



SAN FRANCISQUITO CREEK  
JOINT POWERS AUTHORITY  
[SFCJPA.ORG](http://SFCJPA.ORG)

## **San Francisquito Creek Flood Protection, Ecosystem Restoration, and Recreation Project**

### **Field Investigations and Feasibility Analysis for Offline Detention Basins**

#### **REQUEST FOR PROPOSALS**

The San Francisquito Creek Joint Powers Authority (SFCJPA) is a regional government agency that plans and implements projects that advance flood protection, ecosystems, and recreational opportunities across jurisdictional boundaries on the San Francisco Peninsula. Included within this area are the cities of East Palo Alto, Menlo Park, Palo Alto, and unincorporated portions of the counties of San Mateo and Santa Clara. Continuing with its next phase of project planning, the SFCJPA is soliciting proposals from qualified individuals or firms (Consultant) to perform field investigations and a constructability and performance analysis for offline detention basins to supplement built and planned flood protection features as part of its San Francisquito Creek Flood Protection, Ecosystem Restoration, and Recreation Project Upstream of Highway 101. The offline detention basins were evaluated at a program level in the [Final EIR](#) for this project, certified by the SFCJPA Board in September 2019.

#### **PROPOSALS MUST BE SUBMITTED BY:**

**November 11, 2020 at 2:00 pm local time to:**

Kevin Murray, Senior Project Manager  
San Francisquito Creek Joint Powers Authority  
2100 Geng Road, Palo Alto, CA 94303  
e-mail: [kmurray@sfcjpa.org](mailto:kmurray@sfcjpa.org)  
phone: 650-484-0779

Proposals are to be submitted in electronic copy only. The electronic copy may be provided by email or similar electronic transfer, or on a CD or flash drive delivered to the SFCJPA offices. Proposals are to be limited to 30 pages, font size 11, including any supporting materials. Proposals shall be valid for a minimum one hundred and fifty (150) days.

#### **Introduction and Background:**

The San Francisquito Creek watershed encompasses an approximate 45-square-mile area, extending from Skyline Boulevard to San Francisco Bay. The watershed includes public lands and numerous private landowners in the cities of East Palo Alto, Menlo Park, Palo Alto, Portola Valley and Woodside, unincorporated areas of San Mateo and Santa Clara counties, and Stanford University.

The creek represents the boundary between the two counties in the lower watershed. The last relatively unaltered urban creek system in the South Bay, San Francisquito Creek begins at the confluence of Corte Madera Creek and Bear Creek, just below Searsville Dam in Stanford University's Jasper Ridge Biological Preserve. The mouth of the creek opens to the San Francisco Bay adjacent to the Palo Alto Airport and the Baylands Nature Preserve. The watershed contains over 71 miles of creek bed; the main stem is 14 miles long.

The lower reach of the creek runs through urbanized areas of, and creates a 5 square mile floodplain within, the cities of East Palo Alto, Menlo Park, Palo Alto. In 1998, the creek overbanked, causing \$28 million in documented damages to homes and businesses in these cities. Other

significant high-flow events have occurred in 1955, 1958, 1982, 2002, 2005, 2012 and 2017. Through hydrologic modeling of the watershed performed by Santa Clara Valley Water District in 2016, the 1998 event has been categorized as a 70-year flood flow. The U.S. Army Corps of Engineers (Corps) has estimated that damages from a 100-year flow event on San Francisquito Creek would cause 25-times the financial damages experienced in the 1998 flood, and would pose a far greater threat to lives, property, and regional commerce.

In response to the 1998 flood of record, local jurisdictions formed the San Francisquito Creek Joint Powers Authority in May of 1999 as a new government agency to develop strategies to reduce flood risk from the creek that both divides the communities geographically and unites them in pride and appreciation of the natural resource. Founding members of the SFCJPA are the cities of East Palo Alto, Menlo Park and Palo Alto, the Santa Clara Valley Water District and the San Mateo County Flood Control District, which has recently been changed to the San Mateo County Flood and Sea Level Rise Resiliency District.

### **Project History:**

The SFCJPA's comprehensive plan for flood protection, ecosystem restoration and recreation enhancements will be implemented in phases over three reaches of San Francisquito Creek.

