

COASTAL CONSERVANCY

Staff Recommendation
May 05, 2020

POTRERO CREEK FISH PASSAGE REMOVAL

Project No.16-011-02
Project Manager: Tom Gandesbery

RECOMMENDED ACTION: Authorization to disburse up to \$186,024 to Trout Unlimited to remove a fish passage barrier on Potrero Creek, in the Carmel River watershed, in Monterey County and adoption of findings under the California Environmental Quality Act.

LOCATION: Carmel Valley, Monterey County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

- Exhibit 1: [Project Location Map and Local Maps](#)
- Exhibit 2: [Photos and Plans and Design](#)
- Exhibit 3: [Mitigated Negative Declaration for the 2019 Fisheries Habitat Restoration Project](#)
<https://wildlife.ca.gov/Grants/FRGP/MND>
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one hundred eighty six thousand one hundred twenty four dollars (\$186,024) to Trout Unlimited (“the grantee”) to remove a fish passage barrier on Potrero Creek in the Carmel River Watershed in Monterey County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
 2. Names and qualifications of any contractors to be retained in carrying out the project.
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3. A plan for acknowledgement of Conservancy funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Prior to commencing the project, the grantee shall enter into and record an agreement pursuant to Public Resources Code 31116(d) sufficient to enable the grantee to implement, operate, and maintain the project and to protect the public interest in the improvements.”

Staff further recommends that the Conservancy adopt the following findings:

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

1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding Integrated Marine and Coastal Resources.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. Trout Unlimited is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.
4. The Conservancy has independently reviewed and considered the *Mitigated Negative Declaration for the 2019 Fisheries Restoration Grant Program* adopted by the California Department of Fish and Wildlife on November 18, 2019 pursuant to the California Environmental Quality Act (“CEQA”) and attached to the accompanying staff recommendation as Exhibit 4. The Conservancy finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the Project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.”

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of up to \$186,124 to Trout Unlimited (TU) to remove two culverts on Potrero Creek in the Carmel River watershed (Exhibit 1) that are barriers to steelhead migration and replace them with one longer fish-friendly concrete culvert (Exhibit 2). The culverts are located within the Carmel Valley Athletic Club (CVAC), a private tennis and health club located between the Carmel River and Quail Lodge Golf Club and the Santa Lucia Reserve (Exhibit 1).

The 2014 Assessment Of Steelhead Passage Barriers In Portions Of Four Tributaries To The Carmel River (Barriers Assessment), prepared by the Monterey Peninsula Water Management District, identified several fish passage barriers along Potrero Creek, including a set of two metal culverts within the CVAC. The Assessment rated these paired culverts as a “red / yellow”, in other words as a severe barrier and recommended that the culverts be replaced. In May

2016, the Conservancy authorized a grant to TU to analyze the potential to remove steelhead barriers along the lower reach of Potrero Creek. Over the past two winters, the design team observed migration flows at each of the lower reach barriers. Based on this field work, hydraulic modeling, and visual assessments, it was determined that due to velocity and jump heights the two parallel culverts at CVAC are the most severe migration barrier and constitute a “full” barrier, whereas other barriers provide passage at some migration flows. Based on that determination, the CVAC culverts are now the highest priority barrier within the lower reach. An additional downstream culvert and a reach along the Quail Lodge and Golf Club may be addressed in a potential second phase.

Removing the CVAC culverts will restore fish passage and access to spawning habitat on Potrero Creek, which is the first tributary available to steelhead migrating up the Carmel River from the ocean. The creek, which flows from the south to the river, is just 3.8 miles from the Pacific Ocean (Exhibit 1). There are approximately five miles of high quality creek habitat upstream of the CVAC within the Santa Lucia Preserve (Exhibit 1).

