

# DRAFT



## Draft Community Preferred Program Report

**JUNE 2020**



**Valley Water**

Clean Water • Healthy Environment • Flood Protection



Left to right: Tony Estremera representing District 6; Richard P. Santos representing District 3; John L. Varela representing District 1; Gary Kremen representing District 7; Barbara Keegan representing District 2; Nai Hsueh representing District 5; Linda J. LeZotte representing District 4

## Board of Directors

**John L. Varela**, District 1

**Barbara Keegan**, District 2

**Richard P. Santos**, District 3

**Linda J. LeZotte**, District 4

**Nai Hsueh**, District 5

**Tony Estremera**, District 6

**Gary Kremen**, District 7

## About Valley Water

Valley Water (also known as Santa Clara Valley Water District) is a public agency that manages an integrated water resources system that includes the supply of safe, clean water, flood protection, and environmental stewardship on behalf of Santa Clara County's 2 million residents. Valley Water effectively manages 10 dams and surface water reservoirs, three water treatment plants, an advanced recycled water purification center, a state-of-the-art water quality laboratory, and nearly 400 acres of groundwater recharge ponds, providing wholesale water and groundwater management services to local municipalities and private water retailers who deliver drinking water to homes and businesses.

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

# Letter from the CEO



*"We take pride in this work, which has been greatly aided by the local funding provided by the 2012 Safe, Clean Water and Natural Flood Protection Program."*

As I write this letter, we are sheltering in place trying to stay safe during a pandemic. Yet, just a few months ago we were out and about, moving around freely, and conducting business as usual. I think it's safe to say we won't be returning to the way things were very soon. But during these uncertain times and as we move into a new normal, you can count on the people behind your water.

Valley Water is working hard to provide safe, clean water and flood protection to the people and businesses of Santa Clara County while caring for the environment.

We take pride in the work we do for the community, which has been greatly aided by the local funding provided by the 2012 Safe, Clean Water and Natural Flood Protection Program (2012 Safe, Clean Water Program). From securing the supply of safe, clean water during an unprecedented drought to providing flood protection and dealing with aging infrastructure while restoring habitat and preventing pollution from contaminating our waterways, the 2012 Safe, Clean Water Program has been the key to meeting the county's water needs.

All projects Valley Water committed to in the 2012 Safe, Clean Water Program are currently on track to meet or exceed the performance measures. This includes the completion of the Main Avenue and Madrone Pipelines Restoration Project to increase South County groundwater recharge and maximize imported water supplies to drinking water treatment plants in North County, along with: providing 50 new drinking water bottle refill stations to schools; removing more than 6,642 tons of trash along local streams; awarding nearly \$13 million in grants and partnerships to support a variety of programs such as restoring stream habitats, pollution prevention, environmental education, and trails and open space; revitalizing 63 acres—three times the 2012 Safe, Clean Water Program goal; and conducting an average of 417 annual encampment cleanups since 2014—about eight times more than the 2012 Safe, Clean Water Program goal. We have also completed the Berryessa Creek Flood Protection Project, while beginning construction and making significant progress on the Permanente Creek, San Francisquito Creek and Upper Llagas Creek flood protection projects.

As with all long-term projects, times change, and unforeseen and unpredicted challenges will always arise. Challenges we predicted, and could have never predicted, include a growing population, uncertain imported water supplies, climate change, more frequent natural disasters, an infrastructure that continues to age, ongoing operations and maintenance, and increasing cost of mitigation.

If as a community we want to collectively meet these challenges and ensure a reliable water supply into the future, Valley Water must refresh and renew our 2012 Safe, Clean Water Program to bring it once again into alignment with our community needs and priorities.

To ensure the proposed Safe, Clean Water Program renewal reflects community needs and priorities while balancing the diverse interests of stakeholders to the furthest extent possible, we conducted a wide-reaching public engagement effort. Using a wide array of outreach tools and techniques, we engaged over 16,000 residents, businesses, employees, community organizations and other key stakeholders during an intensive six-month process.

This engagement has resulted in a proposed draft community-preferred program report with six top community priorities:

- **Priority A:** Ensure a Safe, Reliable Water Supply
- **Priority B:** Reduce Toxins, Hazards and Contaminants in our Waterways
- **Priority C:** Protect our Water Supply and Dams from Earthquakes and Other Natural Disasters
- **Priority D:** Restore Wildlife Habitat and Provide Open Space Access
- **Priority E:** Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways
- **Priority F:** Support Public Health and Public Safety for Our Community

To ensure transparency, accountability and fiscal responsibility, the proposed Safe, Clean Water Program renewal will continue to be monitored by an external independent monitoring committee (IMC), which is an external citizen oversight committee. The proposed Safe, Clean Water Program renewal would also require independent audits every five years, and a change control process, which requires all adjustments be made by the Board of Directors during a public board meeting. Modifications to key performance indicators (KPIs) or decisions to not implement a project would require a public hearing. Five-Year Implementation Plans will also be developed to serve as checkpoints during implementation of the proposed Safe, Clean Water Program renewal.

In addition to forward looking plans, each year Valley Water will produce an annual report, which looks back on the prior fiscal year and reports on each project's expenditures and progress towards delivery of its KPIs. Those annual reports will be reviewed by the IMC, which will make recommendations to the Board regarding any program adjustments or modifications that may be required. Finally, the funding renewal would also continue exemptions for low-income seniors.

If approved by voters, the updated and enhanced Safe, Clean Water Program would act as a road map to providing safe, clean water and natural flood protection to Santa Clara County most effectively and responsibly and its renewal will ensure that in our ever-changing world, the services that Valley Water delivers will remain constant and consistent with the community's priorities.

*"This updated and enhanced Safe, Clean Water Program would act as a road map to providing safe, clean water and natural flood protection to Santa Clara County most effectively and responsibly and its renewal will ensure that in our ever-changing world, the services that Valley Water delivers will remain constant and consistent with the community's priorities."*



Rick L. Callender  
Chief Executive Officer  
Santa Clara Valley Water District





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# Executive Summary

# Executive Summary

## SAFE, CLEAN WATER PROGRAM OVERVIEW

- Proposed renewal of existing Safe, Clean Water Program to ensure continued local funding for vital projects benefitting the community
- Updates existing projects and adds new projects to address changing conditions and align with the community's needs
- Adds a new priority to better reflect what is important to the community
- Continues independent monitoring of the proposed Safe, Clean Water Program with all expenditures published annually and external independent audits
- Maintains current parcel tax rate
- Based on input from thousands of county residents and stakeholders

## Overview

Valley Water's mission is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy. Supporting this mission is the draft community-preferred program developed to provide an updated and enhanced Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program). This proposed Safe, Clean Water Program renewal continues to ensure a safe, reliable water supply; protect water supply infrastructure from earthquakes and natural disasters; and repair and replace aging infrastructure, such as dams, pipelines and reservoirs. The updated Safe, Clean Water Program would also help to reduce toxins, hazards and contaminants in our waterways; restore wildlife habitat and provide access to open space; and protect our residents and businesses from flooding while supporting the public health and public safety of our community and addressing climate change.

The proposed Safe, Clean Water Program renewal builds upon and, if approved by voters, would replace the existing 2012 Safe, Clean Water Program that is funded by a special parcel tax that voters approved overwhelmingly by 74% in 2012. All projects funded by the current special parcel tax are on track to meet the performance measures, known as key performance indicators (KPIs), and a few have exceeded those measures.

As Valley Water has implemented the 2012 Safe, Clean Water Program since its inception, a series of emerging challenges and changes have occurred, affecting the community's needs as they relate to water resources. Our county's population is burgeoning. Climate change, more frequent natural disasters and uncertain imported water supplies go hand-in-hand. Our infrastructure continues to age. We are experiencing more delays in regulatory permitting, and ongoing operations, maintenance and environmental mitigation of projects come with ongoing costs. All these situations combine to create

challenges in continuing to provide safe, clean drinking water, as well as flood protection and environmental stewardship on behalf of the community. Addressing these challenges and meeting future water needs requires realigning and expanding upon the 2012 Safe, Clean Water Program and renewing it.

To develop this newly proposed Safe, Clean Water Program, Valley Water conducted an extensive outreach effort engaging thousands of community members and stakeholders. The outreach tools include a dedicated Safe, Clean Water website; online community surveys that were conducted in English, Spanish, Vietnamese and Chinese and received more than 15,000 responses; more than 75 in-person and virtual presentations reaching more than 1,000 residents; telephone town halls and webinars; and a Blue-Ribbon Forum for stakeholders and community leaders.

There are several key themes that staff heard from numerous stakeholder meetings, including the Blue-Ribbon Forum and other community feedback received to date that has helped shape certain elements within the proposed Safe, Clean Water Program renewal. These concepts include: keeping the proposed community-preferred program flexible enough to adapt to emerging challenges or situations that arise, while planning for long-term needs; protecting and ensuring water supply reliability, repairing aging infrastructure, bolstering resources for long-term maintenance, operations and mitigation needs; supporting more multi-benefit projects

and incorporating climate change adaptation strategies across projects; supporting trash and homeless encampment cleanups; expanding grant funding for hydration stations, water conservation grants, pollution prevention, and wildlife habitat/open space, as well as streamlining and providing increased access to smaller organizations, technology start-ups and individuals; continuing support for environmental stewardship, habitat restoration; and supporting flood protection projects to protect communities from flooding.

The result of this six-month public engagement effort is a draft community-preferred program that looks to update and enhance the Safe, Clean Water Program, which is the basis of this report.

The proposed Safe, Clean Water Program renewal would continue to honor prior commitments made under the 2012 Safe, Clean Water Program in carrying forward all active projects and meeting associated KPIs. It would continue the current five priorities and proposes to add a sixth new priority based on community input and feedback gathered. Below is a summary list of the six priorities, with an emphasis on key efforts that are now enhanced or new under each priority, building upon existing projects slated to continue.

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### Priority A: Ensure a Safe, Reliable Water Supply

Priority A projects will upgrade aging water infrastructure, such as dams, pipelines and water storage and treatment systems, to reduce the risk of water outages. In addition to carrying forward existing projects, it would contain two new

projects, including the Pacheco Reservoir Expansion Project to increase water storage to provide more security for our drinking water supplies in emergencies and through the effects of climate change. The other new project is to provide water conservation rebates and programs to increase water-use efficiency and ensure sustainability for drinking water supplies throughout the county.

### Priority B: Reduce Toxins, Hazards and Contaminants in our Waterways

Priority B projects use multiple strategies to reduce and remove contaminants in our local creeks, streams and bays. Along with mercury treatment systems in our reservoirs, projects under this priority prevent toxins from entering waterways by working with municipalities and other agencies across the region to reduce runoff pollution. In addition to carrying forward existing projects, the priority would include funding to support the implementation of green stormwater infrastructure. It would also continue projects to provide rapid emergency response to hazardous materials spills, as well as to support public education and volunteer cleanup efforts.

### Priority C: Protect our Water Supply and Dams from Earthquakes and Other Natural Disasters

Priority C projects help protect our drinking water supply and water quality infrastructure from natural disasters, such as earthquakes. This priority provides partial funding to retrofit Anderson Dam so that it can safely withstand a large earthquake. Known as the Anderson Dam Seismic Retrofit Project, the project would continue to ensure public safety and secure a reliable water supply.





## Priority D: Restore Wildlife Habitat and Provide Open Space Access

Priority D projects restore and protect wildlife habitat. Work under this priority includes controlling non-native, invasive plants; replanting native species; and maintaining previously replanted areas. Other projects include removing barriers to fish movement, improving steelhead habitat and stabilizing eroded creek banks. Under this priority, projects supporting riparian planting and invasive plant removal, fish passage and fish habitat improvements would be enhanced with additional funding.

To support restoration projects, Valley Water would continue to build and update a comprehensive watershed database that tracks stream ecosystem conditions helping Valley Water and other organizations make informed watershed, asset management and natural resource decisions.

## Priority E: Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways

Priority E focuses on providing flood protection through major capital construction projects. Projects are prioritized to protect the largest number of people, homes and businesses, as well as safeguard the highways, streets, public transportation and business centers that people depend on for their livelihoods. In addition to continuing the existing flood protection projects, some of them with enhanced funding, this priority would now include the Lower Berryessa Creek Flood Protection Project.

Almost all the construction projects under this priority include a preferred project that relies on state and federal government funding and a local funding only project. Should federal funding become scarce, Valley Water would reduce the project scope to the local-funding only project, as described in the individual project summaries. Whenever possible, Valley Water also leverages funds from state, local municipalities and other stakeholders.

## Priority F: Support Public Health and Public Safety for Our Community

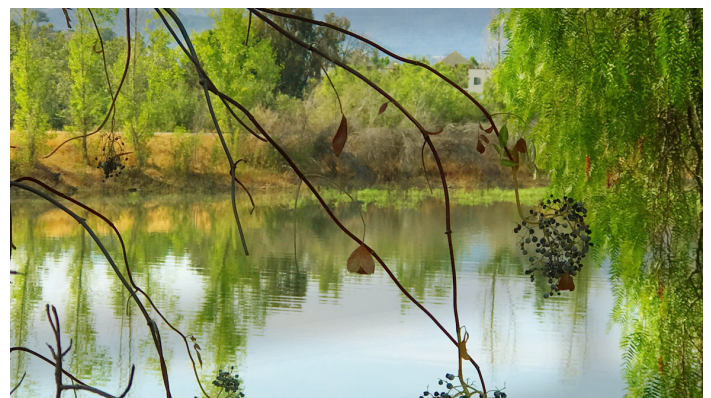
With the advent of the COVID-19 pandemic that drastically changed the world, the critical need for safe, clean water supplies and essential water infrastructure, particularly during emergencies, has come into sharper focus. This newly proposed priority pulls together multi-benefit projects that were previously placed under other priorities in the 2012 Safe, Clean Water Program and groups them based on their

*With the advent of the COVID-19 pandemic that drastically changed the world, the critical need for safe, clean water supplies and essential water infrastructure, particularly during emergencies, has come into sharper focus.*

common benefit of supporting public health and public safety along our waterways and critical infrastructure.

This priority would include enhanced funding to support public safety by partnering with local municipalities to increase park ranger and police patrols along waterways; reducing trash and other pollutants from entering waterways from encampments to support public health; and ongoing vegetation control and sediment removal activities to maintain conveyance capacity of flood protection projects. It would also provide additional funding for grants and partnerships for local agencies, organizations and individuals for water conservation, pollution prevention, creek cleanups and education, wildlife habitat restoration, and access to trails and open space.

Additionally, it would include two newly proposed efforts: a project to fund public art to beautify Valley Water property and infrastructure to deter graffiti and litter, and a long-term effort to ensure that existing flood protection infrastructure continues to function sustainably for continued public safety. Other projects would include vegetation management for access and fire safety, removing flood-inducing blockages, and improving coordination and communication in flood emergencies.



Above: Valley Water headquarters view from across a groundwater recharge pond. Left: An egret takes flight surrounded by mallards.

# Funding Safe, Clean Water: Transitioning from the old program

Beginning with the previous 2000 Clean, Safe Creeks and Natural Flood Protection Plan and leading to the passage of the current 2012 Safe, Clean Water Program, the continuous need for such a multi-benefit, community-preferred measure has never been more evident than today. Longer-term solutions for both existing and emerging challenges in providing safe, clean drinking water, natural flood protection and environmental stewardship to the community could be better met with a realigned and updated program that provides ongoing local funding for community-preferred projects.

If voters approve renewing the existing tax measure, the updated Safe, Clean Water Program would replace in its entirety the 2012 Safe, Clean Water Program. Passage of the updated Safe, Clean Water Program would extend the current annual parcel tax that allows Valley Water to deliver the existing and new projects that our community values beginning in fiscal year 2022. If approved, the proposed Safe, Clean Water Program renewal would remain active until repealed by voters.

Any existing funds collected under the current 2012 Safe, Clean Water Program would be used to continue corresponding projects under the proposed Safe, Clean Water Program renewal. And since this would be an extension of the 2012 Safe, Clean Water Program, the parcel taxes will be assessed using the same rate structure and include exemptions for qualifying low-income seniors.

If voters approve, the renewed and replaced voter-approved parcel tax would fund the Safe, Clean Water Program as a community-preferred program, which includes carrying forward existing projects plus the addition of enhanced and new projects.

Approximately \$45.5 million is expected to be collected annually, amounting to approximately \$682.5 million in 2020 dollars over the first 15 years of this new program. In addition, the Board of Directors reserves the right to vote on an annual escalator to adjust for inflation; additional details may be found in the Resolution (Appendix A).



*2012 Safe, Clean Water Program - Construction of Rancho San Antonio detention basin, which is part of the Permanente Creek Flood Protection Project.*

## Financing the Program

A combination of debt financing and pay-as-you-go funding would pay for capital projects. Debt financing will provide upfront funding for Safe Clean Water capital projects that would otherwise be delayed until tax revenues were accumulated.

## Accountability and Transparency

As with the 2012 Safe, Clean Water Program, the Valley Water Board would appoint an Independent Monitoring Committee (IMC) to track the progress of the proposed Safe, Clean Water Program to ensure transparency and accountability. Additionally, to provide transparency of all activities to the public, the renewed Safe, Clean Water Program would require an external, independent audit every five years, an annual rate-setting report, an annual report of project expenditures and progress towards meeting KPIs, and 5-year implementation plans. All IMC, staff and auditor reports would be available for public viewing. In compliance with a change control process, any update or changes to the proposed Safe, Clean Water Program would be made in publicly noticed meetings or public hearings, which are also streamed live on Valley Water's website.

# Background



# Background

## Timeline

2000

Santa Clara County voters approved the 15-year Clean, Safe Creeks and Natural Flood Protection Plan (Clean, Safe Creeks Plan), a special parcel tax to address community needs for enhanced stream stewardship and flood protection.

2012

74 percent of voters approved the 15-year Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program), a special parcel tax to address projects under the five priorities.

2020

Based on changing circumstances and community needs, Valley Water conducts outreach to re-evaluate the Safe, Clean Water Program for the public. A renewed Safe Clean Water Program is proposed to enhance and update the 2012 Safe, Clean Water and Natural Flood Protection Program. If approved by voters in November 2020, the proposed program would renew the funding at the same parcel tax rate structure approved under the previous Safe, Clean Water Program to ensure a seamless continuation of critical water-related services to Santa Clara County.





# History of Safe, Clean Water Program

In 2000, seeing a need to address stream stewardship and flood protection issues in the county, Valley Water created, and voters approved a special parcel tax, the Clean, Safe Creeks and Natural Flood Protection Plan (Clean, Safe Creeks Plan). The funding from this plan supported projects to restore habitat, maintain healthy creek and bay ecosystems, improve water quality, reduce flood risks, and provide open space and recreational opportunities. It also created an Independent Monitoring Committee to oversee progress and ensure the plan was meeting its outcome goals cost-effectively.

As the Clean, Safe Creeks Plan neared its end, Valley Water conducted outreach to determine community priorities regarding water, flood protection and the environment. Using the extensive input gained over 18 months, Valley Water put together a program that would continue local funding, make up for diminished federal funding, line up with community priorities, deal with aging/outdated infrastructure, address new regulatory and policy requirements, and ensure an uninterrupted flow of services.

In 2012, Santa Clara County voters passed the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) ballot measure by an overwhelming majority of nearly 74 percent. Voters supported the 2000 Clean, Safe Creeks Plan and the 2012 Safe, Clean Water Program because both represented the community's values around clean water, the environment and flood protection, which are key tenets of Valley Water's work.

Like the Clean, Safe Creeks Plan, the 2012 Safe, Clean Water Program was also committed to accountability and transparency and created an Independent Monitoring Committee (IMC) to oversee the program's progress and ensure that outcomes are met in a cost-effective manner. In addition, the 2012 Safe, Clean Water Program also required three independent external audits over 15 years.

The projects in the 2012 Safe, Clean Water Program have performance measures known as key performance indicators (KPIs). The existing program's flood protection projects, which rely heavily on federal funding, each have two KPIs: the preferred project with federal funding; and the local funding only project. As many of the flood protection projects have



Wildflower with reservoir in the background.

experienced delays in receiving anticipated federal funds to achieve the preferred project KPIs, Valley Water has continued to focus on moving those projects forward toward delivery of the local-funding-only KPIs, while seeking federal and other external funding sources. As a result, all projects are on track to meet or exceed their KPIs.

Because the Clean, Safe Creeks Plan, the 2012 Safe, Clean Water Program and the newly proposed Safe, Clean Water Program renewal were created to benefit the community, community input has been instrumental in determining the priorities that are the focus of the funding that they generate; with projects to deliver enhanced water quality and reliability, improved habitat and environment and reduced flood risks for thousands of residents and businesses.

All three efforts have included extensive community outreach as integral parts of their formation. Over the life of the each, through the annual reports, audits, IMC reports and Board discussions, the community is kept informed of the progress we are making on the multi-benefit projects that comprise the Safe, Clean Water Program.

# Why Renew the Safe, Clean Water Program Now?

Valley Water is committed to providing safe, clean water and flood protection and to protecting the environment. As new challenges face Valley Water and the community it serves, an updated and renewed Safe Clean Water Program would help us streamline it and keep it relevant while securing our future water resources.

Challenges facing Valley Water and the broader community regarding water-related issues include a growing population in our county, aging infrastructure, uncertain imported water supplies, climate change and more extreme weather. We are also experiencing more regulatory permitting delays, as well as ongoing operations, maintenance and environmental mitigation costs. Add to that the advent of the COVID-19 pandemic, and providing safe, clean water and natural flood protection during a public health crisis becomes yet another challenge.

## Updating and expanding the Safe, Clean Water Program

Addressing emerging and growing challenges requires creative thinking and a deep understanding of how these challenges will affect our existing and future projects. That is one key to the proposed realignment of the Safe, Clean Water Program and its potential renewal.

To develop solutions, Valley Water staff participated in a two-day workshop in January 2020 to evaluate the projects in the existing 2012 Safe, Clean Water Program. Staff members documented changes, discussed challenges and brainstormed new opportunities for improvement. Staff explored ways to

### WHY UPDATE AND EXTEND SAFE, CLEAN WATER NOW?

To meet new and expanding challenges, we need to refresh and realign the 2012 Safe, Clean Water Program. Challenges that a proposed renewal of the Safe, Clean Water Program will help us better meet include:

- A growing Santa Clara County population
- Climate change and extreme weather
- More frequent natural disasters
- Aging infrastructure
- Ongoing operations, maintenance and mitigation costs
- More delays in regulatory permitting
- Uncertain imported water supplies

address increasing operations, maintenance and mitigation costs; strategies to improve infrastructure reliability and integrate climate change adaptation and mitigation; ways to streamline the grants program; and approaches to support public health and public safety.

With an eye toward these important considerations, staff set about suggesting updates and enhancements for a proposed Safe, Clean Water Program renewal. For some of the projects under 2012 Safe, Clean Water Program, realignment was necessary, certain key performance indicators for existing projects were adjusted to ensure the delivery of the most effective, efficient and responsible projects. New projects or project elements are proposed to address changed circumstances or new needs that have arisen since the passage of 2012 Safe, Clean Water Program.

Once a project is constructed, it is not necessarily finished for all time. Projects, particularly flood protection projects, require regular maintenance to continue functioning as designed and provide benefits to the community. This proposed update of the Safe, Clean Water Program takes that into account, providing for long-term maintenance and operation of the included projects.

Another important part of completing a project is mitigating any negative impacts it might have on wildlife or the environment. Just as projects take maintenance, mitigation takes monitoring to ensure it works as designed. This proposed Safe, Clean Water Program renewal allows us to ensure that our mitigation is functioning for the benefit of the projects and the environment.

We have also looked at areas where conditions have changed significantly and that now warrant new projects that were not necessary or as pressing before. Where feasible, we have added these new projects to address these changed circumstances.

The proposed Safe, Clean Water Program renewal has new projects as well as a new priority—Priority F: Support Public Health and Public Safety for Our Community. With the advent of the COVID-19 pandemic that drastically changed the world, the critical need for reliable, safe and clean water, particularly during emergencies, came into even sharper focus. Priority F would address the need for enhanced public health and public safety by pulling projects that have multiple benefits from

*Once a project is constructed, it is not necessarily finished for all time. Projects, particularly flood protection projects, require regular maintenance to continue functioning as designed and provide benefits to the community.*

other priority areas. The projects are chosen based on their common support of public health and public safety along our waterways and key water infrastructure.

Projects under Priority F would include coordinating with cities to increase local police patrols near waterways; reducing trash and other pollutants from entering waterways from encampments; removing flood-inducing blockages; managing vegetation and removing sediment to maintain conveyance capacity of flood protection projects. Among other projects under this priority are grants and partnerships for agencies, organizations and individuals for water conservation, pollution prevention, creek cleanups and education, wildlife habitat restoration, access to trails and open space; and graffiti and litter removal as well funding for public art to beautify Valley Water property and infrastructure.



2012 Safe, Clean Water Program: Looking upstream from the Friendship Bridge at the completed portion of the San Francisquito Creek Flood Protection Project from S.F. Bay to Highway 101

# Community Engagement



# Community Engagement

Community input has played a critical part in developing the proposed Safe, Clean Water Program renewal and in determining the necessary changes to align with community priorities and expectations. Combined with Valley Water's expertise in executing projects and familiarity with current conditions, and the Board of Director's guidance, community input has helped round out proposed Safe, Clean Water Program updates and make it the most responsive it can be.

To develop this proposed Safe, Clean Water Program renewal, Valley Water conducted a comprehensive and intensive public outreach effort engaging more than 16,000 community members and stakeholders.

The outreach included conducting online community input surveys, reaching more than 15,000 residents. The surveys were provided in English, Spanish, Vietnamese and Chinese, and also included a student version to reach Santa Clara County youth. Our dedicated Safe, Clean Water Program microsite ([www.safecleanwater.org](http://www.safecleanwater.org)) served as the landing page for information on the proposed program renewal as well as for taking the survey and providing input. To achieve a high response rate and receive the widest input, the surveys were promoted through a variety of tools including multi-language videos, social media channels, texting and telephone banking efforts, as well as distributing the survey through our blogs, eNews blasts and wide e-mail distribution lists across the agency and to our various partners. Additionally, a public information and education outreach effort that included print advertorials, radio spots, billboards and digital and social media posts directed people to complete the surveys and provide their input.

Despite the ongoing public health crisis, new technology tools allowed Valley Water to seamlessly continue to connect virtually with the community during the COVID-19 pandemic. While outreach is still ongoing up until early July, staff has reached more than 1,000 residents by making more than 75 in-person and virtual presentations, webinars and

## COMMUNITY ENGAGEMENT TOOLS

-  Dedicated website: 10,000 visitors
-  Online community input surveys: 15,000 respondents
-  Digital/social media efforts: 4 million views, with 33,000 link clicks
-  Water supply outreach tours: 446 attendees
-  Employee presentations : 274 attendees
-  Virtual speaker's bureau: 220 attendees
-  Virtual Blue-Ribbon Forum: 35 stakeholder participants
-  Stakeholder/Partners meetings: 150 stakeholders

infrastructure tours to various stakeholders and community groups, including Board Committees, Board Advisory Committees and Board Commissions, the Safe, Clean Water Program Independent Monitoring Committee, Water Retailers, as well as diverse stakeholder groups, including employees, civic, community and neighborhood groups. We also hosted a virtual Blue-Ribbon Forum, with nearly 100 community leaders, stakeholders and employees participating and providing feedback on the proposed renewal of Safe, Clean Water Program. A telephone town hall is also planned for early July.



