

### Notice of Special Meeting of the Board of Directors

Thursday, February 23, 2023

### 3:30 P.M.

Due to the risk of COVID-19 transmission, this meeting will be held remotely via video/teleconference pursuant to Government Code Section 54953(e) (Assembly Bill 361). Members of the public may observe or participate in this meeting by joining the meeting online through the Zoom link provided below or by joining the meeting with a telephone by dialing the Zoom teleconference number provided below.

You may provide public comment during the meeting: (1) by using the chat function and typing your question or comment, (2) if you are joining online, by selecting the raise your hand function and speaking when called upon, or (3) if you are joining by phone, by pressing\*9 to raise your hand and \*6 to mute/unmute yourself and to speak. If you experience technical problems with the Zoom meeting, please contact the Clerk of the Board at the phone number or email listed at the bottom of this Agenda.

If you require an accommodation pursuant to the Americans with Disability Act, please contact the Clerk of the Board at the phone number or email listed at the bottom of this Agenda by 10:00 am on the day of the meeting.

You are invited to a Zoom meeting.

When: Feb 23, 2023, 3:30 PM Pacific Time (US and Canada)

Register in advance for this meeting:

https://us02web.zoom.us/meeting/register/tZUlduChrj8jGNLVmtbrZVAhkM3qjiXbh9ne

After registering, you will receive a confirmation email containing information about joining the meeting.

\*Members of the Public may speak on any agenda item for up to three minutes\*

- 1. CALL TO ORDER AND ROLL CALL
- 2. APPROVAL OF AGENDA
- 3. APPROVAL OF MEETING MINUTES January 26, 2023
- 4. PUBLIC COMMENT: Individuals may speak on a non-agendized topic for up to three minutes.
- 5. CONSENT AGENDA
  - A. Consider adopting Resolution 23-02-16-A to authorize public meetings to continue to be held via teleconferencing pursuant to Government Code Section



54953(e).

- B. 2023 Board Meeting Schedule Approve 2023 meeting schedule.
- C. Accept the 2023 Edition of the SFCJPA Comprehensive Plan via Resolution 23-02-23-B.

# 6. ACTION ITEMS

- A. Board reorganization Action on Board roles and Committee assignments.
- B. Second Amended Re-Stated SFCJPA Members Agreement Review and consider approval of the revised SFCJPA Members Agreement for future ratification by SFCJPA members.
- C. Authorize the Executive Director to negotiate scope of work and contract terms for a survey of the Creek channel, not to exceed \$45,000.

# 7. INFORMATION ITEMS

- 7.A. Study Session on Reach 2: The Urban Reach 2 Project extends from East Bayshore Road to just upstream of the Pope Chaucer Bridge. Staff and Project Partners will present an update on the status of the Reach 2 project: impacts of the New Year's Eve storm and what we are doing, project elements planning and design, permitting, access & easements, funding.
- 7.B. Executive Director's Report
- 8. BOARD MEMBER COMMENTS, INFORMATION ITEMS, REQUESTS and ANNOUNCEMENTS (Information only)
- 9. ADJOURNMENT

PLEASE NOTE: Board meeting Agenda and supporting documents can be viewed online no later than 3:30 p.m. on Monday, February 20, 2023, at <u>sfcjpa.org</u> -- click on the "Meetings" tab near the top. We email the Board Meeting package on Friday before the meeting to our Board Meeting distribution list. Contact SFCJPA Board Clerk, Miyko Harris-Parker at <u>MHParker@sfcjpa.org</u> if you are not on this list and would like to be added.

# San Francisquito Creek Joint Powers Authority February 23, 2023, Regular Meeting of the Board Agenda Item 3 January 26, 2023, Board Meeting Minutes DRAFT

Director Abrica called the meeting to order at 3:30 p.m., welcoming Director Eisenberg and Director Stone, via streaming video and teleconference call.

Public input was solicited on each item and all public comments received are noted herein.

1)	ROLL CALL		
	Members Present:	Director Ruben Abrica, City of East Palo Alto	
		Director Drew Combs, City of Menlo Park	
		Director Rebecca Eisenberg, Santa Clara Valley Water District (Valley Water)	
		Director Greer Stone, City of Palo Alto	
	Members Absent:	Director Dave Pine, San Mateo County Flood and Sea Level Rise Resiliency	
		District	
	SFCJPA Staff Present: Margaret Bruce, Executive Director		
		Miyko Harris-Parker, Staff	
		Kevin Murray, Staff	
		Tess Byler, Staff	

Legal Present: Trisha Ortiz

### 2) APPROVAL OF AGENDA

ACTION: Motion and second (Stone/Abrica) to approve the agenda, passed 4-0.

Roll call vote: Director Abrica Aye Director Combs Aye Director Eisenberg Aye Director Stone Aye

Director Pine not present.

### 3) APPROVAL OF MEETING MINUTES: December 15, 2022, Regular Meeting minutes

ACTION: Motion and second (Combs/Abrica) to approve the December 15, 2022, Regular Meeting minutes, passed 3-0-1.

Roll call vote: Director Abrica Aye Director Combs Aye Director Eisenberg Abstained Director Stone Aye

Director Pine not present.

### 4) PUBLIC COMMENT

None.

### 5) CONSENT AGENDA

Consider adopting Resolution 23-01-26-A to authorize public meetings to continue to be held via teleconferencing pursuant to Government Code Section 54953(e). Consider adopting Employee Handbook - 2022 Updates. Consider adopting Board Handbook - 2022 Updates ACTION: Motion and second (Abrica/Eisenberg) to approve the Consent Agenda passed 4-0.

### San Francisquito Creek Joint Powers Authority February 23, 2023, Regular Meeting of the Board Agenda Item 3 January 26, 2023, Board Meeting Minutes DRAFT

Roll call vote: Director Abrica Aye Director Combs Aye Director Eisenberg Aye Director Stone Aye

Director Pine not present.

### 6) ACTION ITEMS

<u>Board reorganization – Board roles and Committee assignments</u> Agendized to next meeting of the Board.

### Approve 2023 Regular Board Meeting Schedule

ACTION: Motion and second (Stone/Abrica) to approve the 2023 Regular Board Meeting Schedule acknowledging July as the month for board recess, passed 4-0.

Roll call vote: Director Abrica Aye Director Combs Aye Director Eisenberg Aye Director Stone Aye

Director Pine not present.

### 7) SPECIAL PRESENTATION BY STANFORD UNIVERSITY

Stanford staff members, Tom Zigterman, Karla Smith, Shweta Bhatangar and Kelly Kline were present to give a special presentation on Stanford's Searsville Dam project.

### 8) INFORMATION ITEMS

<u>DRAFT Second Amended Re-Stated SFCJPA Members Agreement. Review and discussion</u> Ms. Bruce presented the second amended re-stated SFCJPA Members Agreement for review and discussion.

Mid-Year Budget Report

Ms. Bruce presented the mid-year budget report.

#### Executive Director's Report

Ms. Bruce provided a summary of the Executive Director's report.

Director Eisenberg expressed appreciation for the impact of visiting the areas impacted by the winter storm events.

Director Stone commented on and gave thanks for the incredible response from all agencies during and after the winter storm events.

Resident Richard Gu expressed thanks for the prompt response to the winter storm events and stated that residents are looking for a prompt response for protection from flooding issues.

Resident Xenia Hammer concurred with Richard Gu's comments, requested that clarification be made regarding the role of the Pope Chaucer Bridge and stated that the reports regarding the winter

# San Francisquito Creek Joint Powers Authority February 23, 2023, Regular Meeting of the Board Agenda Item 3 January 26, 2023, Board Meeting Minutes DRAFT

storm events need to mention the flooding on Palo Alto streets and homes.

### 9) <u>BOARD MEMBER COMMENTS, INFORMATION ITEMS, REQUESTS and ANNOUNCEMENTS</u> (Information only)

Director Eisenberg encouraged member agencies to impose restrictions on development near creek banks and implementing more measures to encourage using porous materials.

Director Combs welcomed the new members of the Board.

### 10) ADJOURNMENT

Adjourned at 5:06 pm.

Minutes drafted by Clerk of the Board: Miyko Harris-Parker.

# RESOLUTION NO. 23-02-23-A

### A RESOLUTION OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY RECONSIDERING THE CIRCUMSTANCES OF THE COVID-19 STATE OF EMERGENCY AND MAKING FINDINGS IN CONNECTION THEREWITH TO AUTHORIZE MEETINGS TO BE HELD VIA TELECONFERENCING PURSUANT TO GOVERNMENT CODE SECTION 54953(e)

WHEREAS, the Board of Directors (the "Board") of the San Francisquito Creek Joint Powers Authority (the "Authority") is committed to public access and participation in its meetings while balancing the need to conduct public meetings in a manner that reduces the likelihood of exposure to COVID-19; and

WHEREAS, all meetings of the Authority are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 - 54963), so that any member of the public may attend, participate, and watch the Board conduct its business; and

WHEREAS, pursuant to Assembly Bill 361, signed by Governor Newsom and effective on September 16, 2021, legislative bodies of local agencies may hold public meetings via teleconferencing pursuant to Government Code Section 54953(e), without complying with the requirements of Government Code Section 54953(b)(3), if the legislative body complies with certain enumerated requirements in any of the following circumstances:

- 1. The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.
- 2. The legislative body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.
- 3. The legislative body holds a meeting during a proclaimed state of emergency and has determined, by majority vote, that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

WHEREAS, on March 4, 2020, Governor Newsom declared a <u>State of Emergency</u> in response to the COVID-19 pandemic (the "Emergency").

WHEREAS, the Centers for Disease Control and Prevention continue to advise that COVID-19 spreads more easily indoors than outdoors and that people are more likely to be exposed to COVID-19 when they are closer than 6 feet apart from others for longer periods of time.

WHEREAS, due to the ongoing COVID-19 pandemic and the need to promote social distancing to reduce the likelihood of exposure to COVID-19, the Authority intends to hold public meetings via teleconferencing pursuant to Government Code Section 54953(e).

WHEREAS, to continue meeting remotely pursuant to Government Code Section 54953(e), an agency must make periodic findings that: (1) the body has reconsidered the circumstances of the declared emergency; and (2) the emergency impacts the ability of the body's members to meet safely in person, or state or local officials continue to impose or recommend measures to promote social distancing.

### NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY DOES RESOLVE AS FOLLOWS:

- 1. The Recitals provided above are true and correct and are hereby incorporated by reference.
- 2. The Board has reconsidered the circumstances of the COVID-19 state of emergency and hereby finds that the state of emergency continues to directly impact the ability of the members to meet safely in person. As required by Government Code Section 54953(e)(3), the findings made

pursuant to this Section 2 shall apply as of February 23, 2022, and shall cover the period of time until the announced end of the Governor's Emergency Declaration, on February 28, 2023.

- 3. The legislative bodies of the Authority may conduct their meetings pursuant to Government Code section 54953(e).
- 4. Staff is hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act. Such actions include returning to the Board within 30 days and every 30 days thereafter to make the findings required by Section 54953(e)(3).
- 5. This Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the Board of Directors of the San Francisquito Creek Joint Powers Authority this <u>23<sup>rd</sup> day of February</u>, <u>2023</u>, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

APPROVED:

Date: 02/23/2023

Date: 02/23/2023

Chairperson

Vice Chairperson

APPROVED AS TO FORM:

Legal Counsel

Date: 02/23/2023

# Consent Agenda Item 5.B. – 2023 Board Meeting Schedule

### Background

In January 2023 the Board Meeting schedule as proposed was incorrect.

### Discussion

We have updated the 2023 SFCJPA Board Meeting schedule to reflect the correct dates and have confirmed meeting venues.

# Draft 2023 Board Meeting Schedule

# **Regular Board of Directors Meetings**

Meetings are held monthly on the Fourth Thursday of the month beginning at 3:30 p.m.

January 26, 2023	February 23, 2023	
Video/teleconference	Video/teleconference	
March 23, 2023	April 27, 2023	
City of Menlo Park	City of East Palo Alto	
Council Chambers	Council Chambers	
701 Laurel Street	2415 University Ave	
Menlo Park, CA	East Palo Alto, CA	
May 25, 2023	June 22, 2023	
City of Palo Alto	City of Menlo Park	
Council Chambers	<b>Council Chambers</b>	
250 Hamilton Ave	701 Laurel Street	
Palo Alto, CA	Menlo Park, CA 94025	

July 27, 2023	August 24, 2023	
(Board recess. No meeting)	City of East Palo Alto	
	Council Chambers	
	2415 University Ave	
	East Palo Alto, CA	
September 28, 2023	October 26, 2023	
City of Palo Alto	City of Menlo Park	
250 Hamilton Ave	701 Laurel Street	
Palo Alto, CA	Menlo Park, CA	
November 16, 2023	December 21, 2023	
City of East Palo	City of Menlo Park	
2415 University Ave	750 Laurel Street	
East Palo Alto, CA	Menlo Park, CA	
	(City of Palo Alto not available.)	

# Recommendation

Please accept the updated and corrected 2023 SFCJPA Board Meeting schedule.

# Consent Agenda Item 5.C. SFCJPA Comprehensive Plan 2023 Update

# Background

The SFCJPA developed its initial Comprehensive Plan in June 2020 to communicate our purpose and projects to diverse audiences. This plan was reviewed by various community members and other stakeholders that shaped and informed the revised plan. The Board approved the initial Comprehensive Plan in November 2020.

The draft updated <u>Comprehensive Plan with preliminary staff edits and updates</u> was presented for Board and Public comments as part of the Board package for the June 24, 2022 Board Meeting. Written comments were received from Stanford University and the City of Palo Alto, with verbal comments from Grassroots Ecology that have been incorporated into the revised plan.

The SFCJPA Comprehensive Plan is considered a living document and will be reviewed annually and updated as needed. The resulting 2023 update to the Comprehensive Plan update is provided here for Board approval.

# Additional information

The 2023 update to the plan documented known data that has been collected in the San Francisquito watershed, added a new section on water rights and recommended actions.

*2023 Update:* The San Francisquito Creek watershed is changing, not only with the SFCJPA projects, but also by projects planned and implemented by others. The assessment of overall watershed condition by Valley Water in Santa Clara County indicates generally fair conditions in the lower watershed. A geomorphic stability evaluation in two sections of the creek completed in 2017 concluded that San Francisquito Creek is an altered urbanized creek channel that has lost much of its floodplain, and as such has higher instability and flooding potential as compared with a more natural channel. Changes at a broader scale are also occurring because of changing climate.

The SFCJPA recommends the following actions:

- Review and incorporate 2022-2023 storms into project planning.
- Increase trash removal activities.
- Increase invasive species removal.
- Continue surface water quality monitoring
- Conduct a Stream Condition Assessment for the San Mateo County side of watershed.

# **Recommendation:**

Approve of the 2023 Update to the Comprehensive Plan via Resolution 23-02-23-B.



# COMPREHENSIVE PLAN

This Comprehensive Plan is the SFCJPA's description of our vision and action plan for the benefit of our member agencies, residents, and stakeholders for the San Francisquito watershed and floodplain. The SFCJPA has always considered a watershed approach for our work, and this document is intended to chronicle our overall plan. This plan is a living document and will be revisited annually and updated to reflect new information, recent or anticipated activities and events that affect the watershed.

San Francisquito Creek Joint Powers Authority



### **REVISION HISTORY**

Revision #	Revision Date	Revisions Made
0	November 2020	Initial Plan
1	October 2021	Minor updates to project nomenclature, annual updates, and incorporation of 2021 stakeholder comments
2	February 2023	Updated to incorporate available data for the watershed, including water rights, water quality and watershed condition. Developed recommendations for future actions based on data evaluated and incorporated 2022 stakeholder comments.

### ACKNOWLEDGEMENTS

This plan was prepared through a collaboration of stakeholders coordinated by the San Francisquito Creek Joint Powers Authority, the members of which are the Cities of East Palo Alto, Menlo Park and Palo Alto; the Santa Clara Valley Water District and the San Mateo County Flood and Sea Level Rise Resiliency District. We thank our reviewers for their thoughtful comments that continue to make this a better plan.



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### Summary

This Comprehensive Plan describes the SFCJPA's vision, goals, and action plan for the San Francisquito Watershed for the benefit of our member agencies, watershed partners and stakeholders. San Francisquito Creek is an asset unifying the communities it touches, providing ecosystem and recreation services. The San Francisquito Creek Joint Powers Authority (SFCJPA) works with its members and watershed partners to address the interrelated issues of flood protection, ecosystem restoration and creation of recreational opportunities along the creek and in the watershed.

The Comprehensive Plan is an element of San Francisquito Creek Watershed project planning. The San Francisquito Creek watershed has been studied by many different entities, and the 2022 update has incorporated known data sources as elements of a watershed plan. The existing data about the physical characteristics of the watershed may serve as baseline data forming an analytic framework for the watershed and floodplain.



Figure 1. Watershed Reaches and Projects

Our overarching goal, working with our member agencies and partners, is to implement a suite of interrelated actions, each with independent utility but together comprising a comprehensive approach with multiple benefits to all inhabitants of the watershed. The SFCJPA's action plan to achieve our vision and overarching goal is to implement the following projects that are components of the SFCJPA's plan to cost effectively provide protection to people and infrastructure, while improving habitat and recreational opportunities:



### Reach 1 - San Francisco Bay to Highway 101 "Downstream Project"

This completed project was the necessary first step in our plan. The flood control aspects of the project consisted of widening the creek channel, constructing new setback levees and flood walls, and creating in-channel marsh plain. In total, this project created more than 22 acres of new and improved marsh and added new trails on top of the levees that connect to the San Francisco Bay Trail and West Bayshore Road. This project specifically incorporated protection against three feet of sea level rise. When considering the safety factor of FEMA freeboard, the project as built protects against 100-year creek flows and up to 10 feet of sea level rise compared to today's daily high tide. The Reach 1 Downstream Project flood protection elements were completed December 2018 and the overall project was completed June 2019.

### Reach 2 - Highway 101 to El Camino Real "the Middle or Urban Reach Project"

This project is designed to provide protection for people and property from a flood event similar to the 1998 flood, which is considered an approximate 70-year event. This project will not provide protection from a 100-year flooding event. It will increase channel capacity at key locations. The SFCJPA submitted draft permit applications with State and Federal Fish and Wildlife agencies in July 2022 to ensure the project is designed to improve habitat and consider minimum flow depth for fish migration. The lowest flow capacity point is the Pope Chaucer Bridge, which is currently planned for replacement by a new bridge with a more open design that restores the natural creek bed resulting in an increase in the hyporheic zone in this area. Cooler water temperatures and enriched nutrients from an increase in the hyporheic zone may be beneficial for smolt out migration. The new bridge has been carefully designed to minimize its footprint and to maintain current street elevations, while ensuring safe pedestrian and bicycle access. The City of Palo Alto will be replacing the Newell Road bridge, which is considered by Caltrans to be functionally obsolete and is also a channel constriction point. Being furthest downstream, the Newell bridge replacement must happen first, and is planned for summer of 2024. Channel widening is anticipated to begin in 2024. The Pope-Chaucer bridge construction is anticipated to begin in 2025. Aging top of bank structures will be evaluated as part of a Supplemental Environmental Impact Report and may be replaced along this reach.

The project is being recalibrated based on the storms in January 2023 and the effects of Stanford's Searsville Watershed Restoration Project that was proposed February 8, 2023.

### Reach 3 – "Upstream Offline Detention" to complete 100-Year Flood Protection

In order to achieve the 100-year level of protection and associated FEMA freeboard<sup>1</sup> to remove parcels from the FEMA floodplain (and the need to pay for flood insurance), an additional project for upstream detention was evaluated at a programmatic level in our September 2019 Environmental Impact Report.

<sup>&</sup>lt;sup>1</sup> Freeboard refers to the distance between the surface of high water and the top of the bank or floodwall. FEMA requires a certain amount of freeboard as a margin of safety.



The topography of the upper watershed does not allow for upstream detention on its own to provide 100-year flood protection; only a combination of the completed Reach 1 and Reach 2 projects, supplemented by Reach 3 offline detention and/or other similar flow reduction features can achieve 100-year protection with FEMA freeboard for San Francisquito Creek. Data collection for a project level evaluation of potential alternatives that can achieve 100-year flood protection with FEMA freeboard has been initiated. Data collection and cost evaluation will provide an understanding of the potential for upstream detention to supplement Reach 1 and 2 improvements to provide for 100-year flood protection with freeboard.

Considering climate change effects, modeling by Stanford University staff estimates that the frequency of 500-year storm events will occur three times more frequently than today. With the additional sediment loads that will occur with Stanford's proposed project at Searsville, creek flow capacity will be diminished. Upstream offline detention may offset some of this decreased capacity downstream.

# Tidal flood protection and marsh restoration- Strategy to Advance Flood Protection and Ecosystem Restoration and Recreation along San Francisco Bay (SAFER Bay Project)

The <u>S</u>trategy to <u>A</u>dvance <u>F</u>lood protection, <u>E</u>cosystem restoration and <u>R</u>ecreation Project (SAFER Bay) addresses tidal flood protection by improving or rebuilding flood protection features along San Francisco Bay within SFCJPA jurisdiction. <u>Public Draft Feasibility reports</u> were issued in 2016 for East Palo Alto and Menlo Park, and in 2019 for Palo Alto. The multiple reaches and elements of these projects, when fully constructed, will eliminate a key protection gap in the tidally influenced areas, along the bay margin, outside of our completed project from San Francisco Bay to Highway 101 described above.

We are currently moving forward with a portion of SAFER Bay project in East Palo Alto and Menlo Park. We have initiated early coordination with permitting agencies working on 30% designs, project description, and stakeholder outreach. The SFCJPA released a Notice of Preparation (NOP) in April 25, of 2022 and began the CEQA process. The SFCJPA will continue to work closely with the South Bay Salt Ponds Restoration Project to plan habitat restoration strategies for the former Salt Ponds R1 and R2. The SAFER Bay project will implement a combination of engineered and natural flood protection, to address tidal flooding and projected sea level rise. This project has similar protection criteria as our completed Reach 1 Creek project from San Francisco Bay to Highway 101.

The SFCJPA Board adopted the <u>Bay Adapt Platform</u> in December 2021 for the SAFER Bay project. This regional strategy encompasses a broad range of planning, policy, community, and project decisions to protect people, infrastructure, and natural systems, balancing local economic growth and jobs, services, housing, and recreational opportunities and is focused on local decision-making. In addition, this platform encourages projects to network across the region to better coordinate actions, share knowledge, and avoid unintended consequences or cascading effects around the Bay.



The SFCJPA has convened a SAFER Bay community advisory committee through our partnerships with Climate Resilient Communities and Nuestra Casa December 2022 and intends to continue outreach throughout design and construction.

The SFCJPA will implement the above projects as key components to achieve our vision and goals.

**2023 Update Rationale and Recommendations for Action:** The San Francisquito Creek watershed is changing, not only with the SFCJPA projects, but also by projects planned and implemented by others. Assessment of overall condition by Valley Water in Santa Clara County indicates generally fair conditions. Geomorphic stability evaluation completed in 2017 indicates that San Francisquito Creek is an altered urbanized creek channel that has lost much of its floodplain, and as such has higher instability and flooding potential as compared with a more natural channel. Changes at a broader scale are also occurring as a result of changing climate. This plan incorporates available baseline data that may serve as a future basis as a Watershed Plan.

The SFCJPA recommends the following actions:

- Review and incorporate 2022-23 storms into project planning.
- Increase trash removal activities.
- Develop a program for invasive species removal and remove invasive trees in the creek channel.
- Continue surface water quality monitoring and evaluate if current parameters and methods are sufficient for expected changes to watershed.
- Conduct Stream Condition Assessment for the San Mateo County side of watershed.

In addition, surface water level and groundwater pumping are monitored across different entities, and may miss watershed scale effects. Of particular interest are how flow regimes may be impacted and what those impacts mean for anadromous fish habitat in the watershed. This may be an area of future coordination and collaboration as projects move forward.

We intend to work with our member agencies and leverage other planned activities in the watershed using a partnership approach to augment our plan. As stated so eloquently in 2005, by the San Francisquito Creek Watershed Council in **A Stakeholder Vision for San Francisquito Creek**:

"This document offers a vision for securing the future of the San Francisquito watershed as a vital community resource. Its authors are a group of stakeholders with a range of perspectives as representatives from neighborhood associations, local cities, environmental groups, Stanford University, and local, state, and federal resource agencies. While they do not always agree on paths of action to a given goal, they put forward this vision as their collective expression of what it means to live in a watershed and keep it healthy and safe for the future."



The SFCJPA intends to follow this tradition with our member agencies and numerous partners in a transparent and collaborative manner.

This plan will be reviewed biennially and updated as needed.



