

COASTAL CONSERVANCY

Staff Recommendation
June 18, 2020

SULPHUR CREEK FISH PASSAGE IMPROVEMENT PROJECT

Project No. 20-014-01
Project Manager: Su Corbaley

RECOMMENDED ACTION: Consideration and authorization to disburse up to \$196,123 to California Trout, Inc. to conduct studies and prepare engineering designs for the Sulphur Creek Fish Passage Improvement Project to remove a fish passage barrier on Sulphur Creek.

LOCATION: Sulphur Creek, St. Helena, Napa County

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: [Project Location Map](#)

Exhibit 2: [Photographs](#)

Exhibit 3: [Project Letters](#)

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 an amount not to exceed one hundred ninety-six thousand one hundred twenty-three dollars (\$196,123) to California Trout, Inc. (the grantee) to conduct studies and prepare engineering designs for the Sulphur Creek Fish Passage Improvement Project to remove a fish passage barrier on Sulphur Creek in St. Helena, Napa County, California. This authorization is subject to the condition that prior to disbursement of any funds for the project, the grantee shall submit for review and approval by the Conservancy’s Executive Officer a work plan, schedule, budget, the names of any contractors or subcontractors to be retained for the project, and a plan for acknowledgement of Conservancy funding and Proposition 1 as the source of that funding.”

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 4.5 of Division 21 of the Public Resources Code, regarding the San Francisco Bay Conservancy Program.
 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
 3. California Trout, Inc. is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.”
-

PROJECT SUMMARY:

Staff recommends the Conservancy authorize the disbursement of up to \$196,123 to California Trout, Inc. (CalTrout), which is partnering with the Napa County Resource Conservation District (NCRCD), to conduct studies and prepare designs for the Sulphur Creek Fish Passage Improvement Project (“project”) located where Sulphur Creek crosses under a bridge on White Sulphur Springs Road in St. Helena, Napa County (Exhibit 1). This authorization will enable CalTrout and the NCRCD, working with adjacent landowners, local stakeholders, and resource agencies, to develop plans for a high priority habitat restoration project in a tributary to the Napa River. This tributary is important to spawning and rearing Central California Coast steelhead (CCC steelhead) as well as other anadromous fish including Chinook salmon and Pacific lamprey.

The proposed project will address current problems with a fishway/fish ladder on Sulphur Creek that has been rendered ineffective by scour and frequent blockage by storm debris. Removal of this fishway/fish ladder is specifically called out in the Center for Ecosystem Management and Restoration (CEMAR) Bay Area Anchor Watersheds report for the Napa River watershed as a priority, and the project will plan for its removal. Removal of the barrier will open up 3.2 miles of high-quality spawning and rearing habitat for steelhead. Addressing this fish passage barrier will also ensure adequate sediment delivery of high-quality spawning gravel to downstream reaches to benefit Pacific lamprey, Chinook salmon, and steelhead within and downstream of Sulphur Creek

The fishway was installed by California Department of Fish and Wildlife (CDFW) in 2002. Since then the site has been monitored by CDFW staff and local citizens to ensure it is functioning and free of debris after storms. However, it does not function optimally, and the site has required a high level of maintenance to manually clear debris jams and prevent flooding of White Sulphur Springs Road. Currently, fish passage is severely limited for steelhead during most flow regimes.

The project area is particularly important because surface flow below the bridge typically dries up during the summer and fall of most years but is perennial in the reaches upstream and provides ideal spawning and rearing conditions. Upstream of the restoration site, Sulphur Creek is free of structures that could block fish passage. Climate change will bring more frequent drought conditions and could substantially reduce water supplies. This could lead to poor water quality, warmer water temperatures, reduced surface flow, and reduced fish migration

windows, which all pose significant threats to salmonid populations. This project will help CCC steelhead survive climate change by restoring access to the cold, persistent flow in Sulphur Creek above White Sulphur Springs Road.

