

FC 1025 (09-20-13)

Meeting Date: 06/10/2014
Agenda Item: **2.1**
Unclassified Manager: M. Richardson
Extension: 2035
Director(s):

BOARD AGENDA MEMO

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

RECOMMENDATION:

- A. Conduct the public hearing on the Modification to the San Francisquito Creek Flood Protection Project, Proposed Project E5 of the Safe, Clean Water and Natural Flood Protection Program
- B. Adopt Resolution Approving Modification to the San Francisquito Creek Flood Protection Project, Proposed Project E5 of the Safe, Clean Water and Natural Flood Protection Program (Attachment 5)
- C. Consider the potential environmental effects of the San Francisco Bay to Highway 101 section of the Project, as discussed in the Final EIR and Addendum
- D. Adopt Resolution Making Findings of Fact and Adopting a Mitigation Monitoring and Reporting Program pursuant to the Provisions of the California Environmental Quality Act of 1970 in connection with Approval of Funding for the San Francisquito Creek Flood Protection Project: San Francisco Bay to Highway 101(Attachment 7).
- E. Approve the Agreement for Funding Construction of the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101

SUMMARY:

On July 24, 2012, the Board adopted Resolution No. 12-62, which specified the limits and conditions by which the District is authorized to institute a special parcel tax for the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program). As set forth in that Resolution, the Board of Directors may direct that proposed projects in the Safe, Clean Water program be modified or not implemented depending upon a number of factors, including federal and state funding limitations. To modify a proposed project, the Board must hold a formal, public hearing on the matter, which will be noticed by publication and notification to interested parties, before adoption of any such decision to modify or not implement a project. At its regular meeting on May 27, 2014, the Board set the time and place for a formal public hearing to take place on June 10, 2014 to consider modifying the San Francisquito Creek Flood Protection Project E5.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

Staff prepared and published an advertisement in Santa Clara County and San Mateo County newspapers consistent with the two-week notice requirements stated in Government Code section 6066. Staff also emailed the ad to provide notice to interested parties. The outreach strategy, including the list of newspapers that published the ad, and a copy of the Public Notice Ad is attached to this memo (Attachment 1).

Background:

1. The Safe, Clean Water and Natural Flood Protection Program

In November 2012, Santa Clara County voters overwhelmingly supported Measure B, the Safe, Clean Water Program. Developed with input from more than 16,000 residents and stakeholders, this 15-year program was created to match the community's needs and values.

Five funding priorities were implemented by the program:

- Priority A: Ensure a safe, reliable water supply
- Priority B: Reduce toxins, hazards, and contaminants in our waterways
- Priority C: Protect our water supply from earthquakes and natural disasters
- Priority D: Restore wildlife habitat and provide open space
- Priority E: Provide flood protection to homes, businesses, schools and highways

Flood protection capital projects are included in Priority E and have been prioritized to protect the largest number of people, homes and businesses, as well safeguard the highways, streets, public transportation and business centers that people depend on for their livelihoods.

The San Francisquito Creek Flood Protection Project is a Priority E proposed project, referenced in the Program document as Project E5.

2. San Francisquito Creek Flood History

San Francisquito Creek is the geographic boundary between San Mateo and Santa Clara Counties and is bordered by the cities of Palo Alto, Menlo Park, and East Palo Alto. The creek has a history of overflow flooding, seven times since 1910, and can cause severe flood damage with very little warning.

During the February 1998 El Niño event, a flow of approximately 7,400 cubic feet per second (cfs), caused record flooding that resulted in an estimated \$28 million in damages in Palo Alto, East Palo Alto, and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 100-year flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the United States Army Corps of Engineers (USACE) in 2011.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

3. San Francisquito Creek Joint Powers Authority

In 1999, after the creek's historic flood event of 1998, 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 joined together to create the San Francisquito Creek Joint Powers Authority (SFCJPA). The primary goal of the SFCJPA was to take a regional approach to identifying and implementing the necessary flood improvement projects on San Francisquito Creek.

For its first major capital project to go to construction, the SFCJPA is coordinating a project to provide 1 percent flood protection to the communities of East Palo Alto and Palo Alto along San Francisquito Creek between the San Francisco Bay and U.S. Highway 101. This portion of the creek is at a high risk of severe flooding, both from watershed flows from neighboring hills and from tidal sources.

The San Francisco Bay to Highway 101 project is the necessary first step in an overall plan to provide protection to properties located within the flood-prone areas of San Francisquito Creek. Work upstream of Highway 101 cannot be undertaken until the creek's capacity has been increased downstream, as inundation will occur if the downstream portion isn't physically prepared to receive the increased flow of the widened channel.

4. Project E5 San Francisquito Creek Flood Protection San Francisco Bay to Middlefield Road – Palo Alto

Preferred project: A federal-state-local partnership

As defined in the original Project description for E5 (Attachment 2), the scope of this Project includes construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101, the Project would provide 1 percent flood protection, ecosystem protection, and recreational benefits.

The work would remedy channel constrictions and modify bridges at University Avenue, Newell Road, Middlefield Road, and Pope/Chaucer Street. The project is sponsored by the SFCJPA, of which the District is a member agency, in partnership with the USACE. The Project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

Key performance indicators

The Safe, Clean Water program defines two 15-year Key Performance Indicators (KPIs) for Project E5 (see Attachment 2, Original Project Description): one for the preferred Project with federal and local funding, and the other one with local funding only.

- 1. Preferred project with federal and local funding:** Protect more than 3,000 parcels by providing 1 percent flood protection.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

2. **With local funding only:** Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and 50-year protection upstream of Highway 101).

Proposed Modifications to Project E5 of the Safe, Clean Water Program:

Proposed Modifications to Project E5 of the Safe, Clean Water and Natural Flood Protection Program are shown in Attachment 3, strike-through version.

As stated in the Safe, Clean Water Program, all the construction projects categorized as Funding Priority E are undertaken in partnership with the federal government, and will require federal funding, in addition to local funding, to complete the preferred scope. Should federal funding be unavailable, a reduced project scope would be implemented.

This project is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, currently only state and local funds are committed to pay for Project construction. Because federal funding for construction has not yet been committed to this Project, staff recommends modifying the Program document to advise the public of the level of flood protection that can be achieved at this time.

As stated in the Modified Project Description, the local-state-funding-only project will be the same as the preferred project downstream of Highway 101; but upstream of Highway 101, the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cfs, approximately a 30-year flood event. Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently, the channel can only convey a 15-year flood event.

If sufficient funding becomes available, a 1 percent (100-year) flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls could be built.

Changes to the Preferred Project

The objective of the preferred project continues to be to provide 1 percent flood protection and ecosystem benefits. However, the description of the work upstream of Highway 101 has been modified to reflect the feasible alternatives currently being considered through the California Environmental Quality Act's Environmental Review Process. Below is the modified text of the preferred project.

The work upstream of Highway 101 would remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street, and include; a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; underground bypass channels; and floodwalls.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

The Key Performance Indicators (KPIs) for the Project have also been modified to reflect currently available funds for the Modified Project.

Modified KPIs:

1. **Preferred project with federal, state, and local funding:** Protect more than 3,000 parcels by providing 1 percent flood protection.
2. **With state and local funding only:** Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101).

The Modified Project Description reflecting these changes is included as Attachment 4, final version.

Staff recommends that the Board adopt the Resolution Approving Modification to the San Francisquito Creek Flood Protection Project, Proposed Project E5 of the Safe, Clean Water and Natural Flood Protection Program (Attachment 5).

The Local-State-Funding-Only Project: San Francisco Bay to Highway 101

The Project proposes to increase the Creek's capacity from San Francisco Bay to East Bayshore Road by 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 the influence of tides and increase channel capacity; and 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 the Creek. In addition, major Project elements include an overflow terrace at marsh elevation adjacent to the Baylands Preserve, and extension of Friendship Bridge via a boardwalk across new marshland within the widened channel.

Plans and specifications for construction of the downstream Project are in final draft and being reviewed by the Project team. Staff anticipates that the Project will receive environmental permits and complete all necessary real estate transactions by July 2014.

Staff will submit an agenda item to the Board to Adopt Plans and Specifications and Authorize Advertisement for Bids for the San Francisco Bay to Highway 101 Project. The Project team anticipates recommending construction contract award to the Board by early fall 2014.

SFCJPA Approved the San Francisco Bay to Highway 101 Project

The SFCJPA certified the *Final Environmental Impact Report for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101* as the Lead Agency under CEQA on October 18, 2012. In March 2013, the SFCJPA prepared an Addendum to the Final EIR to evaluate environmental effects associated with longfin smelt. Staff recommends the Board consider the JPA's EIR and Addendum and make required findings prior to taking action on funding the Project.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

The EIR identified three significant unavoidable impacts associated with the project: emissions of nitrous oxides from construction equipment in excess of the Bay Area Air Quality Management District (BAAQMD) daily threshold of 54 pounds per day; toxic air contaminant emissions in excess of BAAQMD daily emission thresholds; and the reduced availability of existing recreational facilities (the Palo Alto Golf Course) by converting 7.4 acres of the golf course to flood conveyance. The EIR proposes mitigation for these impacts, but even with the implementation of proposed measures, the impact would remain significant (or in the case of the golf course, implementation of mitigation is not within the jurisdiction of the SFCJPA or the District). District approval of the project would allow the construction of proposed facilities and thus contribute to these significant impacts.

In order to proceed with construction of the downstream project, staff recommends the Board consider and make certain findings under CEQA, including a Statement of Overriding Considerations for the significant and unavoidable impacts associated with the project. The SFCJPA is responsible for implementing all mitigation measures identified in the EIR with the coordination of the member agencies, including the District.

Staff recommends that the Board adopt the Resolution Making Findings of Fact and Adopting a Mitigation Monitoring and Reporting Program Pursuant to the Provisions of the California Environmental Quality Act of 1970 in connection with Approval of Funding for the San Francisquito Creek Flood Protection Project: San Francisco Bay to Highway 101, Attachment 7.

San Francisco Bay to Highway 101 Construction Funding Agreement

The SFCJPA, including representatives of its member agencies, 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, have all agreed to the funding commitments listed below.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

San Francisco Bay to Hwy 101 -- Construction Related Funding Sources

S.F. Bay to Highway 101	Funding Sources	Amount
	East Palo Alto	\$0.8M
	San Mateo County match	\$0.8M
	SCVWD	\$28.0M
	DWR Grant (secured by SFCJPA)	\$8.0M
	Estimated Total Revenue	\$37.6M

Upstream of Highway 101 – Construction Related Funding Sources

Newell Road Bridge modification	Funding Sources	Amount
	SCVWD	\$0.5M
	CalTrans Grant	\$3.5M
	Estimated Total Revenue	\$4.0M
Pope/Chaucer Bridge modification and in-channel/bank work	Funding Sources	Amount
	Menlo Park	\$0.5M
	East Palo Alto	\$0.2M
	San Mateo County match	\$0.7M
	SCVWD	\$9.7M
	Estimated Total Revenue	\$11.1M

The total District share for construction-related Project costs is approximately \$38.2M.

All members of the SFCJPA are parties to an agreement to fund construction of the San Francisco Bay to Highway 101 section of the Project. Staff at each member agency is recommending approval by their respective governing bodies. This section of the project is the necessary first step to provide protection to properties located within the flood-prone areas of San Francisquito Creek.

Staff recommends that the Board approve the Agreement for Funding Construction of the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101(Attachment 6).

Next Steps

Upstream of Highway 101

Preferred Project

Projects upstream of Highway 101, including a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; underground bypass channels, and floodwalls, are still undergoing environmental review through the CEQA process. This process includes multiple opportunities for the community to provide comments and feedback about the combination of alternatives under analysis.

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

State and local funding only Project

Newell Road Bridge modification

The City of Palo Alto is the lead agency for the Environmental Impact Report (EIR) on the Newell Road Bridge Modification Project. After the Final EIR is certified by the city, the Board will have the opportunity to consider the EIR and approve a funding agreement for construction of the Newell Road Bridge Modification Project. The proposed funding allocations are referenced under the Construction Funding subheading of this memo's table on page 7.

Pope/Chaucer Bridge modification and in-channel/bank work

The SFCJPA is lead agency for the EIR on all other upstream improvements, including remedying channel constrictions between Highway 101 and El Camino Real and modifying the Pope/Chaucer Street Bridge, and some combination of modifying bridges at University Avenue and Middlefield Road, upstream detention, underground bypass channels, and floodwalls.

After the Final EIR is certified by the SFCJPA, the Board will have the opportunity to consider the EIR and approve a funding agreement for construction of the Pope/Chaucer Street Bridge Modification and In-Channel/Bank Work Project. The proposed funding allocations are referenced under the Construction Funding header of this memo's table on page 7.

FINANCIAL IMPACT:

The original construction cost for the entire project E5 projected by the Safe, Clean Water and Natural Flood Protection Program was \$35.5M. On May 13, 2014, the Board approved an additional \$5M allocation to the San Francisquito Creek Flood Protection Project, from the San Francisco Bay to Highway 101 as part of the District's Fiscal Year 2015-19 preliminary Capital Improvement Program work study session. The current Safe, Clean Water program allocation is \$40.5M and the total estimated District share for construction related project costs for the local-state-funding-only project, including construction management, is \$38.2M. This leaves \$2.3 M available for contingency expenses.

CEQA:

An Environmental Impact Report was prepared by the SFCJPA, the lead agency under CEQA. The SFCJPA's EIR is available for the Board's and the public's review on line through the SFCJPA's external web site at:

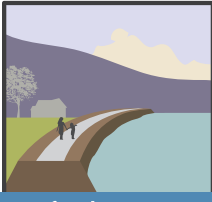
http://sfcjpa.ehclients.com/documents/SFCreek_EBayshore_FEIR_10Oct2012.pdf

SUBJECT: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project of the Safe, Clean Water and Natural Flood Protection Program; Adopt Resolution Making California Environmental Quality Act Findings for the San Francisquito Creek Project, San Francisco Bay to Highway 101; and Approve the Construction Funding Agreement for the San Francisquito Creek Project, San Francisco Bay to Highway 101

(06/10/14)

ATTACHMENTS:

- Attachment 1 – Public Notice Ad
- Attachment 2 – Original Project Description
- Attachment 3 – Proposed Modifications to Project Description (strike-through)
- Attachment 4 – Modified Project Description (final version)
- Attachment 5 – Resolution Approving Modification to the San Francisquito Creek Flood Protection Project, Proposed Project E5 of the Safe, Clean Water and Natural Flood Protection Program
- Attachment 6 – Agreement for Funding Construction of the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101
- Attachment 7 – Resolution Making Findings of Fact and Adopting a Mitigation Monitoring and Reporting Program pursuant to the Provisions of the California Environmental Quality Act of 1970 in connection with Approval of Funding for the San Francisquito Creek Flood Protection Project; San Francisco Bay to Highway 101



Safe, Clean Water
and Natural Flood Protection

Public hearing Modification to the San Francisquito Creek Flood Protection Project



Priority E: Provide flood protection to homes, business, schools and highways.

What: Public Hearing on Modification to the San Francisquito Creek Flood Protection Project

When: June 10, 2014 at 6:00 p.m.

Where: District Headquarters – Board Room
5700 Almaden Expressway, San Jose, CA 95118

Due to the level of external funding available, staff recommends modifying the program document to advise the public of the level of flood protection that can be achieved at this time.

As stated in the Modified Project Description, the local-state-funding-only project will be the same as the preferred project downstream of Highway 101; but upstream of Highway 101, the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cubic feet per second (cfs), approximately a 30-year flood event. Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently, the channel can only convey a 15-year flood event.

If sufficient funding becomes available, a 1 percent (100-year) flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be built.



San Francisquito Creek, 1950s flood event

Proposed modifications to key performance indicators:

- 1. Preferred project with federal, state and local funding:**
Protect more than 3,000 parcels by providing 1 percent flood protection.
- 2. With state and local funding only:**
Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101).

The full board agenda memo will be posted online on May 30, 2014 at www.valleywater.org.

For more information on the public hearing, please contact **Melanie Richardson** at (408) 630-2035, or by email at mrichardson@valleywater.org.



Public Hearing Outreach for Modification to San Francisquito Creek Flood Protection Project

Ad Placement Schedule

Newspaper:	Dates:
Campbell Express	5/28, 6/4
Almanac (Portola Valley)	5/28, 6/4
El Observador (translated)	5/30, 6/6
Gilroy/Morgan Hill	5/30, 6/6
Los Altos T.C.	5/28, 6/4
Mercury News	5/28, 6/3
San Mateo Times	5/28, 6/3
Metro	5/28, 6/4
Milpitas Post	5/30, 6/6
Mt. View/Palo Alto	5/30, 6/6
Santa Clara Weekly	5/28, 6/4
Vietnam Daily News (translated)	5/30, 6/3
SVCN Weeklies*	5/30, 6/6
San Jose Post	5/28, 6/3

***SVCN community papers include:** Almaden, Cambrian, Campbell, Cupertino, Los Gatos, Rose Garden, Saratoga, Sunnyvale and Willow Glen.

Email Outreach

The public notice ads were also emailed to the following:

- The Safe, Clean Water Program Blue Ribbon Committee
- All Project stakeholders identified from email lists generated through meeting sign-in sheets, comment cards, and Project related inquiries



SAFE, CLEAN WATER AND
NATURAL FLOOD PROTECTION

**Project E5: San Francisquito
Creek Flood Protection,
San Francisco Bay to
Middlefield Road – Palo Alto**

Protect approximately 3,000
parcels from flooding

Leverage funding through cost
shares and grants

Reduce bank erosion and sedi-
mentation

Improve habitat for steelhead
and other endangered species

Improve stream water quality

Identify areas to integrate recre-
ational opportunities

PROJECT E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

Preferred project: A federal-state-local partnership

This project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101 the project would provide 1 percent flood protection, ecosystem protection and recreational benefits.

The work would remedy channel constrictions and modify bridges at University Avenue, Newell Road, Middlefield Road and Pope/Chaucer Street. The project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers (Corps). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

Flooding history and project background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed seven times since 1910.

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

Benefits

- Provides 1 percent flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the State Department of Water Resources and the California Department of Transportation

Key performance indicators

1. Preferred project with federal and local funding: Protect more than 3,000 parcels by providing 1 percent flood protection.
2. With local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and 50-year protection upstream of Highway 101).

The 1998 flooding of San Francisquito Creek closed Highway 101 and caused an estimated \$28 million in damages.





This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.

What if no federal funding is available?

The local-funding-only project will be the same as the preferred project downstream of Highway 101, but upstream of Highway 101 it will provide 2 percent (50-year) flood protection, rather than 1 percent (100-year) protection to approximately 3,000 parcels in Palo Alto.

Geographic area of benefit: Palo Alto

Estimated funding from Safe, Clean Water: \$35.5 million

Estimated total project cost: \$128 million*

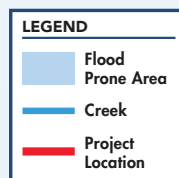
**The \$92.5 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, state grant funds and local partnerships under the JPA, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.*



A debris deflector protrudes up from beneath the Bayshore Freeway bridge, where it prevents the accumulation of flood debris that can block water flow and cause flooding to nearby homes. The facing page photo shows debris accumulating at this same bridge before the deflector was installed.