# 1. Introduction

This Comprehensive Plan details the past efforts and current Capital Improvement Program of the San Francisquito Creek Joint Powers Authority (SFCJPA) to document our efforts and as a communications tool. The development and refinement of the Comprehensive Plan will also provide opportunities for discussion about the issues related to flood management, ecosystem restoration, and recreational opportunities in the San Francisquito Creek watershed and floodplain and show how stakeholders throughout the watershed can work together to implement the planning goals of the SFCJPA. This document:

- describes the San Francisquito Creek Watershed and floodplain and the resources within the watershed and floodplain
- describes the evolution of the creek and floodplain and re-engineering efforts
- states accomplishments of the Planning process to date and the role of the SFCJPA,
- outlines the SFCJPA's Comprehensive Capital Improvement Program,
- describes the roles and relationships of key watershed and floodplain partners, and
- broadly outlines potential solutions and future funding needs,
- describes emerging issues and their potential impacts and opportunities.

**Vision:** The San Francisquito Creek and floodplain are assets enhancing and unifying the communities they touch, providing recreation and ecosystem services. The SFCJPA works with its members and watershed partners to address the interrelated issues of flood protection, ecosystem restoration and creation of recreational opportunities along the creek and floodplain, and in the watershed in a fiscally responsible manner.

**Overarching Goal:** Implement a suite of interrelated actions, each with independent utility but together comprising a comprehensive approach with multiple benefits to all inhabitants of the watershed and floodplain.

Action Plan: The projects described in Section 5 are components of the SFCJPA's action plan to provide 100-year flood protection, improve habitat and ecosystems, and provide recreational amenities where possible:

This Comprehensive Plan represents our path for implementing the SFCJPA's vision and tracking progress towards our overarching goal with our action plan.

This plan is intended to be a living document that will be reviewed biennially and updated as necessary. Additional information on the SFCJPA's activities can be found on our website at <u>www.sfcjpa.org</u>.



# 2. Description of the Watershed

The San Francisquito Creek watershed is approximately 45 square miles in extent and includes areas of Santa Clara and San Mateo counties. The mainstem and a portion of its Los Trancos Creek tributary form the boundary between the city of Palo Alto and the cities of Menlo Park and East Palo Alto, and between Santa Clara and San Mateo counties, reflecting the fact that it originally defined the boundary between the lands of the Spanish Missions in Santa Clara and San Francisco (Figure 1).

San Francisquito Creek is an intermittent stream that begins at the confluence of Corte Madera Creek and Bear Creek below Searsville Dam in the Jasper Ridge Biological Preserve. Perennial pools exist in the upper watershed. The creek is joined by Los Trancos Creek just northeast of Interstate 280. The creek runs approximately 14 miles from southwest to northeast, and after exiting the foothills of the Santa Cruz Mountains near Junipero Serra Boulevard and Alpine Road, flows in an incised channel within a broad historic alluvial fan before emptying into the San Francisco Bay south of the Dumbarton Bridge and north of the Palo Alto Flood Basin.



Figure 2 San Francisquito Creek Watershed and Alluvial Fan (Floodplain)

Source: Janet M. Sowers, 2004. Oakland Museum of California, Creek and Watershed Map of Palo Alto and Vicinity, ISBN 1-882140-25-7



Based on USGS surveys dating back to 1857and other historical sources, the watershed historically encompassed a more complex stream and floodplain that has been modified by human development The San Francisco Estuary Institute developed a series maps that document the natural location of floodplain elements such as willow groves, tidal marsh, and tidal channels for Reach 1 as part of Lower San Francisquito Creek Historical Ecology evaluation funded by the SFCJPA in 2009.

The SFEI noted the history of sedimentation in the lower stream reaches, where sediment aggradation was inferred. Sediment aggradation has also been noted in regional surveys of the area by <u>Point Blue</u>, suggesting that marshes have the potential to keep pace with some amount of rising tides (Hayden et al, 2019). SFEI also documented apparent management of sediment by local farmers in the 1920's to raise marsh levels that is of current relevance, given concerns about sea level rise, shoreline erosion and limited sediment supply.

Upstream of marshes and willow thickets, valley foothill riparian woodland habitat occurs in the watershed. Upland areas were also modified, most notably with the construction of Searsville Dam in the 1890's with associated diversions and manmade lakes and reservoirs. The creek and the associated groundwater of the San Francisquito Cone alluvial aquifer have been and are currently used for water supply.

The San Francisquito Creek Bank Stabilization Master Plan (SFCJPA 2000) noted that the following under Hydrologic and Geomorphic Conditions as key items that changed the watershed:

- Native Americans used fire to clear brush in oak woodlands and grasslands to improve hunting conditions and manage fuel loads in the San Francisquito Watershed, which would have altered vegetation cover, storm runoff, and sediment supply by soil erosion on a periodic basis.
- In the 1700's, prior to major chronic human intervention in the landscape, the creek was already deeply incised into the alluvial fan deposited during the Pleistocene based on diary accounts of Portola Expeditions.
- The introduction of cattle and sheep in the early 1800s also caused scour and chronic channel incision into alluvial sediments by reducing vegetation cover through overgrazing, increasing amount of runoff from storms and decreasing the lag time to peak flows downstream. In addition, some areas of riparian vegetation, which had previously helped to stabilize the channel and banks, were destroyed and could not regenerate. Fire was used to convert chaparral cover to grassland in the lower half of the watershed.
- Commercial logging from the 1840s to the 1880s resulted in the clearing of extensive areas of forest in the upper watershed. Settlement of the area brought residential development, scattered agriculture, and a network of roads. The cumulative effect of these landscape changes likely affected the lower portion of the watershed by further increasing peak flows and sediment yields.



As described above, the San Francisquito Creek watershed and floodplain have a long history of human use. Indigenous people managed forests and harvested salt from the shoreline areas. Large scale salt evaporator ponds were developed from tidal marsh by the 1950's, and other marsh areas were filled for farming or filled with trash and debris. Some shoreline areas were used for industrial development, marinas, and wastewater treatment.

The creek and riparian corridor, bay shoreline and associated marshes are home to several endemic and endangered species. Marshes on the edge of the bay absorb storm wave energy and dampen the impacts of high tides, providing shoreline protection against flooding. With climate change, the impacts of sea level rise will be most immediate in the floodplain areas of our communities.

Based on historical evidence, the San Francisquito Creek was likely always incised and deep, and geology and active seismic activity in the upper watershed contributed sediment via landslides (SFCJPA 2000).

### Land Use

Of the approximately 27,400 acres of the San Francisquito Creek watershed, approximately 8,798 acres are protected by public agencies, property easements, or private land trusts (32%), providing a natural feel within much of the watershed. The west side of the watershed is largely unpopulated, consisting primarily of forest and grasslands. Headwaters of the watershed are in the east side of Santa Cruz Mountains, and form the Los Trancos Creek, Corte Madera Creek, and Bear Creek sub-watersheds, include forested habitats, and drain into the main stem. The lower watershed is highly urbanized and includes expansive areas of residential and commercial development. The lower watershed is highly developed when compared to the upper watershed, but some areas of open space remain interspersed throughout the urban and suburban land uses.

The watershed begins in the Santa Cruz Mountains to the west and the broad floodplain ends at the Bay to the east. The area east of Alameda de las Pulgas/Junipero Serra Boulevard is considered to be "lowlands" with a slope of less than 5%. The densest development in the region is typically located in the lowlands and includes visually similar commercial and industrial buildings as well as multi- and single-family homes. Breaks in this dense development pattern include open areas along the Bayfront, large surface parking lots, setbacks along major arterials, or local and regional parks. Development density generally decreases as elevation increases.

The steep banks of the creek in the urban portions of the watercourse have been modified or hardened in many places in response to bank erosion. Even with these modifications, the San Francisquito Creek remains one of the least modified creeks on the Peninsula and the creek retains much of its natural appearance. The creek has created its own natural 'levees'; with higher banks that slope away from the channel. The bank-tops feature many mature coastal live oak, valley oak, scrub oak, California bay laurel, and buckeye trees, while willows grow abundantly on the lower portions of the bank and in the creek channel. The heavily wooded creek banks provide a unique natural character to neighborhoods adjacent to the creek. Many residents enjoy walking or bicycling on the creek-side roads.



Several bridges cross the Creek that connect the communities of East Palo Alto, Palo Alto, and Menlo Park. Vehicular and multi-use bridges include crossings at El Camino Real, Middlefield Road, Newell Road, University Avenue, Pope Street/Chaucer Street, and East and West Bayshore Road, adjacent to the vehicular use only bridge at Highway 101. There are four public bicycle/pedestrian bridges, including the Menlo Ohlone Bridge near San Mateo Drive that connects Stanford and Menlo Park, Peninsula Bikeway Bridge off Willow Place in Menlo Park connecting to Palo Alto Avenue in Palo Alto, the Alma Street Bridge at Alma Street in Menlo Park and Palo Alto, adjacent to the one railroad bridge across San Francisquito Creek at Palo Alto Park and the Friendship Bridge off O'Connor Street in East Palo Alto that connects to the Palo Alto Baylands. The Friendship Bridge is an important bike commute route. In addition, several properties in Palo Alto span both sides of the creek and owners have built their own private pedestrian bridges across the creek.

### **Demographics**

Population in communities within the San Francisquito Creek Watershed is estimated in the table on the following page.

Estimated Population, San Francisquito Creek Watershed (US Census data)					
Area	Population	Year			
Woodside	5,309	2020			
Stanford	21,150	2020			
Palo Alto	68,572	2020			
East Palo Alto	30,034	2020			
Menlo Park	33,780	2020			
Atherton	7,188	2020			
Total	166,033				

Residents of the San Francisquito Creek Watershed represent a wide range of socio-economic circumstances, from the wealthiest to economically disadvantaged, as well as culturally and racially diverse communities. In the SFCJPA's jurisdiction, approximately 12,700 people in East Palo Alto and 4,300 people in Menlo Park are considered vulnerable communities', as defined by the Department of Water Resources, meaning that they are highly susceptible to the impacts of flood and drought, as well as lacking the resources needed to effectively manage for water resource sustainability. Using another measure for disadvantaged community, two entire census tracts within East Palo Alto, with a combined population of over 17,000, are recognized as California Disadvantaged and Severely Disadvantaged Communities by the California Environmental Protection Agency (2017) as defined by State Bill 535. According to the U.S. Census website, the population of the cities of Menlo Park and Palo Alto tend to

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be both older and whiter than neighboring East Palo Alto, although a sizable percentage of Palo Alto's population is Asian. East Palo Alto's population skews younger, and more racially diverse, with a majority of Hispanic, African American and Pacific Islander residents.

The SFCJPA has and will continue to tailor community outreach to include as many stakeholders as possible. As described in Section 6, we have partnered with Nuestra Casa and Climate Resilient Communities for specific outreach for our work in disadvantaged portions of our communities. Additionally, SFCJPA can draw on the expertise of their bilingual staff members where Spanish/English or Tagalong translation or interpretation is necessary.

### Historic and archeological resources<sup>2</sup>

The area was occupied by indigenous people for millennia prior to the first European visitors to the area in 1769. The aboriginal way of life for the Ohlone was disrupted by contact with European explorers and the establishment of missions by the Spanish in the late eighteenth century. At the time of Spanish contact, the Bay Area and the Coast Range valleys were dotted with native villages.

Gaspar de Portola crossed San Francisquito Creek in November 1769, and Spanish colonial policy throughout the late 1700s and early 1800s was directed toward establishing religious missions, presidios, and secular towns known as pueblos, with all land being held by Spain. The Stanford University campus, comprising over 8,100 acres, was once home to a large population of Muwekma-Ohlone Indians, estimated to number 10,000 individuals in small communities throughout the San Francisco Bay Area (Source: https://exhibits.stanford.edu/stanford-stories/feature/stanford-lands.

With the transition of the area to the Mexican Government in 1821, the former Spanish mission lands were divided into vast tracts called "ranchos" owned by individuals. The watershed encompasses portions of seven ranchos, two on the north side of San Francisquito Creek (Rancho Las Pulgas and Rancho Cañada de Raymundo) and five on the south side (Rancho Cañada El Corte de Madera, Rancho El Corte de Madera, Rancho San Francisquito, Rancho Rincon de San Francisquito, Rancho Rinconada del Arroyo de San Francisquito). Many of these names have come to define the geography of the watershed and its environs to this day.

After the Mexican-American War (1846-1848), the U.S. military gained control of California. The early American Period was primarily defined by the growth of agriculture in the region, with land grants establishing the towns of Menlo Park and Mayfield, and right of way for railroads. Locally, construction on the San Francisco and San Jose Railroad began in 1861, with passenger and freight service beginning in 1863. The railroad expanded the agricultural life of California and led to more innovative ways to ship and preserve food supplies, such as transporting fruit and meat in refrigerator cars which were invented

<sup>&</sup>lt;sup>2</sup> Summarized from the 2011 report Initial Cultural Resources Investigation San Francisquito Creek Flood Damage Reduction and Ecosystem Restoration Project, Santa Clara and San Mateo Counties, California by Far Western Anthropological Research Group, Inc.



in 1880. The railroad also facilitated the development of communities in the south Bay, a process greatly hastened by the San Francisco earthquake of 1906 which displaced hundreds of people.

Leland Stanford, Sr. purchased land along San Francisquito Creek in the late nineteenth century and established the Palo Alto Stock Farm. This land formed the basis of Stanford University, which was founded in 1891.

During the early twentieth century, population in the region expanded considerably with many marsh areas filled for farming, and San Francisquito Creek was rerouted to accommodate desired growth. Menlo Park and Palo Alto expanded, with the latter incorporating the City of Mayfield by the beginning of World War II. The general area also began to transition from rural to urbanized, with residential and commercial uses wide-spread west of Highway 101 since the 1920s. Today, the San Francisquito Creek floodplain is almost entirely developed, with many areas being redeveloped.

### Creek Evolution and Re-engineering

San Francisquito Creek was modified by early European settlers who established the large Ranchos in the 1830s. These early ranchers likely constructed irrigation ditches to transport water and ford crossings at creeks. In 1876, former Governor Leland Stanford acquired the 8,800 acres which later became the Stanford University campus.

In 1887, the Manzanita Water Company (later the Spring Valley Water Company) began construction of Searsville Dam. The dam was completed in October 1891. Due to fine suspended sediment and odor, the water was considered non-potable and was used for irrigation purposes. In 1919 Stanford University took over the lake and dam from the Spring Valley Water Company and raised the dam 3-1/2 feet. Starting in 1922 the lake was used as a local swimming hole. Today the reservoir is nearly filled with sediment which has created wetland habitat for waterfowl, bats, and other species.

The section of creek downstream of what is now Highway 101 was first channelized and re-routed in 1931 for planned development. The area previously occupied by the creek mouth and slough is now the Palo Alto Airport and golf course. When the creek was channelized between levees it was moved north to its current alignment, which effectively moved the boundary between San Mateo and Santa Clara counties along this reach.

The Newell Road Bridge, located between Woodland Avenue (East Palo Alto) and Edgewood Drive (Palo Alto), was built in 1911. In East Palo Alto, Newell Road connects to Woodland Avenue, which provides access to University Avenue and US 101. In the City of Palo Alto, Newell Road connects to two main thoroughfares, Channing Avenue and Embarcadero Road, which also provide access to US 101. This bridge has limited hydraulic capacity and will be replaced both for traffic safety and flow conveyance.

The Pope-Chaucer bridge, which connect Pope Street in Menlo Park to Chaucer Street in Palo Alto, was originally a wooden structure built in 1907, and soon thereafter was replaced by a concrete bridge in the same location. In 1948, the bridge deck was expanded to support a right turn lane for vehicles travelling



north on Chaucer Street to turn right onto Woodland Avenue after crossing the bridge. To support the expanded bridge deck, the existing culvert, which is a hydraulic constriction, was added under the existing bridge and expanded deck. The right turn lane was later abandoned, and in the 1980s oak trees were planted in the soil between the culvert and former road surface.

At least two efforts were initiated in the 1950s and 1960s, partially in response to the 1955 flood, to straighten and channelize the creek from Middlefield Road to San Francisco Bay. The plans were abandoned for several reasons, including the difficulty in acquiring needed land rights and community opposition.

### **Ownership**

The San Francisquito Creek Watershed creek is owned by many different entities that vary by creek reach. A summary of land ownership was developed as part of the SFCJPA Bank Stabilization Master Plan (Figure 2).



Figure 3 Creek Ownership Overview



### Recreation

The San Francisquito Creek watershed and floodplain supports a wide range of local and regional parks, trails, and open spaces. The Creek flows into Don Edwards National Wildlife Refuge and Baylands Nature Preserve, a 1,940-acre tract of marshland (the largest remaining marshland in the San Francisco Bay) with high-quality marsh habitat. The creek runs adjacent to the Palo Alto Municipal Golf Course and Palo Alto's Baylands Athletic Center. The Creek corridor also supports a portion of the regional Bay Trail and connects to Cooley Landing Park and the Ravenswood Open Space Preserve to the north in East Palo Alto and Palo Alto Baylands Nature Preserve to the south in Palo Alto. The San Francisquito Creek Trail is well traveled and is the location of many community events, including Moonlight Run, Great Race for Saving Water and Bay Day. Figure 3 shows parks and open space within the Watershed and along the shoreline.

Note that Jasper Ridge Biological Preserve is neither a park nor open space. It is mostly zoned residential and is an academic facility owned and operated by Stanford.



Figure 4 Parks and Open space in San Francisquito Creek Watershed

The Urban reach of the Creek between Highway 101 and Interstate 280 is features urban parks and trails such as Hopkins Creekside Park and El Palo Alto Park, transitioning to a wide range of larger parks and open space further west on Stanford University lands and in the surrounding foothills.



### Utilities

As San Francisquito Creek runs through the urban environment, multiple utility corridors run adjacent to or over the creek. The relocation, protection, or avoidance of these utilities have a significant impact on work in or around the creek.

The typical utilities are expected to cross San Francisquito Creek at major road crossings. In addition, there are major known utilities spanning over or adjacent to the creek. Significant utilities include:

- Pacific Gas & Electric substations and high-tension overhead electric lines and high-pressure gas transmission lines are within an easement adjacent to and across the channel downstream of Highway 101.
- Sanitary sewer, water service, and surface water drainage conduit occur beneath Woodland Avenue, while overhead electric lines occur adjacent to Woodland Avenue.
- Caltrain trestle and tracks cross over the creek, adjacent to the El Palo Alto Park, near Alma Avenue.

Along the Bay shoreline of Menlo Park and East Palo Alto, critical utilities, include:

- PG&E natural gas pipelines, electrical sub-stations, transmission and distribution lines,
- San Francisco Public Utilities Commission (SFPUC) drinking water supply aqueducts,
- Eastern Sanitary District wastewater conveyance systems
- Stormwater pump stations and tide gates (add locations)
- The CalTrans Highway 84 Western Dumbarton Bridge approach

Sea level rise and storm events may adversely impact these utilities.

The SFCJPA will continue to coordinate closely with PG&E, local and State districts and municipal departments in the planning and implementation of our projects to ensure these critical infrastructure resources are considered during project planning and safeguarded.

### Fish and Wildlife resources

San Francisquito Creek flows through a mix of protected open space, agricultural, commercial, light industrial, and residential settings before reaching the baylands habitat associated with South San Francisco Bay. At the bottom of the watershed, where the creek meets the San Francisco Bay, is salt marsh habitat. The salt marsh harvest mouse, Ridgway's Rail, and black rail, have all been observed in this vicinity. Moving upstream and west through the watershed, as water becomes less tidally influenced and salinity levels decrease, riparian corridors of perennial water, stream-side vegetation such as willows, box alders, and cattails, are present along many of the streams throughout the watershed.

These areas provide suitable habitat for the California red-legged frog, California tiger salamander, and western pond turtle, which have all been observed within the watershed. The National Marine Fisheries Services has designated San Francisquito Creek downstream of Searsville Dam as Critical Habitat for steelhead.



Additionally, streams within the Bear Creek, San Francisquito Creek and Los Trancos Creek watersheds provide suitable migration and spawning habitat for steelhead. Serpentine soil outcrops have been identified within the San Francisquito, Corte Madera, Bear, and West Union Creek sub- watersheds. This micro-habitat supports special status and common wildlife and plant species, including the Bay checkerspot butterfly, serpentine bunchgrass, and Crystal Springs lessingia.

### **Climate and Climate Change**

The Bay Area has a Mediterranean climate with mild wet winters and warm dry summers. Coastal ocean currents moderate the effects of seasonal changes in temperature. The Santa Cruz Mountains impose a moderate rain-shadow (or orographic) effect to their east in the San Francisquito Creek watershed. This orographic effect contributes to variability in average annual precipitation in the watershed, ranging from about 40 inches at the crest of the mountains to approximately 15 inches in Palo Alto.

In the past century, global mean sea level has increased by 7 to 8 inches with human influence the dominant cause of observed atmospheric and oceanic warming. Given current trends in greenhouse gas emissions and increasing global temperatures, sea level rise is expected to accelerate in the coming decades, with scientists projecting as much as a 66-inch increase in sea level along segments of California's coast by the year 2100. While over the next few decades, the most damaging events are likely to be dominated by large El Niño - driven storm events in combination with high tides and large waves, impacts will generally become more frequent and more severe in the latter half of this century (https://www.coastal.ca.gov/climate/slr/).

The California Coastal Commission states that sea level rise in California will affect almost every facet of our natural and built environments. Natural flooding, erosion, and storm event patterns are likely to be exacerbated by sea level rise, leading to significant social, environmental, and economic impacts. Guidance from the California Ocean Protection Council and the San Francisco Bay Conservation and Development Commission (BCDC) recommend that new projects along the San Francisco Bay shoreline incorporate three and ½ feet of sea level rise (BCDC 2020).

Sea level rise along the bay margin will have an impact on ground water aquifers as saline or brackish water intrudes inland along with rising sea levels. This salt-water intrusion may compromise wells presently used for drinking or irrigation water. Rising ground water tables at the bay margin may also adversely impact the built and landscaped environment where subsurface excavations or construction encounter groundwater.

Climate change will also impact the San Francisquito Creek watershed. As temperatures increase, this will raise the rate of evapotranspiration in watershed vegetation and soils. This will tend to decrease the amount of water retained in the soil and watershed vegetation, potentially leading to lower creek flows, and lower groundwater tables, loss of trees, vegetation and changes in the ecosystem that will reduce the creeks ability to absorb runoff and thus increase flows and flooding. Additionally, warmer and dryer conditions are conducive to greater fire risks, and to hotter, faster-burning fires,

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when they occur. Fires in the heavily vegetated areas of the higher elevations of the San Francisquito watershed could have significant negative impacts on habitat and both water quantity, and water quality in the watershed.

Changing heat and moisture regimes open new ecological niches for plants and animals not formerly associated with the watershed. New species may be benign, or they may disrupt ecosystems, such as with forest damaging diseases or insects. Species disruptions may also increase the risk of fire, as existing vegetation regimes succumb to disease.

### UPDATED CLIMATE CHANGE MODELING 2022

The SFCJPA collaborated on a study with Stanford University staff on hydraulic modeling of San Francisquito Creek (<u>https://agu.confex.com/agu/fm20/meetingapp.cgi/Paper/734076</u>). The study used the existing watershed level HEC-RAS and sediment transport models and modified them to three separate probabilistic predictions of flows under the following three transects:

- 1) upstream of the Middlefield Road Bridge,
- 2) between the Middlefield Road Bridge and the Pope-Chaucer Bridge, and
- 3) downstream of the Pope-Chaucer Bridge.

Thirty centimeters of sea level rise were included, and a 50% increase in precipitation was simulated by increases in river discharge. The study used the output from HEC-RAS at transects within the above three locations to evaluate outflow over modeled hydraulic structures (levees, floodwalls) to predict flooding. The probabilistic modeling was completed for four potential future climate conditions-present-day, increased discharge, increased sea level, increased discharge and sea level, and across each of the three creek conditions: Baseline, Infrastructure, and Infrastructure + Sedimentation.

Results indicate that the probability of a 1% (100-year) flood becomes approximately two and one half times (2.5x) more frequent. Very high flood events, a 500-year flood (0.4%) may occur almost three times more frequently in the future. The simulations also predict that in the future, there is an increased probability of breakout at the University Avenue Bridge. The sedimentation simulations indicate increased probability of sediment accumulation near Highway 101 that if not managed as planned, could cause flooding from San Francisquito Creek.

The SFCJPA has and will continue to consider foreseeable impacts and changing priorities due to climate change in project planning and implementation. The SFCJPA cannot transfer risks from one area to another so will evaluate each project to ensure that the design does not result in unintended consequences locally or regionally.



