

COASTAL CONSERVANCY

Staff Recommendation
May 29, 2014

**SAN FRANCISQUITO CREEK:
LOS TRANCOS AND BEAR CREEKS FISH PASSAGE IMPROVEMENT PROJECTS**

Project No. 13-020-02
Project Manager: Amy Hutzel

RECOMMENDED ACTION: Authorization to disburse up to \$67,000 to American Rivers to design and prepare for implementation three fish passage improvement projects on two San Francisquito Creek tributaries: Los Trancos Creek and Bear Creek in Portola Valley and Woodside, respectively.

LOCATION: Los Trancos Creek and Bear Creek, tributaries to San Francisquito Creek, in Portola Valley and Woodside, respectively, San Mateo County.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

- Exhibit 1: [Project Location and Site Maps](#)
Exhibit 2: [Summary Description of Fish Passage Barriers](#)
Exhibit 3: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to sixty-seven thousand dollars (\$67,000) to American Rivers to design and prepare for implementation three fish passage improvement projects in the San Francisquito Creek watershed at Los Trancos Creek and Bear Creek, in Portola Valley and Woodside, respectively, San Mateo County. Prior to the disbursement of funds, American Rivers shall submit for review and approval by the Executive Officer of the Conservancy:

1. A work program, including a schedule and budget for the project;
2. The names and qualifications of all contractors to be employed for the project.”

Staff further recommends that the Conservancy adopt the following findings:

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“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the current Project Selection Criteria and Guidelines.
 2. The proposed authorization is consistent with the purposes and objectives of Chapter 4.5 of Division 21 of the Public Resources Code, regarding resource and recreational goals in the San Francisco Bay Area.
 3. American Rivers is a nonprofit organization existing under Section 501(c)(3) of the Internal Revenue Service, and whose purposes are consistent with Division 21 of the Public Resources Code.”
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PROJECT SUMMARY:

Staff recommends disbursement of up to \$67,000 to American Rivers to design the Los Trancos and Bear Creek Fish Passage Improvement Projects (project) in tributaries to San Francisquito Creek, which forms the border of San Mateo and Santa Clara Counties. The Conservancy funds would be heavily matched with the California Department of Fish and Wildlife’s Fisheries Restoration Grant Program (FRGP), a program that utilizes federal funding, and would provide the final amount necessary to design three of the highest priority barrier remediations in the watershed. The projects, which will be designed by American Rivers in the summer and fall of 2014, will be fully ready to seek implementation funding from the FRGP and other sources in 2015.

American Rivers seeks to remove or modify three barriers to important spawning and rearing habitat for Steelhead Trout (*Oncorhynchus mykiss*). Objectives in support of the goal include: 1) Develop 100% designs for removing or modifying three culverts on two San Francisquito tributaries, Los Trancos Creek and Bear Creek; 2) Design barrier modifications to enable passage of sediment and woody debris, minimizing ongoing maintenance of the project site; 3) Develop designs that maintain the existing 100-year water surface elevation at the culvert inlet so that the flood zone boundary is not changed using future hydrology; and 4) Develop designs that maintain the longevity of the structures. The proposed work will complement the work of the San Mateo Resource Conservation District (SMRCD), the National Marine Fisheries Service (NMFS) and the Conservancy who recently cooperated to remove the Bonde Weir barrier just downstream. In particular, the project is intended to benefit steelhead trout, as the San Francisquito Creek watershed provides roughly 40 miles of habitat for this species above the recently completed Bonde Weir site, and below Searsville Dam on the Stanford University campus.

San Francisquito Creek is an urban stream that flows through the communities of East Palo Alto, Menlo Park, Palo Alto, Woodside, Portola Valley, and Stanford University. (See Exhibit 1). The watershed is part of the Central California Coast steelhead Evolutionarily Significant Unit in which steelhead are considered "threatened" under the federal Endangered Species Act. San

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Francisquito Creek hosts one of the last remaining wild steelhead populations among Bay Area streams (Smith and Harden, 2001) and has been identified as one of eight “anchor watersheds” in the San Francisco Bay Area having the highest restoration potential for steelhead (Center for Ecosystem Management and Restoration).

Following remediation of the Bonde Weir last summer, these three barriers are now the most significant lower watershed impediments to steelhead migration. The three culverts spread creek flow across the entire width of the channel, creating generally impassable shallow depths at low flows and high velocities at high flows. In addition, the Fox Hollow Bridge over Bear Creek requires a 2.3-foot jump from a pool that is 2.9 feet deep, which makes passage difficult in low flows. The biggest challenge, however, is for the fish to negotiate the twin box culverts that are each 10 feet wide and 30 feet long. The first and second Los Trancos Creek paired concrete box culverts require storm flows for passage. This project is focused on planning, designs, and preparation of materials for permits needed to replace or modify the three culverts.