- Reach 1 – San Francisco Bay to U.S. Highway 101
- Reach 2 – Highway 101 to the upstream side of the Pope-Chaucer Bridge
- Reach 3 – Upstream of the Pope-Chaucer Bridge

The SFCJPA completed the first and necessary step of our comprehensive plan in Reach 1 from San Francisco Bay to Highway 101 in 2019, with flood protection elements substantially complete by December 2018. The “Bay to 101” project provides protection against a 100-year flow event with a Bay water level ten feet above today's daily high tide. The project also created or improved 22 acres of marsh and marsh plain terrace.

The SFCJPA Board of Directors certified a Final EIR for the second reach of creek, between Highway 101 and just upstream of the Pope-Chaucer Bridge in September 2019. Project features include the replacement of the Pope Chaucer Bridge and widening of the channel at 5 locations within the reach. Due to restrictions on channel improvement resulting from development close to the tops of bank, this project will provide increased conveyance and reduced flood risk but does not provide full 100-year protection. The SFCJPA plans to begin construction in 2022.

The Final EIR included a program level evaluation of potential stormwater detention basins in Reach 3, upstream of the Pope-Chaucer Bridge; it compared two basins to other actions that could provide supplemental flood risk reduction to the level needed to achieve the overall project objective of removing all parcels upstream of Highway 101 in the San Francisquito Creek flood plain from the FEMA flood zone.

### **Related Project:**

Searsville Dam and Reservoir – In April 2015, Stanford University completed the [Searsville Alternatives Study](#), a multi-year evaluation that recommended future actions to deal with sediment accumulation within the reservoir, protected species in the San Francisquito Creek watershed, and the desire by downstream communities for protection against flooding.

Of the many options studied, the Committee's preferred alternative is passive flow management. The proposal calls for creating an opening/tunnel at the base of the dam and then using creek flows to send reservoir sediment downstream (known as “sluicing”) in order to create a new channel upstream of the new dam opening and provide for safe fish passage.

Because the reservoir behind the dam would no longer stockpile sediment from the upper watershed, this option only works with the collaboration of downstream agencies, including the

SFCJPA, to prepare San Francisquito Creek for the sluicing of sediments to the Bay and the renewed annual sediment flows.

It is anticipated that these actions, once implemented, could provide a reduction in peak discharge downstream during a 100-year flow event by at least 800 cubic feet per second (cfs). Stanford University owns the dam and reservoir and would be the implementing entity for the Searsville project in close coordination with the SFCJPA and other agencies and stakeholders.

**Contract Purpose:**

The purpose of this contract is to conduct analyses for potential stormwater detention basins in the upper watershed of San Francisquito Creek. The basins, if constructable and effective, would supplement existing and planned improvements in the lower watershed with the objective of providing cumulative flood protection against a 100-year storm event and adequate freeboard such that the homes, businesses, and public facilities in the San Francisquito Creek floodplain can be removed from the FEMA floodplain.

The work will consist of field investigations and preliminary engineering to determine the constructability and performance of developed concepts for upstream detention. The final work products of this contract shall be a series of technical memoranda to inform the SFCJPA's determination of whether or not to advance detention basins to a project level EIR.

**Project Schedule:**

This project will begin with contract execution on December 17, 2020 and be completed over a period not to exceed 12 months.

**Proposal Requirements:**

Each proposal should contain the following:

- A cover letter with contact information
- Title page and table of contents
- Executive Summary
- Organizational chart of the project team
- An approach that addresses each task of carrying out the scope of services described in this RFP, and any suggested modifications to the Project Tasks
- Project team qualifications and experience
- Project schedule
- Cost proposal by task
- List of team members that will be assigned to the project, their role on the project, experience, and qualifications.
- Description of previously completed projects of similar scope
- List of any subcontractors, their role, qualifications, and qualifications of personnel assigned to the project.
- Non-Collusion Declaration
- Conflict of Interest Statement

Staff from the SFCJPA and its partner agencies will evaluate the proposals provided in response to this RFP and assign a score of up to 100 points based following criteria:

- quality of the approach and solution, goods and/or services to be provided (50 points)
- quality and completeness of proposal (20 points)
- experience and expertise, including the experience of staff to be assigned to the project, the engagements of similar scope and complexity (20 points)
- project cost to the SFCJPA (10 points)

5 points will be added for teams lead by or teaming with locally owned (Santa Clara County or San Mateo County headquartered) or Woman, Minority or Veteran-owned businesses.