### Geology

San Francisquito Creek flows out of the Santa Cruz Mountains and onto a coalesced alluvial fan or apron near Junipero Serra Boulevard. The creek has deeply incised the alluvial fan sediments along much of its course, leaving steep banks that are often 25 feet high. A geological profile along San Francisquito Creek, downstream from Alameda de Las Pulgas Road/Junipero Serra Boulevard, shows a layer of coarse channel bed material (gravel, cobbles, and boulders) as far downstream as Middlefield Road. The coarse bed surface present was formed through a winnowing of finer sediment; the underlying subsurface material appears to be considerably finer.

The area is tectonically active, and this has affected the shape and form of the San Francisquito Watershed. Four major northwest-southeast trending faults occur within the Watershed that are associated with the San Andreas Fault System. The Pilarcitos Fault forms the drainage divide to the southwest, and a similar cluster of faults trend along West Union Creek. The Santa Cruz Mountains were formed by uplift along these faults and define the upper limit of the watershed. Just west of Interstate 280, the elongated portion of the watershed follows the San Andreas Fault System. T-shape oriented in a northwestern-southeasterly manner, closely following the fault system.

Geology also ultimately controls the type and composition of sediments and in the Watershed. In particular, the Franciscan Complex at Jasper Ridge and Searsville formed by metamorphosed marine sediments is highly erodible and characteristic in composition. Other bedrock in the upper watershed are the Whiskey Hill, Ladera Sandstone, and Santa Clara formations that are generally sandstones (SLAC 2006).

The October 1891 completion of Searsville Dam on Corte Madera Creek, and subsequent reduction of coarse sediment supply while peak flows were maintained, is thought to be a contributing factor to formation of the bed surface. The coarse sediments overlie a sandy deposit that continues in the streambed to downstream from Highway 101 to the Palo Alto Municipal Golf Course. A thick layer of bay sediments with lenses of alluvium extends at depth beneath the sand upstream to about where the San Francisquito Creek passes the Stanford University Campus, forming a shallow aquifer beneath the fan. These bay sediments are underlain at depth by older, more consolidated alluvium and bedrock.

### Soils

The soils along lower San Francisquito Creek are relatively young. These soils are composed of fine particles (e.g., silt, clay) that were transported as suspended sediment derived from upstream sources and deposited overbank during flood events. The texture and characteristics of these soils affect how quickly water can infiltrate the ground surface. As a result, the soil is important for determining the volume of storm runoff, its timing, and its peak rate of flow.

### Groundwater and Land Subsidence

Groundwater and surface water are hydraulically connected in the San Francisquito Creek Watershed (San Mateo County 2018). The USGS defined the unconsolidated sediments as the "San Francisquito Cone Alluvial Aquifer" in 1997. This aquifer is the most productive unit in the San Mateo Plain Groundwater Basin (San Mateo County 2018).



The San Francisquito Cone Alluvial Aquifer is used as a potable supply source by Palo Alto Park Mutual Water Company and O'Connor Tract Cooperative Water Company to supply portions of East Palo Alto Menlo Park. The aquifer is also an emergency supply source for City of Palo Alto, City of Menlo Park and Stanford University. There are also many private wells in the San Francisquito Cone alluvial aquifer that are primarily used for irrigation, including San Mateo County Parks, residents in Atherton, Saint Patrick's Seminary, Holbrook Palmer Park and Stanford University. Consumptive groundwater use from riparian vegetation along San Francisquito Creek from Junipero Serra Road to Highway 101 was estimated to be about 82 acre feet per year (San Mateo County 2018).



Figure 5. Location of San Francisquito Cone Alluvial Aquifer and Wells (San Mateo County 2018)

Groundwater pumping (not including five Stanford wells located near San Francisquito Creek) was estimated to be 2,300 acre feet per year (San Mateo County Groundwater Assessment 2018). Stanford's groundwater use from the five wells between 2010 and 2015 averaged 584 acre feet per year (Stanford Water Supply Assessment, 2017). Stanford uses groundwater wells to supplement surface water diversions from the San Francisquito Creek watershed for use as irrigation water supply. As mentioned above, the wells also serve as emergency potable water supply to the campus in the event of disruption in the supply of potable water from SFPUC (source: <a href="https://suwater.stanford.edu/water-supplies/groundwater">https://suwater.stanford.edu/water-supplies/groundwater</a>).





Figure 6. Location of Stanford Wells, Stanford Water Supply Assessment, 2017.

Groundwater use in the area is currently considered to be balanced, meaning that withdrawals approximately equal recharge (San Mateo County 2018). However, historical overdraft (defined as long-term pumping that exceeds recharge) from groundwater pumping in the San Francisquito Cone alluvial aquifer at 6,000 to 7,500 acre feet per year (AFY) resulted in historical localized land subsidence and salinity intrusion. San Mateo County Office of Sustainability funded a groundwater monitoring plan and two years of monitoring following the 2018 groundwater assessment. San Mateo County has renewed the contract to continue this work for the next several years.

Regional groundwater levels have been trending upward until the most recent drought. This is because surface water and groundwater in the San Francisquito Watershed are directly hydraulically connected, and groundwater pumping in the San Francisquito Cone Alluvial Aquifer in Santa Clara and San Mateo Counties cannot be considered independently (San Mateo County 2018).

### Regulatory Status of Creek and Watershed

The creek is listed by the State Water Board under the 303(d) list as impaired for Diazinon, sedimentation/siltation, and trash. Placement of a water body and its offending pollutant(s) on the 303(d) list, initiates the development of a Total maximum Daily Load (TMDL). TMDLs may establish



"daily load" limits of the pollutant, or in some cases require other regulatory measures, with the ultimate goal of reducing the amount of the pollutant entering the water body to meet water quality standards.

The San Francisco Bay Basin Plan (San Francisco Bay Regional Water Quality Control Board 2015) describes beneficial uses for the waters in San Francisco Bay. Beneficial uses represent the services and qualities of a water body (i.e., the reasons the water body is considered valuable). Beneficial uses of San Francisquito Creek are listed below:

- Cold Freshwater Habitat (COLD); Fish Migration (MGR)
- Preservation of Rare and Endangered Species (RARE)
- Fish Spawning (SPWN)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Water Contact Recreation (REC-1)
- Noncontact Water Recreation (REC-2)

Other federal, California and local regulatory authorities governing actions that the SFCJPA may take include regulations promulgated by US Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, California Office of Historic Preservation, Bay Conservation and Development Commission, California Department of Fish and Wildlife as well as local plans and ordinances from the relevant cities and counties. These requirements and others are described in environmental documentation for our projects as well as our Operations and Maintenance Manual for completed work.

The California Department of Water Resources has designated two groundwater Basins, one on each side of the creek, that are also directly hydraulically connected in the watershed. In San Mateo County, it is Groundwater Basin 2-009.03 Santa Clara Valley- San Mateo Plain, and on the Santa Clara County side of the Creek, it is Groundwater Basin 2-009.02 Santa Clara Valley- Santa Clara Sub-basin (Department of Water Resources Bulletin 118, Groundwater Basins, 2021). The Sustainable Groundwater Management Act has classified the Santa Clara side as very high priority and the San Mateo side as very low priority (DWR Basin Prioritization 2021). As noted above, this designation across political boundaries and may not make sense for management of San Francisquito Cone Alluvial Aquifer (San Mateo County 2018). In 2015 several local entities approved resolutions to sustainably manage groundwater in the San Francisquito Cone Alluvial aquifer, including the Cities of Menlo Park, Palo Alto, East Palo Alto, Santa Clara Valley Water District, Town of Portola Valley, and San Mateo County (Byler *et al* 2015).

### Surface Water and Water Rights

Tributaries that feed into San Francisquito Creek include Bear Creek, Los Trancos Creek, Alambique Creek, Dennis Martin Creek, Sausal Creek, and Corte Madera Creek (See Figure 1). San Francisquito


Creek itself begins at the confluence of Bear and Corte Madera creeks in the upper watershed and continues to San Francisco Bay.

There are four manmade lakes located within in the San Francisquito Creek watershed, three of which are on Stanford lands that are primarily used for water storage: Searsville Lake, Felt Lake, and Lake Lagunita. Lake Lagunita does not hold water and recharges groundwater. Boronda Lake is within the City of Palo Alto Foothills Nature Preserve and is used for recreation.

Stanford reservoirs diverted creek surface waters providing approximately 1,250 Acre Feet per Year (1.12 million gallons per day) to Stanford's lake water system (Stanford Water Supply Assessment, 2017). Lake Lagunita is not a water storage facility, as water recharges the aquifer in this area and is preserved for conservation purposes. In 2019, Stanford removed the diversion dam from San Francisquito Creek (https://news.stanford.edu/2019/02/27/stanford-removes-lagunita-diversion-dam/).

A fifth reservoir is located just outside the watershed, Bear Gulch Reservoir, but is fed by water from diverted from two dams on Bear Creek. This reservoir is the main storage for the Bear Gulch District of the California Water Service, holding up to 215 million gallons (about 660 acre feet) of water, serving the towns of Portola Valley, Woodside, and Atherton, and portions of the Cities of Menlo Park and Redwood City.

Based on water rights reported in the California Water Resources Control Board Water Rights Electronic Water Rights Management System (eWRIMS) Report Management System, the following is a summary of active diversions and water rights in the San Francisquito Creek Watershed:

Water right owner	Source	
LELAND STANFORD JR UNIVERSITY	San Francisquito Creek and Los Trancos Creek	
CALIF WATER SERVICE COMPANY	San Francisquito Creek and Bear Gulch Creek	
SKY L'ONDA MUTUAL WATER COMPANY	Bear Gulch Creek	
ANCILE LLC	El Corte de Madera Creek	

The largest water rights in the Watershed (Stanford University and California Water Service/Sky L'onda Mutual Water Company) are described below.

Stanford:

Stanford's 2017 Water Supply Assessment describes the following water rights:

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Stanford holds a combination of riparian and pre-1914 appropriative rights reported under four Statements of Water Diversion and Use (S004660, S004661, S015695, S015696) and one appropriative right licensed by the SWRCB (L001723). These water rights support Stanford's diversion operations from Corte Madera, Los Trancos Creek and San Francisquito Creek, streams that flow through Stanford lands, which supply Stanford's non-potable Lake Water system. These appropriative water rights date to 1886, 1870, and 1891, and the licensed right was issued in 1937. The rights provide water for recreation, irrigation, stock watering, and fire protection purposes, and are summarized as follows:

- License 1723 authorizes diversion of up to 900 AFY from Los Trancos Creek and/or the San Francisquito Creek pump station, from December 1 to May 1, to storage in Felt Reservoir, which has a storage capacity of 1,050 acre-feet.
- Statements S015695 and S015696 document pre-1914 appropriative water rights to divert from those same diversion facilities to storage in Felt Reservoir.
- Statement S004660 documents Stanford's pre-1914 appropriative right to impound, divert and store water in Searsville Reservoir (Searsville Reservoir storage capacity has been reduced over time by sedimentation, but this pre-1914 appropriative water right has been exercised downstream at the San Francisquito Creek pump station).
- Statement S004661 authorizes the diversion of water from San Francisquito Creek to Lagunita for recreational and habitat purposes.

Stanford impounds water seasonally (during periods of high flow) in two reservoirs above campus: Searsville Reservoir on Corte Madera Creek (just above its confluence with Bear Gulch Creek) and Felt Reservoir east of Los Trancos Creek (see Figure 1). Water is then drawn from these reservoirs as needed. Because of the way in which waters from multiple sources commingle during diversion and storage, total diversion and usage statistics are reported in aggregate monthly quantities to the SWRCB, on an annual basis. Together, the rights to diverted surface waters can yield over 1,250 AFY (1.12 mgd) to the lake water system. Stanford's most recent usage report dated March 2022 totaled 1,968.62 acre feet, primarily May through September, as submitted to the Water Board at:

## https://rms.waterboards.ca.gov/Print\_LIC2021.aspx?FORM\_ID=530843

Since about 2020, Stanford has also been reusing stormwater up to a 2-year storm event, this stormwater runoff is routed by a diversion structure to a basin, filtered, and pumped through the non-potable irrigation (lake water) system to Felt Lake Reservoir for future irrigation on Stanford property. The captured runoff is metered for tracking with the other sources that contribute to the lake water system (Source: <a href="https://suwater.stanford.edu/water-supplies/stormwater-capture">https://suwater.stanford.edu/water-supplies/stormwater-capture</a> ).

#### California Water Service - Bear Gulch/ Skylonda Mutual Water Company:

Bear Gulch Reservoir is a reservoir in the town of Woodside, California. It is the main storage for the Bear Gulch District of the California Water Service, holding up to 215 million US gallons of water, and serving 55,501 people. It is fed by water diverted by two dams on Bear Creek. Groundwater use in the



past two years has been reported as zero, with all potable supply coming from SFPUC. The most recent local surface water from San Francisquito Creek watershed was in 2018-2019, with 936-acre feet reporting being used (Source: <u>https://bawsca.org/members/profiles/cws\_bear\_gultch</u>

## **Flood History**

San Francisquito Creek has a history of recurring floods which have adversely impacted the safety and economic stability of the residents, businesses, and government property within the flood plain. Flooding within the watershed has been documented as far back as 1911, with significant flood events occurring in 1955, 1958, 1982, 1998, 2012, 2014, 2017 and 2022. San Francisquito Creek is "flashy", meaning stream flow levels can rise and fall quickly. The creek is characterized by a dry bed during summer and fall, and periodic high flows or even flooding, during winter rain events.

The maximum instantaneous peak flow recorded on San Francisquito Creek at the Stanford University US Geological Survey station occurred February 3, 1998, with a peak of 7,200 cfs. After record rainfalls, San Francisquito Creek overtopped its banks and inundated over 11,000 acres of land in Palo Alto, East Palo Alto, and Menlo Park, affecting approximately 1,700 residential and commercial structures.

The top five flows recorded at the USGS gage in Stanford's gold course are presented below:

	DATE	PEAK FLOW
		RATE (Cubic Feet per Second)
1.	FEBRUARY 3, 1998	7,200
2.	DECEMBER 31, 2022	6,340
3.	DECEMBER 22, 1955	5,560
4.	DECEMBER 23, 2012	5,400
5.	JANUARY 4, 1982	5,220

The SFCJPA recalibrated the hydraulic model after the 2012 storm and is recalibrating hydraulic model following the flood on December 31, 2022, that was followed by three atmospheric rivers in January 2023 that did not result in overbanking, but did result in significant bank erosion.





Figure 7 Preliminary FEMA Floodplain Designation and Approximate number of parcels to be addressed

Source: FEMA Preliminary Flood Insurance Rate Maps 2015. Panels 0311E; 001H, 0309E, 0314E

FEMA does not prepare maps of 70-year floods, but the hydraulic model used by the SFCJPA and our partners for the watershed indicate that the area is similar to a 100-year FEMA floodplain, but that depth of inundation are less than that for a 100-year flood.

## 3. Data Summary

The San Francisquito Creek Watershed has been studied for many years by many different entities for different purposes. The section describes the known data that has been collected to develop a scientifically sound an analytic framework for the San Francisquito Creek Watershed.



This data compilation is developed as an initial step in comprehensive watershed planning to establish baseline conditions, identify pollutant sources, and manage a changing watershed.

The goal of this data synthesis is to specify adaptive management measures in future versions of this plan that can effectively reduce both point and nonpoint sources of water quality impairments.

# Types of Data

Known data collected in the watershed is summarized below for

- flow,
- water quality and
- watershed condition.

*Flow:* The SFCJPA provides real-time information for creek flow and rainfall gages west of Highway 280 at: <u>http://floodwarning.sfcjpa.org/</u>



Figure 8. SFCJPA Creek Monitoring System

The City of Palo Alto has a camera and creek level monitors available at:

https://www.cityofpaloalto.org/Departments/Public-Works/Engineering-Services/Creek-Monitor-Cam





Figure 9 Example data from Palo Alto Creek Monitor

This data includes data collected by the USGS, SFCJPA and partners, research institutes, and non-governmental organizations.

The U.S. Geological Survey (USGS) Flow data has been collected since 1930 at a Stream gage located on Stanford University's Golf Course.





Leaflet | Powered by Esri | USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National ....

Figure 10 Location of USGS Stream Gage at Stanford Golf Course

The USGS stream gage data is available online at:

## https://waterdata.usgs.gov/monitoringlocation/11164500/#parameterCode=00065&period=P365D&compare=true

Streamflow gains and losses in the watershed were evaluated in 1997 and re-evaluated in 2017 as part of San Mateo County's Groundwater Assessment. The 2017 evaluation generally verified the earlier results and confirmed that water in the upper watershed has minimal recharge over bedrock, has variable gains and losses along the urban reach that may be masked in some areas by urban water management practices, and in the estuary reach<sup>3</sup> is affected by tides.

#### Water Quality

The USGS website above lists available water quality data, primarily from 2017 that are presented by type and dates in Figure 11.

<sup>&</sup>lt;sup>3</sup> The segment of the San Francisquito Creek that is tidally influenced, roughly from the Newell Road bridge downstream to where the creek meets the bay.



#### Summary of All Available Data

USGS Parameter Group Data Types		Start Date	End Date
Biological	Water-quality	2017-05-03	2017-05-03
Information Water-quality		2017-03-16	2017-05-03
Inorganics, Major, Metals	Water-quality	2017-03-16	2017-05-03
Inorganics, Major, Non-metals	Water-quality	2017-03-16	2017-05-03
Inorganics, Minor, Non-metals	s, Minor, Non-metals Water-quality		2017-05-03
Inorganics, Minor, metals	Water-quality	2017-03-23	2017-05-03
Nutrient	Water-quality	2017-03-16	2017-05-03
Organics, other	Water-quality	2017-03-16	2017-05-03
Organics, pesticide	Water-quality	2017-03-16	2017-05-03
Physical	Daily Values, Unit Values, Water-quality	1930-10-01	2022-08-26
Radiochemistry	Water-quality	2017-05-03	2017-05-03
Sediment	Water-quality	1958-01-10	2017-05-03
Stable Isotopes	Water-quality	2017-04-20	2017-04-20
n/a	Peak Measurements	1931-01-01	2021-01-28
n/a	Site Visits	1931-12-27	2022-06-14
n/a	USGS Annual Water Data Reports Site	2005-01-01	2021-01-01

Figure 11 USGS Data for San Francisquito Creek

Water Quality Monitoring was performed by SFCJPA partners at Grassroots Ecology. San Francisquito Creek has been monitored since 2004, with data from 2013-2022 available online at:

https://www.grassrootsecology.org/water-quality-monitoring



Volunteers and staff collected data on a quarterly basis at six stations along San Francisquito Creek for general water quality parameters using handheld devices following specified protocols.



# San Francisquito Creek Water Quality Monitoring

Figure 12 Water Quality Data Summary, August 2022

The SLAC Linear Accelerator Center collected data in San Francisquito Creek, which roughly forms the southern boundary of SLAC. A preliminary assessment of San Francisquito Creek was completed in 1995 and presents data collected in 1992 for 42 stream sediment samples and 9 surface water samples (from 40 sampling points) for various analytical parameters, including PCBs, pesticides, metals, total petroleum hydrocarbons, phosphates and nitrate (SLAC 1995). The purpose of this data collections was to evaluate potential impact of activities at SLAC on drainages that lead to the San Francisquito Creek Watershed. No detectable concentrations of PCBs were identified in the 9 surface water samples (SLAC 1995).

## **Overall Watershed Condition:**

California Rapid Assessment Method (CRAM) Assessment: Valley Water has partnered with SFEI since 2010 to evaluate the overall condition of watersheds in Valley Water's jurisdiction. This included a 2017 initial assessment of the Santa Clara side of the San Francisquito Creek Watershed, defined by Valley

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Water as the Lower Peninsula Watershed. The Lower Peninsula Watershed as defined by Valley Water encompasses a larger area and other natural watersheds, but specific data was collected to represent the Santa Clara County side of San Francisquito Creek.

This evaluation used the CRAM method, which is a cost-effective and scientifically defensible rapid assessment method for monitoring and assessing the ecological conditions of streams and wetlands throughout California. CRAM is designed evaluate conditions based on its landscape setting, hydrology, physical structure, and biological structure. Because the methodology is standardized, ecological condition scores can be compared at the local, regional, and statewide landscape scales.

The evaluation consisted of evaluating representative locations in the Santa Clara County side of the watershed, which represents about 22% of the entire San Francisquito Creek Watershed. The results determined that in the San Francisquito Creek watershed (within Santa Clara County), 21% of streams were in good condition. Most stream segments evaluated (71%) were classified as being in fair condition, and six percent were in poor condition. Important stressors of the San Francisquito Creek watershed were identified to be:

- location near a transportation corridor,
- urban land use
- engineered channel,
- industrial commercial land use,
- recreational use, and
- a lack of treatment for invasive plants

Valley Water's study recognized the importance of evaluating San Mateo County side of the Watershed as evidenced by the proposed sample draw. However, being in San Mateo County, Valley Water lacked the authority to implement outside their jurisdiction (Figure 13).



Figure 4. Map of the targeted CRAM stream condition sites in the Lower Peninsula watershed by PAI. The San Francisquito Creek stream reaches within San Mateo County (sites shown here in orange) were not assessed in 2016.

Figure 13. Target Area for Stream Condition Assessment



#### Geomorphic Stability:

The 2004 *San Francisquito Creek Watershed Analysis and Sediment Reduction Plan*, Final Report May 2004 (SFCJPA 2004) presents information on the watershed, and focuses on erosion, transport, and deposition of sediment in the San Francisquito Creek watershed based on natural and human-related activities that have modified hydrology, altered erosion rates, or trapped sediment. Historical information indicates that debris slides are important sediment sources in San Francisquito Creek Watershed, and that San Francisquito Creek is susceptible to erosion depending on many factors, including rock type, slope, hydromodification and of course mainly from large precipitation events. This report developed preliminary sediment budgets for sub-watersheds.

The 2000 Bank Stability Master Plan developed bank stability curves every 200 feet along the creek (SFCJPA 2004b). The results were presented on 18 panels that constitute the condition for geomorphic stability of San Francisquito Creek. The maps include bed sediment characteristics, information on the habitat available to organisms living on or within the bed of the creek and sediment facies. In addition, information presented on channel bed material can be used with hydraulic information to calculate the depth of scour likely to occur at a structure (SFCJPA 2000).

The 2000 Bank Stabilization Master Plan determined that bank instability is a widespread problem, with approximately 40% of the study reach with unstable banks. The majority of existing revetments are composed of sacked concrete, gabion baskets, sprayed concrete ("shot-crete"), and large placed boulders. Areas of dumped rubble generally were determined to be ineffective in preventing erosion. Steep bank angles and sparse surface protection (vegetative and structural)are closely correlated with bank instability in the most severely eroded sections of the study reach (SFCJPA 2000).

In 2017, regional curves for geomorphic stability were developed for a trio of creeks, including San Francisquito Creek (Laurel Collins and Leventhal, Roger, 2017). This study characterized the San Francisquito Creek watershed as, "a highly altered urbanized creek channel that has lost much of its floodplain and as such has higher instability and flooding potential as compared with a more natural channel. It has been altered for flood control purposes." The San Francisquito Creek evaluation included 32 data points at 21 different field sites.

The bank-full curve line represents an approximate one-and-a-half to a two-year storm event. The measurements in San Francisquito Creek Watershed are all located upstream of Searsville Dam and would only apply in this area. Bank-full would be different in different parts of a watershed, but in general may be used to assist in designing restoration that moves sediment and minimizes maintenance needs and as a calibration tool to a model.





Figure 14 Bankfull Cross-Section Area versus Drainage Area



Figure 15. Bankfull Width versus Drainage Area

The authors suggested that with current influences of land use impacts and a changing climatic regime, that it will be key to incorporate flood prone width into channel restoration design that uses hydraulic geometry concepts. They also recommended that existing stream gages continue to be maintained and



that additional data, as it is developed should be added to the local curves (Laurel Collins and Roger Leventhal, 2017).

## Analytic Framework

There is a wealth of data collected within the San Francisquito Creek and floodplain that provides a baseline to assess conditions within the watershed. Specifically, the following summary observations may be made:

- Water Quality- the creek and associated groundwater are used for potable and irrigation supply and are therefore generally considered acceptable quality but may locally exceed secondary Maximum Contaminant Levels for iron and manganese. Shallow groundwater is locally contaminated by past industrial and agricultural practices and current urban runoff and not used as a drinking water source. Surface water in the creek is listed by the State Water Board under the 303(d) list as impaired for Diazinon, sedimentation/siltation, and trash.
- 2. Water Quantity-groundwater and surface water are directly hydraulicly connected. Groundwater withdrawals could affect creek flows and fish spawning. Local entities have agreed to sustainably manage this resource and continued monitoring and continued data sharing is needed to assess optimum conditions.
- 3. **Watershed Condition** Watershed conditions are considered good in the upper watershed and fair or poor in urban and estuary reaches. In addition, due to planned changes in the watershed, continued monitoring of water quality and creek capacity are indicated.

