

COASTAL CONSERVANCY

Staff Recommendation  
September 29, 2016

**SCOTT RIVER INSTREAM HABITAT RESTORATION PROJECT**

Project No. 16-035-01  
Project Manager: Michael Bowen

**RECOMMENDED ACTION:** Authorization to disburse up to \$93,559 to California Trout to implement the Scott River Instream Habitat Restoration Project in Siskiyou County.

**LOCATION:** South Fork Scott River, Callahan, Siskiyou County.

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

Exhibit 1: [Project Maps, Graphics and Plans](#)

Exhibit 2: [Project Letters](#)

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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251 through 31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to ninety-three thousand five hundred fifty nine dollars (\$93,559) to California Trout for the implementation of the Scott River Instream Habitat Restoration Project, subject to the following conditions:

1. Prior to the disbursement of funds, the Council shall submit for review and approval by the Executive Officer of the Conservancy:
  - a. A work program including a schedule and budget for the project.
  - b. All contractors to be retained for the project.
  - c. Documentation that all funding required for the project has been secured.
2. Prior to the commencement of construction of the project:
  - a. California Trout shall submit for review and approval by the Executive Officer documentation that all necessary permits, landowner access agreements, and approvals have been obtained.

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 authorization is consistent with the current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code, regarding resource enhancement.
3. The California Trout 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 the Conservancy authorize the disbursement of up to \$93,559 to California Trout to implement the Scott River Instream Habitat Restoration Project (“Project”) in Callahan, Siskiyou County (Exhibit 1). This authorization will enable California Trout to implement a high priority habitat restoration project in a Klamath River tributary important to spawning and rearing Pacific salmon. The proposed project will address current problems along the Scott River by restoring floodplain connectivity, increasing instream habitat complexity and cover, and providing velocity breaks and rearing habitat for juvenile coho salmon.

The Project’s restoration elements include: floodplain creation by excavating an inset floodplain, installation of large wood, and felling trees located on a heavily forested hillslope into the river. Excavation of the inset floodplain will be accomplished using heavy equipment such as an excavator, loader, and truck to excavate the floodplain to the prescribed elevations and relocate the excavated material to a high terrace. Large wood will be placed using an excavator and will be buried into the bank to ballast it. Trees felled from the hillslope will be cut with chainsaws, dropped and winched into a stable position. Work will be conducted during the summer and early fall when flows are low. Flows can be directed away from the work areas using coffer dams and culverts.

The project involves constructing geomorphic floodplains at three locations along a 0.21 mile reach of the South Fork Scott River, construction of five log jams, and felling (chop and drop) of four large trees to add geomorphic and aquatic habitat complexity. All logjams will be constructed by partially burying wood into the bank and placing wood near existing large trees to prevent mobilization. Root wads and trees will come from property/on-site. Large boulders salvaged onsite will be placed on and next to the logjam members to prevent mobilization.

CalTrout and Cascade Stream Solutions will carry out Effectiveness Monitoring for all project components as outlined by NOAA/NMFS and CDFW guidelines. Final 100% Construction Drawings will include a detailed monitoring plan made up of physical and biological monitoring with a complete set of photo monitoring points.

### **Site Description:**

The Scott River is part of the Klamath Mountain Province, which encompasses land in both Oregon and California. This project is located approximately 41 miles south west of the City of Yreka in Northern California. From the town of Callahan (at the confluence of the South Fork

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Scott and Scott River) the project is located approximately three river miles upstream on the South Fork Scott, on property owned by Timbervest Inc.

The Scott River, one of four major tributaries of the Klamath River, is an important native coho salmon river. Draining 813.4 sq. mi, the Scott River watershed includes varied geology, geomorphology, and climate. Native vegetation on the western slopes includes mixed-conifer forest, scattered meadows and brush. Oaks, western juniper, brush and annual grasses cover the eastern mountains. The Klamath National Forest manages 35% of the watershed; irrigated valley farmland (50 sq. mi) and rangeland (80 sq. mi.) comprise 16%; and, privately owned and federally managed timberlands account for the remaining watershed.

This stream reach is known as a critically important spawning and rearing habitat for coho salmon. However, like the rest of the watershed, it suffers from a disconnected and restricted floodplain, absence of in-stream complexity, and a severely incised channel; the degraded riparian habitat conditions and altered hydrologic function that are occurring throughout the basin are limiting stresses for the Scott River coho salmon population. The project will restore the geomorphic floodplain and increase instream channel complexity within a steep and incised 21-mile reach of the South Fork Scott River.

### **Project History:**

With the discovery of gold in 1850, and the panning, sluicing, and dredging that followed, large areas of the Scott River were stripped of vegetation: A legacy of gravel deposits left along many tributaries created permanent changes in floodplain and channel characteristics. Floating dredge operations through the 1950s confined the Scott River to one side of its historic floodplain further degrading available habitat.