The SFCJPA's Standard Agreement template is available for review at [www.sfcjpa.org](http://www.sfcjpa.org) or by request from the Project Manager. Potential applicants should consider their ability to comply with the provisions contained within the SFCJPA Standard Agreement prior to submitting a proposal. No exceptions to this agreement will be entertained.

**Selection Process Timeline:**

RFP Issuance	October 14, 2020
Optional Virtual Workshop*	October 21, 2020
Proposals Due	November 11, 2020
Interviews	November 17 - 18, 2020
Consultant Selection	November 23, 2020
Contract Development	November 24 – December 9, 2020
Pre-Contract meeting	December 15, 2020
Contract Execution	December 17, 2020
Project Kick-Off	Early January 2021

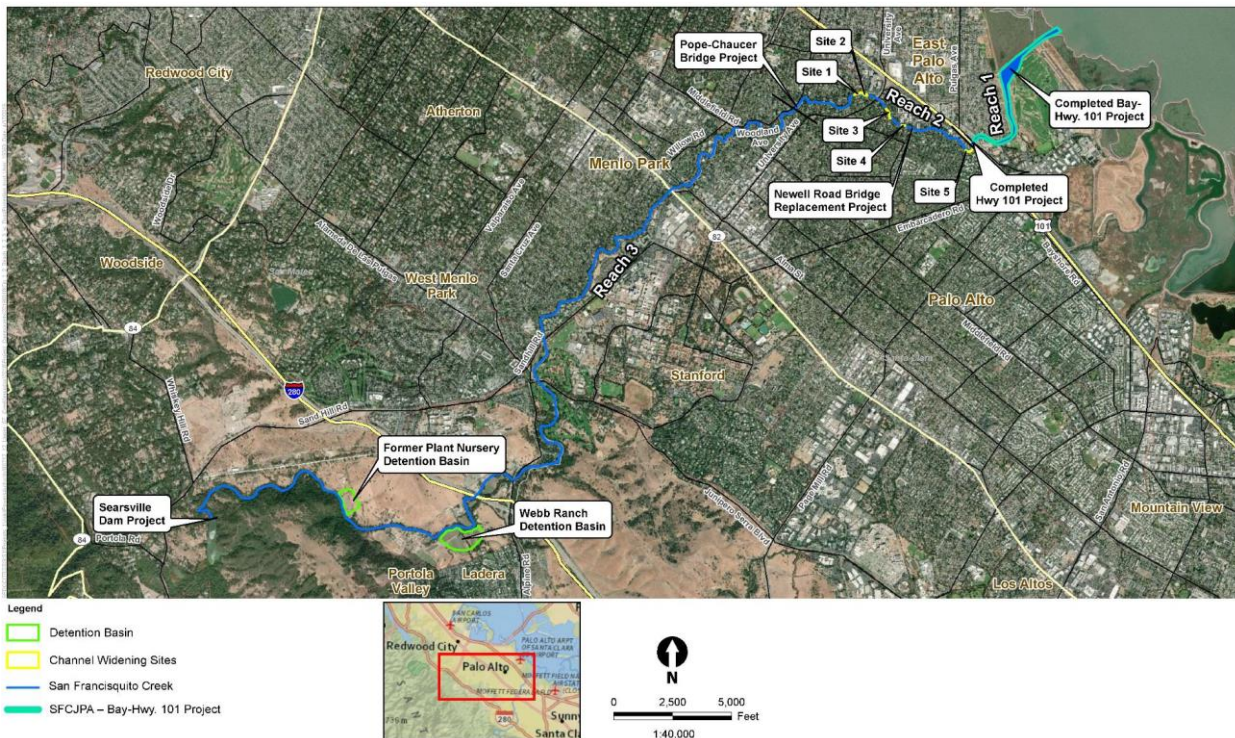
\*Interested Parties should send a request for the link to the Optional Virtual Workshop

**Proposed Project Elements**

The proposed project consists of evaluation of stormwater detention facilities upstream of the San Francisquito Creek flood plain. While the locations, size, dimensions, and capacity of the detention facilities have been identified, certain design features such as the inlet and outlet structures of the facilities have only been developed to a conceptual level. The consultant will work with the SFCJPA to develop preliminary engineering analyses considering the inlet and outlet alternatives identified to date, as well as investigations to determine ground water level, geotechnical characteristics of the underlying soils, and other factors needed to evaluate the potential performance of the features.