Headquartered in Washington D.C., and formed in 1973, American Rivers is a national nonprofit conservation organization dedicated to free-flowing rivers. American Rivers protects wild rivers, restores damaged rivers, and conserves clean water for people and nature. Since 1973, American Rivers has protected and restored more than 150,000 miles of rivers through advocacy efforts, on-the-ground projects, and its annual America’s Most Endangered Rivers ® campaign. American Rivers has been working in the watershed to develop partnerships and has gained broad support for restoration efforts, including fish passage. American Rivers has also obtained matching funds from DFW to proceed with this project. The project team is ready to proceed upon award by the Conservancy.

Site Description: San Francisquito Creek, an urban stream that flows through the communities of East Palo Alto, Menlo Park, Palo Alto, Woodside, Portola Valley, and Stanford University, forms the boundary between San Mateo and Santa Clara Counties. The barriers proposed for design improvements are at three locations in the San Francisquito watershed. (See Exhibit 1). The first location is a culvert located just downstream of Highway 84 where Fox Hollow Road crosses Bear Creek in the city of Woodside. The site is owned by the City of Woodside. The second location is a double box culvert road crossing upstream of Alpine Road on Los Trancos Creek. The third location is on Los Trancos Creek where an emergency fire access road branches off of Los Trancos Road. Both of these sites are owned by the City of Portola Valley and are located between Jasper Ridge Preserve and the Stanford University Campus.

San Francisquito Creek hosts one of the last remaining wild steelhead populations among Bay Area streams. The creek channel has retained its original configuration, though urbanization of the surrounding area is evidenced by numerous storm drain outfalls, train, vehicle and pedestrian crossings, and individual bank protection structures. Large, episodic flows are common due to natural watershed characteristics and have been exacerbated in frequency and magnitude over time due to urbanization.

The Los Trancos and Bear Creek barriers are box culverts constructed to provide road crossings of the creeks. They dissipate flow over a wide and shallow area. These box culverts are among the most significant lower watershed impediments to steelhead migration in San Francisquito Creek. A summary description and photos of each of these barriers are attached as Exhibit 2.

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Project History: Ecosystem restoration in the San Francisquito Creek watershed has long been a priority of the Conservancy and its partners.

In 2001, a report was completed for the San Francisquito Watershed Council on steelhead passage (Smith and Harden 2001) in which the authors inventoried and prioritized fish passage barriers in five major tributaries to San Francisquito Creek. Thirty-four barriers were identified and were prioritized based on: 1) severity (whether the barrier block passage under most or all conditions), 2) presence of substantial or good quality habitat upstream, and 3) ease of modification. Three of the highest priority sites were the paired bridge culvert at Fox Hollow Road where it crosses Bear Creek, and two culverts on Los Trancos Creek.

In 2004, Love and Allen completed a fish passage assessment and alternatives analysis for improving passage conditions on these road-stream crossings.

Beginning with a grant to the non-profit organization Acterra, the Conservancy funded the San Francisquito Watershed Council's steelhead enhancement efforts in San Francisquito Creek in 2003. Under this grant, the Council worked with project partners to improve fish passage and conduct bank revegetation efforts on the main stem of San Francisquito Creek and in two of its subwatersheds - Los Trancos Creek and Bear Creek.

In 2004, the Steelhead Task Force of the San Francisquito Watershed Council (Love and Allen, 2004) surveyed San Francisquito Creek and its tributaries for impediments to steelhead migration. The task force, made up of biologists representing the Department of Water Resources, Stanford University, San Jose State University, Jasper Ridge Biological Preserve, DFW, Santa Clara Valley Water District and the San Francisquito Creek Joint Powers Authority (SFCJPA), identified the three crossings that are the subject of this proposal as high priorities.

Concurrent with the assessment of barriers, and as part of a larger effort, the Conservancy worked closely with the Center for Ecosystem Management and Restoration (CEMAR) to assess steelhead resources in the San Francisco estuary, and then identify high priority steelhead fishery restoration projects. *Historical Distribution and Current Status of Steelhead/Rainbow Trout (Oncorhynchus mykiss) in Streams of the San Francisco Estuary, CA* was completed in 2005, the most authoritative account prepared of steelhead/rainbow trout distributions in watersheds tributary to the Bay. Using this information, CEMAR completed *The San Francisco Estuary Watersheds Evaluation* in 2007. In this report, the San Francisquito Creek watershed, due largely to its size and protected watershed status, ranked as one of the eight "anchor watersheds" of the estuary with respect to available habitat for steelhead and other aquatic species, and necessary for the protection and enhancement of steelhead in the estuary. CEMAR also identified specific actions in promising locations that would enhance steelhead recovery in the San Francisco Bay estuary. Again, and informed in part by the efforts of the Council, San Francisquito Creek ranked high, and Los Trancos Creek and Bear Creek were specifically identified as a high priority action for recovery in that watershed. These efforts were the first such comprehensive evaluation of the region's streams and identification of all the problems preventing sustainable fishery runs in a watershed. This effort has informed selection of fishery restoration projects in the Bay Area.