The proposed project will refine existing conceptual designs to prepare engineered designs and prepare cost estimates for construction. The project includes, through contract with the Napa RCD, developing a hydraulic model and complete channel design analyses, developing utility and geotechnical survey reports, developing design through an iterative process involving stakeholders and agencies, and undertaking rare plant and cultural resource surveys. CalTrout anticipates applying for grant funds from the CDFW Fish Passage Restoration Program (FRGP) for construction, at which time the designs will be finalized following analysis of environmental impacts pursuant to the California Environmental Quality Act (CEQA). The rare plant and archaeological surveys will inform the CEQA analysis.

Work is expected to begin in the summer of 2020 and be completed in spring 2020.

Site Description: Sulphur Creek is a major tributary (5,882 square acres) along the western edge of the Napa River watershed that drains the eastern slope of the Mayacamas Mountains near the town of St. Helena. The Sulphur Creek watershed is lightly developed in its middle and headwater areas, with 86% forest, 7% grassland/shrub, and 7% agriculture (vineyards, low-density livestock) and rural residential development. The lower areas of the watershed include the City of St. Helena, which is comprised of urban development, agriculture, and riverwash where Sulphur Creek crosses its broad alluvial fan and was historically mined until 1999. Ownership is approximately 99% Private, 0.5% State, and 0.5% Federal in the watershed.

The project site is located at a private bridge that crosses Sulphur Creek adjacent to White Sulphur Springs Road, approximately 2.4 miles upstream from the confluence with the Napa River, in the city of St. Helena in Napa County. The fishway was set in a concrete and rip-rap apron that forms the base support for the bridge which provides the only access for two properties. Being located at the transition between the headwaters of Sulphur Creek, which contains year-round flow and high value steelhead spawning and rearing habitat, and the lower alluvial fan section of the creek, which dries out in summer, it prohibits fish from accessing approximately 3.2 miles of anadromous stream above the fishway. See Exhibit 2 for photographs of the current site conditions.

The Sulphur Creek watershed supports steelhead, Chinook salmon, and Pacific lamprey and the Napa River supports an independent population CCC steelhead. Steelhead spawning has been documented throughout much of the Sulphur Creek system, with the highest quality spawning habitat located upstream of the project site where cool, perennial flow is present.

Grantee Qualifications: California Trout Inc. is a 501(c)(3) nonprofit organization whose mission is to protect and restore wild trout, steelhead, salmon and their waters throughout California. It is a statewide leader in salmonid biology and habitat restoration and has worked on many Conservancy-funded planning and implementation grants throughout northern California. CalTrout will be working with the NCRCD to complete the planning project. NCRCD's lead biologist has more than 20 years of experience in restoration work and has completed several grant-funded projects on the Napa River watershed.

Project History: CDFW installed the fishway beneath a private bridge in 2002 to provide steelhead with access to critical spawning and rearing habitat upstream of White Sulphur Springs Road away from the summer-dry lower reaches of Sulphur Creek. Since then, citizens and CDFW have monitored the fishway to assess passage conditions and remove debris multiple times each year. Over time, scour formed below the fishway and debris continued to block the passage and exacerbate flooding of White Sulphur Springs Road. In 2018, a multidisciplinary and interagency team conducted a preliminary assessment of the fishway barrier. Conceptual designs were generated and a preferred alternative was selected, which includes complete removal of the the fishway and grade control beneath the bridge and replacing both with a simulated plane-bed channel for several hundred feet and additional assessment of the bridge to determine what structural reinforcements are needed to stabilize the structure. Preliminary design plans were completed along with a basis-of-design report and preliminary cost estimates.

A stakeholder meeting with the Napa RCD, CalTrout, and landowners occurred on site at the fishway in March 2019 to discuss the project, stakeholder support, and partnership roles and an overarching fundraising strategy. In 2019, CalTrout, partnering with Napa RCD, submitted a Proposition 1 grant application to the Coastal Conservancy for the project. In 2019, CalTrout and Napa RCD each submitted successful applications to CDFW for matching funds from Proposition 68 and FRGP, respectively.