## Suggested Additional Data Collection

The following are preliminary recommendations based SFCJPA's review of data to date:

- Review and incorporate 2022 storms into project planning.
- Increase trash removal activities in lower reaches, especially around Woodland Avenue where dumping occurs.
- Invasive species removal large scale invasive tree and plant removal would increase the value of the habitat in the creek and riparian corridor and increase creek capacity.
- Continued water quality monitoring (Grassroots Ecology is no longer monitoring San Francisquito Creek due to loss of grant funding.). Sediment and creek capacity will be key parameters to evaluate.
- Stream Condition Assessment using pre-selected sample draw locations by Valley Water California Rapid Assessment Method for the San Mateo County side of watershed

In addition, surface water level and groundwater pumping are monitored across different entities, may miss watershed scale effects. Of particular interest are how flow regimes may be impacted and what those impacts mean for anadromous fish habitat in the watershed. This may be an area of future coordination and collaboration as projects move forward.



## 4. Integrated Planning with Watershed Partners

The SFCJPA works across jurisdictional boundaries to coordinate and collaborate with a wide range of organizations to develop and implement projects that address a large part of the watershed system that could create or be affected by flood events. The SFCJPA organizational structure has been cited as a model for local governments in planning for climate change impacts in a case study by the Bay Conservation and Development Commission (BCDC), the San Francisco Bay National Estuarine Research Reserve (NERR) and the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. The SFCJPA Board is composed of elected officials from each of our member organizations.

Projects completed in the Watershed in 2022 include Children's Health Council Bank Stabilization Project using log crib walls. Projects in progress include Stanford's project at Searsville and the SFCJPA's Reach 2 and Reach 3 projects.

## **SFCJPA Members**

The five SFCJPA members have collaborated on past key documents that affect the watershed, including the following: Bank Stabilization Master Plan, draft plans for Total Maximum Daily Loads to achieve water quality standards, and Stormwater Resource Plans for Green Infrastructure. The SFCJPA also provides advice on proposed construction projects along the Creek.

In addition to our collaborative work, each of our member entities has related projects that will ultimately help achieve the SFCJPA overall goal and vision. The list below is not intended to be exhaustive but rather to illustrate some current projects that affect the watershed or projects that are part of our comprehensive plan.

#### Valley Water

Valley Water has specific funding for <u>San Francisquito Creek</u> as part of the Safe Clean Water and Natural Flood Protection Program, a parcel tax approved by voters in Santa Clara County in 2012. This parcel tax was made permanent in 2020. As the largest contributor of SFCJPA creek project funding, Valley Water not only provided approximately \$30,000,000 for the Reach 1 Downstream project construction, but also provided bid, award, and construction oversight of the work. Valley water has provided the HEC-RAS stream flow modeling for our project work. Valley Water's Stream Maintenance Program covers San Francisquito Creek on the Santa Clara County side of the creek. In January 2020, Valley Water completed the <u>San Francisquito Creek Emergency Action Plan</u> to provide guidance on how Valley Water makes decisions during storm and flood events. It is consistent with the San Francisquito Creek Multi-Agency Coordination Operational Plan for Severe Flood events.

Valley Water also has several projects that will reduce tidal flooding and address sea level rise like the Palo Alto <u>Flood Basin Tide Gates Project</u> which will replace the tide gates that protect homes and businesses in Palo Alto and the <u>San Francisco Bay Shoreline Project</u>. These projects are being



coordinated with SAFER Bay Project to ensure consistent design standards and to avoid unintended consequences.

#### San Mateo County/ Flood and Sea Level Rise Resiliency District (FSLRD) also known as OneShoreline.

The FSLRD, which began January 2020, is a key partner for SAFER Bay. In addition, OneShoreline has a mission to address flooding and sea level rise within San Mateo County. The SFCJPA worked collaboratively with OneShoreline on incorporating sea level rise into Bedwell Bayfront Park entrance improvements. We anticipate a continued partnership with OneShoreline as a funding partner for SFCJPA, as well as for shared mission area to mitigate flooding, creek maintenance activities and land easements. At some point in the future, OneShoreline may assume a leadership role with some aspects of the SAFER Bay project.

#### East Palo Alto

East Palo Alto was a key partner for the Reach 1 Downstream Project and continues with maintenance of the completed project along with Valley Water. East Palo Alto has taken the lead in implementation with a portion of the SAFER Bay Project known as Phase 1 and has committed \$5.5 million of capital funding for construction and long-term maintenance. A letter from FEMA dated September 1, 2022, identified \$4,649,240.00 in Phase 1 funding for design, and \$156,323.00 for management costs for the SAFER Bay Project.

#### Menlo Park

Menlo Park has provided strategic assistance to SFCJPA, including housing the SFCJPA for many years after formation, and continues to be a key stakeholder for our project work. The Reach 2 Upstream project will protect property and infrastructure in Menlo Park. Menlo Park is a key stakeholder for SAFER Bay, and was lead on a \$50M FEMA BRIC grant that was identified for funding July 2021.

#### Palo Alto

Palo Alto has been a key stakeholder for the Reach 1 Downstream Project, Reach 2 Upstream Project and SAFER Bay. Palo Alto has several projects that are in the watershed, including the Newell Bridge replacement project with Caltrans, and their collaboration with Valley Water on the Flood Basin Tide Gates and the Shoreline Project. The <u>San Francisco Bay Shoreline Project</u> is a regional climate adaptation project extending from Palo Alto to Alviso. The SFCJPA's SAFER project communicates with key project stakeholders to ensure coordination and consistency. The City of Palo Alto completed a <u>Sea</u> <u>Level Rise Vulnerability Assessment</u> in June 2022 with key vulnerabilities identified including increased number of flooded parcels, emergent groundwater, liquefaction, mobilization of contaminants and compromised infrastructure, including utilities and roads.

#### SFCJPA Partners

Our partners have included the US Army Corps of Engineers, Don Edwards National Wildlife Refuge, California Department of Water Resources, San Francisco Estuary Partnership, San Francisco Bay Restoration Authority, Stanford University, PG&E, Facebook, East Palo Alto Sanitary District, CalTrans, US

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Geological Survey (USGS), South Bay Saltponds Restoration Authority (SBSPRA), San Francisco Estuary Institute (SFEI), Association of Bay Area Governments (ABAG), the San Francisco Regional Water Quality Control Board, Woodland Park Apartments, Sand Hill Property management, West-of-Bayshore Community Association, and many other consultants, non-profit entities and regulatory agencies.

The work of the SFCJPA relies on collaboration and coordination. We acknowledge our role in the success of others, and their roles in our success. Not all past or present partners are listed among the illustrative examples below.

#### U S Army Corps of Engineers

The SFCJPA has a long-standing partnership with USACE. This includes collaboration on the initial hydraulic model for San Francisquito Creek (Noble 2009) and reviewing modifications to that model. USACE has been part of a CAP 205 Study in 2003 and a GI Study 2004-2020. We are now working with USACE on a new CAP 205 partnership for key project element(s) that may result in a favorable cost benefit ratio to alleviate floods. We recognize that the ACOE CAP 205 has a single mission for flood protection and that is why we are examining project elements, such as channel widening in Reach 2 that best fit that definition.

#### California Department of Water Resources (DWR)

The DWR has been a key funding partner for SFCJPA projects, particularly through the Integrated Water Resources Planning Program and Local Levee Repair programs. DWR grant funding totals more than of \$17,000,000, with more than \$14,000,000 that enabled construction of the Reach 1 Downstream project, SAFER Bay Feasibility Studies and SAFER Bay Phase 1 design permitting. For the Reach 2 Upstream project, DWR has awarded almost \$3 million in funding in June 2020 from Integrated Regional Water Management Proposition 1, Round 1 funding that is being managed through the San Francisco Estuary Partnership.

#### California Office of Emergency Services/FEMA

The Cal OES/FEMA is a funding partner for both the Reach 2 Upstream project and the SAFER Bay Phase 1 in East Palo Alto and Menlo Park.

#### Don Edwards National Wildlife Refuge-

The Reach 1 project required coordination with Don Edwards National Wildlife Refuge, and the SFCJPA is continuing to coordinate with the Refuge on restoration elements in the Estuary Reach as well as SAFER Bay.

#### Stanford University

Stanford University is the largest landowner in the watershed and an important watershed partner with the SFCJPA. We have worked closely with Stanford and used output from their sediment transport model for the Reach 2 Upstream project simulations. Our 2009 feasibility evaluation of potential upstream offline detention sites are all on Stanford land and Stanford has agreed to allow SFCJPA to



evaluate this option. The SFCJPA has determined that upstream detention is technically feasible and is currently evaluating costs and potential benefits of implementation.

Stanford is moving forward with the Searsville Watershed Restoration Project, which is Stanford's preferred alternative to improve fish passage, manage accumulated and future sediment and avoid an increase in upstream or downstream flood threats in the San Francisquito Creek watershed. The Notice of Intent and Notice of Preparation of environmental documentation were published February 8, 2023, with environmental reports expected in 2024 and construction beginning in 2025.

This project would create an opening at the base of Searsville Dam that would allow the creek to flow through the dam and provide upstream fish passage conditions. The proposed opening includes the installation of a tunnel at the base of the dam, with a gate on the upstream face of the dam. During the flushing period, the tunnel would be opened at the onset of pre-determined weather conditions expected to successfully initiate flushing of the accumulated sediment. After the initial flushing period when the accumulated sediments have been flushed out to the Bay, the tunnel would be left open in a fixed position to provide the optimized peak flow attenuation. The Searsville Watershed Restoration Project also includes modifications to the San Francisquito Creek pump station to relocate the Searsville point of diversion, an expansion of Felt Reservoir to replace the Searsville storage function to this off stream reservoir.

San Francisquito Creek is considered to be an aggrading stream with sediment deposition in downstream reaches (SFEI 2009 and Point Blue Conservation Science, 2020). This project would restore hydrologic and sediment transport processes that have been held back by Searsville Dam. The project must seek a balance of sedimentation traps, fish passage improvement, and high flow attenuation, while avoiding adverse impacts to the creek banks and existing channel capacities. The project will require sediment removal for accumulated sediments, as well as afterwards at intervals that will be determined by storm intensity and sediment removal triggers. For example, sediment removal has occurred in the downstream of Highway 101 about every 20 years because this area is very flat and influenced by tides. Flow velocities naturally decrease in this area, allowing sediment to settle out of the water and accumulate. The frequency of sediment removal will need to increase with the completion of the Searsville Project. In addition, there will be short term impacts during construction and during the flushing period, including temporary adverse effects on steelhead populations downstream of Searsville Dam.

#### South Bay Salt Ponds Restoration Authority (SBSPRA)

The SBSPRA has been a partner for the past six years on our SAFER Bay Project. We are working with the SBSPRA Project Management Team on restoration scenarios for former salt ponds R1 and R2. This includes design options that are currently best suited for this area based on SBSPRA adaptive management plan.



#### SFEI

The SFCJPA has partnered with SFEI since 2009 to develop <u>historical ecology</u> of the watershed and recommendations to improve flood control as part of <u>Flood Control 2.0.</u> In 2016, SFEI assessed the condition of the <u>Santa Clara side of the watershed</u> using the widely accepted California Rapid Assessment Methodology.

We continue to explore partnerships with SFEI and others for SAFER Bay and rising groundwater.

#### NGO partners

The SFCJPA formed relationships with several local non-profits, among them, the Watershed Council, Grassroots Ecology, Canopy, Nuestra Casa, Climate Resilient Communities, Acterra, and The Nature Conservancy.

The Watershed Council facilitated the development of the first collaboratively created watershed vision in 2005.

Grassroot Ecology is a restoration and educational partner with regular events that benefit San Francisquito Creek, including monthly water quality citizen science, invasive plant removal, coordination of community creek clean-up events, with many restoration projects in our watershed. Their native plant nursery has supplied phytophthora-free plants for our Reach 1 Downstream project and is located within the watershed in Palo Alto's Foothill Park.

The Nature Conservancy is a partner with the SFCJPA for nature-based flood protection and assessing the economic value of wetlands, which completed evaluations in December 2022.

Nuestra Casa and Climate Resilient Communities are partnerships developed in 2019 for public outreach for the SAFER Bay Phase 1 Project to specifically engage economically disadvantaged members of our communities.

#### Stormwater Resource and Green Infrastructure Plans and One Water Plans

The City/County Association of Governments of San Mateo County developed a <u>Stormwater</u> <u>Resource Plan in February 2017</u> that used a watershed approach to identify and prioritize projects for implementation.

In 2019, the Santa Clara Valley Urban Runoff Pollution Prevention Program and Valley Water developed a <u>SWRP</u> for the Santa Clara County side of San Francisquito Creek.

The SFCJPA reviewed and provided input to each of these plans.

Each of our member cities is or has developed Green Infrastructure Plans that are consistent with the Stormwater Resources Plans.

Both Valley Water and the City of Palo Alto are developing One Water Plans. These plans have both a stewardship and sustainability component. For example, the City of Palo Alto lists as a key action in



their draft *2021 Sustainability and Climate Action Plan* by 2030 to achieve a 10% increase in acres of watershed treated within the City compared to the 2020 baseline, utilizing stormwater management to protect the San Francisco Bay and increasing beneficial use of captured stormwater (City of Palo Alto, https://www.cityofpaloalto.org/City-Hall/Sustainability/SCAP).

The SFCJPA believes that green infrastructure has an important role in managing stormwater runoff on a local level and encourages implementation where possible.

# 4. Comprehensive Flood Protection and Ecosystem Restoration Program

This section discuses SFCJPA projects and how they work together to form a suite of interrelated projects each with independent benefits, but together form a cohesive program. The following projects are components of the SFCJPA's overall plan to provide 100-year flood protection and improve habitat and ecosystems.

## Reach 1 - San Francisco Bay to Highway 101: Downstream Project

This completed Reach 1 "Downstream" project was the necessary first step in our plan. The project included widening the creek channel, constructing new setback levees and flood walls, and creating inchannel marsh plain. In total, this project created more than 22 acres of new and improved marsh plain and added new trails on top of the levees that connect to the San Francisco Bay Trail and West Bayshore Road.

This project specifically incorporated consideration of three feet-of sea level rise. When considering the safety factor of FEMA freeboard, the project as built protects against 100-year creek flows- up to 10 feet of sea level rise compared to today's daily high tide. (Completed June 2019).

The SFCJPA will work with FEMA to determine if the completion of Reach 1 project will allow some properties, particularly those in East Palo Alto, to have lower premiums for flood insurance.

## Reach 2 – Highway 101 to Pope Chaucer Bridge

This project is designed to provide protection to people and property from a flood event similar to the 1998 event, which is considered a 70-year flood, while maintaining or improving the natural character of the banks and channel and improving in-channel habitat. The 70-year flood is the largest recorded flood since the US Geological Survey began measurements in the 1930's. The work includes widening the channel in multiple locations (see Figure 3), and repairing or replacing existing, aging top-of-bank structures which protect communities on either side of the creek in Palo Alto and East Palo Alto.



The City of Palo Alto has a parallel project to replace the Newell Road Bridge. Replacement of the Newell Road Bridge is part of the SFCJPA comprehensive plan but is being led by Caltrans and the City of Palo Alto. The bridge is a hydraulic constriction but is also functionally obsolete and therefore eligible for Caltrans funding to replace it for traffic safety. The new bridge is designed to Caltrans standards for safety and the SFCJPA design flow. Construction of the new bridge will be covered under the SFCJPA's regulatory permits for creek work.

The series of rainstorms on December 31 that resulted in flooding and three atmospheric rivers in January 2023 are being used to validate and potentially re-calibrate the Reach 2 project approach.



Figure 16. Location of Urban Reach 2 Project Elements

The area around these project elements is fully developed, with Woodland Avenue on the Menlo Park side and residential properties lining the opposite creek bank in Palo Alto. Most of the creek widening areas are constrained by engineering considerations, including shear stress and velocity requirements, and require updated hard armoring, while incorporating improvements to habitat. At one location in East Palo Alto, a large concrete structure will be removed, the creek bank will be regraded to



a more natural configuration and planted with native riparian vegetation. The SFCJPA has initiated prepermit coordination with State and Federal Fish and Wildlife agencies to ensure the project is designed to improve habitat and consider minimum flow depth for fish migration.

Downstream of Newell Road bridge, top-of-bank structures are being evaluated. These aging structures will either need to be repaired or replaced to continue providing protection to the communities of Palo Alto and East Palo Alto. The SFCJPA began work on a Supplemental Environmental Impact Report (SEIR) for this work in January 2023, with an approximate 9-month timeline for the release of the draft SEIR.

The Pope Chaucer Bridge, which is a concrete culvert, is planned to be replaced with a new bridge and the natural creek bed will be restored. The new bridge will be as open as possible, taking into consideration constraints on the bridge design including existing homes in the area, maintaining street elevations, and ensuring safe pedestrian access. The intersections on both the Palo Alto and Menlo Park sides will be matched to the existing elevation (Construction anticipated 2023-2024). The Newell Bridge replacement must be completed before the Pope Chaucer bridge work can begin.

Following project completion, the SFCJPA will explore with FEMA if creek widening and bridge replacements in Reach 2 can allow some properties to be removed from flood insurance requirements and/or pay lower premiums.

## Reach 3 – Upstream Detention for 100-Year Flood Protection

Meeting the Federal Emergency Management Agency (FEMA) requirements for 100-year flood protection, including FEMA freeboard, is envisioned as an additive project that was evaluated at a programmatic level in our September 2019 Environmental Impact Report. Freeboard is a factor of safety usually expressed in feet above a flood level for purposes of floodplain management and is used by FEMA to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed. Freeboard is not required by FEMA's National Flood Insurance Program standards, but communities are encouraged to adopt at least a one-foot freeboard to account for the one-foot rise built into the concept of designating a floodway and the encroachment requirements where floodways have not been designated. Freeboard results in significantly lower flood insurance rates due to lower flood risk.

Just as our Reach 2 project from Highway 101 to Pope-Chaucer Bridge does not provide 100-year protection with FEMA freeboard by itself, the topography of the upper watershed does not allow for upstream detention at the scale needed to provide 100-year protection with FEMA freeboard on its own. Only a combination of the completed Reach 1 and Reach 2 water conveyance and capacity improvements, supplemented by upstream detention and/or other similar flow reduction or floodproofing features can achieve 100-year protection with FEMA freeboard for San Francisquito Creek.

February 2023



One ongoing effort that may contribute to reducing flows downstream is Stanford University's planned modifications to Searsville Dam (which Stanford University is leading) that will allow for free flow conditions during normal weather but provide some check-dam detention during large flow events. Another alternative could be constructing off-stream detention capacity that would provide additional, similar benefits as the Searsville Dam project.

The SFCJPA Board has dedicated funding to evaluate detention facility options. The SFCJPA is working closely with Stanford for access to and information about the area to adequately evaluate potential options on Stanford lands. Data collection for a project level evaluation of potential alternatives that may achieve 100-year flood protection with FEMA freeboard has been initiated. The SFCJPA's consultants will be providing a cost-benefit analysis in 2023. The SFCJPA is continuing to look for grant funding for the Reach 3 project.

# Tidal flood protection and marsh restoration- Strategy to Advance Flood Protection and Ecosystem Restoration along San Francisco Bay (SAFER Bay Project)

The <u>S</u>trategy to <u>A</u>dvance <u>F</u>lood protection, <u>E</u>cosystem restoration and <u>R</u>ecreation Project (SAFER Bay) addresses tidal flood protection and projected sea level rise by protecting critical infrastructure using natural and manmade flood protection features along San Francisco Bay within SFCJPA jurisdiction. Public Draft Feasibility reports were issued in 2016 for East Palo Alto and Menlo Park, and in 2019 for Palo Alto. This project is intended to close the protection gap in the tidally influenced areas outside of our completed Reach 1 project from San Francisco Bay to Highway 101 described above. The project concept and early activity goes back to at least 2013; however, with the creation of the San Mateo Flood and Sea Level Rise Resiliency District, this project could transition to OneShoreline at the mutual agreement of both organizations' boards. .

The SFCJPA has moved forward with a portion of this project in East Palo Alto and Menlo Park. We are coordinating with our member agencies, permitting agencies, and stakeholders on planning and design. The SFCJPA began CEQA with the release of a Notice of Preparation for environmental documentation on April 25, 2022. A <u>Scoping Report</u> summarizing the NOP process, and comments received was issued October 2022 and <u>Community Outreach Plan</u> and other documents are available on the SFCJPA's website. A draft Programmatic EIR, and project level EIR for portions of the project in East Palo Alto, is anticipated to be released 2024. A Project Description prior to the release of the Draft EIR is planned for August 2023.

The SFCJPA Board adopted the <u>Bay Adapt Platform</u> in December 2021 for the SAFER Bay project. This regional strategy encompasses a broad range of planning, policy, community, and project decisions to protect people, infrastructure, and natural systems, balancing local economic growth and jobs, services, housing, and recreational opportunities and is focused on local decision-making. In addition,



this platform networks regionally to coordinate actions to avoid unintended consequences around the Bay.

The SFCJPA convened a SAFER Bay community advisory committee December 2022 through our partnerships with Climate Resilient Communities and Nuestra Casa. The SFCJPA will continue to communicate and coordinate with multiple stakeholders and other regional adaptation projects via meetings and working groups.

Our completed Reach 1 Downstream project provides protection against flooding from San Francisquito Creek The SFCJPA's ultimate goal is to remove properties from the FEMA floodplain, and the associated requirement for flood insurance, to the extent feasible. SAFER Bay will build new levees and other flood control structures along the Bay in East Palo Alto and Menlo Park. When these planned improvements are built, the area will be protected from both creek and tidal flood risks and may then be evaluated for removal from the FEMA flood maps.

FEMA accredits levee systems with an emphasis on interior drainage and long term operations and maintenance. The SFCJPA is evaluating if a letter of for map revision to FEMA based on the completed Reach 1 project will be worthwhile to some residents and businesses. The SFCJPA will submit Conditional Letter of Map Revision for the SAFER Bay project to enable FEMA's review of the design.

The SAFER Bay project incorporates similar protection criteria as the completed Reach 1 Downstream project from San Francisco Bay to Highway 101.

## 5. Stewardship

This section addresses long term actions, including monitoring and maintenance of implemented work. The SFCJPA facilitates an annual maintenance walk with member agencies, Stanford and Grassroots Ecology. The walk identifies key maintenance actions required prior to the rainy season and assigns responsibilities for action to each member entity. The annual maintenance walk also identifies areas for annual creek cleanup by community volunteers.

The SFCJPA's projects provide for watershed stewardship, for both short and long term. In the short term, up to 10 years after project completion, monitoring and assessment is performed for the project's components and overall health of the watershed in the project area as part of the Mitigation and Monitoring Plan. In the long term, the project's Operation and Maintenance manual specifies annual assessments of project performance and five-year plans to evaluate the project's effect on the watershed. The Operation and Maintenance manual may form the basis for long term stewardship in the Watershed.

The SFCJPA has or will delegate maintenance actions to member agencies where a project is located. For example, Valley Water and the City of East Palo Alto are the leads for long term operations and maintenance for our Reach 1 project between S.F. Bay and Highway 101.



The two major items that the SFCJPA has heard consistently over the years that would be most beneficial for the watershed and floodplain are:

- increased removal of trash and
- removal of invasive species.

Large and heavy trash items (such as grocery carts, couches etc.) are removed by our member entities. Small trash items are removed as part of volunteer creek cleanup actions, typically twice a year. More areas of the creek would benefit from routine trash removals. In addition, enforcement, educational outreach may be useful tools to deter littering and illegal dumping activities.

Invasive species have been removed as part of SFCJPA projects, including Arundo removal that required several years of diligence to eradicate in one small area of the creek. Other areas of emergence have been noted in 2022-23. Invasive trees, particularly species of acacia, tree of heaven (Ailanthus altissima) and eucalyptus are prevalent in the creek bed, slopes and top of bank along the riparian corridor. No large scale removal action has occurred but, would benefit creek condition and capacity, particularly in the Urban Reach. Herbaceous non-native species, include cape ivy (Delairea odorata), yellow star thistle (Centaurea solstitialis), pepper grass (Cardaria draba) caster bean (Ricinus communis) and stinkwort (Dittrichia graveolens) are also common and small scale removal efforts by volunteers are welcome, but more aggressive action would be ideal for watershed and floodplain condition.