Valley Water staff - the people behind your water.

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# Safe, Clean Water Program

# Introducing the Safe, Clean Water Program Update

As proposed, the updated Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) would be a replacement and renewal of the existing 2012 Safe Clean Water Program helping to secure the present and future water resources of Santa Clara County. This updated program would continue and build upon the success of the existing Safe, Clean Water Program, which was overwhelmingly approved by 74 percent of voters in 2012, while realigning it to meet current and future challenges in water resources management.

The proposed updated Safe, Clean Water Program would ensure Valley Water's continued delivery of relevant, efficient and responsible projects that benefit the community.

This proposed Safe, Clean Water Program renewal is critical to Santa Clara County by continuing to fund essential existing watershed and stewardship budgeted programs implemented by Valley Water and its partners. It would fund upgrades to infrastructure, helping to meet the needs of a growing county; allow access to open space; help protect our water supply from more frequent natural disasters and climate change; and allow for the reduction of toxins and hazards in our waterways. In addition, a renewed Safe, Clean Water Program would provide funds to help reduce flood risks and help restore and protect fish and wildlife habitat, all while supporting public health and public safety for our communities.



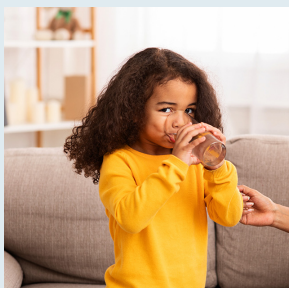
# An opportunity to prepare for the future

A proposed Safe, Clean Water Program renewal would provide funding for additional environmental benefits, new and existing infrastructure and flood protection projects, and operations and maintenance of projects. The proposed renewal would provide for an expanded grants program with additional funding and access for new public health and public safety elements, and it would focus resources on fire safety and removing blockages in creeks. It would also support addressing homeless encampments and impacted water quality along our creeks and waterways, and better adapt to and meet the growing challenges that stem from climate change and extreme weather patterns, such as severe drought, flooding, and wildfires.

The following pages summarize all the projects, existing and newly proposed, with their updated key performance indicators, under each of the following priorities:

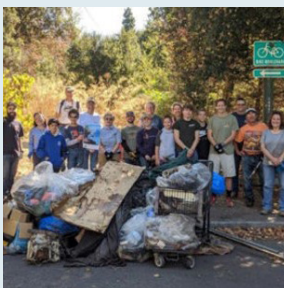
## A

Ensure a Safe, Reliable Water Supply



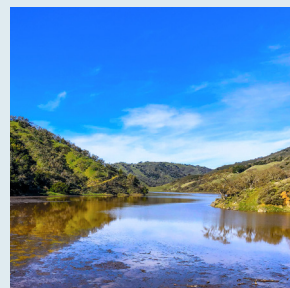
## B

Reduce Toxins, Hazards and Contaminants in our Waterways



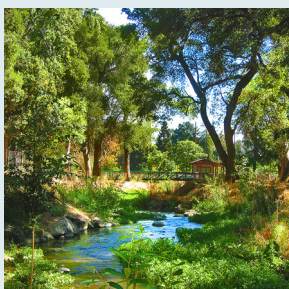
## C

Protect our Water Supply and Dams from Earthquakes and Other Natural Disasters



## D

Restore Wildlife Habitat and Provide Open Space Access



## E

Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways



## F

Support Public Health and Public Safety for Our Community



## FULL LIST OF PROJECTS

### Priority A

<b>A1</b>	Pacheco Reservoir Expansion
<b>A2</b>	Water Conservation Rebates and Programs
<b>A3</b>	Pipeline Reliability

### Priority B

<b>B1</b>	Impaired Water Bodies Improvement
<b>B2</b>	Inter-Agency Urban Runoff Program
<b>B3</b>	Hazardous Materials Management and Response
<b>B4</b>	Support Volunteer Cleanup Efforts and Education

### Priority C

<b>C1</b>	Anderson Dam Seismic Retrofit
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### Priority D

<b>D1</b>	Management of Riparian Planting and Invasive Plant Removal
<b>D2</b>	Revitalize Stream, Upland and Wetland Habitat
<b>D3</b>	Sediment Reuse to Support Shoreline Restoration
<b>D4</b>	Fish Habitat and Passage Improvement
<b>D5</b>	Ecological Data Collection and Analysis
<b>D6</b>	Restoration of Natural Creek Functions
<b>D7</b>	Partnerships for the Conservation of Habitat Lands

## FULL LIST OF PROJECTS

### Priority E

<b>E1</b>	Coyote Creek Flood Protection, Montague Expressway to Tully Road -- San José
<b>E2</b>	Sunnyvale East and Sunnyvale West Channels Flood Protection, San Francisco Bay to Inverness Way and Almanor Avenue -- Sunnyvale
<b>E3</b>	Lower Berryessa Flood Protection, including Tularcitos and Upper Calera Creeks (Phase 3) -- Milpitas
<b>E4</b>	Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive -- San José
<b>E5</b>	San Francisquito Creek Flood Protection, San Francisco Bay to Upstream of Highway 101 -- Palo Alto
<b>E6</b>	Upper Llagas Creek Flood Protection, Buena Vista Avenue to Llagas Road -- Morgan Hill, San Martin, Gilroy
<b>E7</b>	San Francisco Bay Shoreline Protection -- Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale
<b>E8</b>	Upper Guadalupe Flood Protection, Highway 280 to Blossom Hill Road -- San José

### Priority F

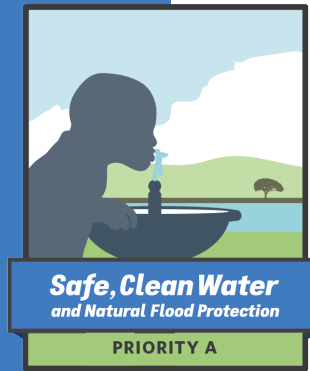
<b>F1</b>	Vegetation Control and Sediment Removal for Capacity
<b>F2</b>	Emergency Response Planning and Preparedness
<b>F3</b>	Flood Risk Assessment Studies
<b>F4</b>	Vegetation Management for Access and Fire Safety
<b>F5</b>	Good Neighbor Program: Encampment Cleanups
<b>F6</b>	Good Neighbor Program: Graffiti and Litter Removal and Public Art
<b>F7</b>	Emergency Response Upgrades
<b>F8</b>	Sustainable Creek Infrastructure for Continued Public Safety
<b>F9</b>	Grants and Partnerships for Safe, Clean Water, Flood Protection and Environmental Stewardship

# Priority A



# Priority A

## Ensure a Safe, Reliable Water Supply



Priority A projects would upgrade aging water infrastructure, such as dams, pipelines and water storage and treatment systems, to reduce the risk of water outages. In addition to carrying forward existing projects, it would contain two new projects, including the Pacheco Reservoir Expansion Project to increase water storage to provide more security for our drinking water supplies in emergencies and through the effects of climate change. The other new project is to provide water conservation rebates and programs to increase water-use efficiency and ensure sustainability for drinking water supplies throughout the county.

### PROJECT A1 PACHECO RESERVOIR EXPANSION

A collaboration between Valley Water, the San Benito County Water District and the Pacheco Pass Water District, the Pacheco Reservoir Expansion Project is a strategic and long-term investment toward ensuring a more reliable supply of safe, clean drinking water in the face of climate change.

This project will boost Pacheco Reservoir's operational capacity from 5,500 acre-feet to up to 140,000 acre-feet, enough to supply up to 1.4 million residents with water for one year in an emergency. Located in southeast Santa Clara County, the expanded reservoir will also reduce the frequency and severity of water shortages during droughts, protect our drinking water supply and infrastructure and improve habitat for fish.

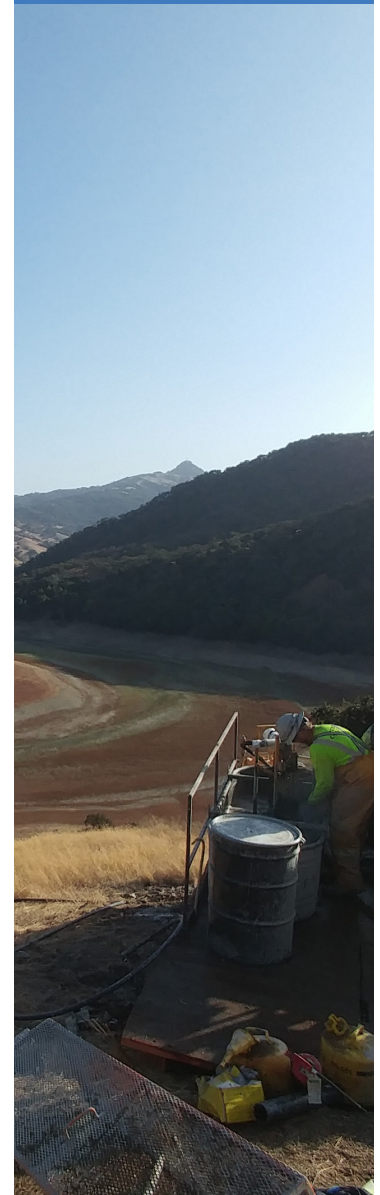
Valley Water has taken into consideration 2030 and 2070 future conditions with climate change to ensure that the reservoir is not only viable today, but can withstand the changes expected in the future.

#### Benefits

- Ensures a reliable supply of drinking water
- Provides an emergency supply of drinking water
- Improves habitat for fish, including federally threatened steelhead
- Reduces flood risk to disadvantaged communities

### PROJECT A1: PACHECO RESERVOIR EXPANSION

- Ensures a reliable and sustainable supply of drinking water
- Provides an emergency supply of drinking water
- Reduces flood risk
- Improves habitat for fish



## PROJECT A2: WATER CONSERVATION REBATES AND PROGRAMS

- Increases water-use efficiency
- Increases water supply reliability
- Reduces pollution by reducing irrigation runoff
- Saves energy and reduce operating costs
- Reduces CO2 emissions



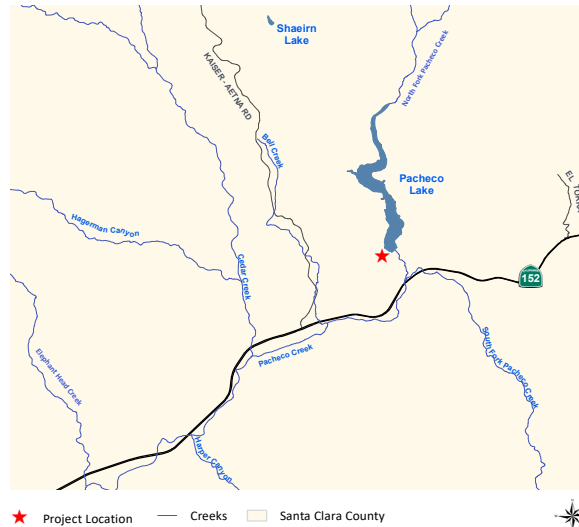
Succulent garden.

- Allows for environmental water management that supports habitat projects and other environmental water needs
- Addresses climate change

### Key performance indicator

1. Provide a portion of funds, up to \$10 million, to help construct the Pacheco Reservoir Expansion Project.

**Geographic area of benefit:** Countywide



**Estimated funding from Safe, Clean Water Renewal:** \$10 million

**Estimated total project cost:** \$1.3 billion

## PROJECT A2 WATER CONSERVATION REBATES AND PROGRAMS

This project to help meet and exceed long-term water conservation and reliability goals would increase water-use efficiency in the landscape, residential, schools and commercial sectors through water conservation rebates, technical assistance and public education.

Water Conservation rebate programs may include a residential leak detection and assistance program, an expanded landscape rebate program that promotes California-native plant species as well as water-saving plants, advanced metering infrastructure (AMI) and a restaurant-efficiency and school-efficiency upgrade program.

Water use requires a lot of energy to extract, convey, treat and distribute. By reducing the demand for water, conservation reduces greenhouse gas emissions. Conservation also helps adapt to climate change by conserving limited water supplies and lessening demand in the face of an uncertain water-supply future.

## Benefits

- Helps County residents exceed the countywide goal of conserving 110,000 acre-feet of water per year by 2040
- Increases water supply reliability
- Reduces greenhouse gases
- Reduces pollution to the Bay by reducing irrigation runoff

## Key performance indicator

1. Award up to \$1 million per year toward specified water conservation program activities, including rebates, technical assistance and public education, within the first seven (7) years of the Program.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$7.9 million

**Estimated total project cost:** \$51.3 million

## PROJECT A3 PIPELINE RELIABILITY PROJECT

This project constructs four (4) line valves at various locations along the East, West and Snell treated water pipelines in Saratoga, Cupertino and San José.

Continued from the 2012 Safe, Clean Water Program, this project is closing out its design phase and nearing construction. Once constructed, this project will allow Valley Water to isolate sections of pipelines for scheduled maintenance and repairs following a catastrophic event, such as a major earthquake, and allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

## Benefits

- Supports shorter service interruption in the case of a pipeline break
- Provides operational flexibility for pipeline maintenance work
- Improves drinking water reliability
- Reduces the amount of water released in streams in the event of a pipeline maintenance or repair.

## PROJECT A3: PIPELINE RELIABILITY

- Improves drinking water reliability
- Provides flexibility for pipeline maintenance
- Supports shorter service interruptions



Shannon line valve.

## Key performance indicator

1. Install four (4) new line valves on treated water distribution pipelines.

## Geographic area of benefit:

Mountain View, Sunnyvale, Santa Clara, Cupertino, Saratoga, Los Gatos, Los Altos, Campbell, San José and Milpitas



Estimated funding from Safe, Clean Water Renewal: \$9.8 million

Estimated total project cost: \$11.9 million

### *What happens to Priority A projects if funding is not available?*

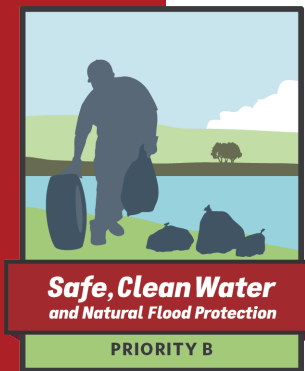
Pipeline rehabilitation and upgrades may be delayed or suspended indefinitely. Water Conservation Rebates and Programs will likely not meet their long-term water supply reliability goals.



# Priority B

# Priority B

## Reduce Toxins, Hazards and Contaminants in our Waterways



Priority B projects use multiple strategies to reduce and remove contaminants in our local creeks, streams and bays. Along with mercury treatment systems in our reservoirs, projects under this priority prevent toxins from entering waterways by working with municipalities and other agencies across the region to reduce runoff pollution. In addition to carrying forward existing projects, the priority would include funding to support the implementation of green stormwater infrastructure. It would also continue projects to provide rapid emergency response to hazardous materials spills as well as to support public education and volunteer cleanup efforts.

### PROJECT B1 IMPAIRED WATER BODIES IMPROVEMENT

This project reduces pollutants in streams, reservoirs and groundwater of Santa Clara County by supporting surface water quality pollution prevention activities. These programs address water quality concerns currently identified by local and state regulatory agencies, as well as contaminants of emerging concern. Initiatives under this project are consistent with the Regional Water Quality Control Board (RWQCB) impaired water bodies designation and Total Maximum Daily Loads (TMDLs), which are the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. Under this project, Valley Water studies and implements methods to reduce methylmercury formation in reservoirs, and helps create and carry out realistic plans to reduce contaminants, such as nutrients, bacteria, pesticides, Polychlorinated biphenyls (PCBs) and others, in local creeks and reservoirs.

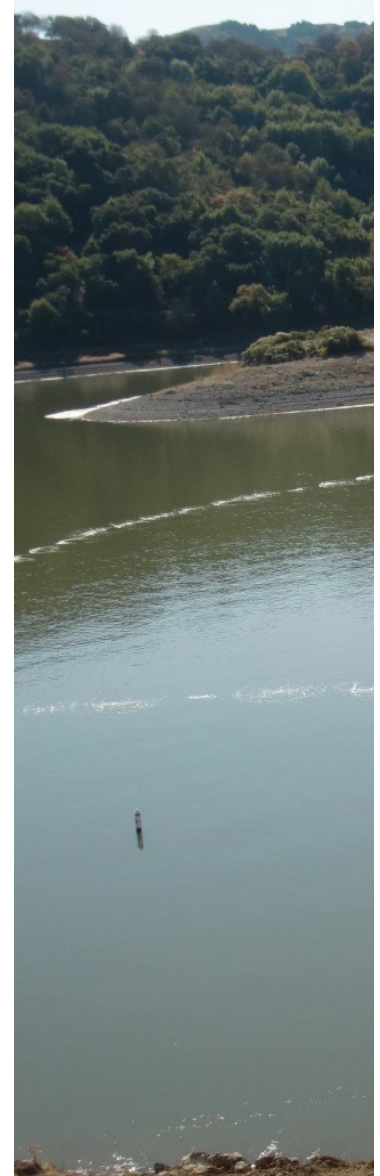
This project addresses both greenhouse gas (GHG) reduction and adaptation, as reservoirs are a major source of GHG emissions (i.e. methane) during low oxygen conditions. Oxygenation is the current mechanism to control mercury in fish and may reduce methane emissions. Oxygenation can also reduce the formation of harmful algal blooms, which may become more frequent with warmer temperatures.

#### Benefits

- Reduces contamination in streams and reservoirs
- Improves water quality, including water going to drinking water treatment plants
- Increases understanding of mercury cycling in reservoirs to develop strategies that reduce toxic methylmercury in fish consumed by people and wildlife

### PROJECT B1: IMPAIRED WATER BODIES IMPROVEMENT

- Reduces pollutants in streams, reservoirs and groundwater
- Reduces methylmercury in reservoirs
- Reduces greenhouse gases



## PROJECT B2: INTER-AGENCY URBAN RUNOFF PROGRAM

- Reduces contaminants in stormwater
- Maintains programs or devices to reduce trash in creeks
- Addresses surface water quality improvements
- Implements green stormwater infrastructure projects



Trash boom cleaning on Lower Silver Creek.

- Increases the scientific understanding of environmental pollutants, such as mercury, to assist in developing actions to manage them
- Supports regulatory compliance with surface water quality standards for local creeks and reservoirs
- Addresses climate change

### Key performance indicators

1. Investigate, develop and implement actions to reduce methylmercury in fish and other organisms in the Guadalupe River Watershed.
2. Prepare and update a plan for the prioritization of surface water quality improvement activities, such as addressing trash and other pollutants.
3. Implement at least two priority surface water quality improvement activities identified in the plan per 5-year implementation period.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$32.8 million

**Estimated total project cost:** \$32.8 million

## PROJECT B2 INTER-AGENCY URBAN RUNOFF PROGRAM

This project supports Valley Water's continued participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and South County stormwater programs. These programs enable Valley Water to reduce stormwater pollution through technical support and regional leadership. In addition, this project supports stormwater pollution prevention activities in South County Watersheds and green stormwater infrastructure (GSI). GSI allows rainwater runoff from roads, parking lots and other impervious surfaces to soak into the ground and be filtered by soil rather than discharge into storm drains that transport the water to creeks.

Project B2 allows Valley Water to participate in the regulatory development process related to stormwater by participating in stormwater permit re-issuance and providing review, analysis and comments on various water quality regulatory efforts. This project also allows Valley Water to collaborate with local agencies on public education and outreach activities to help prevent urban runoff pollution at the source.

Multi-benefit projects, such as green stormwater infrastructure, are important strategies to adapt and limit the rate of global warming. One way to address climate change is to reduce carbon dioxide in the atmosphere by having it captured or sequestered by plants. Green infrastructure uses plants to soak water into the ground and as plants grow, they take carbon dioxide from the atmosphere. Since green stormwater infrastructure slows down, spreads and helps absorb rainwater instead of having it go down a storm drain, it also reduces peak flows to a creek.

### Benefits

- Uses partnerships with municipalities and other agencies to reduce contaminants in

stormwater and improve surface water quality in our streams, reservoirs, lakes and wetlands

- Maintains Valley Water compliance with the Regional Water Quality Control Board requirements in National Pollutant Discharge Elimination System (NPDES) permits
- Allows continued participation in SCVURPPP and South County urban runoff programs
- Allows Valley Water to help direct required monitoring efforts in ways that benefit Valley Water programs and projects
- Promotes stormwater pollution prevention
- Facilitates collaboration with partners on stormwater projects that provide multiple benefits and support Valley Water's mission
- Addresses climate change

### Key performance indicators

1. Address trash in creeks by maintaining trash capture devices or other litter control programs.
2. Maintain Valley Water's municipal stormwater compliance program and partner with cities to address surface water quality improvements, including participation in at least three (3) countywide, regional or statewide stormwater program committees to help guide regulatory development, compliance and monitoring.
3. Support at least one stormwater quality improvement activity per 5-year implementation period in Santa Clara County, including providing up to \$1.5 million in 15 years to support implementation of green stormwater infrastructure consistent with Santa Clara Basin and South County Stormwater Resource Plans.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$19.8 million

**Estimated total project cost:** \$45.2 million

## PROJECT B3 HAZARDOUS MATERIALS MANAGEMENT AND RESPONSE

This project allows Valley Water to continue providing a local number to report hazardous materials spills 24 hours a day, 7 days a week. Valley Water staff will respond within two (2) hours of the initial report, with spill cleanup in Valley Water rights-of-way performed in a timely manner. Appropriate agencies will be alerted when spills are outside Valley Water jurisdiction.

### Benefits

- Prevents and reduces contaminants in surface and groundwater
- Encourages public to engage in protecting our waterways

## PROJECT B3: HAZARDOUS MATERIALS MANAGEMENT AND RESPONSE

- Prevents and reduce contaminants in surface and groundwater
- Encourages public to protect our waterways
- Allows for quick responses to reduce impacts of hazardous spills



Vehicle accident at Valley Water facility.



#### PROJECT B4: SUPPORT CREEK STEWARDSHIP VOLUNTEER EFFORTS

- Reduces contaminants entering our waterways and groundwater
- Engages and educates the community through watershed stewardship
- Leverages volunteer community resources for efficient use of funds



National River Cleanup Day 2019.

- Provides a quick, professional response that reduces impacts of hazardous materials spills

#### Key performance indicator

1. Respond to 100% of hazardous materials reports requiring urgent on-site inspection in two (2) hours or less.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$1.1 million

**Estimated total project cost:** \$4.2 million

#### PROJECT B4 SUPPORT CREEK STEWARDSHIP VOLUNTEER EFFORTS

This project provides funding for Valley Water's creek stewardship program to support volunteer cleanup activities, such as National River Cleanup Day, California Coastal Cleanup Day, the Great American Litter Pick Up, Adopt-A-Creek and the Creek Connections Action Group; along with creekwise education and regional coordination efforts.

#### Benefits

- Reduces contaminants entering our waterways and groundwater
- Engages and educates the community, and supports watershed stewardship
- Leverages volunteer community resources for efficient use of funds

#### Key performance indicator

1. Fund Valley Water's creek stewardship program to support volunteer cleanup activities, such as annual National River Cleanup Day, California Coastal Cleanup Day, the Great American Litter Pick Up; and the Adopt-A-Creek Program.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$5.1 million

**Estimated total project cost:** \$9.2 million

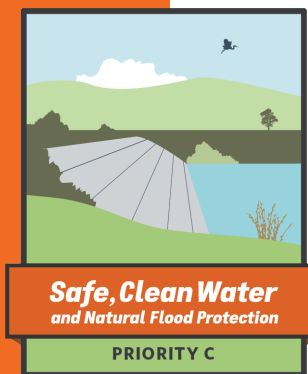
*What happens to Priority B projects if funding is not available?*

Funding for pollution prevention activities and green stormwater infrastructure will not be available. Only activities that fulfill legal and regulatory requirements will be funded.

# Priority C

# Priority C

## Protect Our Water Supply and Dams from Earthquakes and Other Natural Disasters



Priority C projects help protect our drinking water supply and water quality infrastructure from natural disasters, such as earthquakes. This priority provides partial funding to retrofit Anderson Dam so that it can safely withstand a large earthquake. Known as the Anderson Dam Seismic Retrofit Project, the project would continue to ensure public safety and secure a reliable water supply.

### PROJECT C1 ANDERSON DAM SEISMIC RETROFIT

Anderson Reservoir is currently limited in its capacity due to seismic concerns, costing Santa Clara County valuable drinking water resources. This project, which continues 2012 Safe, Clean Water project, provides a portion of the funds required to help restore the full operating capacity of Anderson Reservoir.

Anderson Dam creates the county's largest surface water reservoir—Anderson Reservoir—which stores local rainfall runoff and imported water from the Central Valley Project. The reservoir is an important water source for treatment plants and the recharge of the groundwater basin. Besides restoring drinking water supplies and covering the earthquake retrofitting of Anderson Dam to improve reliability and safety, the upgrade also supports compliance with environmental regulations. Valley Water's regular reservoir releases ensure that downstream habitat has healthy flows to sustain wildlife.

A breach of Anderson Dam at full capacity could have catastrophic consequences, including inundation of surrounding land more than 30 miles northwest to San Francisco Bay, and more than 40 miles southeast to Monterey Bay.

