

# Flood Protection

# 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 294 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 294 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.

Valley Water's flood protection management has significantly reduced the intensity and frequency of flooding in Santa Clara County. Of the 166,526 parcels in the floodplain, Valley Water projects have protected approximately 100,000 parcels, with plans to protect approximately 25,000 more over the next five years.

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 its 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set to sunset in 15 years from the date of implementation, the renewed Safe, Clean Water Program will continue unless repealed by voters or if the Board determines the funding is no longer needed.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 the 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)
- Palo Alto Flood Basin Tide Gate Structure Replacement
- San Francisquito Creek, San Francisco Bay to Middlefield Road, Construction

## 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 I-880
- Guadalupe River-Downtown, I-880 to I-280

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

- Guadalupe River-Upper, I-280 to Blossom Hill Road (Safe, Clean Water)
- Guadalupe River, Tasman Drive to I-880
- Lower Guadalupe River Capacity Restoration

# Flood Protection Capital Improvements

## 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 I-680 (2012 Safe, Clean Water)
- Lower Silver Creek, I-680 to Cunningham Avenue, (Reaches 4-6)

### *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
- 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-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)
- Small Capital Improvements, Watershed Asset Rehabilitation Program (WARP)

### *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. Throughout the various phases of a capital project, projections of this impact are regularly

considered and updated as needed to reflect changes in project elements.

## CIP DEVELOPMENT PROCESS AND FINANCIAL ANALYSIS

The annual CIP Development 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 the 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 2025-29 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 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.

# Flood Protection Capital Improvements

## *Significant Project Updates from the Prior Year*

Updates to capital project plans are considered to be significant if total project costs (TPC) increase or decrease by more than \$1 million (inflated), project completion is extended beyond one year, or if there are any changes to project scope. Listed here are the changes to projects from the CIP Adopted FY 2024-28 Five-Year Plan:

## *Capital Improvement Project Updates*

- The Palo Alto Flood Basin Tide Gate Structure Replacement Project decreased in cost by \$754 thousand. The Project has been divided into two phases, a short-term Phase 1 and long-term Phase 2, with short-term Phase 1 focusing on designing and constructing a seismic retrofit and rehabilitation of the existing tide gate structure and long-term Phase 2 involving work on a long-term structure replacement project, in collaboration with the United States Army Corps of Engineers (USACE), to ensure alignment and elevation compatibility with the South San Francisco Bay Shoreline Phase II Project. Phase 2 cost and schedule are yet to be determined and will be updated by the time Phase 1 enters the Construction Phase.
- The Permanente Creek, SF Bay to Foothill Expwy Project decreased in cost by \$460 thousand. This 2012 Safe, Clean Water (SCW Program), Measure B, project was granted more than what was carried forward for the project closeout in the 2020 renewed SCW Program, Measure S. Since this project is not part of the renewed SCW Program's first 15-year financial cycle (FY2022-36), it does not receive new funding from the renewed Program. During the budget cycle and CIP production, the forecasted FY 2024 amounts exceeded the TPC, but that wasn't known until all the FY 2023 actuals were realized. As this 2012 SCW project is closing at the end of FY24, the correct TPC and cumulative budget need to align with the approved carryforward in the renewed SCW Program. The FY24 budget allocation needs to be adjusted because it was granted in error and violates the SCW program guidelines.
- The Sunnyvale East and West Channels (E2) Project decreased in cost by \$152 thousand. The Board of Directors modified Project E2 funding allocation on January 24, 2023, reducing Phase 1 construction costs and reallocating Phase 2 construction-related expenditures to Fund 26 Operating and Capital Reserves. While Phase 1 construction funding is secured, funding sources for Phase 2, including federal and state grants, are being explored, with reassessments on an annual basis as part of the financial development process. Valley Water will reassess the availability of funding on an annual basis as part of the Capital Improvement Program's financial development process, through which the Board may reallocate construction funding to Phase 2 when and if funding becomes available. There is no change to the TPC, adjustments to phase totals only. The schedule is being extended due to the resubmission of Permit Applications in August 2023, with construction expected to be advertised in September 2024 and the contract awarded in January 2025.
- The Lower Guadalupe River Capacity Restoration Project increased in cost by \$3.88 million due to the extension of the schedule by two years and an updated estimate of expenditures in the Planning and Design Phases, as these were underestimated in past project plans. The project schedule has increased by a total of 2 years to reflect the completion of the planning phase in FY 2024. The remaining phases (design, construction, and closeout) have not increased in duration, but have been pushed out two years accordingly.
- The Guadalupe River-Upper, I-280 to SPRR - Reach 6 Project planned expenditures have increased in cost by \$427 thousand to address higher than expected costs incurred during FY23, particularly related to labor expenses for monitoring Phase 1 gravel augmentation sites. Environmental Mitigation and Monitoring staff conducted various fieldwork activities, including a topographic survey and water surface profile monitoring, resulting in an overage of the FY 2023 budget. Continuing into FY 2024, FY 2025, FY 2026, and FY 2027, additional fieldwork to trace rocks from Phase 1 gravel augmentation sites has been included.
- The Berryessa Creek, Calaveras Blvd. to I-680 Project increased in cost by \$4 thousand due to the overall schedule being extended by one year for the extra time necessary to finalize payment to the U.S. Army Corps of Engineers USACE.
- The Berryessa Creek, Lower Penitencia Creek to Calaveras Blvd Phase 1 Project decreased in cost by \$68 thousand as the only remaining work needed is to finalize the wetlands report in accordance with the final Mitigation and Monitoring Report. This report is planned to be completed by a consultant working on the project by the second half of FY 2024. The overall Project schedule is being extended to complete the closeout activities.

# Flood Protection Capital Improvements

- The Berryessa Creek, Lower Penitencia Creek to Calaveras Blvd Phase 2 Project increased in cost by \$1.60 million due to additional scope for a waterline and sewer replacement requested by the City of Milpitas. Despite completion in July 2022, a water leak was discovered in December 2022, leading to collaboration between Valley Water and the City of Milpitas for repair plans. The waterline leak caused the civil construction aspect of the project completion to be delayed, resulting in additional labor costs for the repair and associated civil work. Additionally, cost was added to the three-year Plant Establishment Phase for unforeseen conditions, such as irrigation or replacement planting exceeding the scope of the contract.
- The Coyote Creek, Montague Expressway to Tully Road (E1) Project decreased in cost by \$3.59 million due to the construction costs being pushed out by one fiscal year to accommodate the necessary hydraulic analyses and internal drainage studies needed for the Environmental Impact Report. As a result, a necessary flood protection element was added, and design alternatives were developed in coordination with the City of San José, to minimize impacts on City of San José parkland.
- The Lower Penitencia Creek Improvements Project increased in cost by \$409 thousand due to delays in material supply availability, as well as storm events that damaged a concrete channel wall. A design consultant task order was needed to bring in technical expertise to evaluate, design, and monitor the wall until it could be repaired. Additionally, staff hours were needed to address the channel wall repair. The schedule was delayed to address these unforeseen circumstances and the 3-year plant establishment and maintenance is scheduled to be completed in FY 2027.
- The Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4) Project increased in cost by \$4.04 million for additional review of the Planning Study Report (PSR) and the incorporation of an Environmental and Design consultant procurement which resulted in the schedule being extended by 2 years to address these unforeseen circumstances.
- The Llagas Creek – Lower Capacity Restoration, Buena Vista Rd. to Pajaro River Project decreased in cost by \$5.93 million. This project was on hold for over 10 years. Due to the time lapse, staff updated phase deliverables and schedules resulting in increased expenditures for the anticipated level of work. On August 4, 2023, Governor Newsom issued Executive Order N-10-231 which applies to the Pajaro River and tributaries in response to the flooding that occurred in January 2023. The executive order (EO) suspends certain permitting requirements for activities related to vegetation management. As part of this project, and in response to the EO, Valley Water removed several acres of vegetation along Lower Llagas Creek to partially restore the capacity of the channel. Additional improvements will be needed to fully restore capacity, however, this initial vegetation removal work significantly reduced the need for future planned improvements. In addition, at the January 9, 2024 Board meeting, this project was added to the unfunded list, therefore the schedule and expenditures in FY 2025 and beyond have been removed.
- The Llagas Creek, Upper, Reimbursable Project increased in cost by approximately \$1.83 million to cover the costs of relocating existing utilities in conflict with project construction and acquiring the last remaining properties needed for project completion. Eligible costs associated with this increase are expected to be reimbursed by the Department of Water Resources – State Subventions Program, contingent on the program’s funding. Construction and Close-out schedules have been extended by one year to accommodate utility relocations that need to be done concurrently with construction.
- The SF Bay Shoreline, EIAs 5-9 (E7) Project increased in cost by \$2.32 million due to CEQA-related activities for Valley Water staff in the Environmental Phase that were not included in the prior project plan, as well as additional labor costs for Valley Water staff in the Planning Phase. The schedule has been updated to reflect staff time to complete the Feasibility Study. The Feasibility Cost Share Agreement with the US Army Corps of Engineers (USACE), signed on August 28, 2023, initiated a 3-year study set to conclude in 2026.