PROJECT FINANCING

Coastal Conservancy	\$196,123
California Department of Fish and Wildlife Prop 68	\$220,000
California Department of Fish and Wildlife FRGP	\$155,000
Project Total	\$571,123

The expected source of Conservancy funds for the planning and design phase of the Sulphur Creek Fish Passage Improvement project is an appropriation to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (Section 79731). Section 79732(a) identifies specific purposes of Chapter 6, of which the following *subsections* pertain: (1) protect and increase the economic benefits arising from healthy watersheds, fishery resources and in-stream flow; (2) implement watershed adaptation projects for which grantee has consulted with the state and local conservation corps; (4) protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors; (6) remove barriers to fish passage; (9) protect and restore rural and urban watershed health; and (12) assist in the recovery of endangered species by improving watershed health, in-stream flows, and fish passage.

As required by Proposition 1, the proposed project provides multiple benefits. The design will provide for a project that will aid in the recovery of endangered species, provide resilience against climate change-induced loss of anadromous fish rearing habitat and continue to foster working relationships with resource agencies and private landowners to advance essential work on private lands.

The project was reviewed and is now being recommended for funding through the competitive grant process that was established by the Conservancy's *Proposition 1 Grant Program Guidelines* adopted in June 2015 (Prop 1 Guidelines) (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this staff recommendation.

In accordance with Section 79707(b) which requires agencies to prioritize "projects that leverage private, federal, or local funding or produce the greatest public benefit", this project leverages local in-kind contributions. CalTrout and the Napa RCD will each provide in-kind contributions of staff time together valued at \$15,000. CDFW has notified CalTrout that this project has been selected for a grant of \$220,000 in Proposition 68 funds and the NCRCD has been awarded a grant of \$155,000 in CDFW Fish Restoration Grants Program Funds.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resource Code (PRC) Sections 31160-31165, which establish that the Conservancy may award grants in the nine-county San Francisco Bay Area towards the resource and recreational goals of the San Francisco Bay Area Conservancy Program, and pursuant to Section 31111.

Under Section 31162(b), the Conservancy may undertake projects that protect, restore, and enhance natural habitats, connecting corridors, and watersheds. The proposed project will assist in the enhancement of an anchor watershed for steelhead trout in Napa County in the Bay Area.

The proposed project satisfies all of the criteria for determining project priority under 31163(c), since the project: 1) is supported by adopted regional plans including the Northern California Steelhead and Central California Coast Steelhead (NOAA National Marine Fisheries Service, 2016) and the CEMAR Bay Area Anchor Watersheds report for the Napa River (Center for Ecosystem Management and Restoration); 2) serves a regional constituency by creating access to habitat for steelhead trout, a special status species, across multiple local jurisdictions; 3) can be implemented in a timely manner; 4) provides benefits to anadromous fish that will be lost if the project is not quickly implemented; and 5) will leverage in-kind match from project partners.

The Conservancy is authorized under Section 31111 of the Public Resources Code to fund and undertake plans and feasibility studies and award grants to nonprofit organizations, like CalTrout Inc., for these purposes.

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

Consistent with **Goal 12, Objective E** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop plans for enhancement of riverine habitat and watershed functions for the benefit of wildlife, including removal of barriers to fish passage.

