

COASTAL CONSERVANCY

Staff Recommendation

May 24, 2018

CACHAGUA CREEK FISH PASSAGE

Project No. 18-010-01

Project Manager: Tom Gandesbery

RECOMMENDED ACTION: Authorization to disburse up to \$200,000 to Trout Unlimited to replace a concrete creek crossing with a fish-friendly box culvert on Cachagua Creek, a tributary to the Carmel River in Monterey County, and adoption of CEQA findings.

LOCATION: Cachagua Creek, Monterey County (Exhibit 1)

PROGRAM CATEGORY: Integrated Marine and Coastal Resources

EXHIBITS

Exhibit 1: [Regional and Local Maps](#)

Exhibit 2: [Photos](#)

Exhibit 3: [Project Letters](#)

Exhibit 4: [Mitigated Negative Declaration for the 2017 Fisheries Habitat Restoration Project](#)

RESOLUTION AND FINDINGS:

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

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed two hundred thousand dollars (\$200,000) to Trout Unlimited (TU) for the removal of a concrete road creek crossing and installation of a box culvert designed to allow fish migration on Cachagua Creek, a tributary to the Carmel River, subject to the following conditions:

Prior to commencement of the project, the Executive Officer of the Conservancy has reviewed and approved in writing:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.
3. A plan for acknowledgement of Conservancy funding.

4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that TU has entered into and recorded an agreement pursuant to Public Resources Code 31116(c), which enables it to implement, operate, and maintain the project, and is sufficient 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 existing under section 501(c)(3) of the U.S. Internal Revenue Code, whose purposes are consistent with Division 21 of the Public Resources Code.”
4. The Conservancy has independently reviewed and considered the *Mitigated Negative Declaration for the 2017 Fisheries Habitat Restoration Project*, adopted by the California Department of Fish and Wildlife on February 28, 2018, pursuant to the California Environmental Quality Act 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 of the project to a less-than-significant level and that there is no substantial evidence based on the record as a whole that the project, as mitigated, may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.”

PROJECT SUMMARY:

Staff recommends providing a \$200,000 grant to Trout Unlimited (TU) to remove a concrete ford crossing of Cachagua Creek in the Carmel River watershed and replace it with a fish-friendly box culvert. The ford is located on an unnamed private road that accesses Valley Creek Park, an unincorporated community near Cachagua Community Park (Exhibits 1 and 2). A secondary goal of the project is to facilitate other passage barrier removal projects by demonstrating to other Cachagua Creek landowners that solutions are available which work for the fish and the landowner without causing undue stress, expense, or regulatory enforcement.

The South-Central California Coast (SCCC) distinct population segment of steelhead are listed as threatened under the federal Endangered Species Act. The 2013 Recovery Plan prepared by the National Marine Fisheries Service (NMFS) identifies removal or modification of fish passage barriers as a critical recovery action in the Carmel River Watershed. Los Padres Dam is the only remaining fish passage barrier on the main-stem of the Carmel River, and efforts to improve fish

passage are now focusing on the tributaries. The upper reaches of Cachagua Creek and its tributaries Finch and James Creek provide several miles of high quality habitat for steelhead. However, there are several ford crossings of the creek that create partial barriers to fish passage.

The Valley Creek Park ford addressed by this project is the most downstream barrier on Cachagua Creek according to the 2015 *Revised Assessment Of Steelhead Passage Barriers In Portions Of Four Tributaries To The Carmel River* (Barrier Assessment) prepared by the Monterey Peninsula Water Management District (MPWMD) (see Exhibit 1-C for location of barrier). The Barrier Assessment identifies locations of significant migration barriers and ranks them in priority by location in the watershed, the amount of spawning habitat upstream and severity of blockage. In 2015, Trout Unlimited was awarded a Fisheries Restoration Grant (FRGP) from the California Department of Fish and Wildlife (CDFW) to design appropriate modification or replacement of the Valley Creek Park ford. The ford is ranked fourth in the Barrier Assessment for this tributary and tenth overall. Trout Unlimited anticipates that successful completion of this project may convince landowners of higher ranked barriers to participate in cooperative barrier removal projects.

The proposed project will remove the existing structure and replace it with a series of box culverts at the existing location. Specifically, three pre-fabricated concrete box culverts, each having a span of 24 feet long by 12 feet high, will be installed. A 20-foot wide roadway will be constructed over the culverts. The box culvert inverts will be embedded below the proposed channel grade and backfilled with native streambed material to maintain a natural channel bottom that provides passage opportunities similar to adjoining reaches of the channel.