The advent of mechanized timber harvest clear-cutting transformed healthy forests to plantations on surrounding lands managed by the Klamath National Forest until reduced impact timber harvest practices introduced selective cutting in the 1990s. The accompanying road building, tree felling, skidding, compaction and haul road use adversely affected water quality, flows, drainage patterns and surface runoff, exacerbating surface erosion and delivering sediment to coho salmon habitat downstream.

Eventually, Southern Oregon Northern California Coastal (SONCC) coho salmon were listed as a threatened species under the Endangered Species Act (ESA) in 1997 and under the state ESA in 2004. The Scott River was designated as impaired for temperature and sediment in 2006 under the Clean Water Act but is currently under waiver status for both listings (Order No. R-2012-0084), as efforts are being made to meet Total Maximum Daily Load requirements.

The project originated through the shared vision and objectives of California Trout, the landowner Timbervest Inc., the Siskiyou Resource Conservation District, the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). The Siskiyou RCD, CDFW and USFWS identified the project area and stream reach as a high priority for restoration for coho salmon spawning and rearing. Accordingly, California Trout and the Siskiyou RCD engaged Timbervest Inc. to request access to the project area and funding for design and engineering. Timbervest Inc. agreed to participate in the project, contributed \$10,000 in match funding for design, and signed the Land Owner Access Agreement Form used for CDFW's Fisheries Restoration Grant Program (FRGP). California Trout and partners subsequently submitted and secured an FRGP grant proposal for implementation.

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California Trout, founded in 1971, works to solve complex resource issues that balance the needs of fish and people -using science, advocacy, law, and on-the-ground restoration to provide innovative solutions. Throughout the life of this project, CalTrout’s Mount Shasta-Klamath Regional Director Andrew Braugh, will oversee all project elements including design, implementation, grant administration, and reporting. Andrew is now working to restore the Wild Trout Area of Hat Creek with over 5,000 native plants, trees, and shrubs, 1.5 miles of in-stream habitat (large woody debris), and new river parkway recreational infrastructure including a 160 prefabricated steel bridge and 2.5 miles of river trail.

**PROJECT FINANCING**

<b>Coastal Conservancy</b>	<b>\$93,559</b>
Department of Fish and Wildlife (FRGP)	\$84,193
California Trout	\$21,540
<b>Project Total</b>	<b>\$199,292</b>

The expected source of Conservancy funds for this project is the fiscal year 2015/16 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 identifies specific purposes of Chapter 6 and includes: protect and restore aquatic, wetland and migratory bird ecosystems, including fish and wildlife corridors; protect and restore coastal watersheds, including, but not limited to bays, marine estuaries, and nearshore ecosystems; and assist in the recovery of endangered, threatened or migratory species by improving watershed health, instream flows, fish passage and coastal or inland wetland restoration.

The proposed project helps achieve the above-identified Chapter 6 purposes and provides multiple benefits. By restoring flood plain and channel form and function, the project will restore historic access to spawning and rearing habitat, improve water quality by preventing and reducing erosion and reduce temperatures to levels suitable for aquatic life.

The proposed project was selected through a competitive grant process under 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 report..

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

The proposed authorization is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code, as follows:

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Pursuant to §31251, the Conservancy may award grants to local public agencies and nonprofit organizations for the purpose of enhancement of coastal resources which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to California Trout to enhance coastal fishery resources disturbed by incompatible land uses, such as intensive mining, timber harvest and other legacy land uses that have disrupted the channel and floodplain processes.

Pursuant to §31251.2(a), “In order to enhance the natural or scenic character of coastal resources within the coastal zone, the Conservancy may undertake a project or award a grant . . . to enhance a watershed resource that is partly outside of the coastal zone. . . .” Consistent with this section, California Trout, which operates inside and outside of the coastal zone, requested Conservancy assistance to implement this habitat restoration project that is located outside the coastal zone. This assistance was sought in order to implement a project intended to enhance and benefit salmon populations known to travel many miles upstream of the coastal zone boundary in order to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high quality habitat both within and outside of the coastal zone in order to survive. If salmon and other highly prized aquatic resources are to be maintained and restored to historic levels, projects to improve salmon habitat must be undertaken both within and outside the coastal zone. Section 31251.2 also requires the review and approval of the California Department of Fish and Wildlife. The Department is a frequent co-funder of California Trout projects, and supported the design of this project as well as its proposed implementation.

Pursuant to §31253, “[t]he Conservancy may provide up to the total of the cost of any coastal resource enhancement project . . . .” Consistent with this section, staff has proposed the funding amount in light of the fiscal resources of the applicant, the urgency of the matter, and the application of other factors relevant to project eligibility, as detailed in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section, below.