The preferred project will provide 1 percent flood protection from San Francisco Bay to Middlefield Road in Palo Alto.





SAFE, CLEAN WATER AND
NATURAL FLOOD PROTECTION

Project E5: San Francisquito
Creek Flood Protection,
San Francisco Bay to
Middlefield Road – Palo Alto

Protect approximately 3,000
parcels from flooding

Leverage funding through cost
shares and grants

Reduce bank erosion and sedi-
mentation

Improve habitat for steelhead
and other endangered species

Improve stream water quality

Identify areas to integrate recre-
ational opportunities

The 1998 flooding of San
Francisquito Creek closed
Highway 101 and caused
an estimated \$28 million
in damages.



PROJECT E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

Preferred project: A federal-state-local partnership

This project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101 the project would provide 1 percent flood protection, ecosystem protection and recreational benefits.

The work **upstream of Highway 101** would remedy channel constrictions and modify bridges at **University Avenue, Newell Road, Middlefield Road and Pope/Chaucer Street, and include; a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; underground bypass channels; and floodwalls.**

The project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers (Corps **USACE**). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

Flooding history and project background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed seven times since 1910.

During the February 1998 El Niño event, **a flow of approximately 7,400 cubic feet per second (cfs), caused record flooding caused that resulted in** an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 100-year flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the Corps **USACE** in 2011.

Benefits

- Provides 1 percent flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the State Department of Water Resources and the California Department of Transportation

Key performance indicators

1. Preferred project with federal, **state** and local funding: Protect more than 3,000 parcels by providing 1 percent flood protection.
2. With **state and** local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, **and approximately 30-year 50-year** protection upstream of Highway 101).



This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if **only state and local funding are** alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.

What if no federal funding is available?

The local-state-funding-only project will be the same as the preferred project downstream of Highway 101, but upstream of Highway 101, **the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cfs, approximately a 30-year event. Allowing this level of water to flow through the channel will protect provide 2 percent (50-year) flood protection, rather than 1 percent (100-year) protection to approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently the channel can only convey a 15-year flood event.**

If sufficient funding becomes available, a 1 percent (100-year) flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be built.

Geographic area of benefit: Palo Alto

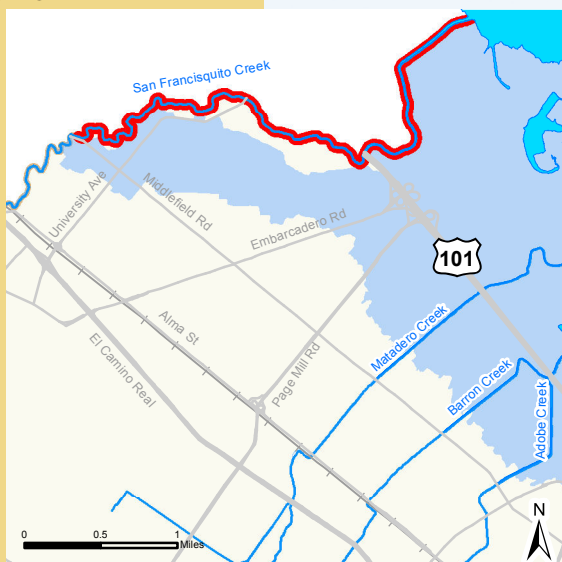
Estimated funding from Safe, Clean Water: \$35.5 **\$40.5** million

Estimated total project cost: \$128 **\$133** million*

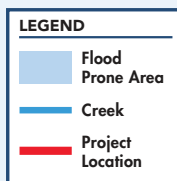
*The \$92.5 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, state grant funds and local partnerships under the JPA, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.



A debris deflector protrudes up from beneath the Bayshore Freeway bridge, where it prevents the accumulation of flood debris that can block water flow and cause flooding to nearby homes. The facing page photo shows debris accumulating at this same bridge before the deflector was installed.



The preferred project will provide 1 percent flood protection from San Francisquito Bay to Middlefield Road in Palo Alto.





SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

Project E5: San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

Protect approximately 3,000
parcels from flooding

Leverage funding through cost
shares and grants

Reduce bank erosion and sedi-
mentation

Improve habitat for steelhead
and other endangered species

Improve stream water quality

Identify areas to integrate recre-
ational opportunities

The 1998 flooding of San
Francisquito Creek closed
Highway 101 and caused
an estimated \$28 million
in damages.



PROJECT E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

Preferred project: A federal-state-local partnership

This project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101 the project would provide 1 percent flood protection, ecosystem protection and recreational benefits.

The work upstream of Highway 101 would remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street, and include; a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; underground bypass channels; and floodwalls. The project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers (USACE). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

Flooding history and project background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed seven times since 1910.

During the February 1998 El Niño event, a flow of approximately 7,400 cubic feet per second (cfs), caused record flooding that resulted in an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 100-year flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the USACE in 2011.

Benefits

- Provides 1 percent flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the State Department of Water Resources and the California Department of Transportation

Key performance indicators

1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1 percent flood protection.
2. With state and local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101).



This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if only state and local funding are available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.

What if no federal funding is available?

The local-state-funding-only project will be the same as the preferred project downstream of Highway 101; but upstream of Highway 101, the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cfs, approximately a 30-year event. Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently the channel can only convey a 15-year flood event.

If sufficient funding becomes available, a 1 percent (100-year) flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be built.

Geographic area of benefit: Palo Alto

Estimated funding from Safe, Clean Water: \$40.5 million
Estimated total project cost: \$133 million*

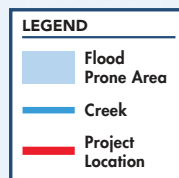
**The \$92.5 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, state grant funds and local partnerships under the JPA, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.*



A debris deflector protrudes up from beneath the Bayshore Freeway bridge, where it prevents the accumulation of flood debris that can block water flow and cause flooding to nearby homes. The facing page photo shows debris accumulating at this same bridge before the deflector was installed.



The preferred project will provide 1 percent flood protection from San Francisco Bay to Middlefield Road in Palo Alto.



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

RESOLUTION NO. 14-

**APPROVING MODIFICATION TO THE SAN FRANCISQUITO CREEK
FLOOD PROTECTION PROJECT, PROPOSED PROJECT E5 OF THE
SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION PROGRAM**

WHEREAS, on July 24, 2012, the Board of Directors of the Santa Clara Valley Water District (District) adopted Resolution No. 12-62 Providing for the Continuation and Levy of a Special Tax to Pay the Cost of a Safe, Clean Water and Natural Flood Protection Program in the Combined Flood Control Zone of the Santa Clara Valley Water District Subject, Nevertheless, to Specified Limits and Conditions (Resolution No. 12-62); and

WHEREAS, the purpose of the special tax is to supplement other available but limited revenues to keep the District's flood protection system of levees, channels, drains, debris basins and other improvements in a safe and effective condition; to enable the District to respond to emergencies; to perform maintenance and repair; to acquire, restore, and preserve habitat; to provide recreation; to conduct environmental education; to protect and improve water quality; and, to construct and operate flood protection storm drainage facilities; including in each case the cost of financing such activities; and

WHEREAS, in November 2012, the District's Measure B was overwhelmingly approved by more than a two-thirds majority vote of the electorate of the District, implementing a special tax, the proceeds of which are used solely for the purpose of supporting the five funding priorities of the Safe, Clean Water and Natural Flood Protection Program (Program), which are as follows: Priority A: Ensure a safe, reliable water supply; Priority B: Reduce toxins, hazards, and contaminants in our waterways; Priority C: Protect our water supply from earthquakes and natural disasters; priority D: Restore wildlife habitat and provide open space; and Priority E: Provide flood protection to homes, businesses, schools, and highways; and

WHEREAS, "Priority E: Provide Flood Protection to Homes, Businesses, Schools, Streets, and Highways" is accomplished in part by the District undertaking certain capital projects. The District's flood protection capital projects are prioritized to protect the largest number of persons, homes, and businesses, as well as safeguard the highways, streets, public transportation, and business centers that people depend on for their livelihoods; and

WHEREAS, one of the Program's flood protection capital projects in Priority E is Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road in Palo Alto (Project E5). The "Preferred" project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101, the project would provide 1 percent flood protection, ecosystem protection, and recreational benefits. Project E5 would remedy channel constrictions and modify bridges at University Avenue, Newell Road, Middlefield Road, and Pope/Chaucer Street; and

WHEREAS, the Program defines Key Performance Indicators (KPIs) for each of the funding priorities; two are stated for Project E5: "1. Preferred project with federal and local funding: Protect more than 3,000 parcels by providing 1 percent flood protection, and 2. With local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, 50-year protection upstream of Highway 101)"; and

WHEREAS, Project E5 is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the United States Army Corps of Engineers (USACE); and

WHEREAS, Project E5 is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope; currently, only state and local funding has been committed to pay for Project construction, thereby necessitating modifications to Project E5 in terms of the level of flood protection that can be achieved at this time; and

WHEREAS, the District's Resolution No. 12-62 (Resolution No. 12-62) authorizes modifications to proposed projects. Paragraph J. reads as follows: "The Board of Directors may direct that proposed projects in the Safe Clean Water and Natural Flood Protection Program be modified or not implemented depending upon a number of factors, including federal and state funding limitations and the analysis and results of CEQA environmental review. The Board of Directors must hold a formal, public hearing on the matter, which will be noticed by publication and notification to interested parties, before adoption of any such decision to modify or not implement a project."

WHEREAS, at its regularly scheduled meeting conducted on May 27, 2014, the District's Board of Directors set a time and place for a formal public hearing to occur on June 10, 2014, at which time the Board will consider modifications to the Safe, Clean Water and Natural Flood Protection Program, Proposed Project E5.

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

1. Pursuant to the requirements stated in the District's Resolution No. 12-62, paragraph J., a noticed public hearing has been held.
2. Currently, and for the foreseeable future, neither federal funding nor sufficient state and local funding will be available for construction of the Preferred Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road in Palo Alto. Modifications to the upstream portion of the Preferred Project are therefore necessary.
3. The Key Performance Indicators for the Preferred Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road—Palo Alto, as set forth in the Safe Clean Water and Natural Flood Protection Program (July 24, 2012) are modified to state as follows:
 - "1. Preferred project with federal-state-local funding: Protect more than 3,000 parcels by providing 1 percent flood protection.
 2. With state and local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101."
4. Due to the level of available external funding, the upstream portion of the Preferred Project E5, is modified to remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street. If sufficient funding becomes available in the future,

Approving Modification to the San Francisquito Creek Flood Protection Project, Proposed Project E5 of the Safe, Clean Water and Natural Flood Protection Program

Resolution No. 14-

a 1 percent flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be constructed.

5. The “Estimated funding from Safe, Clean Water: \$35.5 million” as stated for the Preferred Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road—Palo Alto, as set forth in the Safe Clean Water and Natural Flood Protection Program (July 24, 2012) is modified to state as follows:

“Estimated funding from Safe, Clean Water: \$40.5 million.”

6. The “Estimated total project cost: \$128 million” as stated for the Preferred Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road—Palo Alto, as set forth in the Safe Clean Water and Natural Flood Protection Program (July 24, 2012) are modified to state as follows:

“Estimated total project cost: \$133 million.”

7. The District’s Safe, Clean Water and Flood Protection Program, proposed Project E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road—Palo Alto, is hereby modified as stated in Attachment A hereto, Modified Project E5, San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road—Palo Alto.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on June 10, 2014:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

By: _____
TONY ESTREMER
Chair/Board of Directors

ATTEST: MICHELE L. KING, CMC

Clerk/Board of Directors



SAFE, CLEAN WATER AND
NATURAL FLOOD PROTECTION

Project E5: San Francisquito
Creek Flood Protection,
San Francisco Bay to
Middlefield Road – Palo Alto

Protect approximately 3,000
parcels from flooding

Leverage funding through cost
shares and grants

Reduce bank erosion and sedi-
mentation

Improve habitat for steelhead
and other endangered species

Improve stream water quality

Identify areas to integrate recre-
ational opportunities

PROJECT E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

Preferred project: A federal-state-local partnership

This project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101 the project would provide 1 percent flood protection, ecosystem protection and recreational benefits.

The work upstream of Highway 101 would remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street, and include a combination of: modified bridges at University Avenue and Middlefield Road; upstream detention; underground bypass channels; and floodwalls. The project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers (USACE). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

Flooding history and project background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed seven times since 1910.

During the February 1998 El Niño event, a flow of approximately 7,400 cubic feet per second (cfs), caused record flooding that resulted in an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 100-year flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the USACE in 2011.

Benefits

- Provides 1 percent flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the State Department of Water Resources and the California Department of Transportation

Key performance indicators

1. Preferred project with federal, state and local funding: Protect more than 3,000 parcels by providing 1 percent flood protection.
2. With state and local funding only: Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and approximately 30-year protection upstream of Highway 101).

The 1998 flooding of San Francisquito Creek closed Highway 101 and caused an estimated \$28 million in damages.





This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if only state and local funding are available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.

What if no federal funding is available?

The local-state-funding-only project will be the same as the preferred project downstream of Highway 101; but upstream of Highway 101, the project will remedy channel constrictions and modify bridges at Newell Road and Pope/Chaucer Street to allow the channel to contain flood waters equal to the channel's capacity of 7,000 cfs, approximately a 30-year event. Allowing this level of water to flow through the channel will protect approximately 3,000 parcels in Palo Alto from a flood event close to the February 1998 flood, the largest on record. Currently the channel can only convey a 15-year flood event.

If sufficient funding becomes available, a 1 percent (100-year) flood protection project upstream of Highway 101, including some combination of: modifications to the University Avenue and Middlefield Road bridges; upstream detention; underground bypass channels; and floodwalls, could be built.

Geographic area of benefit: Palo Alto

Estimated funding from Safe, Clean Water: \$40.5 million

Estimated total project cost: \$133 million*

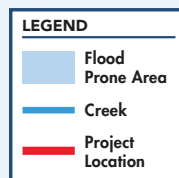
**The \$92.5 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, state grant funds and local partnerships under the JPA, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.*



A debris deflector protrudes up from beneath the Bayshore Freeway bridge, where it prevents the accumulation of flood debris that can block water flow and cause flooding to nearby homes. The facing page photo shows debris accumulating at this same bridge before the deflector was installed.



The preferred project will provide 1 percent flood protection from San Francisco Bay to Middlefield Road in Palo Alto.



**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR FUNDING CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

This Agreement (“Agreement”) is made and entered into as of the date it is fully executed by and between the SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY (“Authority”), a California joint powers authority, the SANTA CLARA VALLEY WATER DISTRICT (“Water District”), a special district of the State of California, the San Mateo County Flood Control District, a special district of the State of California (“Flood District”), the CITY OF PALO ALTO (“Palo Alto”), the CITY OF EAST PALO ALTO (“East Palo Alto”), and the CITY OF MENLO PARK (“Menlo Park”), collectively referred to as “the Parties” or individually as “Party.” The effective date of this Agreement will be the last date that this Agreement is executed by the Parties.

The purpose of this Agreement is to define the roles and responsibilities of the Parties for funding construction of the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101 (“Project”).

R E C I T A L S

- A. San Francisquito Creek (“Creek”) has a history of flooding the communities in and around East Palo Alto, Menlo Park and Palo Alto, most recently in December 2012, impacting residential properties adjacent to the Creek.
- B. Following the severe flood in February 1998, East Palo Alto, Menlo Park, and Palo Alto along with the Flood District and the Water District formed the Authority on May 18, 1999. These entities are all full members of the Authority. The Authority was authorized to represent its member agencies as the local sponsor for a U.S. Army Corps of Engineers’ (“Corps”) San Francisquito Creek flood control project on May 23, 2002.
- C. In March 2005 the Corps, working with the Authority, completed a reconnaissance study for the Creek. The reconnaissance study results indicated a Federal Interest in developing a flood control project for San Francisquito Creek. Therefore, the Corps has engaged in the feasibility study (“Study”) phase of the San Francisquito Creek Flood Damage Reduction and Ecosystem Restoration Project (“FDRER”) which requires a Feasibility Cost Share Agreement with a local sponsor.
- D. The Authority entered into a Feasibility Cost Share Agreement (“FCSA”) with the San Francisco District of the Corps for the Study on the Creek. The Corps, pursuant to the FCSA, is developing a project to evaluate flood protection and ecosystem restoration opportunities within the San Francisquito Creek Watershed in Santa Clara and San

Mateo Counties. At the conclusion of the Study, the Corps will issue a Federally Preferred Plan, which will detail the pre-design actions to be taken to complete the FDRER.

- E. The Corps' ability to complete the Study has been impacted by unanticipated delays due to federal funding constraints and Corps' processes.
- F. Due to the Corp's delay in completing the Feasibility Study and the Member Agencies' desire to begin addressing the risk of flooding in their jurisdictions, the Authority and Member Agency staff conducted a process of evaluating alternatives for an initial capital project and recommended a preferred alternative with conceptual design drawings to the Authority Board of Directors for consideration.
- G. On July 23, 2009, the Authority's Board of Directors unanimously approved the staff's recommended Project and authorized its Executive Director to pursue funding opportunities and to contract with qualified consultants to perform 1) planning and design services and 2) environmental impact assessment and planning for the Project.
- H. The Authority, the Water District, and the Flood District entered into an agreement on November 3, 2009 to fund the design and environmental documentation of the Project.
- I. The Authority hired a design engineering firm and an environmental consulting firm to prepare design documents and an Environmental Impact Report ("EIR") for the Project.
- J. The final EIR was certified by the Authority on October 25, 2012. The Notice of Determination (NOD) was filed by the Authority with the County of Santa Clara, Office of the Clerk/Recorder and by the County of San Mateo Office of the Recorder, on July 30, 2013.
- K. East Palo Alto will contribute \$800,000 towards Project costs.
- L. In November 2012, the voters of Santa Clara County approved Measure B, the Water District's Safe, Clean Water initiative which will provide significant funding toward the Project costs. The District will contribute approximately \$28 million toward Project costs from its Safe, Clean Water program and other sources.
- M. On January 9, 2013, the Authority entered into an Agreement with the State of California, Department of Water Resources (DWR) for \$8 million in grant funding from DWR's Stormwater Flood Management Program to be applied towards Project costs.
- N. The Flood District will contribute \$800,000 toward Project costs. The Flood District's financial contribution will be in an amount equal to the financial contribution made by East Palo Alto.
- O. The City of Menlo Park and the City of Palo Alto are not financially contributing toward the Project costs, however, construction of the Project directly benefits the City of Menlo Park as its completion is necessary to accommodate future flood protection measures located in Menlo Park, upstream of the Project, which may be constructed in the future. In addition, Palo Alto is impacted by the Project because realignment of a portion of its

municipal golf course may be necessary to accommodate various flood protection construction elements of this Project.