## Small Capital Improvement Project Updates

Small Capital project forecasts undergo annual revisions, adjusting asset rehabilitation projects based on asset condition and project requirements, and updating project costs according to market conditions. These revisions to both schedule and costs result in several minor changes in expected expenditures over the forecasted period.

The Watersheds Asset Rehabilitation Program (WARP) was originally validated and included into the Capital Improvement Program (CIP) in 2015 as the Small Capital Improvements, Watersheds Project. While there have been several scope changes over the years and the project was

# Flood Protection Capital Improvements

renamed the Watersheds Asset Rehabilitation Program (WARP), the project continued to be managed as a Small Capital Improvement Project with asset rehabilitation projects added, removed, and rescheduled on an annual basis based on asset condition and project need.

Since this is an ongoing watersheds rehabilitation project and work is expected to continue at approximately the same level in future years, WARP is being renamed to include a reference to the “small capital improvements” to align with the naming convention used for the other types of Small Capital Improvements projects in the CIP. Additionally, to reflect the small capital planning and forecasting process, the planned expenditures have been updated to extend through the full 15-year capital forecast period.

- Small Capital Improvements, Watersheds Asset Rehabilitation Program (WARP) increased in cost by \$127.49 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 (E5)
- Sunnyvale East and West Channels (E2)

- Upper Guadalupe River, I-280 to Blossom Hill Road (E8)
- Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3 - Planning and Design (E3)
- Coyote Creek, Montague Expressway to Tully Road (E1)
- Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4)
- Llagas Creek-Upper, Buena Vista Avenue to Llagas Road (E6)
- San Francisco Bay Shoreline - EIAs 1-4 and Planning and Design for EIAs 5-9 (E7)

With the exception of the Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3, each of these projects was 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 are 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 I-680 (2012 Safe, Clean Water)

For more information about the Safe, Clean Water Program visit [www.valleywater.org](http://www.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 2023-24.

## Flood Protection Capital Improvements (\$K)


Project Number	PROJECT NAME	Through FY23	FY24*	FY24 Unspent	FY25	FY26	FY27	FY28	FY29	FY30-39	TOTAL
<b>LOWER PENINSULA WATERSHED</b>											
10394001	Palo Alto Flood Basin Tide Gate Structure Replacement	7,537	-	27	650	3,238	50	-	-	-	11,475
10244001s	Permanente Creek, SF Bay to Foothill Expressway	115,224	21	-	21	-	-	-	-	-	115,266
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	75,778	4,917	972	22,782	9,453	422	427	113	-	113,892
<b>WEST VALLEY WATERSHED</b>											
26074002	Sunnyvale East and West Channels Flood Protection (E2)	38,402	-	1,950	9,362	5,077	2,225	1,234	1,487	-	57,786
<b>GUADALUPE WATERSHED</b>											
30154019	Lower Guadalupe River Capacity Restoration Project	5,613	1,341	-	3,121	3,245	3,375	30,938	29,670	29,676	106,979
26154001s	Guadalupe River--Upper, I-280 to Blossom Hill Road (E8)	135,358	-	20,504	-	-	15,569	18,206	3,766	677	173,577
<b>COYOTE WATERSHED</b>											
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	53,264	1,146	100	4	-	-	-	-	-	54,415
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	137,678	342	1,787	168	87	-	-	-	57,529	195,804
26174043	Coyote Creek, Montague Expressway to Tully Road (E1)	25,230	4,104	-	16,065	94,496	77,484	3,195	36	521	221,131
40334005	Lower Penitencia Ck Improvements, Coyote Ck to Berryessa Ck	34,869	525	177	-	107	22	-	-	-	35,522
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	23,029	-	5,836	-	-	842	-	-	-	23,871
<b>UVAS/LLAGAS WATERSHED</b>											
50284010	Llagas Creek--Lower, Capacity Restoration, Buena Vista Road to Pajaro River	6,947	-	-	-	-	-	-	-	-	6,947
26174051s	Llagas Creek--Upper, Buena Vista Avenue to Llagas Road (E6)	247,783	24,422	6,967	58,636	11,533	22	-	-	-	342,394
<b>MULTIPLE WATERSHEDS</b>											
00044026s	San Francisco Bay Shoreline (E7)	126,371	6,548	685	2,142	22,427	9,376	9,622	3,680	-	180,167
62084001	Small Capital Improvements, Watersheds Asset Rehabilitation Program (WARP)	57,014	13,115	-	19,679	17,550	9,511	10,000	10,476	167,060	304,405
<b>TOTAL</b>		<b>1,090,097</b>	<b>56,482</b>	<b>39,005</b>	<b>132,630</b>	<b>167,212</b>	<b>118,897</b>	<b>73,621</b>	<b>49,228</b>	<b>255,463</b>	<b>1,943,630</b>

\*FY 2024 Adjusted Budget includes adopted budget plus budget adjustments

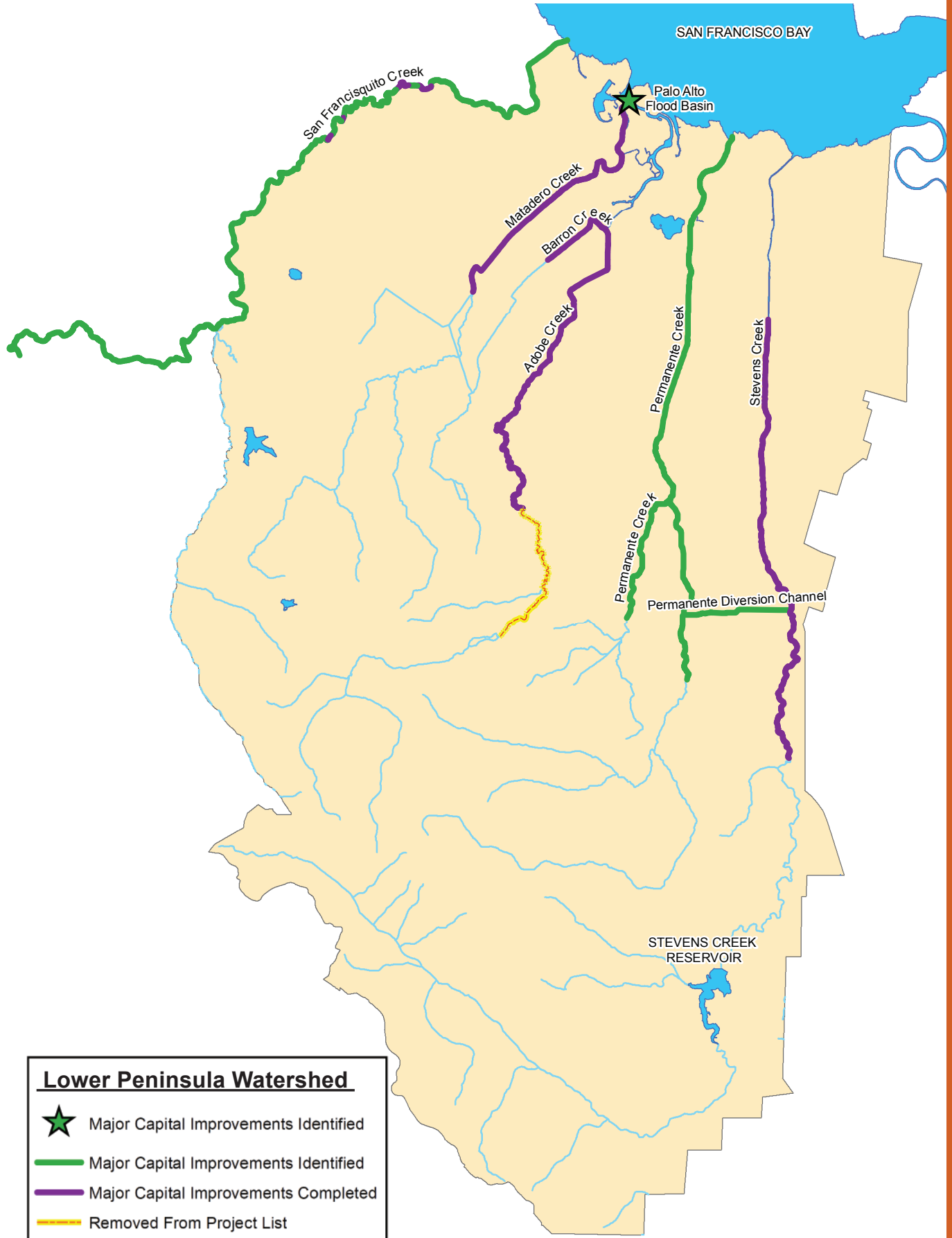
 FY 2023-24 Funds to be reappropriated

## Flood Protection - Funding Sources (\$K)

Fund Number	FUND NAME	Through FY23	FY24	FY24 Unspent	FY25	FY26	FY27	FY28	FY29	FY30-39	TOTAL
12	Watershed Stream Stewardship Fund	386,418	18,140	1,991	23,691	40,192	12,958	40,938	40,146	246,510	808,993
26	Safe, Clean Water and Natural Flood Protection Fund	703,679	38,341	37,014	108,939	127,021	105,940	32,683	9,082	8,953	1,134,637
<b>TOTAL</b>		<b>1,090,097</b>	<b>56,482</b>	<b>39,005</b>	<b>132,630</b>	<b>167,212</b>	<b>118,897</b>	<b>73,621</b>	<b>49,228</b>	<b>255,463</b>	<b>1,943,630</b>

