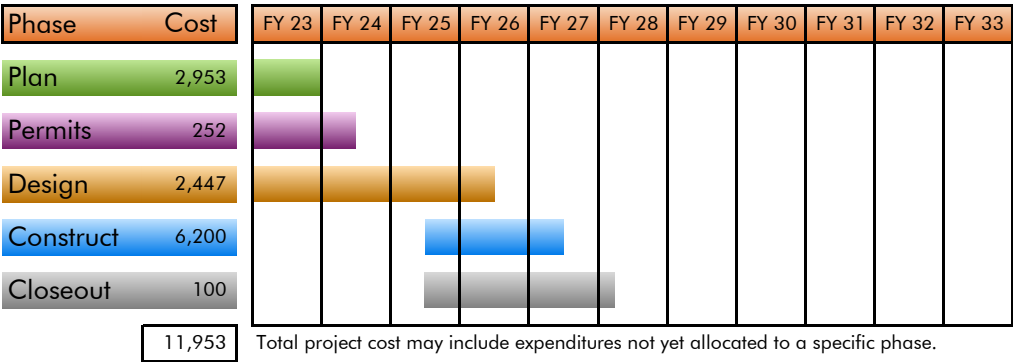
## PROJECT LOCATION





SCHEDULE & STATUS

September 2008 to July 2027



EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,354	1,306	993	3,000	3,000	300	0	0	11,953
with inflation	3,354	1,306	993	3,418	3,452	358	0	0	12,880

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future		
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	6,947	0	2,287	0	2,124	3,452	358	0	0	12,880

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	11,760
State of California	1,120
Total	12,880

OPERATING COST IMPACTS

Operating cost impacts will be determined at the completion of the design phase.

USEFUL LIFE: 30+ Years



<b>Project</b>	<b>Llagas Creek–Upper, Buena Vista Avenue to Llagas Road (E6)</b>
<b>Program</b>	Flood Protection – Uvas/Llagas Watershed
<b>Project No.</b>	26174051s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org



Llagas Creek floods at Watsonville Road and the surrounding area

## PROJECT DESCRIPTION

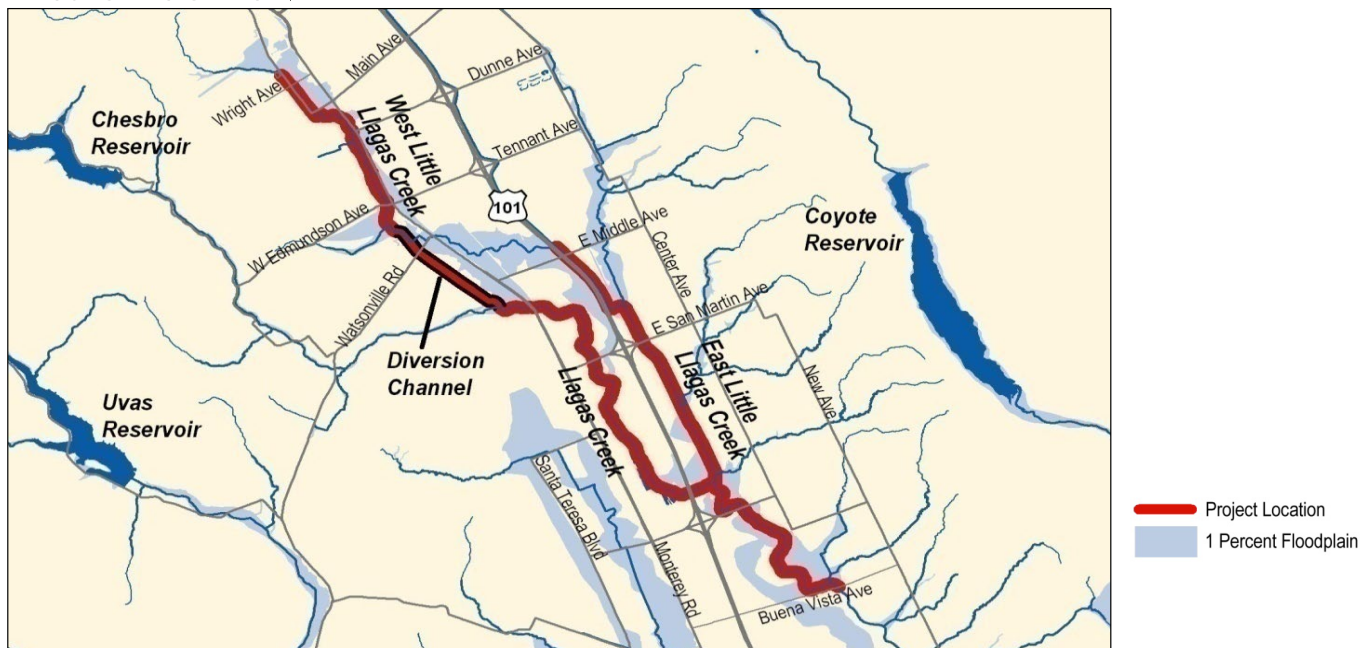
This project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (USACE) and the state to plan, design, and construct improvements along 13.9 miles of channel. The project extends from Buena Vista Avenue to Llagas Road, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1% (or 100-year) flood, and reduces the frequency of flooding in surrounding areas. Construction includes channel modifications and replacement of road crossings. Valley Water continues to work with Congress to aggressively pursue federal funds to bring this project to full fruition. In 2012, project limits were extended 2,700 feet upstream to Llagas Road to address public concerns.