- P. For the purpose of this Agreement, funding from East Palo Alto, the Flood District, the Authority, and any future funds from other sources, contributed toward Project costs, shall be referred to as “Non Water District Funds.”
- Q. The Water District and the Authority intend to enter into a Construction Management Agreement designating the Water District as the entity responsible for managing construction of the Project.
- R. The Parties desire to enter into this Agreement to provide for reimbursement of Water District expenditures towards construction of the Project from funding that may become available through Non Water District Funds

NOW, THEREFORE, in consideration of the foregoing recitals, and the covenants and conditions in the sections contained herein below, the Parties agree as follows:

PROVISIONS

1. Project Purposes

The Project’s purposes are to improve flood protection, restore the ecosystem, and provide recreational opportunities within the Project’s reach, with the following specific objectives: 1) protect properties and infrastructure between Highway 101 and the San Francisco Bay from San Francisquito Creek flows resulting from 100 year flood events in conjunction with a 100-year tide, including projected Sea Level Rise; 2) accommodate future flood protection measures upstream of the Project that may be constructed; 3) enhance habitat along the Project reach, particularly habitat for threatened and endangered species; 4) enhance recreational uses; and 5) minimize operational and maintenance requirements.

2. Funding Amounts

Construction of the Project is currently estimated to cost approximately \$37.45 million. Based on this estimate, the Parties agree to contribute the following amounts toward these costs.

A. Non Water District Funds

1. The Authority will provide Project funding in the currently estimated amounts as stated below. The Authority will provide to the Water District documentation of all listed expenses incurred and paid for by the Authority.

- a) \$3,000,000 to the City of Palo Alto to mitigate for impacts to the City of Palo Alto Municipal Golf Course;
- b) \$50,000 for other mitigation activities;
- c) \$2,700,000 to Pacific Gas and Electric Company to relocate gas and electric transmission lines;

- d) \$400,000 to the East Palo Alto Sanitary District to relocate a sewer line;
- e) \$100,000 for property acquisition within East Palo Alto;
- f) \$150,000 DWR grant administration costs incurred by the Authority;
- g) \$1,450,000 remaining balance of DWR grant funds after the Authority pays for all costs listed in a) – f) above. The remaining balance will be remitted to the Water District as partial reimbursement of its construction costs.

2. East Palo Alto: \$800,000.

3. Flood District: \$800,000 (matching East Palo Alto's contribution of \$800,000 currently identified from Non Water District Funds).

B. Water District Funds

The Water District will expend an amount not to exceed \$28,000,000 for expenditures incurred in constructing the Project.

3. Method and Timing of Transactions

- A. Water District shall prepare and submit quarterly invoice packages to the Authority. Water District's Quarterly invoice packages will include Project progress reports and all other documentation required by DWR sufficient to enable the Authority to submit subsequent funding requests to DWR for grant funding reimbursement.
- B. Authority shall submit a request for grant fund reimbursement to DWR within 15 days of receipt of invoice packages from Water District, provided all DWR-related invoicing requirements are met. To the extent funds are available after the Authority pays for all costs itemized in paragraph #2. A. a) through f) above, the Authority will issue payment to the Water District for costs of construction managed by the Water District within thirty days of receipt of grant funds from DWR.
- C. Non Water District Funds contributed by East Palo Alto and the Flood District will be remitted to the Water District within one hundred and eighty days (180) after a construction contract is awarded by the Water District's Board of Directors.

4. Mutual Hold Harmless

Mutual Hold Harmless and Indemnification Obligations

- A. In lieu of and notwithstanding the pro rata risk allocation, which might otherwise be imposed between the Parties pursuant to Government Code Section 895.6, the Parties agree that all losses or liabilities incurred by a Party shall not be shared pro rata but, instead, the Member Agencies agree that, pursuant to Government Code Section 895.4, each of the Parties hereto shall fully indemnify and hold each of the other Parties, their officers, board members, employees, and agents, harmless from any claim, expense or cost, damage or liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Party, its officers, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such party under

this Agreement. No Party, nor any officer, board member, or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the another party hereto, its officers, board members, employees, or agents, under or in connection with or arising out of any work, authority or jurisdiction delegated to such other Party under this Agreement. The obligations set forth in this paragraph will survive termination and expiration of this Agreement.

- B. In the event of concurrent intentional or unintentional misconduct, negligent acts or omissions by any one of the Parties (or each of their respective officers, directors and/or employees), then the liability for any and all claims for injuries or damages to persons and/or property which arise out of each and any of their performance of the terms and conditions of this Agreement shall be apportioned according to the California law of comparative negligence. The Parties hereto are not jointly and severally liable on any liability, claim, or lawsuit.
- C. The construction contract and bid documents will require the construction contractor to agree to appropriate indemnity provisions allowable by law to protect the Parties, and to secure and maintain in full force and effect all times during construction of the Project and until the Project is accepted by the Parties, general liability and property damage insurance, business automobile insurance and such other insurance as the Parties deem appropriate, in forms and limits of liability acceptable to the Parties, naming Water District, Authority and each of its Member Agencies and their respective directors, council members, officers, employees and agents as additional insureds from and against all damages and claims, losses, liabilities, costs or expenses arising out of or in any way connected to the construction of the Project.
- D. The duties and obligations of this Section will survive and continue in full force and effect after the termination or expiration this Agreement.

5. Retention of Records, Right to Monitor and Audit

Unless a longer period of time is required by law or federal or state grant funding agreements, the Parties shall maintain all financial records related to this Agreement and/or the Project for five (5) years after the Agreement expires or is terminated earlier pursuant to Section 7 of this Agreement. The records shall be subject to the examination and/or audit of either Party.

6. Agreement Term

This Agreement shall commence on the Effective Date and remain in place until the construction of the Project is completed and accepted by the Parties, or this Agreement is terminated earlier by the Parties in the manner authorized by Section 7. Termination.

7. Termination

- A. If any Party fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, any other Party may terminate this Agreement but only after giving written notice of the failure of performance to

the Party committing the failure with a copy of such notice given to all other Parties. Such notice shall explain the alleged failure of performance and provide a reasonable opportunity for the failure to be cured which in no case will be less than 30 days. If the failure of performance is not satisfactorily cured within the cure period, the Agreement may be terminated upon the delivery of a written notice of termination to all of the Parties.

- B. A final notice of termination may be given only after completion of the notice and cure process described in Section 7.A. and only with the approval of the governing body of the Party terminating the Agreement.
- C. In event of termination, each Party shall deliver to all of the other Parties, upon request, copies of reports, documents, and other work performed by any Party under this Agreement. The cost of work performed under this Agreement to the date of termination shall be due and payable in accordance with the provisions of this Construction Funding Agreement to be executed by the Parties prior to Water District's commencement of the bid process for award of a construction contract for the Project.
- D. Notwithstanding the foregoing, after the Water District awards a construction contract for the Project, this Agreement may only be terminated by the mutual written agreement of all of the Parties approved by the governing body of each Party.
- E. The Chief Executive Officer of the Water District and the Executive Director of Authority are empowered to terminate this Agreement on behalf of their respective agencies in accordance with the provisions of this Agreement.

8. Notices

Any notice or other communication required or permitted to be given hereunder shall not be effective unless it is given in writing and shall be delivered (a) in person, (b) by certified mail, postage prepaid, return receipt requested, or (c) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and addressed to the parties at the addresses stated below, or at such other address as either party may hereafter notify the other parties in writing:

Authority: San Francisquito Creek Joint Powers Authority
615-B Menlo Avenue
Menlo Park, California 94025
Attention: Len Materman, Executive Director
len@sfcjpa.org

Water District: Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
Attention: Beau Goldie, Chief Executive Officer
bgoldie@valleywater.org

Palo Alto City of Palo Alto
250 Hamilton Avenue
P.O. Box 10250
Palo Alto, CA 94303
Attention: James Keene, City Manager
james.keene@cityofpalalto.org

East Palo Alto City of East Palo Alto
2415 University Avenue
East Palo Alto, CA 94303
Attn: Magda Gonzalez, City Manager
mgonzalez@cityofepa.org

Menlo Park City of Menlo Park
701 Laurel Street
Menlo Park, CA 94025
Attention: Alex McIntyre, City Manager
admcityre@menlopark.org

Flood Control District Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063
Attention: James Porter, Director
jporter@smcgov.org

Service of any such notice or other communications so made shall be deemed effective on the day of actual delivery (whether accepted or refused) as evidenced by:

- a) confirmed in-person delivery by the addressee or other representative of the Party authorized to accept delivery on behalf of the addressee, b) as shown by the addressee's return receipt if by certified mail, or c) as confirmed by the courier service if by courier; provided, however, that if such actual delivery occurs after 5:00 p.m. (local time where received) or on a non-business day, then such notice or demand so made shall be deemed effective on the first business day immediately following the day of actual delivery. No communications via electronic mail shall be effective to give any notice, request, direction, demand, consent, waiver, approval or other communications hereunder.

9. Severability

In the event any portion of this Agreement is declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, such portion shall be severed from this Agreement and the remaining parts hereof shall remain in full force and effect as fully as though such invalid, illegal or unenforceable portion had never been part of this Agreement.

10. Governing Law and Compliance with Laws

The parties agree that California law governs this Agreement. In the performance of this Agreement each Party will comply with all applicable laws, ordinances, codes and regulations of the federal, state, and applicable local government.

11. Venue

In the event that suit shall be brought by any party to this contract, the parties agree that venue shall be exclusively vested in the state courts of either the County of Santa Clara, or the County of San Mateo or where otherwise appropriate, exclusively in the United States District Court, Northern District of California.

12. Assignability and Subcontracting

Parties shall not assign this Agreement or any portion thereof to a third party or subcontract with a third party to provide services required under this Agreement without the prior written consent of the other parties. Any unauthorized attempt by any Party to so assign or transfer shall be void and of no effect. Notwithstanding the foregoing, a Party may hire a consultant to fulfill its obligations under Section 3 of this Agreement.

13. Ownership of Materials

All reports, documents, or other materials developed or discovered by any Party or any other person engaged directly or indirectly by any Party to perform the services required hereunder shall be and remain the mutual property of Authority and Water District without restriction or limitation upon their use.

14. Entire Agreement

This Agreement constitutes the entire Agreement between the Authority and the Water District with respect to the subject matter hereof and supersedes all prior offers and negotiations, oral and written. This Agreement may not be amended or modified in any respect whatsoever except by an instrument in writing signed by authorized representatives of the Authority and Water District.

15. Further Actions

The Authority and Water District agree to execute all instruments and documents, and to take all actions, as may be reasonably required to consummate the transactions contemplated by this Agreement.

16. Counterparts

This Agreement may be executed in any number of counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, taken together, shall be deemed to be one and the same instrument.

17. Non Waiver

A Party's waiver of any term, condition, or covenant, or breach of any term, condition or covenant will not be construed as a waiver of any other term, condition or covenant.

18. Third Parties

This Agreement is entered into only for the benefit of the Parties executing this Agreement and not for the benefit of any other individual, entity, or person.

(remainder of page intentionally left blank)

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the San Francisquito Creek Joint Powers Authority has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM: San Francisquito Creek Joint Powers Authority

By: _____
Greg Stepanicich
Title: SFCJPA General Counsel

By: _____
Len Materman
Title: Executive Director

Date: _____

Date: _____

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the Santa Clara Valley Water District has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM:

Santa Clara Valley Water District

By: _____
Leslie Orta
Title: Senior Assistant District Counsel
Office of the District Counsel

By: _____
Tony Estremera
Title: Chair/Board of Directors

Date: _____

Date: _____

ATTEST: MICHELE L. KING, CMC

Clerk/Board of Directors

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the City of Palo Alto has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM:

City of Palo Alto

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the City of East Palo Alto has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM:

City of East Palo Alto

By: _____
John Nagel
Title: City Attorney

By: _____
Print Name: _____
Title: _____

Date: _____

Date: _____

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the City of Menlo Park has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM:

City of Menlo Park

By: _____
William L. McClure

By: _____
Print Name: _____

Title: City Attorney

Title: _____

Date: _____

Date: _____

**AGREEMENT AMONG THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY,
THE SANTA CLARA VALLEY WATER DISTRICT,
THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT,
THE CITY OF PALO ALTO, THE CITY OF MENLO PARK, AND THE CITY OF EAST PALO
ALTO
FOR THE FUNDING OF CONSTRUCTION OF
THE SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

IN WITNESS WHEREOF, the San Mateo Flood Control District has executed this Funding Agreement as of the date and year stated below.

Each Party has executed a separate signature page.

APPROVED AS TO FORM:

San Mateo County Flood Control District

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

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

RESOLUTION NO. 14-

MAKING FINDINGS OF FACT AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 IN CONNECTION WITH APPROVAL OF FUNDING FOR THE SAN FRANCISQUITO CREEK FLOOD PROTECTION PROJECT: SAN FRANCISCO BAY TO HIGHWAY 101

WHEREAS, the San Francisquito Creek Joint Powers Authority (“JPA”) has prepared plans for flood protection improvements along the lower section of San Francisquito Creek;

WHEREAS, the JPA certified the *Final Environmental Impact Report for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project: San Francisco Bay to Highway 101* (“EIR”) as the Lead Agency under California Environmental Quality Act (“CEQA”) in October 2012;

WHEREAS, the JPA approved an Addendum to update information in the EIR regarding longfin smelt in March 2013;

WHEREAS, the Santa Clara Valley Water District (“District”) is planning on contributing funding and resources to implement the proposed project;

WHEREAS, the District as a Responsible Agency pursuant to the CEQA must make certain findings prior to making approvals in support of the project; and

WHEREAS, the District Board of Directors (“Board”) has reviewed and considered the information contained in the EIR and the record (“Final EIR”) and received comments on the project in a duly noticed public hearing on June 10, 2014;

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

1. The Final EIR has been completed in compliance with CEQA and is adequate for purpose of Board consideration of the Project.
2. The Final EIR reflects the independent judgment and analysis of the District.
3. Changes have been incorporated into the Project which avoid and/or substantially lessen several of the significant environmental effects identified in the Final EIR.
4. Specific economic, social, and technological considerations make infeasible mitigation for certain significant environmental effects of the Project. The Findings of Fact,

MAKING FINDINGS OF FACT AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 IN CONNECTION WITH APPROVAL OF FUNDING FOR THE SAN FRANCISQUITO CREEK FLOOD PROTECTION PROJECT: SAN FRANCISCO BAY TO HIGHWAY 101

Resolution No. 14-

attached hereto as Exhibit 1 and incorporated herein by this reference, include a statement of overriding considerations that support approval of the Project.

5. The Findings of Fact contained in Exhibit 1 are supported by substantial evidence in the record.
6. The Mitigation, Monitoring, and Reporting Program ("MMRP"), attached hereto as Exhibit 2 (Appendix F in the Final EIR), and incorporated herein by this reference, is adopted. Implementation of the MMRP is required as a condition of approval of the Project.
7. Consistent with the Public Resources Code, the documents which constitute the record of proceedings for approving this Project are located with the Clerk of the Board at 5750 Almaden Expressway, San Jose, California.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on June 10, 2014:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

By: _____
TONY ESTREMER
Chair/Board of Directors

ATTEST: MICHELE L. KING, CMC

Clerk/Board of Director

Exhibit 1 to the Resolution Making Findings of Fact and Statement of Overriding Considerations for the San Francisquito Creek Project Final EIR

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS BY THE BOARD OF DIRECTORS OF THE SANTA CLARA VALLEY WATER DISTRICT REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE SAN FRANCISQUITO CREEK FLOOD REDUCTION, ECOSYSTEM RESTORATION, AND RECREATION PROJECT - SAN FRANCISCO BAY TO HIGHWAY 101

This document presents Findings of Fact (“Findings”) and a Statement of Overriding Considerations by the Santa Clara Valley Water District (“District”) regarding the Final Environmental Impact Report (“EIR”) for the San Francisquito Creek Flood Reduction Project, East Bayshore Road to San Francisco Bay (“Project”), for which the District is acting as the California Environmental Quality Act (“CEQA”) responsible agency. The Findings and Statement of Overriding Considerations presented herein were prepared in compliance with CEQA and the State’s CEQA Guidelines. Substantial evidence supporting all findings made herein is contained in the EIR) and/or the record of proceedings.

If a proposed project would have significant adverse effects on the environment, CEQA requires a responsible agency to prepare findings describing how those effects would be reduced or avoided. Under California Public Resources Code Section 21081[a], several findings are possible.

- (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
- (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

For any significant effects that cannot be avoided or reduced to a less-than-significant level, the responsible agency must describe the reasons why mitigation or adoption of an alternative approach is infeasible (California Public Resources Code Section 21081[a][3]). Adoption of a project that would have significant adverse effects on the environment requires that the lead agency identify the project benefits that are evaluated as outweighing its significant effects on the environment (Public Resources Code Section 21081[b]).

I. BACKGROUND

The Project proposes flood reduction facilities along an approximately 1.5-mile stretch of San Francisquito Creek (“Creek”) from East Bayshore Road to the San Francisco Bay. Flooding from the Creek is a common occurrence. A major 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 estimates that the 1998 flood was a 45-year flood event. A 100-year flood event¹ 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 would increase conveyance capacity of floodwaters from runoff and tides from the bay to protect residents and property from flood events along the lower section of the Creek.

A. District’s role in the Project

The San Francisquito Creek Joint Powers Authority (“JPA”) was 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 District. The JPA plans and implements flood management, ecosystem restoration and recreational enhancements throughout the San Francisquito Creek watershed and floodplain. The District plans to contribute funding to allow the construction of the Project. In addition the District will manage and oversee the construction contract and be involved in future monitoring and mitigation efforts associated with the Project

B. District’s Role as a Responsible Agency under CEQA.

The JPA, as the lead agency for the Project under CEQA, certified the Final EIR for the Project in October 2012. In March 2013, the JPA prepared an Addendum to the Final EIR to evaluate environmental effects associated with longfin smelt. When the JPA certified the EIR, it also adopted a Mitigation Monitoring and Reporting Program (“MMRP”) and adopted a statement of overriding considerations regarding the impacts that cannot be mitigated to less than significant levels.

The District is a responsible agency for the Project under CEQA since it will provide funding and construction management services for the Project. As a responsible agency, the District is required to consider the environmental review document prepared by the lead agency and make findings regarding the environmental effects of those parts of the Project that the District decides to carry out, fund or approve.

C. District’s Review and Consideration of the Final EIR and Addendum

The Final EIR for the Project consists of the Draft EIR (July 2012), the Final EIR (October 2012), and the Addendum (March 2013). These components are collectively referred to as the EIR in the findings.

Prior to taking action on the Project, the District Board fully reviewed and considered the information contained in the record of proceedings. In accordance with PRC § 21167.6(e), the record of proceedings for the District’s decision on the Project includes the following documents:

- Notice of Preparation, September 15, 2010;
- Draft EIR (July 2012) and all appendices thereto;

¹ The 100-year flood is more accurately referred to as the 1 percent annual exceedance probability flood because it is a flood that has a 1 percent chance of being equaled or exceeded in any single year. A 100-year flood has approximately a 63.4 percent chance of occurring in any 100-year period, not a 100 percent chance of occurring, but conversely could theoretically occur in consecutive years.