 FY 2023-24 Funds to be reappropriated

# Lower Peninsula Watershed





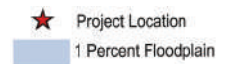
<b>PROJECT</b>	<b>Palo Alto Flood Basin Tide Gate Structure Replacement</b>		
<b>PROGRAM</b>	Flood Protection - Lower Peninsula Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	10394001		byerrapotu@valleywater.org



View from west side of Palo Alto tide gates facing east



Location Map



## PROJECT DESCRIPTION

This project plans and designs a rehabilitation and retrofit in the short-term and a replacement tide gate structure in the long-term 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

## OPERATING COST IMPACTS

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

**USEFUL LIFE:** 30-50 Years

## SCHEDULE & STATUS

November 2018 to September 2026

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	1,156											
Permits	1,839											
Design	4,530											
Construct	3,472											
Closeout	95											
<b>11,137</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Replacement	6,782	728	677	2,906	45	0	0	0	11,137
with inflation	6,782	728	677	3,238	50	0	0	0	11,475
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Replacement	7,537	0	27	650	3,238	50	0	0	0	11,475
Adjusted Budget includes adopted budget plus approved budget adjustments.										

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	11,475
Other Funding Sources	0
<b>Total</b>	<b>11,475</b>

<b>PROJECT</b>	<b>Permanente Creek, San Francisco Bay to Foothill Expressway</b>		
<b>PROGRAM</b>	Flood Protection – Lower Peninsula Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	10244001s		byerrapotu@valleywater.org



McKelvey Ball Park and Detention Basin upon completion in February 2020



Location Map

**Project Location**  
**1 Percent Floodplain**

## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, and Hale Creek from Foothill Expressway to its confluence with Permanente Creek, 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
- Provide recreation enhancements

This project is anticipated to be completed and closed by June 30, 2024.

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).

## 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:** 50 Years

SCHEDULE & STATUS

July 2001 to June 2025

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	10,051											
Permits	3,970											
Design	18,558											
Construct	81,992											
Closeout	695											
115,266	Total project cost may include expenditures not yet allocated to a specific phase.											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
10244001-Permanente Ck, S.F. Bay to Foothill Expwy – Lower Peninsula Fund	19,703	624	21	0	0	0	0	0	20,348
with inflation	19,703	624	21	0	0	0	0	0	20,348
26244001-Permanente Ck, S.F. Bay to Foothill Expwy	94,856	62	0	0	0	0	0	0	94,918
with inflation	94,856	62	0	0	0	0	0	0	94,918
TOTAL	114,559	686	21	0	0	0	0	0	115,266
with inflation	114,559	686	21	0	0	0	0	0	115,266

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
10244001-Permanente Ck, S.F. Bay to Foothill Expwy – Lower Peninsula Fund	20,306	21	0	21	0	0	0	0	0	20,348
26244001-Permanente Ck, S.F. Bay to Foothill Expwy	94,918	0	0	0	0	0	0	0	0	94,918
TOTAL	115,224	21	0	21	0	0	0	0	0	115,266

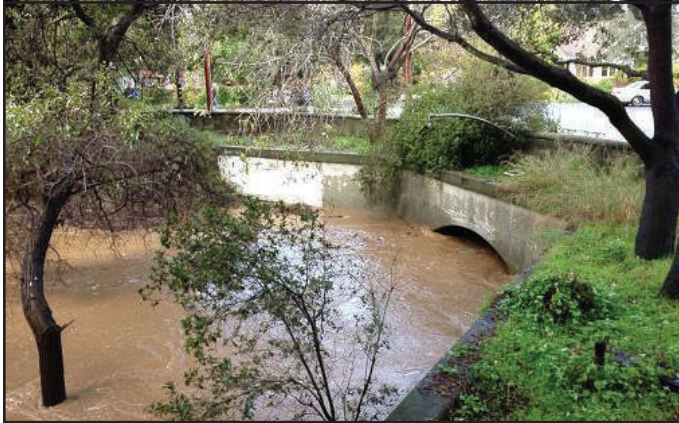
Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	20,348
SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	93,895
City of Mountain View	1,023
Total	115,266

<b>PROJECT</b>	<b>San Francisquito Creek, San Francisco Bay through Searsville Dam (E5)</b>		
<b>PROGRAM</b>	Flood Protection – Lower Peninsula Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	10284007s		byerrapotu@valleywater.org



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



Location Map

 Project Location

## 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 (USACE), 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 thru Searsville Dam – Completed
- 10284008 – Early Implementation – Completed
- 26284001 – S.F. Bay thru Searsville Dam (E5) – Closed
- 26284002 – S.F. Bay to Middlefield Road (E5), 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).

## OPERATING COST IMPACTS

These projects will increase annual operating costs by approximately \$250,000, beginning in FY29.

**USEFUL LIFE:** 30+ Years



## SCHEDULE & STATUS

June 2003 to June 2029

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	4,637											
Permits	1,909											
Design	26,350											
Construct	78,359											
Closeout	113											
<b>112,755</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
10284007-San Francisquito Ck, S.F. Bay thru 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 thru Searsville Dam (E5)	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 (E5), Construction	51,746	15,888	23,754	8,445	375	365	93	0	100,666
with inflation	51,746	15,888	23,754	9,453	422	427	113	0	101,803
<b>TOTAL</b>	<b>63,835</b>	<b>15,888</b>	<b>23,754</b>	<b>8,445</b>	<b>375</b>	<b>365</b>	<b>93</b>	<b>0</b>	<b>112,755</b>
<b>with inflation</b>	<b>63,835</b>	<b>15,888</b>	<b>23,754</b>	<b>9,453</b>	<b>422</b>	<b>427</b>	<b>113</b>	<b>0</b>	<b>113,892</b>
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

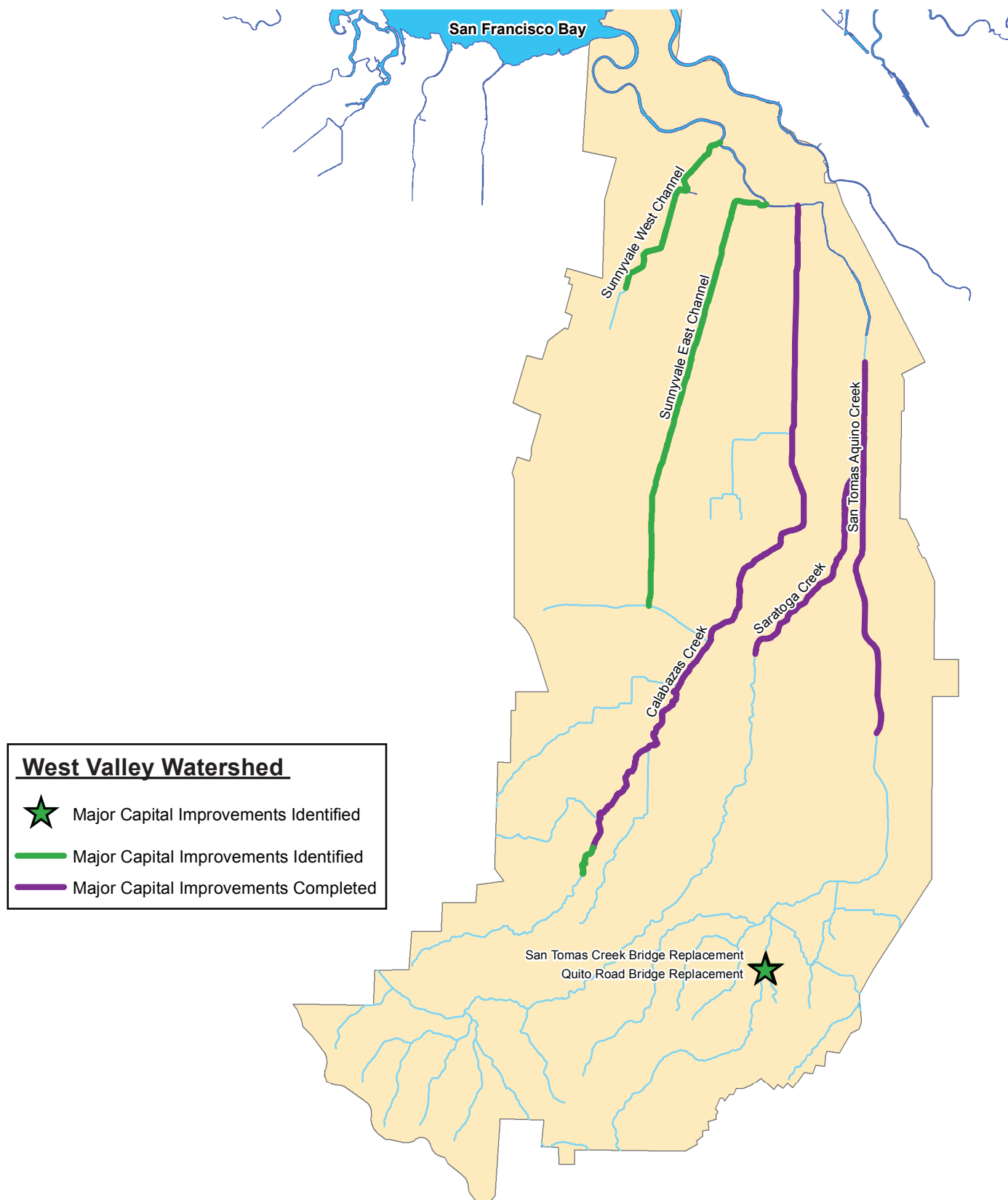
	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
10284007-San Francisquito Ck, S.F. Bay thru Searsville Dam	4,064	0	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, S.F. Bay thru Searsville Dam (E5)	6,411	0	0	0	0	0	0	0	0	6,411
26284002-San Francisquito Ck - S.F. Bay to Middlefield Road (E5), Construction	63,689	4,917	972	22,782	9,453	422	427	113	0	101,803
<b>TOTAL</b>	<b>75,778</b>	<b>4,917</b>	<b>972</b>	<b>22,782</b>	<b>9,453</b>	<b>422</b>	<b>427</b>	<b>113</b>	<b>0</b>	<b>113,892</b>
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)	26,816
<b>Total</b>	<b>113,892</b>
San Francisquito Joint Powers Authority	11,040
County of San Mateo - In-kind Services	1,500
County and USACE participation are for Feasibility Study activities only. Additional funding will be negotiated during subsequent phases.	