Removing trash and invasive species has an educational component to prevent, creating coordinated educational activities that may be useful as a watershed management tool.

## 6. Stakeholder Engagement

Ensuring the SFCJPA has the community's trust and confidence is essential to maintaining the SFCJPA's ability to execute projects. The SFCJPA's primary responsibility is to implement flood risk mitigation projects. These must also integrate as many co-benefits as possible – such as ecosystem restoration and recreation opportunities - into project design and construction.

The goals of community and stakeholder engagement are to:

- Promote awareness of the SFCJPA, its purpose, roles, responsibilities and priorities, and its multi-benefit creek or bay shoreline flood mitigation projects by informing community members and stakeholders.
- Engage community members and stakeholders for the purposes of understanding community and stakeholder priorities and to refine and improve project design and implementation based on community and stakeholder input.
- Support community members and stakeholder involvement in and contributions to the SFCJPA's projects' success through an effective public engagement processes.



(Center for Economic and Community Development, Engagement Toolbox, at <a href="https://aese.psu.edu/research/centers/cecd/engagement-toolbox/">https://aese.psu.edu/research/centers/cecd/engagement-toolbox/</a>).

## **Tools and Approaches**

Electronic communications will be used to support community and stakeholder engagement. There are various tools and options for the purpose, some are more suitable to the SFCJPA than others. The single most useful tool that the SFCJPA has identified is outreach in affected neighborhoods by meeting people where they are at a time convenient to them.

*Website* - Our website at <u>www.sfcjpa.org</u> conveys important information on projects, events and activities of the SFCJPA and its members or regional partners. The website hosts organizational documents, board meeting records, key project documents and schedule of meetings and events. The website also features links to our watershed data including stream and tide monitoring stations, and Palo Alto's real-time stream level monitor. This watershed data is an important community asset and is used by Emergency Operations personnel as part of winter flood response.

*Newsletters* – The SFCJPA implemented a quarterly electronic newsletter in 2020, with over 500 subscribers as of 2023. The newsletter provides information about SFCJPA projects, creek or shoreline related issues, upcoming events, and meetings. Special announcements, such as those for community project updates, have also been sent out via email to specific distribution lists and by U.S. Post to ensure community members and stakeholders are aware of critical information.

*Social Media* – Various social media tools can be useful for reaching community members and stakeholders. However, maintaining social media accounts requires regular updates and dedicated staff with time for one-on-one engagement. With our small staff, and other mechanisms for outreach, our presence on these social media platforms is currently a low priority. The SFCJPA may choose to selectively use NextDoor through its member agencies' accounts, as it can be an effective platform for reaching local residents about specific events or issues.

*Print and Traditional Media* – The SFCJPA will maintain connections with local media outlets and keep them informed through media alerts when appropriate. The SFCJPA responds as appropriate to media inquiries.

*SFCJPA Meetings & events* - Regular in-person meetings are an exceptional way to engage community members and stakeholders. However, for as long as the COVID-19 pandemic is a consideration, any in-person meetings will be planned with appropriate caution. In -person meetings are utilized for project updates, tours for interested stakeholders, various working groups and committees, and other special events, alone or in combination with web-based meetings.

*SFCJPA Comprehensive Plan* -This document is considered a key tool to convey our vision, goals and objectives.



SFCJPA presentations to City Councils, Boards of Supervisors or their various committees and Commissions - SFCJPA Board members, Executive Director, and staff may make formal or informal presentations to the elected bodies of its member agencies, or their appointed commissions, as part of project approvals, or to provide less formal project or organizational updates.

*Informal in-person, "office hours", or other local meetings* – SFCJPA Board members, Executive Director and staff may set up informal opportunities for community members to visit and discuss creek or bay margin projects in an unscripted and informal setting. These settings may only reach a few community members at a time, but provide a relaxed setting, convenient to community members.

*Board meetings* – In addition to being the primary vehicle by which the SFCJPA Board conducts business, regular board meetings provide an opportunity to hear from community members and to share information about SFCJPA operations and projects with stakeholders. All Board meetings are recorded and posted on the SFCJPA's website and YouTube channel.

Study sessions – These non-action item board meetings are an opportunity to explore topics of relevance to the SFCJPA. Study sessions often feature both in-house and outside experts presenting information. Study sessions provide community members and stakeholders the opportunity to hear the same information as the board, and to ask questions of the presenters. Study sessions conducted in person are typically hosted in a seminar format, with presentations, question and answer sessions and perhaps break-out groups for discussion and reporting back to all attendees.

*Webinars* – Webinars or video and audio presentations, with a Q&A component, are recorded and archived on the SFCJPA's website for future reference. Brief webinars, focusing on one topic, are coordinated, promoted via newsletters, email distributions or social media posts, with moderate staff time and effort. Staff may choose to conduct the presentations themselves or find experts to make presentations. The SFCJPA has found webinars to be an effective communication tool. In the future, webinars will continue to be used to inform and engage community members on a variety of topics.

*Project Update Community meetings* – Meetings and presentations specific to project updates are an important mechanism for informing community members and stakeholders who have a direct interest in the activities associated with a project, or phase of a project. In situations where project neighbors may be negatively impacted by project activities, informing community members of what to expect, what actions the SFCJPA and its contractors are taking to mitigate or minimize negative impacts, and who to contact with questions or concerns, can go a long way in alleviating community member's concerns or mistrust over project activities. One possible element of Project Update Community meetings may include project walk-arounds and tours of project elements, providing community members and stakeholders an opportunity to see the project in context.

*One-on-One calls or meetings* – Personal outreach to community members and stakeholders may be time-intensive but is an essential tool for building understanding between SFCJPA staff and community members and stakeholders.



*Tours* – As part of project updates, or as stand-alone activities, tours for community members and stakeholders provide an opportunity for staff to explain our projects in the context of the natural and human ecology of the San Francisquito Creek and the Bay margin.

## Other meetings

CEO & City Manager's Meetings – These regular meetings, held approximately every two months, enable the SFCJPA to brief member agency staff leadership on the status of the SFCJPA's work.

San Francisquito Creek Multi-Agency Coordination for Emergency Planning/Public Safety (MAC) – A MAC group and associated operations plan was formed in 2015 to facilitate a common flood and severe weather response for San Francisquito Creek that historically has impacted each member. The SFCJPA supports the MAC, which was composed of the following stakeholders in 2019; but other members may be added as indicated:

- City of East Palo Alto
- City of Menlo Park
- City of Palo Alto
- County of San Mateo
- County of Santa Clara

- Menlo Park Fire Protection District
- Valley Water
- SFCJPA
- Stanford University
- CalFire

The MAC Operations Plan is developed and maintained by the Palo Alto Office of Emergency Services (OES), as the chair of the MAC group. The plan describes coordination between member agency emergency operations staff and typically includes an annual briefing and table-top exercise to test the concepts and mobilization activities, as well as an After-Action Review of the Plan with stakeholders.

Engaging volunteers and building educational partnerships – The SFCJPA has a long history of supporting volunteer activities, including educational, community and other outreach activities. We have supported educational research projects related to the Creek, promoted creek advocacy, and support many community events such as Bay Day, Earth Day, and Coastal Cleanup.

Volunteer opportunities have included:

- Tabling events and coordinating or presenting webinars
- Providing content for newsletters, blogs, and photographs or featuring the Creek or Bay margin on the SFCJPA website and/or in newsletters
- Promoting and coordinating community tours of various aspects of the creek and bay margin

The SFCJPA has supported high school and college internships. Interns are an option when funding can be secured to support paid, short-term, focused engagements. The SFCJPA has supported educational partnerships with local schools, colleges and universities.



In the future, we may expand our presence in the community through additional coordination of volunteer support, as the Creek provides a rich opportunity for local community members, learners, and educators.

# 7. Advocacy

As a government agency, there are limitations on advocacy. The agency may advocate for its interests before local, State, and federal legislatures, but is limited in its scope to advocate to community members and stakeholders. Education takes the place of advocacy in all communications to community members and stakeholders. There are also targeted educational opportunities including community events described above as part of SFCJPA outreach activities. In addition, the SFCJPA routinely coordinates with staff of local, State, and federal elected representatives to brief them on SFCJPA projects, progress, and issues. Elected representatives can play a key role in the success of SFCJPA projects, so ensuring their staff members are well-informed is important.

*Education* – All elements of the community and stakeholder engagement can be described as education. Regarding building support for the long-term success of the SFCJPA, certain ideas or messages are important to instill, such as the importance of stream-side property owner stream stewardship or elevating the importance of long-term funding for urban stream and bay margin flood mitigation and resilience projects.

To convey these messages, and any other timely priorities, SFCJPA Board and Executive Director may engage local elected representatives, regularly brief member City Councils and our County Supervisors and inform local candidates about SFCJPA projects.

*Advocacy* – The Executive Director and SFCJPA Board may engage in advocacy before local, State, and federal legislative bodies on issues of importance to the SFCJPA.

Advocacy may take the form of support letters, participating in advocacy coalitions, meeting with individual policymakers to make the SFCJPA's case, or providing written or verbal testimony to committees or other bodies of elected or appointed officials.

In the future, the Board, and staff of the SFCJPA might choose to identify a specific set of policy issues and positions to facilitate advocacy engagement.

Access to funding and funding sources will be a relevant issue for the life of the SFCJPA. Advocating for funding sources such as bond measures that provide flood risk mitigation, environmental restoration and stewardship, are issues the SFCJPA should strongly support and be engaged in.



## 8. Funding

The SFCJPA has two funded components: operations and projects. Operations are funded through a nnual contributions from its five constituent members. Projects have been funded through a combination of funding from Valley Water's Safe Clean Water and Natural Flood Protection Program assessment revenues, additional contributions from member agencies, grant funding from the Department of Water Resources, State Water Resources Control Board, the Army Corps of Engineers, and other sources. The SFCJPA developed-a funding roadmap for the Reach 2 Upstream project. This roadmap will consider a broad range of funding options, including near and long-term funding strategies, which will include some or all the options described below.

Although not a funding mechanism, the <u>Protecting the Bay Working Group</u> is working to quantify flood protection benefits of wetlands, and has included the SFCJPA's SAFER Bay project for an assessment of the flood risk reduction benefits of salt marshes, and their subsequent development of climate finance mechanisms. The goal of this group is to lower insurance premiums for flood prone areas by incorporating the flood protection value of natural infrastructure, such as wetlands and marshes. This working group consists of local stakeholders (San Mateo County Supervisor Dave Pine, Flood and Sea Level Rise Resiliency District, San Francisco Estuary Institute) and others focused on flood risk mitigation and natural infrastructure statewide (California Department of Insurance, California State Coastal Conservancy) and globally (TNC, Swiss RE).

*Operations funding* – The SFCJPA's operations funding comes from member contributions. Annual budgets are provided to the Board for consideration. Approved budget amounts are divided evenly among the five member agencies. These contributions pay for all shared costs: salaries, benefits, office and operations, etc.

Sponsorships are one possible additional operational funding source. These are potential gifts given directly to the SFCJPA to support specific operational purposes or activities. Typically, sponsorships are sought from private or corporate donors, who believe the purpose of the donation also helps them in some way. Such donations may be tax deductible charitable contributions for private or corporate donors. Sponsorships might support elements of the SFCJPA's operations, such as paying an internship stipend, covering the costs to host a special event, or for the creation of a publication. Sponsorships might also be sought for ongoing ecosystem stewardship, recreational facilities, and their maintenance. These activities are associated with projects but are themselves not capital projects.

*Project Funding* - The SFCJPA will continue to seek local and state contributions while also evaluating new funding opportunities.

Potential future funding mechanisms for projects include expansions of existing mechanisms, such as state agency grants funded through revenue bonds. Future revenue bonds may include a Statewide Climate Resiliency Bond measure, which may be on the ballot in the next couple of years. This, and



similar bond measures that provide flood risk mitigation, environmental restoration and stewardship are issues the SFCJPA should strongly support and be engaged in.

*Member contributions* – the SFCJPA's members may choose to contribute funding or to provide collateral for low interest rate loans for project construction.

*Cash or In-Kind match* – Projects seek grant funding from State or federal sources. Many of these grants require matching contributions. Traditionally, local governments applying for grants provide these matching funds. However, receiving matching funds, either cash or in-kind, demonstrates a strong local commitment to the project and in the case of the SAFER Bay BRIC grant, was a significant factor in the grant's award. The SFCJPA will continue to seek in-kind or cash contributions for project grants where appropriate.

*Philanthropy/Capital Campaign* – Non-profit organizations such as museums, zoos or charitable organizations sometimes fund large investments in capital facilities through capital campaigns. These are well-organized, targeted fund-raising campaigns, seeking donations to fund large capital projects. While it may be unusual for a local government agency to conduct a capital campaign to fund projects such as creek channel modifications, flood detention basins, or bay margin levees, it is an option to consider.

*General Parcel Taxes* – This mechanism funds the Safe Clean Water and Natural Flood Protection program implemented by Valley Water. This provides a predictable, long-term revenue stream, which Valley Water apportions based on number of parcels and flood risk mitigation project needs. In November 2020, Santa Clara County voters approved a permanen<u>t</u> extension of the <u>Safe, Clean Water</u> and <u>Natural Flood Protection Program</u>.

Parcel taxes may be assessed by a JPA, including the SFCJPA. According to California law, these parcel tax assessments must be approved by a vote of two thirds.

*Community Facility or Benefit Assessment District* – Community Facilities Districts, or Benefit Assessment Districts can be established by local governments as a means of obtaining additional public funding to pay for public works and some public services. Assessment Districts are a "property tax" mechanism and are established for a specific geographical area receiving a special benefit from specified public improvements and services. There is a small benefit assessment district on the San Mateo County side of the creek, which contributes some revenues to the SMC FSLRD revenues. This approach may be an effective mechanism for raising revenues from property owners impacted by creek flooding and sea level rise in the future.



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## Glossary

This glossary is intended to assist the reader with words that they may not be familiar with, especially as they relate to San Francisquito Creek.

**Alluvial fan**- a triangle-shaped deposit of gravel, sand, and smaller pieces of sediment, such as silt. These unconsolidated deposits, or alluvium, are left by flowing streams. Alluvial fans are typically thicker close to streams and thinner at the outer edges.

Groundwater in the alluvial fan formed by San Francisquito Creek forms a productive aquifer known as the San Francisquito Creek Cone (named for the general cone shape).

**Anadromous**- is the term that describes fish born in freshwater who spend most of their lives in saltwater and return to freshwater to spawn, such as salmon and some species of sturgeon.

**Arundo-** (Arundo donax) is a non-native invasive grass that grows up to 25 feet tall along the edges of creeks and canals. It clogs channel capacity and increases flooding. The SFCJPA completed an eradication project along San Francisquito Creek and continues to monitor the area.

**Bankfull-** The water level, or stage, at which a stream, river or lake is at the top of its banks and any further rise would result in water moving into the flood plain. It may be identified by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Beneficial Uses-** As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The beneficial use category is related the California's water quality protection goals. For water with multiple beneficial uses, the beneficial use with the higher level of protection is used.

cfs - cubic feet per second, a measure of flow velocity

**Emergent groundwater-** Sea level rise (SLR) will cause shallow unconfined coastal aquifers to rise. Rising groundwater can emerge as surface flooding and impact buried infrastructure, soil behavior, human health, and nearshore ecosystems. Higher groundwater can also reduce infiltration rates for stormwater, adding to surface flooding problems. Levees and seawalls may not prevent these impacts.

**Engineered stream bed material-** (ESM) this is a mix of boulders, cobbles and pebbles used to stabilize creek bottoms and banks. The mix is site-specific and depends on stream hydraulics and design criteria. The rocks are strategically emplaced to minimize scour, largest to smallest, tamped into place, and then covered with sand to minimize movement within design parameters.



ESM looks and functions much like a natural stream bed and has already been used in San Francisquito Creek in the Bonde Wier removal project that was completed in 2013. The SFCJPA prefers the use of ESM where possible over rock slope protection that uses uniform sized cobbles.

**FEMA-** Federal Emergency Management Agency, a federal agency that prepares for and responds to disasters. In 2003, FEMA became part of the Department of Homeland Security.

**Freeboard**-term used by the Federal Emergency Management Agency's National Flood Insurance Program to describe a factor of safety, usually expressed in feet above the 1-percent-annual-chance flood level. A detailed definition is here: <u>https://www.fema.gov/glossary/freeboard</u>

**Flashy**- Stream that rapidly collects flows from the steep slopes of its catchment (watershed) and produces flood peaks soon after the rain that subside rather quickly after the cessation of rainfall. San Francisquito Creek is considered to be a flashy creek.

**Groundwater** - Water held underground in the soil or in pores and crevices in rock. that collects or flows beneath the Earth's surface, filling the porous spaces in soil, sediment, and rocks. Groundwater originates from rain and from melting snow and ice and is the source of water for aquifers, springs, and wells.

**Hyporheic Zone-** The hyporheic zone is defined as a subsurface volume of sediment and porous space adjacent to a stream through which stream water readily exchanges. Although the hyporheic zone physically is defined by the hydrology of a stream and its surrounding environment, it has a strong influence on stream ecology, stream biogeochemical cycling , and stream-water temperatures. Thus, the hyporheic zone is an important component of stream ecosystems. Read more: <a href="http://www.waterencyclopedia.com/St-Ts/Stream-Hyporheic-Zone-of-a.html#ixzz7t4CpjizB">http://www.waterencyclopedia.com/St-Ts/Stream-Hyporheic-Zone-of-a.html#ixzz7t4CpjizB</a>

**Invasive Species**- nonnative plants and animals as those that were brought into our area from around the world. Some nonnative plants and animals have become pests that out compete native species and threaten California's native biodiversity and ecosystems and are termed invasive species.

**Nature based solutions-** FEMA defines nature-based solutions as sustainable planning, design, environmental management and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. While FEMA uses the term "nature-based solutions," other organizations use related terms, such as green infrastructure, natural infrastructure, natural and nature-based features, or <u>Engineering with Nature</u>, a program of the U.S. Army Corps of Engineers.

**Overbank**- Flows that exceed top of channel margins. Flood flows.



**Perched Creek-** A stream with a bottom that is above that of the groundwater table and thus is separated from underlying groundwater. This condition can vary seasonally and annually depending on the amount of precipitation, as well as in different sections of the same streambed. Another term for this is a losing stream because it can recharge ground water unless there is a confining layer that inhibits percolation. A gaining stream is a stream bottom that is below the top of the groundwater table and is thus directly hydraulically connected with groundwater.

**Reach-** San Francisquito Creek is divided into Reaches or segments based on hydrology or other parameters. Reach 1 is the most downstream reach and extends from Highway 101 to San Francisco Bay. Reach 2 begins at West Bayshore Road adjacent to Highway 101 and extends to just upstream of the Pope Chaucer Bridge, or to El Camino Real for US Army Corp of Engineers studies. Reach 2 is also known as the Urban Reach. Reach 3 is the upper watershed, with Stanford University as the primary landowner. Stanford has further defined Reach 3 as Delta and Searsville Reservoir reaches. See Figure 1.

**Refugia-** A natural or constructed feature that provides a resting area for animals. The San Francisquito Creek constructed five high tide refugia islands for salt marsh harvest mice and California Ridgeway's Rail to adapt to rising tides. We also installed rootwads and rock berms that provide habitat and refuge for fish in the creek. Our <u>Reach 2 Uup</u>stream project has incorporated similar features and includes pools and riffles for fish.

**Riparian-** Riparian areas are lands that occur along watercourses and water bodies. Typical examples include flood plains and streambanks. They are distinctly different from surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by the presence of water. A riparian area or zone is illustrated below:



Major components of a stream or water body riparian area—Riparian areas can be symmetrical or asymmetrical in shape. The topography and hydrogeology determine the plant and animal communities associated with the width or meandering riparian area configurations.

Image source: USDA, NRCS


**Scour-** Net removal of sediment from stream by action of water flow. Scour may be measured in volume of sediment removed from a channel reach, in average depth of sediment removal from an area, in average change of depth at a cross section, or in change of depth at a point.

Streambed scour is the mobilization/fluctuations in the vertical position of the bed of a stream as material is eroded and degrades. Some degree of streambed fluctuation is natural process; however, urban development and floodplain encroachment have resulted in excessive channel incision or bed lowering during larger flow events in San Francisquito Creek.

Salmonoid spawning success requires that deep scour of the bed does not occur during the time the eggs are incubating in gravel deposits.

**Sediment-** A collective term for rock and mineral particles that 1) are being transported by a fluid (sediment in transport, suspension, or motion) caused by the fluid motion or 2) have been deposited by the fluid (i.e., sediment deposits).

**Sheet Pile-** Sheet piles are three dimensional vertical sections, most commonly made of steel, that interlock to form a continuous wall that can hold back soil and/or water. The term sheet piling refers to any retaining wall type that is a) installed into the ground by driving or pushing, rather than pouring or injection.

**Stage-** The level of the water surface in a stream, river, or reservoir, measured with reference to some datum.

**Stream Bank-** The sloping margin of a stream or river that confines flow to the natural channel during normal stages.

**Toe of Bank-** The "toe" lies at the bottom of the creek side slopes or banks and supports the weight of the bank. The toe is the area that is most susceptible to erosion because it is located in between the ordinary water level and the low water level, and it is the area most affected by currents and/or storm flows.

**Top of Bank-** The point along the bank of a stream where an abrupt change in slope is evident, and where the stream is generally able to overflow the banks and enter the adjacent floodplain during an annual flood event. Determination of the top of bank is site specific and vary along a bank. This determination may require a survey but is important to creek protection policies and buffers.

**Total Maximum Daily Load (TMDL):** An evaluation of the condition of an impaired surface water on the Section 303(d) List that establishes limitations on the amount of pollution that water can be exposed to without adversely affecting its beneficial uses and allocating proportions of the total limitation among dischargers to the impaired surface water.

**Tidal/Tidal Influence-** areas that are subject to the ebb and flow of tides. San Francisquito Creek is tidal in Reach 1 from San Francisco Bay to Highway 101.



**Undergrounding-** utility lines or piping that is moved from above ground to below ground.

Waters of the State- Defined more broadly than "waters of the United States and includes "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code section 13050(e)). The definition is broadly interpreted to include all waters within the state's boundaries, whether private or public, including waters in both natural and artificial channels. California includes riparian area of creeks, from Top of Bank to Top of Bank, rather than mean high water as interpreted federally. This broader application stems from the Porter-Cologne Act that expands the aerial extent of the Water Quality Control Boards' authority as waters of the State. The Porter-Cologne Act also requires the Water Board to address both indirect and direct impacts of activities (including downstream impacts), as well as possible future impacts that can result in the degradation of water quality.

**Waters of the United States** - Very generally refers to surface waters, as defined by the federal Environmental Protection Agency in 40 C.F.R. § 122.2. On October 7, 2021, the Council on Environmental Quality proposed a rule to modify its NEPA regulations, with the final rule that became effective on May 20, 2022. These modifications essentially reinstated requirements that were removed as part of the "2020 Rule," including cumulative impacts and climate change through the emission of greenhouse gases.

#### **RESOLUTION NUMBER 23-02-23-B**

#### RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY COMPREHENSIVE PLAN UPDATE

**BE IT RESOLVED** by the Board of Directors of the San Francisquito Creek Joint Powers Authority that the Board of Directors hereby accepts the 2023 update to the SFCJPA's Comprehensive Plan.

Approved and adopted on February 23, 2023, the undersigned hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of the San Francisquito Creek Joint Powers Authority.

INTRODUCED AND PASSED: AYES: NOES: ABSENT: ABSTAIN:

ATTEST:

APPROVED:

Vice Chairperson

Date: 02/23/2023

Chairperson

Date: 02/23/2023

APPROVED AS TO FORM:

Legal Counsel

Date: 02/23/2023

## Agenda Item 8.A. Second Amended Restated SFCJPA Members Agreement

#### Background

When the SFCJPA was formed in 1999 a founding members agreement established the framework within which the organization operated. In 2020, with the establishment of the San Mateo County Flood and Sea Level Rise Resiliency District and that organization's assumption of the San Mateo County Flood Control functions, the SFCJPA members agreement was reviewed and the elements relating to the new agency member were updated. During the 2020 process, many additional updates were noted as being necessary, although not urgent.

#### Discussion

Over the past ~18 months, the members agreement has been evaluated and discussed among member senior staff, technical leads, and legal counsels, and many improving edits recommended. The clean draft document and marked-up version of the current draft document is included in the board packet for your review.

Elements of the agreement that have been clarified though this process include:

- Reconciliation of original document text to actual practice (for example: hiring of JPA staff, and board roles)
- Clarification of SFCJPA scope and authority regarding land acquisition
- Clarification of SFCJPA scope regarding shoreline projects and watershed stewardship
- Modernization and simplification of language for clarity
- Addition of now-standard clauses common to local government agreements
- Format reconciliation and updates

Over the past month, key member representatives and legal staff have met and conferred. The attached document reflects the full and final input of all parties with mutual concurrence.