HEC-HMS hydrologic models were created in 2009 to test various alternatives for supplementary upstream detention in the San Francisquito Creek watershed. For each alternative, the relative location, stage-storage relationship and inflow-diversion relationship were simulated in the model. Outlets were sized to drain detention facilities so that flood storage capacity could be restored within approximately one day after a flood peak. Models were optimized to fill detention facilities to peak storage. This hydrologic analysis resulted in the recommendation of two potential detention sites which shall be further evaluated under this contract. The results of the work specified in this RFP must provide the information needed for the SFCJPA to decide if advancing design and development of a project level Environmental Impact Report for the construction of the detention features is warranted.

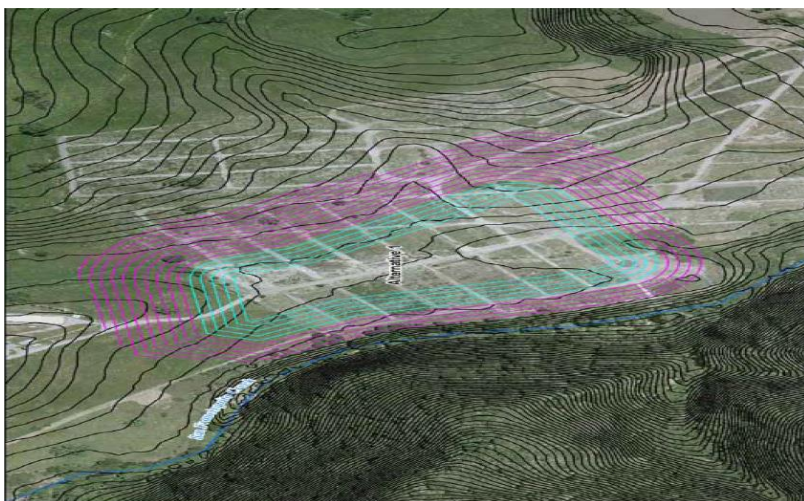




Overview of SFCJPA program

Offline Detention Site 1:

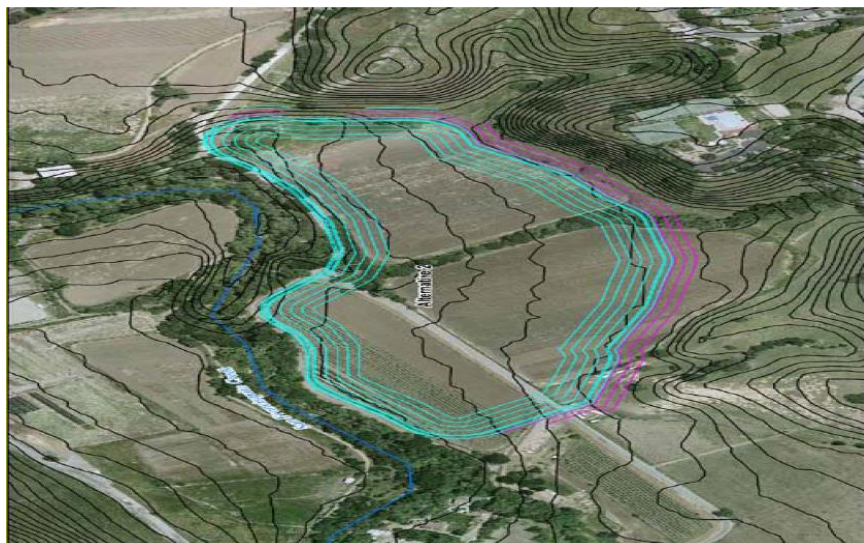
A 12.4-acre site with the potential to provide up to approximately 180 acre/ft of floodwater detention at a location formerly operated as a nursery, which is on Stanford University lands and is not currently in use. Operation of a detention facility at this site could reduce peak discharge during a 100-year flow event by approximately 450 cfs.