# West Valley Watershed





<b>PROJECT</b>	<b>Sunnyvale East and West Channels Flood Protection Project (E2)</b>		
<b>PROGRAM</b>	Flood Protection – West Valley Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	26074002		byerrapotu@valleywater.org



Sunnyvale West Channel looking south at Carl Road



Location Map

— Project Location  
 1 Percent Floodplain

## 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% 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).

## OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately \$210,000 per year, beginning in FY29.

**USEFUL LIFE:** 50 Years

## SCHEDULE & STATUS

March 2006 to June 2029

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	5,776											
Permits	2,481											
Design	19,373											
Construct	29,241											
Closeout	200											
<b>57,151</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project (E2)	26,428	10,025	11,312	4,587	2,200	1,200	1,400	0	57,151
with inflation	26,428	10,025	11,312	5,077	2,225	1,234	1,487	0	57,786
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

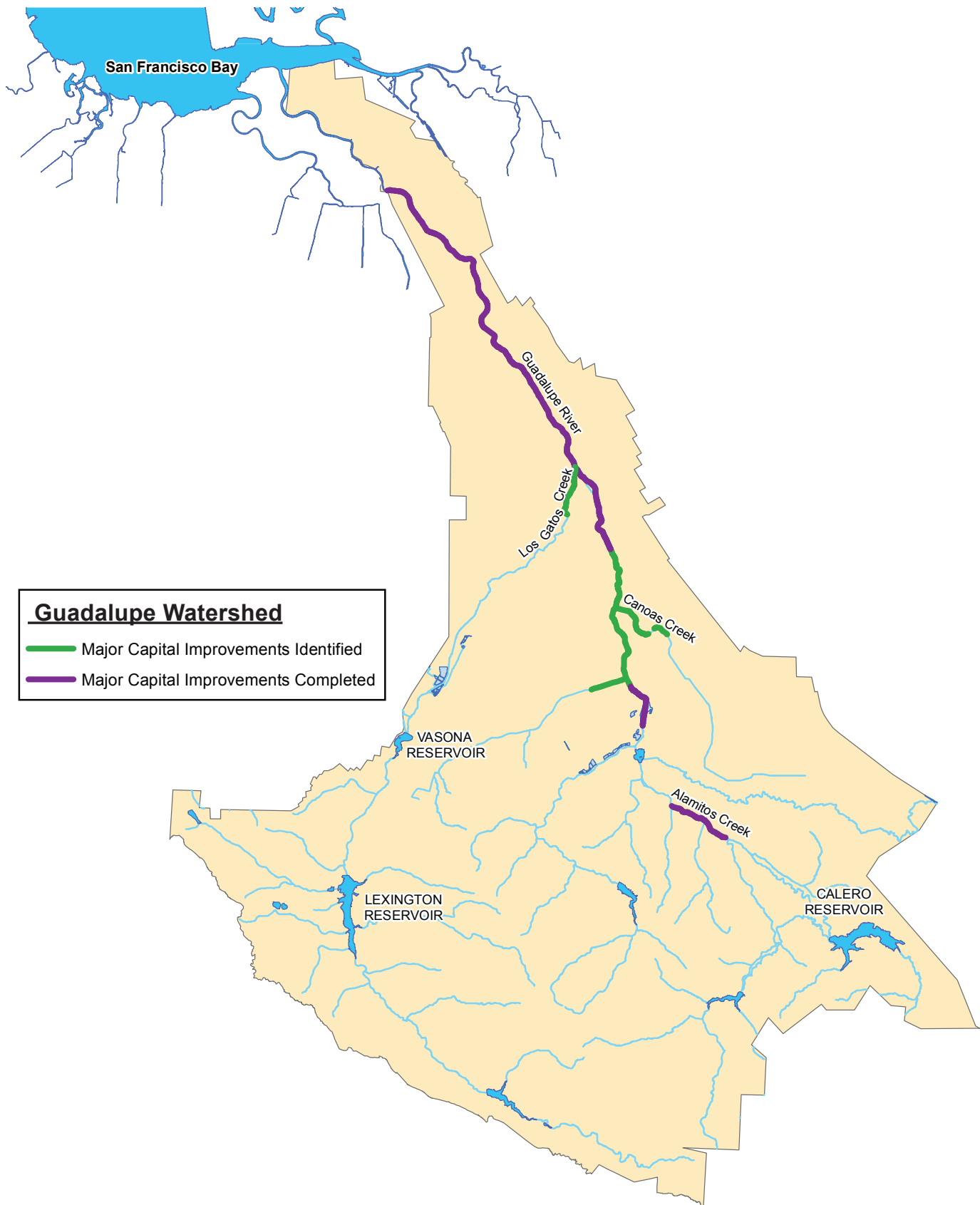
	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project (E2)	38,402	0	1,950	9,362	5,077	2,225	1,234	1,487	0	57,786
Adjusted Budget includes adopted budget plus approved budget adjustments.										

## FUNDING SOURCES

(in thousands \$)

SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	57,786
Other Funding Source	0
<b>Total</b>	<b>57,786</b>
Valley Water estimates total WIFIA debt service payment for the eligible SCW projects would be \$146,700,000 in principal, plus \$227,300,000 in interest, for a total of \$374,000,000 with final payoff of the loan occurring in 2062. The Sunnyvale East and West Channel Project represents approximately 21% of the total WIFIA program.	

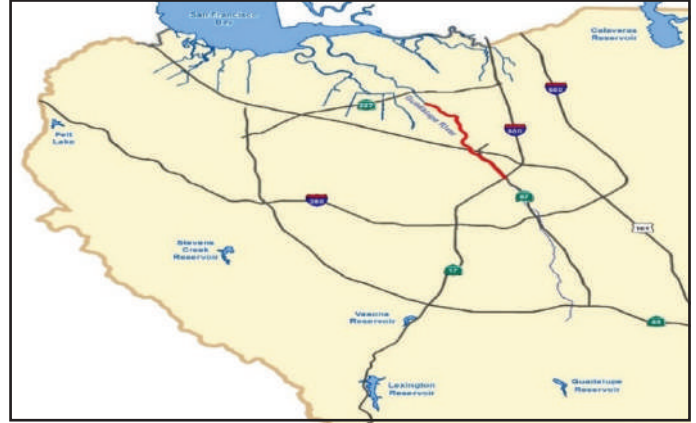
# Guadalupe Watershed



<b>PROJECT</b>	<b>Lower Guadalupe River Capacity Restoration Project</b>		
<b>PROGRAM</b>	Flood Protection – Guadalupe Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	30154019		byerrapotu@valleywater.org



East bank of the Guadalupe River, looking upstream toward Trimble Road



Location Map

 Project Location

## PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along the Guadalupe River from Tasman Drive to Interstate 880 to restore the 100-year flood conveyance capacity.

The project will accomplish the following objective:

- Restore designed level of service along a portion of the Guadalupe River to provide 1% flood protection

## OPERATING COST IMPACTS

Operating cost impacts will be determined during the design phase.