This project is accounted for in the following:

- 26174051 – Reaches 4-8 & 14 - Lands, Easements, Rights of Way, Relocation, & Disposal (Reimbursable)
- 26174052 – Reaches 4-8 & 14 - Construction/Coordination with USACE
- 26174053 – Technical Studies - Completed
- 26174054 – Design
- 26174055 – Phase 2B Construction

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E6. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



SCHEDULE & STATUS

July 2000 to June 2026

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

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	3,732											
Permits	7,891											
Design	71,948											
Construct	164,455											
Closeout	621											
249,021		Total project cost may include expenditures not yet allocated to a specific phase.										

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26174051-Llagas Ck—Upper, LERRDs	46,388	1,700	21	20	0	0	0	0	48,129
with inflation	46,388	1,700	21	22	0	0	0	0	48,131
26174052-Llagas Ck—Upper, USACE Coordination	128,141	20,898	18,477	4,815	250	0	0	0	172,579
with inflation	128,141	20,898	18,477	5,273	285	0	0	0	173,073
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	22,575	1,097	1,097	1,149	949	0	0	0	26,867
with inflation	22,575	1,097	1,097	1,255	1,083	0	0	0	27,107
26174055-Llagas Ck—Phase 2B Construction	0	0	22,400	50,000	10,000	0	0	0	82,400
with inflation	0	0	22,400	56,000	11,200	0	0	0	89,600
TOTAL	198,550	23,695	19,595	5,984	1,199	0	0	0	249,021
with inflation	198,550	23,695	41,995	62,550	12,568	0	0	0	339,357

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
26174051-Llagas Ck—Upper, LERRDs	48,088	0	0	21	22	0	0	0	48,131
26174052-Llagas Ck—Upper, USACE Coordination	155,169	16,885	23,016	0	734	285	0	0	173,073
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	28,193	0	4,521	0	0	0	0	0	28,193
26174055-Llagas Ck—Phase 2B Construction	0	0	0	22,400	56,000	11,200	0	0	89,600
TOTAL	232,896	16,885	27,537	22,421	56,756	11,485	0	0	340,443

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately \$1,086,000. Excess funding will be returned to reserves upon project completion.

FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe, Clean Water Fund	169,652
SCVWD Watershed Stream Stewardship Fund	23,690
State of California	34,425
City of Morgan Hill	4,090
NRCS Grants (Unsecured)	89,600
Total	339,357
USACE - In-kind Services	65,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by \$1,500,000 per year, beginning in FY26.