Offline Detention Site 1

### Offline Detention Site 2:

A 27.4-acre site with the potential to provide up to approximately 440 acre/ft of floodwater detention at a location on Stanford University lands that is currently used for agriculture. Operation of a detention facility at this site could reduce peak discharge during a 100-year flow event by approximately 900 cfs.



*Offline Detention Site 2*

### Preservation of Current Uses:

The SFCJPA and the communities we serve desire to maintain the current uses at the proposed project sites after the proposed detention facilities are constructed. Consultant will work with the SFCJPA, Stanford University, and current leaseholders at the proposed sites to evaluate methodologies that preserve current land use but allow for temporary and infrequent inundation of agricultural lands for flood water detention

### **Preliminary Scope of Services**

Major tasks for this project include project administration; site reconnaissance and review of existing information including archaeological records; field investigations; preliminary engineering, and a preliminary statement on project constructability and potential performance.

### **Quality Management**

Close coordination between Consultant, SFCJPA, and other designated SFCJPA partners will be required throughout the course of the project.

The first version (“draft”) of each deliverable will be submitted to the SFCJPA for review and comment. The SFCJPA will provide consolidated comments to Consultant, and these consolidated comments shall serve as the basis for the final version of the document. For technical memoranda and other deliverables, the SFCJPA review period will be two weeks.

### **CONSULTANT RESPONSIBILITIES**

1. The Consultant is responsible for performing the Scope of Services in compliance with all applicable federal, state, and local laws, regulations, standards, and guidelines.
2. The Consultant will submit draft deliverables in electronic format and final deliverables in both electronic and hardcopy format unless otherwise directed by the SFCJPA.
3. The Consultant will provide Quality Control/Quality Assurance (QC/QA) on all services performed by Consultant.



4. All documents produced by the Consultant will be well-written in standard, proper English, generally conforming to a widely accepted style manual consistent with the product. Should the Consultant submit a draft or final product or products with extensive errors or which is substantially incomplete, the product or products may be returned to the Consultant without complete reviews for the Consultant to make corrections and revisions and resubmit the product or products, at no additional cost to the SFCJPA.
5. Consultant will ensure the technical level of writing be such that the material is fully understandable by a person without specific training in the field at hand but without compromising its value to the target audience. The target audience includes technical staff, management, elected officials and the public. The work products may be used for regulatory permitting, policy and related issues, as well as possible follow-up analyses. Jargon specific to various fields will either be clearly explained in the text or defined in a glossary.

## **OPTIONAL SERVICES**

Tasks identified in this scope of services as optional or contingent shall not be conducted without specific written authorization from the SFCJPA prior to commencement of services.

## **TASKS**

The Preliminary Scope of Service (PSOS) as presented herein is to aid the Consultant in understanding the required services. Consultants shall use this PSOS as a guide to develop their own Scope of Services (SOS) as they deem appropriate and include their recommended approach in their proposal.

Task 1.0 – Project Administration

Task 2.0 – Site Reconnaissance and Review Existing Background Information

Task 3.0 – Data Gaps Memorandum

Task 4.0 – Field Investigations

Task 5.0 – Preliminary Engineering

Task 6.0 – Area of Potential Effect (optional service)

### **Task 1.0 Project Administration**

Consultant will provide project administration services during the term of the Agreement. Consultant's project manager will be responsible for providing any needed subcontractors, managing Consultant team, providing the resources to complete the job, monitoring the project budget and schedules, providing status reports, and maintaining an efficient, effective document tracking system. Key project staff should be available for telephone consultation and team meetings throughout the duration of the Agreement on any significant issues (or potential deviations) related to the project schedule, work plan, or fees.

**1.1 Prepare Progress Reports and Scheduling Revisions.** Consultant will submit monthly invoices, status reports, and project schedule reports. These documents will be prepared in an agreed upon format and content between Consultant and SFCJPA.

#### ***Deliverables:***

1. Monthly invoices, status reports, and project schedule updates (electronic copies preferred).

**1.2 Attend Project Management Related Meetings.** Consultant will attend monthly Project team meetings. Consultant will prepare the meeting agendas, action items, and meeting notes in

consultation with the SFCJPA Project Manager. These meetings will be conducted virtually, or at the SFCJPA office in Palo Alto.