#### Benefits

- Brings the dam into compliance with today's seismic standards
- Increases reliability and safety of our area's largest reservoir by protecting it from earthquakes
- Eliminates operational restrictions issued by the two regulatory agencies--the Federal Energy Regulatory Commission (FERC) and the California Department of Water Resources Division of Safety of Dams (DSOD). In February 2020, FERC directed Valley

### PROJECT C1: ANDERSON DAM SEISMIC RETROFIT

- Brings the dam into compliance with today's seismic standards
- Increases reliability and safety by protecting the dam from earthquakes
- Enhances fish and wildlife habitat
- Minimizes the risk of uncontrollable releases from the reservoir that could cause downstream flooding



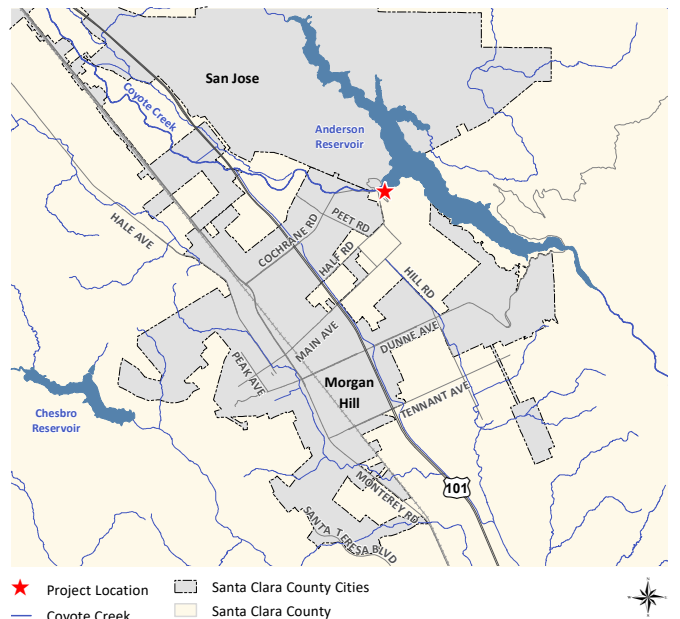
Water to begin safely lowering the reservoir to an elevation of 488 feet (essentially almost emptying the reservoir) beginning October 1, 2020. This project would restore Anderson Reservoir to its full capacity of approximately 90,373 acre-feet of water storage for our current and future water supply

- Ensures compliance with environmental laws and regulations
- Enhances native fish and wildlife habitat
- Minimizes the risk of uncontrollable releases from the reservoir, which could cause downstream flooding

### Key performance indicator

1. Provide portion of funds, up to \$54 million, to help restore full operating reservoir capacity of 90,373 acre-feet.

**Geographic area of benefit:** Countywide



**Estimated funding from Safe, Clean Water Renewal:** \$54.1 million

**Estimated total project cost:** \$576.3 million

### *What happens to Priority C projects if funding is not available?*

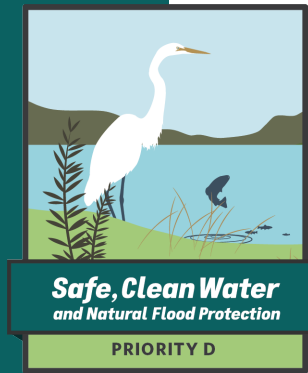
A breach of Anderson Dam at full capacity could have catastrophic consequences, which makes the funding contribution from this program vital to the safety of our county.



# Priority D

# Priority D

## Restore Wildlife Habitat and Provide Open Space Access



Priority D projects restore and protect wildlife habitat. Work under this priority includes controlling non-native, invasive plants; replanting native species; and maintaining previously replanted areas. Other projects include removing barriers to fish movement, improving steelhead habitat and stabilizing eroded creek banks. Under this priority, projects supporting riparian planting and invasive plant removal, fish passage and fish habitat improvements would be enhanced with additional funding. To support restoration projects, Valley Water would continue to build and update a comprehensive watershed database that tracks stream ecosystem conditions helping Valley Water and other organizations make informed watershed, asset management and natural resource decisions.

### PROJECT D1 MANAGEMENT OF RIPARIAN PLANTING AND INVASIVE PLANT REMOVAL

This project supports Valley Water management of at least 300 acres of existing riparian planting projects and 200 acres of invasive plant removal projects throughout the five (5) watersheds. The project also funds maintenance of future riparian planting and invasive plant removal sites, which are anticipated as part of upcoming environmental mitigation requirements. Funding for this project ensures that design objectives of all required riparian planting and invasive plant removal projects are maintained as functional habitat that can support wildlife. In addition, this project includes targeted control of especially damaging non-native, invasive plant species such as *Arundo donax* throughout the county.

Climate change has increased temperatures and lengthened growing seasons, which facilitates the spread of non-native invasive vegetation by allowing them to establish early in spring before native species, thus transforming ecosystems. Management of riparian planting and invasive plant removal helps prevent the spread of non-native species, making the natural habitat less vulnerable and more resilient to climate change. Furthermore, restoring habitats that are damaged during regular operations is an important component of sustainable stewardship to protect nearby natural areas. It helps improve native habitat.

### PROJECT D1: MANAGEMENT OF RIPARIAN PLANTING AND INVASIVE PLANT REMOVAL

- Maintains existing revegetated areas
- Maintains areas of invasive plant removal
- Prevents the spread of non-native species
- Improves native habitat



## PROJECT D2: REVITALIZE RIPARIAN, UPLAND AND WETLAND HABITAT

- Improves habitat by planting tidal, riparian and upland plant species
- Increases habitat connectivity for wildlife
- Helps prevent new invasive plants from becoming established



Lower Guadalupe River revitalization.

### Benefits

- Maintains 300 acres of existing riparian planting sites
- Maintains 200 acres of existing invasive plant management projects
- Allows Valley Water to monitor plant survival and habitat functions
- Complies with environmental laws, which require long-term habitat mitigation for routine stream maintenance, flood protection and water supply projects
- Provides for the maintenance of future riparian planting and invasive plant management sites
- Addresses climate change

### Key performance indicators

1. Maintain a minimum of 300 acres of riparian planting projects annually to meet regulatory requirements and conditions.
2. Maintain a minimum of 200 acres of invasive plant management projects annually to meet regulatory requirements and conditions.
3. Remove 25 acres of *Arundo donax* throughout the county over a 15-year period.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$68.9 million

**Estimated total project cost:** \$118.8 million

## PROJECT D2 REVITALIZE RIPARIAN, UPLAND AND WETLAND HABITAT

This project allows Valley Water to revitalize habitat for rare, threatened or endangered species or vegetation types, and create a more contiguous corridor for wildlife, including pollinators. Funding helps to restore degraded habitat by removing invasive plants and/or revegetating with native species. Funding is prioritized for projects that include community partnerships or provide education for nearby landowners and other stakeholder groups on the control of harmful species.

The project will also create an Early Detection and Rapid Response Program to identify and treat small infestations of new weeds before they become established.

Increasing the quality and quantity of native habitat areas and improving the connections between them are important adaptive strategies to support native species as climate conditions change. It increases access to new areas for migration and more room for hiding, hunting, breeding and rearing as needs evolve and increase.

### Benefits

- Increases viability of native plant species by reducing competition from non-native, invasive species
- Improves habitat by installing tidal, riparian, and upland plant species or allowing

native vegetation to passively regenerate after treatment/ removal of invasive species

- Improves ecological function of existing riparian, wetland and potentially upland habitats to support more diverse wildlife species
- Improves patchy wildlife corridors by increasing connectivity with nearby habitat areas
- Increases community awareness about the damaging impact that non-native, invasive plants have on local ecosystems
- Helps to prevent new invasive species from becoming established
- Early Detection Invasive Species Information Sheets will guide staff and public on identification and treatment options, raise public awareness, and help prevent the spread of new noxious weeds

### Key performance indicators

1. Revitalize at least 21 acres over a 15-year period through native plant revegetation and/or removal of invasive exotic species.
2. Develop an Early Detection and Rapid Response Program Manual.
3. Identify and treat at least 100 occurrences of emergent invasive species over a 15-year period, as identified through the Early Detection and Rapid Response Program.
4. Develop at least eight (8) information sheets for Early Detection of Invasive Plant Species.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$8.1 million

**Estimated total project cost:** \$8.1 million

## PROJECT D3: SEDIMENT REUSE TO SUPPORT SHORELINE RESTORATION

This project reuses local sediment removed through Valley Water’s Stream Maintenance Program, capital projects and other local sources to create and restore tidal marsh habitat. Sediment may be reused to support the South Bay Salt Pond Restoration project or other environmental enhancement and restoration projects. Valley Water removes sediment from streams to maintain their capacity to carry floodwaters. To secure environmentally appropriate reuse sites, this project continues the existing partnership with the U.S. Fish and Wildlife Service (FWS) and explores partnerships with others. This project also funds site improvements necessary to facilitate sediment delivery to the reuse sites.

## PROJECT D3: SEDIMENT REUSE TO SUPPORT SHORELINE RESTORATION

- Accelerates progress of tidal marsh restoration
- Reduces disposal costs by reusing sediment removed from flood channels
- Addresses sea-level rise impacts

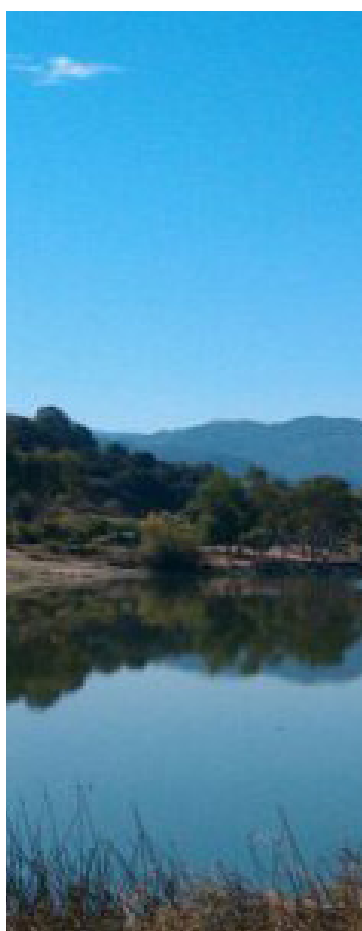


Sediment re-use at Pond A8.



## PROJECT D4: FISH HABITAT AND PASSAGE IMPROVEMENT

- Improves habitat and passage for steelhead and other native fish
- Contributes to required mitigation for reservoir and stream project impacts



Almaden Lake Creek/Lake Separation Project.

Beneficial reuse of sediment has become a key component in tidal marsh restoration around the Bay. As sea levels rise, natural sedimentation and vegetation rates cannot keep up and tidal zones are in danger of being submerged, erasing environmental gains from restoration work. By delivering clean sediment from local creeks that would have naturally flowed into the San Francisco Bay, this project accelerates natural marsh-building processes and helps to keep up with sea-level rise. Activities necessary for sediment reuse may include testing, transport, cover material, and site improvements required for access.

### Benefits

- Accelerates progress of important tidal wetland restoration projects
- Reduces disposal costs for sediment that has been removed from local channels
- Reduces disposal of clean fill into local landfills
- Addresses climate change

### Key performance indicators

1. Maintain partnership agreements to reuse sediment to improve the success of salt pond and tidal marsh restoration projects and activities.
2. Provide up to \$4 million per 15-year period to support activities necessary for sediment reuse.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$4.1 million

**Estimated total project cost:** \$4.1 million

## PROJECT D4 FISH HABITAT AND PASSAGE IMPROVEMENT

This project helps restore and maintain healthy fish populations, especially steelhead, by improving fish passage and habitat. Sites may include Alamitos Creek at Lake Almaden and County of Santa Clara-owned Ogier Ponds in the Coyote watershed, where human-made creek alterations disrupt fish migration. The project, which includes coordinating and partnering with other external parties, incorporates studies of streams throughout the county to determine what and where habitat improvements will most benefit steelhead. These studies can be used by several regional partners to implement complementary habitat enhancements.

The project also continues funding to place instream gravel, boulders, large wood, or other features to enhance fish habitat at appropriate locations. By adding natural stream features such as large wood, we can create habitat to provide refuge during fish migration, prolonged drought, or extreme rainfall events. Additionally, habitat restoration can improve ecosystem function and creates conditions with increased

resiliency to climate change. By restoring natural functions, issues such as water quality may be less exacerbated and native species can continue to flourish and adapt.

## Benefits

- Improves habitat and passage for steelhead and other native fish within Santa Clara County watersheds
- Contributes to required mitigation for environmental impacts of reservoir and recharge operations and countywide Stream Maintenance Program
- Maintains investment in earlier habitat improvements
- Addresses climate change

## Key performance indicators

1. Complete planning and design for one creek/lake separation.
2. Construct one creek/lake separation project in partnership with local agencies.
3. Use \$8 million for fish passage improvements.
4. Update study of all major steelhead streams in the county to identify appropriate locations for installation of large woody debris and gravel as appropriate.
5. Complete five (5) habitat enhancement projects based on studies that identify high priority locations for large wood, boulders, gravel and/or other habitat enhancement features.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$43.6 million

**Estimated total project cost:** \$50.6 million

## PROJECT D5: ECOLOGICAL DATA COLLECTION AND ANALYSIS

This project continues to build and update a comprehensive watershed database that tracks stream ecosystem conditions helping Valley Water and other county agencies and organizations make informed watershed, asset management and natural resource decisions. This new and updated information integrates and enhances Valley Water's programs, projects, maintenance and stewardship actions through standardized, repeatable and defensible measurements that guide, organize and integrate information on stream and habitat conditions.

Ecological monitoring and assessments are conducted on an ongoing basis and shared with land use agencies, environmental resource groups, and the public to support efficient environmental decisions throughout the county. Valley Water will seek partnerships to conduct monitoring cooperatively.

## PROJECT D5: ECOLOGICAL DATA COLLECTION AND ANALYSIS

- Provides more reliable data on countywide stream conditions and project performance
- Facilitates watershed approach to resource management
- Provides scientific guide for decisions and actions to improve stream conditions



Biologist overlooking Coyote Ridge.

## PROJECT D6: RESTORATION OF NATURAL CREEK FUNCTIONS

- Improves native aquatic habitat
- Reduces instability and sedimentation in creeks
- Reduces annual maintenance costs for sediment removal



Hale Creek will be the pilot project to restore natural functions and stream stability.

Measuring changes in ecological conditions through time allows Valley Water, resource agencies, land managers and the public to understand and respond to climate change effects and evolving creek and habitat conditions.

### Benefits

- Improves natural resource, watershed and asset management decisions
- Provides a systematic, scientific guide for decisions and actions to improve stream conditions
- Supports effective and environmentally sound design options
- Maximizes the impact of dollars with more reliable data on countywide stream conditions and project performance
- Facilitates a watershed approach to resource management, permitting and restoration planning
- Addresses climate change

### Key performance indicator

1. Reassess and track stream ecological conditions, habitats and selected fauna in each of the county's five (5) watersheds every 15 years.

### Geographic area of benefit:

Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$7 million

**Estimated total project cost:** \$10.5 million

## PROJECT D6 RESTORATION OF NATURAL CREEK FUNCTIONS

This project will develop, compile and use local hydrologic and geomorphic data to identify, design and construct projects to restore and improve natural functions and stability of stream channels.

Geomorphically appropriate channels will be more resilient to damage from changing, more intense rainfall patterns caused by climate change.

### Benefits

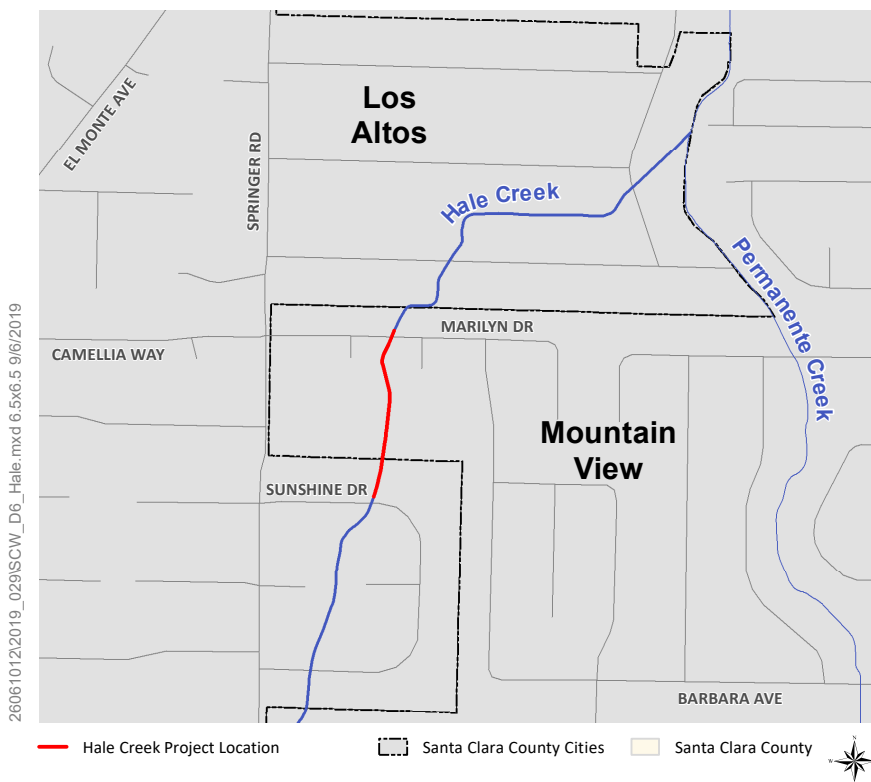
- Uses scientific principles to improve sediment balance and reduce erosion, enhance percolation and reduce instability and sedimentation in creeks
- Can help reduce annual maintenance cost for sediment removal where erosion and incision problems can be addressed

- Improves native aquatic habitat
- Improves the aesthetic and recreational value of a stream
- Addresses climate change

## Key performance indicators

1. Construct the Hale Creek Enhancement Pilot Project, which includes restoration and stabilization of a 650-foot section of concrete-lined channel on Hale Creek, between Marilyn Drive and North Sunshine Drive on the border of Mountain View and Los Altos.
2. Construct the Bolsa Road Fish Passage Project along 1,700 linear feet of Uvas-Carnadero Creek in unincorporated Santa Clara County, which includes geomorphic design features that will restore stability and stream function.
3. Identify, plan, design and construct a third geomorphic-designed project to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.

## Geographic area of benefit: Countywide



**Estimated funding from Safe, Clean Water Renewal:** \$14.5 million

**Estimated total project cost:** \$19.6 million



## PROJECT D7: PARTNERSHIPS FOR THE CONSERVATION OF HABITAT LANDS

- Protects, enhances and restores natural resources in Santa Clara County
- Contributes to recovery of special status species
- Coordinates regional mitigation and conservation projects



Coyote Ceanothus

## PROJECT D7 PARTNERSHIPS FOR THE CONSERVATION OF HABITAT LANDS

Funding from this project helps the community acquire and protect important habitat land to preserve local ecosystems. The project supports implementation of multi-agency agreements, such as the Valley Habitat Plan, that pool mitigation or conservation dollars to protect or restore large areas of habitat land.

Acquiring, restoring, connecting and protecting habitat areas helps native species to adapt to a changing climate. Large, contiguous land patches allow species room to move and adapt, to find cover and to reestablish resting and rearing areas from the damaging effects of climate change.

### Benefits

- Protects, enhances and restores natural resources in Santa Clara County
- Contributes to the recovery of special status species
- Coordinates regional mitigation or conservation projects to create larger, less fragmented conservation lands that are more beneficial for wildlife and the environment
- May fulfill a portion of Valley Water's responsibilities to the Valley Habitat Plan
- Addresses climate change

### Key performance indicator

1. Provide up to \$8 million per 15-year period for the acquisition or enhancement of property for the conservation of habitat lands.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$8 million

**Estimated total project cost:** \$8 million

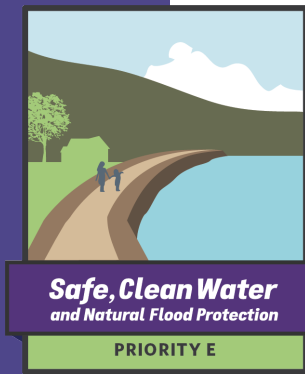
### *What happens to Priority D projects if funding is not available?*

Critical mitigation and maintenance work will be severely impacted. Important fish habitat and passage work may not occur and integral environmental studies and analysis will go unfunded.

# Priority E

# Priority E

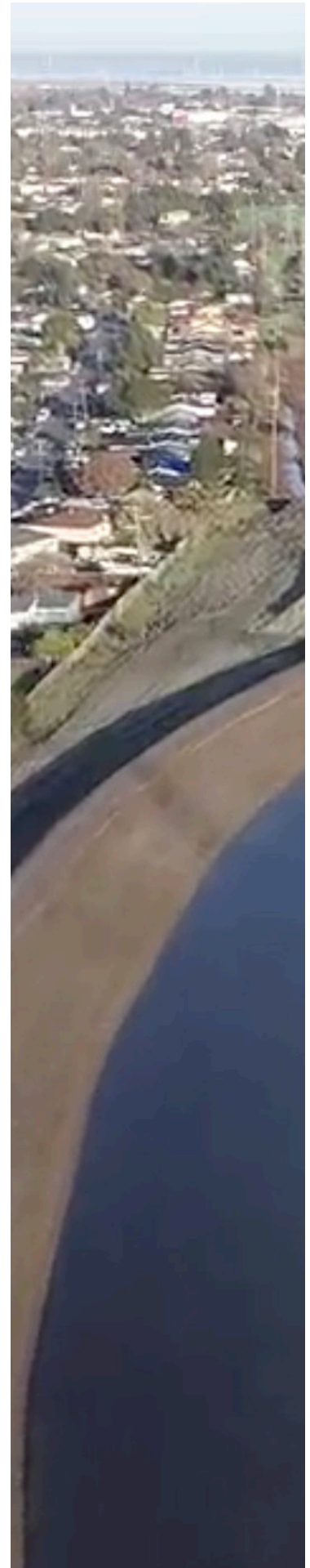
## Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways



Priority E focuses on providing flood protection through major capital construction projects. Projects are prioritized to protect the largest number of people, homes and businesses, as well as safeguard the highways, streets, public transportation and business centers that people depend on for their livelihoods. In addition to continuing the existing flood protection projects, some of them with enhanced funding, this priority would now include the Lower Berryessa Creek Flood Protection Project.

Almost all the construction projects under this priority describe a preferred project that relies on state and federal government funding and a local-funding only project. Should federal funding become scarce, Valley Water would reduce the project scope to the local-funding only project, as described in the individual project summaries. Whenever possible, Valley Water also leverages funds from state, local municipalities and other stakeholders.

Climate change is a global reality and is expected to result in sea-level rise and more variable weather patterns, leading to potentially bigger and more frequent floods. Valley Water incorporates climate change projections, especially sea-level rise, in design and construction of more resilient flood protection projects that increase the capacity of channels to convey higher storm events without overbanking into local streets, highways and neighborhoods.



## PROJECT E1: COYOTE CREEK FLOOD PROTECTION, MONTAGUE EXPRESSWAY TO TULLY ROAD -- SAN JOSÉ

- Provides flood protection
- Enhances stream habitat
- Improves water quality
- Increases recreational opportunities



Interim floodwall and embankment along Coyote Creek in the Rock Springs community

## PROJECT E1 COYOTE CREEK FLOOD PROTECTION, MONTAGUE EXPRESSWAY TO TULLY ROAD – SAN JOSÉ

This project is to plan, design and construct improvements along approximately nine (9) miles of Coyote Creek, between Montague Expressway and Tully Road, in San José. The primary objective is to provide protection from floods up to the level that occurred on February 21, 2017, equivalent to a 5% flood (20-year event). In December 2019, the Valley Water Board of Directors voted to allocate local funding for construction of the preferred project; however, Valley Water is also exploring additional external funding sources and partnership opportunities.

Since 2017, Valley Water has implemented several short-term interim projects to help reduce the risk of flooding along Coyote Creek. These include the installation of an interim floodwall and embankment along the creek in the Rock Springs community. This structure protects the Rock Springs community from a flood event equivalent to the February 2017 flood. Some of the other interim projects include repairing a 150-foot levee adjacent to the South Bay Mobile Home Park, installing flood gauges on bridges that provide real-time visual information on water levels and removing invasive vegetation from Valley Water and City property in parts of the creek that experienced the most flooding.

### Flooding History and Project Background

Flooding has occurred many times within the Coyote Creek Watershed, including along portions of Coyote Creek in 1911, 1917, 1931, 1958, 1969, 1982, 1983, 1997, 1998, and 2017. The largest flow recorded on Coyote Creek was 25,000 cubic feet per second in 1911, prior to construction of the current two (2) water-supply reservoirs in the upper watershed. The worst flooding in the project reach since Anderson Reservoir was constructed in 1950, occurred in February 2017. Coyote Creek overtopped its banks at several locations between Montague Expressway and Tully Road. Businesses and hundreds of homes were inundated by creek waters for many hours. Highway 101 near Watson Park and various local streets were closed due to flooding, and thousands of residents had to be evacuated and sheltered.

The original project reach extended approximately 6.1 miles between Montague Expressway and Highway 280; however, the project reach was extended approximately 2.9 miles upstream to Tully Road in 2017 to include the Rock Springs neighborhood and incorporate the areas impacted by the February 2017 flood event. In addition to the primary objective of reducing flood risk, the project may evaluate opportunities to improve fisheries, stream habitat values, and public access.

### Benefits

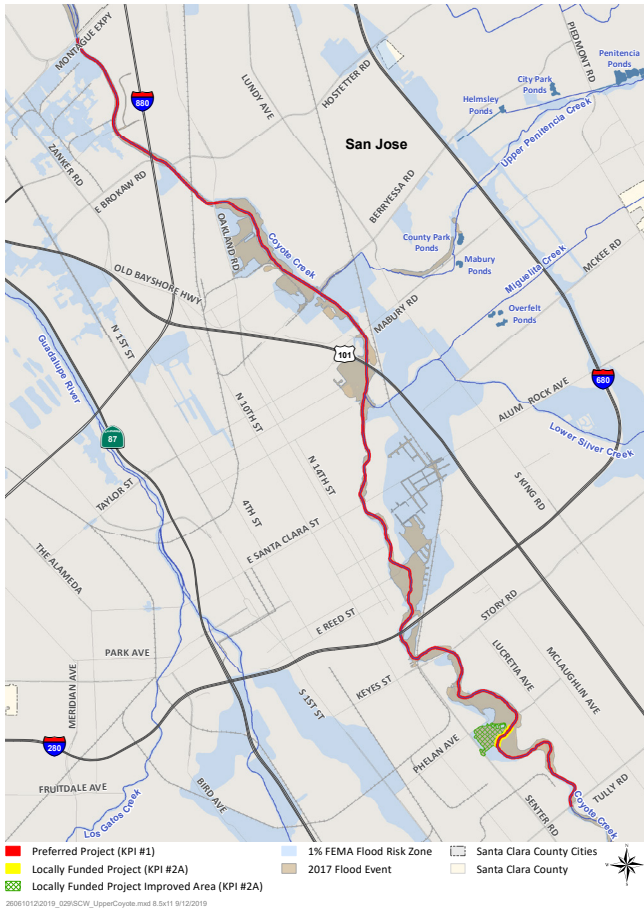
- Protects approximately 600 parcels from the level of flooding that occurred on February 21, 2017, approximately a 5% flood
- Improves water quality, enhances stream habitat and increases recreational opportunities
- Provides opportunities to incorporate revegetation and aesthetic elements to the Coyote Creek park chain in the project
- Addresses climate change



## Key performance indicator

1. Construct flood protection improvements along Coyote Creek between Montague Expressway and Tully Road to provide protection from floods up to the level that occurred on February 21, 2017, approximately a 5% (or a 20-year) flood event.

Geographic area of benefit: San José



Estimated funding from Safe, Clean Water Renewal: \$41.8 million

Estimated total project cost: \$80.8 million

## PROJECT E2: SUNNYVALE EAST AND SUNNYVALE WEST CHANNELS FLOOD PROTECTION, SAN FRANCISCO BAY TO INVERNESS WAY AND ALMANOR AVENUE -- SUNNYVALE

- Provides flood protection
- Improves stream water quality by reducing erosion



Sunnyvale West Channel from Carl Road looking south to Caribbean Drive.

## PROJECT E2 SUNNYVALE EAST AND SUNNYVALE WEST CHANNELS FLOOD PROTECTION, SAN FRANCISCO BAY TO INVERNESS WAY AND ALMANOR AVENUE -- SUNNYVALE

This project is to upgrade approximately 6.4 miles of the existing Sunnyvale East Channel to provide 1% flood protection to 1,618 parcels and approximately three (3) miles of the existing West Channel to provide 1% flood protection for 47 acres of highly valuable industrial lands, including the Onizuka Air Force Base.