USEFUL LIFE: 50+ Years

<b>Project</b>	<b>San Francisco Bay Shoreline (E7)</b>
<b>Program</b>	Flood Protection – Multiple Watersheds
<b>Project No.</b>	00044026s
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@valleywater.org

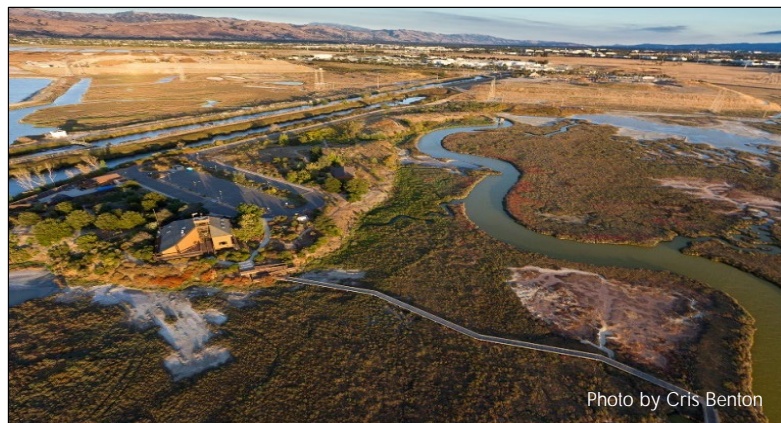


Photo by Cris Benton

Restoration of tidal marshland in the San Francisco Bay

## PROJECT DESCRIPTION

The Shoreline Project area is broken up into eleven economic impact analysis (EIA) areas and will be completed in phases.

- Phase I is comprised of EIA 11, which includes the shoreline area between Coyote Creek and Guadalupe River in San José; Under the 2012 Safe, Clean Water (SCW) Program, \$15,000,000 was provided toward Valley Water's cost-share of the design and partial construction efforts
- Phase II is comprised of EIAs 1, 2, 3, and 4, which includes the shoreline area between San Francisquito Creek in Palo Alto to Permanente Creek in Mountain View; Under the renewed SCW Program, approximately \$25,000,000 will be provided toward Valley Water's cost-share of the planning, design and construction phase efforts
- Phase III is comprised of EIAs 5, 6, 7, 8, 9, and 10, which includes the shoreline area between Permanente Creek in Mountain View and Guadalupe River in San José; Under the renewed SCW Program, approximately \$12,000,000 will be provided toward Valley Water's cost-share of the planning and design phase efforts for EIAs 5-9. Funding for EIA 10 is yet to be determined

This project partners with the California Coastal Conservancy, U.S. Army Corps of Engineers (USACE) and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline to accomplish the following objectives:

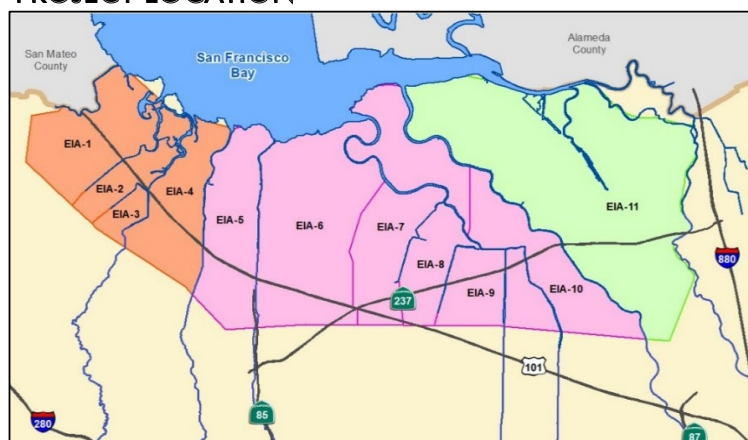
- Provide integrated fluvial and 1% coastal flood protection
- Provide protection for future sea level rise
- Restore and/or enhance tidal marsh and related habitats
- Provide recreational and public access opportunities
- Pursue continued federal funding
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency
- Coordinate closely with the South Bay Salt Pond Restoration Project, local jurisdictions/cities, U.S. Fish and Wildlife Service, the community and key stakeholders

This project is accounted for in the following:

- 62044042 – Shoreline, Early Implementation - Completed
- 00044026 – San Francisco Bay Shoreline (Phase I)
- 26444001 – EIA 11, Design and Partial Construction (Phase I) - Completed
- 26444002 – EIAs 1-4 (Phase II)
- 26444004 – EIAs 5-9 (Phase III)

This project meets the commitments of the voter-approved Safe, Clean Water Program (SCW), Project E7. For a full description of the SCW benefits and KPIs, please visit [www.valleywater.org](http://www.valleywater.org).

