



March 8, 2013

Ms. Tami Schane
California Department of Fish and Wildlife—Lake and Streambed Alteration Program
Bay Delta Region
P.O. Box 29398
San Francisco, CA 94129-0398

Subject: Notification of Streambed Alteration for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Mateo and Santa Clara Counties, CA

Dear Ms. Schane:

Enclosed is a notification of streambed alteration for the San Francisquito Creek Joint Powers Authority San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project located in San Mateo and Santa Clara Counties, California.

The project proposes to increase the Creek's capacity by degrading a portion of an unmaintained levee downstream of Friendship Bridge, excavating sediment deposits within the channel, rebuilding levees and relocating a portion of the southern levee, and constructing floodwalls in the upper reach of the Creek. The goal of the project is to improve flood protection, habitat, and recreational opportunities within the Project reach. The Project would ultimately improve channel capacity for creek flows coupled with the influence of the tides of San Francisco Bay, including projected Sea Level Rise (SLR), from the downstream face of East Bayshore Road to San Francisco Bay. It would reduce local fluvial flood risks in the Project area during storm events, provide the capacity needed for future upstream improvements, increase and improve ecological habitat, and provide for improved recreational opportunities.

The Proposed project would directly affect 8.56 acres of water of the State. Permanent impacts would total 7.96 acres and temporary impacts would total 0.60 acres. The SFCJPA proposes to create 14.63 acres of marshplain habitat within San Francisquito Creek adjacent to the Faber-Laumeister Tract to the north. The current project schedule anticipates construction will start in September 2013, but could start sooner if possible. An Individual Permit requesting authorization for the project under Section 404 of the Clean Water Act has been sent to Ian Liffmann at the San Francisco District, U.S. Army Corps of Engineers, and a 401 Water Quality Certification application has been sent to Margarete Beth at the San Francisco Bay Regional Water Quality Control Board. Additional permit applications are being sent to the Bay Conservation and Development Commission.

The following documents/enclosures comprise the notification package sent with this letter:

- Notification Fee of \$4,482.75

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- Notification of Lake or Streambed Alteration Agreement (Form FG2023), including attachment sheets and:
 - figures showing the project location, impacts to waters of the U.S. and riparian vegetation, and plan, profile, and cross sectional views of the proposed bridge
 - Representative photographs of the project
- Compact disc containing:
 - EIR
 - Copy of Individual Permit Application sent to the U.S. Army Corps of Engineers
 - Copy of 401 Water Quality Certification Application sent to the San Francisco Bay Regional Water Quality Control Board.
- Compact Disc containing:
 - Digital files of notification form and attachment
 - Hydraulic Study
 - Biological Assessment
 - Wetland Delineation

If you would like printed copies of any of the above reports, require additional information, or have any questions regarding this request, please contact Kevin Murray (Project Applicant) at (650) 324-1972 or me at (408) 216-2815. Thank you for your assistance with this project.

Sincerely,



Matthew Jones
Project Manager

cc: Kevin Murray, SFCJPA, Project Manager/Applicant

FOR DEPARTMENT USE ONLY

Date Received	Amount Received	Amount Due	Date Complete	Notification No.
	\$	\$		



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE
NOTIFICATION OF LAKE OR STREAMBED ALTERATION



Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name			
Business/Agency			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

2. CONTACT PERSON *(Complete only if different from applicant)*

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

3. PROPERTY OWNER *(Complete only if different from applicant)*

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name				
B. Agreement Term Requested		<input type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.	
A.	<input type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> CDFW Fisheries Restoration Grant Program (FRGP) FRGP Contract Number _____
G.	<input type="checkbox"/> Master
H.	<input type="checkbox"/> Master Timber Harvesting

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1			
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		E. TOTAL FEE ENCLOSED	

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?	
<input type="checkbox"/> Yes (Provide the information below) <input type="checkbox"/> No	
Applicant: _____ Notification Number: _____ Date: _____	
B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?	
<input type="checkbox"/> No <input type="checkbox"/> Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)	
<input type="checkbox"/> Continued on additional page(s)	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

8. PROJECT LOCATION

A. Address or description of project location. (Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)					
<input type="checkbox"/> Continued on additional page(s)					
B. River, stream, or lake affected by the project.					
C. What water body is the river, stream, or lake tributary to?					
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
E. County					
F. USGS 7.5 Minute Quad Map Name		G. Township	H. Range	I. Section	J. ¼ Section
<input type="checkbox"/> Continued on additional page(s)					
K. Meridian (check one)		<input type="checkbox"/> Humboldt <input type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)					
<input type="checkbox"/> Continued on additional page(s)					
M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)					
Latitude/Longitude	Latitude:		Longitude:		
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input type="checkbox"/> Decimal Degrees <input type="checkbox"/> Decimal Minutes		
UTM	Easting:	Northing:		<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27		<input type="checkbox"/> NAD 83 or WGS 84	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

Yes No (*Skip to box 11*)

D. Will the proposed project require work in the wetted portion of the channel?

Yes (*Enclose a plan to divert water around work site*)
 No

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Continued on additional page(s)

B. Will the project affect any vegetation?

Yes (Complete the tables below) No

Vegetation Type	Temporary Impact	Permanent Impact
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below) No Unknown

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study) No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study) No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Continued on additional page(s)

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. _____ Applied Issued

B. _____ Applied Issued

C. _____ Applied Issued

D. Unknown whether local, state, or federal permit is needed for the project. (Check each box that applies)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?			
<input type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each) <input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)			
<input type="checkbox"/> Notice of Exemption	<input type="checkbox"/> Mitigated Negative Declaration	<input type="checkbox"/> NEPA document (type): _____	
<input type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report	<input type="checkbox"/> CESA document (type): _____	
<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Notice of Determination (Enclose)	<input type="checkbox"/> ESA document (type): _____	
<input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigation, Monitoring, Reporting Plan		
B. State Clearinghouse Number (if applicable)			
C. Has a CEQA lead agency been determined?		<input type="checkbox"/> Yes (Complete boxes D, E, and F) <input type="checkbox"/> No (Skip to box 14.G)	
D. CEQA Lead Agency			
E. Contact Person		F. Telephone Number	
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input type="checkbox"/> Yes (Enclose proof of payment) <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
<p><i>Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.</i></p>			

15. SITE INSPECTION

Check one box only.	
<input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.	
<input type="checkbox"/> I request the Department to first contact (insert name) _____ at (insert telephone number) _____ to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

- Yes (Please enclose the information via digital media with the completed notification form)
- No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Signature of Applicant or Applicant's Authorized Representative

Date

Print Name

LAKE AND STREAMBED ALTERATION AGREEMENT APPLICATION

**SAN FRANCISQUITO CREEK FLOOD REDUCTION, ECOSYSTEM
RESTORATION, AND RECREATION PROJECT, SAN MATEO AND SANTA
CLARA COUNTIES, CA**

SUBMITTED TO:

California Department of Fish and Wildlife
Bay Delta Region
P.O. Box 29398
San Francisco, CA 94129-0398
Contact: Tami Schane
415/831-4640

APPLICANT:

San Francisquito Creek Joint Powers Authority
615 B Menlo Avenue
Menlo Park, CA 94025
Contact: Kevin Murray
650/324-1972

PREPARED BY:

ICF International
75 East Santa Clara Street, Suite 300
San Jose, CA 95113
Contact: Matthew Jones
408/216-2815

MARCH 8, 2013



ICF International. 2013. San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project. Section 1602, Lake or Streambed Alteration Application. March. (ICF 00882.09.) San Jose, CA. Prepared for: San Francisquito Creek Joint Powers Authority, Menlo Park, CA. Submitted to: California Department of Fish and Game, Bay Delta Region.