The Sunnyvale East Channel and Sunnyvale West Channel improvement projects have been combined into a single flood protection project with a single Environmental Impact Report (EIR) to reduce construction costs and improve efficiencies. Both projects decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality and reducing sediment to the San Francisco Bay.

In 2018, Valley Water entered into a Memorandum of Understanding with Google, LLC (Google) to incorporate Google's proposed enhancement effort along 1,100 linear feet of the Sunnyvale West Channel into the project. This portion of the project will also be part of Google's Caribbean Campus Project. Valley Water has completed 100% design and has submitted all required permit applications for the project. Once all permits are received, Valley Water will begin construction.

### Flooding History and Project Background

The Sunnyvale East Channel and the Sunnyvale West Channel were constructed in the 1960s to serve as storm drains with approximately 10% flood protection. They were constructed in response to flooding caused by a combination of major storm events, land subsidence, and inadequate drainage to south San Francisco Bay. Since construction, the storm drain channels have experienced flooding during major storm events in 1968, 1983, 1986, and 1998.

### Benefits

- Provides 1% flood capacity for approximately 6.4 miles of channel along Sunnyvale East and approximately three (3) 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)
- Improves stream water quality by providing erosion control measures to decrease sediment and turbidity
- Identifies recreational opportunities that can be integrated by the City of Sunnyvale and others as appropriate
- Addresses climate change

### Key performance indicator

1. Provide 1% flood protection for 1,618 properties and 47 acres (11 parcels) of industrial land, while improving stream water quality and working with other agencies to incorporate recreational opportunities.

**Geographic area of benefit:** Sunnyvale

Estimated funding from Safe, Clean Water Renewal: \$33 million

Estimated total project cost: \$70.4 million

## PROJECT E3 LOWER BERRYESSA FLOOD PROTECTION, INCLUDING TULARCITOS AND UPPER CALERA CREEKS (PHASE 3) -- MILPITAS

This project is located in the City of Milpitas and includes Tularcitos Creek and Upper Calera Creek, which are two tributary creeks of Lower Berryessa Creek. Once constructed, this project will provide 1% (100-year event) flood protection to 1,100 parcels affected by Upper Calera Creek from the drop structure upstream of Arizona Avenue upstream to Jose Huger Adobe Park, and to an estimated 320 parcels along Tularcitos Creek between its confluence with Berryessa Creek and Interstate 680. Additionally, this project will address inadequate maintenance access along all three creeks, which have made past maintenance more difficult, costly and time-consuming.

### Flooding History and Project Background

Flooding has occurred along Berryessa Creek in 1982, 1983 and 1997. While no reports of flooding along Calera Creek or Tularcitos Creek have been discovered, the Federal Emergency Management Agency and Valley Water 1% flood maps indicate potential flooding along portions of Lower Berryessa Creek and Calera Creek. Flows in Lower Berryessa Creek have a backwater effect on most of Tularcitos Creek. Tularcitos Creek cannot contain design flows due to both this backwater effect and inadequate channel capacity. Also, though the existing levees on both sides of the Tularcitos Creek are structurally stable, they are constructed with highly plastic clay that shrinks and swells, causing erosion and cracking along portions of the levees. Additionally, Upper Calera Creek cannot contain design flows due to inadequate channel capacity.

### Benefits

- Provides 1% flood protection for an estimated 1,420 parcels along Upper Calera and Tularcitos creeks
- Improves access for long-term channel maintenance for both creeks
- Incorporates opportunities to integrate levees with the City of Milpitas trail system
- Identifies opportunities for stream habitat enhancement and/or restoration
- Addresses climate change

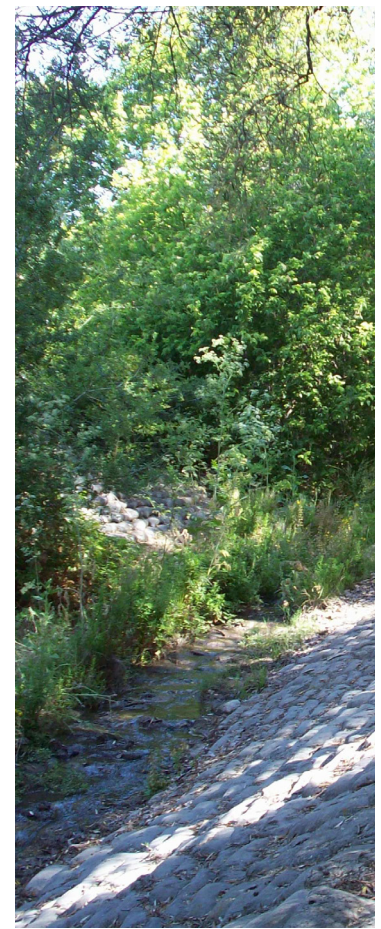
### Key performance indicator

1. Complete the design phase of the project.

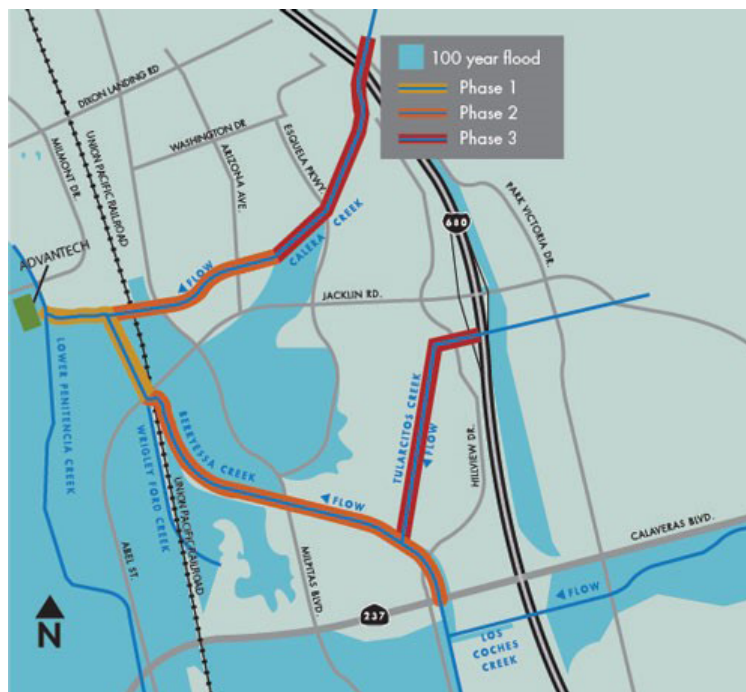
Geographic area of benefit: Milpitas

## PROJECT E3: LOWER BERRYESSA FLOOD PROTECTION, INCLUDING TULARCITOS AND UPPER CALERA CREEKS (PHASE 3) -- MILPITAS

- Provides flood protection along Upper Calera and Tularcitos creeks
- Improves stream water quality by reducing erosion



Channel near US 680.



Estimated funding from Safe, Clean Water Renewal: \$8.2 million

Estimated total project cost: \$71.2 million

## PROJECT E4

### UPPER PENITENCIA CREEK FLOOD PROTECTION, COYOTE CREEK TO DOREL DRIVE -- SAN JOSÉ

#### Preferred project: A federal-state-local partnership

This project continues a partnership with the U.S. Army Corps of Engineers (USACE), to plan, design and construct improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. Part of the project will protect the area around the Bay Area Rapid Transit's Berryessa station near King Road, which would otherwise be subject to flooding.

In addition to providing flood protection, this multi-objective project will also provide ecological restoration and recreation benefits while preserving the water supply. The natural creek channel will be preserved while adjacent existing open space and parkland will remain as recreational areas, only rarely taking the role as a temporary floodplain so that floodwaters do not enter surrounding neighborhoods and commercial areas. Proposed construction measures may include modified floodplains, limited levees/floodwalls, a bypass channel, and fish passage improvements.

#### Local-funding only project

The original local-funding only project was to acquire all necessary rights-of-way and construct a 1% flood protection project from Coyote Creek confluence to King Road, which would have protected 450 parcels. In December 2019, the Valley Water Board directed staff to use the available local funding to complete the design and construction of the locally funded project as well as build the reaches of the preferred project that can be constructed with the available funding. This approach extends the local-funding



only project from King Road to Capital Avenue and provides 1% flood protection for an additional 800 parcels. As a result, the new local-funding only project is to construct flood improvements along Upper Penitencia Creek from the confluence of Coyote Creek to Capital Avenue to maximize the 1% flood protection provided with local available dollars to 1,250 parcels, including the new Berryessa BART station.

## Flooding History and Project Background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San José. Approximately 8,000 homes, schools, businesses, including many high-tech and commercial industries supporting the greater Silicon Valley, and the new Berryessa BART station are in this floodplain.

With the capacity to carry less than a 10% flood (10-year) event, Upper Penitencia Creek has spilled its banks at least seven (7) times since Valley Water began preparing flood reports in 1967. Damaging flood events occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

## Benefits

- Preferred project provides up to 1% flood protection to approximately 8,000 homes, schools and businesses.
- Locally funded-only project provides 1% flood protection to 1,250 parcels, including the new Berryessa BART station.
- Restores/enhances ecological and riparian habitat
- Reduces sedimentation and maintenance requirements
- Improves water quality in Upper Penitencia and Coyote creeks
- Provides opportunities for recreation improvements consistent with the City of San José and Santa Clara County Park master plans
- Addresses climate change

## Key performance indicator

1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 8,000 parcels.
2. With local funding only: Construct a 1% flood protection project from Coyote Creek confluence to Capital Avenue to provide 1% flood protection to 1,250 parcels, including the new Berryessa BART station.

**Geographic area of benefit:** San Jose

**Estimated funding from Safe, Clean Water Renewal:** \$22.9 million

**Estimated total project cost:** \$67 million

### PROJECT E4: UPPER PENITENCIA CREEK FLOOD PROTECTION, COYOTE CREEK TO DOREL DRIVE -- SAN JOSÉ

- Provides flood protection
- Restores and enhance riparian habitat
- Improves stream water quality

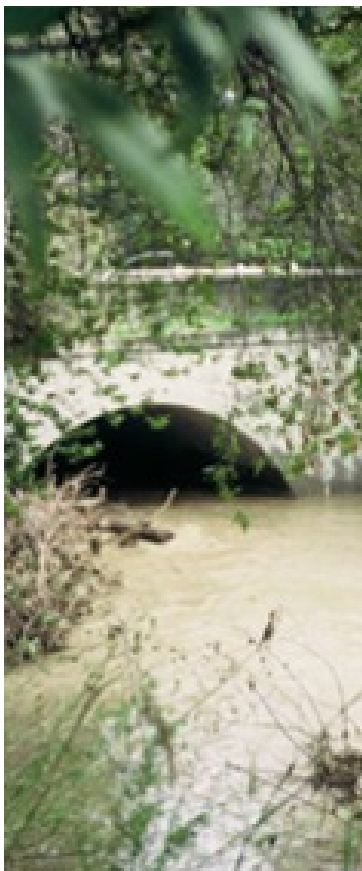


Upper Penitencia along Commodore Park.



## PROJECT E5: SAN FRANCISQUITO CREEK FLOOD PROTECTION, SAN FRANCISCO BAY TO UPSTREAM OF HIGHWAY 101 -- PALO ALTO

- Provides flood protection
- Reduces bank erosion and sedimentation
- Enhances recreational opportunities for the community



High flows under the Pope/Chaucer Street Bridge

## PROJECT E5

### SAN FRANCISQUITO CREEK FLOOD PROTECTION, SAN FRANCISCO BAY TO UPSTREAM OF HIGHWAY 101 -- PALO ALTO

This project is sponsored by the San Francisquito Creek Joint Powers Authority (SFCJPA), of which Valley Water is a member agency, in partnership with the U.S. Army Corps of Engineers (USACE).

#### Preferred project: A federal-state-local partnership

The project is to construct improvements along San Francisquito Creek from San Francisco Bay to Middlefield Road and additional detention of floodwaters upstream of Highway 280 to provide 1% (100-year event) flood protection, ecosystem protection and recreational benefits to surrounding communities.

#### Local-state-funding-only partnership

##### *Highway 101 to Pope-Chaucer Bridge*

This stretch of the project will remedy channel constrictions and replace bridges at Newell Road and Pope/Chaucer streets to allow the channel to contain floodwaters of approximately 7,500 cubic feet per second, equivalent to approximately a 1.4% flood event (70-year event). Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently the channel can only convey approximately a 7% flood event (approximately a 15-year event).

##### *Newell Road Bridge*

The Newell Road bridge replacement, unlike the rest of the project elements in this stretch, is sponsored by the City of Palo Alto, which has applied for funding through Caltrans' Highway Bridge Program (HBP). The project has been programmed by Caltrans to fund approximately 89% of the total cost for replacing the Newell Road bridge, while the local match funds, approximately 11% of the total cost, will be funded by Valley Water through the Safe, Clean Water Program renewal. The City of East Palo Alto and the SFCJPA continue to provide input on the Newell Road bridge replacement.

Additionally, the SFCJPA continues to pursue partnerships with federal, state and local agencies for additional construction funding.

In 2019, Valley Water completed the construction of the San Francisco Bay to Highway 101 reach of the project to provide 1% flood protection and ecosystem benefits to the neighboring communities. Major improvements included construction of approximately 4,000 feet of floodwall and creating a significantly wider creek marsh plain. Therefore, the completion of this stretch protects approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record.

## Flooding History and Project Background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead

trout runs. The creek can cause severe flood damage with very little warning and has overflowed 7 (seven) times since 1910.

During the February 1998 El Niño event, record flooding caused an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 1% flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the USACE in 2011.

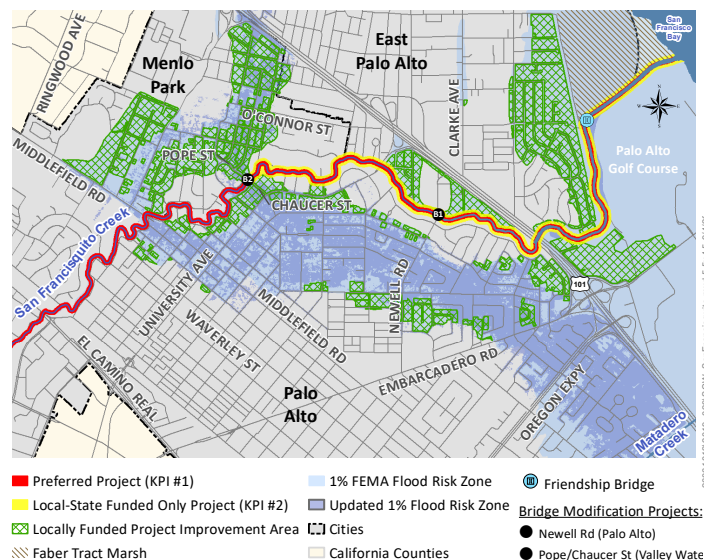
## Benefits

- Provides 1% flood protection to approximately 3,000 homes and businesses in Palo Alto
- Local-state-funding-only project provides approximately 1.4% (70-year event) flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the state Department of Water Resources and the California Department of Transportation Addresses climate change

## Key performance indicators

1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1% flood protection.
2. With state and local funding only: Protect approximately 3,000 parcels by providing 1% flood protection downstream of Highway 101, and approximately 1.4% protection upstream of Highway 101.

## Geographic area of benefit: Palo Alto



**Estimated funding from Safe, Clean Water Renewal:**  
\$31.5 million

**Estimated total project cost:**  
\$89.3 million

**PROJECT E6:  
UPPER LLAGAS  
CREEK FLOOD  
PROTECTION,  
BUENA VISTA  
AVENUE TO LLAGAS  
ROAD -- MORGAN  
HILL, SAN MARTIN,  
GILROY**

- Provides flood protection
- Improves stream habitat and fisheries
- Creates additional wetland habitat



Lake Silveira

**PROJECT E6**

**UPPER LLAGAS CREEK FLOOD PROTECTION, BUENA VISTA AVENUE TO LLAGAS ROAD -- MORGAN HILL, SAN MARTIN, GILROY**

**Preferred project: A federal-state-local partnership**

This project continues a partnership with the U.S. Army Corps of Engineers (USACE) and the State of California to plan, design and construct improvements along 13.9 miles of channel. The project extends from Buena Vista Avenue to Llagas Road and includes West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1% flood (100-year 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.

**Local-funding only project**

Construct flood protection improvements along Llagas Creek from Buena Vista Avenue to Highway 101 in San Martin (Reaches 4 and 5 (portion)), Monterey Road to Watsonville Road in Morgan Hill (Reach 7a), approximately W. Dunne Avenue to W. Main Avenue (a portion of Reach 8), and onsite compensatory mitigation at Lake Silveira.

In September 2019, Valley Water began construction on the locally funded Reaches 4, 7a, a portion of Reach 5 and Lake Silveira, which is expected to be completed in 2022. Construction of the approximately 2,300 linear feet of a horseshoe-shaped underground tunnel and approximately 1,600 linear feet of twin reinforced concrete box culverts upstream and downstream of the tunnel to carry high water flows is scheduled to begin in November 2020. Construction is expected to take 2.5 years.

**Flooding History and Project Background**

The area sustained damage in 1937, 1955, 1958, 1962, 1963, 1969, 1982, 1986, 1996, 1997, 1998, 2002, 2004, 2008, 2009, 2011 and 2017. In 2009, many businesses and residences in downtown Morgan Hill were flooded under 1 foot of water.

**Benefits**

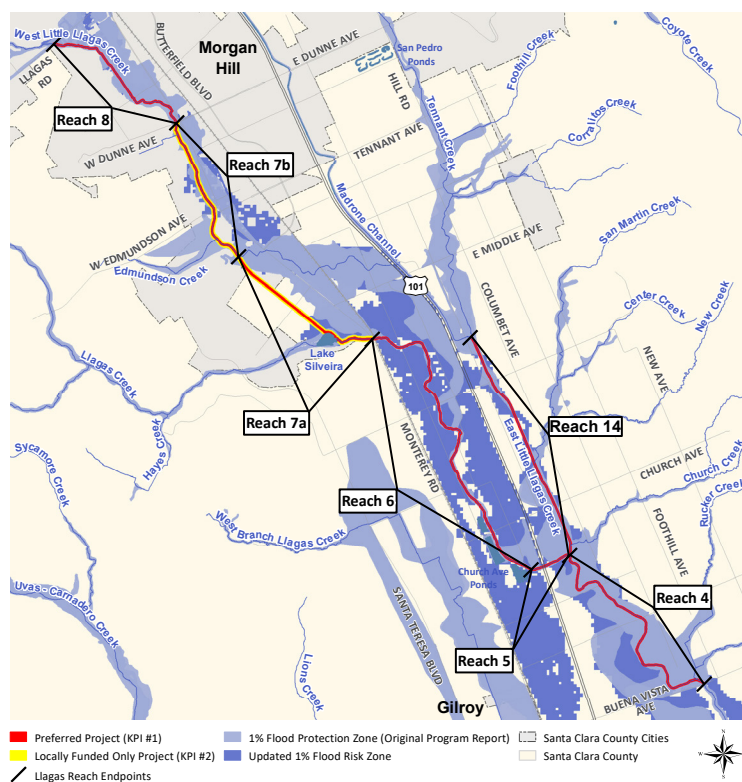
- Provides 1% flood capacity for four (4) miles along West Little Llagas Creek within downtown Morgan Hill, protecting approximately 1,100 homes and 500 businesses
- Provides 10-year flood protection to approximately 1,300 agricultural acres in Morgan Hill, Gilroy and San Martin
- Locally funded project provides improved flood protection for a limited number of homes and businesses in Morgan Hill
- Improves stream habitat and fisheries
- Creates additional wetlands
- Improves stream water quality
- Identifies opportunities to integrate recreation improvements with the City of Morgan Hill and others as appropriate

- Addresses climate change

## Key performance indicators

1. Preferred project with federal and local funding: Plan, design and construct flood protection improvements along 13.9 miles of Upper Llagas Creek from Buena Vista Avenue to Llagas Road to provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.
2. With local funding only: Construct flood protection improvements along Llagas Creek from Buena Vista Avenue to Highway 101 in San Martin (Reaches 4 and 5 (portion)), Monterey Road to Watsonville Road in Morgan Hill (Reach 7a), approximately W. Dunne Avenue to W. Main Avenue (portion of Reach 8), and onsite compensatory mitigation at Lake Silveira.

**Geographic area of benefit:** Morgan Hill, San Martin and Gilroy



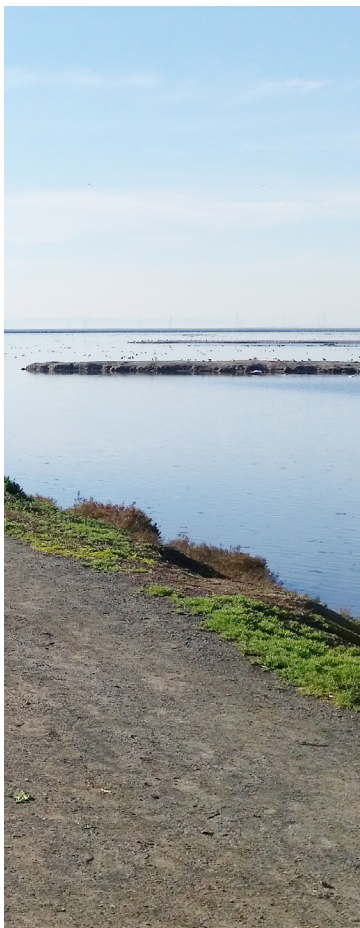
**Estimated funding from Safe, Clean Water Renewal:** \$46.3 million

**Estimated total project cost:** \$285 million



**PROJECT E7:  
SAN FRANCISCO  
BAY SHORELINE  
PROTECTION  
-- MILPITAS,  
MOUNTAIN VIEW,  
PALO ALTO, SAN  
JOSÉ, SANTA CLARA  
AND SUNNYVALE**

- Provides flood protection from coastal flooding and sea-level rise
- Restores tidal marsh habitat
- Provides educational opportunities



Shoreline Phase 1 levee

## **PROJECT E7**

### **SAN FRANCISCO BAY SHORELINE PROTECTION -- MILPITAS, MOUNTAIN VIEW, PALO ALTO, SAN JOSÉ, SANTA CLARA AND SUNNYVALE**

This project is a partnership with the California State Coastal Conservancy, the U.S. Army Corps of Engineers (USACE) and regional stakeholders to provide tidal flood protection, restore and enhance tidal marsh and related habitats, and provide recreational and public access opportunities along Santa Clara County's shoreline.

This project relies on federal participation from the USACE to review and approve the plans. Without federal participation, Valley Water cannot implement planning, design and construction on our own due to limited available funding. The proposed Safe, Clean Water funding provides Valley Water's cost share to complete the planning study, design and construction for Economic Impact Areas (EIAs) 1-4, and provides Valley Water's cost share to complete the planning study and design for EIAs 5-10 .

The 2012 Safe, Clean Water Program has already provide \$15 million as a portion of Valley Water's local share of funding for flood protection improvements in Economic Impact Area (EIA) 11, which is the urban area of North San José and the community of Alviso. Once completed, EIA 11 will provide flood protection to more than 1,000 residential structures and 100 non-residential structures, and allow for the restoration of 2,900 acres of tidal marsh and related habitats.

The project will provide coastal flood protection from rising sea-level, restore and enhance tidal marsh by using a combination of flood protection levees, wetlands and transitional zone habitats also known as ecotones. Ecotones will provide an additional protective buffer for the levee and allow marsh habitat to migrate upslope as sea level rises. This approach of using natural infrastructure will help develop a resilient and adaptable flood protection system that can evolve in the future.

### **Flooding History and Project Background**

This project stems from the 2003 acquisition of thousands of acres of former South Bay salt production ponds, purchased for wetland restoration with combined public and private funding. The South Bay Shoreline Protection Project is an important component of the South Bay Salt Ponds Restoration Project, a large, multi-agency effort to restore 15,100 acres of tidal wetlands near San Jose, Mountain View and East Palo Alto/Menlo Park Baylands. Without incorporating flood protection measures along the inboard side of the former salt ponds, proposed wetland restoration is likely to increase coastal flood risks to the shoreline areas. This project would construct flood protection levees to protect Silicon Valley's "Golden Triangle," bounded by Highway 101, State Route 237 and Interstate 880. Multiple flood events since the mid-1990s have damaged business operations in this area, which is home to major high-tech corporations including Intel, Google, Yahoo, Cisco and others. The project would also protect low-lying communities, as well as important infrastructure such as airports and sewage treatment plants.



The existing multi-agency partnerships for the San Francisco Bay Shoreline Study and the South Bay Salt Ponds Restoration project will continue to ensure all the goals for both these projects are achieved.

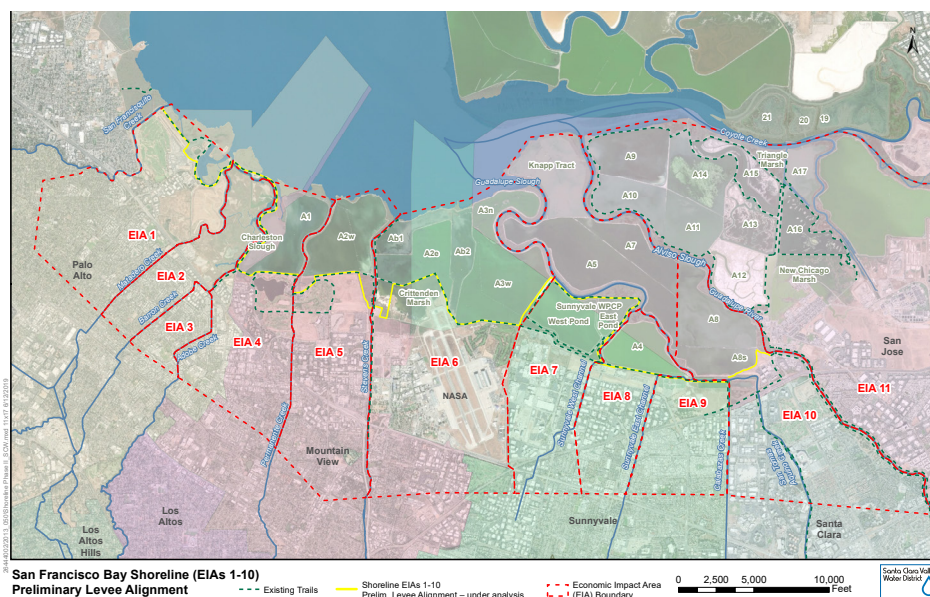
## Benefits

- Provides planning and design to protect nearly 4,700 acres and more than 5,000 structures, including roads, highways, parks, airports and sewage treatment plants in Santa Clara County
- Allows for restoration of tidal marsh habitat for endangered wildlife such as the salt marsh harvest mouse and Ridgway's rail; rich feeding grounds for shorebirds; and nursery areas for young fish such as leopard sharks and steelhead
- Provides educational, recreational and public access opportunities
- Protects more than 4,300 structures (EIAs 1-4)
- Allows for the restoration of 400 acres of tidal marsh and related habitats (EIAs 1-4)
- Addresses climate change

## Key performance indicators

1. Provide portion of the local share of funding for planning, design and construction phases for the Santa Clara County shoreline area (EIAs 1-4).
2. Provide portion of the local share of funding for planning and design phases for the Santa Clara County shoreline area (EIAs 5-9).