## PROJECT LOCATION



## SCHEDULE & STATUS

July 2005 to December 2028

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	23,630											
Permits	492											
Design	37,095											
Construct	110,333											
Closeout	200											

172,254

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
00044026-San Francisco Bay Shoreline	78,871	19,639	2,796	51	14,149	0	0	0	115,506
with inflation	78,871	19,639	2,796	56	16,805	0	0	0	118,166
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 & Partial Construction	17,516	0	0	0	0	0	0	0	17,516
with inflation	17,516	0	0	0	0	0	0	0	17,516
26444002-EIAs 1-4	4,696	2,709	2,708	1,025	5,200	5,200	5,200	0	26,738
with inflation	4,696	2,709	2,708	1,119	5,934	6,201	6,480	0	29,847
26444004-EIAs 5-9	0	2,090	1,045	3,000	3,000	3,000	0	0	12,135
with inflation	0	2,090	1,045	3,276	3,423	3,578	0	0	13,412
<b>TOTAL</b>	<b>101,442</b>	<b>24,438</b>	<b>6,549</b>	<b>4,076</b>	<b>22,349</b>	<b>8,200</b>	<b>5,200</b>	<b>0</b>	<b>172,254</b>
with inflation	<b>101,442</b>	<b>22,348</b>	<b>5,504</b>	<b>1,175</b>	<b>22,739</b>	<b>6,201</b>	<b>6,480</b>	<b>0</b>	<b>179,301</b>

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
00044026-San Francisco Bay Shoreline	82,618	15,892	0	2,796	56	16,805	0	0	0	118,166
62044042-Shoreline, Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11, Design & Partial Construction	17,516	0	0	0	0	0	0	0	0	17,516
26444002-EIAs 1-4	5,646	1,760	1	2,707	1,119	5,934	6,201	6,480	0	29,847
26444004-EIAs 5-9	1,045	1,045	0	1,045	3,276	3,423	3,578	0	0	13,412
<b>TOTAL</b>	<b>107,184</b>	<b>18,697</b>	<b>1</b>	<b>6,548</b>	<b>4,451</b>	<b>26,163</b>	<b>9,779</b>	<b>6,480</b>	<b>0</b>	<b>179,301</b>

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	5,593
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	60,775
California Department of Water Resources	420
SFBRA Measure AA (Grant)	61,079
SFBRA Measure AA (Ballot Reimbursement)	831
State of California	48,591
<b>Total</b>	<b>179,301</b>
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, USACE, Shoreline	8,990
<b>Total Partnership Funding for In-kind Services</b>	<b>91,250</b>

## OPERATING COST IMPACTS

Operating costs will be determined upon completion of the construction phase.

USEFUL LIFE: 50+ Years



<b>Project</b>	<b>Watersheds Asset Rehabilitation Program</b>
<b>Program</b>	Flood Protection - Multiple Watersheds
<b>Project No.</b>	62084001
<b>Contact</b>	Bhavani Yerrapotu byerrapotu@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 blockage repair
- Fish ladder modifications and repairs

## PROJECT LOCATION



★ Project Location

## SCHEDULE & STATUS

Several small projects go through the design and construction phases each year under the Stream Maintenance Program 2 permit.

Phase	Cost	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33
Plan	3,162											
Permits	4,691											
Design	14,084											
Construct	85,386											
Closeout	570											
	148,156											

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

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Future	
62084001-Watersheds Asset Rehabilitation Program	42,536	14,478	8,387	5,845	5,835	8,100	8,100	54,875	148,156
with inflation	42,536	14,478	8,387	6,645	6,858	9,849	10,181	77,979	176,913

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY22	FY23		FY24	FY25	FY26	FY27	FY28	Future	
62084001-Watersheds Asset Rehabilitation Program	50,273	6,741	0	8,387	6,645	6,858	9,849	10,181	77,979	176,913

Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	176,913
City of Palo Alto (Matadero Creek)	442
<b>Total</b>	<b>176,913</b>

## 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 existing facilities or modes of operation.

**USEFUL LIFE:** Not Available