### **CONSISTENCY WITH CONSERVANCY’S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective E** of the Conservancy’s 2013-2018 Strategic Plan, the proposed authorization will implement one project to improve barriers to fish passage and provide instream habitat and favorable water temperatures.

### **CONSISTENCY WITH CONSERVANCY’S PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed authorization 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.

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3. **Promotion and implementation of state plans and policies:** The proposed project is consistent with the following state plans and policies concerning restoration of riparian habitat and increasing natural production of the coastal salmon populations that depend upon that habitat for certain life history stages.
- a. The proposed project is consistent with the themes for habitat restoration identified in the *Steelhead Restoration and Management Plan for California* (California Department of Fish and Wildlife, 1996). Specifically, that plan advises that “(h)abitat improvement projects should be focused on the many areas throughout the State where steelhead habitat is severely degraded and restoration work is sorely needed” (p. 74). Providing unimpeded access to support the growth and survival of juvenile salmonids is one of the highest priority habitat improvement actions known.
  - b. More recently, and more specifically, the proposed project is consistent with the *Recovery Strategy for California Coho Salmon* (California Department of Fish and Wildlife, 2004) in that the Scott River is identified as a “key population to maintain or improve.”
  - c. The project is consistent with federal National Marine Fisheries Service 2014 *Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch)*. In recent years, the Scott River has seen the largest runs of coho in the state validating the Recovery Plan’s assignment to the Scott River of one of the highest “Intrinsic Potential Values” of all tributaries to the Klamath River. The SONCC Coho Recovery Plan 2014 lists beaver removal, road construction, agricultural practices, river channelization, dams and diversions, timber harvest, mining/dredging, gravel extraction, high severity fires, and rural residential development as limiting factors that have simplified, degraded, and fragmented migrating, spawning, and rearing habitat throughout the Scott River basin, conditions which have reduced stream flows; increased water temperatures; restricted access to spawning habitat in drought years; seasonally disconnected tributaries from the mainstem; stranded juveniles; reduced summering habitat in tributaries; sedimented rearing pools and spawning gravels, and reduced riparian cover and instream structure for coho salmon rearing. This project will reverse that trend within the project reach.
  - d. Finally, the project is consistent with the *California Water Action Plan*, a collaborative effort of the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture, issued in 2014. This plan was developed to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water resources system. It lays out the state’s challenges, goals and actions needed to put California’s water resources on a safer, more sustainable path. The plan identifies ten overarching strategies to

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protect our resources, include two particular to this project that the Conservancy can help implement: 4) *Protect and restore important ecosystems (restore coastal watersheds and strategic coastal estuaries to restore ecological health and nature system connectivity to benefit local water systems and help defend against sea level rise, eliminate barriers to fish migration)* and 7) *Increase flood protection (encourage flood projects that plan for climate change and achieve multiple benefits)*. By channel and floodplain function while increasing flood protection by designing a project that increases flood routing through the project area, the project is consistent with this report.

4. **Support from the public:** The proposed project enjoys the support of the County of Siskiyou, U.S. Congressman Doug LaMalfa, State Senator Ted Gaines, Assemblyman Brian Dahle, and many resource agencies including the Department of Fish and Wildlife, NOAA Fisheries and others. (See Exhibit 2).
5. **Location:** The project site is outside the coastal zone, but will benefit numerous coastal resources by providing coastal salmon populations with sufficient access throughout a watershed to fulfill their life history patterns.
6. **Need:** Without this grant funding, California Trout could not proceed with the project, and the existing and majority funds for implementation would revert.
7. **Greater-than-local interest:** The project helps fulfill the objectives of state and federal species recovery plans, and is therefore of greater-than-local interest.
8. **Sea level rise vulnerability:** Located well outside the coastal zone, the proposed project suffer no vulnerability from sea level rise.

### Additional Criteria

9. **Urgency:** As described above, California Trout can proceed with this restoration project timely, thereby ensuring the improvement of an important Klamath River tributary in anticipation of the removal of four Klamath dams by 2020.
10. **Resolution of more than one issue:** Improving tributary habitat within the Klamath watershed ensures the availability of seed-stock to re-colonize newly reopened habitat above four dams slated for removal by 2020.
11. **Leverage:** See the “Project Financing” section above.
12. **Conflict resolution:** California Trout effectively harmonizes the demands of the Endangered Species Act with the realities of upgrading and maintaining transportation infrastructure and private land. Their achievement of landowner support for the project on private land in Siskiyou County is an important and salutary development.
13. **Readiness:** California Trout has demonstrated its ability and desire to commence and complete the project timely.
14. **Realization of prior Conservancy goals:** “See “Project History” above.”
15. **Cooperation:** As described in Project History, above, the landowner Timbervest, Inc. has contributed cash to the project design, and will contribute equipment and materials towards

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the implementation. In addition, the grantee has worked closely with the Siskiyou Resource Conservation District and numerous agencies to bring the project to implementation state.