**USEFUL LIFE:** 100 Years

## SCHEDULE & STATUS

March 2019 to June 2030

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	5,308											
Design	10,335											
Construct	79,923											
Closeout	50											
<b>96,048</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
30154019-Lower Guadalupe River Capacity Restoration Project	3,991	2,964	3,120	3,000	3,000	27,407	26,283	26,283	96,048
with inflation	3,991	2,964	3,120	3,245	3,375	30,938	29,670	29,676	106,979
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
30154019-Lower Guadalupe River Capacity Restoration Project	5,613	1,341	0	3,121	3,245	3,375	30,938	29,670	29,676	106,979
Adjusted Budget includes adopted budget plus approved budget adjustments.										

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	106,979
Other Funding Sources	0
<b>Total</b>	<b>106,979</b>

## PROJECT      **Guadalupe River-Upper, Interstate 280 to Blossom Hill Road (E8)**

**PROGRAM**      Flood Protection - Guadalupe Watershed

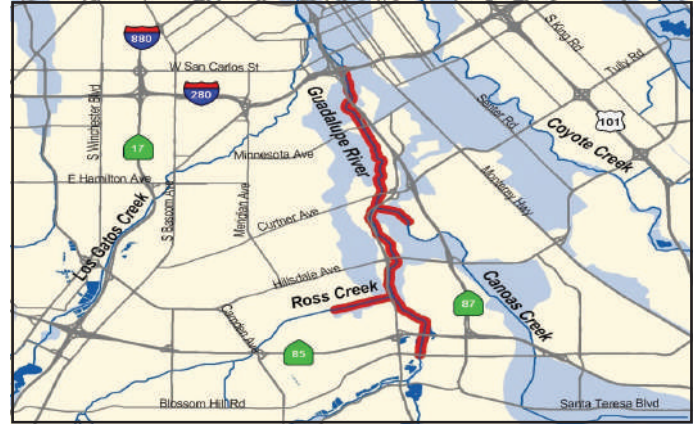
**CONTACT**      Bhavani Yerrapotu

**PROJECT NO.**      26154001s

byerrapotu@valleywater.org



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



Location Map

— Project Location  
— 1 Percent Floodplain

### 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 to provide 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).

### 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



## SCHEDULE & STATUS

September 1985 to June 2031

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	9,132											
Permits	3,211											
Design	77,274											
Construct	72,853											
Closeout	277											
<b>166,694</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods (E8)	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 -Reach 6 (E8)	34,721	160	166	30	160	200	1,480	535	37,453
with inflation	34,721	160	166	32	180	234	1,942	677	38,114
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. - Reaches 7-12 (E8)	69,121	314	104	8,725	22,940	16,000	1,500	0	118,703
with inflation	69,121	314	104	9,567	25,862	18,133	1,824	0	124,926
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>114,379</b>	<b>474</b>	<b>270</b>	<b>8,755</b>	<b>23,100</b>	<b>16,200</b>	<b>2,980</b>	<b>535</b>	<b>166,694</b>
<b>with inflation</b>	<b>114,379</b>	<b>474</b>	<b>270</b>	<b>9,599</b>	<b>26,043</b>	<b>18,368</b>	<b>3,767</b>	<b>677</b>	<b>173,578</b>
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods (E8)	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR -Reach 6 (E8)	35,421	0	540	0	0	0	73	1,942	677	38,114
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. - Reaches 7-12 (E8)	89,399	0	19,964	0	0	15,569	18,133	1,824	0	124,926
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
<b>TOTAL</b>	<b>135,358</b>	<b>0</b>	<b>20,505</b>	<b>0</b>	<b>0</b>	<b>15,569</b>	<b>18,206</b>	<b>3,767</b>	<b>677</b>	<b>173,578</b>
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	125,560
State of California	31,427
City of San José	4,591
<b>Total</b>	<b>173,578</b>



# Coyote Watershed



## PROJECT Berryessa Creek, Calaveras Boulevard to Interstate 680

**PROGRAM** Flood Protection - Coyote Watershed

**CONTACT** Bhavani Yerrapotu

**PROJECT NO.** 26174041s

byerrapotu@valleywater.org



Berryessa Creek near flood stage at Piedmont Road in San José



Location Map

— Project Location  
— 1 Percent Floodplain

### 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).

### OPERATING COST IMPACTS

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

**USEFUL LIFE:** 30+ Years

SCHEDULE & STATUS

January 2000 to June 2025

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	8,323											
Permits	1,877											
Design	14,022											
Construct	29,505											
Closeout	320											
54,415	Total project cost may include expenditures not yet allocated to a specific phase.											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
26174041-Berryessa Creek, USACE Coordination	24,075	12,565	104	0	0	0	0	0	36,745
with inflation	24,075	12,565	104	0	0	0	0	0	36,745
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	41,746	12,565	104	0	0	0	0	0	54,415
with inflation	41,746	12,565	104	0	0	0	0	0	54,415
Actuals include project expenditures and encumbrances.									

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
26174041-Berryessa Creek, USACE Coordination	35,594	1,146	100	4	0	0	0	0	0	36,745
26174042-Berryessa Creek, LERRDs	17,670	0	0	0	0	0	0	0	0	17,670
TOTAL	53,264	1,147	100	4	0	0	0	0	0	54,415
Adjusted Budget includes adopted budget plus approved budget adjustments.										

FUNDING SOURCES

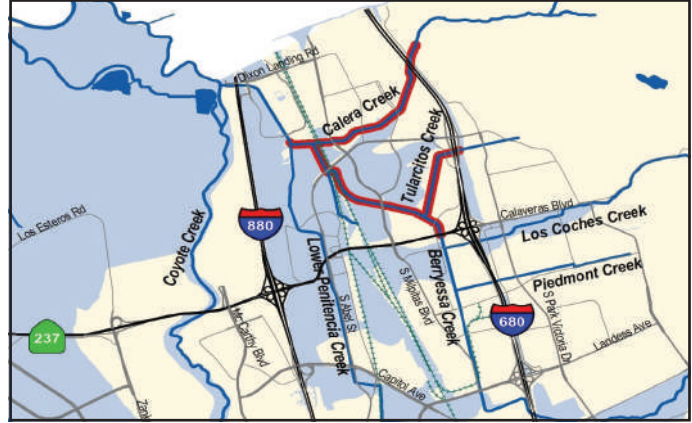
(in thousands \$)

SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	18,815
State of California	25,600
Department of Water Resources (Prop 1E)	10,000
Total	54,415
USACE In-kind Services	13,600

<b>PROJECT</b>	<b>Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard</b>		
<b>PROGRAM</b>	Flood Protection - Coyote Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	40174004s		byerrapotu@valleywater.org



Berryessa Creek upstream of the confluence with Lower Penitencia Creek



Location Map

— Project Location  
— 1 Percent Floodplain

## 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 is anticipated to be completed and closed by June 30, 2024.

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).

## OPERATING COST IMPACTS

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

**USEFUL LIFE:** 30+ Years

## SCHEDULE & STATUS

March 2001 to June 2041

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	7,957											
Permits	2,049											
Design	21,968											
Construct	133,731											
Closeout	120											
<b>166,695</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 1	46,897	5	0	0	0	0	0	0	46,902
with inflation	46,897	5	0	0	0	0	0	0	46,902
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 2	87,727	1,605	265	80	0	0	0	0	89,677
with inflation	87,727	1,605	265	87	0	0	0	0	89,684
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 3	0	0	0	0	0	0	0	24,967	24,967
with inflation	0	0	0	0	0	0	0	49,773	49,773
26C40420-Phase 3 Planning/Design only (E3)	0	0	0	0	0	0	0	5,150	5,150
with inflation	0	0	0	0	0	0	0	7,756	7,756
<b>TOTAL</b>	<b>134,624</b>	<b>1,610</b>	<b>265</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,117</b>	<b>166,695</b>
<b>with inflation</b>	<b>134,624</b>	<b>1,610</b>	<b>265</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57,529</b>	<b>194,114</b>

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 1	48,591	0	1,690	0	0	0	0	0	0	48,591
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 2	89,087	342	97	168	87	0	0	0	0	89,684
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard, Phase 3	0	0	0	0	0	0	0	0	49,773	49,773
26C40420-Phase 3 Planning/Design only (E3)	0	0	0	0	0	0	0	0	7,756	7,756
TOTAL	137,678	342	1,787	168	87	0	0	0	57,529	195,804
Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately \$1,690,000. Excess funds will be returned to Fund Reserves at the close of the project.										