- Final EIR (October 2012) and all appendices thereto;
- Addendum to the EIR (March 2013);
- All written comments received in response to, or in connection with, environmental documents prepared for the Project, including responses to the Notice of Preparation,
- Documents cited or referenced in the Draft EIR and Final EIR;
- All findings adopted by the JPA and the District for the Project;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the JPA or consultants to the JPA with respect to the District's compliance with CEQA and with respect to the District's action on the Project;
- Any recordings of public meetings, public workshops and public hearings held by the District in connection with the Project; and
- Any other materials required for the record of proceedings by Public Resources Code Section 21167.6, subdivision (e).

The Board designates the Clerk of the Board of Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, CA 95118, as the custodian of documents and record of proceedings on which the decision was based.

D. Project Objectives

Protection from the 100-year flood (1percent flood protection) is the currently accepted standard for flood protection works, and the Project is being designed specifically to meet a goal of providing 1 percent flood protection for residents and businesses along the San Francisquito Creek corridor. The specific objectives include the following:

- 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.

E. Project Description

The Project proposes to increase the Creek's capacity from San Francisco Bay to East Bayshore Road by:

- 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 the influence of tides and increase channel capacity.
- Constructing floodwalls in the upper reach to increase capacity and maintain consistency with the California Department of Transportation's (Caltrans) enlargement of the U.S. 101/East Bayshore Road Bridge over the Creek.

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 majority of the Project elements would occur on properties in Palo Alto and East Palo Alto and owned by the City of Palo Alto; or within District or City of East Palo Alto rights-of-way.

F. Scoping and Draft EIR Circulation

The JPA submitted the Notice of Preparation (“NOP”) for the Project to the State Clearinghouse on September 15, 2010. Two public scoping meetings were held in September 2010. To reach as many community members as possible, the first meeting (midday Wednesday, September 29, 2010) was held at the East Palo Alto Senior Center in East Palo Alto, and the second meeting (Thursday evening, September 30, 2010) was held at the International School of the Peninsula in Palo Alto. Both meetings were publicized through direct mailings to approximately 11,000 affected and interested households, offices, and agencies.

The JPA circulated the Draft EIR for a 45-day public and agency review period, beginning on July 30, 2012 and concluding on September 13, 2012. The Draft EIR and Notice of Completion were transmitted to the State Clearinghouse on July 30, 2012. Bound hard copies of the Draft EIR were placed on reserve at several public venues, including the East Palo Alto Public Library, Palo Alto Public Library, and the JPA’s offices in Menlo Park. The Draft EIR was also made available in electronic format online, via the JPA’s website. Notice of the Draft EIR’s availability was e-mailed to interested parties, including adjacent residents and other community members who had requested Project notification. Two public hearings to solicit comments on the Draft EIR were held at 6 p.m. on August 15 and August 29, 2012 at East Palo Alto City Hall (2415 University Avenue) in the East Palo Alto City Council Chambers.

G. Final EIR

Based on comments received on the Draft EIR, changes were made to the document and a response was provided for each comment. The Final EIR consists of the following materials: copies of all comments on the Draft EIR received by the JPA; the JPA’s responses to those comments; and the complete text of the EIR, including revisions made in response to comments received. The Final EIR and all associated materials in the administrative record are incorporated herein by this reference. The JPA certified the Final EIR on October 25, 2012.

H. Addendum to the EIR

Based on comments received from the California Department of Fish and Wildlife (“CDFW”) about longfin smelt, an Addendum to the EIR was prepared. The Addendum determined that the Project as proposed, including seasonal restrictions to in-channel work to avoid impacts to steelhead, would not have a significant impact on longfin smelt. The Addendum to the EIR is

incorporated herein by this reference. The JPA considered and approved the Addendum on March 18, 2013.

II. SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

The EIR identified a number of potentially significant environmental impacts that, absent the adoption of mitigation measures, could occur with the implementation of the Project. The Proposed Project was considered to have potentially significant impacts on odors, biological resources, paleontological resources, greenhouse gas emissions, hazardous materials and public health, flood hazards, noise and vibrations, and traffic.

The Board finds that, in response to each significant effect identified in the EIR and listed in this section, all feasible changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen these environmental effects. With implementation of the proposed mitigation measures described in the EIR and briefly summarized below, the proposed Project is determined to have less-than-significant impacts on these resources except for impacts on, air quality and recreational facilities, discussed in Section III, below.

The findings regarding the level of impacts and their mitigation are not intended to state all of the substantial evidence in the EIR, or elsewhere in the record, that supports the conclusions stated in these findings. In addition, the mitigation measures are described in an abbreviated fashion; the EIR should be consulted for a complete description of the requirements of these measures.

A CREATION OF OBJECTIONABLE ODORS

Impact

Project construction activities could generate odors associated with diesel exhaust, paving activities, and other construction-related sources. Odors would be temporary and localized but could still result in disturbance, potentially rising to the level of a significant impact, for all Project elements, especially where construction takes place in close proximity to residences.

Mitigation

Odor impacts would be reduced to less-than-significant levels through *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction*, which requires all construction contractors to implement the exhaust Basic Construction Mitigation Measures and Additional Construction Mitigation Measures recommended by the Bay Area Air Quality Management District (BAAQMD) to control exhaust emissions; *Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction*, which requires that all on-road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used at the Project site will comply with U.S. Environmental Protection Agency (EPA) 2007 on-road emission standards for particulate matter less than 10 microns in diameter (PM₁₀) and oxides of nitrogen (NO_x); *Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction*, which requires that the contractor's equipment used for directional drilling meet EPA Tier 2 or higher emissions standards, in

addition to being outfitted with the best available control technology (BACT) devices certified by the California Air Resources Board (CARB) that achieve emissions reductions no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations; and *Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*, which designates a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures AQ2.1, AQ2.2, AQ2.3, and NV1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to creation of objectionable odors during construction would be less than significant.

B. Biological Resources

B1 —Disturbance or Loss of Special-Status Plant Populations

Impact

For all Project elements, construction activities could damage or remove individuals of the following special-status species with potential to occur in the Project area: Alkali milkvetch, San Joaquin sparscale, Congdon's tarplant, Point Reyes bird's-beak, Hairless popcornflower, Slender-leaved pondweed, California seablite, and/or Saline clover. However, it is unlikely that the Project would have any impact on Slender-leaved pondweed, if it is determined to be present. Substantial loss of individuals of any of these species as a result of construction disturbance (earthwork, staging activities, foot traffic, vehicle traffic, or other activity) or destruction of suitable habitat adjacent to an existing population could result in a significant impact on the species.

Mitigation

To ensure that significant impacts on special-status plants during Project construction are avoided if possible, and are compensated if they cannot be avoided, the following measures will be implemented: *Mitigation Measure BIO1.1—Conduct Botanical Surveys*, *Mitigation Measure BIO1.2—Confine Construction Disturbance and Protect Special-Status Plants during Construction*, and *Mitigation Measure BIO1.3—Compensate for Loss of Special-Status Plants*.

Mitigation Measure BIO1.1 requires a qualified botanist to survey suitable habitat in the Project area for special-status plants during the appropriate blooming periods for each species, in accordance with the California Native Plant Society (CNPS) Botanical Survey Guidelines (California Native Plant Society 2001). *Mitigation Measure BIO1.2* would be implemented if it is determined that individuals of identified special-status plant species are present and could be affected by construction traffic or activities. It requires that construction disturbance be confined to the minimum area necessary to complete the work and requires avoidance of adjacent habitat. If deemed necessary by a qualified botanist, a species-appropriate buffer area determined in consultation with agency (California Department of Fish and Wildlife [CDFW] and U.S. Fish and Wildlife Service [USFWS]) staff will be established to protect the special status

plants from encroachment and damage during construction by installing temporary construction fencing. *Mitigation Measure BIO1.3* would be implemented if any individuals of listed special-status plants are present and cannot be effectively avoided through implementation of Mitigation Measure BIO1.2. This measure requires that a compensation plan be developed and implemented so that there is no net loss of special-status plants.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO1.1, BIO1.2, and BIO1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance or loss of special-status plant populations during construction would be less than significant.

B2 - Disturbance, Injury, or Mortality of Western Pond Turtles

Impact

In the Project area, levee lowering on the right bank, levee raising on the right bank, levee raising on the left bank and levee relocation, construction of the access road on the left bank, and modification to Friendship Bridge have the potential to disturb upland habitat adjacent to the freshwater pond in the Project area and could result in the loss of western pond turtle individuals or nests; this potential for disturbance and loss would represent a significant impact.

Mitigation

Impacts to western pond turtles would be reduced to less than significant by implementing *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training*, *Mitigation Measure BIO2.2—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles*, and (if necessary) *Mitigation Measure BIO2.3—Daily Surveys and Monitoring of Construction Activities to Decrease Disturbance to Western Pond Turtles*.

Mitigation Measure BIO2.1 requires that prior to construction, Worker Awareness Training be conducted to inform construction workers of their responsibilities regarding sensitive environmental resources. *Mitigation Measure BIO2.2* requires that prior to the start of construction activities at Project element sites that could support western pond turtle, a qualified biologist be retained to conduct preconstruction surveys for western pond turtles. If preconstruction surveys identify active nests, the biologist will establish no-disturbance buffer zones in consultation with CDFW. If western pond turtles are found during the pre-construction survey, then *Mitigation Measure BIO2.3* will be implemented, which requires that a qualified biologist be retained to conduct daily surveys for western pond turtles in all suitable habitats in the vicinity of work sites that will be active within the 3 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If a turtle is found during the daily survey, construction in the vicinity of the turtle will not commence until the turtle is removed from the Project area to be relocated to suitable habitat outside of the Project limits per CDFW protocols and permits.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures

BIO2.1, BIO2.2, and BIO2.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance, injury, or mortality of western pond turtles during construction would be less than significant.

B3 - Disturbance of Nesting Migratory Birds and Raptors (Excluding Burrowing Owl)

Impact

For all Project elements, heavy equipment and human activity during construction would increase noise in the vicinity of the work area, potentially resulting in disturbance of birds nesting and foraging in the area. If occupied nests are present on or adjacent to the construction area, construction activities could result in the abandonment of nests, the death of nestlings, and the destruction of eggs in active nests. Migratory birds, raptors, and their nests are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Disturbance of nesting migratory birds or raptors thus represents a significant impact.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described above, and *Mitigation Measure BIO3.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds (Excluding Burrowing Owl)* would reduce the potential for impacts on nesting raptors and migratory birds to less than significant.

Mitigation Measure BIO3.1 requires that prior to the start of construction activities that begin during the migratory bird nesting period (between January 15 and August 31 of any year), a qualified wildlife biologist be retained to conduct a survey for nesting raptors and migratory birds that could nest along the Project corridor; and with the exception of raptor nests, inactive bird nests may be removed. If an active nest is discovered during these surveys, the qualified wildlife biologist will establish a no-disturbance buffer zone around the nest tree or nest in consultation with CDFW, and construction will be stopped if necessary.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1 and BIO3.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance of nesting migratory birds and raptors (excluding burrowing owl) during construction would be less than significant.

B4 - Disturbance of Western Burrowing Owls and Habitat

Impact

Project elements with potential to affect this species include levee lowering on the right bank, levee raising on the left bank and levee relocation, construction of the floodwall on the left bank, construction of the downstream access road on the right bank, and construction of the upstream access road on the right bank. Construction activities within these Project element sites during

the nesting period could result in direct injury or mortality, as well as disturbance impacts related to elevated noise and human presence. Impacts could be significant.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described above (western burrowing owl awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities* would reduce this impact to less than significant.

Mitigation Measure BIO4.1 requires that, prior to any construction activity, a qualified wildlife biologist be retained to conduct seasonally appropriate preconstruction surveys for burrowing owls. If any western burrowing owls are found within 250 feet of the construction footprint, during the survey or at any time during the construction process, CDFW will be notified and work will proceed under CDFW direction. Any necessary buffers will be established in consultation with CDFW.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1 and BIO4.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance of western burrowing owls and their habitat during construction would be less than significant.

B5 - Disturbance of California Clapper Rail and California Black Rail and Habitat

Impact

Clapper rail and black rail are considered to have a high potential to be present in suitable habitat within and adjacent to the Project area. Disturbance of species and habitat could result from construction activities associated with the following Project elements: levee lowering on right bank, levee raising on right bank, construction of the floodwall on right bank, levee raising on left bank and levee relocation, construction of the floodwall on left bank, modification of Friendship Bridge, and all marshland restoration Project elements. In addition, maintenance of Project facilities identified as being in or near suitable habitat would have some potential to disturb California clapper rail and California black rail. Thus, construction and maintenance impacts could be significant.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described above (California clapper rail and California black rail awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO5.1—Implement Survey and Avoidance Measures for California Clapper Rail and California Black Rail Prior to Construction Activities*, and *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities* would reduce disturbance on California clapper rail and California black rail to less than significant.

Mitigation Measure BIO5.1 states that 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 marshplain is inundated. In addition, seasonally appropriate surveys will be conducted by a permitted biologist. During breeding season, if necessary, Project activities occurring within 500 feet of active nests will be postponed until after young have fledged. Outside breeding season, if necessary, no-disturbance buffer will be established, and no work will occur within the buffer until the biologist verifies that California clapper rail or California black 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 CDFW. *Mitigation Measure BIO5.2* states that a habitat monitoring plan will be developed and implemented for existing (i.e., pre-Project) habitat within the Faber Tract that will document baseline conditions prior to Project implementation. Plan approval by USFWS and CDFW will be necessary before implementation of activities recommended by the plan.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1, BIO5.1, and BIO5.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of California clapper rail and California black rail and habitat during construction and operation and maintenance would be less than significant.

B6 - Disturbance of Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew and Habitat

Impact

Construction activities could disturb salt marsh harvest mouse and salt marsh wandering shrew and habitat for the following Project elements: levee lowering on right bank, levee raising on right bank, construction of the floodwall on right bank, levee raising on left bank and levee relocation, construction of the floodwall on left bank, modification to Friendship Bridge, and all marshplain restoration Project elements. In addition, increasing in periodicity of fluvial inputs associated with the levee lowering on right bank could potentially result in habitat changes detrimental to salt marsh harvest mouse and salt marsh wandering shrew.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described above (salt marsh harvest mouse and salt marsh wandering shrew awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities* (which is described above), and *Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Prior to Construction* would reduce these impacts to less than significant.

Mitigation Measure BIO6.1 requires that construction and maintenance work, including site preparation, be avoided to the extent possible within suitable habitat for these 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 and implemented in

consultation with USFWS and CDFW. In addition, vegetation clearing will be monitored by a permitted biologist, and appropriate measures will be taken if individuals are observed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1, BIO5.2, and BIO6.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of salt marsh harvest mouse and salt marsh wandering shrew and habitat during construction and operation would be less than significant.

B7 - Disturbance of California Least Tern and Western Snowy Plover and Habitat

Impact

Levee lowering on the right bank has potential to disturb California least tern and western snowy plover. Construction activities serving this Project element would occur near suitable habitat for these species and could disturb nesting or foraging individuals that could be present. Disturbance of nesting or foraging California least tern and western snowy plover would be a significant impact. In addition, because California least tern and western snowy plover have potential to occur in habitat in the Faber Tract, flooding from San Francisquito Creek associated with levee lowering on right bank and subsequent habitat alteration could affect these species as well. This habitat alteration could be significant.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* described above (California least tern and western snowy plover awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO7.1—Implement Survey and Avoidance Measures for California Least Tern and Western Snowy Plover Prior to Construction Activities*, and *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities*, described above, would reduce this impact to less than significant.

Mitigation Measure BIO7.1 requires that construction work, including site preparation, will be avoided to the extent possible within 500 feet of suitable habitat for these species during their breeding seasons. In addition, 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, and Project activities will be postponed or appropriate buffers will be established, if necessary. If individuals are routinely observed in or within 500 feet of the work area or do not leave the work area, a species avoidance plan will be developed in coordination with USFWS and CDFW.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1, BIO5.2, and BIO7.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to

disturbance of California least tern and western snowy plover and habitat during construction and operation would be less than significant.

B8 - Disturbance of California Red-Legged Frog and San Francisco Garter Snake and Habitat

Impact

The following Project elements have potential to disturb California red-legged frog and San Francisco garter snake: levee lowering on right bank, levee raising on right bank, and levee raising on left bank and levee relocation. Construction activities for these Project elements would occur near suitable habitat for California red-legged frog and San Francisco garter snake and could disturb individuals that might be present in the uplands and in the ponds. Such an effect could constitute a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* described above (California red-legged frog and San Francisco garter snake awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO8.1—Implement Survey and Avoidance Measures for California Red-Legged Frog and San Francisco Garter Snake Prior to Construction Activities* would reduce this impact to less than significant.

Mitigation Measure BIO8.1 requires that a permitted biologist be retained to conduct a survey of the freshwater ponds and surrounding upland habitat prior to initiation of construction activities in accordance with applicable protocols, and buffer areas and/or a species avoidance plan will be developed in coordination with USFWS and CDFW if needed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1 and BIO8.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitor Plan to ensure their implementation. With these measures in place, impacts related to disturbance of California red-legged frog and San Francisco garter snake and habitat during construction would be less than significant.

B9 - Disturbance of Steelhead Trout and Suitable Habitat

Impact

Construction activities for all Project elements would occur near suitable habitat for steelhead trout and could disturb individuals that could be present in San Francisquito Creek. Such an effect would be considered a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* (steelhead trout and habitat awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO9.1—*

Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities would reduce this impact to less than significant.

Mitigation Measure BIO9.1 requires that no in-channel construction activities will occur during the steelhead migration period, to reduce the likelihood that steelhead are present during construction activities, and a qualified fisheries biologist, approved by the National Marine Fisheries Service (NMFS), will survey the construction area 1 to 2 days before the Project begins. If no surface water is present in the immediate construction area, fish will not be relocated. If water is present, additional procedures will be implemented to capture and relocate fish as described in the Final EIR.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1 and BIO9.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance of steelhead trout and suitable habitat during construction would be less than significant.

B10 - Disturbance or Loss of Riparian Habitat

Impact

The only Project element that would affect riparian habitat is channel widening and marshplain creation and restoration in the upper reach of San Francisquito Creek in the Project area. Extensive trimming, pruning, or removal of riparian habitat could represent a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* (described above), *Mitigation Measure BIO11.1—Identify and Protect Riparian Habitats*, and *Mitigation Measure BIO11.2—Restore Riparian Habitat* would reduce impacts to less than significant by replacing any riparian areas permanently impacted.

