

COASTAL CONSERVANCY

Staff Recommendation

March 25, 2021

**TENMILE CREEK - WATER CONSERVATION AND RESTORATION PLANNING PHASE II**

Project No. 18-008-02

Project Manager: Su Corbaley

**RECOMMENDED ACTION:** Authorization to disburse up to \$499,070 to the Eel River Recovery Project to conduct planning and prepare plans, designs and environmental compliance documents for water storage and erosion control sites that will enhance summer flows and improve water quality to benefit salmonids in lower Tenmile Creek, a tributary to the South Fork Eel River in Mendocino County.

**LOCATION:** Lower Tenmile Creek watershed, Laytonville, Mendocino County

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EXHIBITS

Exhibit 1: [Project Location Maps](#)

Exhibit 2: [Tenmile Creek Watershed Conservation and Restoration  
Action Plan](#)

Exhibit 3: [Project Letters](#)

**RESOLUTION AND FINDINGS**

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed four hundred ninety-nine thousand, seventy dollars (\$499,070) to the Eel River Recovery Project (“the grantee”) for planning and to prepare design and environmental compliance documents for water storage and erosion control projects that will enhance summer flows and improve water quality to benefit salmonids in at various sites along lower Tenmile Creek, a tributary to the South Fork Eel River in Mendocino County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy 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.

3. A plan for acknowledgement of Conservancy funding and Proposition 1 as the source of that funding.

Findings:

Based on the accompanying staff recommendation 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 coastal and marine resources protection.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Eel River Recovery Project is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

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**STAFF RECOMMENDATION**

**PROJECT SUMMARY:**

Staff recommends the Conservancy authorize disbursement of up to \$499,070 to the Eel River Recovery Project (“ERRP”) for planning and to prepare designs and environmental compliance documents for a variety of projects that will enhance summer flows and improve water quality to benefit salmonids in Tenmile Creek, in Mendocino County. The primary goal of the project is to design off-stream water storage and associated infrastructure projects for sites at Black Oak Ranch and Camp Winnarainbow on Streeter Creek, and design gully and road erosion control projects for approximately 12 sites in the lower Tenmile Creek watershed. The project will improve aquatic habitat for endangered pacific salmon by eliminating dry-season water diversions at lower Streeter Creek while ensuring an adequate supply of water for agricultural operations on the ranch and camp activities and by reducing sediment load in salmonid rearing habitat in lower Tenmile Creek.

The project will also aid in improving domestic water quality and supply for a disadvantaged community tract, which encompasses the entire Tenmile Creek watershed including the Cahto Indian Reservation, and the severely disadvantage community of Laytonville, located 5 miles south and downstream of the project area on the South Fork Eel River (see Exhibit 1).

Additional goals include developing a water budget for the westside Tenmile Creek watershed and continuing community outreach efforts to enroll additional properties for future projects.

Tenmile Creek is a major tributary to the South Fork Eel River in northwestern Mendocino County that had substantial historic fisheries production and still supports three species of Endangered Species Act-listed Pacific salmon species: Chinook and coho salmon, and steelhead. National Marine Fisheries Service (“NMFS”) data show the Tenmile Creek watershed was likely one of the most significant coho salmon producers in the Eel River watershed, which bodes well for population resilience if flow and habitat are restored. The last viable coho salmon meta-population in the Southern Oregon/Northern California Coastal (“SONCC”) conservation area is in the upper South Fork Eel River, upstream and downstream of Tenmile Creek. Coho from

tributaries in this reach could provide a source of colonists for Tenmile Creek if restoration efforts are successful.

Salmonids in Tenmile Creek are threatened by flow depletion, excess sediment supply, elevated summer water temperatures, poor riparian conditions, non-point source agricultural pollution, and invasive species. Temperature and flow surveys conducted by ERRP since 2012 show that the stream is losing surface flows in dry and moderate rainfall years. Desiccated reaches are found in upper Tenmile Creek west of Laytonville and in lower Tenmile above Grub Creek, downstream of Highway 101. Water diversions for local agriculture and domestic uses, and the potential threat of high-power groundwater pumps being installed in the Laytonville area and the surrounding Long Valley, are causing concern for further water flow depletion in the Tenmile system.