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:**
 - *California Water Action Plan.* Consistent with Action 4 to Protect and Restore Important Ecosystems, the Project will make a plan to eliminate barriers to fish migration to provide anadromous fish species access to historic spawning and rearing habitat, and it will engage private landowners to achieve ecological goals through integrated voluntary efforts (pp. 13-14).
 - *California State Wildlife Action Plan.* CCC steelhead is identified as a Species of Greatest Conservation Need (Table 5.3-3). This project directly addresses improving the habitat for steelhead by planning how to remove a major barrier to passage.
 - *California Essential Habitat Connectivity Strategy for Conserving a Connected California.* CCC steelhead is denoted as a conservation target that is integrated into the connectivity corridor prioritization (p. 97) and these target areas should be prioritized (p. 84). This project would plan for restoring habitat connectivity for CCC steelhead.
 - *Steelhead Restoration and Management Plan for California (CDFW, 1996, Updated Statewide 2013 Task List).* The Project is consistent with task CC-12-213-01 to develop project designs to remove, modify or provide passage above barriers and impediments to adult and juvenile steelhead. This project will plan for the removal of a fish barrier.
 - *National Marine Fisheries Service Coastal Multispecies Recovery Plan.* This plan states to evaluate, design, and implement strategies to achieve maximum amount of spawning habitat in ... Sulphur Creek (p. 118). This project will develop a plan that will increase spawning habitat on Sulphur Creek by 3.2 miles.

4. **Support of the public:** The project is supported by State Senator Bill Dodd, State Assembly member Cecilia Aguiar-Curry, Napa County Supervisor Diane Dillon, and the Napa County Resource Conservation District. Letters are attached as Exhibit 3.
5. **Location:** The Project is located in the city of St. Helena in Napa County, within the jurisdiction of the San Francisco Bay Area Conservancy Program.
6. **Need:** The Conservancy funds are necessary to complete the project designs in a timely manner. Without Conservancy funds, the project would not occur timely to take advantage of CDFW funds and the barrier to fish passage on a critical steelhead stream would remain in place.
7. **Greater-than-local interest:** CCC steelhead is a state-listed endangered species and therefore has statewide significance. Sulphur Creek is a major tributary to Napa River which is identified as anchor stream for CCC steelhead and removing the fish passage barrier at the project site will expand critical steelhead spawning and rearing habitat.
8. **Sea level rise vulnerability:** The project site is not vulnerable to the effects of sea level rise.

Additional Criteria

10. **Resolution of more than one issue:** The project will plan for the removal of a critical barrier to fish passage and eliminate flooding of and maintain the integrity of a private bridge that provides the only road access to an adjacent property owner.
11. **Leverage:** See the “Project Financing” section above.
14. **Readiness:** CalTrout and the Napa RCD will begin work in summer 2020.
17. **Cooperation:** The Project demonstrates cooperation between the grantee, the Napa RCD, resource agencies and private landowners.
18. **Vulnerability from climate change impacts other than sea level rise:** This project directly addresses the threat of climate change and helps build back in the portfolio of life history diversity by allowing upstream and downstream migration for adult and juvenile salmonids during different portions of the year, and access to cool, year-round streamflows, which are in short supply in the Napa River watershed and will allow access to diverse habitat from the mainstem.
19. **Minimization of greenhouse gas emissions:** This phase of the project entails only project planning and design and is unlikely to result in a measurable production of GHG emissions. There will be approximately 10-12 site visits for CalTrout personnel over two years from Redwood City to St Helena for landowner and stakeholder outreach meetings. Likewise, Napa RCD staff and contractor staff, who are all local to the project area, will make between 24 and 30 site visits for stakeholder meetings and data collection. Where possible and practicable, these site visits will be coupled with multiple purposes to maximize benefit and minimize driving. Once the fishway is removed there will be significant reduction in GHG emissions by the elimination of multiple maintenance visits annually by CDFW that are currently required to keep the fishway functioning and free of debris.

CEQA COMPLIANCE:

The proposed project consists of planning and design activities, including data collection and research to develop engineering design documents, and as such is statutorily exempt from CEQA pursuant to 14 Cal. Code of Regulations Sections 15262 (feasibility or planning studies for possible future actions) and categorically exempt pursuant to Section 15306 (basic data collection, research, experimental management and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource).

Upon approval of the project, Conservancy staff will file a Notice of Exemption.