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	180,804
SCVWD Safe, Clean Water Fund	7,756
Department of Water Resources (Prop 1E)	15,000
<b>Total</b>	<b>195,804</b>



## PROJECT Coyote Creek, Montague Expressway to Tully Road (E1)

**PROGRAM** Flood Protection – Coyote Watershed

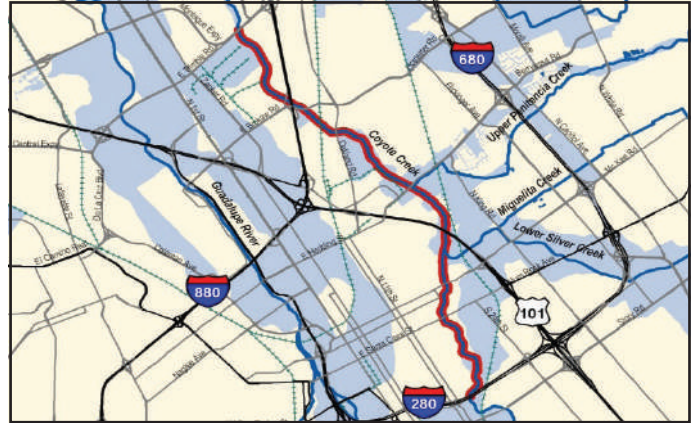
**CONTACT** Bhavani Yerrapotu

**PROJECT NO.** 26174043

byerrapotu@valleywater.org



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



Location Map

— Project Location

### 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:

- Reduce the risk of flooding to homes, schools, businesses, and highways from 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).

### 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

## SCHEDULE & STATUS

November 2017 to June 2031

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	9,985											
Permits	1,395											
Design	25,531											
Construct	160,790											
Closeout	106											
<b>198,324</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future		
26174043-Coyote Creek, Montague Expressway to Tully Road (E1)	21,447	7,888	16,065	84,200	65,602	2,694	30	400		198,324
with inflation	21,447	7,888	16,065	94,496	77,484	3,195	36	521		221,131
Actuals include project expenditures and encumbrances.										

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
26174043-Coyote Creek, Montague Expressway to Tully Road (E1)	25,230	4,104	0	16,065	94,496	77,484	3,195	36	521	221,131
Adjusted Budget includes adopted budget, plus a budget adjustment for \$2,500,000.										

## FUNDING SOURCES

(in thousands \$)

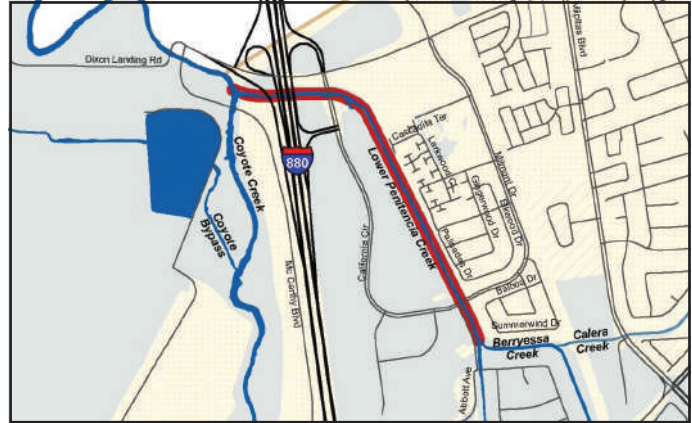
SCVWD Clean, Safe Creeks and Safe, Clean Water and Natural Flood Protection Fund	221,131
Other Funding Sources	0
<b>Total</b>	<b>221,131</b>
Valley Water estimates total WIFIA debt service payment for the eligible SCW projects would be \$146,700,000 in principal, plus \$227,300,000 in interest, for a total of \$374,000,000 with final payoff of the loan occurring in 2062. The Coyote Creek Flood Protection Project represents approximately 71% of the total WIFIA program.	



<b>PROJECT</b>	<b>Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek</b>		
<b>PROGRAM</b>	Flood Protection - Coyote Watershed	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	40334005		byerrapotu@valleywater.org



Milmont Road to California Circle (Midstream Right Bank)



Location Map

— Project Location  
 1 Percent Floodplain

## 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

## 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

SCHEDULE & STATUS

October 2010 to December 2026

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	3,576											
Permits	992											
Design	6,799											
Construct	24,112											
Closeout	20											
35,509	Total project cost may include expenditures not yet allocated to a specific phase.											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
40334005-Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek	34,752	465	144	129	20	0	0	0	35,509
with inflation	34,752	465	144	140	22	0	0	0	35,522
Actuals include project expenditures and encumbrances.									

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
40334005-Lower Penitencia Creek Improvements, Coyote Creek to Berryessa Creek	34,869	525	177	0	107	22	0	0	0	35,522
Adjusted Budget includes adopted budget, plus a budget adjustment of \$450,000.										

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	30,522
Department of Water Resources (Prop 1E)	5,000
City of Milpitas	314
Total	35,522

## PROJECT Upper Penitencia Creek, Coyote Creek to Dorel Drive (E4)

**PROGRAM** Flood Protection - Coyote Watershed

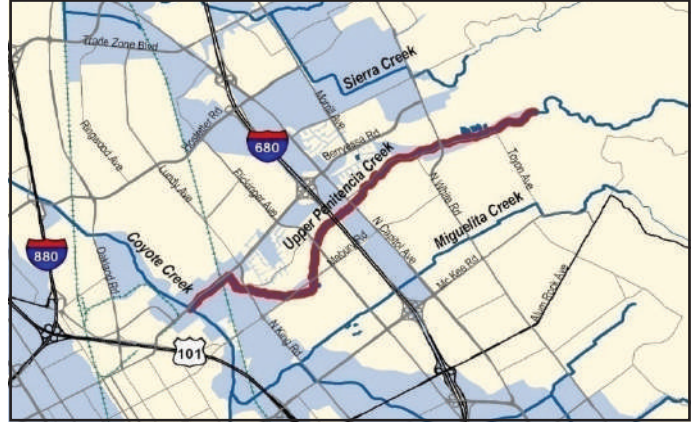
**CONTACT** Bhavani Yerrapotu

**PROJECT NO.** 40324003s

byerrapotu@valleywater.org



Flooding at King Road on Upper Penitencia Creek



Location Map

### 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).

### 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

## SCHEDULE & STATUS

July 2000 to May 2027

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	8,891											
Permits	1,319											
Design	11,550											
Construct	1,480											
Closeout												
	<b>23,569</b>	Total project cost may include expenditures not yet allocated to a specific phase.										

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	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 (E4)	2,999	2,418	3,442	1,500	1,435	0	0	0	11,793
with inflation	2,999	2,418	3,442	1,622	1,614	0	0	0	12,095
<b>TOTAL</b>	<b>14,775</b>	<b>2,418</b>	<b>3,442</b>	<b>1,500</b>	<b>1,435</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,569</b>
with inflation	14,775	2,418	3,442	1,622	1,614	0	0	0	23,871

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	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 (E4)	11,253	0	5,836	0	0	842	0	0	0	12,095
<b>TOTAL</b>	<b>23,029</b>	<b>0</b>	<b>5,836</b>	<b>0</b>	<b>0</b>	<b>842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,871</b>

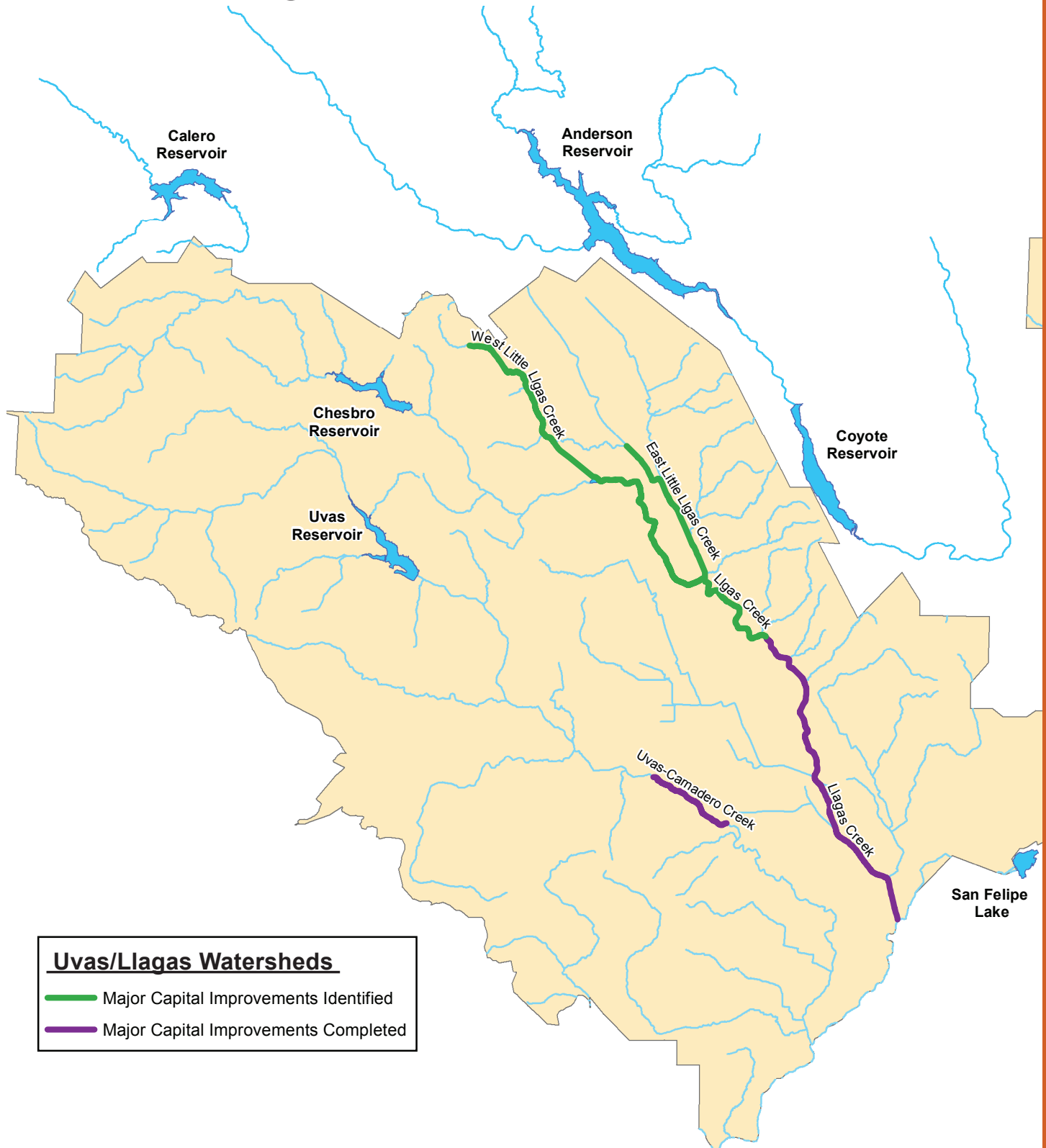
Adjusted Budget includes adopted budget plus approved budget adjustments.