Last year, the Conservancy provided matching funds to the San Mateo Resource Conservation District to complete the removal of a significant barrier (Bonde Weir) immediately below these

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sites. That project was advanced by American Rivers who, following multiple attempts by numerous entities to develop acceptable designs, developed new designs in cooperation with NMFS and CEMAR. That project was completed last autumn.

American Rivers also successfully applied for and received \$94,803 in FRGP funds from the DFW in order to develop designs for these remaining high priority barriers. American Rivers is now seeking matching funds from the Conservancy in order to advance the project.

PROJECT FINANCING

Coastal Conservancy	67,000
California Department of Fish and Wildlife	94,803
American Rivers	<u>16,500</u>
Total Project Costs	178,303

The anticipated source of Conservancy funds for this project is the FY 2009 budget appropriations for the San Francisco Bay Area Conservancy Program from the “Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Bond Act of 2006” (Proposition 84). This funding source may be used for the **protection of coastal waters and watersheds, including projects to protect and restore the natural habitat values of coastal waters** pursuant to the Conservancy’s enabling legislation, Division 21 of the Public Resources Code. The proposed project will assist in preparing planning and designs that will, when implemented restore two coastal creeks that drain to the San Francisco Bay and restore the habitat for the endangered steelhead. In addition, as described in the “Consistency with Conservancy’s Enabling Legislation” section, below, the project is consistent with Chapter 4.5 of Division 21 of the Public Resources Code.

Proposition 84 also requires that for restoration projects that protect natural resources, the Conservancy assess whether the project meets at least one of the criteria specified in Section 75071(a)-(e). The proposed acquisition satisfies four of the specified criteria. The project satisfies criterion (a) by removing a barrier to fish and other aquatic life, thereby providing an important habitat linkage between large blocks of accessible habitat. The project satisfies criterion (b) by eliminating an undersized crossing at risk of erosion and failure, thereby improving the biological quality of the watershed. Few natural resources have been as under-protected as urban streams. San Francisquito Creek, however, remains ecologically intact and biologically productive. Therefore, the project satisfies criterion (c) by supporting and enhancing a large area of an under-protected habitat type. The project advances criterion (e) by including significant non-state matching funds.

The project is also supported by substantial outside funding. The grantee will provide nearly \$111,303 in important commitments of resources including: 1) \$16,500 of labor for administering the design and peer review process, and; 2) \$94,803 from Department of Fish and Wildlife (DFW) in design costs.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The project is consistent with Chapter 4.5 of Division 21 of the Public Resources Code Sections 31160 et seq. regarding resource and recreational goals for the San Francisco Bay Area.

The project is located in San Mateo County, which is within the nine-county San Francisco Bay Area, consistent with Section 31162.

Pursuant to Section 31162(b), the Conservancy may award grants that will “protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional importance.” In addition, under Section 31165, the Conservancy may undertake projects and award grants “for activities that are compatible with the preservation, restoration, or enhancement of ocean, coastal, bay, or watershed resources...” Consistent with Section 31162(b) and 31165, the project involves engineering design work for the enhancement of the San Francisquito Creek watershed and its habitats by the replacement of barriers to fish passage.

Pursuant to Section 31162(c), the Conservancy may grant awards to “assist in the implementation of the policies and programs of ... the adopted plans of local governments and special districts.” The project will implement the policies and programs of American Rivers and the San Francisquito Creek Joint Powers Authority (JPA).

The project satisfies all of the criteria for determining project priorities under the San Francisco Bay Area Program (as articulated in Section 31163(c)) in that:

1. The project is consistent with several approved plans including: a) The San Francisquito Creek Watershed Council's 2004 Steelhead Task Force Report that identified remediating barriers at Los Trancos and Bear Creek as a high priority for conservation and restoration of steelhead; b) The Center for Ecosystem Management and Restoration's 2007 San Francisco Estuary Watersheds Evaluation Report that identified the San Francisquito Creek as an “anchor watershed” where restoration and conservation efforts could have the most impact on steelhead populations; c) The 2007 Federal Recovery Outline for the Distinct Population Segment of Central California Coast Steelhead prepared by National Marine Fisheries Service Southwest Regional office, and; d) DFW's 2012 Updated Statewide Task List for the Steelhead Restoration and Management Plan for California, which lists modification of in-stream fish passage barriers as a priority for implementation within this watershed.
2. The project serves a regional constituency by enhancing habitat access for steelhead trout, a special-status species, in an “anchor watershed” in the San Francisco Bay Area.
3. The project can be implemented in a timely way as the DFW has a strong track record of allocating implementation funding to projects designed under the FRGP awards. American Rivers has prepared a strategy for seeking implementation funds already, and is committed to seeing the projects constructed within five years.
4. The design for the removal and replacement of the Los Trancos and Bear Creek structures provides an opportunity for habitat benefits that could be lost without this funding since the DFW FRGP funds will revert this year if not adequately matched.
5. The project includes significant matching funds from DFW and the grantee.