#### Recommendation

Review the proposed final Second Amended and Restated SFCJPA Members Agreement document. Provide any additional input or direction.

If the Board is satisfied with this document, approve this document and direct staff to coordinate the ratification of the same with all member agencies.

# SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT

FOR THE

SAN FRANCISQUITO CREEK

JOINT POWERS AUTHORITY

AMENDED AND RESTATED as of

January 1, 2020

February 17, 2023

Draft Dated 3/24/20

# SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT FOR THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

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#### SAN FRANCISQUITO CREEK SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT

#### FOR THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

This <u>Second</u> Amended and Restated Agreement <u>Joint Powers Agreement for the San</u> <u>Francisquito Creek Joint Powers Authority</u> ("Agreement") is made by and among <u>the City of East</u> <u>Palo Alto</u>, the City of Menlo Park, the City of Palo Alto, the <u>City of East Palo Alto</u>, the <u>Santa Clara</u> <u>Valley Water District</u>, and the San Mateo County Flood and Sea Level Rise Resiliency District—(", <u>and the Santa Clara Valley Water District (each a Member Entity and collectively, the Member</u> Entities"), all of which are public entities organized and operating under the laws of the State of California, and each of which is a public agency as defined in California Government Code section 6500. <u>This Agreement is effective upon full execution by all Member Entities (Effective Date)</u>.

#### RECITALS

A. The Joint Exercise of Powers Act, being Government Code sections 6500 et seq. (the "JPA Law"), permits two or more local public entities by agreement to jointly exercise any power common to them.

B. Following years of effort to address environmental and flooding concerns related to the watershed and floodplain of San Francisquito Creek (encompassing approximately 50 square miles from the Santa Cruz Mountains to San Francisco Bay), and soon after the flood of record in 1998 damaged approximately 1,700 properties, the Member Entities established the San Francisquito Creek Joint Powers Authority (Authority) pursuant to that certain "Joint ExercisePowers Agreement Creating the San Francisquito Creek Joint Powers Authority," dated as of May 18, 1999, to collectively contribute resources and implement policies and projects of mutual interest relating to the primary natural features that unite them, including the San Francisquito Creek ("Creek").

<u>C.</u> The Joint Powers Agreement Creating the San Francisquito Creek Joint Powers Authority, dated as of May 18, 1999, was thereafter revised pursuant to the Joint Powers Agreement for the San Francisquito Creek Joint Powers Authority, Amended and Restated as of January 1, 2020.

D. Each Member Entity agrees to contribute resources and funding towards implementation of projects of mutual interest and benefit relating to San Francisquito Creek and San Francisco Bay shoreline.

C.E. The governing body of each Member Entity has determined that it is in the Member Entity's best interest and in the public interest that this <u>Second</u> Amended and Restated <u>Joint Powers</u> Agreement for the San Francisquito Creek Joint Powers Authority be executed to make minor procedural updates, including the change on January 1, 2020 of the San Mateo County Flood Control District to the San Mateo County Flood and Sea Level Rise Resiliency District.

NOW, THEREFORE, the Member Entities, by, between and among themselves, in consideration of the mutual benefits, promises, and agreements set forth below, hereby agree as follows:

1. Creation of the San Francisquito Creek Joint Powers Authority

1. CREATION OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY. Pursuant to the JPA Law, the Member Entities create a public agency, separate and apart from the Member Entities to be known as the San Francisquito Creek Joint Powers Authority (the "Authority"). Pursuant to Government Code section 6508.1, the debts, liabilities, and obligations of the Authority shall not constitute debts, liabilities, or obligations of any party to this Agreement. A Member Entity may separately contract for or assume responsibility for specific debts, liabilities, or obligations of the Authority. For purposes of, and to the extent required by, Government Code section 6509, in exercising its powers, the Authority shall be subject to the restrictions upon the manner of exercising the powers of the City of Menlo Park, except as otherwise authorized or permitted by the JPA Law.

#### 2. Purposes

2. <u>PURPOSES.</u> This Agreement is entered into by Member Entities under the JPA Law for the following purposes:

a. To facilitate and perform bank stabilization, channel clearing and other Creek maintenance.

b. To plan flood control measures for the

a. <u>Develop and maintain projects to reduce the risk of flooding in and</u> around San Francisquito Creek-watershed.

b. c.To take actions necessary to preserve and enhance environmental values and instream uses of San Francisquito Creek.

c. d.To coordinate emergency mitigation and response activities relating to San Francisquito Creek.

d. e.To make recommendations to Member Entities for funding and alternatives for long term flood control for Member Entity consideration.

a. <u>3.PARTIES TO AGREEMENT. Each Member Entity certifies that</u> it intends to and does contract with every other Member Entity which is a signatory to this Agreement. Each Member Entity also certifies that the deletion

b. Develop and maintain projects to reduce the risk of coastal flooding from along the San Francisco Bay shoreline.

c. Maintain, restore, enhance the environment, and create recreational opportunities, where possible, in implementing the other purposes stated herein.

d. Provide regional information related to flood preparedness and emergency response agencies and others to enhance their ability to communicate about and respond to flood risks.

e. Secure and administer funding for the benefit of the Authority's operations, capital projects, and related work.

#### 3. Parties to Agreement

<u>Withdrawal or expulsion</u> of any Member Entity from this Agreement does not affect this Agreement nor each Member Entity's intent to contract with the Member Entities then remaining. Pursuant to Assembly Bill 825 (Chapter 292, Statutes of 2019), which amended the San Mateo County Flood Control District Act to provide for the San Mateo County Flood and Sea Level Rise Resiliency District, the Member Entities agree that the San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) is the entity formerly known as the San Mateo County Flood Control District, and as such is subject to the terms and conditions of this Agreement.

#### 4. Term of Agreement

4. TERM OF AGREEMENT. This Agreement became effective as of May 18, 1999, and continues in full force until terminated in accordance with Paragraph 18 (paragraph 17. Termination and Distribution).

5. Powers of the Authority

5. POWERS OF THE AUTHORITY. The Authority shall have all powers common to the Member Entities, and such additional powers granted to it by law, necessary to fulfill the purposes of this Agreement. The Authority, through its Board of Directors, is authorized, in its own name and subject to the limitations set forth below, to do all acts necessary to fulfill the purposes of this Agreement referred to in Paragraphparagraph 2. (Purposes) including, but not limited to, each of the following:

<u>e.a.</u><u>a</u> Make and enter into contracts;

f.b. \_\_\_\_\_b \_\_\_\_Incur debts, liabilities, and obligations, provided that no debt, liability, or obligation of the Authority shall be a debt, liability, or obligation of a Member Entity except as separately agreed to by a Member Entity;

e.....e Receive contributions and donations of property, funds, services, and other forms of assistance from any source;

jurisdiction of a Member Entity unless the Member Entity adopts a resolution consenting to the Authority's exercise of eminent domain within its jurisdiction.

~	н. <mark>с.</mark>
Su	e and be sued in its own name;
	<del>i.</del> f
Cc	ontract with independent consultants and/or contractors;
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Re	ceive, collect, and disburse monies;
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6. Member Entity Approvals and Responsibilities

Each Member Entity has the approval authority, obligations, and responsibilities set forth in this Agreement. No action of the Authority shall be effective or binding unless and until such action has been approved in accordance with Subparagraph "e" (Action of the Board) of Paragraph 10 (Board Members) by the Board of Directors consistent with a budget The Member Entities retain the following powers:

<u>a.....T</u> <u>he designation of each Member Entity's Director and alternate as specified in</u> <u>paragraph 9. Board of Directors;</u>

<u>b.....A</u> pproval of an amendment to this Agreement as specified in paragraph 19. Amendments;

<u>c......A</u> <u>pproval of the Member Entity's funding or other contribution for a capital project</u> <u>as specified in paragraph 7. Capital Project Participation; and</u>

<u>d.....</u><u>A</u> <u>pproval of the Member Entity's contribution to the annual budget of the Authority</u> <u>as specified in paragraph 12. Operating Budget.</u>

7. Capital Project Participation

<u>The Authority may approve a contract for a capital project or any discrete phase of a capital project in accordance with the following conditions:</u>

<u>a.....T</u> <u>he Authority's Board of Directors has determined that the Authority will have the</u> <u>funds necessary to pay for that capital project or that discrete phase of the project</u> <u>being approved; and</u>

<u>o</u>.....<u>A</u> ny funding or other contribution from a Member Entity to that capital project or to that discrete phase of the capital project has been approved by independent action of eachthe Member Entity's governing body<del>.</del>

#### 8. Membership

8. MEMBERSHIP. New Member Entities may be added to the Authority by amending this Agreement, as described in Paragraph 21 (paragraph 19. Amendments);, and Member Entities may withdraw or be expelled, as described in Paragraph 16 (paragraph 15. Withdrawal) and Paragraph 17 (paragraph 16. Expulsion).

9. BOARD OF DIRECTORS.

<del>a. \_\_\_\_</del>

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#### 9. Board of Directors

**q.a.** <u>Directors</u>. There shall be a Board of Directors (the "Board") to govern the affairs of the Authority. The Board of Directors shall be comprised of one director, and one alternate director, fromDirector designated by each Member Entity. Each director hasDirector shall have one vote. An alternate director may east a vote as a member of on the Board of Directors only in the absence of the director from that same Member Entity. Each director andDirector shall have an alternate director shall be a member of the governing body of the Member Entity and shall be designated by itsthe governing body; provided, however, that no two directors and no two alternate directors shall be from the same governing body of anyeach Member Entity.

b. Alternates. All references in this Agreement to a Director refer to and include the Director's alternate, when acting in place of a Director.

c. Voting. A Director or alternate is not eligible to vote on any matter before the Board of Directors if: 1) such person serves on the governing body of two Member Entities, and 2) the vote would result in two persons from the governing body of the same Member Entity casting two votes on such matter.

d......b <u>Compensation</u>. Directors and alternate directors are not entitled to compensation by the Authority. The Board of Directors may authorize reimbursement of expenses incurred by directors Directors in connection with serving as a Director.

**erm**. The term of office of a Director shall terminate when such person ceases to be a member of the governing body of the Member Entity or the Member Entity designates another Director and/or alternate directorsto serve.

<u>s.....</u>e

<u>——Powers</u>. The powers of the Board<u>of Directors</u> are each of the powers of the Authority not specifically reserved to the Member Entities by this Agreement. The Member Entities retain the following powers:

t.....( 1) The designation of the Board as specified in Subparagraph "a" of Paragraph 9 (No Action of the Authority shall be effective or binding unless and until such action has been authorized by the Board of Directors and either 1) is consistent with the budget approved by the Board of Directors);

2) Approval of an amendment to this Agreement as specified in Paragraph 21 (Amendments);

3) Approval of actions pursuant to Paragraph 6 (Member Entity Approvals and

**Responsibilities**);

W......( 4) Approval of project participation as specified inparagraph 12. Operating Budget, or 2) complies with paragraph 7-(. Capital Project Participation Approval Authority); and.

5) Approval of the annual budget of the Authority as specified in Paragraph 13 (Budget).

<u>y.....</u>1

0. BOARD MEMBERS.

f. ..... <del>a</del>

z.....M eetings. The Board of Directors shall hold at least one regular meeting each year, at which time the Board of Directors shall elect its officers as appropriate to comply with Paragraph 11 (pursuant to paragraph 10. Officers). The Board of Directors shall fix the date, hour, and place at which each regular meeting is to be held. To the extent practicable, each Board of Directors meeting shall be held in Northern Santa Clara County or Southern San Mateo County. The Chair presides at all meetings. A special meeting may be called upon written request by the Chair or at least two directors.

Directors.

g.....<u>b</u>

aa.h. \_\_\_\_\_B

rown Act. Each regular, adjourned regular, or special meeting of the Board of Directors shall be called, noticed, held, and conducted in accordance with the Ralph M. Brown Act (Sections 54950, et seq., of the Government Code §54950, et seq.).

<u>bb.i....</u>e -Notices, Agendas, Minutes. The Board of Directors shall appoint or hire a Clerk of the Board of Directors who shall draftbe responsible for preparing minutes of each regular and special meeting of the Board, which shall be considered for approval by the Board at a subsequent regular meeting of Directors, and issuing notices and agendas in accordance with the law.

-Quorum. No business may be transacted by the Board of Directors without a quorum of members of the Board of Directors being present except that less than

a quorum may adjourn from time to time. A quorum consists of a majority of the members of the Board <u>of Directors</u>.

<u>Action of the Board of Directors</u>. Except as otherwise specified in this Agreement, <u>or required by law</u>, any action of the Board <u>of Directors</u> shall require a vote of a majority of the <u>BoardDirectors</u>.

<u>k.....</u>a

<u>10.</u> Officers-

<u>a.....b</u> ——Election/Term/Duties.

<u>c.....</u>T he term of office for Chair, and Vice-Chair, and Secretary is one year. <u>shall be</u> <u>determined by a vote of the Board of Directors.</u> The officers shall assume the duties of their offices upon being elected or appointed, as appropriate.

f any of the Chair, or Vice-Chair, or Secretary ceases to be a member of the Board of Directors, the Board of Directors shall elect or appoint a new officer at the next regular meeting of the Board of Directors held after the vacancy occurs.

hh......c . Compensation. Officers are not entitled to compensation by the Authority. The Board may authorize reimbursement of expenses incurred by officers.

ii. .....d . Appointment/Contract. The Board may appoint such officers and may hire or contract with such persons or firms as it considers necessary to carry out the purposes of this Agreement.

d.....<u>4</u> FISCAL YEAR. The first fiscal year of the Authority is July 1, 1999, through June 30, 2000.

#### Fiscal Year 11.

Each subsequent fiscal year of the Authority shall begin on July 1<sup>st</sup> of a calendar year and end on June 30th. of the next following calendar year.

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#### **Operating Budget** 12.

**BUDGET.** The Board of Directors shall adopt an annual operating a. budget, which shall be separate from the budget for any capital project of the Authority's capital projects budget. The operating budget shall include the proposed contribution from each Member Entity for the fiscal year and other sources of income for the fiscal year.

The operating budget shall not be effective unless and until the b. governing body of each Member Entity has approved approves that Member Entity's contribution to the operating budget.

c. A Member Entity-contributions's contribution shall become immediately due and payable to the Authority upon adoption of the annual operating budget, unless expressly provided otherwise in by the Board of Directors and ..... approval of the Member Entity's contribution to the budget by that Member ...... Entity's governing body.

#### 13. Annual Audit and Audit Reports

14. ANNUAL AUDIT AND AUDIT REPORTS. The Board of Directors shall cause an annual financial audit to be made by an independent certified public accountant with respect to all Authority receipts, disbursements, other transactions, and entries into the books. A report of the financial audit shall be filed as a public record with each Member Entity. The audit shall be filed no later than as required by State law. The Authority shall pay the cost of the financial audit from its annual operating budget in the same manner as other administrative costs.

15. ESTABLISHMENT AND ADMINISTRATION OF FUNDS.

<del>a.</del>

Establishment and Administration of Funds 14.

The Authority is responsible for the strict ii.a. Accountability. accountability of all funds and reports of all receipts and disbursements. It shall comply with every provision of law relating to the establishment and administration of funds, particularly Section 6505 of the California in particular, Government Code §6505. The funds shall be accounted for on a full accrual basis.

<u>kk.b.</u>\_\_\_\_b

<u>Investment/Disbursement</u>. The Authority shall receive and disburse funds only in accordance with policies and procedures established by the Board<u>of</u> <u>Directors</u> and in conformity with applicable law.

<u>н.....е</u>

<u>Insurance/BondBonds</u>. The Authority shall procure, carry and maintain, in full force and effect, at all times during the term of this Agreement, such insurance and bonds to protect the Authority and its members of the Board of Directors, officers, employees, agents, and Member Entities, as deemed appropriate by the Board.

<u>c.....</u>d

of Directors.

<u>mm.....<u>D</u></u>

<u>epository and Auditor Controller</u>. The Board <u>of Directors</u> shall designate one of its officers, employees or a third party to perform all acts required by Government Code <u>Sections §6505</u> (regarding an annual audit), §6505.1 (regarding charge of and access to property), §6505.5 (regarding the depository and custodian of money), and §6505.6 (regarding independent audit where an officer or employee acts as treasurer, auditor, or both), as such laws are amended from time to time.

<u>d.....</u><u>1</u> <u>6. WITHDRAWAL.</u>

#### 15. Withdrawal

a. Member Entities may withdraw from the Authority for subsequent fiscal years by providing written notice to the Authority and each Member Entity on or before May 1 of any fiscal year. Withdrawal shall be effective on July 1 of the next fiscal year. This shall be the exclusive means by which a Member Entity may withdraw from the Authority.

b. Any Member Entity that withdraws shall remain liable for any budget contributions or capital improvement project participation approved before withdrawal.

c. Any Member Entity that withdraws shall remain liable for any and all demands, claims, or liabilities of any nature, including death or injury to any person, property damage, or any other loss caused by or arising out of that <u>partyMember</u>.....

Entity's performance or failure to perform the obligations assumed before the Member Entity withdraws from this Agreement. Any Member Entity that withdraws shall remain subject to the provisions of Paragraph 23 (Liability of the Authority; Release and Indemnity) paragraph 21. Indemnification

\_\_\_\_\_with respect to any event or occurrence taking place before the Member Entity withdraws.

17

16. Expulsion

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a. **EXPULSION.** The Authority may expel a Member Entity from the Authority by a four-fifths (4/5) vote of the Authority Board of Directors for a breach of this Agreement determined by the Board of Directors to be a material breach.

<u>b.</u> Any Member Entity that has been expelled pursuant to this paragraph shall have no further liability or obligation pursuant to this Agreement after the effective date of such expulsion; except such Member Entity shall remain liable for any and all demands, claims, or liabilities of any nature, including death or injury to any person, property damage, or any other loss caused by or arising out of that party's performance or failure to perform the obligations assumed before the Member Entity was expelled, including any budget contributions or capital improvement project participation approved before expulsion.

18. TERMINATION AND DISTRIBUTION.

<del>a.</del>

17. Termination and Distribution

<u>mn.a.</u> <u>T</u> <u>ermination</u>. This Agreement shall continue until terminated. This Agreement may be terminated by the written consent of four-fifths (4/5) of the Member Entities; <u>provided, however, this. The</u> Agreement and the Authority shall continue to exist after termination for the purpose of may only be terminated after disposing of all claims, distribution of assets, and <u>performance of</u> all other functions necessary to conclude the <u>obligationobligations</u> and affairs of the Authority.

<u>oo.....b</u>

<u>Surplus</u>. In the event that the Authority is terminated, any surplus money on deposit in any fund or account of the Authority shall be returned to <u>Member</u> <u>Entities</u> in proportion to the contributions made to that fund or account, as required by <u>Section 6512 of the California</u> Government Code <u>§6512</u>. The Board is vested with all powers of the Authority for the purpose of concluding and dissolving the business affairs of the Authority, including for the disposition, division, or distribution of any property acquired as a result of the joint exercise of powers.

pp......1
 9. NOTICES. Notices to each Member Entity under this Agreement are sufficient if mailed to its respective address on file with the Authority.

c.....2 0. PROHIBITION AGAINST ASSIGNMENT.

<u>d</u>......<u>P</u> **roperty**. All real property and any improvements thereon, that were owned by a Member Entity and contributed to the Authority shall be returned to the Member Entity, upon its approval, that contributed such property.

e. Member Entity Obligations. In no event shall any funds or assets be distributed, divided or returned to a Member Entity until such Member Entity has either paid their share of all outstanding debts and obligations that were incurred while they were a Member Entity, or executed a contract with the Authority to pay for all outstanding debts and obligations that were incurred while they were a Member Entity.

#### 18. Prohibition Against Assignment

No Member Entity may assign a right, claim, or interest it may have under this Agreement, and any such assignment shall be void. No creditor, assignee, or third-party beneficiary of a Member Entity has a right, claim, or title to any part, share, interest, fund, or asset of the Authority.

#### 19. Amendments

21. <u>AMENDMENTS.</u> This Agreement may <u>only</u> be amended by approval by the governing body for each and every Member Entity. A proposed amendment must be submitted to each Member Entity at least thirty (30) days in advance of the date <del>when the Member Entity considers iton which it will be considered</del>. An amendment is to be effective <del>immediately unless</del> otherwise designated upon full execution by all Member Entities.

#### 20. Severability

22. SEVERABILITY. If a portion, term, condition, or court of competent jurisdiction holds any provision of this Agreement is determined by a court to be illegal or in conflict with the law of the State of California, or is otherwise rendered, unenforceable or ineffectual, or invalid in whole or in part for any reason, the validity and enforceability of the remaining portions, terms, conditions, and provisions is, or portions of them, will not be affected.

23, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision. LIABILITY OF THE AUTHORITY; RELEASE AND INDEMNITY.

21. Indemnification

<u>a.</u> Funds of the Authority may be used to defend, indemnify, and hold harmless the Authority, any Member Entity, any member of the Board <u>of Directors</u>, and each officer, employee and agent of the Authority <u>or Member Entities</u>, for their actions taken within the scope of their duties while acting on behalf of the Authority. The parties to this Agreement release each other and agree to hold each other harmless, as well as their officers and employees, for any loss or liability arising from their respective activities pursuant to this Agreement. Except as otherwise provided herein, each party agrees to indemnity, defend

qq. In lieu of and notwithstanding the pro rata risk allocation, which might otherwise be imposed between the Member Entities pursuant to Government Code Section 895.6, the Member Entities agree that all losses or liabilities incurred by a Member Entity shall not be shared pro rata but, instead, the Member Entities agree that, pursuant to Government Code Section 895.4, each Member Entity hereto shall fully indemnify and hold harmlesseach of the other parties Member Entities, their officers, agents, and board members, employees, and agents, harmless from any and all demands, claims, or liabilities of any nature, including death or injury to any person, property damage, or any other loss caused by or arising out of that party's performance or failure to perform the obligations assumed under this Agreement. Each Member Entity agrees that legal counsel for any Member Entity may be designated claim, expense or cost, damage or liability imposed for injury (as defined in Government Code 810.8) occurring by reason of the Board to represent the Authority by performing legal services, including litigation, and that any potential conflict of interest arising from such representation shall be deemed waived by the Authority and Member Entity, unless an actual adverse relationship exists between the Member Entity and the Authority with respect to the particular matter. The designation of legal counsel from a Member Entity shall be with the approval of that Member Entity. negligent acts or omissions or willful misconduct of the indemnifying Member Entity, its officers, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such Member Entity pursuant to this Agreement. No Member Entity, nor any officer, board member, employees, or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other Member Entity hereto, its officers, board members, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such other Member Entity pursuant to this Agreement. The rights, duties, and obligations of the Member Entities as set forth above in this paragraph 21. Indemnification, survive completion, termination, expiration, and suspension of this Agreement.

b. 24.....GOVERNING LAW. This

22. Choice of Law and Venue

<u>The Parties agree that this</u>Agreement <u>shallis to</u> be governed <u>by and</u>, construed, <u>and</u> <u>enforced</u> in accordance with the laws of the State of California.

25. <u>COUNTERPART</u>The Parties also agree that the venue of any litigation arising out of or connected with this Agreement will lie exclusively in the state trial court or Federal District Court located in Santa Clara County or San Mateo County in the State of California. The Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

#### 23. Counterpart

This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one instrument.

#### 24. Agreement Complete

26. AGREEMENT COMPLETE. The foregoing constitutes the full and complete Agreement of the Member Entities. There are no oral understandings or agreements not set forth in writing herein.

#### 25. No Third-Party Beneficiaries

27. NO THIRD-PARTY BENEFICIARIES. Nothing in this Agreement, whether express or implied, shall be construed to give any person or entity, other than the <u>partiesParties</u> hereto, any legal or equitable right, remedy, or claim under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

#### 26. Nonwaiver of Rights

The failure of either Party to this Agreement to object to or to take affirmative action with respect to any conduct of the other Party that is in violation of the terms of this Agreement will not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.

#### 27. Agreement Execution

<u>Unless otherwise prohibited by law or policy of any Member Entity, the Member Entities</u> agree that an electronic copy of a signed agreement, or an electronically signed agreement, has the same force and legal effect as an agreement executed with an original ink signature. The term "electronic copy of a signed agreement" refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed agreement in a portable document format. The term "electronically signed agreement" means an agreement that is executed by applying an electronic signature using technology in compliance with the Electronic Signature Act (California Civil Code §1633).