The proposed project will remove a set of perched 48-inch corrugated metal culverts and concrete aprons and replace them with a single multi-plate arched culvert (Exhibit 2). The arched culvert will be approximately 23 feet long, have a 12-foot-10-inch span, 8-foot-4-inch rise and will provide a 16-foot roadway width. The culvert will be embedded approximately 3.5 feet below the channel grade and backfilled with native streambed material to maintain a natural channel bottom that will provide passage opportunities similar to adjoining reaches of the channel.

TU intends to contract with the Monterey County Resource Conservation District to secure necessary project permits. TU will oversee the project, hire a construction contractor, and engage additional consultants as needed to ensure compliance with all CEQA and permit conditions. Work will be conducted during the 2020 dry season.

Grantee Qualifications: TU has extensive experience working to remove barriers to fish migration in coastal California streams and has administered numerous grants related to salmonid habitat restoration. For example, TU successfully completed a large multi-river assessment of watershed hydrology and determination of in-stream flows and subsequently implemented off-stream storage projects in a half dozen river systems from the Mattole in Humboldt County to the Pajaro in Santa Cruz County. TU will also be remediating three barriers on other creeks within the Carmel River watershed.

Project History: As discussed above, in 2014 the Monterey Peninsula Water Management District identified the several potential fish passages barriers in lower Potrero Creek. The Carmel River Task Force (CRTF) Action Plan identifies removal of fish barriers as a high priority. Based on these two documents, TU approached the owners of properties along the lower reach of the Creek and proposed remediation of the barriers. After securing letters of support from the property owners (CVAC and Quail Meadows Lodge and Golf Course) the Conservancy awarded a grant in May of 2016 to investigate each of the impediments identified in the 2014 Barrier Assessment and prepared design documents to remediate each section. The subject culverts (CVAC Upper) are the most restrictive to steelhead migration and are the most feasible for removal and replacement; however, TU has also prepared Fisheries Restoration Grant

Program (FRGP) grant applications to address the other barriers on the system (culverts lower on CVAC property and within Quail Lodge and Golf Club section). Remediation of all the barriers on lower Potrero Creek will likely be managed as separate phases, over the next several years.

Site Description:

Potrero Creek flows generally south to north with the confluence of the creek and the Carmel River approximately 4 miles from the Pacific Ocean. Although relatively small in size (5.2 square mile watershed), the creek otherwise provides spawning and rearing habitat for steelhead in normal and wet years. Ownership of this creek lies in the hands of 3 entities: Quail Lodge and Golf Club, CVAC and the Santa Lucia Conservancy (SLC), a nonprofit land trust. Upstream of CVAC, the creek flows from the hills within on the 20,000 acre Santa Lucia Preserve which contains high quality spawning habitat. As the creek enters CVAC, it flows through the subject (upper) culverts, through the tennis facility and through a second set of culverts before flowing to Quail Lodge and Golf Club. The Creek then flows past homes and greenways before reaching the Carmel River.

Prior to the current development the area was used for farming and ranching. Remediating the subject culverts will allow connection between the Carmel River and the SLC. The permanently protected lands administered by SLC are located within a residential community known as the Santa Lucia Preserve. Created in the early 1990's, the Preserve's development design permanently protected 18,000 acres of the 20,000 acre "Rancho San Carlos" to ensure that its "ecological, scenic, and scientific values were sustained." SLC owns or manages over 90% of the Potrero Creek watershed, supporting several miles of well-shaded, spring-enhanced creek habitat with deep perennial pools.

PROJECT FINANCING

Coastal Conservancy	\$186,024
CDFW Fisheries Restoration Grant	\$518,484
Project Total	\$704,508

The anticipated source of Conservancy funds for the project is the Carmel River Settlement Account ("Account") within the Conservancy's Coastal Trust Fund. The Account consists of funds paid by California American Water Company (Cal-Am) pursuant to a settlement agreement with the National Marine Fisheries Service concerning alleged Endangered Species Act violations. The settlement requires Cal-Am to pay \$16.7 million over a twelve-year period. The settlement funds can only be used to improve habitat conditions for, and production of South-Central California Coast (SCCC) steelhead, or otherwise aid in the recovery of SCCC steelhead in the Carmel River watershed. In addition, these funds can only be expended for mitigation of impacts from well-pumping and water withdrawals by Cal-Am. One effect of Cal-Am's water withdrawals is the loss of access to rearing habitat in the lower Carmel River, because it dries up in the summer. The proposed project will facilitate improved access to other spawning and rearing habitat in one of the river's tributaries and will thereby help mitigate the

impacts on SCCC steelhead from Cal-Am's water withdrawals. Therefore, the proposed project is consistent with the funding source.