Site Description: The Carmel River, which empties into the Monterey Bay National Marine Sanctuary, has a large watershed of over 255 square miles (163,200 acres / 66,044 hectares) and was once one of the premier steelhead trout fishing rivers in California (Exhibit 1-B). Water diversions from the river date back to the Spanish Mission period, and two large dams, San Clemente Dam and Los Padres Dam were built on the main-stem of the river in the 1920s and 1940s, respectively. San Clemente Dam was removed in 2015. The river supplies a majority of the drinking water for the Monterey Peninsula and has been adversely impacted by the withdrawals as the population of the Monterey Peninsula has increased.

Cachagua Creek joins the Carmel River approximately six miles upstream of the site of the former San Clemente Dam, which is approximately 18 miles upstream of the Pacific Ocean (Exhibit 1-C). Cachagua Creek and its tributaries Finch and James Creeks, drain the most easterly reaches of the Carmel River watershed in the Coast Mountain range of Monterey County. The project is located in Valley View Park (formerly Jensen's Park), an area of steep canyons covered in chaparral and rolling hills of oak woodlands. Valley View Park is a community of about fifty single-family dwellings and permanently stationed RVs located within one property. TU has an agreement to work in cooperation with the owner of Valley View Park where the crossing is located. Many of the residents commute to the greater Monterey Peninsula area for work. There are no commercial services within the development or within the vicinity.

The Cachagua stream system contains 12.6 miles of steelhead habitat. For nearly 100 years, access to this portion of available steelhead habitat was limited by two major dams, San Clemente Dam and the Old Carmel River Dam, together with associated antiquated fish ladders. Now, because these dams were removed as the largest dam removal project in California history, that limitation is gone. However, there are several partial migration barriers along Cachagua

Creek. These typically are concrete vehicle fords, which span the creek and will be addressed by the proposed project.

Although lower Cachagua Creek is known to lose continuous surface flow during the summer months in dry years and some “normal” years, the upper reaches and the water in upper tributaries of Finch and James remain perennial and cool. According to the Barrier Assessment, “Even though lower Cachagua Creek dries up most years, this tributary system is one of the most productive in the Carmel River watershed.”

Grantee Qualifications: TU, a nonprofit corporation that is eligible to accept charitable contributions pursuant to Internal Revenue Code Section 501(c)(3), has extensive experience in removing 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 in four systems from the Mattole River to the Pajaro River. That project was funded by the Conservancy in 2008 and was successfully concluded in 2013. TU is currently working under Conservancy grants to restore fish passage on San Clemente Creek, just a half mile above the location of the former San Clemente Dam, and Potrero Creek, which is the lowest tributary to the Carmel River.

Project History: As discussed above, the 2013 Recovery Plan identified the need to remove passage barriers and the 2015 Barrier Assessment identified and prioritized the barriers found along four of the river’s tributaries. The Carmel River Task Force (CRTF) Action Plan also identifies removal of fish barriers as a high priority. In response to the high priority of removing or modifying fish passage barriers, TU has begun working on several barrier removal projects in the watershed.

In 1981, CDFW established the Fisheries Restoration Grant Program (FRGP) in response to rapidly deteriorating fish habitat in California. The program has invested millions of dollars to support projects from sediment reduction to watershed education throughout coastal California.

In 2015, FRGP awarded TU a grant to design an appropriate modification or replacement of the Valley Creek Park ford. Three local non-profit organizations (Carmel River Watershed Conservancy, Carmel River Steelhead Association and the Steinbeck Country Chapter of Trout Unlimited) each contributed funds as a local cash match for the first FRGP grant. As part of that grant’s scope, TU carried out topographic and geotechnical surveys, and hydraulic and hydrologic modeling. TU then prepared conceptual designs that analyzed various alternative engineering approaches for removing and replacing the structure. Based on input from the design engineer, the CDFW reviewing engineer and site access needs, a preferred alternative was selected which has been developed to a 65% level of design. The final design was recently completed. TU applied for and was awarded an FRGP grant in 2017 to implement this project. As indicated below, FRGP will provide a majority of funding to remove and replace the crossing, with the Conservancy making up the remainder.

