

**FINAL ENVIRONMENTAL IMPACT REPORT
ADDENDUM #1**

**SAN FRANCISQUITO CREEK FLOOD REDUCTION,
ECOSYSTEM RESTORATION, AND RECREATION PROJECT
SAN FRANCISCO BAY TO HIGHWAY 101**

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Acronyms and Abbreviations

CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
DFW	California Department of Fish and Wildlife
EIR	environmental impact report
LFS	Longfin smelt
NMFS	National Marine Fisheries Service
Project	San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101
SCVWD	Santa Clara Valley Water District
SFCJPA	San Francisquito Creek Joint Powers Authority
SLR	Sea Level Rise

1.1 Purpose of the Addendum

The California Environmental Quality Act (CEQA) recognizes that between the date a project is approved and the date a project is constructed, one or more of the following changes may occur: 1) the scope of the project may change, 2) the environmental setting in which the project is located may change, 3) certain environmental laws, regulations, or policies may change, and 4) previously unknown information may be disclosed. CEQA requires that lead agencies evaluate these changes to determine whether or not they are significant.

The mechanism for assessing the significance of these changes is found in CEQA Guidelines Sections 15162–15164. If the changes involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects, further environmental review (in the form of a Subsequent or Supplemental Environmental Impact Report) would be warranted per CEQA Guidelines Section 15162 and 15163. If the changes do not meet these criteria, then an Addendum per CEQA Guidelines Section 15164 is prepared to document any minor corrections to the Environmental Impact Report (EIR). CEQA does not require that an Addendum be circulated for public review.

1.2 Previous Environmental Studies

The San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project was evaluated in an Environmental Impact Report prepared pursuant to the requirements of CEQA. The Draft EIR was circulated for a 45-day public review period from July 30, 2012 through September 13, 2012. The final EIR (FEIR) was certified on October 25, 2012. The California Department of Fish and Wildlife (DFW) commented that longfin smelt were not addressed in the FEIR. This addendum addresses the potential for longfin smelt in the Project area, not previously analyzed in the EIR.

1.3 Scope of the Addendum

The scope of the Addendum is limited to an evaluation of the environmental impacts of the proposed Project on longfin smelt. The Draft EIR did not evaluate the potential for longfin smelt to occur in the Project reach. In addition, DFW's DEIR comment letter of September 26, 2012 did not raise any concerns regarding the species. Initial concerns regarding longfin smelt were brought forward by DFW Regulatory Staff on February 28, 2013. The San Francisquito Creek Joint Powers Authority (SFCJPA) decided to prepare an addendum to address the issue, given a preliminary determination that the potential presence of the species would not result in previously unidentified significant impacts.

1.4 Project Description

The Project description remains the same as described in Chapter 2, *Project Description*, of the Final EIR (FEIR) (ICF International 2012). Impacts on longfin smelt are analyzed according to the Project description.

In summary, to guide any reader who encounters this addendum under separate cover, the Project is focused on the mainstem of San Francisquito Creek, the last relatively unaltered urban creek system in the South Bay. The Project would ultimately improve channel capacity for Creek flows coupled with the influence of the tides of San Francisco Bay, including projected Sea Level Rise (SLR), from the downstream face of East Bayshore Road to San Francisco Bay. It would reduce local fluvial flood risks in the Project area during storm events, provide the capacity needed for future upstream improvements, increase and improve ecological habitat, and provide for improved recreational opportunities.