### 28. Equal Opportunity

#### a. Equal Opportunity Employer

The Member Entities are equal opportunity employers and requires their consultants to have and adhere to a policy of equal opportunity and non-discrimination. In the performance of the Agreement, Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including apprenticeship), or against any other person, on the basis of sex

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(which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.

#### b. Compliance with Applicable Equal Opportunity Laws

Consultant's policy must be in conformance with applicable state and federal guidelines including the Federal Equal Opportunity Clause, 41 Code of Federal Regulations, Part 60-1, §60-1.4; Title VII of the Civil Rights Act of 1964 as amended; the Americans with Disabilities Act of 1990; the Rehabilitation Act of 1973 (§503 and §504); the Age Discrimination Act of 1975 (42 U.S.C. §6101 et seq.); the California Fair Employment and Housing Act (Government Code §12900 et. seq.); and California Labor Code §1101 and §1102.

#### c. Investigation of Claims

<u>Consultant must designate a specific position within its organization to be</u>
 <u>responsible for investigating allegations of non-compliance with the anti-</u>
 <u>discrimination and anti-harassment provisions of this Agreement. Consultant must</u>
 <u>conduct a fair, prompt, and thorough investigation of all allegations directed to</u>
 <u>Consultant by any Member Entity. In cases where such investigation results in a</u>
 <u>finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective action against the offender.</u>

#### 29. Notices

Unless otherwise specified in this Agreement, all requests for written approval or legal notices must be sent to the representatives' addresses on file with the Authority. All notices are deemed to have been given when made in writing and when delivered or mailed to the representatives at their respective addresses.

IN WITNESS WHEREOF, the <u>partiesMember Entities</u> hereto have executed this Agreement on the dates <u>as</u> set <u>forthfor the</u> below.

### SIGNATURES TO FOLLOW ON SEPARATE PAGES

Second Amended and Restated Joint Powers Agreement for the San Francisquito Creek Joint Powers Authority			
)			
<del>DATED:</del>	, 2020CITY OF MENLO PARK		
	By: Cecilia Taylor, Mayor		
	ATTEST:		
	By:		
APPROVE	AS TO FORM:		

City Attorney

DATED:	<u>, 2020</u>	CITY OF PALO ALTO
		By:
		-ATTEST:
		By:
APPROVE AS TO FORM:		Deth willion, City Clerk

City Attorney

Second Amended and Restated Joint Powers Agreement for	<u>the</u>
San Francisquito Creek Joint Powers Authority	

<del>DATED:</del>	, 2020	CITY OF EAST PALO ALTO
		By:
		ATTEST:
		By:
APPROVE AS TO FORM:		

City Attorney (REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

DATED:	<u>, 2023</u>	CITY OF MENLO PARK
		By:
		Name
		Mayor
		ATTEST:
		By:
		Name
		City Clerk
APPROVE AS TO FORM:		-

City Attorney

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

DATED:	<u>, 2023</u>	<u>CITY OF PALO ALTO</u> By:
		Name
		Mayor
		ATTEST:
		<u>By:</u>
		Name
		<u>City Clerk</u>
<u>APPROVE AS TO FORM:</u>		

City Attorney

DATED:	, 2020	SANTA CLARA VALLEY WATER DISTRICT
		By: Nai Hsueh, Chair
		ATTEST:
		By: Michele L. King, CMC, Board Clerk
APPROVE AS TO FORM:		
General Counsel DATED:	, 2023	CITY OF EAST PALO ALTO By:
		Name Mayor ATTEST: By:
APPROVE AS TO FORM:		<u>Name</u> <u>City Clerk</u>

<u>Second Amended and Restated Joint Powers Agreement for the</u> <u>San Francisquito Creek Joint Powers Authority</u>		
DATED:	, <del>2020</del>	SAN MATEO COUNTY FLOOD
		By: Dave Pine, Chair
		ATTEST:
APPROVE AS TO FO	<del>RM:</del>	By:
General Counsel DATED:	<u>, 2023</u>	SANTA CLARA VALLEY WATER DISTRICT By: John L. Varela Chair, Board of Directors

By: Michele L. King, CMC Clerk, Board of Directors

# APPROVE AS TO FORM:

District Counsel J. Carlos Orellana

, 2023

DATED:

#### SAN MATEO COUNTY FLOOD AND SEA LEVEL RISE RESILIENCY DISTRICT By:

<u>Name</u>

Chair, Board of Directors ATTEST:

By:

Name Clerk, Board of Directors

## APPROVE AS TO FORM:

Brian Kulich Lead Deputy County Counsel General Counsel

# SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT

# FOR THE

# SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

AMENDED AND RESTATED

as of

February 17, 2023

# SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT FOR THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

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# SECOND AMENDED AND RESTATED JOINT POWERS AGREEMENT FOR THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

This Second Amended and Restated Agreement Joint Powers Agreement for the San Francisquito Creek Joint Powers Authority (Agreement) is made by and among the City of East Palo Alto, the City of Menlo Park, the City of Palo Alto, the San Mateo County Flood and Sea Level Rise Resiliency District, and the Santa Clara Valley Water District (each a Member Entity and collectively, the Member Entities), all of which are public entities organized and operating under the laws of the State of California, and each of which is a public agency as defined in California Government Code section 6500. This Agreement is effective upon full execution by all Member Entities (Effective Date).

#### RECITALS

- A. The Joint Exercise of Powers Act, Government Code sections 6500 et seq. (JPA Law), permits two or more local public entities by agreement to jointly exercise any power common to them.
- B. Following years of effort to address environmental and flooding concerns related to the watershed and floodplain of San Francisquito Creek (encompassing approximately 50 square miles from the Santa Cruz Mountains to San Francisco Bay), and soon after the flood of record in 1998 damaged approximately 1,700 properties, the Member Entities established the San Francisquito Creek Joint Powers Authority (Authority) pursuant to that certain "Joint Powers Agreement Creating the San Francisquito Creek Joint Powers Authority," dated as of May 18, 1999, to collectively contribute resources and implement policies and projects of mutual interest relating to the primary natural features that unite them, including the San Francisquito Creek.
- C. The Joint Powers Agreement Creating the San Francisquito Creek Joint Powers Authority, dated as of May 18, 1999, was thereafter revised pursuant to the Joint Powers Agreement for the San Francisquito Creek Joint Powers Authority, Amended and Restated as of January 1, 2020.
- D. Each Member Entity agrees to contribute resources and funding towards implementation of projects of mutual interest and benefit relating to San Francisquito Creek and San Francisco Bay shoreline.
- E. The governing body of each Member Entity has determined that it is in the Member Entity's best interest and the public interest that this Second Amended and Restated Joint Powers Agreement for the San Francisquito Creek Joint Powers Authority be executed.

NOW, THEREFORE, the Member Entities, by, between and among themselves, in consideration of the mutual benefits, promises, and agreements set forth below, hereby agree as follows:

#### 1. Creation of the San Francisquito Creek Joint Powers Authority

Pursuant to the JPA Law, the Member Entities create a public agency, separate and apart from the Member Entities to be known as the San Francisquito Creek Joint Powers Authority (Authority). Pursuant to Government Code section 6508.1, the debts, liabilities,

and obligations of the Authority shall not constitute debts, liabilities, or obligations of any party to this Agreement. A Member Entity may separately contract for or assume responsibility for specific debts, liabilities, or obligations of the Authority. For purposes of, and to the extent required by, Government Code section 6509, in exercising its powers, the Authority shall be subject to the restrictions upon the manner of exercising the powers of the City of Menlo Park, except as otherwise authorized or permitted by the JPA Law.

#### 2. Purposes

This Agreement is entered into by Member Entities under the JPA Law for the following purposes:

- a. Develop and maintain projects to reduce the risk of flooding in and around San Francisquito Creek.
- b. Develop and maintain projects to reduce the risk of coastal flooding from along the San Francisco Bay shoreline.
- c. Maintain, restore, enhance the environment, and create recreational opportunities, where possible, in implementing the other purposes stated herein.
- d. Provide regional information related to flood preparedness and emergency response agencies and others to enhance their ability to communicate about and respond to flood risks.
- e. Secure and administer funding for the benefit of the Authority's operations, capital projects, and related work.

#### 3. Parties to Agreement

Withdrawal or expulsion of any Member Entity from this Agreement does not affect this Agreement nor each Member Entity's intent to contract with the Member Entities then remaining. Pursuant to Assembly Bill 825 (Chapter 292, Statutes of 2019), which amended the San Mateo County Flood Control District Act to provide for the San Mateo County Flood and Sea Level Rise Resiliency District, the Member Entities agree that the San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) is the entity formerly known as the San Mateo County Flood Control District, and as such is subject to the terms and conditions of this Agreement.

#### 4. Term of Agreement

This Agreement continues in full force until terminated in accordance with paragraph 17. Termination and Distribution.

#### 5. Powers of the Authority

The Authority shall have all powers common to the Member Entities, and such additional powers granted to it by law, necessary to fulfill the purposes of this Agreement. The Authority, through its Board of Directors, is authorized to do all acts necessary to fulfill

the purposes of this Agreement referred to in paragraph 2. Purposes including, but not limited to, each of the following:

- a. Make and enter into contracts;
- b. Incur debts, liabilities, and obligations, provided that no debt, liability, or obligation of the Authority shall be a debt, liability, or obligation of a Member Entity except as separately agreed to by a Member Entity;
- c. Receive contributions and donations of property, funds, services, and other forms of assistance from any source;
- d. Acquire, hold, and dispose of real property, including, without limitation, the power to convey real property to a Member Entity, as deemed appropriate by the Authority's Board of Directors, and as accepted by the Member Entity, provided, however, that the Authority shall not exercise the power of eminent domain in the jurisdiction of a Member Entity unless the Member Entity adopts a resolution consenting to the Authority's exercise of eminent domain within its jurisdiction.
- e. Sue and be sued in its own name;
- f. Contract with independent consultants and contractors;
- g. Receive, collect, and disburse monies;
- h. Hire staff in conformance with an approved operating budget;
- i. Assign, delegate, or contract with a Member Entity or third party to perform any of the Authority's duties including, but not limited to, acting as administrator for the Authority; and
- j. Exercise all other powers and carry out other duties as necessary and proper to fulfill the provisions of this Agreement.

#### 6. Member Entity Approvals and Responsibilities

Each Member Entity has the approval authority, obligations, and responsibilities set forth in this Agreement. The Member Entities retain the following powers:

- a. The designation of each Member Entity's Director and alternate as specified in paragraph 9. Board of Directors;
- b. Approval of an amendment to this Agreement as specified in paragraph 19. Amendments;
- c. Approval of the Member Entity's funding or other contribution for a capital project as specified in paragraph 7. Capital Project Participation; and
- d. Approval of the Member Entity's contribution to the annual budget of the Authority as specified in paragraph 12. Operating Budget.

#### 7. Capital Project Participation

The Authority may approve a contract for a capital project or any discrete phase of a capital project in accordance with the following conditions:

- a. The Authority's Board of Directors has determined that the Authority will have the funds necessary to pay for that capital project or that discrete phase of the project being approved; and
- b. Any funding or other contribution from a Member Entity to that capital project or to that discrete phase of the capital project has been approved by the Member Entity's governing body or designee. Each Member Entity shall have the right to determine independently whether to participate in any capital project.

#### 8. Membership

Member Entities may be added to the Authority by amending this Agreement, as described in paragraph 19. Amendments, and Member Entities may withdraw or be expelled, as described in paragraph 15. Withdrawal and paragraph 16. Expulsion.

#### 9. Board of Directors

- a. **Directors**. There shall be a Board of Directors to govern the Authority. The Board of Directors shall be comprised of one Director designated by each Member Entity. Each Director shall have one vote on the Board of Directors. Each Director shall have an alternate designated by the governing body of each Member Entity.
- b. **Alternates**. All references in this Agreement to a Director refer to and include the Director's alternate, when acting in place of a Director.
- c. **Voting**. A Director or alternate is not eligible to vote on any matter before the Board of Directors if: 1) such person serves on the governing body of two Member Entities, and 2) the vote would result in two persons from the governing body of the same Member Entity casting two votes on such matter.
- d. **Compensation**. Directors are not entitled to compensation by the Authority. The Board of Directors may authorize reimbursement of expenses incurred by Directors in connection with serving as a Director.
- e. **Term**. The term of office of a Director shall terminate when such person ceases to be a member of the governing body of the Member Entity or the Member Entity designates another Director and/or alternate to serve.
- f. **Powers**. The powers of the Board of Directors are each of the powers of the Authority not specifically reserved to the Member Entities by this Agreement. No Action of the Authority shall be effective or binding unless and until such action has been authorized by the Board of Directors and either 1) is consistent with the budget approved by the Board of Directors pursuant to paragraph 12. Operating Budget, or 2) complies with paragraph 7. Capital Project Participation.
- g. **Meetings**. The Board of Directors shall hold at least one regular meeting each year, at which time the Board of Directors shall elect its officers pursuant to paragraph 10. Officers. The Board of Directors shall fix the date, hour, and place
at which each regular meeting is to be held. To the extent practicable, each Board of Directors meeting shall be held in Northern Santa Clara County or Southern San Mateo County. The Chair presides at all meetings. A special meeting may be called upon written request by the Chair or at least two Directors.

- h. **Brown Act**. Each regular, adjourned regular, or special meeting of the Board of Directors shall be called, noticed, held, and conducted in accordance with the Ralph M. Brown Act (Government Code §54950, et seq.).
- i. **Notices, Agendas, Minutes**. The Board of Directors shall appoint or hire a Clerk of the Board of Directors who shall be responsible for preparing minutes of each regular and special meeting of the Board of Directors, and issuing notices and agendas in accordance with the law.
- j. **Quorum**. No business may be transacted by the Board of Directors without a quorum of members of the Board of Directors being present except that less than a quorum may adjourn from time to time. A quorum consists of a majority of the members of the Board of Directors.
- k. **Action of the Board of Directors**. Except as otherwise specified in this Agreement, or required by law, any action of the Board of Directors shall require a vote of a majority of the Directors.

#### 10. Officers

- a. The officers of the Authority are the Chair, and Vice-Chair.
- b. The officers shall be elected or appointed by the Board of Directors at its first meeting of the calendar year unless delayed by an action of the Board of Directors.
- c. The term of office for Chair and Vice Chair shall be determined by a vote of the Board of Directors. The officers shall assume the duties of their offices upon being elected or appointed, as appropriate.
- d. If the Chair or Vice Chair ceases to be a member of the Board of Directors, the Board of Directors shall elect or appoint a new officer at the next regular meeting of the Board of Directors held after the vacancy occurs.

#### 11. Fiscal Year

Each fiscal year of the Authority shall begin on July 1 of a calendar year and end on June 30 of the next following calendar year.

#### 12. Operating Budget

- a. The Board of Directors shall adopt an annual operating budget, which shall be separate from the budget for any capital project of the Authority. The operating budget shall include the proposed contribution from each Member Entity and other sources of income for the fiscal year.
- b. The operating budget shall not be effective unless and until the governing body of each Member Entity approves that Member Entity's contribution to the operating budget.

c. A Member Entity's contribution shall become due and payable to the Authority upon adoption of the annual operating budget by the Board of Directors and approval of the Member Entity's contribution to the budget by that Member Entity's governing body.

#### 13. Annual Audit and Audit Reports

The Board of Directors shall cause an annual financial audit to be made by an independent certified public accountant with respect to all Authority receipts, disbursements, other transactions, and entries into the books. A report of the financial audit shall be filed as a public record with each Member Entity. The audit shall be filed no later than as required by State law. The Authority shall pay the cost of the financial audit from its annual operating budget in the same manner as other administrative costs.

#### 14. Establishment and Administration of Funds

- a. **Accountability**. The Authority is responsible for the strict accountability of all funds and reports of all receipts and disbursements. It shall comply with every provision of law relating to the establishment and administration of funds, in particular, Government Code §6505. The funds shall be accounted for on a full accrual basis.
- b. **Investment/Disbursement**. The Authority shall receive and disburse funds only in accordance with policies and procedures established by the Board of Directors and in conformity with applicable law.
- c. **Insurance/Bonds**. The Authority shall procure, carry and maintain, in full force and effect, at all times during the term of this Agreement, such insurance and bonds to protect the Authority and the Board of Directors, officers, employees, agents, and Member Entities, as deemed appropriate by the Board of Directors.
- d. **Depository and Auditor Controller**. The Board of Directors shall designate one of its officers, employees or a third party to perform all acts required by Government Code §6505 (regarding an annual audit), §6505.1 (regarding charge of and access to property), §6505.5 (regarding the depository and custodian of money), and §6505.6 (regarding independent audit where an officer or employee acts as treasurer, auditor, or both), as such laws are amended from time to time.

#### 15. Withdrawal

- a. Member Entities may withdraw from the Authority for subsequent fiscal years by providing written notice to the Authority and each Member Entity on or before May 1 of any fiscal year. Withdrawal shall be effective on July 1 of the next fiscal year. This shall be the exclusive means by which a Member Entity may withdraw from the Authority.
- b. Any Member Entity that withdraws shall remain liable for any budget contributions or capital project participation approved before withdrawal.
- c. Any Member Entity that withdraws shall remain liable for any and all demands, claims, or liabilities of any nature, including death or injury to any person, property damage, or any other loss caused by or arising out of that Member Entity's performance or failure to perform the obligations assumed before the Member Entity withdraws from this Agreement. Any Member Entity that

withdraws shall remain subject to the provisions of paragraph 21. Indemnification with respect to any event or occurrence taking place before the Member Entity withdraws.

#### 16. Expulsion

- a. The Authority may expel a Member Entity from the Authority by a four-fifths (4/5) vote of the Authority Board of Directors for a breach of this Agreement determined by the Board of Directors to be a material breach.
- b. Any Member Entity that has been expelled pursuant to this paragraph shall have no further liability or obligation pursuant to this Agreement after the effective date of such expulsion; except such Member Entity shall remain liable for any and all demands, claims, or liabilities of any nature, including death or injury to any person, property damage, or any other loss caused by or arising out of that party's performance or failure to perform the obligations assumed before the Member Entity was expelled, including any budget contributions or capital project participation approved before expulsion.
- c. Any Member Entity that has been expelled shall remain subject to the provisions of paragraph 21. Indemnification with respect to any event or occurrence taking place before the Member Entity was expelled.

#### 17. Termination and Distribution

- a. **Termination**. This Agreement shall continue until terminated. This Agreement may be terminated by the written consent of four-fifths (4/5) of the Member Entities. The Agreement may only be terminated after disposing of all claims, distribution of assets, and performance of all other functions necessary to conclude the obligations and affairs of the Authority.
- b. **Concluding Affairs**. The Board of Directors is vested with all powers of the Authority for the purpose of concluding and dissolving the business affairs of the Authority, including for the disposition, division, or distribution of any property acquired as a result of the joint exercise of powers.
- c. **Surplus**. In the event that the Authority is terminated, any surplus money on deposit in any fund or account of the Authority shall be returned to Member Entities in proportion to the contributions made to that fund or account, as required by Government Code §6512.
- d. **Property**. All real property and any improvements thereon, that were owned by a Member Entity and contributed to the Authority shall be returned to the Member Entity, upon its approval, that contributed such property.
- e. **Member Entity Obligations**. In no event shall any funds or assets be distributed, divided or returned to a Member Entity until such Member Entity has either paid their share of all outstanding debts and obligations that were incurred while they were a Member Entity, or executed a contract with the Authority to pay for all outstanding debts and obligations that were incurred while they were a Member Entity.

#### 18. **Prohibition Against Assignment**

No Member Entity may assign a right, claim, or interest it may have under this Agreement, and any such assignment shall be void. No creditor, assignee, or third-party beneficiary of a Member Entity has a right, claim, or title to any part, share, interest, fund, or asset of the Authority.

#### 19. Amendments

This Agreement may only be amended by approval by the governing body for each and every Member Entity. A proposed amendment must be submitted to each Member Entity at least thirty (30) days in advance of the date on which it will be considered. An amendment is effective upon full execution by all Member Entities.

#### 20. Severability

If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.

#### 21. Indemnification

- a. Funds of the Authority may be used to defend, indemnify, and hold harmless the Authority, any Member Entity, any member of the Board of Directors, and each officer, employee and agent of the Authority or Member Entities, for their actions taken within the scope of their duties while acting on behalf of the Authority.
- b. In lieu of and notwithstanding the pro rata risk allocation, which might otherwise be imposed between the Member Entities pursuant to Government Code Section 895.6, the Member Entities agree that all losses or liabilities incurred by a Member Entity shall not be shared pro rata but, instead, the Member Entities agree that, pursuant to Government Code Section 895.4, each Member Entity hereto shall fully indemnify and hold each of the other Member Entities, their officers, board members, employees, and agents, harmless from any claim, expense or cost, damage or liability imposed for injury (as defined in Government Code 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Member Entity, its officers, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such Member Entity pursuant to this Agreement. No Member Entity, nor any officer, board member, employees, or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other Member Entity hereto, its officers. board members, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such other Member Entity pursuant to this Agreement. The rights, duties, and obligations of the Member Entities as set forth above in this paragraph 21. Indemnification, survive completion, termination, expiration, and suspension of this Agreement.

#### 22. Choice of Law and Venue

The Parties agree that this Agreement is to be governed, construed, and enforced in accordance with the laws of the State of California. The Parties also agree that the

venue of any litigation arising out of or connected with this Agreement will lie exclusively in the state trial court or Federal District Court located in Santa Clara County or San Mateo County in the State of California. The Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

#### 23. Counterpart

This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one instrument.

#### 24. Agreement Complete

The foregoing constitutes the full and complete Agreement of the Member Entities. There are no oral understandings or agreements not set forth in writing herein.

#### 25. No Third-Party Beneficiaries

Nothing in this Agreement, whether express or implied, shall be construed to give any person or entity, other than the Parties hereto, any legal or equitable right, remedy, or claim under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

#### 26. Nonwaiver of Rights

The failure of either Party to this Agreement to object to or to take affirmative action with respect to any conduct of the other Party that is in violation of the terms of this Agreement will not be construed as a waiver thereof, or as waiver of any future breach or subsequent wrongful conduct.

#### 27. Agreement Execution

Unless otherwise prohibited by law or policy of any Member Entity, the Member Entities agree that an electronic copy of a signed agreement, or an electronically signed agreement, has the same force and legal effect as an agreement executed with an original ink signature. The term "electronic copy of a signed agreement" refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed agreement in a portable document format. The term "electronic signature using technology in compliance with the Electronic Signature Act (California Civil Code §1633).

#### 28. Equal Opportunity

a. Equal Opportunity Employer

The Member Entities are equal opportunity employers and requires their consultants to have and adhere to a policy of equal opportunity and nondiscrimination. In the performance of the Agreement, Consultant will comply with all applicable federal, state, local laws and regulations, and will not discriminate against any subcontractor, employee, or applicant for employment in the recruitment, hiring, employment, utilization, promotion, classification or reclassification, transfer, recruitment advertising, evaluation, treatment, demotion, layoff, termination, rates of pay or other forms of compensation, and selection for professional development training (including apprenticeship), or against any other person, on the basis of sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), race, religion, color, national origin (including language use restrictions), ancestry, religious creed (including religious dress and grooming practices), political affiliation, disability (mental and physical, including HIV or AIDS), medical condition (cancer and genetic characteristics), genetic information, marital status, parental status, gender, age (40 and over), pregnancy, military and veteran status, sexual orientation, gender identity and gender expression, the exercise of family and medical care leave, the exercise of pregnancy disability leave, or the request, exercise, or need for reasonable accommodation.

b. Compliance with Applicable Equal Opportunity Laws

Consultant's policy must be in conformance with applicable state and federal guidelines including the Federal Equal Opportunity Clause, 41 Code of Federal Regulations, Part 60-1, §60-1.4; Title VII of the Civil Rights Act of 1964 as amended; the Americans with Disabilities Act of 1990; the Rehabilitation Act of 1973 (§503 and §504); the Age Discrimination Act of 1975 (42 U.S.C. §6101 et seq.); the California Fair Employment and Housing Act (Government Code §12900 et. seq.); and California Labor Code §1101 and §1102.

c. Investigation of Claims

Consultant must designate a specific position within its organization to be responsible for investigating allegations of non-compliance with the antidiscrimination and anti-harassment provisions of this Agreement. Consultant must conduct a fair, prompt, and thorough investigation of all allegations directed to Consultant by any Member Entity. In cases where such investigation results in a finding of discrimination, harassment, or hostile work environment, Consultant must take prompt, effective action against the offender.

#### 29. Notices

Unless otherwise specified in this Agreement, all requests for written approval or legal notices must be sent to the representatives' addresses on file with the Authority. All notices are deemed to have been given when made in writing and when delivered or mailed to the representatives at their respective addresses.