**Geographic area of benefit:** Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale



**Estimated funding from Safe, Clean Water Renewal:** \$46 million

**Estimated total project cost:** \$400 million

## PROJECT E8: UPPER GUADALUPE FLOOD PROTECTION, HIGHWAY 280 TO BLOSSOM HILL ROAD -- SAN JOSÉ

- Provides flood protection
- Improves stream habitat values and fisheries
- Allows for creekside trail access



Upper Guadalupe River Reach 10B

## PROJECT E8 UPPER GUADALUPE FLOOD PROTECTION, HIGHWAY 280 TO BLOSSOM HILL ROAD -- SAN JOSÉ

### Preferred project: A federal-state-local partnership

This federally authorized project continues a project in partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct improvements along 5.5 miles of the channel extending from Interstate 280 to Blossom Hill Road. Improvements include channel widening, construction of floodwalls and levees, replacement of road crossings and planting of streamside vegetation. Reducing flood frequency and bank erosion will improve water quality, while planned mitigation measures will give fish access to an additional 12 miles of habitat within and upstream of the project reach.

### With local funding only

The locally funded project entails constructing flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive (Reach 7). It also includes completing a gravel augmentation project along approximately 800 lineal feet of the Upper Guadalupe River in San José, from approximately the Union Pacific Railroad Bridge to West Virginia Street Bridge to improve aquatic habitat for migrating steelhead and channel stability. Flood damage will be reduced through the local-funding only project. However, protection from the 1% flood is not provided until completion of the entire Upper Guadalupe River Flood Protection Project.

Mitigation elements of the project, namely Reach 10B (from Curtner Avenue to Almaden Expressway) and Reach 12 (from Brahnam Lane to Blossom Hill Road), were completed in 2015 in partnerships with USACE. Construction on the gravel augmentation project is scheduled to begin in August 2021. USACE has initiated a General Re-evaluation Report (GRR) of the preferred project, which is anticipated to be completed by October 2023. The scope of the project may change as a result of the GRR findings.

## Flooding History and Project Background

Damaging flood events occurred in 1982, 1983, 1986, 1995 and 1998. Severe flooding in 1995 damaged more than 150 homes in the Gardner, Willow Glen, and South San José residential districts, and shut down Highway 87 and the parallel light rail line – both major commuter thoroughfares. Freeway and light rail flooding occurred again in 1998.

## Benefits

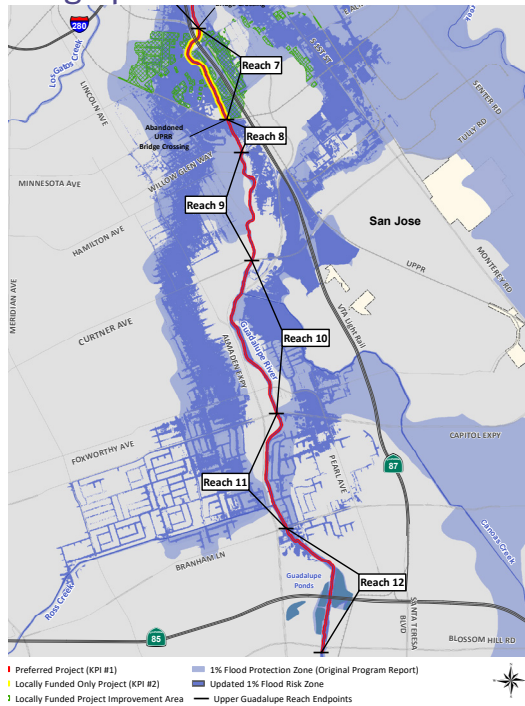
- Preferred project will construct 1% flood conveyance capacity for 5.5 miles of channel in San José, protecting approximately 6,280 homes, 320 businesses and 10 schools/institutions
- Local funding only constructs improvements to 4,100 linear feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing downstream of Padres Drive to convey 1% flow
- Improves stream habitat values and fisheries
- Improves stream water quality

- Allows for creekside trail access
- Addresses climate change

## Key performance indicators

1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 6,280 homes, 320 businesses and 10 schools and institutions.
2. With local funding only: Construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive and provide gravel augmentation along approximately 800 lineal feet of the Upper Guadalupe River in San José, from approximately the Union Pacific Railroad Bridge to West Virginia Street Bridge to improve aquatic habitat for migrating steelhead and channel stability.

### Geographic area of benefit: San José



Estimated funding  
from Safe, Clean Water  
Renewal: \$35.8 million

Estimated total project  
cost: \$494 million

## *What happens to Priority E projects if funding is not available?*

Over the years, Santa Clara County has experienced severe flooding. These projects are being designed and constructed to protect our county's most at risk communities. Without this funding, the majority of these projects may be significantly delayed, prolonging the risk to the community.

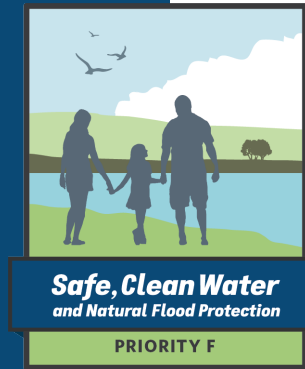
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# Priority F



# Priority F

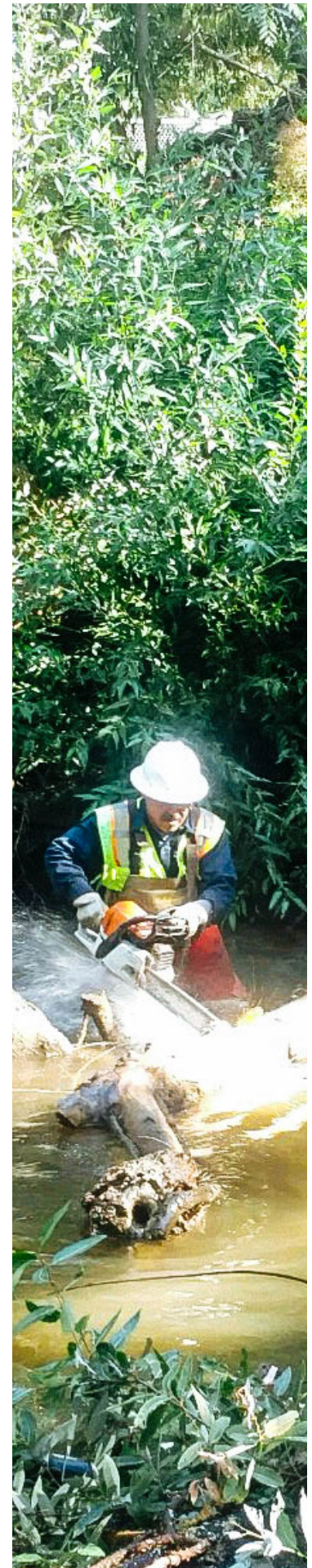
## Support Public Health and Public Safety for Our Community



With the advent of the COVID-19 pandemic that drastically changed the world, the critical need for safe, clean water supplies and essential water infrastructure, particularly during emergencies, has come into sharper focus. This newly proposed priority pulls together multi-benefit projects that were previously placed under other priorities in the 2012 Safe, Clean Water Program and groups them based on their common benefit of supporting public health and public safety along our waterways and critical infrastructure.

This priority would include enhanced funding to support public safety by partnering with local municipalities to increase park ranger and police patrols along waterways; reducing trash and other pollutants from entering waterways from encampments to support public health; and ongoing vegetation control and sediment removal activities to maintain conveyance capacity of flood protection projects. It would also provide additional funding for grants and partnerships for local agencies, organizations and individuals for water conservation, pollution prevention, creek cleanups and education, wildlife habitat and access to trails and open space.

Additionally, it would include two newly proposed efforts: a project to fund public art to beautify Valley Water property and infrastructure to deter graffiti and litter, and a long-term effort to ensure that existing flood protection infrastructure continues to function sustainably for continued public safety. Other projects would include vegetation management for access and fire safety, removing flood-inducing blockages and improving coordination and communication in flood emergencies.



## PROJECT F1: VEGETATION CONTROL AND SEDIMENT REMOVAL FOR CAPACITY

- Ensures existing flood protection channels function as planned
- Improves and protects water quality



Los Coches Creek.

## PROJECT F1 VEGETATION CONTROL AND SEDIMENT REMOVAL FOR CAPACITY

This project supports Valley Water's ongoing vegetation control and sediment removal activities that reduce flood risk by maintaining the design conveyance capacity of flood protection projects. The project includes controlling in-stream vegetation and tree growth and removing sediment at appropriate intervals. Before carrying out in-stream maintenance, Valley Water's personnel perform biological pre-construction surveys to minimize environmental impacts. This project also helps fund future maintenance of flood protection projects completed under the Safe, Clean Water Program.

This project comprises two (2) sub-projects that support Valley Water's ongoing vegetation control and sediment removal activities. These sub-projects are:

F1.1 Vegetation Control for Capacity

F1.2 Sediment Removal for Capacity

### Benefits

- Ensures that existing flood protection projects continue to provide flood protection
- Improves water quality

### Key performance indicator

1. Maintain completed flood protection projects for flow conveyance.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$114.1 million

**Estimated total project cost:** \$213.1 million

## PROJECT F2 EMERGENCY RESPONSE PLANNING AND PREPAREDNESS

This project enables Valley Water to work with local municipalities to clearly delineate and communicate roles and responsibilities for floodplain management and flood emergency management. The resulting plans will also strengthen response capabilities for mutual assistance during other types of public health and safety emergencies or natural disasters. The project supports Valley Water's countywide emergency response, preparedness and mitigation activities, develops communication processes and disseminates web-based flood forecasting information developed under Project F7: Emergency Response Upgrades. Valley Water will also assist collaborators in developing formal, site-specific flood-fighting strategies and will coordinate outreach throughout the county so that the public receives uniform warning messages during a flood emergency.

This project is composed of two (2) sub-projects that support Valley Water's ongoing emergency response planning and mitigation. These sub-projects are:

F7.1 Coordination with local municipalities on disaster planning, mitigation, response and communication

F7.2 Collaboration with partner municipalities on developing and sharing disaster response procedures

### Benefits

- Reduces flood damage
- Improves flood preparedness
- Provides effective coordinated response to disaster-related emergencies
- Improves community awareness about disaster-related risks

### Key performance indicators

1. Coordinate with local municipalities to merge Valley Water-endorsed flood emergency processes with their own emergency response plans and processes.
2. Complete five flood management plans/procedures per five-year period, selected by risk priorities.
3. Train Valley Water staff and partner municipalities annually on disaster procedures via drills and exercises before testing the plans and procedures.
4. Test flood management plans/procedures annually to ensure effectiveness.

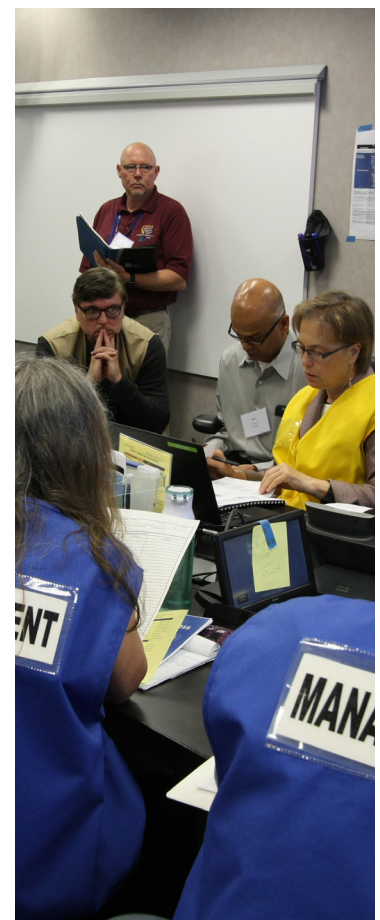
**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$7.2 million

**Estimated total project cost:** \$7.2 million

## PROJECT F2: EMERGENCY RESPONSE PLANNING AND PREPAREDNESS

- Improves flood preparedness
- Reduces flood damages
- Provides effective coordinated response to disaster-related emergencies



Emergency response planning.



### PROJECT F3: FLOOD RISK ASSESSMENT STUDIES

- Provides more accurate mapping of areas at risk of flooding
- Identifies locations in need of preventative maintenance to prevent creek deterioration
- Supports communication with partner agencies on evolving flood risks



Needles Dr between Senter Rd and Welch Ave.

## PROJECT F3 FLOOD RISK ASSESSMENT STUDIES

This project is to enable Valley Water scientists to update custom software models of local creeks for the most current and accurate understanding of potential flood risks in high priority flood-prone areas and develop options for managing the flood risks. Existing models will be verified, updated and recalibrated as conditions change, resulting in more effective maintenance operations. Valley Water will also convey this information to the community and partner cities.

When creek conditions necessitate rehabilitation to preserve flood protection, this project also funds preliminary engineering studies to isolate problem areas and explore potential solutions. Current, engineering studies to be completed are:

- Calera Creek near Milpitas High School to Interstate 680 in Milpitas, which will feed into the design of Project E3: Lower Berryessa Flood Protection
- Tributaries to Lower Silver Creek (Ruby, Norwood, Quimby and Fowler creeks) in San José
- Ross Creek in San José, from Guadalupe River to Blossom Hill Road

As of June 30, 2019, Valley Water had completed four (4) engineering studies under this project. These were on Coyote Creek (Bay to Anderson Dam, including Rock Springs Neighborhood); Adobe and Barron creeks tidal flood protection (Highway 101 to Middlefield Road in Palo Alto); and Alamitos Creek (upstream of Almaden Lake) in San José. The Coyote Creek study completed under this project was utilized to develop the short-term interim projects that Valley Water built to help reduce the risk of flooding along Coyote Creek. These include the installation of an interim floodwall and embankment along the creek to protect the Rock Springs community from a flood event equivalent to the February 2017 flood. Valley Water also updated the Alamitos Creek 2-D hydraulic (HEC-RAS) model of the updated 1% floodplain and shared the information with the City of San José.

Revising flood models on a regular basis enables Valley Water to keep pace with changes in rainfall patterns and intensity as our climate changes. An up-to-date understanding of flood risks allows us to work toward preventing future flooding.

### Benefits

- Provides more current and accurate mapping of areas at risk of flooding
- Provides the technical basis for developing future flood protection plans, and for potential funding partnerships
- Identifies, in a timely manner, the needs to prevent creek deterioration Identifies the need for flood mitigation or creek rehabilitation projects
- Facilitates communication with partner cities on evolving flood risks and possible solutions
- Addresses climate change

### Key performance indicators

1. Complete engineering studies on three (3) creek reaches to address 1% flood risk.
2. Annually, update floodplain maps on a minimum of three (3) creek reaches in

accordance with new FEMA standards.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$21.9 million

**Estimated total project cost:** \$21.9 million

## PROJECT F4 VEGETATION MANAGEMENT FOR ACCESS AND FIRE SAFETY

This project supports Valley Water’s ongoing vegetation management activities that reduce fire risk by maintaining creekside lands. These activities also ensure access for maintenance and emergency personnel and equipment.

The project includes vegetation management activities such as weed abatement, goat grazing, herbicide application and pruning to provide access and reduce fire risk. Before carrying out maintenance, Valley Water’s personnel perform biological pre-construction surveys to minimize environmental impacts. Allocations for Project F4 also help fund future maintenance of flood protection projects completed under the Safe, Clean Water Program.

Fire risk reduction will become a higher priority as the climate changes. This project will allow Valley Water to adapt to those changes.

### Benefits

- Provides safe access for maintenance of creek channels
- Reduces fire risk along creek channels
- Addresses climate change by preparing for increased fire risk through vegetation management

### Key performance indicator

1. Provide vegetation management for access and fire risk reduction on an average of 495 acres per year, totaling 7,425 acres along levee, property lines and maintenance roads over a 15-year period.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$12 million

**Estimated total project cost:** \$80 million

## PROJECT F4: VEGETATION MANAGEMENT FOR ACCESS AND FIRE SAFETY

- Provides safe access for maintenance of creek channels
- Reduces fire risk along creek channels

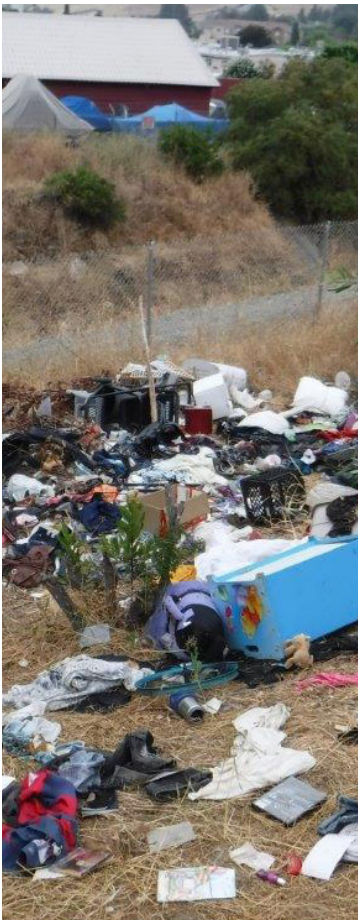


Uvas Creek at Luchessa Avenue East bank



## PROJECT F5: ENCAMPMENT CLEANUPS

- Reduces the accumulation of trash and other pollutants in local waterways
- Reduces flood risk
- Coordinates efforts among multiple agencies to create lasting solutions to homeless encampments near waterways



Homeless encampment site

## PROJECT F5 GOOD NEIGHBOR PROGRAM: ENCAMPMENT CLEANUPS

This project supports Valley Water's ongoing coordination with local cities and agencies to clean up encampments near waterways or on Valley Water property. Such encampments can contaminate waterways or damage Valley Water facilities. This is a cooperative effort with local police departments, social services and nonprofit groups that help provide alternatives to homelessness.

This project will also provide funding for supplemental park ranger and police patrols along waterways to prevent re-establishment of homeless encampments and to provide outreach to the homeless community for the safety of staff and the community.

### Benefits

- Reduces the accumulation of trash and other pollutants in local waterways, including streams, reservoirs and wetlands
- Protects Valley Water facilities and reduces flood risk
- Improves the aesthetics of creeks in neighborhoods and parks
- Coordinates efforts among multiple agencies to create lasting solutions to homeless encampments near waterways

### Key performance indicators

1. Perform 300 annual cleanups to reduce the amount of trash and pollutants entering the streams.
2. Provide up to \$500,000 per year in cost-share with other agencies to provide police and ranger patrol activities along waterways.
3. Partner with local agencies to address homelessness crisis with the goal to reduce encampment cleanups.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$38.7 million

**Estimated total project cost:** \$38.7 million

## PROJECT F6

### GOOD NEIGHBOR PROGRAM: GRAFFITI AND LITTER REMOVAL AND PUBLIC ART

This project allows Valley Water to continue responding to requests for cleanup of illegal dumping, trash and graffiti on Valley Water's property and rights-of-way. Cleanup efforts include graffiti removal from floodwalls, concrete embankments, signs, structures and other Valley Water's assets, as well as maintaining, repairing and installing fences and gates so that Valley Water's structures and facilities remain safe and clean. The project also includes quarterly cleanups of problem trash sites to help reduce waterway pollution and keep creeks and riparian areas free of debris. The project also funds installation and maintenance of public art projects, such as murals, to beautify Valley Water property and infrastructure, to help deter graffiti and litter.

#### Benefits

- Reduces trash and contaminants in local waterways
- Improves the appearance of waterways in neighborhoods and parks by removing trash, graffiti and litter as well as illegally dumped items, such as cars, shopping carts, appliances, etc.
- Reduces illegal dumping into or near waterways by repairing and installing fencing on Valley Water's property
- Provides coordinated response to community complaints about trash and graffiti in neighborhoods along waterways
- Helps deter graffiti and litter by implementing public art projects to beautify Valley Water property and infrastructure

#### Key performance indicators

1. Cleanup identified trash and graffiti hotspots at approximately 80 sites four (4) times per year.
2. Respond to requests on litter or graffiti cleanup within five (5) working days.
3. Provide up to \$1.5 million over 15 years to implement public art projects on Valley Water property and infrastructure.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$13.1 million

**Estimated total project cost:** \$26.4 million

## PROJECT F6

### GRAFFITI AND LITTER REMOVAL AND PUBLIC ART

- Improves the appearance of waterways in neighborhoods and parks by removing trash, graffiti and litter
- Provides coordinated response to complaints about graffiti and litter
- Helps deter graffiti and litter by implementing public art projects



Graffiti.

## PROJECT F7: EMERGENCY RESPONSE UPGRADES

- Improves accuracy of flood forecasting services
- Improves emergency response times
- Addresses climate change through an adaptation strategy to track and understand uncertain future weather patterns



New stream gauge sensor.

## PROJECT F7 EMERGENCY RESPONSE UPGRADES

This project supports ongoing development and maintenance of a robust flood forecasting system. The system facilitates the efficient dissemination of information to emergency responders and the public.

### Benefits

- Improves the accuracy of flood forecasting services
- Improves emergency response times and information dissemination regarding upcoming storms and potential floods
- Provides information toward improving reservoir management to optimize flood risk reduction and water supply management
- Provides a real-time website that tracks and offers public access to local weather and flood forecasting information
- Increases atmospheric data collection network, data management and maintenance
- Addresses climate changes through an adaptation strategy to track and understand uncertain future weather patterns

### Key performance indicators

1. Maintain existing capabilities for flood forecasting and warning.
2. Improve flood forecast accuracy and emergency response time working with the National Weather Service and through research and development.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$13.2 million

**Estimated total project cost:** \$13.2 million

## PROJECT F8 SUSTAINABLE CREEK INFRASTRUCTURE FOR CONTINUED PUBLIC SAFETY

This project supports Valley Water's long-term efforts to ensure that existing flood protection infrastructure continues to function sustainably and provide the level of service originally intended. The project includes: (1) assessing and prioritizing existing creek and watershed infrastructure; (2) preparing watershed and/or creek asset management plans; and (3) implementing recommendations of asset management plans.

Undertaking this project, in effect, provides for adaptive management of existing infrastructure, ensuring infrastructure continues to provide flood protection and public safety as climate and other changes evolve.

### Benefits

- Ensures that existing flood protection infrastructure continues to function sustainably and provides the level of service originally intended
- Preserves and extends the life of flood protection infrastructure
- Strengthens the reliability of flood protection infrastructure

### Key performance indicator

1. Provide up to \$7.5 million over the next 15 years to plan, design and construct projects identified through Watersheds asset management plans.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water Renewal:** \$7.5 million

**Estimated total project cost:** \$15 million

## PROJECT F8: SUSTAINABLE CREEK INFRASTRUCTURE FOR CONTINUED PUBLIC SAFETY

- Strengthens the reliability of flood protection infrastructure
- Ensures existing flood protection infrastructure continues to function sustainably and provides the level of service intended



San Tomas erosion repair.



## PROJECT F9: GRANTS AND PARTNERSHIPS FOR SAFE, CLEAN WATER, FLOOD PROTECTION AND ENVIRONMENTAL STEWARDSHIP

- Increases collaborations and partnerships with cities, the County, non-profit organizations, schools and other stakeholders
- Leverages community resources for efficient use of funds



Fremont High School Water to Go

## PROJECT F9

### GRANTS AND PARTNERSHIPS FOR SAFE, CLEAN WATER, FLOOD PROTECTION AND ENVIRONMENTAL STEWARDSHIP

This project provides grants and partnerships for agencies, organizations and individuals for water conservation, pollution prevention, creek cleanups and education, wildlife habitat restoration, access to trails and open space. Eligible projects include water conservation; recycled water programs and infrastructure; pollution prevention programs; watershed stewardship; creek cleanups; education; and developing plans and/or implementing projects that create or enhance wetland, riparian and tidal marsh habitat; protect special status species; improve fish passage and habitat; remove non-native, invasive plant species; plant native species; partnerships to remove flood-inducing blockages, and provide access to creekside trails or trails that provide a significant link to the creekside trail network.

### Benefits

- Leverages community resources for efficient use of funds to implement projects that conserve water, prevent trash and contaminants from entering our waterways and groundwater, enhance creek and bay ecosystems, and expand trail and open space access
- Increases collaborations and partnerships with cities, the County, nonprofit organizations, schools and other stakeholders
- Promotes public involvement, awareness and education of safe, clean drinking water, flood protection and environmental stewardship through community-led projects

### Key performance indicators

1. Provide three (3) grant cycles every five (5) years that follow pre-established competitive criteria related to safe, clean drinking water, flood protection and environmental stewardship.
2. Provide two (2) partnership cycles every five (5) years for projects related to safe, clean drinking water, flood protection and environmental stewardship.
3. Provide annual funding for bottle filling stations to increase drinking water accessibility, with priority for installations in economically disadvantaged communities and locations that serve school-age children and students.
4. Provide annual mini-grant funding opportunity for projects related to safe, clean drinking water, flood protection and environmental stewardship.

**Geographic area of benefit:** Countywide

**Estimated funding from Safe, Clean Water: Renewal** \$50.1 million

**Estimated total project cost:** \$50.1 million

### *What happens to Priority F projects if funding is not available?*

The projects under this priority are critical to public health and public safety. Without funding, our creeks would become overrun with encampments, trash and debris, causing blockages that could lead to flooding and impacting the quality of our water.

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# Financing the Program



# Financing

The proposed extension of the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) would update and extend the measure that voters approved with an overwhelming majority in 2012. If approved by voters, the revenue from the proposed Safe, Clean Water Program renewal would continue to be collected in the same manner as under the current 2012 Safe, Clean Water Program. All existing active projects started under the current 2012 Safe, Clean Water Program would continue under the proposed Safe, Clean Water renewal.

The proposed Safe, Clean Water Program renewal is expected to generate approximately \$45.5 million each year. In the first 15 years, an estimated \$682.5 million is expected to be generated to help fund the 32 capital and operating projects listed and discussed in previous chapters. This figure does not include a potential annual escalator that the Board may utilize to account for inflation, as described further below. Since the renewal is proposed to continue until repealed by voters, completed projects would be replaced with new projects to meet community needs and address the challenges of the time.

The proposed Safe, Clean Water Program renewal would follow 15-year financial planning cycles. This will allow Valley Water to align the budget each year with the projects' key performance indicators as well as long-term planning efforts, such as the Capital Improvement Program.