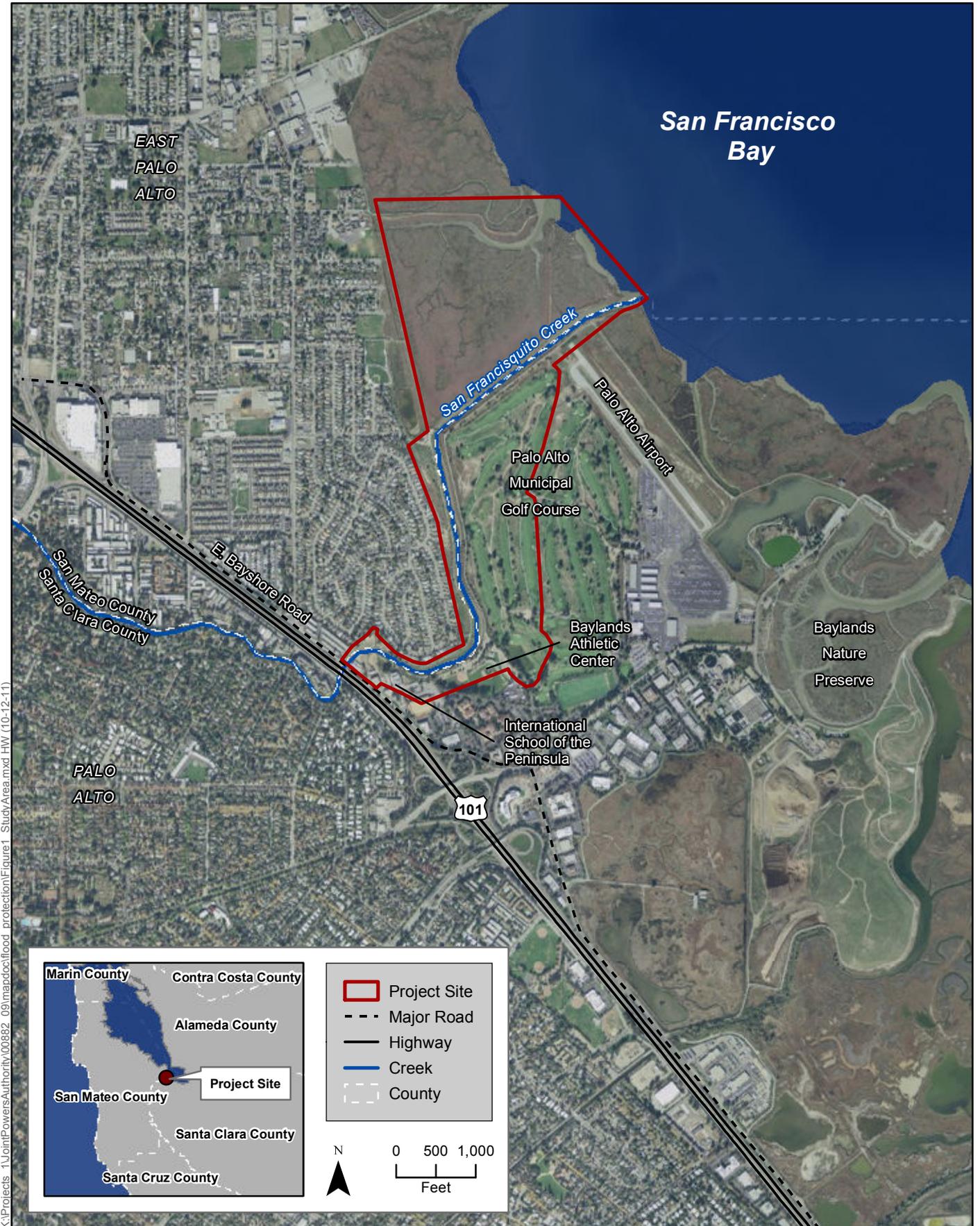
Increasing San Francisquito Creek's capacity from San Francisco Bay to East Bayshore Road would be achieved by:

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

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.

Figure 1 shows the Project location.



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1.5 Longfin Smelt (*Spirinchus thaleichthys*)

Environmental Setting

Longfin smelt is listed as state threatened (April 9, 2010). Longfin smelt are known to occur in the tidal reaches of South Bay sloughs. Adult distribution is most widespread in the winter and spring in the South Bay, and occurrence in tidal reaches seems to be correlated to high outflow years. In February 2010, high numbers of longfin smelt were found in Coyote Creek, Alviso Slough, and nearby salt ponds (Rosenfield 2009).

In December 2010 and February 2011 and from October 2011 to March 2012, longfin smelt were captured only in the Alviso Marsh complex. Longfin smelt were the seventh most abundant species in trawls during that period and were captured in all major sloughs and tributary sloughs within the complex. Longfin abundance peaked in December of both years (2010 and 2011) and only the larger, reproductively mature adults remained within the marsh through March 2012. Despite gravid adult smelt being captured within the Alviso Marsh complex, larval fish surveys of the area did not indicate successful spawning occurred in either the winter of 2010–2011 or 2011–2012 (Buckmaster and Hobbs 2012).

Spawning adults were captured from Medford Island in the San Joaquin River, north to Upper Cache Slough and the Sacramento Deep Water Ship Channel (Moyle 2002). Therefore, it is unlikely spawning occurs in the South Bay. Larval and juvenile distribution spreads out in high flow years. In high flow years, larvae are found throughout the Bay from the South Bay through the West Delta. The greatest concentrations are found in San Pablo and Suisun Bay early in the season and then later in the Central Bay (Rosenfield 2009).

Methods and Significance Criteria

In accordance with the FEIR (ICF International 2012), impacts on vegetation and wildlife were analyzed based on existing biological conditions and resources present at each Project element site and a review of the current working design for the proposed Project elements.

For the purposes of this analysis, an impact was considered to be significant and to require mitigation if it would result in any of the following.

- Adverse effects on populations of any special-status plant or wildlife species as a result of direct mortality, injury, or disturbance; or degradation, modification, or loss of habitat.
- Adverse effects on populations of common or special-status wildlife species as a result of obstruction of movement routes or migratory corridors used by any native resident or migratory fish or wildlife species, or impedance of the use of native wildlife breeding habitat or nursery sites.
- Loss or degradation of wetland habitat through direct removal, filling, hydrologic interruption, or other direct or indirect means.
- Loss or degradation of riparian habitat.
- Conflict with any local policy or ordinance protecting botanical or wildlife resources.

Potential to conflict with an adopted conservation plan (including but not limited to habitat conservation plans and natural community conservation plans) is usually also identified as a significant impact under CEQA. However, no HCP or NCCP that would cover the Project site is approved or in preparation. Hence, the proposed Project would not result in such conflicts, and this issue is not addressed further.