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Figure 4 Impacts to Wetlands and Other Waters

Figure 5 Marshplain Creation

Figure 6 Engineered Drawings

Figure 7 Landscape Sheet Plan Set

Appendix B: Representative Photographs

Appendix C: Notice of Determination and Proof of Filing Fee

This package also includes two Compact Discs:

- Disc 1:**
Environmental Impact Report

Disc 2:

Biological Assessment
Wetland Delineation Report
Hydrological Study
Water Diversion Plan

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Additional Pages

Notification of Streambed Alteration for San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project

Box 3: Property Owner(s)

The San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project (Project) would occur within Santa Clara and San Mateo County right of way through land held by the City of Palo Alto

Box 8: Project Location

The San Francisquito Creek (Creek) watershed encompasses a 45-square-mile basin, extending from Skyline Boulevard to San Francisco Bay. The watershed encompasses public and private lands in the Cities of East Palo Alto, Menlo Park, Palo Alto, Portola Valley, and Woodside; the unincorporated areas of San Mateo and Santa Clara counties; and Stanford University. The San Francisquito Creek floodplain, which has almost no overlap with the watershed, comprises almost 5 square miles.

San Francisquito Creek represents the boundary between San Mateo and Santa Clara 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 Lake in Stanford University's Jasper Ridge Biological Preserve. The mouth of the Creek opens to the San Francisco Bay adjacent to Palo Alto Airport of Santa Clara County (Palo Alto Airport) to the south and the Baylands Nature Preserve to the north. The system contains more than 71 miles of Creek bed; the mainstem is approximately 14 miles long. The Project is focused on the mainstem of the Creek. Figure 1 shows the Project Site.

For description purposes, the Project is divided into three reaches. A reach is a continuous part of the Creek between two specified points. The Project reach as a whole is from San Francisco Bay to East Bayshore Road. The lower reach is from San Francisco Bay to Friendship Bridge, the middle reach from Friendship Bridge to Daphne Way, and the upper reach from Daphne Way to East Bayshore Road. Additionally, the right bank refers to the San Mateo County (East Palo Alto) side of the Creek and the left bank refers to the Santa Clara County (Palo Alto) side of the Creek. Figure 2 shows the Project reaches and identifies the left and right banks.

Action Area

The action area includes “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action” (50 Code of Federal Regulations [CFR] §402.02). For this Project, the action area includes the channel banks and bottom from approximately 200 feet upstream of East Bayshore and Highway 101 Bridge to approximately 500 feet into San Francisco Bay. It is assumed that suspended sediments generated during the construction and breaching of levees would settle or become diluted in the channel at a distance of approximately 500 feet downstream of the levee degrade.

The action area is located in southeastern San Mateo County and northwestern Santa Clara County, on the eastern edge of East Palo Alto. The 263.5-acre action area is situated in an alluvial plain, alluvial fan, and tidal marsh area. The Palo Alto Municipal Golf Course (Golf Course) and Palo Alto Airport are adjacent to the eastern and southern boundaries of the action area. San Francisco Bay is to the east, and residential areas and tidal marshes are to the north. The western edge is formed by East Bayshore Road. San Francisquito Creek enters the action area immediately east of U.S. 101. Consistent with its setting, much of the Creek’s length within the action area has been straightened, channelized, or otherwise improved for flood protection, although it remains unlined within constructed levees.

Box 10: Project Description

Purpose and Need of Project

The Project would ultimately improve channel capacity for creek flows coupled with the influence of the tides of San Francisco Bay, including projected Sea Level Rise (SLR), from the downstream face of East Bayshore Road to San Francisco Bay. It would reduce local fluvial flood risks in the Project area during storm events, provide the capacity needed for future upstream improvements, increase and improve ecological habitat, and provide for improved recreational opportunities.

The SFCJPA, formed in 1999 following the flood of 1998, is a regional government agency whose members include the Cities of Palo Alto, Menlo Park, and East Palo Alto; the San Mateo County Flood Control District, and the Santa Clara Valley Water District (District). The SFCJPA implements flood management, ecosystem restoration and recreational enhancements throughout the San Francisquito Creek watershed and floodplain. Flooding from the Creek is a common occurrence. The most recent flood event occurred as a result of record creek flows in February 1998, when the Creek overtopped its banks in several areas, affecting approximately 1,700 residential, commercial, and public structures and causing more than \$28 million in property damages. The maximum instantaneous peak flow recorded during the February 1998 event was 7,200 cubic feet per second (cfs). The U.S. Army Corps of Engineers (USACE) estimates that the 1998 flood was a 45-year flood event. A 100-year flood event is anticipated to result in flows of 9,400 cfs at the mouth of the Creek. These flows would exceed the existing capacity of the Creek (San Francisquito Creek Joint Powers Authority 2009). The Project’s goals are to improve flood protection, habitat, and recreational opportunities within the Project reach, with the following specific objectives:

- Protect properties and infrastructure between East Bayshore Road and the San Francisco Bay from Creek flows resulting from 100-year fluvial flood flows occurring at the same time as a 100-year tide that includes projected Sea Level Rise through 2067.
- Accommodate future flood protection measures that might be constructed upstream of the Project.
- Enhance habitat along the Project reach, particularly habitat for threatened and endangered species.
- Enhance recreational uses.
- Minimize operational and maintenance requirements.

- The Project would increase conveyance and retention capacity of floodwaters from runoff and San Francisco Bay tides to protect residents and property from flood events along the lower section of the Creek, from East Bayshore Road to the San Francisco Bay.

Project Elements

The San Francisquito Creek Joint Powers Authority (SFCJPA) proposes the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101 (Project). This Project would increase conveyance and retention capacity of floodwaters from runoff and San Francisco Bay tides to protect residents and property from flood events along the lower section of the Creek, from East Bayshore Road to the San Francisco Bay. An Environmental Impact Report was approved October 25th, 2012. Work within the project boundary includes the following activities.

- Degrading a portion of an unmaintained levee downstream of Friendship Bridge to allow flood flows from the Creek channel into the Palo Alto Baylands Preserve north of the Creek.
- Excavating sediment deposits within the channel to maximize conveyance.
- Rebuilding levees and relocating a portion of the southern levee to widen the channel to reduce influence of tides and increase channel capacity.
- Constructing floodwalls in the upper reach to increase capacity and maintain consistency with Caltrans’ enlargement of the U.S. 101/East Bayshore Road Bridge over San Francisquito Creek (Caltrans facility).