The agreement for the disbursement of the settlement funds also directs the Conservancy to attempt to "maximize the value of the funds by seeking cash or in-kind matching contributions from fund recipients or non-State, third party project partners whenever possible." (See Mar. 3, 2009 Settlement Agreement between CAW, NOAA, and CDFG, pg 4; see also June 6, 2014 First Amendment to Settlement Agreement between CAW, NOAA, CDFW, and SCC [SCC assumes CDFW's rights and obligations under the agreement]; see also 2017 Memorandum of Agreement between CAW, NMFS, and SCC, executed Jan. 10, 2018). As discussed above, TU has also obtained a grant from FRGP, which will pay for the bulk of the project and for which this grant provides the funding match.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to the Chapter 5.5 of the Conservancy's enabling legislation, Division 21, Public Resources Code (PRC), Section 31220, regarding integrated coastal and marine resources protection.

PRC Section 31220(a) authorizes the Conservancy to undertake a project or award a grant for coastal watershed and living marine resources protection and restoration projects that meet one or more of the criteria of Section 31220(b). The proposed project will help achieve the objectives of the following Section 31220(b) subsections: (b)(2) protect and restore fish and wildlife habitat within a coastal watershed; (b)(6) restore sensitive watershed lands and (b)(7) reduce the impact of population pressures on the coastal resources. The proposed project will help achieve these objectives by removing a fish passage barrier caused by a road crossing.

Consistent with §31220(a), staff has consulted with the State Water Resources Control Board and the Central Coast Regional Water Quality Control Board in the development of the project to ensure consistency with Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code concerning protection and restoration of water quality of coastal waters.

As Section 31220(c) directs, the proposed project is consistent with the Water Quality Control Plan (Basin Plan) prepared by the regional water quality control board as discussed in detail below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan" The project will include implementation of monitoring and evaluation of the replacement culvert.

CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective E** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will improve fish passage by modifying a creek crossing to remove a passage barrier.

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 October 2, 2014, 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. **Promotion and implementation of state plans and policies:** The proposed project is consistent with the following plans and policies:
 - The project implements the **California Water Resilience Portfolio** (Draft 2019) which under the heading **Protect and Enhance Natural Systems** directs agencies to "Reconnect aquatic habitat to help fish and wildlife endure drought and adapt to climate change" with an associated objective of "...Support a comprehensive culvert and fish passage improvement program along transportation corridors." (page 20).
 - The project is consistent with the California Department of Fish and Wildlife's (CDFW) 2005 **California Wildlife Action Plan**, which sets forth goals for the Central Coast region that include protecting sensitive species and important wildlife habitat and restoring anadromous fish populations.
 - The project implements a recovery action identified for the Carmel River biogeographic group in NMFS' 2013 **SCCCS Recovery Plan**. Specifically, the project will, consistent with CAR-SCCCS-3.2, "implement plan to remove or modify fish passage barriers within the watershed." The project will also further the overarching Recovery Objective to "restore suitable habitat conditions and characteristics to support all life history stages of viable [steelhead] populations."
4. **Support of the public:** The proposed project is supported by the National Marine Fisheries Service, the Carmel River Watershed Conservancy, the Santa Lucia Conservancy, the Carmel River Steelhead Association, and the Steinbeck Country Chapter of TU; and it addresses priority actions defined by the CRTF.
5. **Location:** The proposed project is located on Potrero Creek which is the lowest tributary of the Carmel River, with its confluence 3.8 miles upstream from the ocean; the project site is about 0.8 mile upstream of the confluence (Exhibit 1). The project is located outside of the Coastal Zone and will benefit steelhead, an anadromous fish species, by removing a migration barrier.
6. **Need:** Even with FRGP grant funding, TU does not have the financial capacity to provide the additional funds needed to complete this project on its own. Without the Conservancy's support, the project will not occur.