The proposed Safe, Clean Water Program renewal would build in flexibility to revisit the projects to ensure they continue to align with the community's and the Board's priorities, as well as meet new challenges or take advantage of new opportunities that arise. Five-Year Implementation Plans would also be developed to serve as checkpoints during implementation of the proposed Safe, Clean Water Program renewal. In addition to these forward-looking plans, each year Valley Water would produce an annual report, which looks back on the prior fiscal year and reports on each project's expenditures and progress towards delivery of its key performance indicators (KPIs). Those annual reports would be reviewed by the Independent Monitoring Committee, which would make recommendations to the Board regarding

## FINANCIAL HIGHLIGHTS

- Primary source of revenue for the proposed Safe, Clean Water Program renewal is a special parcel tax
- Proposed Safe, Clean Water Program renewal is expected to generate approximately \$45.5 million each year
- Proposed Safe, Clean Water Program renewal will follow 15-year financial planning cycles
- An estimated \$682.5 million is expected to be generated in the first 15 years to help fund 32 capital and operating projects
- Proposed program renewal is an extension of the current 2012 Safe, Clean Water Program, as such the parcel tax will continue to be assessed at the same rates as under the current 2012 program

any adjustments or modifications that may be required. Furthermore, the proposed Safe, Clean Water Program renewal would continue the practice of the 2012 Safe, Clean Water Program to require independent audits every five years, and include a change control process, which would require all adjustments be made by the Board during board meetings. Modifications to KPIs or decisions to not implement a project would require public hearings.

This financial section provides an overview of the proposed update to the Safe, Clean Water Program, including revenues, financing, expenditures, special tax rate structure, and details on the transition from the existing 2012 Safe, Clean Water Program.

## Financial highlights

### RATE STAYS THE SAME

Because the proposed program renewal would be an extension of the current 2012 Safe, Clean Water Program, the parcel tax would continue to be assessed at the same rates as under the current 2012 program. Note that taxes would only be assessed and collected on the measure in effect for FY 2021-22, either the existing Safe, Clean Water Program, or the renewed Safe, Clean Water Program, if it passes.

## LOCAL TAX STAYS LOCAL

As with the current 2012 Safe, Clean Water Program, the update would be used for specific local projects only. The state cannot redirect the money to other non-local projects or obligations.

## SEAMLESS TRANSITION

If voters approve the proposed update, they would not notice any difference. The Safe, Clean Water charge would continue to be assessed as it has been since the passage of the current program in 2012. The official start of the proposed Safe, Clean Water Program renewal would occur on July 1, 2021, and Valley Water would receive first revenue from the special tax in January 2022.

## CONSUMER PRICE INDEX (CPI) ADJUSTMENT

The tax would continue to be assessed in the same manner, but the Valley Water Board of Directors may adjust it annually to account for inflation. If they elect to do so, they would adjust the tax using the San Francisco-Oakland-San José Consumer Price Index for all Urban Consumers. If the Consumer Price Index is lower than 2%, the Board may set it at 2%.

## RECOVERY OF COSTS OF NATURAL DISASTER DAMAGE

Extreme weather and natural disasters such as wildfires and floods are becoming more frequent, endangering infrastructure that delivers safe, clean water to the community or that provides flood protection. The best way to deal with the possibility of damage to these facilities from natural

disasters is through prevention, which is included in projects covering emergency response preparedness, upgrades and assessments. However, we cannot control nature, and sometimes there will be unanticipated disasters and damage. In such an event, the Board may increase the special tax rates to meet the repair cost of Valley Water facilities damaged by flooding or other natural disasters. The maximum tax rate shall be the percentage increase in the Consumer Price Index plus up to 4.5% to cover the repair costs. A special tax rate increase such as this can only be collected for three years after an unanticipated disaster has occurred.

## EXEMPTION FOR LOW-INCOME SENIOR CITIZENS

Though the rate is relatively low, it can still be a burden for low-income seniors. That is why Valley Water would continue to provide an exemption from the tax for those who are low-income, own at least 50% of the property they reside in and have turned 65 years old before the end of the fiscal year in which the tax is due. Many low-income seniors already receive the exemption under the current 2012 program, and would continue to receive the exemption under the renewed program. Low-income seniors not currently receiving the exemption would need to apply. "Low-income" is defined as 75% of the state median total household income. The latest available data from 2018 indicates that the state median total household income level was \$75,277; "low income" would then be \$56,458.

## FUNDING SOURCES

The proposed Safe, Clean Water Program renewal derives its funding for projects from four sources: the special parcel tax,



capital reimbursements, interest earnings and carryover of the reserves from unspent funds under the current 2012 Safe, Clean Water Program.

The special tax is expected to generate \$45.5 million per year in the first 15 years. Capital reimbursements are expected to account for \$107 million during that same period, and interest earnings are expected to be \$21.7 million. The reserves that will carry over is estimated to total \$92.5 million.

## SPECIAL PARCEL TAX REVENUE

The primary source of revenue for the proposed Safe, Clean Water Program renewal is a special parcel tax. The revenue can be used for any voter-approved purpose, such as construction projects, maintenance and other services, including those benefitting public health and public safety, all as listed in this report.

By potentially continuing the Safe, Clean Water Program with updates to address current needs, Valley Water can avoid the extra costs of developing a new type of tax program. The rate structure for calculating the special parcel tax would remain the same and would be applied equitably and consistently throughout the county. It is based on the size of each parcel and its use, which relates to the stormwater runoff from each parcel. Land use, estimated stormwater runoff and the special tax calculation formula are described in Appendix D.

## CARRYOVER OF RESERVES

The current 2012 Safe, Clean Water Program uses a mixture of pay-as-you-go funding and debt financing to pay for the included projects. Pay-as-you-go financing, which means that Valley Water does not begin construction until there are sufficient funds in hand, has resulted in accumulated reserves for certain projects. As of July 1, 2021, Valley Water is projected to have \$92.5 million in reserves designated for 2012 Safe, Clean Water Program projects, and that money would continue to be available to those projects under the proposed Safe, Clean Water Program renewal.

## STATE REIMBURSEMENTS AND OTHER CONTRIBUTIONS

Certain flood protection projects carried forward from the 2012 Safe, Clean Water Program to the proposed Safe, Clean Water Program renewal are eligible to receive subvention funds from the California Department of Water Resources' State Flood Control Subventions Program. These subventions

*Because the proposed program renewal is an extension of the current 2012 Safe, Clean Water Program, the parcel tax would continue to be assessed at the same rates as under the current 2012 program.*

are financial reimbursements available to local agencies that construct federally authorized flood protection projects, and certain Valley Water flood protection projects have already begun to receive these subventions, making them a secondary source of funding for the proposed Safe, Clean Water Program renewal.

For the list of flood protection projects under the proposed Safe, Clean Water Program renewal, Valley Water expects to receive \$6.9 million in the first 15 years. That is expected to increase as the listed projects are completed and new ones are added.

Federally authorized flood protection projects do not typically receive money directly from the federal government; however, by partnering with the U.S. Army Corps of Engineers when possible, Valley Water receives in-kind work including planning, design and construction.

In addition, Valley Water is seeking \$80 million from the Natural Resource Conservation Service (NRCS) to help fund a critical portion of the Upper Llagas flood protection project. Finally, Valley Water is seeking \$20 million in grants and partnership funding to complete the San Francisquito Creek flood protection project.



Left image: 2012 Safe, Clean Water Program - Upper Berryessa Creek Flood Protection Project - Finalized Trestle Bridge.

2012 Safe, Clean Water Program - Calabazas Creek Flood Protection Project completion ceremony.



While it is planned that Valley Water will apply for these grants/state reimbursements, there has not been receipt of any written award(s).

## INTEREST EARNINGS

Funds awaiting use accumulate interest, primarily in the pay-as-you-go capital program financing method.

## PAY-AS-YOU-GO AND DEBT FINANCING FOR CAPITAL PROJECTS

The proposed Safe, Clean Water Program renewal would use a combination of pay-as-you-go and debt financing to pay for capital projects. While Valley Water must wait until it has sufficient funds to begin work under the pay-as-you-go financing structure, debt financing allows Valley Water to borrow money upfront against the stream of revenue projected over the course of the proposed Safe, Clean Water Program renewal. Over the first 15 years of the proposed Safe, Clean Water Program, Valley Water anticipates receiving \$310 million of Debt Proceeds.

## FUNDING USES

Funding for the proposed Safe, Clean Water Program renewal would be used to achieve various aspects of it, including implementing the priorities through the various projects, planning and delivery, debt financing, and unanticipated expenditures.

Some of the projects included in the proposed Safe, Clean Water Program renewal have already begun. Funding would be allocated to these projects to see them through to completion as described on a project by project basis.

## DEBT SERVICE, DEBT PROCEEDS, AND RATE STABILIZATION RESERVE

Valley Water currently projects that \$310 million in debt would be issued with 30-year repayment terms within the first 15 years of the program. Average annual debt service is estimated at \$19.7 million, totaling \$296.1 million over the first 15 years of the program and \$627 over the 30-year repayment term.

A Rate Stabilization Reserve is planned with funding levels that range from \$0 million to \$74 million over the first 15 years of the proposed Safe, Clean Water Program renewal to help ensure that the debt service coverage ratio is maintained at a minimum of one times the annual debt service amount on a net basis (current year revenues less current year operating and maintenance expense and transfers in/out). In year seven (7) (FY 2027-28), \$59 million is planned to be transferred to



2012 Safe, Clean Water Program Grants and Partnerships - Oak Cove Trail

the Water Utility fund, primarily to fund the Anderson Dam Seismic Retrofit project. The Rate Stabilization Reserve is planned to be drawn down in that year to fund the transfer.

## SUMMARY OF FUNDING SOURCES AND USES

For the first 15 years of the proposed Safe, Clean Water Program renewal, funding sources are projected to exceed expenditures such that a \$40 million Contingency Reserve would be eventually accumulated, helping to ensure Valley Water would be able to deliver on the commitments made in the November 2020 ballot.



# Implementing the Program

# Implementing the Program

To keep the public apprised of the use of their tax dollars, a potential renewal of the 2012 Safe, Clean Water Program would continue to include oversight, transparency and accountability. Updated and enhanced, the proposed Safe, Clean Water Program renewal would extend funding until repealed by voters. Therefore, at the onset of the renewed program and every five-years thereafter, Valley Water would develop a five-year implementation plan to ensure that the renewed Safe, Clean Water Program continues to meet community needs and that projects remain on track.

## Structure of the program includes transparency

The structure for the current 2012 Safe, Clean Water Program is guiding that of the proposed renewal. Because times, circumstances and needs change, the potential renewal would continue to provide flexibility through development of implementation plans every five years, an annual report on expenditures and project progress, and a detailed change control process to allow adjustments and modifications. These provisions provide transparency, giving the public an opportunity to see how their tax dollars are being put to work, and giving Valley Water a means to address new challenges or opportunities.

To begin, Valley Water would continue compiling 5-year implementation plans for the Safe, Clean Water Program renewal, as is the practice with the current 2012 Safe, Clean Water Program. These plans outline the expected focus on these projects for the upcoming five years. They also provide an opportunity to reassess projects and key performance indicators (KPIs), to ensure they continue to fulfill the existing priorities of the community and Board of Directors and address any new needs that may arise.

The Board would not be limited to making changes to the program at these 5-year intervals. The Board may make



2012 Safe, Clean Water Program - Independent Monitoring Committee tour of the McKelvey Park flood detention facility, which is part of the Permanente Creek Flood Protection Project

changes to reflect any economic, policy or regulatory changes or in response to recommendations from external independent audits or from the independent monitoring committee that provides independent oversight of the program.

All adjustments that the Board makes must be made during the public session of the Board's meetings, and any changes to the KPIs or decisions not to implement a project require a public hearing before being voted on by the Board.

## Accountability

Accountability remains important in the proposed continuation of the program as well. The transparency provided by the various check-in points and public session discussions of any potential changes allows the public an unvarnished look into the program's accomplishments, expenditures and opportunities for improvement.

The establishment of an independent citizen oversight committee, as existing with the current 2012 Safe, Clean Water Program and stipulated in the proposed Safe, Clean Water Program renewal, would provide a dedicated, independent body to keep track of included priorities and projects. The Board would appoint individuals to this independent monitoring committee (IMC). Staff would

The transparency provided by the various check-in points and public session discussions of any potential changes allows the public an unvarnished look into the program's accomplishments, expenditures and opportunities for improvement.

produce annual reports and make them available to Santa Clara County residents and the IMC, providing details of the updated Safe, Clean Water Program's finances and the progress made on all the projects. The IMC would use these annual reports to provide independent oversight and to make recommendations to the Board regarding adjustments or modifications that may be required of the potentially renewed Safe, Clean Water Program.

In addition, Valley Water is proposing requiring audits of the proposed Safe, Clean Water Program renewal every five years by an independent organization. This would give Valley Water and the residents and businesses of Santa Clara County another unbiased window into the Safe, Clean Water Program and would provide specific recommendations for change if necessary.

Because this is a measure subject to voters' will, changing it is not something Valley Water takes lightly. If passed, Valley Water would adhere as closely to the renewed Safe, Clean Water Program as possible. However, sometimes circumstances change and a project that was listed under the community- and Board-approved priorities may no longer be feasible or beneficial. In that case, the project may require a change to its KPIs, or no longer need to be implemented under the updated Safe, Clean Water Program.

Changing the KPIs or deciding not to implement a project are important changes that require careful consideration. Under the current 2012 Safe, Clean Water Program, Valley Water is implementing a change control process that adheres to best practices and helps the program remain accountable to the voters. As per this process, any such changes would require a public hearing at a Board meeting, during which members of the public would share their opinions on the recommendation.

Valley Water always strives to be responsible to all in our community. Recognizing that a special parcel tax can pose an economic difficulty for low-income senior citizens, Valley Water has built a continuation of the current practice of



Board discussion regarding the Upper Llagas Creek Flood Protection Project on January 10, 2017.

providing an exemption from the tax for qualifying low-income senior citizens into the proposed renewal of the program. This has been an important part of the existing 2012 Safe, Clean Water Program and a feature for which the community expressed support.

## Role of the Board

Valley Water is governed by a 7-member elected Board whose responsibility is to review the proposed renewal of the 2012 Safe, Clean Water Program and make decisions regarding its implementation. This responsibility includes reviewing the performance and financial analyses of the potential Safe, Clean Water Program renewal, reviewing reports and updates from staff and the independent monitoring committee, and carefully considering community input.

Through the aggregation of this information, the Board will decide whether and what to modify, add to or delete from the proposed Safe, Clean Water Program renewal. It is the Board's duty to conduct this business in open, public sessions and to hold public hearings on specific requests for changes to a project's KPIs or if deciding not to implement a project.

# Appendices



**BOARD OF DIRECTORS  
SANTA CLARA VALLEY WATER DISTRICT**

**RESOLUTION NO. 20-\_\_\_\_\_**

**PROVIDING FOR THE CONTINUATION AND LEVY OF  
A SPECIAL TAX TO PAY THE COST OF THE SAFE, CLEAN WATER  
AND NATURAL FLOOD PROTECTION PROGRAM IN THE COMBINED  
FLOOD CONTROL ZONE OF THE SANTA CLARA VALLEY WATER DISTRICT  
SUBJECT, NEVERTHELESS, TO SPECIFIED LIMITS AND CONDITIONS**

WHEREAS, the Santa Clara Valley Water District (Valley Water) policy is to ensure current and future water supplies and provide healthy, clean and reliable water in Santa Clara County; and

WHEREAS, Valley Water policy is to protect Santa Clara County creeks, reservoirs, Monterey Bay, and San Francisco Bay from toxins, pollutants, and contaminants; and

WHEREAS, Valley Water policy is to provide for flood water and storm water flood protection to residents, businesses, visitors, public highways, and the watercourses flowing within the District; and

WHEREAS, Valley Water policy is to protect our water supply, pipelines, and local dams from earthquakes and natural disasters; and

WHEREAS, Valley Water maintains a flood protection system of levees, channels, drains, detention basins, and other improvements upon which the lives and property of Valley Water residents depend, which said improvements must be kept in a safe and effective condition; and

WHEREAS, the Valley Water policy is to protect, enhance, and restore healthy Santa Clara County creeks, watersheds, and bay lands ecosystems; and

WHEREAS, in 2000, voters passed the 15-year Clean, Safe Creeks and Natural Flood Protection Plan; and

WHEREAS, the Valley Water policy is to engage in partnerships with the community to provide open spaces, trails, and parks along Santa Clara County creeks and watersheds; and

WHEREAS, in November 2012, voters passed the Safe, Clean Water and Natural Flood Protection Program which replaced the Clean, Safe Creeks and Natural Flood Protection Plan in its entirety when it became effective on July 1, 2013; and

WHEREAS, the Safe, Clean Water and Natural Flood Protection Program was originally scheduled to sunset on June 30, 2028; and

WHEREAS, in order to protect Santa Clara County water supplies, creeks, watersheds, and bay lands and ensure residents have an ample supply of clean water in the future, Valley Water will need a dedicated source of revenue in the future and beyond 2028 to maintain the programs established in the Safe, Clean Water and Natural Flood Program; and

WHEREAS, the California State Legislature has authorized Valley Water to levy a special tax on each parcel of property within Valley Water or any zone or zones thereof upon approval by a two-thirds vote of the electorate of Valley Water or zones therein; and

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WHEREAS, the purpose of the special tax is to supplement other available but limited revenues to keep said improvements in a safe and effective condition; to enable Valley Water to respond to emergencies; to perform maintenance and repair; to acquire, restore, and preserve habitat; to provide opportunities and access to recreation; to conduct environmental education; to protect and improve water quality; and to construct, operate and maintain flood protection and storm drainage facilities; to support public health and public safety through efforts authorized by the District Act; and to fund the cost of financing such activities; and

WHEREAS, State California Environmental Quality Act (CEQA) Guidelines Section 15378(b)(4), states that government funding mechanisms are not projects subject to the requirements of CEQA.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Santa Clara Valley Water District as follows:

FIRST: The Board hereby finds that since (a) the management of creeks, watersheds, and bay lands are necessary to ensure safe, clean water and to protect, enhance and restore healthy ecosystems, (b) the construction and management of flood protection services are made necessary by stormwater runoff, and (c) the lands from which runoff derives are benefitted by provision of means of disposition which alleviates or ends the damage to other lands affected thereby, by direct protection of loss of property, and other indirect means which include improved aesthetics and quality of life, the basis on which to levy the special tax is at fixed and uniform rates per area and county or city designated land use of each parcel, taxed as such parcel is shown on the latest tax rolls.

SECOND: Pursuant to the authority of Section 3 of the District Act, a Combined Zone consisting of the aggregate metes and bounds descriptions of Zones One, Two, Three, Four, and Five is presently existing as generally depicted in Attachment-1.

THIRD: A special Valley Water Election for November 3, 2020 will be called within said District, on the proposition of levy of a special tax.

FOURTH: Subject to approval by two-thirds of the electors of Valley Water voting at such election and pursuant to the authority vested in the Board, there is hereby established a special tax as authorized by this resolution, the proceeds of which shall be used solely for the purpose of supporting the priorities of the Safe, Clean Water and Natural Flood Protection Program. The Safe, Clean Water and Natural Flood Protection Program Report (hereafter "Report") generally describes the priorities and is attached hereto as Attachment 2 and incorporated by reference herein. This tax shall be instituted with the following provisions:

- A. The Chief Executive Officer (CEO) or designee of Valley Water is directed to cause a written Report to be prepared for each fiscal year for which a special tax is to be levied and to file and record the same, all as required by governing law. Said Report shall include the proposed special tax rates for the upcoming fiscal year at any rate up to the

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maximum rate approved by the voters. Valley Water's Board of Directors shall consider formal acceptance of this Report at a public meeting and shall thereafter make a final determination of special taxes with a confirming resolution. A special fund shall be established into which proceeds from the tax shall be deposited. Proceeds from the tax may be used only for the Safe, Clean Water and Natural Flood Protection Program.

- B. The CEO, or designee of Valley Water may cause the special tax to be corrected in the same manner as assessor's or assessee's errors may be corrected but based only upon any or all of the following:
1. Changes or corrections in ownership of a parcel;
  2. Changes or corrections of address of an owner of a parcel;
  3. Subdivision of an existing parcel;
  4. Changes or corrections in the use of all or part of a parcel;
  5. Changes or corrections in the computation of the area of a parcel;
  6. As to railroad, gas, water, telephone, cable television, electric utility right of way, electric line right of way, or other utility right of way properties.

Changes and corrections are not valid unless and until approved by the Board.

- C. The Clerk of the Board shall immediately file certified copies of the final determination of special taxes and confirming resolution with the Auditor-Controller of the County of Santa Clara and shall immediately record with the County Recorder of said County a certified copy of the resolution confirming the special tax.
- D. The special tax for each parcel set forth in the final determination by the Board shall appear as a separate item on the tax bill and shall be levied and collected at the same time and in the same manner as the general tax levy for county purposes. Upon recording of the resolution confirming the special tax such special tax shall be a lien upon the real property affected thereby.
- E. Failure to meet the time limits set forth in this resolution for whatever reason shall not invalidate any special tax levied hereunder.
- F. No special tax for the Safe, Clean Water and Natural Flood Protection Program shall be imposed upon a federal or state or local governmental agency. Where real property owned by a federal, state, or local agency is leased to a private person or private entity, the private interest so created shall be separately assessed as a possessory interest and the special tax for the Safe, Clean Water and Natural Flood Protection Program shall be levied on all holders of such possessory interests. With said exceptions, a Safe,

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Clean Water and Natural Flood Protection Program special tax is levied on each parcel of real property in the five Flood Control Zones of Valley Water subject to this resolution for the purposes stated in the Report and in this resolution. Except for the minimum special tax as hereinafter indicated, the special tax for each parcel of real property in each such zone is computed by determining its area (in acres or fractions thereof) and land use category (as hereinafter defined) and then multiplying the area by the special tax rate applicable to land in such land use category. A minimum special tax may be levied on each parcel of real property having a land area up to 0.25 acre for Groups A, B, and C, up to 10 acres for Groups D and E Urban and, for Group E Rural, the minimum special tax shall be that as calculated for the E Urban category.

- G. Land use categories for each parcel of land in Valley Water are defined and established as follows:
- Group A: Land used for commercial or industrial purposes.
  - Group B: Land used for institutional purposes such as churches and schools or multiple dwellings in excess of four units, including apartment complexes, mobile home parks, recreational vehicle parks, condominiums, and townhouses.
  - Group C: (1) Land used for single-family residences and multiple-family units up to four units and (2) the first 0.25 acre of a parcel of land used for single-family residential purposes.
  - Group D: (1) Disturbed agricultural land, including irrigated land, orchards, dairies, field crops, golf courses, and similar uses and (2) the portion of the land, if any, in excess of 0.25 acre of a parcel used for single-family residential purposes.
  - Group E: Vacant undisturbed land (1) in urban areas and (2) in rural areas including dry farmed land, grazing and pasture land, forest and brush land, salt ponds, and small parcels used exclusively as well sites for commercial purposes.
  - Group F: Parcels used exclusively as well sites for residential uses are exempt from the special tax.
- H. The special tax amounts applicable to parcels in the various land uses shall be as prescribed by the Board of Directors in each fiscal year (July 1 through June 30) beginning with fiscal year 2021-2022 as set forth in Attachment-3, which is incorporated herein by reference, and as required by law; provided, that the annual basic special tax unit (single-family residential parcel of 1/4 acre or less) shall not exceed a maximum limit of \$67.67 annually (averaging \$0.006 per square foot annually) , as adjusted by the



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compounded percentage increases of the San Francisco-Oakland-San Jose Consumer Price Index (CPI-U) for all Urban Consumers (or an equivalent index published by a government agency) in the year or years after April 30, 2021; provided, however that appropriate amounts may be increased in any year by up to the percentage increase of the San Francisco-Oakland-San Jose Consumer Price Index for all Urban Consumers in the preceding year or two percent (2%) whichever is greater; provided, further, however that in any period, not exceeding three years, immediately following a year in which the Governor of the State of California or the President of the United States has declared an area of said zones to be a disaster area by reason of flooding or other natural disaster, then to the extent of the cost of repair of Valley Water facilities damaged by such flooding or other natural disaster, the maximum tax rate shall be the percentage increase in CPI-U plus 4.5 percent; and provided, that special taxes for the Safe, Clean Water and Natural Flood Protection Program shall be levied annually until ended by voters.

- I. In the event that the county or city designated land use for a parcel is different than the actual land use, the CEO of Valley Water may, pursuant to written policies and procedures, cause the special tax to be adjusted based upon any or all of the following:
  1. The parcel owner shall provide Valley Water a claim letter stating that the present actual land use is different than the county or city designated land use, including an estimate of the portion of the parcel that is different than the designated land use. Such claim is subject to investigation by Valley Water as to the accuracy of the claim. Parcel owner shall furnish information deemed necessary by Valley Water to confirm the actual uses and areas in question which may include, but not be limited to, a survey by a licensed surveyor.
  2. The parcel owner shall request Valley Water to inspect the parcel and reevaluate the parcel tax.
  3. The parcel owner shall notify Valley Water after a substantial change in the actual land use occurs, including a new estimate of the portion of the parcel that is different than the designated land use.
  4. Valley Water may inspect and verify the actual land use for these parcels on a regular basis and will notify the appropriate parcel owners when it is determined that the actual land use has matched a county or city designated land use. Valley Water shall then correct the special tax rates for these parcels accordingly.
- J. Pursuant to state law, Valley Water may provide an exemption from the special tax for low income owner-occupied residential properties for taxpayer-owners who are 65 years of age or older, the following shall apply:

Residential parcels where the total annual household income does not exceed 75 percent of the latest available figure for state median income at the time the annual

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tax is set, and such parcel is owned and occupied by at least one person who is aged 65 years or older is qualified to apply for an exemption from the applicable special tax.

- K. As projects under the Program are completed, the Board of Directors shall identify and prioritize new projects for inclusion in the Program. These new projects may be identified and proposed for Board approval at a public meeting through the Board's review and approval of the Program's 5-Year Implementation Plans, the first of which will be produced by the CEO or designee of Valley Water in year one of the Program and every five years thereafter; or, as directed by the Board.
- L. The Board of Directors may direct that proposed projects in the Safe, Clean Water and Natural Flood Protection Program be modified or not implemented depending upon a number of factors, including federal and state funding limitations and the analysis and results of CEQA environmental review and permitting by state and federal regulatory agencies. The Board of Directors must hold a formal, public hearing on the matter, which will be noticed by publication and notification to interested parties, before adoption of any such decision to modify or not implement a project.
- M. The Chief Financial Officer or designee of Valley Water shall file a fiscal year report with the Board of Directors no later than January 1 of each year for the prior fiscal year. The annual report shall contain both of the following: (a) the amount of funds collected and expended; and (b) the status of any project required or authorized to be funded under this resolution.
- N. An external, independent monitoring committee (IMC) shall be appointed by the Valley Water Board of Directors to conduct an annual review of Valley Water's fiscal year report and provide an annual report from the IMC to the Board of Directors regarding implementation of the intended results of the Program; the IMC will identify to the Valley Water Board of Directors such modifications as may be reasonably necessary to meet the priorities of the Safe, Clean Water and Natural Flood Protection Program.
- O. While the Safe, Clean Water and Natural Flood Protection Program is in effect, the Board of Directors shall conduct independent professional audits of the Program to provide for accountability and transparency at least every five years.
- P. Grants and partnerships offered through the Safe, Clean Water and Natural Flood Protection Program, where aligned with the District Act and permitted by law, may extend to state and local governmental organizations; organized community groups with an established structure; nonprofit organizations as defined by Internal Revenue Code subsections (c) or (d); schools, community colleges, or universities (public or nonprofit; non-profit organizations as defined under Internal Revenue Code section 501(c); religious or apostolic associations as defined under Internal Revenue Code section 501(d); for-profit organizations; and persons.