Major Project elements include:

- An overflow terrace at marsh elevation adjacent to the Baylands Preserve.
- Levee setback and improvements to widen the channel and increase levee height and stability between East Palo Alto and the Palo Alto Golf Course.
- Floodwalls in the upper reach downstream of East Bayshore Road.
- Extension of Friendship Bridge via a boardwalk across new marshland within the widened channel.

The Project has two main components: Levee and Floodwall Construction and Marshplain Restoration. Each component contains multiple elements summarized in Table 1 below.

Table 1. Summary of Project Elements

Project Component	Description
Levee and floodwall construction	
Levee lowering on right bank	From the mouth of the Creek at San Francisco Bay to 200 feet downstream of the existing Friendship Bridge. This would allow floodwaters to flow into the Baylands north of San Francisquito Creek.
Levee raising on right bank	From the O’Connor Pump Station tie-in near Friendship Bridge to the floodwall.
Floodwall on right bank	The right floodwall would extend from just downstream of Daphne Way to the end of the Project reach where it would connect with the Caltrans U.S. 101/East Bayshore Road facility.
Levee raising on left bank and levee relocation	Levee relocation of the middle reach and a small portion of the upper and lower reaches. The levee would be relocated inland (currently occupied by the Golf Course), creating space on the left bank for a marshplain terrace. Except for a section around the eastern footings of Friendship Bridge, the existing levee along this stretch would be removed.
Floodwall on	The left floodwall would extend from the end of the left levee, along the

Project Component	Description
left bank	streambed, around the Palo Alto Pump Station, to the end of the Project reach where it would connect with the Caltrans facility.
Downstream access road on right bank	The right bank downstream access road would be approximately 16 feet wide and extend from the crown of the right levee to street level to just downstream of Daphne Way.
Upstream access road on right bank	The right bank upstream access road would be approximately 12 feet wide and would extend from just downstream of Verbena Drive to the Caltrans facility at East Bayshore Road.
Access road on left bank	The left bank access road would be generally 12 feet wide and would extend from a point downstream of the International School of the Peninsula to the Palo Alto Pump Station. The access road would also be used as a public trail within the City of Palo Alto and would connect to the Baylands Athletic Center.
Friendship Bridge	The existing Friendship Bridge would be retained and extended as a boardwalk from the retained eastern footing across the new marshplain terrace to the relocated left bank levee.
Marshplain restoration	
Downstream of Friendship Bridge on right bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the toe of the levee from just upstream of San Francisco Bay to just downstream of Friendship Bridge.
Upstream of Friendship Bridge on right bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the toe of the levee from just upstream of Friendship Bridge to East Bayshore Road.
Left bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the base of the floodwall or the toe of the levee. In this area the marsh would be planted adjacent to the toe of the cut-and-fill area. The marsh would extend from the point at which the new levee would diverge inland from the existing levee to East Bayshore Road.

More detailed information for each project element can be found in the Environmental Impact Report.

Utility Relocation

Project activities would require relocation or removal of electricity transmission towers and poles; abandonment of existing and construction of new gas transmission lines; and realignment or relocation of sewer lines and storm drains (Environmental Impact Report, Figure 2-4). These activities described in more detail can be found in Biological Assessment.

Construction

Construction of Project elements would likely occur in two phases. While all Project elements could be constructed at one time if sufficient funding was secured, the two-phase construction methodology is conservatively assumed to be the preferred construction approach. A summary of the anticipated construction methodology, the proposed starting date and duration of each activity, and the equipment to be used during each phase is listed in Table 2.

Table 2. Summary of Construction Methodology, Timing, and Equipment

Project Component	Proposed Starting Date	Activity	Proposed Duration	Equipment
Utility Relocation				
PG&E Electricity Transmission	12/2012	Site and road preparation: Trees and brush trimmed in work areas	2 weeks	1 dump truck 1 grader 1 four-door pickup
	12/2012	Wood pole relocation	4 weeks	1 flat-bed truck
	1/2013	Demolition of wood poles and secondary wire removal	6 days	3 four-door pickups 3 bucket trucks 3 line trucks 1 rope truck 1 tensioner (on a trailer)
	1/2013	Construction of shoo-fly tower at T3	2 weeks	1 pickup 1 four-door pickup
	2/2013	Tower raises (T1 and T4)	2 weeks (1 week per tower)	1 2-ton tool truck with air compressor
	3/2013	New tower construction and demolition of T2	4 weeks	1 dump truck 1 70-ton crane 1 caterpillar (pile driver)
	3/2013	Demolition of shoo-fly	1 day	1 back hoe 1 concrete truck 1 pump truck
	4/2013	Gas line work	4 weeks	2 4-door pickups 1 backhoe 2 flatbed truck
	4/8/2013	directional drilling	2 weeks	1 directional drill rig
	4/18/2013	export of material	1 week	2 dump trucks 1 flatbed truck
PG&E Gas Transmission	4/25/2013	concrete	2 days	1 concrete truck
	4/27/2013	Demobilization	1 week	2 4-door pickups 1 flatbed truck
	Phase One—Levees and Excavation			
Site Preparation	1/2013	Mobilization Tree Removal Clearing and Grubbing Stripping Demolition	6 weeks	4 four-door pickups 1 backhoe 1 loader 1 jackhammer 1 flat-bed truck

Construction of new left bank levee	4/2013	Site excavation Levee construction Seeding for erosion control	5 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4-6 dump trucks (20 cy each) 2 water trucks
Removal of old left bank levee	6/2013	Site excavation	3 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4-6 dump trucks (20 cy each) 2 water trucks
Removal of right bank levee	6/2013	Site excavation Relocation of East Palo Alto sewer line and siphon	2 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4-6 dump trucks (20 cy each) 2 water trucks
Construction of right bank levee	7/2013	Levee construction Seeding for erosion control	3 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4-6 dump trucks (20 cy each) 2 water trucks
Construction of downstream access road on right and left banks	8/2013	Site preparation and paving	4 weeks	4 four-door pickups 1 dump truck 1 grader 1 four-door pickup 2 concrete trucks 1 asphalt paver 1 compactor
Friendship Bridge	9/2013	Site excavation Boardwalk construction	6 weeks	4 four-door pickups 1 backhoe 1 loader 1 flat-bed truck
Channel widening and marshplain terracing	6/2013	Site excavation Terracing	10 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4-6 dump trucks (20 cy each) 2 water trucks

Revegetation	9/2013	Installation of irrigation system Revegetation	6 weeks	2 four-door pickups
Phase Two—Floodwalls				
Site Preparation	5/2014	Mobilization Clearing and grubbing	3 weeks	4 four-door pickups 1 backhoe 1 loader 1 jackhammer 1 flat-bed truck
Installation of right and left bank floodwalls	6/2014	Site excavation Preparation of foundation Construction of floodwalls	5 months	4 four-door pickups 1 excavator 1 trencher 1 backhoe 1 loader 1 dump truck 1 grader 2 concrete trucks 1 flat-bed truck
Construction of upstream access road on right and left banks	10/2014	Site preparation and paving	4 weeks	4 four-door pickups 1 dump truck 1 grader 1 four-door pickup 2 concrete trucks 1 asphalt paver 1 compactor
Site Restoration	11/2014	Demobilization	2 weeks	2 four-door pickups 1 loader 1 flat-bed truck

Detailed information for the construction and purpose of each element of the project can be found in the Biological Assessment.