16. **Vulnerability from climate change impacts other than sea level rise:** The project site has been selected as a priority in part due to its hospitability to pacific salmon populations in an era of climate change. The upstream portions of the Scott River offer refuge from hot and dry conditions downstream, thereby enabling juvenile salmonids to relocate to higher altitude and more hospitable conditions within the watershed as conditions change.
17. **Minimization of greenhouse gas emissions:** The design work will cause few greenhouse gas emissions. The applicant is committed to ensuring that the contractors will employ best management practices (e.g. low idling rates) during project construction so as to minimize greenhouse gas emissions.

**CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The proposed project is located in the Klamath-Trinity watershed, outside the coastal zone. Nonetheless, it addresses a coastal zone resource and comports to the goals and objectives outlined under the LCPs for Del Norte and Humboldt County, in which the watershed is located. The project is consistent with the applicable LCPs as follows:

Del Norte County

The authorization is consistent with the relevant portions of the Del Norte County Local Coastal Program (LCP), which was certified by the Coastal Commission on October 12, 1983. It is due to the diversity in life history patterns of anadromous fish species that the Del Norte LCP acknowledges the importance of coastal streams and riparian vegetation systems as Sensitive Coastal Habitat, necessary to both the aquatic life and the quality of water courses. Under the LCP, Chapter VI, the following provisions are made:

*“The County shall maintain all existing species of fish, wildlife, and vegetation for their economic, intrinsic and ecological values as well as providing adequate protection of rare and endangered species.”* (App., p. 55)

*“The County should establish riparian corridors along local streams, creeks, and sloughs to maintain their aesthetic appeal, wildlife habitat, control of erosion. . . .”* (App., p. 56)

*“The County encourages programs (e.g., fish hatcheries, habitat rehabilitation) designed to improve the quality of coastal fisheries and other marine resources.”*

(App., p. 57)

*“All surface and subsurface waters shall be maintained at the highest level of quality to insure the safety of public health and the biological productivity of coastal waters.”*(App., p. 58)

This recommendation’s goal of improving anadromous fish habitat by removing barriers to fish passage, and providing access to historic habitat, thereby maintaining and enhancing the aquatic resources of the county, is consistent with the LCP.

Humboldt County

The authorization is consistent with the relevant portions of the Humboldt Bay Local Coastal Program (LCP), which was certified by the Coastal Commission on October 14, 1982, and which states:

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*“The biological productivity and the quality of coastal waters, (and) streams . . . appropriate to maintain optimum populations of marine organisms . . . shall be maintained, and, where feasible, restored....”* (LCP, 3-55)

*“New development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to . . . wetlands, fishery, and wildlife enhancement and restoration projects. . . .”* (LCP, 3-56)

The proposed authorization will prepare projects designed to re-create riparian habitat where it has been lost; restore the natural meander and in stream habitat of the project area; improve sediment flushing by restoring natural geomorphologic processes; and open up previously unavailable habitat; therefore the proposed authorization is consistent with the LCP Policy stated above.

**COMPLIANCE WITH CEQA:**

The Scott River Habitat Restoration Project is exempt under section 15333 of the California Environmental Quality Act (CEQA) because this implementation project is a small habitat restoration project that cumulatively does not exceed five acres in size and will assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife.

The project meets the additional conditions of this categorical exemption in that there would be no significant adverse impact on endangered, rare or threatened species or their habitat pursuant to CEQA Guidelines section 15065; there are no hazardous materials at or around the site; and the project will not result in significant impacts when viewed in connection with the effects of past, present, or probable future projects. Each of the project components has been reviewed and endorsed by the California Department of Fish and Wildlife (“CDFW”) and each is intended and designed to have beneficial effect on endangered species. Regrading of the main channel in a disturbed area will have no harmful impact on the integrity of the channel or floodplain. Best Management Practices outlined in the CDFW Habitat Restoration Manual will be observed to further ensure adequate protection of natural resources. Riparian planting and restoration along the stream will also measurably improve habitat with no material risk of adverse effect to the environment. In addition to these long-term beneficial effects, by design and approach, this project construction work will not impact the endangered fish species because best management practices identified in the CDFW’s Restoration Manual and in permit terms established by NOAA Fisheries and CDFW will be employed by the grantee and its contractors. Consistent with Section 15333(d)(6), the project, the primary purpose of which is to improve habitat and reduce sedimentation, will be undertaken in accordance with these published guidelines and permit terms.

Staff will file a Notice of Exemption upon approval.