The South Fork Eel River watershed, and therefore the Tenmile Creek watershed, is listed under Section 303(d) of the federal Clean Water Act by the U.S. Environmental Protection Agency as an impaired water system due to excessive sediment and high temperatures. The California State Water Resources Control Board ("SWRCB") established Total Maximum Daily Load limits to reduce sediment and temperature in the South Fork Eel River and improve the quality of the water that discharges to the sea. Tenmile Creek is showing signs of sediment over-supply that can disrupt spawning success, fill rearing pools, decrease aquatic insect production important for juvenile salmonid food, and promote stream warming. Gullies with downcutting in meadows and on forested hillslopes, stream bank erosion, road drainage and stream crossings are the prime erosion problems in the Tenmile Creek watershed.

This project is an outgrowth of the Conservancy-funded Tenmile Creek Water Conservation and Restoration Pilot Planning Project, a community outreach and planning project completed by ERRP in 2020. The purpose of the pilot project was to assess the health of the entire watershed (flows, temperature, and sediment sources) and identify water conservation opportunities and strategies for Streeter and Big Rock Creeks. The results of the pilot study, prioritized by need and opportunity, are detailed in the Tenmile Creek Watershed Conservation and Restoration Action Plan ("Action Plan") (Exhibit 2). Another significant outcome of the pilot project was the formation of the Tenmile Creek Watershed Council ("TCWC") a group of community volunteers that work to restore the beneficial uses of Tenmile Creek, its tributary streams, and associated riparian corridors.

The pilot study identified the west-side tributaries of Tenmile Creek as the Priority Water Conservation Area ("PWCA") (Exhibit 1b) and determined the largest diversion of Streeter Creek occurs at Black Oak Ranch, a 600-acre communally owned property. Water withdrawals provide irrigation for a large organic farm that supplies organic produce to Laytonville and Mendocino County, and water for Camp Winnarainbow (Exhibit 1c). Camp Winnarainbow is located on ranch property across Streeter Creek from the farm and hosts inner city, disadvantaged youth in the summer to learn about art and nature. Black Oak Ranch also hosts several multiday festivals each year that attract thousands of people.

This project includes preparing designs, environmental documents, and permit applications for an off-stream storage pond with sufficient supply to meet the needs of the organic farm on Black Oak Ranch and for watering the grounds of Camp Winnarainbow. Designs will include an

augmented tank water storage and appurtenant infrastructure for the camp's needs. This will enable both enterprises to forbear from use of Streeter Creek in the future, thereby increasing instream flows during critical low flow periods and improving conditions for salmonids.

To identify additional water storage and forbearance opportunities in the PWCA, this project includes preparing a groundwater study to develop an integrated surface water and groundwater budget for the westside Tenmile Creek watershed. Using a model developed during the pilot study, ERRP will target Cahto Creek and Mill Creek for water storage projects, where landowners have expressed an interest in forbearance.

Outreach conducted during the pilot study cemented cooperation from landowners on abating gully and streambank erosion throughout the Tenmile Creek watershed. This project includes planning and preparation of permit applications to repair the highest priority gully and road erosion sites in the Action Plan in lower Tenmile Creek between Peterson Creek and Streeter Creek, and on Cahto Creek Ranch on Cahto Creek. Hundreds of Chinook salmon spawn here in some years thus demonstrating the importance of eliminating sources of erosion. Concurrent to planning for these gully and road erosion sites, ERRP will use other funds recently awarded by SWRCB to prepare designs for and carry out remediation of streambank erosion sites identified in the Action Plan.

This project includes continued outreach activities, and basin-wide citizen assisted water temperature monitoring and fish community assessment at 20 locations. Together these efforts will keep the community in touch with their streams and encourage participation in watershed-wide restoration and water conservation efforts.

Landowners involved in the planning are committed to implementation, subject to available future funding. Their letters can be found in Exhibit 3.

Key partners in the success of the pilot project included ERRP, the TCWC, the Cahto Indian Tribe, the Mendocino County Resource Conservation District, the SWRCB and the North Coast Regional Water Quality Control Board, CDFW and ERRP's contractor partners. Each of these will remain involved and informed throughout this planning effort.

**Site Description:** This project focuses on the lower Tenmile Creek watershed below Highway 101 roughly between Streeter Creek and Peterson Creek. Tenmile Creek is a major tributary of the South Fork Eel River with a watershed area of 65 square miles and over 22 miles of habitat suitable for salmonids. The Tenmile Creek watershed comprises half of the upper South Fork Eel River watershed. Large areas of the Tenmile Creek valley are zoned as rangeland and agricultural land, with smaller areas zoned for timber harvest. Rural residential zoning prevails in the hills immediately surrounding the unincorporated community of Laytonville. Laytonville, a severely disadvantaged community, supports a population of approximately 2,000 people within its boundaries, and another approximately 3,000 in the outlying region. While the upper South Fork Eel River watershed is dominated by redwood forest, the Tenmile Creek watershed has different bedrock geology which results in more grasslands and oak woodlands, and coniferous forests dominated by Douglas fir and Jeffrey pine.