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	11,776
SCVWD Safe, Clean Water Fund	12,095
<b>Total</b>	<b>23,871</b>
Valley Water estimates total WIFIA debt service payment for the eligible SCW projects would be \$146,700,000 in principal, plus \$227,300,000 in interest, for a total of \$374,000,000 with final payoff of the loan occurring in 2062. The Upper Penitencia Creek Project represents approximately 8% of the total WIFIA program.	

# Uvas/Llagas Watersheds

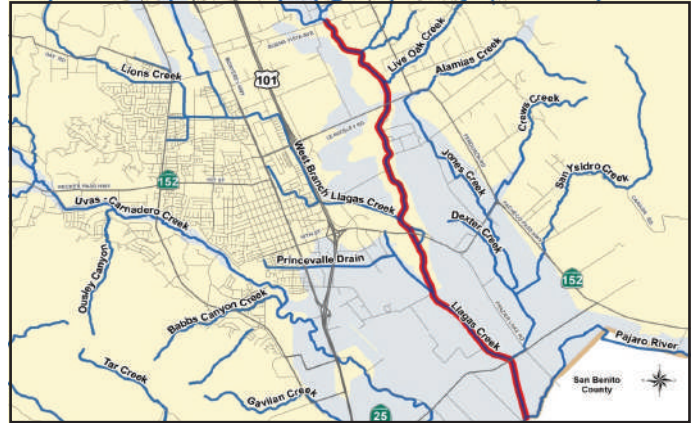




<b>PROJECT</b>	<b>Llagas Creek-Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River</b>		
<b>PROGRAM</b>	Flood Protection - Uvas/Llagas Watersheds	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	50284010		byerrapotu@valleywater.org



Lower Llagas Creek near the Pajaro River



Location Map

— Project Location  
 1 Percent Floodplain

## 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

On August 4, 2023, Governor Newsom issued Executive Order N-10-231 which applies to the Pajaro River and tributaries in response to the flooding that occurred in January 2023. The executive order (EO) suspends certain permitting requirements for activities related to vegetation management. As part of this project, and in response to the EO, Valley Water removed several acres of vegetation along Lower Llagas Creek to partially restore capacity of the channel. Additional improvements will be needed to fully restore capacity, however this initial vegetation removal work significantly reduced the need for future improvements. In addition, at the January 9, 2024 Board meeting, this project was added to the unfunded list, therefore, expenditures in FY25 and beyond will be removed.

## OPERATING COST IMPACTS

Operating cost impacts will be determined at the completion of the project.

**USEFUL LIFE:** 50+ Years

SCHEDULE & STATUS

March 2006 to June 2024

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	4,514											
Permits	287											
Design	233											
Construct	1,900											
Closeout												
6,947	Total project cost may include expenditures not yet allocated to a specific phase.											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
50284010-Llagas Creek-Lower, Capacity Restoration, Buena Vista Ave to Pajaro River	3,861	3,086	0	0	0	0	0	0	6,947
with inflation	3,861	3,086	0	0	0	0	0	0	6,947
Actuals include project expenditures and encumbrances.									

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
50284010-Llagas Creek-Lower, Capacity Restoration, Buena Vista Ave to Pajaro River	6,947	0	0	0	0	0	0	0	0	6,947
Adjusted Budget includes adopted budget plus approved budget adjustments.										

FUNDING SOURCES

(in thousands \$)

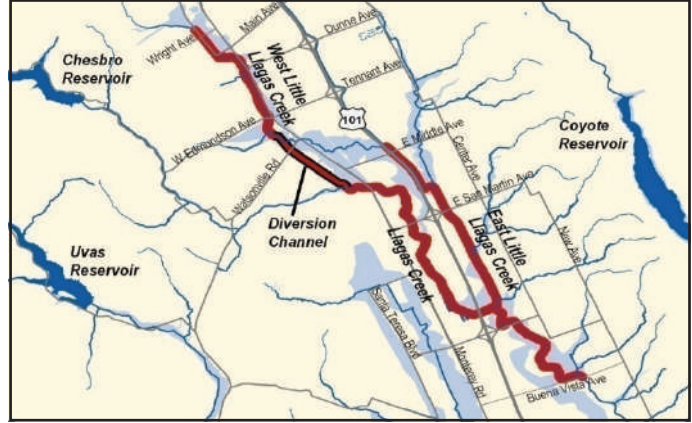
SCVWD Watershed Stream Stewardship Fund	6,827
State of California	120
Total	6,947



<b>PROJECT</b>	<b>Llagas Creek-Upper, Buena Vista Avenue to Llagas Road (E6)</b>	
<b>PROGRAM</b>	Flood Protection - Uvas/Llagas Watershed	<b>CONTACT</b> Bhavani Yerrapotu
<b>PROJECT NO.</b>	26174051s	byerrapotu@valleywater.org



Llagas Creek floods at Watsonville Road and the surrounding area



Location Map

## 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% flood event 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).

## 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

## SCHEDULE & STATUS

July 2000 to June 2027

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	3,732											
Permits	8,475											
Design	73,249											
Construct	164,962											
Closeout	621											
<b>251,450</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
26174051-Llagas Ck—Upper, LERRDs (E6)	46,402	2,707	520	500	20	0	0	0	50,148
with inflation	46,402	2,707	520	541	22	0	0	0	50,192
26174052-Llagas Ck—Upper, USACE Coordination (E6)	148,247	19,265	5,179	251	0	0	0	0	172,943
with inflation	148,247	19,265	5,179	272	0	0	0	0	172,963
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 (E6)	22,709	2,060	1,195	949	0	0	0	0	26,913
with inflation	22,709	2,060	1,195	1,026	0	0	0	0	26,990
26174055-Llagas Ck—Upper, Phase 2B Construction (E6)	0	22,400	56,000	10,000	0	0	0	0	88,400
with inflation	0	22,400	56,000	11,200	0	0	0	0	89,600
<b>TOTAL</b>	<b>218,804</b>	<b>24,032</b>	<b>6,894</b>	<b>1,700</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>251,450</b>
<b>with inflation</b>	<b>218,804</b>	<b>46,432</b>	<b>62,894</b>	<b>13,038</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>341,190</b>

Actuals include project expenditures and encumbrances.

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
26174051-Llagas Ck—Upper, LERRDs (E6)	48,088	2,022	1,000	0	61	22	0	0	0	50,192
26174052-Llagas Ck—Upper, USACE Coordination (E6)	170,056	0	2,543	2,636	272	0	0	0	0	172,963
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design (E6)	28,193	0	3,424	0	0	0	0	0	0	28,193
26174055-Llagas Ck—Upper, Phase 2B Construction (E6)	0	22,400	0	56,000	11,200	0	0	0	0	89,600
<b>TOTAL</b>	<b>247,782</b>	<b>24,422</b>	<b>6,967</b>	<b>58,636</b>	<b>11,532</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>342,393</b>