Mitigation Measure BIO11.1 requires that a qualified biologist or ecologist be retained 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 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 in accordance with International Society of Arboriculture tree protection zone recommendations and any additional requirements of the resource agencies with jurisdiction. *Mitigation Measure BIO11.2* requires that permanently affected riparian habitat be restored at a mitigation-to-impact ratio of 2:1, and temporarily affected habitat restored at a minimum impact-to-mitigation ratio of 1:1 to ensure no net loss of riparian habitat in the affected stream reach. A Mitigation Monitoring Plan will be developed in the context of the federal and state permitting processes under the Clean Water Act and California Fish and Game Code, and will include success criteria as specified by the permitting agencies.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1, BIO11.1, and BIO11.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) and a Mitigation Monitoring Plan to ensure their implementation. With these measures in place, impacts related to disturbance of or loss of riparian habitat during construction and operation would be less than significant.

B11 - Disturbance or Loss of State- or Federally Protected Wetlands

Impact

Levee and floodwall construction activities would temporarily and permanently affect diked marsh and tidal salt marsh habitat. Additionally, marshplain creation and restoration activities would temporarily affect tidal salt marsh habitat.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training*, which is described above, and *Mitigation Measure BIO12.1—Avoid and Protect Jurisdictional Wetlands during Construction* would minimize impacts on wetlands not within the grading footprint, including the low-flow channel, to less than significant.

Mitigation Measure BIO12.1 requires that a qualified resource specialist (biologist, ecologist, or soil scientist) clearly identify wetland areas outside of the direct impact footprint with temporary orange construction fencing before site preparation and construction activities begin at each site or will implement another suitable low-impact measure. Construction will not encroach upon jurisdictional wetlands identified by the wetland specialist.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO2.1 and BIO12.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of or loss of state- or federally protected wetlands during construction would be less than significant.

B12 - Loss of, or Damage to, Protected Trees

Impact

Construction of all Project elements could damage and/or would remove protected tree species outside of riparian habitat. Damage to protected trees affecting their chances of survival and/or removal of any protected trees would be considered a significant impact. Note that removal of trees in riparian habitat is addressed and compensated separately above.

Mitigation

Implementation of *Mitigation Measure BIO13.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations* and

Mitigation Measure BIO13.2—Protect Remaining Trees from Construction Impacts would reduce this impact to less than significant.

Mitigation Measure BIO13.1 requires that protected landscape trees slated for removal be transplanted or replaced as appropriate in accordance with a landscape plan. *Mitigation Measure BIO13.2* provides that trees not designated for removal will be protected from damage during construction by the installation of temporary fencing in a manner consistent with International Society of Arboriculture tree protection zone recommendations.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures BIO13.1 and BIO13.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of, or damage to, protected trees during construction would be less than significant.

C. Damage to Significant Paleontological Resources

Impact

Project construction activities for all Project elements, such as excavations associated with channel widening and floodwall placement, could affect sensitive, previously undisturbed geologic units, potentially unearthing and damaging previously unknown paleontological resources or unique geologic features. According to available geologic maps, such sensitive native sediments may exist on both sides of the channel nearest the upstream portion of the Project area. Any such disturbance could result in a significant impact on sensitive deposits potentially containing paleontological resources. The remainder of the Project site is in areas mapped as artificial fill and artificial levee deposits of varying depth. Should Project-related excavation extend below artificial fill, the Project could result in a significant impact on sensitive deposits underlying the artificial fill potentially containing paleontological resources.

Mitigation

Implementation of *Mitigation Measure Paleo1.1—Conduct a Pre-Construction Paleontological Resources Field Survey and Paleontological Resources Inventory and Evaluation*; *Mitigation Measure Paleo1.2—Conduct Worker Awareness training for Paleontological Resources Prior to Construction*; and *Mitigation Measure CR1.3—Stop Work Immediately if Buried Cultural Resources are Discovered Inadvertently* would reduce impacts on paleontological resources to less than significant level.

Mitigation Measure Paleo1.1 requires that qualified personnel be retained to conduct a paleontological resources field survey to determine whether significant resources exist, and paleontological resources monitoring will be conducted if necessary. *Mitigation Measure Paleo1.2* requires that prior to the initiation of any site preparation and/or start of construction, all construction workers receive training overseen by a qualified professional paleontologist, to ensure that forepersons and field supervisors can recognize paleontological resources in the event that any are discovered during construction. *Mitigation Measure CR1.3* requires that if paleontological resources are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified paleontologist can assess the

significance of the find and, if necessary, develop appropriate treatment measures in consultation with project sponsors as appropriate.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures Paleo1.1, Paleo1.2 and CR1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to significant paleontological resources during construction would be less than significant.

D. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Impact

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting greenhouse gases (GHGs) during construction phases. Project operation would not generate any direct long-term, operational emissions, or contribute to indirect emissions. While not established as a construction threshold, construction-related emissions from the Project are slightly above the Bay Area Air Quality Management District's (BAAQMD) 1,100 metric ton operational threshold.

Mitigation

The BAAQMD's Air Quality Guidelines do not recommend a GHG emission threshold for construction-related emissions. However, they do recommend implementation of best management practices (BMPs) to help control and reduce GHG emissions. Implementation of the BAAQMD's BMPs is therefore required to reduce construction-related GHG emissions. Impact GHG1 is considered less than significant with implementation of *Mitigation Measure GHG1.1—Implement BAAQMD Best Management Practices for Construction*, which requires use of alternative fueled vehicles, local building materials, and construction waste recycling.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure GHG1.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment during construction would be less than significant.

E. Hazardous Materials and Public Health

E1 - Creation of Hazard through Transport, Use, or Disposal of Hazardous Materials

Impact

Construction and maintenance of all Project elements would require the use of hazardous substances such as vehicle fuels, lubricants, and solvents. Improper storage and handling, including spills and releases, could result in exposure of the workers and the general public to

toxins and carcinogens, a significant impact. In addition, Periodic activities required to maintain the new Project elements would require the use of vehicle fuels, lubricants, etc., and could also require solvents, paints, paving media, and other substances and would be similar to existing maintenance requirements. As for construction, improper storage and handling, including spills and releases, could result in exposure of the workers and the general public to toxins and carcinogens, a significant impact.

Mitigation

Implementation of *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan* and *Mitigation Measure and HAZ1.2—Require Proper Storage and Handling of Potential Pollutants and Hazardous Materials* would reduce this impact to less than significant.

Mitigation Measure HAZ1.1 requires that the contractor prepare and implement a Spill Prevention, Control, and Countermeasure Plan before any construction activities begin; and *Measure HAZ1.2* requires that the storage and handling of potential pollutants and hazardous materials be in accordance with all local, state and federal laws and other requirements.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures HAZ1.1 and HAZ 1.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to the transport, use or disposal of hazardous materials, either directly or indirectly, that may have a significant impact on the environment during construction and maintenance would be less than significant.

E2 - Exposure of Workers or the Public to Existing Hazardous Materials Contamination

Impact

Due to current and historic uses of properties adjacent to the Project site, there is a possibility of undocumented soil and/or groundwater contamination that, if disturbed, could impact the Project site. This translates to some risk that construction workers or the public could be exposed to hazardous substances through disturbance during Project construction, potentially constituting a significant impact.

Mitigation

Any impacts would be reduced to a less-than-significant level by implementing *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan*, which is described above, and *Mitigation Measure HAZ2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered* would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures HAZ1.1 and HAZ2.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and

specifications) to ensure their implementation. With these measures in place, impacts related to exposure of workers or the public to existing hazardous materials contamination during construction would be less than significant.

E3 - Generation of Hazardous Emissions/Use of Hazardous Materials within 0.25 Mile of Schools

Impact

The upstream portion of the Project reach is located within 0.25 mile of the International School of the Peninsula. Because construction would require the use of a variety of hazardous substances, there would be some potential for exposure of students, school employees, and the public to hazardous materials. The same would be true for ongoing maintenance activities. This is a potentially significant impact for all Project elements.

Mitigation

This impact would be reduced to less than significant by implementing *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan*, which is described above.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure HAZ1.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to generation of hazardous emissions/use of hazardous materials within 0.25 Mile of schools during construction and maintenance would be less than significant.

E4 - Interference with Emergency Response or Evacuation Plan

Impact

For all Project elements, the presence of construction equipment and vehicles, worker activities, and materials storage would have the potential to impede emergency access to the Project site and/or interfere with emergency evacuation plans. This would also be true for maintenance activities, although to a lesser degree because fewer pieces of equipment and vehicles would typically be involved. This is a potentially significant impact.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which requires contractors to develop and implement a traffic control plan for each construction site and would impose similar requirements for maintenance activities, would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With

this measure in place, impacts related to interference with an emergency response or evacuation plan during construction and maintenance would be less than significant.

E5 - Breeding or Harborage of Disease Vector Organisms

Impact

Construction of any of the Project elements has potential to create or expand the potential for mosquito breeding in the Project area, which would be a significant impact.

Mitigation

Mitigation Measure HAZ8.1—Prevent Mosquito Breeding During Project Construction, which requires that standing water that accumulates on the construction site be removed within four days (96 hours) and that construction personnel properly dispose of unwanted or unused artificial containers and tires, would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure HAZ8.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to breeding or harborage of disease vector organisms during construction would be less than significant.

F - Effects on Flood Hazards

Impact

For all Project elements, water diversions associated with Project construction have the potential to disrupt storm water flows within the Creek during significant storm events. Temporary relocation of storm drains would occur during the dry season. This is a potentially significant impact. In addition, the permanent alteration of storm drainage facilities as a result of new Project facilities (i.e., levees) could affect conditions during flood events. This impact has the potential to be significant if relocated storm drains are not designed to accommodate preconstruction flood flows.

Mitigation

Mitigation Measure HWR1.1—Design of Temporary Relocation of Storm Drainage Facilities during Construction states that temporary storm drainage design during construction will include the necessary review and assessment of alternative routes and ancillary facilities to ensure that they can safely accommodate the redirected flow to the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities until such time that the original facilities are restored. Implementation of *Mitigation Measure HWR1.1* reduces construction impacts to less than significant.

Mitigation Measure HWR1.2—Design of Permanent Relocation of Storm Drainage Facilities states that the permanent relocation of stormwater conveyance facilities would be designed so as not to alter the original outlet locations and internal routes. The design will include the necessary review and assessment of pipeline additions and ancillary facilities to ensure that

they can safely accommodate flood flows to the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities. Implementation of *Mitigation Measure HWR1.2* reduces operational impacts to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures HWR1.1 and HWR1.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to flood hazards during construction and operation would be less than significant.

G – Noise and Vibration

G1 - Excessive Groundborne Vibration Levels

Impact

For all Project elements, pile driving associated with Pacific Gas and Electric (PG&E) tower relocations is expected to exceed the thresholds at which vibration may become an annoyance and/or damage plaster-walled residential structures for homes within 50 feet of the proposed tower locations. In addition, vibration impacts may be significant for the first row of homes located within approximately 25 feet of the construction sites using heavy construction equipment that is not high-impact equipment.

Mitigation

Mitigation Measure NV2.1—Conduct Construction Vibration Monitoring and Implement Vibration Control Approach(es) would reduce this impact to less than significant. It requires that during periods of construction a qualified acoustical consultant or engineering firm to conduct vibration monitoring at homes or occupied vibration-sensitive buildings to determine if the measured peak particle velocity (PPV) is in excess of 0.2 inches/second. If the threshold is exceeded, construction activity will cease and alternative methods of construction and excavation will be considered. In addition, if permitted, a preconstruction survey will be conducted that documents any existing cracks or structural damage at vibration-sensitive receptors by means of color photography or video, and a designated complaint coordinator (Mitigation Measure NV1.3) will be responsible for handling and responding to any complaints received during such periods of construction.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure NV2.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to excessive groundborne vibration levels during construction would be less than significant.

G2 - Substantial Temporary Increase in Ambient Noise

Impact

For all Project elements, construction activities could result in substantial short-term noise increases at noise-sensitive land uses that could rise to the level of a significant impact.

Mitigation

Implementation of *Mitigation Measure NV4.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents*, *Mitigation Measure NV4.2—Implement Work Site Noise Control Measures*, *Mitigation Measure NV4.3—Designate a Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*, and *Mitigation Measure NV4.4—Install Temporary Noise Barriers* would reduce this impact to less than significant.

Mitigation Measure NV4.1 requires that advance written notification of the proposed construction activities be provided to all residences and other noise and air quality sensitive uses within 750 feet of the construction site, including the name and contact information of the person responsible for ensuring that reasonable measures are implemented to address the problem. *Mitigation Measure NV4.2* requires that all contractors adhere to specific noise control measures. *Mitigation Measure NV4.3* states that the JPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. *Mitigation Measure NV4.4* requires that if a resident or school employee submits a complaint about construction noise, and the contractor is unable to reduce noise levels to below the significance threshold (exceeding 110 dBA at a distance of 25 feet) through other means, the contractor will install temporary noise barriers to reduce noise levels below the applicable construction noise standard, and work will be suspended until barriers are installed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures NV4.1, NV4.2, NV4.3, and NV4.4 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to substantial temporary increases in ambient noise during construction would be less than significant.

H – Traffic and Transportation

H1 - Potential to Create Traffic Safety Hazards

Impact

For all Project elements, the presence of large, slow-moving construction-related vehicles and equipment among the general-purpose traffic on roadways in the study area could result in safety hazards, which would be a significant impact.

Mitigation

To address the potential for safety hazards related to construction traffic *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, will be implemented which requires

contractors to develop and implement a traffic control plan for each construction site. This measure would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to create traffic safety hazards during construction would be less than significant.

H2 - Potential to Obstruct Emergency Access

Impact

At all Project work areas, construction would have the potential to affect emergency vehicle access. Construction-related traffic could also delay or obstruct the movement of emergency vehicles on local area roadways. This would be a potentially significant impact.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which is described above, would include provisions to ensure unrestricted access and passage for emergency vehicles and would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to obstruct emergency access during construction would be less than significant.

H3 - Potential to Conflict with Alternative Transportation

Impact

Construction of all Project elements would require closure of existing pedestrian and bicycle trails located on both sides of the Project portion of the Creek and Friendship Bridge. In addition, the support transit and/or bikeways on the designated truck routes of the Project could be interrupted by slow moving trucks. The impact on the alternative transportation would be temporary but significant.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which is described above, would include provisions for maintaining safe, efficient passage for transit, bicyclists, and pedestrians and would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to conflict with alternative transportation during construction would be less than significant.

III. SIGNIFICANT IMPACTS WHICH CANNOT BE FULLY MITIGATED

Even after the adoption of all feasible mitigation, the Project may cause or contribute to potentially significant, unavoidable environmental effects on air quality and recreation. The Board finds that the proposed Project will result in the following potentially significant and unavoidable impacts, even with the implementation of all feasible mitigation:

Violation of an Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation

Changes or alterations have been required in, or incorporated into, the Project which minimize the significant effects on the environment to the greatest extent feasible, but the Board finds that mitigation is unlikely to reduce NO_x emissions to a less than significant level (i.e., mitigation is unlikely to reduce NO_x emissions below BAAQMD daily emission threshold of 54 pounds per day), and that no alternate or additional mitigation that would provide such a reduction has been identified as feasible. Consequently, the Board finds that a significant residual impact is likely during construction of some of the Project elements.

The following mitigation measures, as described in the Final EIR, will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation: *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction, Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction, Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction, Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents, and Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.* The proposed mitigation measures represent all feasible, cost-effective mitigation measures to reduce exhaust emissions to be implemented by the construction contractor. Although the maximum emissions would be generated only when construction activities from all Project elements overlap and would likely to be short-term, the impact would still be significant and unavoidable with mitigation incorporated.

With implementation of all feasible mitigation, Project construction would generate daily emissions of NO_x exceeding the BAAQMD threshold for various Project components during all construction phases: Utility Relocation, Phase One, and Phase Two. During the Utility Relocation phase, gas line work and directional drilling would result in daily NO_x emissions of 65.71 lbs/day. During Phase One, construction of the new left bank levee and construction of the right bank levee would result in daily NO_x emissions of 110.45 and 94.63 lbs/day, respectively. During Phase Two, Conservative Scenario 1—overlap of gas line work, directional

drilling, and construction of new left bank levee (Utility Relocation and Phase One) would result in daily NO_x emissions of 176.16 lbs/day. In addition, a second scenario was evaluated for Phase Two. Conservative Scenario 2— overlap of site prep, installation of right and left bank floodwalls, and flatbed trailer truck trips (Phase Two) would result in daily NO_x emissions of 68.45 lbs/day.

In summary, the Board will adopt mitigation (Measures AQ2.1, AQ2.2, AQ2.3, NV1.1, and NV1.3) that comprise all of the approaches identified as feasible to reduce criteria pollutant impacts associated with construction of various Project elements. However, even with these measures in place, pollutant levels could intermittently be high enough to exceed BAAQMD thresholds. Any such exceedance would constitute a significant residual impact, and is considered unavoidable.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Changes or alterations have been required in, or incorporated into, the Project which mitigate the significant effects on the environment to the greatest extent feasible, but the Board finds that mitigation is unlikely to reduce Toxic Air Contaminant (“TAC”) emissions to a less-than-significant level (i.e., mitigation is unlikely to reduce TAC emissions below BAAQMD daily emission thresholds: annual PM_{2.5} concentration of 0.3 micrograms per cubic meter (µg/m³), cumulative diesel particulate matter (“DPM”) cancer risk of 100 per million, and cumulative average annual PM_{2.5} concentration of 0.8 µg/m³), and that no alternate or additional mitigation that would provide such a reduction has been identified as feasible. Consequently, the Board finds that a significant residual impact is likely during construction of some of the Project elements.

The following mitigation measures, as described in the Final EIR, will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation: *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction, Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction, Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction, Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents, and Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.* The proposed mitigation measures represent all feasible, cost-effective mitigation measures to reduce exhaust emissions to be implemented by the construction contractor.

With implementation of all feasible mitigation, Project construction would generate daily emissions of PM_{2.5} and DPM exceeding the BAAQMD threshold for various Project elements during all construction phases: Utility Relocation, Phase One, and Phase Two. During the Utility Relocation phase, construction of Shoofly Towers (T1-4) and gas line work/directional drilling would result in annual PM_{2.5} concentrations of 0.65 and 0.40 µg/m³, respectively. During Phase One, site preparation would result in an annual PM_{2.5} concentration of 0.46 µg/m³; construction of new left bank levee would result in an annual PM_{2.5} concentration of 0.52 µg/m³; modifications to Friendship Bridge would result in an annual PM_{2.5} concentration of 0.35 µg/m³; and channel widening and marsh plain terracing would result in an annual PM_{2.5} concentration of 1.57 µg/m³, cumulative DPM cancer risk of 141.83/million, and cumulative average annual PM_{2.5} concentration of 2.45 µg/m³. During Phase Two, site preparation would result in a cumulative DPM cancer risk of 139.77/million and a cumulative average annual PM_{2.5} concentration of 1.13 µg/m³; installation of right and left bank floodwalls would result in an annual PM_{2.5} concentration of 3.46 µg/m³, cumulative DPM cancer risk of 149.23/million, and a

cumulative average annual PM2.5 concentration of 4.35 µg/m³; construction of upstream access road on right and left banks would result in a cumulative DPM cancer risk of 139.83/million and a cumulative average annual PM2.5 concentration of 1.18 µg/m³; Conservative Scenario 1—overlap of gas line work, directional drilling and construction of new left bank levee (Utility Relocation and Phase One) — would result in an annual PM2.5 concentration of 0.9 µg/m³, a cumulative DPM cancer risk of 0.6/million, and a cumulative average annual PM2.5 concentration of 0.9 µg/m³; Conservative Scenario 2—overlap of site prep, installation of right and left bank floodwalls, and Flatbed trailer truck trips (Phase Two) —would result in an annual PM2.5 concentration of 3.7 µg/m³, a cumulative DPM cancer risk of 149.3/million, and a cumulative average annual PM2.5 concentration of 4.6 µg/m³.