Black Oak Ranch borders Tenmile Creek upstream and downstream of Streeter Creek and comprises 600 acres of pasture, farmland, oak woodlands, riparian forests, and coniferous

forest in some upland locations. Streeter Creek flows on the west side of the watershed on the back of Cahto Peak and supports a significant run of steelhead trout and harbors coho salmon and Chinook salmon in some years. In the last decade, the Streeter Creek watershed has experienced widespread sub-division and an influx of cannabis farms that are contributing to de-watering of the stream.

The erosion control planning and design work will focus on the Tenmile Creek watershed north of Streeter Creek and on Cahto Creek on private ranch properties and along approximately 5 miles of roads. This reach of Tenmile Creek is utilized by Chinook for spawning and supports steelhead rearing.

**Grant Applicant Qualifications:** The Eel River Recovery Project is a 501(c)(3) organization established to serve the communities of the Eel River watershed to, among other primary purposes, undertake data collection and scientific research using citizen monitoring to gauge the health of the Eel River ecosystem, sponsor and support projects to prevent further loss of aquatic habitat, and help prevent water pollution, flow depletion, and other environmental impacts which may adversely affect the ecological health of fisheries, and impair beneficial uses. ERRP recently completed a Conservancy-funded pilot project in the Tenmile Creek watershed to identify water storage and forbearance opportunities and inventorying erosion abatement projects throughout the watershed. The same staff and consultants who completed the pilot project will lead this planning effort.

#### **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 below.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section below.
3. **Promotion and implementation of state plans and policies:** The project is consistent with goals and recommendations in a number of state and federal plans as discussed below.

The project addresses the recommendation in the **South Fork Eel River Basin Overview Final Report (CDFW 2014)** to carry out Flow and Water Quality Improvement Activities by protecting stream flows from diversion, particularly in low flow summer months.

**Southern Oregon/Northern California Coast Coho Recovery Plan (National Marine Fisheries Service (NMFS) 2014).** The plan's discussion of the South Fork Eel River ("SFER") (Chapter 41) states that "[k]ey to achieving this population's recovery includes activities that increase summer flows, enhance the complexity of stream habitats, reduce sediment inputs...and increase riparian vegetation." Specifically, the plan recommends reducing water

consumption, groundwater pumping and surface water diversion by utilizing conservation and storage (SFER.3.1.6.4.).

**NOAA Coastal Multispecies Recovery Plan: National Marine Fisheries Service. 2016. Final Coastal Multispecies Recovery Plan (NMFS, West Coast Region, Santa Rosa, California), Volumes II: California Coastal Chinook Salmon and III: Northern California Steelhead.**

Consistent with **Volume II**, the project will prevent or minimize impairment to stream hydrology (impaired water flow) (SFER-CCCh-25.1.1) and establish a forbearance program, using water storage tanks to decrease diversion during periods of low flow (SFER-CCCh-25.1.1.1). Consistent with **Volume III**, the project will improve hydrologic flow conditions (SFEeR-NCSW-3.1.1), prevent or minimize impairment to stream hydrology (SFEeR-NCSW-25.1.1), establish a forbearance program, using water storage tanks to decrease diversion during periods of low flow (SFEeR-NCSW-25.1.1.1) and develop and fund riparian restoration and bank stabilization projects to regain riparian corridors damaged from livestock and other causes (SFEeR-NCSW-18.1.1.1).

**California @ 50 Million: The Environmental Goals and Policy Report (CA OPR 2015).** Goal: Steward and Protect Natural and Working Landscapes by supporting landscape-scale approaches to conservation and mitigation that account for multiple benefits. Goal: Protect and Restore Water Resources for Important Ecosystems by prioritizing watershed protection and health in ecosystem management.

The project promotes the goal of restoration of important species and habitat in support of the **California Water Action Plan**. The project also supports the goals of the following actions: protect and restore important ecosystems, provide assistance to disadvantaged communities, encourage State focus on projects with multiple benefits, and manage headwaters for multiple benefits.

**CA Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan:** Goal B-3 "Increase restoration and enhancement activities to increase climate resiliency of natural and working lands."