7. **Greater-than-local interest:** SCCC steelhead is a federally threatened species and the Carmel River population has been identified as one of the highest priorities for recovery. The proposed project will enhance spawning and rearing habitat for SCCC steelhead.
8. **Sea level rise vulnerability:** The proposed project is located well inland at an elevation greater than 500 feet above sea level.

Additional Criteria

9. **Urgency:** SCCC steelhead populations are at historically low numbers in the Carmel River and several years of drought have exacerbated the adverse conditions caused by over-pumping of the river's water. Immediate steps are needed to help steelhead survive during Cal-Am's over-pumping of the river, which is estimated to continue until at least 2022.
10. **Readiness:** TU is ready to start work on the project immediately; the design work has been completed and implementation will begin within two months of signature of the grant agreement.
11. **Realization of prior Conservancy goals:** This project complements several other projects the Conservancy has funded to improve habitat in the Carmel River including restoration of the south arm of the lagoon, removal of the San Clemente Dam, floodplain restoration east of Highway 1 and removal of barriers on San Clemente Creek and Finch Creek.
12. **Cooperation:** TU has an agreement for access and construction with the owner of the Carmel Valley Athletic Club where the crossing is located. TU is also partnering with the Monterey County Resource Conservation District to carry out the project.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN

Projects undertaken pursuant to Public Resource Code Section 31220 must be consistent with the following, if available and relevant: Integrated Watershed Resource Management Programs (IWRMP); local watershed management plans; and water quality control plans, adopted by the state and regional water boards.

The proposed project is consistent with the **Monterey Peninsula, Carmel Bay, and South Monterey Bay IWRMP**, November 2007 (**Monterey IRWMP**), the scope of which includes the Carmel River. In particular, the proposed project is consistent with the following objectives within the Environment Protection and Enhancement Goal: "protect and enhance sensitive species and their habitats in the regional watersheds," and "minimize adverse effects on biological and cultural resources . . . when implementing strategies and projects". **Monterey IRWMP** at page 4-4. It is also consistent with the regional priority of promoting the steelhead run (Monterey IRWMP at page 6-2) and with the Draft 2014 Update of the **Monterey IRWMP**, Objective EV-1 "Protect and enhance sensitive species and their habitats in the regional watersheds; promote the steelhead run." (*Id.* page 8-4).

The **Water Quality Control Plan for the Central Coastal Basin**, March 2016 (**Water Quality Plan**), adopted by the Regional Water Quality Control Board, designates several beneficial use

objectives for the Carmel River, including cold fresh water habitat and habitat for rare, threatened or endangered species. The proposed project will help to ensure survival of SCCC steelhead, a threatened species that require cold fresh water habitat, and is thus consistent with the **Water Quality Plan's** identified beneficial uses.

CEQA COMPLIANCE:

In order to implement projects to improve fish spawning and rearing habitats through the FRGP, CDFW developed a Programmatic Mitigated Negative Declaration (MND) for its 2019 FRGP funded projects (Exhibit 3). The proposed project is one of the 2019 FRGP funded projects. The MND identifies impacts to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise elements of the environment related to project construction. CDFW found no potentially significant impacts to Aesthetics, Agricultural Resources, Air Quality, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population and Housing, Public Services and Recreation, Utilities and Service Systems, Transportation and Traffic, and Tribal Cultural Resources. The MND addresses all of the anticipated environmental effects of the funded projects by providing mitigation measures for the various types of projects that would be implemented throughout the State in a Mitigation Measures, Monitoring and Reporting Program, which is attached as Appendix B to the MND (MMMRP). The MMMRP includes standard protocols for avoiding impacts to species of concern, including state- and federally-listed threatened and endangered species.