***Deliverables:***

1. Meeting preparation materials
2. Meeting agendas
3. Meeting summary notes

**Task 2.0 Site Reconnaissance and Review Existing Background Information**

The consultant's first activity will be to join the SFJCPA and Stanford University for a site reconnaissance field visit to develop an understanding of the project concept, site conditions, and potential constraints. Consultant will then gather existing environmental documents, memos, data, plans and policies and other information relevant to the project. Such information may include, but is not limited to: additional hazards and hazardous materials assessments of the property(ies) involved; CEQA / NEPA documents for similar facilities in the vicinity and/or other projects on the property(ies) involved; biological or cultural resource studies, data and report information specific to the project vicinity; engineering reports for the project area; other mapping, reports and documentation of special status species in the vicinity of the project site; planning documents by the affected jurisdiction(s), including relevant General Plans, Project Plans and/or Master Plans; and other relevant materials.

The consultant should assume two field days for the Site Reconnaissance and one meeting with Stanford to review existing information. The purpose of the Site Reconnaissance is to obtain the needed information to develop a data gaps memorandum and work plans for field Investigations. Personnel with the experience and knowledge needed to clearly understand data gaps should be available, including an archaeologist that meets the Secretary of the Interior's Professional Qualification Standards.

SFCJPA will provide Consultant with all background information and documents referenced in the 2019 Program EIR.

***Deliverables:***

1. List of references of existing information
2. Copies of data and documents collected

**Task 3.0 Data Gaps Memorandum**

Consultant will analyze the site conditions based on the site reconnaissance and existing data and develop a list of additional information needed to prepare the deliverables under this contract. Should the data needed be different than assumed in the scope of work in the original contract the SFCJPA may choose to modify the scope of work, schedule and/or budget accordingly at its discretion.

***Deliverable:***

1. Technical Memorandum #1 - Additional Data or Studies Required



## **Task 4.0 Field Investigations**

**4.1 Prepare Field Investigation Plan.** Based on the data requirements identified in Task 3, Consultant will develop a field investigation plan and submit it to the SFCJPA for review. These may include geotechnical investigations, groundwater assessments, topographic surveys, investigations of access and road conditions, and other data collection activities needed to assess the constructability and performance of the project elements.

***Deliverable:***

1. Technical Memorandum #2 - Field Investigation Plan

**4.2 Conduct Field Investigations.** To implement the Field Investigation Plan, the Consultant will conduct investigations and/or studies necessary to prepare the deliverables of this contract. Because costs of the field investigations cannot be known prior to site reconnaissance and review of existing background information, consultants should assume a cost of \$50,000 for field investigations in their proposal. This cost will be refined when the needs of the project are identified.

***Deliverable:***

1. Technical Memorandum #3 – Summary of Field Work Results

## **Task 5.0 Preliminary Engineering**

Consultant shall conduct preliminary design and perform the necessary calculations to determine the constructability and performance of the detention features. The deliverable under this task should include preliminary design of project features that can likely be constructed and will likely perform the function intended, and consist of preliminary drawings that include project features and dimensions, including intake and outlet structures, and recommendations on potential operations and maintenance requirements. A complete plan set shall not be prepared under this contract. Should it be determined that a constructable and functional design is not achievable due to site conditions, constraints, or other factors the deliverable under this task shall so state.

***Deliverable:***

1. Technical Memorandum #4 – Statement on Constructability and Performance

## **Task 6.0 Area of Potential Effect (optional service)**

In anticipation of the need to comply with the National Historic Preservation Act of 1966, should it be determined that a constructable and effective design for upstream detention is identified, the SFCJPA may seek to develop the project's Area of Potential Effect (APE) for cultural resources. Development of the APE and cross referencing against known cultural resources discoverable in Task 2 may assist the SFCJPA in its determination of whether or not to conduct future environmental analyses and develop a project-level Environmental Impact Report. The consultant should include a description of the development of the APE as well as a cost estimate for the task. This task is optional and shall not be undertaken by the consultant until directed to do so by the SFCJPA.