In summary, the Board will adopt mitigation (Measures AQ2.1, AQ2.2, AQ2.3, NV1.1, and NV1.3) that comprise all of the approaches identified as feasible to reduce impacts associated with TAC emissions during construction of various Project elements. However, even with these measures in place, TAC levels could intermittently be high enough to exceed BAAQMD thresholds. Any such exceedance would constitute a significant residual impact, and is considered unavoidable.

Result in Reduced Availability of Existing Recreational Facilities or Uses

Changes or alterations have been required in, or incorporated into, the Project which mitigate the significant effects on the environment. The Project would relocate the levee on the left bank of San Francisquito Creek inland from its existing location, thereby widening the Creek and cutting through a portion of the Golf Course. To accommodate the new levee footprint and maintain playability of the course, holes 12 through 15 (which are adjacent to the Creek) and certain holes among the remaining fourteen holes would need to be reconfigured on a timetable to be determined by the City of Palo Alto. The total area of the Golf Course to be permanently incorporated into the Project is 7.4 acres. The converted portion of the Golf Course would remain dedicated parkland, but would be permanently converted from Golf Course use to open space as part of the Project. However, it is feasible to reconfigure the Golf Course design in order to maintain or improve the Golf Course's Professional Golfers' Association (PGA) rating and its playability. *Mitigation Measure REC-1—Compensate the City of Palo Alto for the Conversion of 7.4 Acres of the Palo Alto Municipal Golf Course to Accommodate Project Features* requires the SFCJPA to provide monetary compensation to the City of Palo Alto to compensate for the costs of reconfiguring the Golf Course to maintain its PGA regulation status. Implementation of the proposed mitigation measure REC-1 would reduce permanent impacts on the Golf Course to a less-than-significant level.

The Board finds that implementation of Mitigation Measure REC-1 is within the responsibility and jurisdiction of another public agency (the City of Palo Alto) and has been, or can and should be, adopted by Palo Alto. Since the District does not have the ability to guarantee the implementation of this measure, a significant and unavoidable impact on the Golf Course is assumed. The District, through the JPA, is committed to providing funding to compensate for the costs of reconfiguring the Golf Course as described in *Mitigation Measure REC-1*.

In summary, the Board will adopt Mitigation Measure REC-1 that comprises all of the approaches identified as feasible to reduce impacts associated with the permanent incorporation of 7.4 acres of the Golf Course into the Project. However, because implementation of the mitigation measure is outside the District's and the JPA's jurisdiction and fulfillment cannot be guaranteed, a significant and unavoidable impact is assumed.

Contributions to Cumulative Air Quality Impacts

Impact and Project Contribution

The San Francisco Bay Area Air Basin is a nonattainment area for the federal 8-hour ozone standard, the state 1-hour ozone standard, and the state PM10 and PM2.5 standards; this represents a significant existing cumulative impact on air quality. Construction of the proposed project would temporarily increase emissions of ozone precursors, such as NO_x. The BAAQMD has established emissions thresholds which it believes a project's individual operational criteria pollutant emissions would be cumulatively considerable. Therefore, it considers the project-level criteria pollutant thresholds to address both project-level and cumulative impacts (Bay Area Air Quality Management District 2011). The Project's construction emissions were estimated to exceed the BAAQMD daily emission threshold for NO_x. Therefore, construction-related tailpipe emissions are expected to constitute a considerable contribution to existing cumulative air quality degradation, notwithstanding the mitigation incorporated into the Project as discussed above.

Mitigation

Implementation of *Mitigation Measures AQ2.1 through AQ2.3* and *Mitigation Measures NV1.1 and NV1.3* discussed above would reduce NO_x emissions, but BAAQMD's NO_x thresholds would still be exceeded. Therefore, the project's construction activities on cumulative air quality impacts are expected to be significant and unavoidable.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. The Board finds that Mitigation Measures AQ2.1 through AQ2.3 and Mitigation Measures NV1.1 and NV1.3 are feasible and will adopt these measures as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. However, even with this measure in place, the Project is expected to have a cumulatively considerable contribution to regional air quality degradation.

Except for the temporary air quality impacts from construction, and recreational impacts to the Palo Alto Golf Course, the Board finds that the EIR identifies no significant environmental effects of the proposed Project which cannot be mitigated to levels of insignificance and further finds that all impacts will either be avoided or reduced to a level that is both insignificant and acceptable. All mitigation measures which are included in the proposed Project and EIR (whether or not they are expressly designated as mitigation measures), or which are referenced in these Findings, or which are included in the Mitigation Monitoring and Reporting Program, shall be deemed adopted as part of the Board's approval of the Project and certification of the Final EIR to the extent they have been identified as measures to be undertaken by the District.

IV. ALTERNATIVES ANALYSIS

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of a project, which could reduce potential impacts while still attaining the basic objectives of the project, and to evaluate the comparative merits of the alternatives. CEQA Guidelines also require that the range of alternatives considered include a "No Project"

alternative. For comparative purposes, the objectives of the Proposed Project are set forth in Section I. D of these findings, and impacts are analyzed in Sections II and III above. As set forth below, the JPA considered various alternatives in selecting the Proposed Project.

The Board finds the following with regard to the alternatives analyzed in the EIR, as discussed in more detail below.

- The EIR describes a reasonable range of alternatives to the Project as proposed.
- The Board has evaluated the comparative merits of the alternatives and rejected them in favor of the proposed Project.
- There are no feasible alternatives within the District's powers that would substantially lessen or avoid any significant effects from the Project.

The EIR analyzed two alternatives advanced from the preliminary alternatives analysis in addition to the Project as proposed: Alternative 3 (Golf Course Bypass) and the No Project Alternative.

Findings Regarding the Alternatives – Environmentally Superior Alternative

Alternative 3 (Golf Course Bypass) includes in-channel marshplain terraces, similar to the Project and a large bypass channel extending across the center of the Golf Course. It does not include levee setbacks in either the middle or upper reaches as set forth in the Project. The differentiating feature of Alternative 3 is a large bypass channel extending from south to north through the center of the Golf Course. This bypass reach would intersect the existing channel just downstream of the Baylands Athletic Center and reconnect with the main channel near the airport runway. During both normal daily flows and fluvial flood events, a portion of upstream flows would be diverted through the bypass channel, therefore significantly reducing water levels in the middle reach and conveying a large percentage of flows away from the residences of East Palo Alto. Maintenance and operations of Alternative 3 would be identical to those of the Project. Although Alternative 3 would accomplish Project goals and objectives and reduce impacts on biological resources it would result in greater impacts to aesthetics, cultural resources, land use, noise and vibration, recreation, and traffic. The Board finds that specific economic, legal, social, or other considerations make this alternative infeasible. Specifically, the Board finds this alternative infeasible and undesirable from a policy standpoint because it would result worse environmental impacts when compared to the Project.

The No Project Alternative would avoid numerous significant impacts identified for the proposed Project, but would not accomplish the Project's identified goal and objectives. The Board finds that specific economic, legal, social, or other considerations make this alternative infeasible. Specifically, the Board finds that this alternative is infeasible because it would not meet the Project objectives.

V STATEMENT OF OVERRIDING CONSIDERATIONS

As described in the Background section, flooding from the Creek is a common occurrence and the most recent major flood event in February 1998 affected approximately 1,700 residential, commercial, and public structures and caused more than \$28 million in property damages. The

maximum instantaneous peak flow recorded during the February 1998 event was 7,200 cfs. The 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, and these flows would exceed the existing capacity of the Creek (San Francisquito Creek Joint Powers Authority 2009). Protection from the 100-year flood (1-percent flood protection) is the currently accepted standard for flood protection works, and the Project is being designed specifically to meet a goal of providing 1 percent flood protection for residents and businesses along the San Francisquito Creek corridor.

Construction of the Project would likely result in significant and unavoidable effects on air quality associated with construction of various Project elements during all Project phases. The Board finds that the construction-related air quality impacts are temporary and an unavoidable byproduct of the need to use heavy equipment to complete the Project. The Project would also result in significant and unavoidable effects related to reduced availability of existing recreational facilities due to the permanent incorporation of 7.4 acres of the Golf Course into the Project. The District has committed to all feasible mitigation to reduce this impacts, but the implementation of the mitigation measure for recreation impacts is outside the District's and JPA's jurisdiction and fulfillment cannot be guaranteed. No additional feasible mitigation is available.

The Board finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or Project alternatives identified in the Final EIR, as detailed above in Section IV. All feasible mitigation measures have been incorporated into the Project by way of adoption of the Mitigation Monitoring and Reporting Program, as requirements of implementation of the Project.

In making this Statement of Overriding Considerations in support of the findings of fact and the Project, the Board has considered information contained in the Final EIR for the Project as well as the public testimony and record of proceedings in which the Project was considered. The District has balanced the Project's benefits against the unavoidable adverse impacts identified in the Final EIR. This determination is made based upon the public benefits identified in the Final EIR and record of proceedings as flowing from the Project.

The project provides long term solution to flood management

Key project objectives include improving public safety through flood risk management; accommodating future flood protection measures upstream; enhancing habitat and recreational opportunities in the project area; and minimizing maintenance needs of the Project. The impacts of the Project are localized to the project vicinity, but the Project provides long term regional benefits from implementation.

The Board finds that the benefits of the Project outweigh the unavoidable adverse environmental effects

The Final EIR was prepared pursuant to the CEQA Guidelines. The Board has independently determined that the Final EIR fully and adequately analyzes the impacts and mitigation measures of the Project. The number of Project alternatives identified and considered in the EIR meets the test of "reasonable" analysis and provides the Board with important information from which to make an informed decision. Substantial evidence in the record from public meetings

and other sources demonstrates various benefits and considerations including economic, legal, social, and technological which would be achieved from implementation of the Project.

In consideration of the existing flood risks along San Francisquito Creek associated with lack of adequate capacity in the Creek channel, and the analysis of Project outcomes presented in the Final EIR, the Board balanced Project benefits and considerations against the unavoidable and irreversible environmental risks identified in the EIR and concluded that those impacts are outweighed by the Project benefits. Upon balancing the environmental risk and countervailing Project benefits, the Board has concluded that the benefits that will derive from implementation of the Project outweigh those environmental risks many of which are temporary. The remaining unavoidable and irreversible impacts of the Project are acceptable in light of economic, legal, social, technological, and other considerations set forth herein because the benefits of the Project outweigh any significant and unavoidable or irreversible environmental impact of the Project.

Appendix F
San Francisquito Creek Flood Reduction, Ecosystem
Restoration, and Recreation Project
San Francisco Bay to Highway 101
Mitigation Monitoring and Reporting Plan

Appendix F. Mitigation Monitoring and Reporting Plan for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation
 Project San Francisco Bay to Highway 101

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Air Quality				
<p>Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction. According to the BAAQMD guidelines (2011a), the SFCJPA will require all construction contractors to implement the exhaust Basic Construction Mitigation Measures and Additional Construction Mitigation Measures recommended by the BAAQMD to control exhaust emissions. Emission reduction measures will include at least the following measures and may include other measures identified as appropriate by the SFCJPA and/or contractor.</p> <ul style="list-style-type: none"> • Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes. Clear signage will be provided for construction workers at all access points. • All construction equipment will be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment will be checked by a certified visible emissions evaluator. • The Project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a Project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such 	All Project elements, during construction	Construction contractors	This measure will remain in effect for the duration of Project construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>as particulate filters, and/or other options as such become available.</p> <ul style="list-style-type: none"> • Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_x and PM. • Requiring all contractors use equipment that meets CARB’s most recent certification standard for off-road heavy duty diesel engines. 				
<p>Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction. During construction, the Project Applicant will ensure that all onroad heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used at the Project site will comply with EPA 2007 on-road emission standards for PM10 and NO_x (0.01 grams per brake horsepower-hour [g/bhp-hr] and 0.20 g/bhp-hr, respectively). The Project Applicant will submit evidence of the use of modern truck fleet to the BAAQMD.</p> <p>For purposes of analysis, the mitigated reductions provided by MM-AQ-2.3 herein assume a 2007 and newer model truck fleet.</p>	<p>All Project elements, during construction</p>	<p>Construction contractors</p>	<p>This measure will remain in effect for the duration of Project construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction. During construction, the SFCJPA will require that the contractor’s equipment used for directional drilling meet EPA Tier 2 or higher emissions standards. In addition, all directional drilling equipment will be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor will achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</p>	<p>All Project elements, during construction</p>	<p>Construction contractors</p>	<p>This measure will remain in effect for the duration of Project construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>The requirement of MM-AQ-2.3 will be met, unless the contractor is able to provide proof that any of these circumstances exists:</p> <ul style="list-style-type: none"> • A piece of specialized equipment is unavailable in a controlled form within the State of California, including through a leasing agreement. • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the proposed Project, but the application is not yet approved, or the application has been approved, but funds are not yet available. • A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease. 	<p>All Project elements, during construction</p>	<p>The SFCJPA’s project manager will coordinate written notification and will identify the appropriate staff member(s) to serve as noise and air quality disturbance coordinator.</p>	<p>Notification will occur at least 30 days before construction begins at each site. The noise and air quality disturbance coordinator will continue to be available during working hours (included any extended hours) for the duration of Project construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. The SFCJPA will provide advance written notification of the proposed construction activities to all residences and other noise- and air quality-sensitive uses within 750 feet of the construction site. Notification will include a brief overview of the proposed Project and its purpose, as well as the proposed construction activities and schedule. It will also include the name and contact information of the SFCJPA’s project manager or another SFCJPA representative or designee responsible for</p>				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
ensuring that reasonable measures are implemented to address the problem (the construction noise and air quality disturbance coordinator; see Mitigation Measure NV1.3).				
<p>Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns. The SFCJPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. The disturbance coordinator’s name and contact information will be included in the preconstruction notices sent to area residents (see Mitigation Measure AQ2.2). She or he will be available during regular business hours to monitor and respond to concerns. In the event an air quality or noise complaint is received, she or he will be responsible for determining the cause of the complaint and ensuring that reasonable measures are implemented to address the problem.</p>	All Project elements, during construction	The SFCJPA’s project manager will coordinate written notification and will identify the appropriate staff member(s) to serve as noise and air quality disturbance coordinator.	Notification will occur at least 30 days before construction begins at each site. The noise and air quality disturbance coordinator will continue to be available during working hours (included any extended hours) for the duration of Project construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Biological Resources				
<p>Mitigation Measure BIO1.1—Conduct Botanical Surveys. SFCJPA will retain a qualified botanist to survey suitable habitat in the Project area for special-status plants. Surveys will be conducted during the appropriate blooming periods for each species as indicated in Table 3.3-3.</p>	All Project elements, during construction	A qualified botanist or ecologist retained by the SFCJPA will perform the surveys, documentation, and reporting described in this measure.	<p>Surveys will be completed during the blooming periods for each species before ground-disturbing activities begin. Surveys will take place far enough in advance of ground-disturbing activities to allow for Mitigation Measures BIO1.2 and BIO1.3 to be implemented, if necessary.</p> <p>Survey timing may be adjusted based on input from the qualified</p>	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
<p>Table 3.3-3. Timing of Surveys for Special-Status Plants</p>				
Species	Blooming Period	Period Surveys Should Occur ^a		
Alkali milk-vetch	March–June	April/May		
San Joaquin spearscale	May–October	July/August		

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Congdon's tarplant	June–November	July/August		botanist/ecologist, based on variations in weather and other factors that influence the blooming period. If possible, surveys should be timed to coincide with blooming periods of known local populations.
Point Reyes bird's-beak	June–October	July/August		
Hairless popcorn-flower	April–May	April/May		
Slender-leaved pondweed	May–July	June/July		
California seablite	July–October	July/August		
Saline clover	April–June	April/May		