The CDFW MND includes a discussion of this project, referred to as the Potrero Creek Fish Passage Project, and includes specific mitigation measures for the proposed project in Appendix B to the MND, (Exhibit 3). The mitigation measures specific to this project, as contained in the MND, are described as follows:

- TU will not proceed with on the ground implementation until all necessary permits and consultations are secured. Work in flowing streams is restricted per the Army Corp of Engineers Regional General Permit.
- Actual project start and end dates, within this timeframe, are at the discretion of CDFW.
- No equipment maintenance will be performed within or near the stream channel where pollutants (such as petroleum products) from the equipment may enter the channel via rainfall or runoff. Appropriate spill containment devices (e.g., oil absorbent pads, tarpaulins) will be used when refueling equipment.
- Any and all equipment will be removed from the streambed and flood plain areas at the end of each workday.
- All equipment and gear will be brushed with a stiff brush prior to leaving each stretch of stream to avoid the transport of aquatic invasive species (AIS). When transporting traps out of the area, each numbered trap will be bagged in its own bag to avoid cross contamination during transport in and out of the work area.

- All crew members will decontaminate equipment and shoes for AIS according to the standards detailed in CDFW's Aquatic Invasive Species Decontamination Protocol.
- During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.
- If fish relocation will be required, TU shall notify the CDFW Project Manager a minimum of five working days before the project site is de-watered and the stream flow diverted. The notification will provide a reasonable time for CDFW personnel to oversee the implementation of the water diversion plan and the safe removal and relocation of salmonids and other fish life from the project area.
- If the project requires dewatering of the site, and the relocation of salmonids, TU will implement the following measures to minimize harm and mortality to listed salmonids:
 1. Dewatering and relocation activities shall only occur between June 15 and October 31 of each year and additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the California Salmonid Stream Habitat Restoration Manual.
 2. TU shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible as approved by the CDFW Grant Manager and pursuant to conditions in the USACE Regional General Permit and NMFS Biological Opinion.
 3. All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 2000.
 4. USFWS Approved fisheries biologists will provide fish relocation data via TU to the CDFW Grant Manager on a form provided by CDFW.
- The bridge (culvert) design and installation will meet flow carrying capacity required for a 100-year flood event as identified by specifications determined by National Oceanic and Atmospheric Administration (NOAA) Fisheries and CDFW, for adult and juvenile salmonid fish passage.
- The project will follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and criteria for fish passage as described in Volume II, Part IX, of the California Salmonid Stream Habitat Restoration Manual.
- The engineered plans for the bridge (culvert) installation shall be visually reviewed and authorized by NOAA Fisheries or CDFW engineers prior to commencement of work.
- All habitat improvements will follow techniques described in the California Salmonid Stream Habitat Restoration Manual, Volume I, and Volume II Part XI and Part XII. TU/landowner will maintain the new crossing, inspect the crossing in a timely manner and remove debris as necessary during the storm season.

CDFW found that all potentially significant impacts associated with the funded projects, including this project, Potrero Creek Fish Passage Project, would be avoided or mitigated below a level of significance under CEQA. CDFW approved the MND and filed a Notice of Determination on November 18, 2019.

Staff has independently reviewed the MND, and concurs with the CDFW finding that there is no substantial evidence that the Project, as modified by incorporation of the mitigation measures identified in the MND, Appendix A and the other exhibits, will have the potential for a significant effect on the environment. Staff therefore recommends that the Conservancy find that the project as mitigated avoids, reduces or mitigates the possible significant environmental effects to a level of insignificance and that there is no substantial evidence that the project will have a significant effect on the environment, as defined by Title 14 California Code of Regulations Section 15382.

Upon approval, staff will file a Notice of Determination.