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- Q. Pursuant to the State California Environmental Quality Act (CEQA) Guidelines Section 15378(b)(4), adoption of this resolution for continuation of the parcel tax and as a government funding mechanism, is not a project subject to the requirements of CEQA. Prior to commencement of any project included in the Safe, Clean Water and Natural Flood Protection Program, any necessary environmental review required by CEQA shall be completed.
- R. Upon entering into effect, the Safe, Clean Water and Natural Flood Protection Program parcel tax authorized by this resolution and placed on the ballot by RESOLUTION NO. 20-\_\_\_\_, this resolution shall repeal and replace Resolution 12-62 which was the Safe, Clean Water and Natural Flood Protection Program parcel tax approved by the voters in 2012. Any tax payments already made by voters and collected for use by Valley Water for the prior Safe, Clean Water and Natural Flood Protection Program will be used to achieve priorities identified in this updated Safe, Clean Water and Natural Flood Protection Program. Funding for capital projects currently identified in the prior Safe, Clean Water and Natural Flood Protection Program, will continue under this updated Safe, Clean Water and Natural Flood Protection Program to meet previous commitments. All other projects and programs identified in the prior Safe, Clean Water and Natural Flood Protection Program will be replaced by comparable projects or programs with similar or expanded obligations under the updated Safe, Clean Water and Natural Flood Protection Program.

PASSED AND ADOPTED by the Board of Directors of the Santa Clara Valley Water District by the following vote on \_\_\_\_\_, 2020:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

\_\_\_\_\_  
NAI HSUEH  
Chair, Board of Directors

ATTEST: MICHELE L. KING, CMC

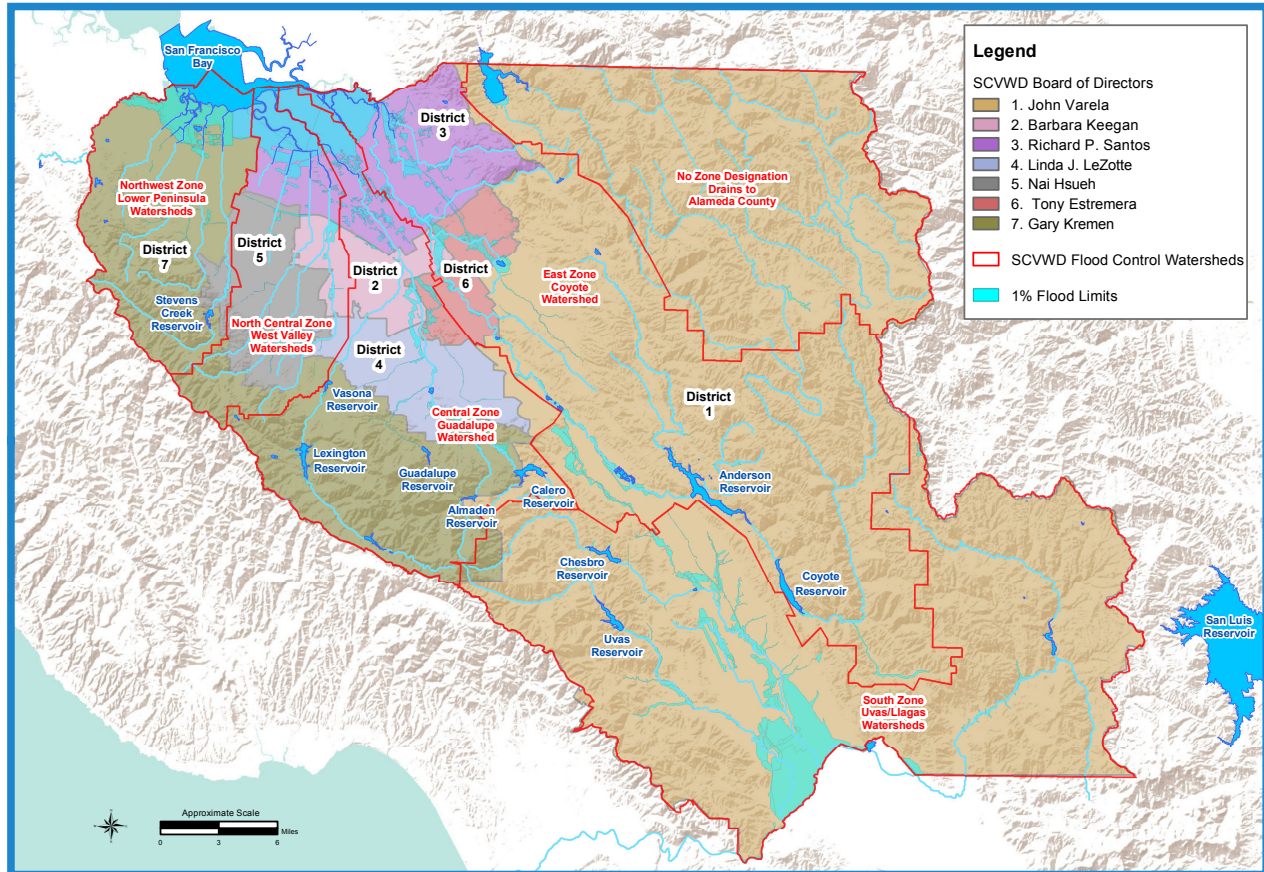
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\_\_\_\_\_  
Clerk, Board of Directors



## SCVWD Flood Control Zones and Board Districts in Santa Clara County



GIS themes are for illustration and general analysis purposes only and are not accurate to surveying or engineering standards. Information is not guaranteed to be accurate, current, or complete and use of this information is your responsibility.

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## Summary of Key Performance Indicators for the First 15 Years of Program

Project	Key Performance Indicator
<b>Priority A: Ensure a Safe, Reliable Water Supply</b>	
A1 Pacheco Reservoir Expansion Project	1. Provide a portion of funds, up to \$10 million, to help construct the Pacheco Reservoir Expansion Project.
A2 Water Conservation Rebates and Programs	1. Award up to \$1 million per year toward specified water conservation program activities, including rebates, technical assistance and public education within the first seven (7) years of the Program.
A3 Pipeline Reliability Project	1. Install four (4) new line valves on treated water distribution pipelines.

Project	Key Performance Indicator
<b>Priority B: Reduce Toxins, Hazards, and Contaminants in our Waterways</b>	
B1 Impaired Water Bodies Improvement	<ol style="list-style-type: none"> <li>1. Investigate, develop and implement actions to reduce methylmercury in fish and other organisms in the Guadalupe River Watershed.</li> <li>2. Prepare and update a plan for the prioritization of surface water quality improvement activities, such as addressing trash and other pollutants.</li> <li>3. Implement at least two (2) priority surface water quality improvement activities identified in the plan per 5-year implementation period.</li> </ol>
B2 Inter-Agency Urban Runoff Program	<ol style="list-style-type: none"> <li>1. Address trash in creeks by maintaining trash capture devices or other litter control programs.</li> <li>2. Maintain Valley Water's municipal stormwater compliance program and partner with cities to address surface water quality improvements, including participation in at least three (3) countywide, regional or statewide stormwater program committees to help guide regulatory development, compliance and monitoring.</li> <li>3. Maintain Valley Water's municipal stormwater compliance program and partner with cities to address surface water quality improvements, including participation in at least three (3) countywide, regional or statewide stormwater program committees to help guide regulatory development, compliance and monitoring.</li> </ol>
B3 Hazardous Materials Management and Response	1. Respond to 100% of hazardous materials reports requiring urgent on-site inspection in two (2) hours or less.
B4 Support Creek Stewardship Volunteer Efforts	1. Fund Valley Water's creek stewardship program to support volunteer cleanup activities such as annual National River Cleanup Day, California Coastal Cleanup Day, the Great American Litter Pick Up; and the Adopt-A-Creek Program.

Project	Key Performance Indicator
<b>Priority C: Protect Our Water Supply and Dams from Earthquakes and Other Natural Disasters</b>	
C1 Anderson Dam Seismic Retrofit	1. Provide portion of funds, up to \$54 million, to help restore full operating reservoir capacity of 90,373 acre-feet.

Project	Key Performance Indicator
<b>Priority D: Restore Wildlife Habitat and Provide Open Space Access</b>	
D1 Management of Riparian Planting and Invasive Plant Removal	<ol style="list-style-type: none"> <li>1. Maintain a minimum of 300 acres of riparian planting projects annually to meet regulatory requirements and conditions.</li> <li>2. Maintain a minimum of 200 acres of invasive plant management projects annually to meet regulatory requirements and conditions.</li> <li>3. Remove 25 acres of Arundo donax throughout the county over a 15-year period.</li> </ol>
D2 Revitalize Riparian, Upland and Wetland Habitat	<ol style="list-style-type: none"> <li>1. Revitalize at least 21 acres over a 15-year period through native plant revegetation and/or removal of invasive exotic species.</li> <li>2. Develop an Early Detection and Rapid Response Program Manual.</li> <li>3. Identify and treat at least 100 occurrences of emergent invasive species over a 15-year period, as identified through the Early Detection and Rapid Response Program.</li> <li>4. Develop at least weight (8) information sheets for Early Detection of Invasive Plant Species.</li> </ol>
D3 Sediment Reuse to Support Shoreline Restoration	<ol style="list-style-type: none"> <li>1. Maintain partnership agreements to reuse sediment to improve the success of salt pond and tidal marsh restoration projects and activities.</li> <li>2. Provide up to \$4 M per 15-year period to support activities necessary for sediment reuse.</li> </ol>
D4 Fish Habitat and Passage Improvement	<ol style="list-style-type: none"> <li>1. Complete planning and design for one creek/lake separation.</li> <li>2. Construct one creek/lake separation project in partnership with local agencies.</li> <li>3. Use \$8 million for fish passage improvements.</li> <li>4. Update study of all major steelhead streams in the county to identify appropriate locations for installation of large woody debris and gravel as appropriate.</li> <li>5. Complete five (5) habitat enhancement projects based on studies that identify high priority locations for large wood, boulders, gravel and/or other habitat enhancement features.</li> </ol>
D5 Ecological Data Collection and Analysis	<ol style="list-style-type: none"> <li>1. Reassess and track stream ecological conditions, habitats and selected fauna in each of the county's five watersheds every 15 years.</li> </ol>
D6 Restoration of Natural Creek Functions	<ol style="list-style-type: none"> <li>1. Construct the Hale Creek Enhancement Pilot Project, which includes restoration and stabilization of a 650-foot section of concrete-lined channel on Hale Creek, between Marilyn Drive and North Sunshine Drive on the border of Mountain View and Los Altos.</li> <li>2. Construct the Bolsa Road Fish Passage Project along 1,700 linear feet of Uvas-Carnadero Creek in unincorporated Santa Clara County, which includes geomorphic design features that will restore stability and stream function.</li> <li>3. Identify, plan, design and construct a third geomorphic-designed project to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.</li> </ol>
D7 Partnerships for the Conservation of Habitat Lands	<ol style="list-style-type: none"> <li>1. Provide up to \$8 million per 15-year period for the acquisition or enhancement of property for the conservation of habitat lands.</li> </ol>

Project	Key Performance Indicator
<b>Priority E: Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways</b>	
E1 Coyote Creek Flood Protection, Montague Expressway to Tully Road – San José	1. Construct flood protection improvements along Coyote Creek between Montague Expressway and Tully Road to provide protection from floods up to the level that occurred on February 21, 2017, approximately a 5% (or a 20-year) flood event.
E2 Sunnyvale East and Sunnyvale West Channels Flood Protection, San Francisco Bay to Inverness Way and Almanor Avenue -- Sunnyvale	1. Provide 1% flood protection for 1,618 properties and 47 acres (11 parcels) of industrial land, while improving stream water quality and working with other agencies to incorporate recreational opportunities.
E3 Lower Berryessa Flood Protection, including Tularcitos and Upper Calera Creeks (Phase 3) -- Milpitas	1. Complete the design phase of the project.
E4 Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive -- San José	1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 8,000 parcels. 2. With local funding only: Construct a 1% flood protection project from Coyote Creek confluence to Capital Avenue to provide 1% flood protection to 1,250 parcels, including the new Berryessa BART station.
E5 San Francisquito Creek Flood Protection, San Francisco Bay to Upstream of Highway 101-- Palo Alto	1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1% flood protection. 2. With state and local funding only: Protect approximately 3,000 parcels by providing 1% flood protection downstream of Highway 101, and approximately 1.4% protection upstream of Highway 101.
E6 Upper Llagas Creek Flood Protection, Buena Vista Avenue to Llagas Road -- Morgan Hill, San Martin, Gilroy	1. Preferred project with federal and local funding: Plan, design and construct flood protection improvements along 13.9 miles of Upper Llagas Creek from Buena Vista Avenue to Llagas Road to provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat. 2. With local funding only: Construct flood protection improvements along Llagas Creek from Buena Vista Avenue to Highway 101 in San Martin (Reaches 4 and 5 (portion)), Monterey Road to Watsonville Road in Morgan Hill (Reach 7a), approximately W. Dunne Avenue to W. Main Avenue (portion of Reach 8), and onsite compensatory mitigation at Lake Silveira.
E7 San Francisco Bay Shoreline Protection -- Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale	1. Provide portion of the local share of funding for planning, design and construction phases for the Santa Clara County shoreline area (EIAs 1-10). 2. Provide portion of the local share of funding toward estimated cost of design and construction of the initial project phase in the North San Jose area, in and near Alviso (EIA 11).

E8 Upper Guadalupe Flood Protection, Highway 280 to Blossom Hill Road -- San José	<ol style="list-style-type: none"> <li>1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 6,280 homes, 320 businesses and 10 schools and institutions.</li> <li>2. With local funding only: Construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive and provide gravel augmentation along approximately 800 lineal feet of the Upper Guadalupe River in San José, from approximately the Union Pacific Railroad Bridge to West Virginia Street Bridge to improve aquatic habitat for migrating steelhead and channel stability.</li> </ol>
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Project	Key Performance Indicator
<b>Priority F: Support Public Health and Public Safety for our Community</b>	
F1 Vegetation Control and Sediment Removal for Capacity	<ol style="list-style-type: none"> <li>1. Maintain completed flood protection projects for flow conveyance.</li> </ol>
F2 Emergency Response Planning and Preparedness	<ol style="list-style-type: none"> <li>1. Coordinate with local municipalities to merge Valley Water-endorsed flood emergency processes with their own emergency response plans and processes.</li> <li>2. Complete five flood management plans/procedures per five-year period, selected by risk priorities.</li> <li>3. Train Valley Water staff and partner municipalities annually on disaster procedures via drills and exercises before testing the plans and procedures.</li> <li>4. Test flood management plans/procedures annually to ensure effectiveness.</li> </ol>
F3 Flood Risk Assessment Studies	<ol style="list-style-type: none"> <li>1. Complete engineering studies on three (3) creek reaches to address 1% flood risk.</li> <li>2. Annually, update floodplain maps on a minimum of three (3) creek reaches in accordance with new FEMA standards.</li> </ol>
F4 Vegetation Management for Access and Fire Safety	<ol style="list-style-type: none"> <li>1. Provide vegetation management for access and fire risk reduction on an average of 495 acres per year, totaling 7,425 acres along levee, property lines and maintenance roads over a 15-year period.</li> </ol>
F5 Good Neighbor Program: Encampment Cleanups	<ol style="list-style-type: none"> <li>1. Perform 300 annual cleanups to reduce the amount of trash and pollutants entering the streams.</li> <li>2. Provide up to \$500,000 per year in cost-share with other agencies to provide police and ranger patrol activities along waterways.</li> <li>3. Partner with local agencies to address homelessness crisis with the goal to reduce encampment cleanups.</li> </ol>
F6 Good Neighbor Program: Graffiti and Litter Removal and Public Art	<ol style="list-style-type: none"> <li>1. Cleanup identified trash and graffiti hotspots at approximately 80 sites four (4) times per year.</li> <li>2. Respond to requests on litter or graffiti cleanup within five (5) working days.</li> <li>3. Provide up to \$1.5 million over 15 years to implement public art projects on Valley Water property and infrastructure.</li> </ol>



F7 Emergency Response Upgrades	<ol style="list-style-type: none"> <li>1. Maintain existing capabilities for flood forecasting and warning.</li> <li>2. Improve flood forecast accuracy and emergency response time working with the National Weather Service and through research and development.</li> </ol>
F8 Sustainable Creek Infrastructure for Continued Public Safety	<ol style="list-style-type: none"> <li>1. Provide up to \$7.5 million over the next 15 years to plan, design and construct projects identified through Watersheds asset management plans.</li> </ol>
F9 Grants and Partnerships for Safe, Clean Water, Flood Protection and Environmental Stewardship	<ol style="list-style-type: none"> <li>1. Provide three (3) grant cycles every five (5) years that follow pre-established competitive criteria related to safe, clean drinking water, flood protection and environmental stewardship.</li> <li>2. Provide two (2) partnership cycles every five (5) years for projects related to safe, clean drinking water, flood protection and environmental stewardship.</li> <li>3. Provide annual funding for bottle filling stations to increase drinking water accessibility, with priority for installations in economically disadvantaged communities and locations that serve school-age children and students.</li> <li>4. Provide annual mini-grant funding opportunity for projects related to safe, clean drinking water, flood protection and environmental stewardship.</li> </ol>

**FIGURE 1**  
**Actual FY 2019–20 and Actual FY 2020–21 Safe, Clean Water and Natural Flood Protection Special Tax Rates**

Land Use Categories	Actual FY '19-20	Actual FY '20-21
A - Commercial, Industrial		
Rate (\$/Acre)	\$541.60	\$541.60
Minimum Assessment <sup>(1)</sup>	\$135.39	\$135.39
B - Apartment, Schools, Churches, Condominiums & Townhouse		
Rate (\$/Acre)	\$406.20	\$406.20
Minimum Assessment <sup>(1)</sup>	\$101.55	\$101.55
Condominiums & Townhouses (\$/unit)	\$32.95	\$32.95
C - Single Family Residential, Small Multiples (2-4 units) <sup>(2)</sup>		
Minimum Assessment <sup>(1)</sup>	\$67.67	\$67.67
D - Utilized Agriculture <sup>(2)</sup>		
Rate (\$/Acre)	\$3.47	\$3.47
Minimum Assessment <sup>(1)</sup>	\$34.70	\$34.70
E - Urban - Nonutilized Agricultural, Grazing Land, Salt Ponds, Well Site in Urban Areas		
Rate (\$/Acre)	\$1.02	\$1.02
Minimum Assessment <sup>(1)</sup>	\$10.23	\$10.23
E - Rural - Nonutilized Agricultural, Grazing Land, Well Sites in Rural Areas		
Rate (\$/Acre)	\$0.14	\$0.14
Minimum Assessment <sup>(1)</sup>	\$10.23	\$10.23
<sup>(1)</sup> The minimum assessments shown for Categories A, B, and C apply to parcels 1/4 acre or less in size. Category C parcels larger than 1/4 acre pay the minimum assessment for the first 1/4 acre and the remaining acreage is assessed at the Category D rate. For Category D, the minimum assessment applies to parcels less than 10 acres. The minimum assessment for Group E parcels is the amount charged for 10 acres of urban undeveloped land; the minimum assessment is the same for both the Urban Category and the Rural Category parcels, however the Rural Category applies to parcels of 80 acres or less.		
<sup>(2)</sup> Residential land in excess of 1/4 acre is assessed at the "D" rate.		

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**TO DATE, THE FOLLOWING ORGANIZATIONS HAVE INDICATED SUPPORT FOR THE PROPOSED RENEWAL. (ADDITIONAL ENDORSERS MAY BE ADDED ONCE CONFIRMED.)**

Acterra

AFSCME, Local 101

Cupertino Chamber of Commerce

Friends of Five Wounds Trail

Hispanic Chamber of Commerce

La Raza Roundtable

Milpitas Chamber of Commerce

NAACP, San Jose/Silicon Valley

Santa Clara County Farm Bureau

Silicon Valley Black Chamber of Commerce

Sunnyvale Chamber of Commerce

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### **Glossary**

#### **1% flood**

A flood that has a 1% chance of occurring in any given year; also referred to as a 100-year flood.

#### **50-year flood**

A flood that has a 2% chance of occurring in any given year.

#### **100-year flood**

A flood that has a chance of occurring an average of once every 100 years; also referred to as a 1% flood.

#### **Acre-feet (AF)**

An acre-foot of water would cover 1 acre of land to a depth of 1 foot. 1 acre-foot equals approximately 325,000 gallons, the average amount of water used by 2 families of 5 in 1 year.

#### **Aquifer**

An underground geologic formation of rock, soil, or sediment that is saturated with water; an aquifer stores groundwater.

#### **Bypass channel**

A channel built to carry excess water from a stream, or to divert water from the main channel.

#### **Trash capture devices**

Innovative devices used to capture wastes and trash in bodies of water and on land. Comprise of nets and sharp implements which can snare waste items.

#### **Cleanup**

The removal of trash and debris resulting from encampments; by Valley Water or by Valley Water in coordination with other agencies.

#### **Ecosystem**

An ecological community of plants, animals, and microorganisms in their environment, functioning together as a unit.

#### **Ecological service index (ESI)**

Index used to measure ecosystem services within multifunctional landscapes, typically defined as a synergistic approach to bridge the gap between ecological services and the needs of a particular landscape.

### **Ecotone**

Transition area between two differing ecological spaces. Retains some of the characteristics of each respective ecological space, yet contains species not typically found in either environment.

### **Encampment (homeless)**

1 or more structures occupied by an individual or family that is located illegally on Valley Water or other public property. An area where there are no structures, but where personal property is stored is also considered an encampment.

### **Environmental enhancement**

Action taken by Valley Water that benefits the environment, is not mitigation and is undertaken voluntarily. Enhancement actions may include environmental preservation or creation. In instances where enhancements are located in the same vicinity as a mitigation project, actions must exceed required compliance activities to be considered environmental enhancements.

### **Epilimnion**

The upper, wind-mixed layer of a lake which has been thermally stratified.

### **Erosion**

The process by which soil is removed from a place by forces such as water or construction activity, and eventually deposited at a new place as sediment.

### **Fiscal year (FY)**

A period that a company or government uses for accounting purposes and preparing financial statements. The fiscal year may or may not be the same as a calendar year. Valley Water uses a fiscal year that begins on July 1 and ends on June 30, which coincides with the State of California's fiscal year. The fiscal year is denoted by the year in which it ends, so spending incurred on November 14, 2015, would belong to fiscal year 2016. The federal government's fiscal year begins on October 1 and ends on September 30.

### **Fisheries**

An area with an associated fish or aquatic population.

### **Fish passage**

A generic term for several methods incorporated into flood protection projects which allow native fish species to travel upstream to spawn.

### **Flood**

A temporary inundation of inland or tidal waters onto normally dry land areas.

**Flood conveyance capacity**

The maximum amount of water that can flow through a channel, stream or culvert before there is flooding of surrounding properties.

**Floodplain**

The low, flat, periodically flooded lands adjacent to creeks and rivers.

**Floodplain management**

A city or county program of corrective, preventive and regulatory measures to reduce flood damage and encourage the natural and beneficial functions of floodplains. Careful local management of development in the floodplains results in construction practices that can reduce flood damages.

**Floodwall**

Walls used as levees to contain floodwaters within a stream. Floodwalls are used when right-of-way is limited.

**Geomorphology/geomorphic**

The study of the natural relationship between a stream and its bank and bed; pertaining to those processes that affect the form or shape of the surface of the earth, including creeks and streams.

**Groundwater**

Water that is found beneath the surface in small pores and cracks in the rock and substrate.

**Habitat**

The specific, physical location or area in which a particular type of plant or animal lives. To be complete, an organism's habitat must provide all of the basic requirements of life for that organism.

**Impaired water bodies**

Waters that are too polluted or otherwise degraded to meet the water quality standards set by the State of California. Under the federal Clean Water Act, California is required to develop lists of impaired water bodies, including creeks, streams, and lakes.

**Invasive plants**

A non-native plant species that has spread into native or minimally managed plant communities (habitats).

**Large woody debris (LWD)**

The logs, sticks, branches, and other wood that falls into streams and rivers. This debris can influence the flow and shape of the stream channel. LWD plays an important biological role in streams by increasing channel complexity, enhancing fish habitat, and creating diversity in the food web.

### **Levee**

An embankment constructed to provide flood protection from seasonal high water.

### **Methylmercury**

An organic, highly toxic form of mercury that easily bioaccumulates in organisms, increasing in concentration as it travels up the food chain. Because of mercury contamination the public is advised against consuming fish caught in some Santa Clara County reservoirs and ponds.

### **Mitigation**

Action taken to fulfill CEQA/NEPA, permit requirements and court-mandates to avoid, minimize, rectify or reduce adverse environmental impacts, or compensate for the impact(s) by replacing or providing substitute resources or environments.

### **Natural flood protection**

A multiple-objective approach to providing environmental quality, community benefit and protection from creek flooding in a cost-effective manner through integrated planning and management that considers the physical, hydrologic and ecologic functions and processes of streams within the community setting.

### **Oxygenation treatment systems**

Treatment systems that help increase the relative oxygen levels in a body of water.

### **Pay-as-you-go**

A funding mechanism which collects revenue until sufficient funds are available to begin construction of a project, in contrast to debt financing, in which a large sum is borrowed so that construction can begin sooner.

### **Permitting requirements**

A mechanism used to enforce state and federal laws that protect environmentally sensitive areas. Before moving forward on projects, Valley Water is required to obtain permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, NOAA Fisheries, Regional Water Quality Control Board and the California Department of Fish and Wildlife. Each permit gives the permitting agency an opportunity to attach specific measures to the project to reduce impact on the environment.

### **Preservation**

Action taken to protect an ecosystem or habitat area by removing a threat to that ecosystem or habitat, including regulatory actions and the purchase of land and easements.

### **Reach (creek)**

A portion of a creek or watercourse usually defined by both an upstream and a downstream unit.

### **Groundwater Recharge**

The addition of new water to an aquifer or to the zone of saturation. See groundwater.

### **Respond**

For hazardous materials response (project B5) "Responded to" means that responder arrives at site within 2 hours. For litter and graffiti removal (project B6) "Responded to" means that a request for Valley Water action is acknowledged either verbally, in writing, or by email within 5 working days.

### **Restoration/restore**

Action taken by Valley Water, to the extent practicable, toward the re-establishment as closely as possible of an ecosystem's pre-disturbance structure, function, and value, where it has been degraded, damaged, or otherwise destroyed.

### **Revegetate**

To re-establish vegetation in areas which have been disturbed by project construction.