PROJECT FINANCING

Coastal Conservancy	\$200,000
Others: FRGP	\$946,041
Project Total	\$1,146,041

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 (CAW) pursuant to a settlement agreement with NMFS concerning alleged Endangered Species Act violations. The settlement requires CAW 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 CAW. One effect of CAW’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 most important tributaries and will thereby help mitigate the impacts of CAW’s withdrawals on SCCC steelhead. 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.” As discussed above, TU has also obtained a grant from FRGP, which will pay for the bulk of the project.

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," and will include implementation of a monitoring and reporting plan.

**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 Action Plan* (California Natural Resources Agency, California Environmental Protection Agency, and California Department of Food and Agriculture, 2014), which includes goal number 4: Protect and Restore Important Ecosystems and the specific objective to Restore Coastal Watersheds, by improving access to spawning and rearing habitat for SCCC steelhead.
 - The project is consistent with CDFW's 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 bio-geographic group in NMFS' 2013 SCCC 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 Trout Unlimited; and it addresses priority actions defined by the Carmel River Task Force (Exhibit 2).

5. **Location:** The proposed project is located on Cachagua Creek about one half-mile upstream of its confluence the Carmel River (Exhibit 1). The project is located on Assessor's Parcel Number 418-261-049-000. The area is within a coastal-draining watershed.
6. **Need:** Even with FRGP funding, Trout Unlimited 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 until CAW's over-pumping of the river stops, which is estimated to be at least three to four years from now.
10. **Readiness:** TU is ready to start work on the project immediately; the design work has been completed implementation within six 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 planning for removal of barriers on Potrero Creek and San Clemente Creek.
12. **Cooperation:** TU has an agreement to work in cooperation with the owner of Valley View Park where the crossing is located.
13. **Minimization of greenhouse gas emissions:** Staff concur with CDFW in its mitigated negative declaration, which found that GHG emissions from construction activities for this project will have a less-than-significant impacts.

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 FRGP, CDFW developed a Programmatic Mitigated Negative Declaration (MND) for all of its 2017 FRGP funded projects (Exhibit 3: Programmatic Mitigated Negative Declaration). The proposed project is one of the 2017 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 MMMRP also identifies and discusses mitigation measures specific to this project.

The CDFW MND also includes a discussion of this project, what it refers to as the “Cachagua Creek Fish Passage Restoration Project – Valley Creek Park”, and includes specific mitigation measures for this project in Appendix A to the MND, (Exhibit 3). The mitigation measures specific to this project, as contained in Exhibit 3 and Appendix B to 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 the California Department of Fish & Wildlife 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.
- 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.
- The TU shall notify the Grantor 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 Grantor 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, the TU will implement the following measures to minimize harm and mortality to listed salmonids:
 - Fish dewatering and relocation activities shall only occur between June 15 and October 31 of each year.
 - 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.
 - The 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.
 - 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.

- USFWS Approved fisheries biologists will provide fish relocation data via the TU to the CDFW Grant Manager on a form provided by CDFW.

In addition, CDFW developed general mitigation measures in its MMRP for Noise and Biological Resources that apply to all FRGP projects. The project involves demolition of the existing concrete ford, most likely with jack hammers, so to mitigate noise impacts, construction personnel are required to wear hearing protection while operating or working near noisy equipment. Mitigation measures for biological impacts include restrictions on timing of construction activities to avoid sensitive periods for fish spawning and migrating and bird nesting; guidelines for dewatering waterways; site best management practices (BMPs) to avoid contamination of habitat areas; minimization and containment of staging areas; BMPs for construction activities within the stream channel area; and BMPs for avoiding and minimizing impacts to wildlife on the site, including pre-construction surveys;

Additional mitigation measures include requirements for onsite emergency communications and traffic management due to temporarily closing of the road over the ford.

CDFW found that all potentially significant impacts associated with the funded projects, including this project, the Cachagua Creek Fish Passage Restoration Project – Valley Creek Park project, would be avoided or mitigated below a level of significance under CEQA. CDFW approved the MND and filed a Notice of Determination on February 28, 2018.

Staff has independently reviewed the MND, and concurs with the CDFW finding that there is no substantial evidence that the Cachagua Creek Fish Passage Restoration Project – Valley Creek Park, 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 14 Cal. Code Regs. §15382.

Upon approval, staff will file a notice of determination.