Marshplain Creation and Restoration

The proposed Project would create approximately 18 acres of tidal marsh on both sides of the Creek, effectively restoring tidal influence in the Project reach (see Figure 2). Marshplain creation would span the entire Project extent on both banks from East Bayshore Road to San Francisco Bay on the right bank and from East Bayshore Road to the end of the existing left levee on the left bank. Both sides of the channel would be planted from the toe of the levee or base of the floodwall to the edge of the Creek channel.

After Phase One levee construction is complete, the tidal marsh area would be terraced and revegetated with high-marsh plants. The high-marsh planting area would total 7.05 acres and the high-marsh transition planting area would total 10.77 acres. Additionally, in areas where rock slope protection is required, 10-foot vegetated shrub bands would be installed to provide refugia and promote long term vegetated protection and stability across the rock slope protection areas.

Native marsh plants would be used to revegetate the terraced land. Plants appropriate to the high marsh would be planted near the stream channel. Plants native to marsh transition areas would be planted in areas more distant from the Creek channel. The San Francisquito Creek Joint Powers Authority (SFCJPA), or its designated contractor, will be responsible for the acquisition of plant material. All container stock will be

propagated from native stock collected within the south San Francisco Bay and tidally influenced creeks in coordination with Santa Clara Valley Water District staff.

Construction Schedule

Phase One construction would begin in 2013 and be completed by 2015. Construction would begin with building the new levee structure outside of the existing levee, during or after completion of PG&E and EPASD modifications to existing utilities and modifications to the PAGC, and would proceed at Friendship Bridge and upstream with the excavation of the channel up to East Bayshore Road being the final Project activity. Phase Two construction of upstream floodwalls and associated maintenance roads would occur once funding was secured.

Construction activities would take place between 8 a.m. and 6 p.m. on weekdays, and 9 a.m. and 5 p.m. on Saturdays, in accordance with City of Palo Alto and City of East Palo Alto municipal codes. Final construction permits issued for the Project may place additional constraints on construction timing. Table 2 (in the Biological Assessment) shows the Project elements, when construction on each is expected to begin, construction activities, and construction duration.

Box 11: Project Impacts

B. Vegetation Type and Tree Species Affected

Wetlands and other waters affected by the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project include San Francisquito Creek, Faber-Laumeister Tract, one freshwater pond in the golf course, and associated wetlands, which include diked marsh, freshwater marsh, and tidal salt marsh habitat. All affected water bodies were determined to be waters of the State. Table 3 provides a summary of all water bodies within the project area and those affected by the proposed project.

Table 3. Summary of Water Bodies

Water Body Type	ID	Wetlands (acres)	Other Water Bodies (acres)	Permanent Impacts (acre)	Temporary Impacts (acres)
Diked Marsh	DM-1	0.53		0.001	0.15
Diked Marsh	DM-2	0.22		0	0.01
Diked Marsh	DM-3	0.03		0.001	0.03
Diked Marsh	DM-4	0.02		0.001	0.01
Diked Marsh	DM-5	0.05		0	0
Diked Marsh	DM-6	0.11		0	0
Diked Marsh	DM-7	0.02		0.02	0
Diked Marsh	DM-8	1.33		1.33	0
Diked Marsh	DM-9	0.68		0.18	0

Diked Marsh	DM-10	0.80	0.80	0
Diked Marsh	DM-11	0.24	0.24	0
Diked Marsh	DM-12	0.10	0.10	0
Diked Marsh	DM-13	0.21	0.21	0
Freshwater Marsh	FM-1	0.19	0	0
Freshwater Marsh	FM-2	0.14	0.14	0
Tidal Salt Marsh	TSM-1	1.99	1.51	0
Tidal Salt Marsh	TSM-3	0.08	0.06	
Tidal Salt Marsh	TSM-4	81.09	0.34	0.38
Tidal Salt Marsh	TSM-5	13.08	0.0003	0
Tidal Salt Marsh	TSM-6	0.04	0	0
Tidal Salt Marsh	TSM-7	1.58	0.08	0.002
Tidal Salt Marsh	TSM-8	9.98	0	0
Tidal Salt Marsh	TSM-9	3.39	1.21	0
Tidal Salt Marsh	TSM-10	0.11	0.002	0
Tidal Salt Marsh	TSM-11	0.09	0.04	0
Tidal Salt Marsh	TSM-12	0.12	0.01	0

Subtotal Wetlands 116.2 6.28 0.58

Freshwater Pond	FP-1	1.13	1.13	0
Tidal Channel and Bay Waters	TC-1	0.57	0	0.02
Tidal Channel and Bay Waters	TC-2	21.82	0.78	0
Tidal Pan	TP-1	0.02	0	0
Tidal Pan	TP-2	0.13	0	0

Tidal Pan	TP-3	0.22	0	0
Subtotal Other Water Bodies		23.89	1.19	0.02
PROJECT TOTAL		140.11	8.19	0.60

Numerous trees will be removed as a result of channel widening, levee reconfiguration and floodwall installation. See the Landscape Sheet Plan Set for a full list of tree species and detailed map depicting each tree removal location (Appendix A, Figure 7).

C. Special Status Animals and Plants Present or Near the Project Site

The following twenty seven special-status wildlife species may occur in the action area and may be affected by the Project:

- Alkali milkvetch (*Astragalus tener* var. *tener*).
- San Joaquin spearscale (*Atriplex joaquiniana*).
- Congdon’s tarplant (*Centromadia parryi* ssp. *congdonii*).
- Point Reyes bird’s-beak (*Chloropyron maritimum* ssp. *palustre* [*Cordylanthus maritimus* ssp. *palustris*]).
- Hairless popcornflower (*Plagiobothrys glaber*).
- Slender-leaved pondweed (*Stuckenia filiformis*).
- California seablite (*Suaeda californica*).
- Saline clover (*Trifolium depauperatum* var. *hydrophilum*).
- Steelhead (*Oncorhynchus mykiss*).
- Green sturgeon (*Acipsenser medirostris*).
- California red-legged frog (*Rana draytonii*).
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*).
- Western pond turtle (*Emys marmorata*).
- Great blue heron (*Ardea herodias*) rookery.
- Western burrowing owl (*Athene cunicularia hypugea*).
- Western snowy plover (*Charadrius alexandrines nivosus*).
- Northern harrier (*Circus cyaneus*).
- White-tailed kite (*Elanus leucurus*).
- Snowy egret (*Egretta thula*) rookery.
- Salt marsh common yellowthroat (*Geothlypis trichas sinuosa*).

- California black rail (*Laterallus jamaicensis coturniculus*).
- Alameda song sparrow (also known as the South Bay song sparrow) (*Melospiza melodia pusillula*).
- Double-crested cormorant (*Phalacrocorax auritus*) rookery.
- California clapper rail (*Rallus longirostris obsoletus*).
- California least tern (*Sterna antillarum browni*).
- Salt marsh harvest mouse (*Reithrodontomys raviventris*).
- Salt marsh wandering shrew (*Sorex vagrans halicoetes*).