**CONSISTENCY WITH CONSERVANCY'S 2013-2018
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 11, Objective F** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will enhance watershed function for the benefit of wildlife and specifically prepare plans to remove three barriers to fish passage, by replacing the Los Trancos and Bear Creek structures, significant barriers to fish passage on the lower San Francisquito Creek watershed.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The project is supported by the DFW, NOAA Restoration Center, Acterra, and the San Francisquito Creek JPA, which is made up of the cities of Menlo Park, East Palo Alto, Palo Alto, the County of San Mateo, and the Santa Clara Valley Water District. Letters are attached as Exhibit 3.
4. **Location:** The design project concerns three separate sites along tributaries to San Francisquito Creek in San Mateo County, which is within the nine-county San Francisco Bay Area. (See Exhibit 1).
5. **Need:** Conservancy funds are sought to provide compulsory match of design costs towards a prior award of nearly \$100,000 from the DFW to American Rivers. If Conservancy funds are not made available the project will not be designed this year, and the DFW FRGP funds will revert. The project would likely be delayed by years until the entire funding package was once again reassembled. At that time, available funding may not remain, and costs may have increased further. Proceeding with this project will establish design plans that can be used to raise the funds necessary to implement the projects. Once complete, the project implementation will significantly enhance steelhead recovery efforts in the San Francisco Bay estuary.
6. **Greater-than-local interest:** Restoration of urban streams as well as the protection and enhancement of coastal steelhead populations that remain in them is an issue of statewide and national importance. Steelhead trout-Central California Coast Evolutionarily Significant Unit (ESU) is federally listed as threatened. This ESU occurs from the Russian River in Sonoma County to Aptos Creek in Santa Cruz County. In addition, it occurs in San Francisco and San Pablo Bays to the Napa River. In most tributaries to San Francisco Bay, steelhead trout are considered extirpated. Thus, any improvement for the population in this region is significant.

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7. **Sea level rise vulnerability:** The proposed project is inland and well away from any foreseeable impacts of sea level rise.

Additional Criteria

8. **Urgency:** The San Francisquito Creek steelhead population ranges from no apparent fish in dry years, to more than one hundred fish in wet years. The population decline adds urgency to providing unhindered passage to the 40 miles of stream above the recently remediated Bonde Weir, and the five miles above Los Trancos and Bear Creek and below the Searsville Dam.
9. **Resolution of more than one issue:** This project, developing plans for improving steelhead habitat and migration opportunities, will resolve multiple issues by preparing to improve habitat, replacing failing transportation infrastructure and diminishing flood risk with improved instream structures at the sites.
10. **Leverage:** See the “Project Financing” section above
12. **Innovation:** Through high quality engineering work and extensive advance coordination with permitting agencies outside of the permitting process, American Rivers will ensure that the project is well designed and prepared for an efficient permit review and implementation process.
13. **Readiness:** American Rivers and its partners have identified qualified engineers, have raised all necessary matching funds, and should be able to complete the proposed project in 2014.
14. **Realization of prior Conservancy goals:** As discussed under “Project History,” above, the Conservancy long ago identified San Francisquito Creek generally, and fish passage barriers specifically, as a promising opportunity to reconnect habitat in an “anchor watershed” of the San Francisco Bay.
15. **Cooperation:** See “Project Financing” section above.
16. **Vulnerability from climate change impacts other than sea level rise:** The future viability of steelhead trout in San Francisco Bay tributaries is threatened by climate changes, including rising temperatures and changes in precipitation. Implementing projects that open up larger areas of creek and river habitats for steelhead will increase the resilience of the species as it faces challenging conditions in the future, and focusing on habitat restoration and fish passage improvement projects within the eight “anchor watersheds” in San Francisco Bay is a promising approach to ensuring the future viability of steelhead.

COMPLIANCE WITH CEQA:

The proposed project and design work involves only data gathering, planning, and analyses for possible future actions and is thus statutorily exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines §15262, Title 14, Cal. Code Regs. The planning and design effort do not have a legally binding effect on future activities or authorizations, which would be subject to further CEQA review. The project is also categorically exempt under section 15306 as an information gathering and resource evaluation exercise.

Staff will file a Notice of Exemption following Conservancy action.