### **Revitalize**

Improve habitat value, particularly in an effort to connect contiguous creek reaches of higher value, by removing invasive, non-native vegetation and diseased and/or non-thriving specimens, applying mulch to suppress weed competition, revegetating sites with native plants, and installing predation prevention measures such as browse protection or cautionary fencing to reduce impacts from animals and vandals.

### **Riparian**

Pertaining to the banks and adjacent terrestrial habitat of streams, creeks or other freshwater bodies and watercourses.

### **Riparian corridor**

The riverside or riverine environment next to a stream channel.

### **Riparian ecosystem**

A natural association of soil, plants and animals existing within the floodplain of a stream and dependent for their survival on high water tables and river flow.

### **Sediment/sedimentation**

Mineral or organic material that is deposited by moving water and settles at the bottom of a waterway. Sediment in a lake, reservoir or stream can either be suspended in the water column or deposited on the bottom. Sediment usually consists of eroded material from the watershed, precipitated minerals and the remains of aquatic organisms.



### **Special status species**

Any species that is listed or proposed for listing as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act; any species designated by the U.S. Fish and Wildlife Service as a "listed," "candidate," "sensitive," or "species of concern," and any species which is listed by the State of California in a category implying potential danger of extinction.

### **Special tax**

Any tax imposed for specific purposes or any tax imposed by a special purpose district or agency, such as the Santa Clara Valley Water District. A special district contemplating a special tax levy must hold a noticed public hearing and adopt an ordinance or resolution prior to placing the tax on the ballot.

The ordinance or resolution must specify the purpose of the tax, the rate at which it will be imposed, the method of collection and the date of the election to approve the tax levy. Approval by a 2/3 vote of the city, county or district electorate is necessary for adoption.

### **State Water Resources Control Board**

The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The mission of the State Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. There are 9 regional water quality control boards that exercise rulemaking and regulatory activities by basin. Santa Clara County is part of 2 regions: Region 2 - San Francisco Regional Water Quality Control Board (north of Morgan Hill) and Region 3 - Central Coast Regional Water Quality Control Board (south of Morgan Hill).

### **Subvention**

Subventions are reimbursements for rights-of-way and relocation costs of channel improvements and levee projects provided to flood control agencies by the Department of Water Resources Flood Subventions Program.

### **Environmental Stewardship**

To entrust the careful and responsible management of the environment and natural resources to one's care for the benefit of the greater community.

### **Stream Maintenance Program (SMP)**

Ensures flood protection projects continue to function as designed to protect homes and businesses along Valley Water streams. SMP work includes removal of sediment, management of vegetation, clearing of trash and debris, stabilization of eroded riverbanks over portions of 278 miles of creeks in Santa Clara County.

### **Threatened species**

A species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

### **Total Maximum Daily Loads (TMDLs)**

The maximum pollutant load a waterbody can receive (loading capacity) without violating water quality standards.

### **Urban runoff**

The water that runs over the impervious areas in cities, collecting pollutants as it flows. Runoff is recognized as a major source of water impairment.

### **Valley Water 1% Flood Risk Zone**

Per Valley Water modeling, this is the area representing parcels that have a 1% chance of experiencing flooding, including less than 1 foot, in any given year.

### **Watershed**

Land area from which water drains into a major body of water.

### **Watershed stewardship**

Protecting and enhancing the county's creeks, streams and water bodies to preserve a vibrant, healthy ecosystem and provide recreational opportunities when appropriate.

### **Wetland**

Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions, as well as the diverse wildlife species that depend on this habitat.

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### How the special tax is calculated

The rate structure for calculating the proposed special tax is identical to the Clean, Safe Creeks and Natural Flood Protection structure that it will replace. It is intended to be an equitable basis for the rate structure and is applied consistently throughout the county. Rates are based on the land use (which is directly related to an assigned storm water runoff factor or can be thought of as the estimated percent of hardscape area on a parcel) and size of each land parcel. The six land use categories, their estimated stormwater runoff factors, and the special tax calculation formula are described in detail below. The FY 2022 parcel tax rates by land use category may be escalated by the greater of CPI or 2% relative to the FY 2021 rates shown in Figure 1 on page A.15.

### Land use categories and estimated stormwater runoff factors

The following six land use categories and estimated stormwater runoff factors will be used to determine the proposed special tax:

#### **CATEGORY A: COMMERCIAL AND INDUSTRIAL PARCELS**

1. Land used for industrial and commercial purposes. This land use is assigned an estimated stormwater runoff factor of 0.8.
2. The minimum tax for this category is applied to parcels of 1/4 acre or less.

#### **CATEGORY B: HIGH-DENSITY RESIDENTIAL PARCELS, SCHOOLS, CHURCHES, AND INSTITUTIONS**

1. Land used for apartment complexes, mobile home parks, condominiums, townhouses, or institutional purposes such as schools and churches. This land use is assigned an estimated stormwater runoff factor of 0.6.
2. With the exception of condominiums and townhouses, the minimum tax for this category is applied to parcels of 1/4 acre or less.
3. For condominiums and townhouses, an average lot size of 0.08 acre for each condominium or townhouse will be used to calculate the annual special tax rate.

#### **CATEGORY C: SINGLE-FAMILY RESIDENCES AND MULTIPLE-FAMILY UNITS UP TO 4 UNITS**

1. Land used for single-family residences and multiple-family units up to four units. This land use is assigned an estimated storm water runoff factor of 0.4.
2. The minimum tax for this category is applied to parcels of 1/4 acre or less. Incremental residential land in excess of 1/4 acre is assessed at the Category D rate.

#### **CATEGORY D: AGRICULTURAL PARCELS**

1. Disturbed agricultural land, including irrigated land, orchards, dairies, field crops, golf courses, and similar uses. This land use is assigned an estimated stormwater runoff factor of 0.005.
2. The minimum tax for this category is applied to parcels of 10 acres or less.

# Special Tax Rate Structure

## APPENDIX D

3. The per acre rate for this category shall be used for any portion of land in Category C that is in excess of 1/4 acre of a parcel used for single-family residential purposes.

### CATEGORY E: NON-UTILIZED AGRICULTURAL PARCELS

1. Urban: Non-utilized agricultural lands, grazing land, salt ponds, undisturbed vacant lands, and parcels used exclusively as well sites for commercial purposes that are located in urban areas.
2. Rural: Non-utilized agricultural land, grazing land, undisturbed vacant land, and parcels used exclusively as well sites for commercial purposes that are located in rural areas.
3. This land use is assigned an estimated storm water runoff factor of 0.0015. The minimum tax for this category is applied to parcels of 10 acres or less. The minimum tax is the same for E-Urban and E-Rural categories. However, for the E-Rural category, incremental lands in excess of 10 acres will be assessed at 1/8 the E-Urban rate.

The 1/8 factor was used because most rangelands in rural areas are either under the Williamson Act contracts, which limit their development potential, or they are located upstream of a District reservoir and impose less potential for flooding downstream. Additionally, the County Assessor's Office had advised that taxes on rangelands are on the average 1/8 of what they would be without Williamson Act provisions.

### CATEGORY F: WELL PARCELS FOR RESIDENTIAL USES

Parcels used exclusively as well sites for residential uses are exempt from the special tax.

*Land use codes assigned to parcels by the County Assessor's Office will be grouped into the above six land use categories for determining the annual special tax for each parcel.*

## Special tax calculation formula

The special tax for each land use category will continue at the annually adjusted rate as established under the Clean, Safe Creeks and Natural Flood Protection measure, using the ratio of the runoff factor of each land use category to the runoff factor of Category C.

### EXAMPLE CALCULATION

If the minimum special tax (for parcels less than 1/4 acre) was set at \$67.67/year for Category C, Single-Family Residences, the special tax (for a one-acre parcel) in Category A, Commercial and Industrial Parcels, can be calculated using the stormwater runoff factors for Category C, Residential, and Category A, Commercial/Industrial, as follows:

$$\$67.67 \text{ /year per } 1/4 \text{ acre} \times (0.8 / 0.4) = \$541.36 \text{ /year per acre}$$



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# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
Priority A: Ensure a Safe, Reliable Water Supply						
A1	Pacheco Reservoir Expansion Project	Increase the operational capacity of Pacheco Reservoir from 5,500 acre-feet to up to 140,000 acre-feet to reduce the frequency and severity of water shortages during droughts, protect our drinking water supply and infrastructure, and improve habitat for fish.	1. Provide a portion of funds, up to \$10 million, to help construct the Pacheco Reservoir Expansion Project.	\$1.3 B	\$10.0 M	<1%
A2	Water Conservation Rebates and Programs	Meet long-term water conservation and reliability goals by increasing water-use efficiency in the landscape, residential, schools and commercial sectors through water conservation rebates, technical assistance and public education.	1. Award up to \$1 million per year toward specified water conservation program activities, including rebates, technical assistance and public education for the first seven (7) years of the program.	\$51.3 M	\$7.9 M	15%
A3	Pipeline Reliability Project	Construct four (4) line valves on treated water distribution pipelines. The line valves will allow Valley Water to isolate sections of pipelines for maintenance and repairs following a catastrophic event such as a major earthquake, allowing Valley Water to maintain deliveries to customers, even if there is damage to individual segments.	1. Install 4 (four) new line valves on treated water distribution pipelines.	\$11.9 M	\$9.8 M	82%
Priority B: Reduce Toxins, Hazard and Contaminants in our Waterways						
B1	Impaired Water Bodies Improvement	Reduces pollutants in streams, reservoirs and groundwater of Santa Clara County by supporting surface water quality pollution prevention activities.	1. Investigate, develop and implement actions to reduce methylmercury in fish and other organisms in the Guadalupe River Watershed 2. Prepare and update a plan for the prioritization of surface water quality improvement activities, such as addressing trash and other pollutants. 3. Implement at least two priority surface water quality improvement activities identified in the plan per 5-year implementation period.	\$32.8 M	\$32.8 M	100%

# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
B2	Inter-Agency Urban Runoff Program	Maintain Valley Water compliance with regulatory requirements for stormwater quality and support green stormwater infrastructure.	1. Address trash in creeks by maintaining trash capture devices or other litter control programs. 2. Maintain Valley Water’s municipal stormwater compliance program and partner with cities to address surface water quality improvements, including participation in at least three (3) countywide, regional or statewide stormwater program committees to help guide regulatory development, compliance and monitoring. 3. Support at least one stormwater quality improvement activity per 5-year implementation period in Santa Clara County, including providing up to \$1.5 million in 15 years to support implementation of green stormwater infrastructure consistent with Santa Clara Basin and South County Stormwater Resource Plans.	\$45.2 M	\$19.8 M	44%
B3	Hazardous Materials Management and Response	Protect streams, groundwater and reservoirs from hazardous material releases.	1. Respond to 100% of hazardous materials reports requiring urgent on-site inspection in two (2) hours or less.	\$4.2 M	\$1.1 M	26%
B4	Support Creek Stewardship Volunteer Efforts	Support volunteer cleanup activities and creekwise education.	1. Fund Valley Water’s creek stewardship program to support volunteer cleanup activities such as annual National River Cleanup Day, California Coastal Cleanup Day, the Great American Litter Pick Up; and the Adopt-A-Creek Program.	\$9.2 M	\$5.1 M	55%
Priority C: Protect Our Water Supply and Dams from Earthquakes and Other Natural Disasters						
C1	Anderson Dam Seismic Retrofit	Bring Anderson dam into compliance with today’s seismic standards to ensure public safety and to restore lost reservoir storage capacity resulting from seismic concerns.	1. Provide portion of funds, up to \$54 million, to help restore full operating reservoir capacity of 90,373 acre-feet.	\$576.3 M	\$54.10	9%
Priority D: Restore Wildlife Habitat and Provide Open Space Access						
D1	Management of Riparian Planting and Invasive Plant Removal	Manage at least 300 acres of existing riparian planting projects and 200 acres of invasive plant removal projects countywide. Maintain future similar projects anticipated due to upcoming environmental mitigation requirements and carry out targeted control of damaging non-native invasive plant species.	1. Maintain a minimum of 300 acres of riparian planting projects annually to meet regulatory requirements and conditions. 2. Maintain a minimum of 200 acres of invasive plant management projects annually to meet regulatory requirements and conditions. 3. Remove 25 acres of Arundo donax throughout the county over a 15-year period.	\$118.8 M	\$68.9 M	58%

# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
D2	Revitalize Riparian, Upland and Wetland Habitat	Improve habitat for rare, threatened or endangered species or vegetation, and create a more contiguous corridor for wildlife, including pollinators.	1. Revitalize at least 21 acres over a 15-year period through native plant revegetation and/or removal of invasive exotic species. 2. Develop an Early Detection and Rapid Response Program Manual. 3. Identify and treat at least 100 occurrences of emergent invasive species over a 15-year period, as identified through the Early Detection and Rapid Response Program. 4. Develop at least 8 information sheets for Early Detection of Invasive Plant Species.	\$8.1 M	8.1 M	100%
D3	Sediment Reuse to Support Shoreline Restoration	Reuse local sediment from Valley Water's stream maintenance activities and capital projects to create and restore tidal marsh habitat.	1. Maintain partnership agreements to reuse sediment to improve the success of salt pond and tidal marsh restoration projects and activities. 2. Provide up to \$4 million per 15-year period to support activities necessary for sediment reuse.	\$4.1 M	\$4.1 M	100%
D4	Fish Habitat and Passage Improvement	Restore and maintain healthy fish populations, especially steelhead, by improving fish passage and habitat.	1. Complete planning and design for one creek/lake separation. 2. Construct one creek/lake separation project in partnership with local agencies. 3. Use \$8 million for fish passage improvements. 4. Update study of all major steelhead streams in the county to identify appropriate locations for installation of large woody debris and gravel as appropriate. 5. Complete five (5) habitat enhancement projects based on studies that identify high priority locations for large wood, boulders, gravel and/or other habitat enhancement features.	\$50.6 M	\$43.6 M	86%
D5	Ecological Data Collection and Analysis	Track stream ecosystem conditions to help Valley Water and other county organizations make informed watershed, asset management and natural resource decisions.	1. Reassess and track stream ecological conditions, habitats and selected fauna in each of the county's five (5) watersheds every 15 years.	\$10.5 M	\$7.0 M	67%

# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
D6	Restoration of Natural Creek Functions	Restore and improve natural functions and stability of stream channels, by designing and constructing projects based on local hydrologic and geomorphic data.	1. Construct the Hale Creek Enhancement Pilot Project, which includes restoration and stabilization of a 650-foot section of concrete-lined channel on Hale Creek, between Marilyn Drive and North Sunshine Drive on the border of Mountain View and Los Altos. 2. Construct the Bolsa Road Fish Passage Project along 1,700 linear feet of Uvas-Carnadero Creek in unincorporated Santa Clara County, which includes geomorphic design features that will restore stability and stream function. 3. Identify, plan, design and construct a third geomorphic designed project to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.	\$19.6 M	\$14.5 M	100%
D7	Partnerships for the Conservation of Habitat Lands	Acquire, restore and protect important habitat land to preserve local ecosystems through multi-agency agreements that pool mitigation or conservation dollars.	1. Provide up to \$8 million per 15-year period for the acquisition or enhancement of property for the conservation of habitat lands.	\$8.0 M	\$8.0 M	100%
Priority E: Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways						
E1	Coyote Creek Flood Protection	Plan, design and construct improvements along approximately nine (9) miles of Coyote Creek, between Montague Expressway and Tully Road, in San José, to provide protection from floods up to the level that occurred on February 21, 2017.	1. Construct flood protection improvements along Coyote Creek between Montague Expressway and Tully Road to provide protection from floods up to the level that occurred on February 21, 2017, approximately a 5% (or a 20-year) flood event.	\$80.8 M	\$41.8 M	63%
E2	Sunnyvale East and Sunnyvale West Channels Flood Protection	Upgrade approximately 6.4 miles of the existing Sunnyvale East Channel to provide 1% flood protection for 1,618 parcels and approximately three (3) miles of the existing West Channel to provide 1% flood protection for 47 acres of highly valuable industrial land.	1. Provide 1% flood protection for 1,618 properties and 47 acres (11 parcels) of industrial land, while improving stream water quality and working with other agencies to incorporate recreational opportunities.	\$70.4 M	\$33 M	47%
E3	Lower Berryessa Flood Protection, including Tularcitos and Upper Calera Creeks (Phase 3)	Provide 1% flood protection for approximately 1,100 parcels affected by Upper Calera Creek from the drop structure upstream of Arizona Avenue upstream to Jose Hugera Adobe Park, and to an estimated 320 parcels along Tularcitos Creek between its confluence with Berryessa Creek and Interstate 680.	1. Complete the design phase of the project.	\$8.2 M	\$8.2 M	100%



# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
E4	Upper Penitencia Creek Flood Protection	Plan, design and construct improvements along 4.2 miles of Upper Penitencia Creek from its confluence with Coyote Creek to Dorel Drive. This multi-objective project will also provide ecological restoration and recreation benefits while preserving water supply infrastructure.	1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 8,000 parcels. 2. With local funding only: Construct a 1% flood protection project from Coyote Creek confluence to Capital Avenue to provide 1% flood protection to 1,250 parcels, including the new Berryessa BART station.	\$67.0 M	\$22.9 M	34%
E5	San Francisquito Creek Flood Protection	Construct improvements along San Francisquito Creek from San Francisco Bay to upstream of Highway 101 for flood protection, ecosystem protection and recreational benefits, in partnership with the San Francisquito Creek Joint Powers Authority and the U.S. Army Corps of Engineers.	1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1% flood protection. 2. With state and local funding only: Protect approximately 3,000 parcels by providing 1% flood protection downstream of Highway 101, and approximately 1.4% flood protection upstream of Highway 101.	\$89.3 M	\$31.5 M	35%
E6	Upper Llagas Creek Flood Protection	Design and construct flood protection improvement along 13.9 miles of Upper Llagas Creek to provide flood protection and improve stream habitat benefiting areas of Morgan Hill, Gilroy and San Martin.	1. Preferred project with federal and local funding: Plan, design and construct flood protection improvements along 13.9 miles of Upper Llagas Creek from Buena Vista Avenue to Llagas Road to provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat. 2. With local funding only: Construct flood protection improvements along Llagas Creek from Buena Vista Avenue to Highway 101 in San Martin (Reaches 4 and 5 (portion)), Monterey Road to Watsonville Road in Morgan Hill (Reach 7a), approximately W. Dunne Avenue to W. Main Avenue (portion of Reach 8), and onsite compensatory mitigation at Lake Silveira.	\$285 M	\$46.3 M	16%
E7	San Francisco Bay Shoreline Protection	Provide tidal flood protection, restore and enhance tidal marsh and related habitats, and provide recreational and public access opportunities in partnership with the California State Coastal Conservancy, the U.S. Army Corps of Engineers and regional stakeholders.	1. Provide portion of the local share of funding for planning, design and construction phases for the Santa Clara County shoreline area (EIAs 1-4). 2. Provide portion of the local share of funding for planning and design phases for the Santa Clara County shoreline area (EIAs 5-9).	\$400 M	\$46.0 M	12%

# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
E8	Upper Guadalupe Flood Protection	Plan, design, and construct improvements along 5.5 miles of Guadalupe River extending from I-280 to Blossom Hill Road in San José to provide 1% flood protection to 6,610 homes, businesses and schools and institutions.	1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 6,280 homes, 320 businesses and 10 schools and institutions. 2. With local funding only: Construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive and provide gravel augmentation along approximately 800 lineal feet of the Upper Guadalupe River in San Jose, from approximately the Union Pacific Railroad Bridge to West Virginia Street Bridge to improve aquatic habitat for migrating steelhead and channel stability.	\$494.0 M	\$35.8 M	7%
Priority F: Support Public Health and Public Safety for our Community						
F1	Vegetation Control and Sediment Removal for Capacity	Reduce flood risk by maintaining the design conveyance capacity of flood protection projects by controlling in-stream vegetation and removing stream sediment.	1. Maintain completed flood protection projects for flow conveyance.	\$213.1 M	\$114.1 M	54%
F2	Emergency Response Planning and Preparedness	Coordinate and collaborate with local municipalities on flood disaster planning, mitigation, response and communication. Utilize systems developed under Project F7, Emergency Response Upgrades.	1. Coordinate with local municipalities to merge Valley Water-endorsed flood emergency processes with their own emergency response plans and processes. 2. Complete five flood management plans/procedures per five-year period, selected by risk priorities. 3. Train Valley Water staff and partner municipalities annually on disaster procedures via drills and exercises before testing the plans and procedures. 4. Test flood management plans/procedures annually to ensure effectiveness.	\$7.2 M	\$7.2 M	100%
F3	Flood Risk Assessment Studies	Create and update custom software models of local creeks for an accurate understanding of flood risks in priority flood-prone areas. Develop options for managing the flood risks.	1. Complete engineering studies on three (3) creek reaches to address 1% flood risk. 2. Annually, update floodplain maps on a minimum of three (3) creek reaches in accordance with new FEMA standards.	\$21.9 M	\$21.9 M	100%
F4	Vegetation Management for Access and Fire Safety	Reduce fire risk and ensure access for creek maintenance by managing vegetation.	1. Provide vegetation management for access and fire risk reduction on an average of 495 acres per year, totaling 7,425 acres along levee, property lines and maintenance roads over a 15-year period.	\$80 M	\$12 M	15%

# Safe, Clean Water Program: Project Summary with KPIs and Costs

## APPENDIX E

Project		Project Description	Key Performance Indicator	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water (First 15 years of Program)	Estimated Percent Funding from Safe, Clean Water
F5	Good Neighbor Program: Encampment Cleanups	Coordinate with local organizations to clean up encampments near waterways to improve water quality, safety and aesthetics, including funding for park ranger and police patrols along waterways. Cooperate with local social services and nonprofit groups to help provide alternatives to homelessness.	1. Perform 300 annual cleanups to reduce the amount of trash and pollutants entering the streams. 2. Provide up to \$500,000 per year in cost-share with other agencies to provide police and ranger patrol activities along waterways. 3. Partner with local agencies to address homelessness crisis with the goal to reduce encampment cleanups.	\$38.7 M	\$38.7 M	100%
F6	Good Neighbor Program: Graffiti and Litter Removal and Public Art	Maintain the aesthetic condition of Valley Water assets by removing trash from creeks, repairing/installing fencing and removing graffiti. Fund installation and maintenance of public art projects, such as murals, to beautify Valley Water property and infrastructure, to help deter graffiti and litter.	1. Cleanup identified trash and graffiti hotspots at approximately 80 sites four (4) times per year. 2. Respond to requests on litter or graffiti cleanup within five (5) working days. 3. Provide up to \$1.5 million over 15 years to implement public art projects on Valley Water property and infrastructure.	\$26.4 M	\$13.1 M	50%
F7	Emergency Response Upgrades	Support ongoing development and maintenance of a robust flood forecasting system, including efficient dissemination of information to emergency responders and the public.	1. Maintain existing capabilities for flood forecasting and warning. 2. Continue to improve flood forecasting capabilities through research and development.	\$13.2 M	\$13.2 M	100%
F8	Sustainable Creek Infrastructure for Continued Public Safety	Ensure that existing flood protection infrastructure continues to function sustainably and provide the level of service originally intended, as climate and other conditions evolve.	1. Provide up to \$7.5 million over the next 15 years to plan, design and construct projects identified through Watersheds asset management plans.	\$15 M	\$7.5 M	50%
F9	Grants and Partnerships for Safe, Clean Water, Flood Protection and Environmental Stewardship	Provide grants and partnerships for agencies, organizations and individuals for water conservation, pollution prevention, creek cleanups, education, wildlife habitat restoration, and access to trails and open space.	1. Provide three (3) grant cycles every five (5) years that follow pre-established competitive criteria related to safe, clean drinking water, flood protection and environmental stewardship. 2. Provide two (2) partnership cycles every five (5) years for projects related to safe, clean drinking water, flood protection and environmental stewardship. 3. Provide annual funding for bottle filling stations to increase drinking water accessibility, with priority for installations in economically disadvantaged communities and locations that serve school-age children and students. 4. Provide annual mini-grant funding opportunity for projects related to safe, clean drinking water, flood protection and environmental stewardship.	\$50.1 M	\$50.1 M	100%

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# Safe, Clean Water Program: Schedule

## APPENDIX F

Proposed Projects		Project Schedule	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
Priority A : Ensure a Safe, Reliable Water Supply																	
A1	Pacheco Reservoir Expansion	2022 - 28															
A2	Water Conservation Rebates and Programs	2022 - 28															
A3	Pipeline Reliability Project	2022 - 26															
Priority B: Reduce Toxins, Hazards and Contaminants in our Waterways																	
B1	Impaired Water Bodies Improvement	2022 - 35															
B2	Inter-Agency Urban Runoff Program	2022 - 36															
B3	Hazardous Materials Management and Response	2022 - 36															
B4	Support Creek Stewardship Volunteer Efforts	2022 - 36															
Priority C : Protect our Water Supply from Earthquakes and Natural Disasters																	
C1	Anderson Dam Seismic Retrofit	2022 - 28															
Priority D: Restore Wildlife Habitat and Provide Open Space																	
D1	Management of Riparian Planting and Invasive Plant Removal	2022 - 36															
D2	Revitalize Riparian, Upland and Wetland Habitat	2022 - 36															
D3	Sediment Reuse to Support Shoreline Restoration	2022 - 36															
D4	Fish Habitat and Passage Improvement	2022 - 36															



# Safe, Clean Water Program: Schedule

## APPENDIX F

Proposed Projects			Project Schedule	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
D5	Ecological Data Collection and Analysis	2022 - 36																
D6	Restoration of Natural Creek Functions	2022 - 36																
D7	Partnerships for the Conservation of Habitat Lands	2022 - 36																
Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways																		
E1	Coyote Creek Flood Protection	2022 - 26																
E2	Sunnyvale East and Sunnyvale West Channels Flood Protection	2022 - 24																
E3	Lower Berryessa Flood Protection, including Tularcitos and Upper Calera Creeks (Phase 3)	2032 - 36																
E4	Upper Penitencia Creek Flood Protection	2022 - 28																
E5	San Francisquito Creek Flood Protection	2022 - 24																
E6	Upper Llagas Creek Flood Protection	2022 - 26																
E7	San Francisco Bay Shoreline Protection	2022 - 28																
E8	E8: Upper Guadalupe Flood Protection	2022 - 26																
Priority F: Support Public Health and Public Safety for Our Community																		
F1	Vegetation Control and Sediment Removal for Capacity	2022 - 36																
F2	Emergency Response Planning and Preparedness	2022 - 36																
F3	Flood Risk Assessment Studies	2022 - 36																

# Safe, Clean Water Program: Schedule

## APPENDIX F

Proposed Projects			Project Schedule	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
F4	Vegetation Management for Access and Fire Safety	2022 - 36																
F5	Good Neighbor Program: Encampment Cleanups	2022 - 36																
F6	Good Neighbor Program: Graffiti and Litter Removal and Public Art	2022 - 36																
F7	Emergency Response Upgrades	2022 - 36																
F8	Emergency Response Upgrades	2022 - 36																
F9	Grants and Partnerships for Safe, Clean Water, Flood Protection and Environmental Stewardship	2022 - 36																

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## APPENDIX G









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