D. Sources of Information Used to Generate the Lists (under Box 11C)

The following sources of information were reviewed during the pre-field investigation to identify special-status species with the potential to occur within or in the vicinity of the project area:

- USFWS species list in the U.S. Geological Survey (USGS) 7.5-minute quadrangles for Palo Alto, Mountain View, Milpitas, San Mateo, and Redwood Point.
- A records search of the 2012 California Natural Diversity Database (CNDDDB) for the Palo Alto, Mountain View, and Milpitas, San Mateo, and Redwood Point USGS 7.5-minute quadrangles.
- California Native Plant Society's (CNPS) 2012 Inventory of Rare and Endangered Plants of California.
- Published and unpublished reports.

Box 12: Measures to Protect Fish, Wildlife, and Plant Resources

The Project has been designed to avoid impacts to environmental resources. When avoidance is not practicable, impacts have been minimized to the maximum extent practicable. All impacts to marsh habitats will be fully compensated through onsite habitat restoration creation and monitored for a period of at least five years.

A. Techniques Used to Prevent Sediments from Entering Water Courses

1. The following measures will be implemented as necessary to reduce and minimize stormwater pollution during ground disturbing maintenance activities:
 - Soils exposed due to maintenance activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized and water quality protected prior to significant rainfall.
 - The preference for erosion control fabrics will be to consist of natural fibers.
 - Appropriate measures include, but are not limited to, the following:

- Silt Fences.
 - Straw Bale Barriers.
 - Brush or Rock Filters.
 - Storm Drain Inlet Protection.
 - Sediment Traps.
 - Sediment Basins.
 - Erosion Control Blankets and Mats.
 - Soil Stabilization (i.e. tackified straw with seed, jute or geotextile blankets, etc.).
 - Wood chips.
 - Straw mulch.
 - All temporary construction-related erosion control methods will be removed at the completion of the Project (e.g., silt fences). (Santa Clara Valley Water District Water Quality BMP 41)
2. The following measures will be implemented to ensure sediments will be stored and transported in a manner that minimizes water quality effects:
- Wet sediments may be stockpiled outside of a live stream or may be stockpiled within a dewatered stream so water can drain or evaporate before removal.
 - This measure applies to saturated, not damp, sediments and depends on the availability of a stockpile site.
 - For those stockpiles located outside the channel, water draining from them will not be allowed to flow back into the Creek or into local storm drains that enter the Creek, unless water quality protection measures recommended by RWQCB are implemented.
 - Trucks may be lined with an impervious material (e.g., plastic), or the tailgate blocked with dry dirt or hay bales, for example, or trucks may drain excess water by slightly tilting their loads and allowing the water to drain out.
 - Water will not drain directly into channels (outside of the work area) or onto public streets without providing water quality control measures
 - Streets and affected public parking lots will be cleared of mud and/or dirt by street sweeping (with a vacuum-powered street sweeper), as necessary, and not by hosing down the street. (Santa Clara Valley Water District Water Quality BMP 4)
3. Oily, greasy, or sediment-laden substances or other material that originate from the Project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway.
4. The following measures will be implemented to ensure the Project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows:
- Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent.
 - Where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent.
 - Where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the Project.
 - Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system for tidal sites and 100 feet downstream of the discharge point for non-tidal sites. Natural watercourse turbidity measurements will be made in the receiving water 100 feet upstream of the discharge site. Natural watercourse turbidity measurements will be made prior to initiation of Project discharges, preferably at least 2 days prior to commencement of operations. (Santa Clara Valley Water District Water Quality BMP 40)

5. No washing of vehicles will occur at job sites. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 9).
6. No fueling will be done in a waterway or immediate flood plain, unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators).
 - For stationary equipment that must be fueled on the site, containment will be provided in such a manner that any accidental spill of fuel will not be able to enter the water or contaminate sediments that may come in contact with water.
 - Any equipment that is readily moved out of the waterway will not be fueled in the waterway or immediate flood plain.
 - All fueling done at the job site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 10)
7. No equipment servicing will be done in a stream channel or immediate flood plain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps, generators).
 - Any equipment that can be readily moved out of the channel will not be serviced in the channel or immediate flood plain.
 - All servicing of equipment done at the job site will provide containment to the degree that any spill will be unable to enter any channel or damage stream vegetation.
 - If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in a channel or flood plain.
 - If emergency repairs are required, containment will be provided equivalent to that done for fueling or servicing.
8. Measures will be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means.
 - Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered.
 - The discharge of any hazardous or nonhazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations (CCR) will be conducted in accordance with applicable state and federal regulations.
 - In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1 800 510 5151. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 12)
9. Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water.
 - Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills.
 - No fueling, repair, cleaning, maintenance, or vehicle washing will be performed in a creek channel or in areas at the top of a channel bank that may flow into a creek channel. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 13)
10. Spill prevention kits appropriate to the hazard will always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).
 - Prior to entering the work site, all field personnel will know the location of spill kits on crew trucks and at other locations within District facilities.
 - All field personnel will be advised of these locations and trained in their appropriate use. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 14)
11. Runoff from soil stockpiles will be avoided. If soil is to be stockpiled, no runoff will be allowed to flow to a creek.
12. Cofferdams will be used for tidal work areas. For tidal areas, a downstream cofferdam will be constructed to prevent the work area from being inundated by tidal flows. By isolating the work area

from tidal flows, water quality effects are minimized. Downstream flows continue through the work area and through pipes within the cofferdam.

- Installation of coffer dams will begin at low tide.
 - Waters discharged through tidal coffer dam bypass pipes will not exceed 50 NTU over the background levels of the tidal waters into which they are discharged.
 - Cofferdams shall not be constructed of earthen fill due to potential adverse water quality impacts in the event of a failure.
 - Cofferdams constructed of gravel shall be covered by a protective covering (e.g., plastic or fabric) to prevent seepage.
13. Groundwater will be managed at work sites. If high levels of groundwater in a work area are encountered, the water will be pumped out of the work site. If necessary to protect water quality, the water will be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a receiving water body. Water pumped into vegetated areas will be pumped in a manner that will not create erosion around vegetation.
14. Sanitary/septic waste will be managed. Temporary sanitary facilities will be located on jobs that last multiple days in compliance with California Division of Occupational Safety and Health (Cal/OSHA) regulation 8 CCR 1526. All temporary sanitary facilities will be placed outside of the Creek channel and flood plain and removed when no longer necessary.
15. In addition, as part of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the San Mateo Countywide Stormwater Pollution Prevention Program (SM-STOPPP), required under Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) overseen by the San Francisco Bay Water Board, all construction sites are required to have site-specific and seasonally and phase-appropriate effective BMPs (San Francisco Bay Regional Water Quality Control Board 2009). SFCJPA will be responsible for ensuring compliance with all local and State regulations, including the RWQCB NPDES permits and local BMPs for jurisdictions adjoining the Project site. The Project specifications require that the Project construction contractor prepare a SWPPP and erosion control and sedimentation plan showing placement of BMPs at various stages of construction in conformance with requirements, and all SWPPP documents and plans will be stamped by a State-certified Qualified SWPPP Developer (QSD). The Project will implement measures to accomplish objectives specified in SFCJPA's San Francisquito Creek Watershed Analysis and Sediment Reduction Plan, which fulfills NPDES permit provisions that require the co-permittees of the SCVURPPP and SM-STOPPP within the Creek watershed to assess and implement sediment management measures in the watershed (San Francisquito Creek Joint Powers Authority 2004). Water quality protection standards during construction will comply with the most protective BMPs of the local jurisdictions and the State of California.