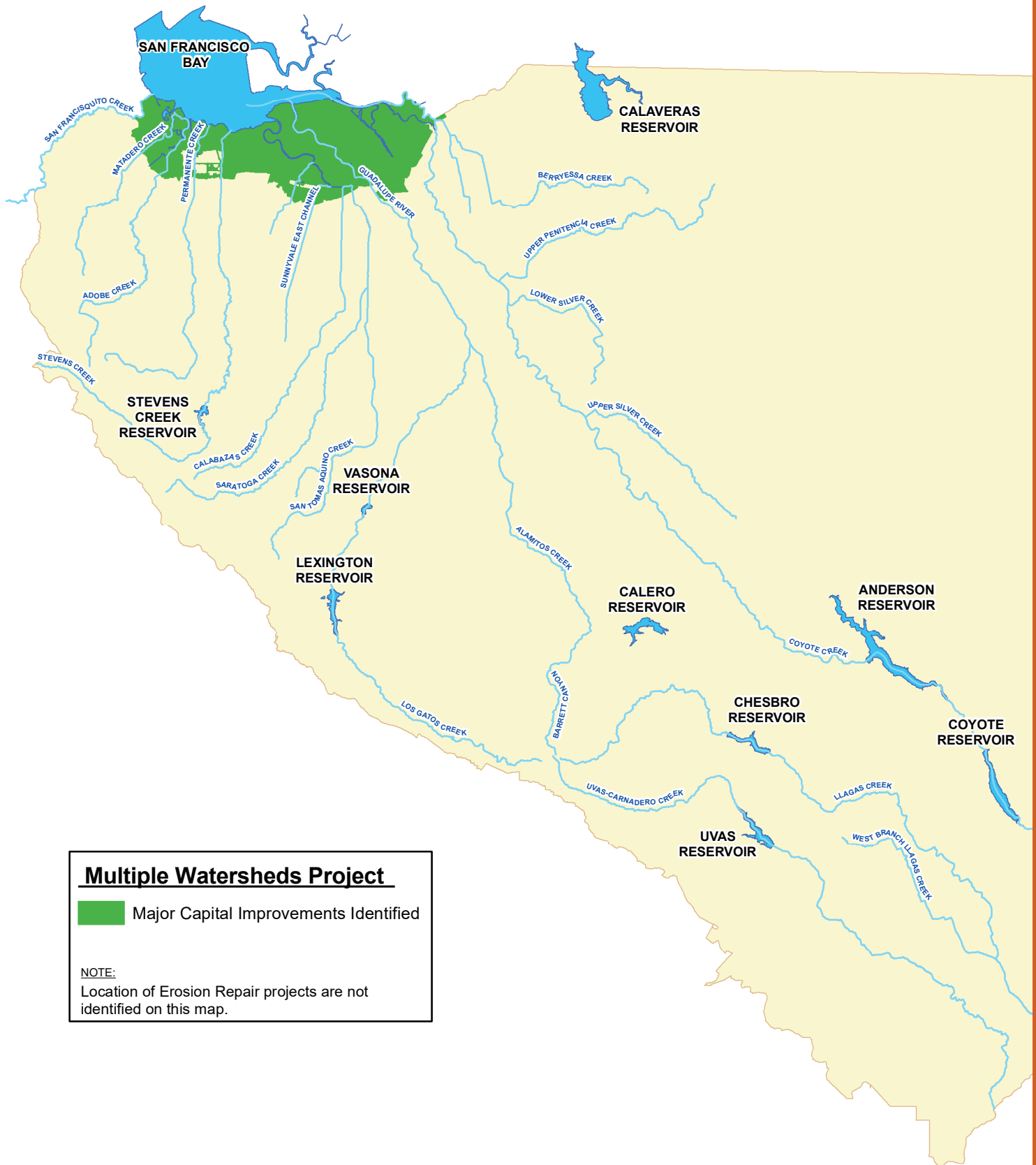
Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately \$1,203,000. Excess funding will be returned to reserves upon project completion.

## FUNDING SOURCES


(in thousands \$)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe, Clean Water Fund	179,217
SCVWD Watershed Stream Stewardship Fund	23,690
State of California	36,068
City of Morgan Hill	4,315
NRCS Grants (Unsecured)	80,000
<b>Total</b>	<b>341,190</b>
USACE In-kind Services	65,000

# Multiple Watersheds



## Multiple Watersheds Project

 Major Capital Improvements Identified

### NOTE:

Location of Erosion Repair projects are not identified on this map.



## SCHEDULE & STATUS

July 2005 to June 2029

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	22,201											
Permits	1,721											
Design	39,872											
Construct	109,779											
Closeout	201											
<b>174,771</b>	Total project cost may include expenditures not yet allocated to a specific phase.											

## EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures							Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future	
00044026-San Francisco Bay Shoreline	88,010	13,297	52	14,149	0	0	0	0	115,508
with inflation	88,010	13,297	52	15,965	0	0	0	0	117,324
10044027 - San Francisco Bay Shoreline - Contribution	490	0	0	0	0	0	0	0	490
with inflation	490	0	0	0	0	0	0	0	490
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 (E7)	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 (E7)	5,161	4,952	1,025	5,200	5,241	5,200	0	0	26,779
with inflation	5,161	4,952	1,025	5,624	5,895	6,083	0	0	28,740
26444004-EIAs 5-9 (E7)	200	2,250	1,750	775	3,095	3,025	3,025	0	14,120
with inflation	200	2,250	1,750	838	3,481	3,539	3,680	0	15,739
<b>TOTAL</b>	<b>111,736</b>	<b>20,499</b>	<b>2,827</b>	<b>20,124</b>	<b>8,336</b>	<b>8,225</b>	<b>3,025</b>	<b>0</b>	<b>174,771</b>
<b>with inflation</b>	<b>111,736</b>	<b>20,499</b>	<b>2,827</b>	<b>22,428</b>	<b>9,377</b>	<b>9,622</b>	<b>3,680</b>	<b>0</b>	<b>180,168</b>
Actuals include project expenditures and encumbrances.									

## FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
00044026-San Francisco Bay Shoreline	98,510	2,796	-0	52	15,965	0	0	0	0	117,324
10044027 - San Francisco Bay Shoreline - Contribution	490	0	0	0	0	0	0	0	0	490
62044042-Shoreline, Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11, Design & Partial Construction (E7)	17,516	0	0	0	0	0	0	0	0	17,516
26444002-EIAs 1-4 (E7)	7,406	2,707	0	1,025	5,624	5,895	6,083	0	0	28,740
26444004-EIAs 5-9 (E7)	2,090	1,045	685	1,065	838	3,481	3,539	3,680	0	15,739
<b>TOTAL</b>	<b>126,371</b>	<b>6,548</b>	<b>685</b>	<b>2,142</b>	<b>22,428</b>	<b>9,377</b>	<b>9,622</b>	<b>3,680</b>	<b>0</b>	<b>180,168</b>
Adjusted Budget includes adopted budget plus approved budget adjustments.										

## FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	46,322
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	61,995
California Department of Water Resources	420
SFBRA Measure AA (Grant)	61,079
SFBRA Measure AA (Ballot Reimbursement)	831
State of California	8,000
<b>Total</b>	<b>180,168</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
Total Partnership Funding for In-kind Services	91,250



<b>PROJECT</b>	<b>Small Capital Improvements, Watersheds Asset Rehabilitation Program (WARP)</b>		
<b>PROGRAM</b>	Flood Protection - Multiple Watersheds	<b>CONTACT</b>	Bhavani Yerrapotu
<b>PROJECT NO.</b>	62084001		byerrapotu@valleywater.org



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



Location Map

★ Project Location

## PROJECT DESCRIPTION

This project provides resources for the restoration of small capital investments to preserve or extend the life of assets within watersheds. This will repair or rehabilitate various features within watersheds to ensure facilities are functioning as intended, ensuring design level of flood protection, removal of impediments to fish passage and geomorphic stability of creeks and waterways to minimize sediment loading and creek erosion. To streamline the implementation process, most of the projects are planned to be executed using Valley Water's current Stream Maintenance Program's approved regulatory permits.

The repair work consists of, but is not limited to:

- Creek erosion repair using rock riprap and steel piles
- Remediation of eroded earthen slopes using natural alternative treatments, where possible
- Levee rehabilitation impacted by animal intrusion and soil degradation
- Rehabilitation of fish passage facilities
- Geomorphic channel restoration with bed and bank repair
- Storm outfall restoration and repair
- Minor concrete repair to restore stream function of existing concrete channels
- Board-approved Emergency Repairs

## 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 Applicable



SCHEDULE & STATUS

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

Phase	Cost	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Plan	5,197											
Permits	8,698											
Design	23,299											
Construct	136,372											
Closeout	620											
228,767	Total project cost may include expenditures not yet allocated to a specific phase.											

EXPENDITURE SCHEDULE

(in thousands \$)

	Actuals Thru	Planned Expenditures								Total
Project	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Future		
62084001-Small Capital Improvements, Watersheds Asset Rehabilitation Program (WARP)	57,004	13,124	19,679	15,800	8,100	8,100	8,100	98,861		228,767
with inflation	57,004	13,124	19,679	17,550	9,511	10,000	10,476	167,062		304,405
Actuals include project expenditures and encumbrances.										

FUNDING SCHEDULE

(in thousands \$)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY23	FY24		FY25	FY26	FY27	FY28	FY29	Future	
62084001-Small Capital Improvements, Watersheds Asset Rehabilitation Program (WARP)	57,014	13,115	0	19,679	17,550	9,511	10,000	10,476	167,062	304,405
Adjusted Budget includes adopted budget, plus a planned budget adjustment of \$4,732,000.										

FUNDING SOURCES

(in thousands \$)

SCVWD Watershed Stream Stewardship Fund	304,405
City of Palo Alto (Matadero Creek)	442
Total	304,405