IN WITNESS WHEREOF, the Member Entities hereto have executed this Agreement on the dates as set for the below.

(SIGNATURES TO FOLLOW ON SEPARATE PAGES)

DATED: \_\_\_\_\_, 2023

**CITY OF MENLO PARK** 

Ву: \_

Name Mayor

#### ATTEST:

By: Name City Clerk

**APPROVE AS TO FORM:** 

City Attorney

3 CITY OF PALO ALTO

By:

Name Mayor

#### ATTEST:

By:

Name City Clerk

APPROVE AS TO FORM:

City Attorney

DATED:	, 2023
	,

CITY OF EAST PALO ALTO

By:

Name Mayor

#### ATTEST:

By:

Name City Clerk

APPROVE AS TO FORM:

City Attorney

#### SANTA CLARA VALLEY WATER DISTRICT

By:

John L. Varela Chair, Board of Directors

#### ATTEST:

By:

Michele L. King, CMC Clerk, Board of Directors

APPROVE AS TO FORM:

District Counsel J. Carlos Orellana

#### SAN MATEO COUNTY FLOOD AND SEA LEVEL RISE RESILIENCY DISTRICT

By:

Name Chair, Board of Directors

#### ATTEST:

By:

Name Clerk, Board of Directors

APPROVE AS TO FORM:

Brian Kulich Lead Deputy County Counsel General Counsel

#### **RESOLUTION NUMBER 23-02-23-C**

#### RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY ACCEPTANCE OF THE 2023 SECOND AMENDED AND RESTATED SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY MEMBERS AGREEMENT

**BE IT RESOLVED** by the Board of Directors of the San Francisquito Creek Joint Powers Authority that the Board of Directors hereby accepts the Second Amended and Restated San Francisquito Creek Joint Powers Authority members agreement and does direct staff to coordinate the ratification of the same by the individual member agencies of the San Francisquito Creek Joint Powers Authority.

Approved and adopted on February 23, 2023, the undersigned hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of the San Francisquito Creek Joint Powers Authority.

INTRODUCED AND PAS AYES: NOES: ABSENT: ABSTAIN:	SSED:		
ATTEST:		APPROVED:	
Vice Chairperson	Date: 02/23/2023	Chairperson	Date: 02/23/2023
APPROVED AS TO FOR	RM:		

Legal Counsel Date: 02/23/2023

Agenda Item 6. C. Authorizing the Executive Director to negotiate scope and cost for a post-storm creek survey.

#### Background

The series of storms at the end of 2022 and early in 2023 impacted the creek channel by causing scour and bank erosion. These changes impact creek-side property owners and infrastructure. Erosion and changes to channel configuration may also have implications for our project designs.

#### Discussion

The SFCJPA and its project partners at the US Army Corps of Engineers, Valley Water and Stanford University all have an interest in answering the questions "Why did the creek behave differently than predicted" and "are there changes in creek channel configuration that should inform the design of our channel widening, top-of-bank, or bridge designs?"

Staff has reached out to our project partners for information and to explore participation in answering these questions.

Funding for this expense can be drawn from shifting under- or un-spent resources in other budget categories.

#### Recommendation

Authorize the Executive Director to proceed with coordinating a creek channel survey, at a cost not to exceed \$45,000, and to negotiate scope, cost, collaboration, and support, and having this performed expeditiously to inform hydraulic models and project design work.

#### Agenda Item 7. A. Study Session – Urban Reach 2 Project Update

#### Lessons from the New Year's Eve storm

As described last month, the storm event on December 31, 2022 was the second highest on record since the U.S. Geological Survey began keeping records in 1931 at their <u>stream gage</u> in Stanford University's golf course. The New Year's Eve flood is estimated to be a 50-year flood event. This flooding event was followed by three more intense storms termed atmospheric rivers through January 18, 2023 that did not result in additional flooding, but caused bank erosion in several areas and caused sediment accumulation in other areas of the creek.

Erosion along Woodland Avenue has prompted a right lane closure at Woodland Avenue and University Avenue until conditions can be addressed. East Palo Alto is concerned that the creek bank along much of Woodland Avenue is undermined. Other areas of bank erosion occurred along the creek banks adjacent to the Allied Arts Guild and residential properties in Menlo Park and Palo Alto.

Bank erosion is a longstanding issue for San Francisquito Creek. In response, the SFCJPA developed a <u>Bank Stabilization Master Plan</u> that describes the types of revetments that are applicable for San Francisquito Creek. The US Geological Survey estimated that the creek is generally migrating northward, and the land survey of the Reller parcel boundary in 2020 confirmed that the creek center line had moved by as much as four feet since the previous survey in the 1935. With the floodplain fully developed, the creek has been constrained and that is the ultimate cause of bank erosion.

#### Hydraulic Model vs. Observed Creek Behavior

The storm event that caused flooding in 2012 provided an opportunity to validate and re-calibrate the hydraulic model Valley Water and the Army Corps of Engineers have used as the basis of design for the elements of the Reach 2 project.



Similarly, the 2022 New Year's Eve storm has provided an opportunity to recalibrate the model based on observed overtopping and erosion areas. Comparing the predicted flows and observed bank over-topping from the model shows that in many areas the creek behaved as predicted but in a few other areas, it behaved differently than expected.

What was different:

- The creek over-topped its banks at a lower cubic feet per second flow than we thought it would.
- Some of the locations of bank over-topping were different than the model predicted.
- The modeled roughness of the creek appears to have changed since the model was developed in 2009. This may mean that more vegetation has grown in the creek since 2009. The presence of invasive species may contribute to increased woody debris.

Other observations:

- The 2022 New Year's Eve storm caused significant erosion of creek banks and localized scour of the creek channel.
- Cities were actively removing debris during all storm events, that included both trash and downed trees and limbs. This proactive removal may have been beneficial to prevent blockages.
- Many trees lost limbs or entire trees fell into the channel, either because bank erosion undermined tree roots, or because the trees themselves were weak due to years of drought. This included several trees in the upper watershed within Reach 3.

San Francisquito Creek Joint Powers Authority February 23, 2023, Special Meeting, Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.)

 Instruments key to our prediction of storm flows were damaged by high flows and winds early in the storm. We are collaborating with Stanford and our consultants to re-install these instruments in ways that will be less vulnerable going forward. We are also considering placing additional measurement instruments to ensure some redundancy.

What the new post storm information means:

- Although we know the creek behaved differently than we anticipated, we don't know exactly why. We plan to conduct a detailed survey of the creek channel to determine the locations and extents of bank erosion and tree loss.
- The location and number of trees lost in the storms will also need to be considered in the Reach 2 project plans.
- Changes in the creek channel may be significant enough to result in design changes in our Reach 2 project elements.

#### **Objectives of the Reach 2 Project**

#### **Overarching Project Tasks and Objectives**

- Project Objectives
  - 70-year storm flow The Reach 2 Project's objective is to provide protection from flooding up to a flow approximately equal to the flood of record, or the 1998 flood, which FEMA considers an approximate 70-year flood. This level of protection is a risk reduction strategy.
  - No transfer of risk The Reach 2 project elements must be constructed in a sequence and of sufficient capacity to ensure each one does not transfer flood risk. For example, if we replaced the Pope-Chaucer Bridge before doing other work, the increased channel capacity would send more water downstream to the still-vulnerable residents near the narrow sections of the creek and the Newell Bridge.
- Regulatory Permits
  - Status, Schedule, Anticipated Completion In July 2022 draft regulatory permits for Reach 2 project elements were submitted to the resource agencies. We have received informal feedback from the agencies and are integrating that into our final permit application materials. The final application will not include the channel widening element, as that is being permitted by the USACE through their process.
- City Permits
  - Ensuring reviews are consistent and coordinated We have met with each of our member cities to ensure the project review and approval process is coordinated, consistent and streamlined. We will need final approvals from the Cities by December 2023 for construction in 2024.

San Francisquito Creek Joint Powers Authority February 23, 2023, Special Meeting, Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.)

- Rights of Way (access and easement agreements)
  - Status, Schedule, Anticipated Completion -
    - Requests for Permissions to Enter have been sent to all creek-side property owners in or near Reach 2 project work areas. We must have permission to conduct necessary surveys to ensure the project knows exact locations of trees, buildings, and other property features which must be considered in project designs. There are still some properties where these permissions have not been obtained – either because the property owner is absent and can't be located or because the property owner has denied access. We anticipate that some of these properties will negotiate access agreements, and for others we may need to proceed with a legal process to gain access for survey work.
    - Surveys are also necessary for complete and accurate identification of temporary and permanent easement needs. Negotiating necessary easements must be completed before advertising for construction bids.
    - Considering the known objections of some project neighbors in Palo Alto, unless we can resolve their objections, this will lead to additional delay.
- Trees
  - Ensuring reviews and permits are consistent and coordinated The Reach 2 project will impact trees along the creek in all three cities. In addition to ensuring the project review is coordinated and consistent in all three cities, we are working with our members to update the list of trees that must be removed based on the trees that came down during the recent storm events.
  - We recommend increased removal of invasive tree species even though this may affect the total number of trees to be removed in Reach 2. This may be accomplished as part of increased maintenance or fire prevention measure rather than Reach 2 project-specific action.
  - Stanford University is also assessing trees near and in the creek in the upper watershed and is developing a prioritized list of actions.
- Community Outreach and Engagement- during the storms the SFCJPA sent out updates to more than 500 subscribers. We also fielded many calls and email requests. We attended the City of Palo Alto's community meeting in January.
  - Status, Plans Together with our member cities, the SFCJPA is planning on a set of outreach efforts to ensure community members are aware of the project, know how to get information about the project, and can share their questions or feedback.
    - Project update presentations for the community, which may be done both in-person and via video conference, will be scheduled soon.

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Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.)

- "Office Hours" We plan to publish and host regular "office hours" during the day – set aside specifically for community members to meet with SFCJPA staff (and leadership if they are available). These may be at the SFCJPA offices, or at another convenient location.
- We plan to address member's councils and boards with brief project updates on a regular basis.
- SFCJPA newsletter The newsletter which includes project updates, will continue quarterly.
- As always, we are happy to host project tours.

#### Components of the Reach 2 Project – in order of implementation

• Newell Bridge –

Status, Schedule, Anticipated Completion – The Newell Bridge design will be at 90% by the end of February. The bridge design will be included in the final regulatory permit applications. Final permits are anticipated before the end of 2023 – we are aiming for the end of September. Updated costs and 90% designs will be submitted to the CalTrans Highway Bridge Program, which will be contributing most of the funding for the project. Construction is expected in 2024.

• Channel Widening –

Status, Schedule, Anticipated Completion, Potential Impediments – The U.S. Army Corps of Engineers is leading on the implementation of the channel widening sites. Valley Water is assisting with the engineering and design and has assisted with access and easement agreements. The Army Corps is completing their draft Feasibility Study Report, which confirms the economic and technical viability of the proposed work. So far, the economic analysis indicates a favorable economic benefit, particularly for the community of East Palo Alto. Channel widening can happen at the same time as, or after the Newell Bridge construction, but must be completed before the Pope-Chaucer Bridge replacement is completed. Potential impediments include: inability to negotiate access and easement agreements, and the Army Corps internal process for permitting and project approval. The Army Corps will advertise for bids and manage the construction contractor. This is a requirement for federally funded Army Corps projects.

• Top-of-Bank Features –

Status, Schedule, Anticipated Completion, Potential Impediments – The top-ofbank floodwalls, which extend along the top of the creek bank downstream of Newell Bridge, along Woodland Avenue in East Palo Alto, and behind homes along Edgewood Drive in Palo Alto are late additions to the project portfolio. The additional work is now the subject of a Supplemental EIR, which will be complete San Francisquito Creek Joint Powers Authority February 23, 2023, Special Meeting, Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.) by the end of this year. Valley Water is designing the repairs to or replacement of these flood walls. 60% designs are expected by the end of March. 90% designs by the end of June and 100% designs by the end of October. Top of bank features can be completed at the same time as, or after Newell Bridge.

• Pope-Chaucer Bridge -

Status, Schedule, Anticipated Completion, Potential Impediments – The design status of the new Pope-Chaucer bridge is at 85%. The bridge design has been reviewed and commented on by the Palo Alto Architectural Review Board and comments have been addressed in the current design (the pedestrian 'bump-outs' have been removed). We anticipate 90% design by the end of February, and 100% designs by the end of October. Replacement of the Pope-Chaucer Bridge would be the final action of the Reach 2 project, with anticipated construction in 2025. Potential impediments include: the timing of funding, and the successful completion of the other project components.

#### **Project Costs and Funding Status**

#### Estimated Costs

Updated cost estimates for all project elements (*not including what may need to be added post-storm*)

- Newell Bridge ~\$15.5M
- Channel Improvements ~\$23.2M
- Top-of-Bank ~\$15M
- Pope-Chaucer \$~11.3M
- TOTAL Cost Estimate = ~ \$65M

#### Funding

- Newell Bridge ~\$15M (CalTrans, Valley Water)
- Channel Improvements ~\$23.14M (USACE CAP205, DWR, Valley Water)
- Top-of-Bank ~\$4.5M (Valley Water)
- Pope-Chaucer \$~11.3M (FEMA/CalOES + Valley Water
- TOTAL Present Funding = ~\$53.9M

#### The Funding Gap:

- There are uncertainties in the funding gap due to:
- Potential changing design requirements
- Grant schedules or grantor funding limitations
- The best-case scenario funding gap is: ~\$15.5M
- A conservative scenario funding gap is: ~\$37M

San Francisquito Creek Joint Powers Authority February 23, 2023, Special Meeting, Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.)

- A worst-case scenario funding gap is: ~\$41M
- Project design refinements, and new or updated grant awards, will change these numbers.

#### Agenda Item 7.B. Executive Director's Report

#### **Project and Operations Updates**

Reach 3 - As the board has seen, upstream offline detention basins are technically feasible. Staff will be bringing to the board a more complete analysis of the economic and necessary capacity calculations later this spring. In addition, staff is actively looking for grant funding to further the planning and design.

SAFER Bay Project – Together with project consultants HDR and their team we have kicked off Task Order 4 to implement the planned evaluations needed for CEQA for the SAFER Bay Project, using funding from DWR and the San Francisco Bay Restoration Authority Measure AA. The SFBRA's Measure AA funding comes from a voter-approved parcel tax for the nine-county Bay Area. The Restoration Authority governing board will vote on an additional \$3.9M in funding at their March 3, 2023, Board meeting.

Stanford University released the Notice of Intent/Notice of Preparation for a combined EIS/EIR for their planned project at Searsville on February 8, 2023.

Two virtual public scoping meetings will be held on Tuesday, February 28, 2023, at:

• <u>3:00 p.m. to 4:30 p.m.</u> Meeting link: (<u>https://kearnswest.zoom.us/j/82343204260</u>

Dial-in Number: 1-309-205-3325

Meeting ID: 823 4320 4260

• <u>6:00 p.m. to 7:30 p.m.</u> Meeting link: <u>https://kearnswest.zoom.us/j/89875146206;</u>

Dial-in Number: 1-309-205-3325

Meeting ID: 898 7514 6206

Click <u>here</u> to access the US Army Corps of Engineers Federal Register Notice of Intent. Comments to the Army Corps are due by **March 9**, **2023**.

Click <u>here</u> to access the Department of Water Resources Notice of Preparation. Comments to the Department of Water Resources are due by **March 17, 2023**. San Francisquito Creek Joint Powers Authority February 23, 2023, Special Meeting, Reach 2 Study Session (7.A.) and Executive Director's Report (7.B.) Click <u>here</u> to access Stanford's Searsville Watershed Restoration Project website.

#### **Operations/Administration –**

NetFile - Staff has completed all necessary documentation and submitted our application to the California Secretary of State's Office to implement NetFile. NetFile will enable the SFCJPA to automate Board and Staff Form 700 filing and enable electronic submittals (more convenient for everyone).

QuickBooks – Staff is transitioning our accounting system to the new cloud-based QuickBooks platform.

#### Forward view of upcoming agendas

March 23 - Return to in	
person	
April 27	Draft SFCJPA operations budget for FY2023-2024
May 25	Detention basins study session



Artificial bodies of water, modern

## SAN FRANCISQUITO CREEK

San Francisquito Creek subvatershed

Starts Monard

**Bear Creek** 

### Regular Meeting of the Board of Directors February 23, 2023

lountain View

Corte Madera Croek subwetershed Los Trancos Greek subwatershed NATIONAL LEVEL



1. ROLL CALL

Contra Madiana Cross

### AGENDA

\*Members of the Public may speak on any agenda item for up to three minutes\*

2. APPROVAL OF AGENDA: Changes or additions to the agenda.

San Francisouito Creek

3. Approval of Meeting Minutes: January 26, 2022.

4. PUBLIC COMMENT: Individuals may speak on a non-agendized topic for up to three minutes on a topic within the SFCJPA's jurisdiction.

### AGENDA ITEM 5 – CONSENT AGENDA

 5.A. Consider adopting a resolution (23-02-16-A) reconsidering the circumstances of the COVID-19 state of emergency and making findings to authorize public meetings to be held via teleconferencing pursuant to Government Code Section 54953(e).

Bear Crock subwelershed

> Corte Mediens Creek subwellershed

Alfaliati boolines of sentent revisions

Los Trancos Creek subwatershed



### AGENDA ITEM 5 – CONSENT AGENDA

#### Agenda Item 5.B. - Draft 2023 Board Meeting Schedule

Regular Board of Directors Meetings Meetings are held monthly on the Fourth Thursday of the month beginning at 3:30 p.m.

January 26, 2023 Video/teleconference

March 23, 2023 City of Menlo Park Council Chambers 701 Laurel Street Menlo Park, CA

May 25, 2023 City of Palo Alto Council Chambers 250 Hamilton Ave Palo Alto, CA

July 27, 2023 (Board recess. No meeting)

September 28, 2023 City of Palo Alto 250 Hamilton Ave Palo Alto, CA

November 16, 2023 City of East Palo 2415 University Ave East Palo Alto, CA February 23, 2023 Video/teleconference

April 27, 2023 City of East Palo Alto Council Chambers 2415 University Ave East Palo Alto, CA

June 22, 2023 City of Menlo Park Council Chambers 701 Laurel Street Menlo Park, CA 94025

August 24, 2023 City of East Palo Alto Council Chambers 2415 University Ave East Palo Alto, CA

October 26, 2023 City of Menlo Park 701 Laurel Street Menlo Park, CA

December 21, 2023 City of Menlo Park 750 Laurel Street Menlo Park, CA (City of Palo Alto not available.) NATURAL LEVEL



### AGENDA ITEM 5 – CONSENT AGENDA

O REEK WATERSA

### 5.C. Accept the 2023 Update of the SFCJPA Comprehensive Plan and adopt resolution 23-02-16-B

San Francisculto Creek

Bear Crook subwetershed

Corte Medera Creek subwetershed Los Trancos Greek

NATURAL LEVELS



### AGENDA ITEM 6 – ACTION ITEMS

6.A. Board organization and committee assignments

Board Chair Board Vice Chair Finance Committee Personnel Committee ACWA-JPIA Director & Alternate

Mountain

CATLORING DEPOSIT

os Trancos Creek

Corte Maders Creek subwatershed



### AGENDA ITEM 6 – ACTION ITEMS

O DEEK MAPERSA

6.B. Review Second Amended Re-Stated SFCJPA Member's Agreement and adopt resolution 23-02-16-C

Bear Crook subwetershed

> Corte Mediera Creek subwetershed

Los Trancos Greek

NATURAL LEVELS



6.C. Authorize Executive Director to negotiate scope and cost for a survey of post-storm creek conditions - up to a maximum of \$45K.

Bear Crock subwetershed

Corte Madera Creek subwatershed Los Trancos Crask subwatershed NATURAL LEVEL



### AGENDA ITEM 7.A. – Information Item

### SPECIAL PRESENTATION

### **Reach 2 Project**

### "Upstream" or "Urban Reach"

Darts Horard

Bear Creek subwetershed

> Corte Maders Creek subwelershed

Los Trancos Creek subwatershed NATURAL LEVELS

# Lessons from the New Year's Eve storm

Hydraulic Model vs. Observed Creek Behavior Actual breakout locations different than predicted in model Significant channel erosion and scour occurred Changes in creek behavior will require validating and probably re-calibrating our project designs. o Surveys, Hydraulic model confirmation, and design evaluation will be done over the next 2 – 3 months.

### Creek Break-Out Locations on 12-31-2022



# Reach 2 Project Objectives: Contain 70-year storm flow No transfer of risk

Bear Crook subvestershed

Corte Haders Creek subwatershed Los Trancos Greek subwatershed NATURAL LEVELS

Regulatory Permits

 Status – Draft permits submitted. Comments
 received. USACE handling their own according to
 their process.

Final Permits to be submitted by June 2023
Permits anticipated by September 2023

Aountair View

INTERNAL LEVER

City Permits
Ensuring reviews are consistent and coordinated
All City reviews and approvals anticipated by December 2023.

Bear Crock subwetershed

> Corte Mediers Croek subwatershed

Los Trancos Grank subwatershed SATURAL LEVER

View

- Rights of Way (access and easement agreements)
   Status
  - Schedule
    Anticipated Completion

Bear Creek

Corte Madera Creek subwatershed Los Trancos Greek subwetershed SATURAL LEVER

View
## **Over-arching Project Objectives and Tasks**

## Community Outreach and Engagement o Status

SOUNDARY

#### o Plans

Artificial bodies of water, midden

Bear Crook subwetershed

> Corte Madera Creek subwatershed

Los Trancos Greek subwatershed THE REAL PROPERTY AND



# Components of the Reach 2 Project – in order of implementation

Newell Bridge – Presented by Palo Alto • Status • Funding • Schedule • Anticipated Completion

Mountain View

Corte Maders Creek subwatershed Los Trancos Creek subwatershed SATURAL LEVER



## Components of the Reach 2 Project -Continued

Channel Widening – Presented by U.S. Army Corps of Engineers • Status • Schedule • Anticipated Completion

Vountain View

Corte Madera Croek subwatershed Los Trancos Greek subwatershed SHOULD BEER



## Components of the Reach 2 Project -Continued

San Francisquito Dreek

- **Top-of-Bank Features**
- Status
- Funding
- Schedule
- Anticipated Completion

Mountain

Corte Madera Creek subwatershed Los Trancos Creek subwetershed



## Components of the Reach 2 Project -Continued

San Francisbuito Creek

- Pope-Chaucer Bridge –
- Status
- Funding
- Schedule
- Anticipated Completion

Mountain

Corte Madera Creek subwatershed Los Trancos Grank subwatershed

## **Project Costs and Funding Status**

#### Costs

Updated cost estimates for all project elements (*not including what may need to be added post-storm*)

ATLENE LEVEL

- Newell Bridge ~\$15.5M
- Channel Improvements ~\$23.2M
- Top-of-Bank ~\$15M

Corte Madena Creek

Pope-Chaucer – \$~11.3M

#### • TOTAL Cost Estimate = ~ \$65M

### **Project Costs and Funding Status**

#### **Funding identified**

Conte Madena Creek

- Newell Bridge ~\$15M (CalTrans, Valley Water)
- Channel Improvements ~\$23.14M (USACE CAP205, DWR, Valley Water)
- Top-of-Bank ~\$4.5M (Valley Water)
- Pope-Chaucer \$~11.3M (FEMA/CalOES + Valley Water

#### • TOTAL Present Funding = ~\$53.9M

# **Project Funding Gap**

There are uncertainties in the funding gap due to:

- Potential changing design requirements
- Grant schedules or grantor funding limitations

The best-case scenario funding gap is: ~\$15.5M A conservative scenario funding gap is: ~\$37M A worst-case scenario funding gap is: ~\$41M

Project design refinements, and new or updated grant awards, will change these numbers.



Artificial bodies at water, modern

### Reach 2 Project "Upstream" or "Urban Reach"

#### **Questions and Discussion**

Sarra Moralia

Bear Croek automateriahed

#### Conclude Agenda Item 7.A.

Corte Maders Creek subwatershed Los Trancos Creek subwetershed ATUMAL LEVEL

Mountain View



## AGENDA ITEM 7.B. – Information Item,

- Executive Director's Report -
- Project Updates
- Operations/Administrative Updates

Bear Crook subwetershed

> Corte Mediens Croek subwellershed

Los Trancos Creek subwatershed NATURAL LEVELS



## Agenda Item 8

REEK WAPERS BOUNDARY

#### BOARD MEMBER COMMENTS, INFORMATION ITEMS, REQUESTS and ANNOUNCEMENTS (Information only)

San Francisculto Creek

SHELR BUSINESS

Bear Croek autowetershed

Corte Madera Creek

Los Trancos Greek

NATURAL LEVELS