B. Measures to Protect Fish and Wildlife Resources

1. Prior to construction, Worker Awareness Training must be conducted to inform construction Project workers of their responsibilities regarding sensitive environmental resources. The training will include environmental education about the western pond turtles, nesting raptors and migratory birds, western burrowing owl, California clapper rail, California black rail, salt marsh harvest mouse, salt marsh wandering shrew, California least tern, western snowy plover, California red-legged frog, San Francisco garter snake, and steelhead, as well as sensitive habitat (e.g., in-stream habitat, riparian habitat, wetlands). The training will include visual aids to assist in identification of regulated biological resources,

actions to take should protected wildlife be observed within the action area, and possible legal repercussions of affecting such regulated resources.

2. Existing access ramps and roads to waterways will be used where possible. If temporary access points are necessary, they will be constructed in a manner that minimizes effects on waterways:
 - Temporary Project access points will be created as close to the work area as possible to minimize running equipment in waterways and will be constructed so as to minimize adverse effects.
 - Any temporary fill used for access will be removed upon completion of the Project. Site topography and geometry will be restored to pre-Project conditions to the extent possible. (Santa Clara Valley Water District Biological Resources BMP 4)
3. Migratory bird nesting surveys will be performed prior to any Project-related activity that could pose the potential to affect migratory birds during the nesting season. Inactive bird nests may be removed, with the exception of raptor nests. No birds, nests with eggs, or nests with hatchlings will be disturbed. (Santa Clara Valley Water District Biological Resources BMP 8)
4. Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete. (Santa Clara Valley Water District Biological Resources BMP 10)
5. Effects on native aquatic vertebrates will be avoided or minimized. Native aquatic vertebrates (fish, amphibians and reptiles) are important elements of stream ecosystems. Native aquatic vertebrates may or may not be able to rapidly recolonize a stream reach if the population is eliminated from that stream reach. If native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, an evaluation of the project site and the native aquatic vertebrates will be conducted by a qualified biologist. The qualified biologist will consider:
 - Native aquatic species present at the site.
 - The ability of the species to naturally recolonize the stream reach.
 - The life stages of the native aquatic vertebrates present.
 - The flow, depth, topography, substrate, chemistry and temperature of the stream reach.
 - The feasibility of relocating the aquatic species present.
 - The likelihood the stream reach will naturally dry up during the work season.

Based on consideration of these factors, the qualified biologist may make a decision to relocate native aquatic vertebrates. The qualified biologist will document in writing the reasons to relocate native aquatic species, or not to relocate native aquatic species, prior to installation of cofferdams, water bypass structures or silt barriers.

If the decision is made to relocate the native aquatic species, then the operation will be based on the District's Fish Relocation Guidelines. If steelhead or other fish species are present, the measures in number 8 (below) will be followed.

6. Local ecotypes of native plants will be planted and appropriate erosion-control seed mixes will be chosen. Whenever native species are prescribed for installation on District fee properties or easements, the following steps will be taken by a qualified biologist or vegetation specialist:
 - Evaluate whether the plant species currently grows wild in Santa Clara County.
 - If the plant species currently grows wild in Santa Clara County, the qualified biologist or vegetation specialist will determine whether the plant installation must include local natives, i.e.

grown from propagules collected in the same or adjacent watershed, and as close to the Project site as feasible.

- A qualified biologist or vegetation specialist will be consulted to determine which seeding option is ecologically appropriate and effective. The following guidelines will inform the biologist or vegetation specialist's determination.
- For areas that are disturbed, an erosion control seed mix may be used consistent with the District Guidelines and Standards for Land Use Near Streams, Design Guide 5, 'Temporary Erosion Control Options.'
- In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of native species.
- Temporary earthen access roads may be seeded when site and horticultural conditions are suitable.
- If a gravel or wood mulch has been used to prevent soil compaction per BI-11, this material may be left in place [if ecologically appropriate] instead of seeding.
- Seed selection will be ecologically appropriate as determined by a qualified biologist, per Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species; and, Supplemental Landscaping\Revegetation Guidelines (ISO document WQ71001).

7. Animal entry and entrapment will be avoided.

- All pipes, hoses, or similar structures less than 12 inches diameter will be closed or covered to prevent animal entry. All construction pipes, culverts, or similar structures, greater than 2-inches diameter, stored at a construction site overnight, will be inspected thoroughly for wildlife by a qualified biologist or properly trained construction personnel before the pipe is buried, capped, used, or moved.
- If inspection indicates presence of sensitive or state- or federally-listed species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action.
- To prevent entrapment of animals, all excavations, steep-walled holes or trenches more than 6-inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility.
 - Holes will be securely covered (no gaps) with plywood or similar materials at the close of each working day, or any time the opening will be left unattended for more than one hour.
 - In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart.
 - In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry.

8. Implement avoidance measures for steelhead trout prior to construction activities. No in-channel construction activities will occur during the steelhead migration period (October 1–May 30), to reduce the likelihood that steelhead are present during construction activities.

A qualified fisheries biologist, approved by NMFS, will survey the construction area 1 to 2 days before work on the Project begins. If water is present in the immediate construction area, the following procedures will be implemented.

- Before a work area is dewatered, fish will be captured and relocated to avoid injury and mortality and minimize disturbance.
 - Before fish relocation begins, a qualified fisheries biologist will identify the most appropriate release location(s). Release locations should have water temperatures similar to the capture location and offer suitable habitat (migratory and rearing) for released fish, and should be selected to minimize the likelihood that fish will reenter the work area or become impinged on the exclusion net or screen. At this time the open reach below the Project site is anticipated to have suitable conditions for relocation.
 - Seining or dip netting will be utilized to keep stress and injury to fish at a minimum. Given the salinity of the Project reach, electrofishing would be ineffective and not utilized.
 - To the extent feasible, relocation will be performed during morning periods. Water temperatures will be measured periodically (every hour or so), and relocation activities will be suspended if water temperature exceeds 20°C (National Marine Fisheries Service 2000).
 - Handling of salmonids will be minimized. When necessary to touch the fish, personnel will wet hands or nets before touching a fish.
 - Fish will be held temporarily in cool, shaded Creek water in a container with a lid. Overcrowding in containers will be avoided. Fish will be relocated promptly. If water temperature reaches or exceeds NMFS limits, fish will be released and relocation operations will cease.
 - If fish are abundant, capture will cease periodically to allow release and minimize the time fish spend in holding containers.
 - Fish will not be anesthetized or measured. However, they will be visually identified to species level, and year classes will be estimated and recorded.
 - Reports on fish relocation activities will be submitted to the California Department of Fish and Game (DFG) and NMFS within 30 days of completion.
 - If mortality during relocation exceeds 5 percent or mortality of any state or federally listed species occurs, relocation will cease, and DFG and NMFS will be contacted immediately or as soon as feasible.
 - Fish relocation efforts will be performed concurrent with the installation of the diversion and will be completed before the channel is fully dewatered. The fisheries biologist will perform a second survey 1 to 2 days following the installation of the diversion to ensure that fish have been excluded from the work area and spot checks will be performed at least biweekly while the diversion is in place.
9. Identify and protect riparian habitats. To avoid unnecessary damage to or removal of riparian habitat, the SFCJPA will retain a qualified biologist or ecologist to survey and demarcate riparian habitat on or adjacent to the proposed areas of construction in the upper reach of San Francisquito Creek. Riparian areas not slated for trimming or removal to accommodate Project construction will be protected from encroachment and damage during construction by installing temporary construction fencing to create a no-activity exclusion zone. Fencing will be brightly colored and highly visible, and installed under the supervision of a qualified biologist to prevent damage to riparian habitat during installation. The fencing will protect all potentially affected riparian habitat consistent with International Society of Arboriculture tree protection zone recommendations and any additional requirements of the resource agencies with