^a 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 **Error! Bookmark not defined.**). 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 individuals of identified special-status plant species could be affected by construction traffic or activities, Mitigation Measure BIO1.2 and, if necessary, Mitigation Measure BIO1.3, will be implemented.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>Mitigation Measure BIO1.2—Confine Construction Disturbance and Protect Special-Status Plants During Construction. Construction disturbance will be confined to the minimum area necessary to complete the work, and will avoid encroachment on adjacent habitat. If special-status plants 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 agency (DFG and 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 mitigation measures protecting wetlands, riparian habitat, and mature trees.</p>	<p>All Project elements, during construction</p>	<p>A qualified botanist or ecologist retained by the SFCJPA will coordinate with DFG and USFWS staff to establish setback buffers (i.e., determine their location and extent).</p> <p>The qualified botanist/ecologist will either install construction fencing to protect plants within the setback, or will supervise installation by construction personnel. The botanist/ecologist will be responsible for ensuring that fencing is installed without damage to special-status plants.</p> <p>All contractor staff will be expected to observe the setback buffers.</p>	<p>At each site, all setbacks will be established and fenced before any site preparation or construction activities are permitted to commence.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Setbacks will be established in consultation with DFG and USFWS.</p>
<p>Mitigation Measure BIO1.3—Compensate for Loss of Special-Status Plants. If any individuals of listed special-status plants are present and cannot be effectively avoided through implementation of Mitigation Measure BIO1.2, SFCJPA will develop and implement a compensation plan. The compensation plan will preserve an off-site area containing individuals of the affected species. The plan will be implemented so that there is no net loss of special-status plants. If an off-site 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</p>	<p>All Project elements, prior to construction</p>	<p>A qualified botanist or ecologist retained by the SFCJPA will coordinate with DFG and USFWS to develop the compensation plan and monitoring and adaptive management plan. The SFCJPA’s project manager will be responsible for implementing the plan.</p>	<p>If propagation is required, propagules will be collected before ground disturbance begins. Any transplantation will also occur prior to ground disturbance.</p> <p>Compensation described in this measure will be arranged, and if possible, completed prior to groundbreaking.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>SFCJPA will submit documentation of the completed compensation and subsequent monitoring and adaptive management plan results to DFG and USFWS</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>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.</p> <p>The compensation plan will be developed by a qualified botanist in coordination with and approval of DFG or USFWS, depending on whether the plant has state or federal status, respectively, or both. 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 DFG and 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.</p> <p>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 impacts; 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</p>				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>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 mitigation 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.</p>				
<p>Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training. Prior to construction, Worker Awareness Training must be conducted to inform construction 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 Project area, and possible legal repercussions of impacting such regulated resources.</p>	<p>All Project elements, prior to construction</p>	<p>The SFCJPA will retain a qualified wildlife biologist to implement this measure for construction contractor crews.</p>	<p>Construction crew training will occur prior to any work on the site.</p>	<p>For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>Mitigation Measure BIO2.2—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles. Prior to the start of construction activities at Project element sites that could support western pond turtle, SFCJPA will retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of the work sites. Surveys will take place no more than 7 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If preconstruction surveys identify active nests, the biologist will establish no-disturbance buffer zones around each nest using temporary orange construction fencing. The demarcation will be permeable to allow young turtles to move away from the nest following hatching. The radius of the buffer zone and the duration of exclusion will be determined in consultation with DFG. The buffer zones and fencing will remain in place until the young have left the nest, as determined by the qualified biologist. If western pond turtles are found in the Project area, a qualified biologist will remove and relocate them to suitable habitat outside the Project limits, consistent with DFG protocols and permits. Relocation sites will be subject to agency approval. If turtles are observed during the surveys, then Mitigation Measure BIO2.3 will be implemented.</p>	<p>All Project elements, prior to construction</p>	<p>The SFCJPA will retain a qualified wildlife biologist to implement this measure.</p>	<p>The surveys and avoidance measures described in this measure will be performed before site preparation and construction activity begins.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Exclusion fencing will be established in consultation with DFG and USFWS as necessary.</p> <p>A written report will be submitted to DFG detailing the survey results of any western pond turtles and subsequent relocation activities (if necessary).</p>
<p>Mitigation Measure BIO2.3—Daily Surveys and Monitoring of Construction Activities to Decrease Disturbance to Western Pond Turtles. SFCJPA will retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of work sites that will be active within the 3 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If no turtles are found during the daily survey, construction will commence and be monitored for the duration of</p>	<p>All Project elements, prior to construction</p>	<p>The SFCJPA will retain a qualified wildlife biologist to implement this measure.</p>	<p>The surveys and avoidance measures described in this measure will be performed daily before construction activity begins.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s SMP program manager will be responsible for ensuring proper</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>work within suitable western pond turtle habitat. If a turtle is found during the daily preconstruction survey, construction in the vicinity of the turtle will not commence until the turtle is removed from the Project area to be relocated to suitable habitat outside of the Project limits per DFG protocols and permits. Relocation sites will be subject to agency approval. Following turtle relocation, the biologist will return to the Project area and monitor construction activities that take place within suitable western pond turtle habitat.</p>				<p>implementation, for enforcement, and for documenting compliance.</p> <p>Exclusion fencing will be established in consultation with DFG and USFWS as necessary.</p> <p>A written report will be submitted to DFG detailing the survey results of any western pond turtles and subsequent relocation activities (if necessary).</p>
<p>Mitigation Measure BIO3.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds (Excluding Burrowing Owl). Prior to the start of construction activities that begin during the migratory bird nesting period (between January 15 and August 31 of any year), SFCJPA will retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory birds that could nest along the Project corridor, including special-status species such as salt marsh common yellowthroat, Alameda song sparrow, northern harrier, and white-tailed kite. Surveys will cover all suitable raptor and migratory bird nesting habitat that will be impacted directly or indirectly through disturbance, including habitat potentially used by ground-nesting migratory bird species.</p> <p>All migratory bird nesting surveys will be performed no more than 2 weeks (14 days) prior to any Project-related activity that could pose the potential to affect migratory birds. If a lapse in Project-related work of 2 weeks or longer occurs, another focused survey will be conducted before Project work can be reinitiated. With the exception of raptor nests, inactive bird nests may be removed. No birds, nests with eggs, or nests with hatchlings will be disturbed. In addition, nesting bird preconstruction surveys will occur prior to ground disturbance, including site</p>	<p>All Project elements, prior to construction</p>	<p>A qualified wildlife biologist retained by the SFCJPA will be responsible for conducting the surveys described in this measure. If any active nests are identified, s/he will coordinate with DFG to establish buffers, will install or oversee the installation of exclusion fencing, and will determine when the nest(s) are no longer active.</p>	<p>Any buffers that are established as a result of surveys will remain in place as long as the nest is active or young remain in the area, as determined by the qualified wildlife biologist.</p>	<p>For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Buffer zones will be established in consultation with DFG as necessary.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>preparation.</p> <p>If an active nest is discovered during these surveys, the qualified wildlife biologist will establish a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, the nest itself). The no-disturbance zone will be marked with flagging or fencing that is easily identified by the construction crew and will not affect the nesting bird. In general, the minimum buffer zone widths will be 0.5-mile for bald and golden eagles, 25 feet (radius) for nonraptor ground-nesting species; 50 feet (radius) for nonraptor shrub- and tree-nesting species; and 250 feet (radius) for all raptor species. Buffer widths may be modified based on discussion with DFG, depending on the proximity of the nest, whether the nest would have a direct line of sight to construction activities, existing disturbance levels at the nest, local topography and vegetation, the nature of proposed activities, and the species potentially affected. Buffers will remain in place as long as the nest is active or young remain in the area. No construction presence or activity of any kind will be permitted within a buffer zone until the biologist determines that the young have fledged and moved away from the area and the nest is no longer active.</p> <p>If monitoring of active nests indicates that disturbance is affecting active nests, buffer widths will be increased until the disturbance no longer affects the nest(s). If the buffer cannot be extended further, then work within the area will stop until the nest is no longer active.</p>	<p>All Project elements, prior to construction</p>	<p>A qualified wildlife biologist retained by the SFCJPA will be responsible for conducting the surveys described in this measure. If individuals are observed outside the</p>	<p>During the nonnesting season (September 1-January 31), surveys will be conducted no more than 7 days prior to ground-disturbing activities.</p> <p>For sites where</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Buffers will be established in consultation with DFG as</p>
<p>Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities. Prior to any construction activity planned to begin during the fall and winter nonnesting season (September 1-January 31), SFCJPA will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing</p>	<p>All Project elements, prior to construction</p>	<p>A qualified wildlife biologist retained by the SFCJPA will be responsible for conducting the surveys described in this measure. If individuals are observed outside the</p>	<p>During the nonnesting season (September 1-January 31), surveys will be conducted no more than 7 days prior to ground-disturbing activities.</p> <p>For sites where</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Buffers will be established in consultation with DFG as</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>owls. Surveys will be conducted no more than 7 days prior to ground-disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance. If any western burrowing owls are found within the disturbance area during the survey or at any time during the construction process, SFCJPA will notify DFG and will proceed under DFG direction. If construction is planned to occur during the nesting season (February 1-August 31), surveys for nesting owls will be conducted by a qualified wildlife biologist in the year prior to construction to determine if there is breeding within 250 feet of the construction footprint. This prior-year survey will provide the Project team advance notice regarding nesting owls in the Project area and allow ample time to discuss with DFG the appropriate course of action if nesting owls are found. In addition, same-year preconstruction surveys for nesting western burrowing owls will be conducted no more than 7 days prior to ground disturbance in all suitable burrowing owl habitat. If the biologist identifies the presence of a nesting burrowing owl in an area scheduled to be disturbed by construction, a 250-foot no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, will be coordinated with DFG, and will be subject to DFG review and oversight.</p>		<p>nesting period, s/he will coordinate with DFG to identify and implement appropriate measures. If active nests are identified, s/he will coordinate with DFG to establish buffers, will install or oversee the installation of exclusion fencing, and will determine when the nest(s) are no longer active.</p>	<p>construction work is scheduled to occur between February 1 and August 31, surveys will be completed before any site preparation or construction activities begin. Surveys will take place no more than 7 days prior to ground disturbance.</p> <p>Any buffers that are established as a result of the surveys will remain in place as long as the nest is active, as determined by the qualified wildlife biologist.</p>	<p>necessary.</p> <p>A written report will be submitted to DFG detailing the survey results of any western burrowing owls found on the Project site.</p>
<p>Mitigation Measure BIO5.1—Implement Survey and Avoidance Measures for California Clapper Rail and California Black Rail Prior to Construction Activities. Work activities within 50 feet of California clapper rail 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.</p> <p>If work is to be conducted during the species’ breeding and rearing seasons (March–August 31) within 700 feet of suitable habitat, a permitted</p>	<p>All Project elements, prior to construction</p>	<p>A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.</p>	<p>Surveys will take place no more than 48 hours prior to the onset of work.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s designated maintenance manager will be responsible for ensuring proper implementation, for</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>biologist will be retained to conduct surveys of appropriate habitat for California clapper rail and California black rail. 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.</p> <p>Outside of breeding season, a permitted biologist will be retained to conduct surveys of appropriate habitat for California clapper rail and California black rail within the work area, including all staging and access routes, no more than 7 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 or California black rail individuals have left the area.</p> <p>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</p>				<p>enforcement, and for documenting compliance.</p> <p>Protection measures will be identified in consultation with DFG and USFWS as necessary.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>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.</p>				
<p>Mitigation Measure BIO5.2—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 and DFG will be necessary before implementation of activities recommended by the plan. Routine monitoring reports will be submitted to the appropriate agencies following their completion.</p>	<p>All Project elements, prior to construction</p>	<p>A qualified biologist retained by the SFCJPA will be responsible for Plan development described in this measure, coordination with DFG, and for any needed follow-up activities.</p>	<p>Coordination with DFG will be initiated before any construction activity begins, and will remain in effect for the duration of the Project.</p> <p>The plan for the site will be completed and approved by DFG prior to groundbreaking.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>The plan would be finalized in consultation with DFG and USFWS as necessary.</p>
<p>Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Prior to Construction. Construction and maintenance work, including site preparation, will be avoided to the extent possible within suitable habitat for these 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</p>	<p>All Project elements, prior to construction</p>	<p>A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.</p>	<p>Surveys will take place no more than 24 hours prior to the onset of work.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s designated maintenance manager will be responsible for ensuring</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>minimum, will include:</p> <ul style="list-style-type: none"> • 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, 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 prior to placement. • Prior to initiation of work each day within 300 feet of tidal or pickleweed habitats, the 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. <p>Prior to initiation of work within suitable habitat, a permitted biologist will be retained to monitor the hand removal of pickleweed to avoid impacts on salt marsh harvest mouse and salt marsh wandering shrew. Monitoring will occur for the duration of all clearing work within suitable habitat, and all clearing of pickleweed will be conducted by hand. If salt marsh harvest mouse or salt marsh wandering shrew 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 1 day or more after the observation date.</p>				<p>proper implementation, for enforcement, and for documenting compliance.</p> <p>Protection measures will be identified in consultation with DFG and USFWS as necessary.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>During the survey, if salt marsh harvest mouse or salt marsh wandering shrew 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.</p> <p>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.</p>	<p>All Project elements, prior to construction</p>	<p>A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.</p>	<p>Surveys will take place no more than 48 hours prior to the onset of work.</p>	<p>For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Protection measures will be identified in consultation with DFG and USFWS as necessary.</p>
<p>Mitigation Measure BIO7.1—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 (700 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 700 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 or heard 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</p>				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>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.</p>				
<p>Mitigation Measure BIO8.1—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.</p>	<p>All Project elements, prior to construction</p>	<p>The SFCJPA will retain a qualified wildlife biologist to implement this measure.</p>	<p>The surveys and any needed relocation of individuals described in this measure will be performed before site preparation and construction activity begins.</p> <p>Fencing will remain in place for the duration of construction or maintenance activity.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Relocation sites will be established in consultation with DFG and USFWS as necessary.</p> <p>A written report will be submitted to DFG and USFWS detailing the survey results of listed amphibians and subsequent relocation activities (if necessary).</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>Mitigation Measure BIO9.1—Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities. No in-channel construction activities will occur during the steelhead migration period (October 1–April 30), to reduce the likelihood that steelhead are present during construction activities.</p> <p>A qualified fisheries biologist, approved by NMFS, will survey the construction area 1 to 2 days before the Project begins. If no surface water is present in the immediate construction area, fish will not be relocated. If water is present, the following procedures will be implemented.</p> <ul style="list-style-type: none"> • 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 ample habitat 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 will not be utilized. • To the extent feasible, relocation will be performed during morning periods. Water temperatures will be measured periodically, and relocation activities will be suspended if water temperature exceeds 18°C (National Marine Fisheries Service 2000). 	<p>All Project elements, prior to construction</p>	<p>A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with NMFS.</p>	<p>Surveys will take place no more than 48 hours prior to the onset of work.</p>	<p>For the construction period, the SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>For the operational period, the SFCJPA’s designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>Protection measures will be identified in consultation with NMFS as necessary.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<ul style="list-style-type: none"> • Handling of salmonids will be minimized. When necessary, personnel will wet hands or nets before touching fish. • Fish will be held temporarily in cool, shaded 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 DFG and NMFS within 30 days of completion. • If mortality during relocation exceeds 5% or mortality of any State or Federal 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. 				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>Mitigation Measure BIO11.1—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.</p>	<p>All Project elements, prior to construction</p>	<p>A qualified botanist or ecologist retained by the SFCJPA will establish the setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install the construction fencing to protect riparian habitat within the setback, or will supervise installation by construction personnel.</p>	<p>Surveys will be conducted and setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure BIO11.2—Restore Riparian Habitat. The SFCJPA will be responsible for restoring permanently affected riparian habitat at a mitigation-to-impact ratio of 2:1, and restoring temporarily affected habitat at a minimum impact-to-mitigation ratio of 1:1 to ensure no net loss of riparian habitat in the affected stream reach. The SFCJPA will develop a Mitigation and Monitoring Plan (MMP) to ensure that all removed habitat is replaced “in kind” with</p>	<p>All Project elements, prior to construction</p>	<p>A qualified botanist/ecologist retained by the SFCJPA will be responsible for identifying and mapping riparian areas and preparing the MMP.</p>	<p>The MMP will be developed and restoration will be planned during the permit process, prior to groundbreaking. The MMP will remain in force until the success criteria described in the plan are met.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The MMP will be developed in consultation with resource agency staff.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>the appropriate native overstory and understory species to maintain structural complexity and habitat value. 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% of the riparian plantings become established after 10 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.</p>				
<p>Mitigation Measure BIO12.1—Avoid and Protect Jurisdictional Wetlands during Construction. The SFCJPA will ensure that a qualified resource specialist (biologist, ecologist, or soil scientist) will clearly identify wetland areas outside of the direct impact footprint with temporary orange construction fencing before site preparation and construction activities begin at each site or will implement another suitable low-impact measure. Construction will not encroach upon jurisdictional wetlands identified by the wetland specialist. The resource specialist will use the wetland delineation (ICF 2012) mapping prepared for the proposed Project and will confirm or modify the location of wetland boundaries based on existing conditions at the time of the survey. Exclusion fencing will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or</p>	<p>All Project elements, prior to construction</p>	<p>A qualified botanist or ecologist retained by the SFCJPA will establish the setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install the construction fencing to protect jurisdictional wetlands within the setback, or will supervise installation by construction personnel.</p>	<p>At each site, all setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>materials will be permitted in fenced wetland areas.</p>				
<p>Mitigation Measure BIO13.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations. Protected landscape trees slated for removal and deemed good candidates for transplantation will be considered for transplanting in conjunction with the proposed landscaping plans. Transplanted trees will be located on the site if space permits. If the number of trees to be transplanted is too large to be accommodated on the Project site, the SFCJPA will prepare a landscaping plan detailing other locations where transplanted trees will be planted, consistent with the requirements of the applicable tree protection ordinance or regulations. Transplanted trees will be subject to the monitoring and replacement requirements identified for replacement trees below.</p> <p>Protected landscape trees not deemed good candidates for transplantation will be replaced. The landscaping plan for tree replacement will specifically identify the locations where replacement trees are to be planted; replacements will be planted on the site, if possible. The landscaping plan will be subject to review and approval by the agency with jurisdiction (Santa Clara County, San Mateo County, City of Palo Alto, or City of East Palo Alto).</p> <p>Tree removals within the Cities of Palo Alto and East Palo Alto will be compensated for at a mitigation-to-impact ratio of 1:1, or as determined by the City. Species and location of the replacement tree will be determined in consultation with the property owner and the City.</p> <p>Impacted mitigation trees associated with the Matadero Creek and Palo Alto Pump Station projects would be replaced in accordance with the terms and conditions of the respective permits for those projects and in consultation with the</p>	<p>All Project elements, prior to construction</p>	<p>Surveys and reporting will be performed by an ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist retained by the SFCJPA. Landscape plans will be developed by a licensed landscape architect and/or civil engineer in consultation with the arborist and SFCJPA project manager. Transplantation and compensation plantings will be performed by contractor staff under the supervision of the certified arborist.</p>	<p>The arborist surveys will be performed during Project design. The landscaping plan, which will determine the feasibility of transplanting protected landscape trees, will be completed prior to groundbreaking. Transplantation efforts, if determined feasible by the certified arborist, will take place during construction as protected landscape trees are removed. If transplantation is not feasible, compensation will be arranged, and if possible, completed prior to groundbreaking. Any onsite compensation plantings will be provided during Project construction/ site finishing.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>responsible permitting authorities for those projects, should the monitoring period for successful completion of mitigation requirements not be completed at the time of construction.</p> <p>The SFCJPA will be responsible for ensuring newly planted trees will be monitored at least once a year for 3 years. Each year, trees that do not survive will be replaced in a manner consistent with the compensation required under the applicable tree ordinance. Trees planted as remediation for failed plantings will then be monitored for a period of 3 years in the same manner, and trees that do not survive will be replaced. Trees that are replaced will be consistent with the Guidelines and Standards for Land Uses near Streams prepared by the Santa Clara Valley Water Resources Protection Collaborative. The SFCJPA will be responsible for the removal of irrigation systems that are no longer used following tree establishment. Inactive irrigation systems will be removed within 5 years of satisfaction of the mitigation measure.</p>				
<p>Mitigation Measure BIO13.2—Protect Remaining Trees from Construction Impacts. Trees not designated for removal will be protected from damage during construction by the installation of temporary fencing in a manner consistent with International Society of Arboriculture tree protection zone recommendations. Fencing will keep construction equipment away from trees and prevent unnecessary damage to or loss of protected trees on the Project site. Protected trees retained on the site and located adjacent to construction activities will be monitored as specified for newly planted trees (see Mitigation Measure BIO13.1) and replaced if they do not survive through the monitoring period.</p>	<p>All Project elements, prior to construction</p>	<p>An ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist retained by the SFCJPA will either install the construction fencing to protect remaining trees within the setback, or will supervise installation by construction personnel. Follow up monitoring will also be performed by a certified arborist.</p>	<p>At each site, all setbacks will be established and fenced before any site preparation or construction activities are permitted to commence.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Cultural and Paleontological Resources				
<p>Mitigation Measure CR1.1—Conduct a Pre-Construction Cultural Field Survey and Cultural Resources Inventory and Evaluation. The SFCJPA will retain qualified personnel to conduct an archaeological field survey of the Project area to determine whether significant resources exist within the Project area. The inventory and evaluation will include the documentation and result of these efforts, the evaluation of any cultural resources identified during the survey, and cultural resources monitoring, if the survey identifies that it is necessary. The monitoring process will be carried out in combination with the District’s standard BMPs.</p>	All Project elements, prior to construction groundbreaking	A qualified architectural historian retained by the SFCJPA will be responsible for conducting the historical resources evaluation described in this measure.	The historical resources evaluation will be conducted during preparation of the National Historic Preservation Act Section 106 report required for the permit process, and will be completed prior to site preparation or construction activities.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
<p>Mitigation Measure CR1.2—Conduct Worker Awareness Training for Archaeological Resources Prior to Construction. Prior to the initiation of any site preparation and/or start of construction, the applicant will ensure that all construction workers receive training overseen by a qualified professional archaeologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize archaeological resources (e.g., areas of shellfish remains, chipped stone or groundstone, historic debris, building foundations, human bone) in the event that any are discovered during construction.</p>	All Project elements, prior to construction groundbreaking	A qualified archaeologist retained by the SFCJPA will be responsible for conducting the construction monitoring described in this measure.	This measure will remain in effect for the duration all ground-disturbing activities.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
<p>Mitigation Measure Paleo1.1—Conduct a Pre-Construction Paleontological Resources Field Survey and Paleontological Resources Inventory and Evaluation. The SFCJPA will retain qualified personnel with experience in vertebrate fossil monitoring and salvage at construction sites to conduct a paleontological resources field survey of the Project area with native soils to determine whether significant resources exist within the Project area. The inventory and evaluation will include the documentation and result of these</p>	All Project elements, prior to construction groundbreaking	A qualified paleontologist retained by the SFCJPA will be responsible for conducting the survey. If salvage and/or protection are required, measures will be designed and implemented by the qualified paleontologist	Surveys will be conducted prior to ground disturbance, and with enough lead time to allow for salvage and/or protection. If salvage or protection is needed, these operations will also be completed prior to construction ground	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
efforts, the evaluation of any paleontological resources identified during the survey, and paleontological resources monitoring, if the survey identifies that it is necessary.		in consultation with the SFCJPA’s project manager.	disturbance.	
<p>Mitigation Measure Paleo 1.2—Conduct Worker Awareness training for Paleontological Resources Prior to Construction. Prior to the initiation of any site preparation and/or start of construction, the applicant will ensure that all construction workers receive training overseen by a qualified professional paleontologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize paleontological resources in the event that any are discovered during construction.</p>	All Project elements, prior to construction groundbreaking	The SFCJPA will retain a qualified paleontologist or California-licensed professional geologist (PG) experienced in training non-specialists to deliver the required training.	Training will occur prior to groundbreaking.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
<p>Mitigation Measure CR1.3—Stop Work Immediately if Buried Cultural Resources are Discovered Inadvertently. If paleontological resources are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified paleontologist with experience in vertebrate fossil monitoring and salvage at construction sites can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the SFCJPA and other agencies as appropriate. Equipment operators, supervisors, inspectors, and other field personnel will be required to report to the paleontology monitor any suspected fossil discoveries. The paleontologist will have authority to halt or redirect excavation operations in the event of discovery of vertebrate, plant, or invertebrate fossils until such time as their probable significance can be assessed and, if potentially significant, appropriate salvage measures have been implemented.</p>	All Project elements, during construction	Stop work orders may be issued by the qualified paleontologist, or by the construction foreperson in response to discoveries by construction workers. All SFCJPA and contractor staff will be responsible for adhering to stop work orders. Any follow-up (evaluation, treatment) will be performed by or under the supervision of the qualified paleontologist.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
The paleontologist will properly collect and document any large vertebrate remains and recognize and appropriately sample and				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>document any sedimentary bodies revealing small vertebrate remains. Large bulk samples may be appropriate. Minimum documentation includes exact location (GPS data), orientation, depth (elevation), and detailed geologic setting of any large- or small-vertebrate finds, including detailed diagrams showing microstratigraphy in nearby excavations supplemented with good-quality field photographs. If vertebrate fossils are discovered in spoils piles during excavation, the paleontologist will make every effort to locate and record the original site of the specimen(s) prior to disturbance.</p> <p>Should ground-disturbing activities within Caltrans ROW make an inadvertent burial discovery, all construction within 50 feet of the find shall cease. Caltrans' Cultural Resource Studies Office, District 4, shall be immediately contacted at (510) 286-5618. A Caltrans staff archaeologist will evaluate the finds within one business day after contact.</p> <p>Salvage of potentially significant specimens discovered in situ in excavated surfaces will be conducted by the paleontologist in compliance with all safety regulations and with implementation of all feasible precautions. The on-site safety inspector will hold final authority to determine whether each proposed salvage operation is consistent with established safety policies at the site. Excavation equipment and operators will be made available for short periods to remove overburden above in situ specimens, to improve safety conditions during salvage operations, or to aid in transport within the site boundaries of any large salvaged specimens which cannot be safely transported by hand.</p> <p>Any potentially significant fossils recovered during the monitoring and salvage phase will be cleaned, repaired, and hardened to the level required by the repository institution, and will be donated to that institution. Any collected bulk</p>				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>sediment samples having the potential for small fossil vertebrate remains will be wet- or dry-screened and processed as necessary for recovery of the included fossils. Details of requirements and conditions for transfer of salvaged specimens to the repository museum will be arranged with the museum as soon as the scope of the salvaged collection becomes apparent, and will be in accordance with the recommendations outlined in SVP 1996.</p> <p>On completion of the above tasks, the supervising paleontologist will prepare a final report on the implementation of the mitigation plan and results and submit it to the appropriate parties, institutions, and government agencies.</p>				
Greenhouse Gas Emissions				
<p>Mitigation Measure GHG1.1—Implement BAAQMD Best Management Practices for Construction:</p> <ul style="list-style-type: none"> • Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet; • Use at least 10 percent local building materials (from within 100 miles of the Project site); • Recycle at least 50 percent of construction waste or demolition materials. 	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Hazardous Materials and Public Health				
<p>Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan. The Project applicant will prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan to minimize the potential for, and effects from, accidental spills of hazardous, toxic, or petroleum substances during construction of the Project. The SPCC will be completed before any construction activities begin.</p>	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>Mitigation Measure HAZ1.2—Require Proper Storage and Handling of Potential Pollutants and Hazardous Materials. The storage and handling of potential pollutants and hazardous materials, including, but not necessarily limited to, gasoline, diesel, oils, paint, and solvents, will be in accordance with all local, state and federal laws and other requirements. Temporary storage enclosures, double walled tanks, berms, or other protective facilities will be provided as required by law. All hazardous materials will be stored and handed in strict accordance with the Material Safety Data Sheets for each product. A copy of each Materials Safety Data Sheet will be submitted to the Project Engineer at the time of delivery of the products to the Project site.</p>	<p>All Project elements, prior to construction groundbreaking</p>	<p>The construction manager/ foreperson will implement this measure.</p>	<p>This measure will remain in effect for the duration of construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure HAZ2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered. In the event that unknown hazardous materials are encountered during construction monitoring or testing of soil suitability, all work in the area of the discovery will stop and SFCJPA will conduct a Phase II hazardous materials investigation to identify the nature and extent of contamination and evaluate potential impacts on Project construction and human health. A Phase I investigation will be done concurrent with or prior to Phase II. If necessary, based on the outcomes of the Phase II investigation, SFCJPA will implement remediation measures consistent with all applicable local, state, and federal codes and regulations. Construction in areas known or reasonably suspected to be contaminated will not resume until remediation is complete. If waste disposal is necessary, SFCJPA will ensure that all hazardous materials removed during construction are handled and disposed of by a licensed waste-disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted</p>	<p>All Project elements, prior to construction groundbreaking</p>	<p>The construction manager/ foreperson will implement this measure.</p>	<p>This measure will remain in effect for the duration of construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
disposal or recycling facility, in accordance with local, state, and federal requirements.				
<p>Mitigation Measure HAZ8.1—Prevent Mosquito Breeding During Project Construction. To prevent mosquito breeding during Project construction, SFCJPA will ensure that standing water that accumulates on the construction site is gone within 4 days (96 hours). All outdoor grounds will be examined and unnecessary water that may stand longer than 96 hours will be drained. Construction personnel will properly dispose of unwanted or unused artificial containers and tires. If possible, any container or object that holds standing water that must remain outdoors will be covered, inverted, or have drainage holes drilled.</p>	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Hydrology and Water Resources				
<p>Mitigation Measures HWR1.1—Design of Temporary Re-location of Storm Drainage Facilities during Construction. A temporary disruption in stormwater conveyance facilities located in the immediate Project construction footprint could result in the temporary relocation and re-routing of outfalls. The temporary design will include the necessary review and assessment of alternative routes and ancillary facilities to ensure that they can safely accommodate the re-directed flow to the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities until such time that the original facilities are restored.</p>	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
<p>Mitigation Measures HWR1.2—Design of Permanent Relocation of Storm Drainage Facilities. The permanent relocation of stormwater conveyance facilities would be designed so as not to alter the original outlet locations and internal routes. The design will include the necessary review and assessment of pipeline additions and ancillary facilities to ensure that they can safely accommodate flood flows to</p>	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities.</p>				
Noise				
<p>Mitigation Measure NV2.1—Conduct Construction Vibration Assessment and Implement Recommended Vibration Control Approach(es) for Culvert Installation. During final design, the SFCJPA will retain a qualified, state-licensed geotechnical professional to determine site-specific soil stratigraphy and engineering properties and model anticipated vibration levels from the anticipated culvert construction activities based on soil properties. If the anticipated vibration level at any home exceeds 80 VdB or 0.2 in/sec, the SFCJPA will modify the proposed construction approach to ensure that both thresholds can be achieved, avoiding annoyance and structural damage.</p>	<p>All Project elements, during construction</p>	<p>A qualified, state-licensed geotechnical engineer retained by the SFCJPA will conduct the vibration assessment. If modifications to Project design are required to meet the thresholds in this mitigation measure, they will be developed by the design team in consultation with the geotechnical engineer, at the direction of the SFCJPA project manager.</p>	<p>This measure will be implemented during Project design.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure NV4.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. SFCJPA will provide advance written notification of the proposed construction activities to all residences and other noise- and air quality-sensitive uses within 750 feet of the construction site. Notification will include a brief overview of the proposed Project and its purpose, as well as the proposed construction activities and schedule. It will also include the name and contact information of SFCJPA’s project manager or another SFCJPA representative or designee responsible for ensuring that reasonable measures are implemented to address the problem (the construction noise and air quality disturbance coordinator; see Mitigation Measure NV4.3).</p>	<p>All Project elements, during construction</p>	<p>SFCJPA staff will implement this measure at the direction of the SFCJPA project manager.</p>	<p>Advance written notification of proposed construction activities will be provided at least 1 month and not more than 3 months in advance of site work.</p> <p>The 24-hour hotline will be in operation for the duration of construction at each site, including site finishing and demobilization.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure NV4.2—Implement Work Site Noise Control Measures. To reduce noise impacts, SFCJPA will require all contractors to adhere to the following measures. SFCJPA will be</p>	<p>All Project elements, during construction and operation</p>	<p>The construction manager/ foreperson will implement this measure.</p>	<p>This measure will remain in effect for the duration of construction at each site.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>responsible for ensuring implementation.</p> <ul style="list-style-type: none"> All construction equipment will be equipped with manufacturer’s standard noise control devices or with equally effective replacement devices consistent with manufacturer specifications. Stationary noise-generating equipment will be located as far as possible from sensitive receptors, and, if feasible, will be shielded by placement of other equipment or construction materials storage. Contractors will be required to use ambient-sensitive backup alarms. 				<p>enforcement, and for documenting compliance.</p>
<p>Mitigation Measure NV4.3—Designate a Noise and Air Quality Disturbance Coordinator to Address Resident Concerns. SFCJPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. The disturbance coordinator’s name and contact information will be included in the preconstruction notices sent to area residents (see Mitigation Measure NV4.1). She or he will be available during regular business hours to monitor and respond to concerns; if construction hours are extended, the disturbance coordinator will also be available during the extended hours. In the event an air quality or noise complaint is received, she or he will be responsible for determining the cause of the complaint and ensuring that all reasonable measures are implemented to address the problem.</p>	<p>All Project elements, during construction</p>	<p>The SFCJPA’s project manager will designate a noise disturbance coordinator. The noise disturbance coordinator will be responsible for receiving and responding to noise complaints, and will coordinate with the SFCJPA project manager to implement timely solutions.</p>	<p>This measure will remain in effect for the duration of Project construction. Resolutions to noise complaints will be provided as rapidly as possible.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p>
<p>Mitigation Measure NV4.4—Install Temporary Noise Barriers. As described in Mitigation Measures NV1.1, NV1.2, and NV1.3, SFCJPA will notify noise-sensitive land uses near the site of upcoming activity before construction begins, will</p>	<p>All Project elements, during construction</p>	<p>Noise barriers will be installed by contractor staff at the direction of the SFCJPA project manager</p>	<p>This measure will remain in effect for the duration of construction.</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>require construction-site noise reduction measures, and will provide a 24 hour complaint hotline. If a resident or school employee submits a complaint about construction noise and SFCJPA is unable to reduce noise levels to below the significance threshold (exceeding 110 dBA at a distance of 25 feet) through other means, SFCJPA will install temporary noise barriers to reduce noise levels below the applicable construction noise standard. Barriers will be installed as promptly as possible, and work responsible for the disturbance will be suspended or modified until barriers have been installed. SFCJPA will include a construction bid item to provide noise barriers onsite and install noise barriers immediately in response to noise or dust concerns from the community. The following minimum criteria will be required of the contractor.</p> <ul style="list-style-type: none"> • The barrier will be 10 feet tall. It will surround the work area to block the line of sight for all diesel-powered equipment on the ground, as viewed from any private residence or any building. • The barrier will be constructed of heavyweight plywood (5/8 inch thick) or other material providing a Sound Transmission Classification of at least 25 dBA. (Note that 5/8 inch is sufficiently thick to provide optimal noise buffering; increasing the thickness of the barrier above 5/8 inch would not provide a noticeable improvement in noise reduction.) • The barrier will be constructed with no gaps or holes that would allow noise to transmit through the barrier. • To minimize reflection of noise toward workers at the construction site, the surface of the barrier facing the workers will be covered with a sound-absorbing material meeting a Noise 				documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Reduction Coefficient of at least 0.70.				
Recreation				
<p>Mitigation Measure REC-1—Compensate the City of Palo Alto for the Conversion of 7.4 Acres of the Palo Alto Municipal Golf Course to Accommodate Project Features. In order to replace permanently affected holes at the Golf Course, compensate the City of Palo Alto an amount equivalent to the cost of replacing golf holes 12 through 15 within the Project footprint, and the relocation of other holes accommodate the new holes 12 through 15, so that the Golf Course can remain a PGA-regulation 18-hole course.</p> <p>To ensure this mitigation measure will be implemented, SFCJPA and City of Palo Alto will enter into a Memorandum of Understanding no later than 30 days prior to the initiation of construction that will require SFCJPA to fund improvements at the Golf Course. SFCJPA and the City of Palo Alto will mutually agree on the amount and timing of the deposit, which will be determined by the results of site evaluation and preliminary design conducted by a certified golf course architect. Money will be used exclusively for mitigation of impacts on the Golf Course that are related to the Project.</p>	All Project elements, prior to and during construction	The SFCJPA’s Executive Director will coordinate with the City of Palo Alto to reach mutually agreeable terms.	The Agreement will be signed by both parties prior to the initiation of construction.	The SFCJPA’s Executive Director will be responsible for ensuring proper implementation, and for documenting compliance.
Traffic				
<p>Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan. SFCJPA will develop a site-specific traffic control plan to minimize the effects of construction traffic on surrounding areas and roadways. The plan will be prepared with oversight by a licensed traffic engineer, and with input from school, park and community stakeholders to ensure that all concerns are appropriately addressed. The plan will be subject to review and approval by the Cities of Palo Alto and East Palo Alto. The SFCJPA would also coordinate, as necessary, with Caltrans, for traffic controls and measures affecting Caltrans</p>	All Project elements, prior to and during construction	The SFCJPA’s project manager will liaise with the Cities and Caltrans during Project design to identify issues that should be addressed in the site-specific traffic control plan for each work site, and will oversee contractors developing the individual plans.	<p>Coordination will local jurisdictions will be initiated before any construction activity begins, and will remain in effect for the duration of the Project.</p> <p>The traffic control plan for each site will be completed and approved by the local jurisdiction prior to groundbreaking;</p>	<p>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</p> <p>The local jurisdiction for each work site will have review and approval authority over the applicable traffic control plan.</p>