Disturbance of Longfin Smelt and Suitable Habitat

Disturbance of Longfin Smelt and Suitable Habitat		
Project Element	Construction Impact Level	Operation and Maintenance Impact Level
All Project elements	Less than Significant with Mitigation	No Impact

Construction

Adult and larvae longfin smelt are known to occur in the South Bay in the winter and spring during high outflow years and are prevalent in the Alviso Marsh complex. It is unknown if longfin smelt use San Francisquito Creek. Construction activities for each Project element would occur near suitable habitat for the species and could disturb any individuals present in San Francisquito Creek. If the species were to occur in reaches near proposed construction activities, the health of individuals could be impaired by decreased water quality (e.g., spills of fuels or chemicals or increased turbidity). Contaminant exposure could increase susceptibility to disease. However, longfin smelt show a preference for turbid waters and are adapted to turbid waters and changing water clarity. Higher densities of longfin smelt are found in more turbid waters, where they may be seeking refuge from predators (Hobbs 2009). Removal of vegetation along the creek channel is a proposed Project activity that could affect longfin smelt habitat.

Longfin smelt will be protected during construction by Project environmental commitments to protect biological resources, detailed in the FEIR, Chapter 2, *Project Description*. The environmental commitments include water quality protection measures and evaluating the stream and native aquatic vertebrates. Further, implementation of FEIR Mitigation Measures *BIO2.1 – Develop and Implement Worker Awareness Training* and *BIO9.1 – Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities* would reduce this impact to a less-than-significant level. *BIO2.1* would be revised to include awareness of longfin smelt and the species' potential to occur in the Project area during high outflow years. (Revisions are shown with underscore.)

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, longfin smelt, 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.

Mitigation Measure BIO9.1—Implement Avoidance Measures for Longfin Smelt and Steelhead Trout Prior to Construction Activities

Longfin smelt work windows are June to October in South San Francisco Bay (LTMS 2004), which coincides with the work window for steelhead. No in-channel construction activities will take place when longfin smelt may be in the South Bay area (October 1–May 31), to reduce the likelihood that longfin smelt are present during construction activities. This window includes the steelhead migration period (October 1–April 30), to reduce the likelihood that steelhead are present during construction activities.

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, the following procedures will be implemented.

- Before a work area is dewatered, fish will be captured and relocated to avoid injury and mortality and minimize disturbance.
- Before fish relocation begins, a qualified fisheries biologist will identify the most appropriate release location(s). Release locations should have water temperatures similar to the capture location and offer 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).
- Handling of smelt and 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 DFW and NMFS within 30 days of completion.

- If mortality during relocation exceeds 5% or mortality of any State or Federally listed species occurs, relocation will cease and DFW 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.

Operation and Maintenance

As discussed in Chapter 2, *Project Description*, of the FEIR, all facilities maintenance improved by the Project is located in upland areas and would take place under the Santa Clara Valley Water District's and East Palo Alto's respective maintenance programs. The Project would create minimal in-channel maintenance needs, primarily limited to monitoring and removal of invasive weeds, and would not result in new impacts on special-status species. Further, ongoing maintenance will be performed in accordance with Project environmental commitments. Emergency maintenance may be needed during the life of the Project, but is not reasonably foreseeable and would be subject to separate approval. There would be no new impact.

The expanded channel and new flood control facilities could potentially affect conditions for rearing longfin smelt in the Project reach, by causing degraded habitat and potential entrapment. In the Phase One reach, widening of the channel, planting of vegetation strips near rip-rap, the higher elevation marshplain terrace, and overflow into the Faber Tract are all anticipated to contribute to varied velocities and create velocity refuge for rearing steelhead during flood events. These changes in velocities are anticipated to be beneficial to longfin smelt as well. Conservatively, no impact, beneficial or otherwise, is assumed. In the Phase Two reach, channel excavation and the installation of floodwalls are anticipated to have no appreciable net impact on in-channel velocities or in-channel refuge for longfin smelt. The marshplain benches and terrace are designed to slope back into the low-flow channel and would not entrap longfin smelt. Distributary channels in the Faber Tract provide pathways for rearing smelt movement that would prevent entrapment of juveniles passed into the Faber Tract during high flow events. Overall, while conditions are anticipated to improve, the benefits for longfin smelt rearing cannot be fully guaranteed, and accordingly, no impact is conservatively assumed.

1.6 Cumulative Impacts

As discussed in the FEIR, Section 3.3, *Biological Resources*, construction of the proposed Project has the potential to result in significant impacts on several special-status species. However, the SFCJPA has adopted a comprehensive suite of mitigation measures that are expected to reduce the Project's impacts on biological resources to the extent feasible; residual impacts, if any, are not expected to be cumulatively considerable. No further analysis is required. The Project would result in a net gain of marsh habitat.

Persons Consulted and List of Preparers

An environmental study team led by ICF International under contract to the SFCJPA prepared this Environmental Impact Report Addendum. The analyses were coordinated primarily with Kevin Murray, Project Manager at the SFCJPA and Michael Martin at the Santa Clara Valley Water District.

2.1 ICF International

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Chapter 3 References

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