jurisdiction. Fencing will be installed before any site preparation or construction work begins and will remain in place for the duration of construction. Riparian vegetation that must be trimmed will be trimmed by an International Society of Arboriculture certified arborist who will minimize stress and potential damage to trees and shrubs. Construction personnel will be prohibited from entering the exclusion zone for the duration of Project construction. Access and surface-disturbing activities will be prohibited within the exclusion zone.

C. Mitigation and Compensation Measures

Riparian Habitat (Continued)

The MMP will be developed in the context of the federal and state permitting processes under the CWA and California Department of Fish and Game Code, and will include success criteria as specified by the permitting agencies. The MMP will also include adaptive management guidelines for actions to be taken if the success criteria are not met. The success criteria will be met if 80 percent of the riparian plantings become established after ten years. Monitoring will occur, at a minimum, during years 1, 2, 3, 5, 7, and 10, with the plantings taking place in year 0. The initial annual monitoring will assess progress of the plantings according to predetermined success criteria. If progress is not satisfactory, adaptive management actions (including replanting, nonnative species removal, etc.) could be implemented. The MMP will remain in force until the success criteria are met.

Special-Status Species

Conservation Measure BIO1—Develop and Implement Worker Awareness Training

Prior to construction, Worker Awareness Training must be conducted to inform construction Project workers of their responsibilities regarding sensitive environmental resources. The training will include environmental education about nesting raptors and migratory birds, California clapper rail, salt marsh harvest mouse, California least tern, western snowy plover, California red-legged frog, San Francisco garter snake, and steelhead, as well as sensitive habitat (e.g., in-stream habitat, riparian habitat, wetlands). The training will include visual aids to assist in identification of regulated biological resources, actions to take should protected wildlife be observed within the action area, and possible legal repercussions of affecting such regulated resources.

Conservation Measure BIO2—Implement Survey and Avoidance Measures for California Red-Legged Frog and San Francisco Garter Snake Prior to Construction Activities

SFCJPA will retain a permitted biologist to conduct a survey of the freshwater ponds and surrounding upland habitat prior to initiation of construction activities. The surveys will be conducted according to applicable protocols and will be performed during optimal observation periods of the day when detection potential for these species is maximized. The survey will be conducted prior to initiation of construction, but such that enough time is allowed to coordinate with USFWS and DFG to develop a species avoidance plan if needed. If California red-legged frog or San Francisco garter snake individuals are observed or heard during the survey, proposed Project activities within 500 feet of the observation will be postponed. A species avoidance plan will be developed in coordination with USFWS and DFG and implemented during construction and maintenance. If no individuals are observed during the surveys, no further action will be necessary.

Conservation Measure BIO3—Implement Survey and Avoidance Measures for California Least Tern and Western Snowy Plover Prior to Construction Activities

Construction work, including site preparation, will be avoided to the extent possible within and near (500 feet) suitable habitat for these species during their breeding seasons (March 1 to August 31). Western snowy

plover may be present within suitable habitat year-round. Prior to the initiation of work within 500 feet of suitable habitat (regardless of the time of year), a permitted biologist will be retained to conduct surveys of appropriate habitat for California least tern and western snowy plover and their nests. The surveys will be conducted no more than 48 hours prior to commencement of construction activities and will be performed during optimal observation periods when these species are most active. If active nests for California least tern or western snowy plover are observed during the survey, Project activities within 500 feet of the observation will be postponed until young have fledged. If individuals are observed outside of the breeding season within 500 feet of the work area, a biologist will establish a no-disturbance buffer. No work will occur within the buffer until the biologist verifies that individuals have left the area. If individuals are routinely observed in or within 500 feet of the work area or do not leave the work area, species avoidance plan will be developed in coordination with USFWS and DFG. If no individuals are observed in accordance with the survey protocols, no buffers will be required.

Conservation Measure BIO4—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities

The SFCJPA or its approved designee will be responsible for the development and implementation of a habitat monitoring plan for existing (i.e., pre-Project) habitat within the Faber Tract that will document baseline conditions prior to Project implementation. The plan will include routine monitoring of the habitat within the Faber Tract to document changes resulting from the hydrologic reconnection of San Francisquito Creek and potential subsequent flooding into the Faber Tract. The habitat monitoring plan will include adaptive management measures to rectify potential conversion of habitat types and other issues that might arise in the Faber Tract as a result of Project implementation. Additionally, contingency measures will be developed and included in the plan in the event of habitat conversion or loss resulting from the Project. Plan approval by USFWS will be necessary before implementation of activities recommended by the plan. Routine monitoring reports will be submitted to the appropriate agencies following their completion.

Conservation Measure BIO5—Implement Survey and Avoidance Measures for California Clapper Rail Prior to Construction Activities

Work activities within 50 feet of California clapper rail habitat will not occur within 2 hours before or after extreme high tides (6.5 feet or above) when the marsh plain is inundated, which could prevent individuals from reaching available cover.

If work is to be conducted during the species' breeding and rearing seasons (February 1st–August 31) within 700 feet of suitable habitat, a permitted biologist will be retained to conduct protocol level surveys at the Project site including rail call surveys and rail-track surveys in appropriate habitat for California clapper rail (California Coastal Conservancy 2011). The surveys will be conducted no more than 48 hours prior to commencement of construction and maintenance activities and will be performed at dawn or dusk, the vocalization periods of highest intensity. Project activities occurring within 700 feet of active nests will be postponed until after young have fledged.

Outside of breeding season, a permitted biologist will be retained to conduct surveys of appropriate habitat for California clapper rail within the work area, including all staging and access routes, no more than seven days prior to initiation of work within suitable habitat. If individuals are observed during this survey, a biologist will conduct an additional survey immediately prior to initiation of construction activities. If individuals are observed within or near the work area, a no-disturbance buffer (minimum 50 feet) will be implemented. If the daily work area is expanded, then a qualified biologist will survey the suitable habitat prior to initiation of work and movement of equipment that day. No work will occur within the buffer until the biologist verifies that California clapper rail individuals have left the area.