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<p>facilities. The SFCJPA will be responsible for ensuring that the plan is effectively implemented.</p> <p>The traffic control plan will include, at a minimum, information regarding working hours, allowable and restricted streets, allowable times for lane closures, emergency vehicle access, detours, and access to private and public properties. All construction traffic control plans will contain the following general requirements:</p> <ul style="list-style-type: none"> • Restrict work site access to the roadways indicated on the traffic control plan. • Prohibit access via residential streets unless expressly approved by the City with jurisdiction. • Maintain two-way traffic flow on arterial roadways accessing active work to accommodate construction of Project facilities, or unless otherwise allowed by the City with jurisdiction. • Provide 72-hour advance notification if access to driveways or private roads will be affected. Limit effects on driveway and private roadway access to working hours and ensure that access to driveways and private roads is uninterrupted during non-work hours. If necessary, use steel plates, temporary backfill, or another accepted measure to provide access. • Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures. • Provide clearly marked bicycle detours to address bicycle route closure or if bicyclist safety would be otherwise compromised. • Provide crossing guards and/or flagpersons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety. 		<p>Each plan will be developed with oversight from a licensed traffic engineer.</p> <p>All SFCJPA and contractor staff will adhere to the plans.</p>	<p>draft traffic control plans will be submitted for review and approval for each work site.</p> <p>Traffic control plans will be in effect for the entire duration of construction at each site.</p>	

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
<ul style="list-style-type: none"> • Use nonskid traffic plates over open trenches to minimize hazards. • Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians. • Notify and consult with emergency service providers, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles. Ensure clear emergency access to all existing buildings and facilities at all times. • Trucks will be queued only in areas and at times allowed by the City with jurisdiction. • Provide adequate parking for construction vehicles, equipment, and workers within the designated staging areas throughout the construction period. If inadequate space for parking is available at a given work site, provide an off-site staging area at another suitable location, and coordinate the daily transport of construction vehicles, equipment, and personnel to and from the work site as needed. • Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof. 				

References

Bay Area Air Quality Management District. 2011a. California Environmental Quality Act Air Quality Guidelines. June. San Francisco, CA.

California Native Plant Society. 2001. Botanical Survey Guidelines of the California Native Plant Society. (Originally published on December 9, 1983; revised on June 2, 2001.) *Fremontia* 29:3-4.

ICF International. 2012. *Preliminary Delineation of Wetlands and Other Waters of the United States, San Francisquito Creek Flood Protection Project*. San Jose, CA. Prepared for San Francisquito Creek Joint Powers Authority, San Jose, CA.

National Marine Fisheries Service (NMFS). 2000. Guidelines for electrofishing waters containing salmonids listed under the Endangered Species Act. June.