If individuals are routinely observed in the work area, a species avoidance plan will be developed in coordination with USFWS and DFG. If no individuals are observed in accordance with the survey protocols, no buffers will be required. All vegetation removal within suitable habitat of these species, as determined by a biologist, will be done by hand to the extent possible. If movement of heavy equipment is necessary in suitable habitat or within 50 feet of habitat, then a biological monitor will observe the area in front of the equipment from a safe vantage point. If these species are detected within the area in front of the equipment, then the equipment will stop and the biologist will direct the equipment on an alternative path. If this is not possible, then equipment will stop until a clear path can be identified.

Additional conservation measures during the construction period will include:

- An annual search for and subsequent destruction of any cat feeding stations along public walkways shall be conducted
- Before the onset of winter high tides, an annual capture and removal effort of feral cats and rats in the surrounding disturbed areas shall be conducted.

Conservation Measure BIO6—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse Prior to Construction

Construction and maintenance work, including site preparation, will be avoided to the extent possible within suitable habitat for this species during their breeding seasons (February 1 to November 30). As work during the species breeding seasons will be necessary, a species avoidance plan will be developed in consultation with USFWS and DFG and implemented. The avoidance plan, at a minimum, will include the following.

- Hand vegetation removal shall start at the edge farthest from the largest contiguous salt marsh area and work its way towards the salt marsh, providing cover for salt marsh harvest mice and allowing them to move towards the salt marsh as vegetation is being removed.
- In consultation with DFG and USFWS, exclusion fencing shall be placed around a defined work area immediately following vegetation removal and before Project activities begin. The final design and proposed location of the fencing shall be reviewed and approved by DFG and USFWS prior to placement.
- Prior to initiation of work each day within 300 feet of tidal or pickleweed habitats, a qualified biologist shall thoroughly inspect the work area and adjacent habitat areas to determine if saltmarsh harvest mice are present. The biologist shall ensure the exclusion fencing has no holes or rips and the base remains buried. The fenced area will be inspected daily to ensure that no mice are trapped.

Prior to initiation of work within suitable habitat, a permitted biologist will be retained to monitor the hand removal of pickleweed to avoid effects on salt marsh harvest mouse. Monitoring will occur for the duration of all clearing work within suitable habitat. If salt marsh harvest mouse are observed during clearing activities, clearing will cease and workers will move to a new area. Clearing work may begin in the area of the observation one day or more after the observation date.

During the survey, if salt marsh harvest mouse individuals are observed, or if active nests of these species are observed, proposed Project activities within 100 feet of the observation will be postponed and a no-disturbance buffer will be established. The buffer will remain in place until the biologist determines that the individuals have left the area and are not present in or near (100 feet) of the work area. If no individuals are observed in accordance with the survey protocols, no buffers will be required.

Work activities within 50 feet of salt marsh harvest mouse habitat will not occur within two hours before or after extreme high tides (6.5 feet or above) when the marsh plain is inundated, which could prevent individuals from reaching available cover.

Conservation Measure BIO7—Conduct Botanical Surveys

SFCJPA will retain a qualified botanist to survey suitable habitat in the action area for California seablite. Surveys will be preferentially conducted from July to August the year before construction will begin, as the blooming period for the species is July to October. Exact timing of surveys should account for annual variations in climate and weather; surveys should be timed to coincide with blooming periods of known local populations whenever possible

Surveys will follow the CNPS Botanical Survey Guidelines (California Native Plant Society 2001). Special-status plants identified during the surveys will be mapped using a handheld global positioning system unit and documented as part of the public record. A report of occurrences will be submitted to SFCJPA and the CNDDDB. Surveys will be completed before ground-disturbing activities begin; survey timing will allow for follow-up mitigation, if needed. If it is determined that identified individuals could be affected by construction traffic or activities, Conservation Measure BIO7 and, if necessary, Conservation Measure BIO8, will be implemented.

Conservation Measure BIO8—Confine Construction Disturbance and Protect California Seablite Individuals during Construction

Construction disturbance will be confined to the minimum area necessary to complete the work, and will avoid encroachment on adjacent habitat. If California seablite individuals are found, a setback buffer will be established around individuals or the area occupied by the population, based on judgment of a qualified botanist. The plants and a species-appropriate buffer area determined in consultation with USFWS staff will be protected from encroachment and damage during construction by installing temporary construction fencing. Fencing will be brightly colored and highly visible. Fencing will be installed under the supervision of a qualified botanist to ensure proper location and prevent damage to plants during installation. Fencing will be installed before site preparation or construction work begins and will remain in place for the duration of construction. Construction personnel will be prohibited from entering these areas (the exclusion zone) for the duration of Project construction. Fencing installation will be coordinated with fence installation required by other conservation measures protecting wetlands, riparian habitat, and mature trees.

Conservation Measure BIO9—Compensate for Loss of California Seablite

If California seablite individuals are present and cannot be effectively avoided through implementation of Conservation Measure BIO7, SFCJPA will develop and implement a compensation plan. The compensation plan will preserve an offsite area containing individuals of the species. The plan will be implemented so that there is no net loss of California seablite. If an offsite population is not located or is not available for preservation, SFCJPA will employ a qualified nursery to collect and propagate the affected species, collected at the appropriate time of year, prior to population disturbance at the affected areas of the Project. Transplantation will also be implemented if practicable for the species affected, including mature native plants to the extent feasible.

The compensation plan will be developed by a qualified botanist in coordination with and approval of USFWS. The compensation area will contain a population and/or acreage equal to or greater than that lost as a result of Project implementation and will include adjacent areas as needed to preserve the special-status plant population in perpetuity. Compensation of the affected population will occur in an amount equal to or greater than the amount lost as a result of the Project to ensure that genetic diversity is preserved and no net loss of the number of individuals occurs. The quality of the population preserved will also be equal to or greater than that of the affected population, as determined by a qualified botanist retained by the SFCJPA. Compensation sites and populations will be subject to USFWS approval. The SFCJPA will be responsible for ensuring that the compensation area is acquired in fee or in conservation easement, maintained for the benefit of the special-status plant population in perpetuity, and funded through the establishment of an endowment.

A monitoring and adaptive management plan will be developed for each compensation site, subject to DFG and USFWS approval. This plan will establish success criteria for the site and will include protocols for annual monitoring of the site. The goal of monitoring will be to assess whether the plan has successfully mitigated Project effects; monitoring will be designed to ensure that the required number of plants and/or plant acreage is being sustained through site maintenance. Factors to be monitored could include density, population size, natural recruitment, and plant health and vigor. If monitoring indicates that special-status plant populations are not maintaining themselves, adaptive management techniques will be implemented. Such techniques could include reseeding/replanting, nonnative species removal, and other management tools. The site will be evaluated at the end of the monitoring period to determine whether the mitigation has met the goal of this conservation measure to preserve a population the same size as that affected and of equal or greater quality as that lost as a result of Project activities at the site. Criteria by which this determination will be made will be established in the monitoring plan. The monitoring plan will also address adaptive management strategies to be adopted if the evaluation determines that the site does not meet the success criteria. In that case, a monitoring plan will stay in place until the success criteria are met.

Appendix A: Figures

Appendix B: Representative Photographs

**Appendix C:
Notice of Determination and Proof of Filing Fee
(PENDING)**