**CA Wildlife Action Plan**, Goal 2 - Enhance Ecosystem Conditions: Maintain and improve ecological conditions vital for sustaining ecosystems in California and Goal 3 - Enhance Ecosystem Functions and Processes: Maintain and improve ecological conditions vital for sustaining ecosystems in California.

4. **Support of the public:** This project is supported by residents of the Tenmile Creek watershed on whose properties the planning will take place. Additionally, the project is supported by the several agencies and the public. See Exhibit 3 for project Letters.
5. **Location:** The project is located on lower Tenmile Creek in Mendocino County, five miles north of Laytonville.
6. **Need:** Without Conservancy funding, design and eventual implementation of the project would be postponed which would result in continued poor habitat conditions and would delay the recovery of endangered and threatened anadromous salmonid populations.

7. **Greater-than-local interest:** Coastal salmon resources support sport, commercial and tribal fisheries, and are therefore of importance to the entire State.
8. **Sea level rise vulnerability:** The planning sites are located well outside the coastal zone in the South Fork Eel River watershed and not vulnerable to sea level rise.

**Additional Criteria**

9. **Urgency:** Delay in enhancing degraded aquatic habitats in Redwood Creek will further endanger the critically threatened anadromous fish species in the South Fork Eel watershed.
10. **Resolution of more than one issue:** The project will lead to securing adequate water supplies and water quality for fish, farmers, and the general residents of the Tenmile Creek watershed and Laytonville community.
11. **Leverage:** See the “Project Financing” section below.
12. **Conflict resolution:** The project seeks to resolve water use conflicts that exist between rural residential uses, agricultural operations and habitat restoration efforts.
13. **Innovation:** This project will utilize innovative streamflow enhancement techniques, drawing from similar efforts in the Mattole River that have proven successful over the past ten years. The project includes an off-channel reservoir and augmented tank storage that will be dedicated specifically to enhancing dry-season flows.
14. **Readiness:** The ERRP team and private landowners are organized and ready to begin onsite planning activities in May 2021. The project will be completed by June 2023.
15. **Realization of prior Conservancy goals:** This project is one of many opportunities identified through the Tenmile Creek Water Conservation and Restoration Pilot Planning Project completed in July 2020. The Conservancy has funded several projects to improve fish habitat and water quality in the Eel River system including in tributaries such as Howe Creek and the restoration efforts in the Salt River and Eel River estuaries. This project complements those efforts in that it will address upstream sedimentation and water supply to benefit downstream resources.
16. **Cooperation:** The project is a cooperative effort of a community- and scientist-based watershed forum, private landowners, and regulatory agencies.
17. **Vulnerability from climate change impacts other than sea level rise:** The primary expected stressors resulting from climate change to the Northern California Coastal salmonid populations are increased air and water temperatures, and variations in precipitation. Precipitation will continue in the Mediterranean seasonal pattern of dry summers and wet winters but with more extreme events. Intense winter flood peaks could accelerate erosion, including road failures, gully formation and expansion, debris torrents on disturbed hillslopes, and inner gorge failure in downstream reaches due to cumulative watershed effects. Drier summers result in low summer flows and increased demand for stream diversions for domestic and agriculture uses, affecting critical water supplies for both salmonids and human populations. This project addresses climate change resiliency by

planning projects that will store water for use during dry months to maintain stream flow longer into the fall. The erosion control projects will incorporate bioengineering utilizing riparian vegetation that will lower water temperatures and improve rearing conditions for salmonids.

- 18. Minimization of greenhouse gas emissions:** This project entails restoration planning and will not result in significant production of GHG emissions. The project team will nevertheless utilize best management practices to reduce both direct and indirect GHG emissions related to transportation for project activities such as carpooling to the project site, teleconferencing meetings instead of driving to a location when feasible and utilizing local contractors if practicable.

**PROJECT FINANCING**

<b>Coastal Conservancy</b>	<b>\$499,070</b>
ERRP	\$125,000
<b>Project Total</b>	<b>\$624,070</b>

The expected source of Conservancy funds for this 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 identifies specific purposes of Chapter 6. The proposed project will achieve several of these purposes, including: protect and restore aquatic, wetland and migratory bird ecosystems (Section 79732(a)(4), protect and restore rural and urban watershed health to improve watershed storage capacity, forest health, protection of life and property, storm water resource management, and greenhouse gas reduction (79732(a)(9), protect and restore coastal watersheds (79732(a)(10)), reduce pollution or contamination of rivers, lakes, streams, or coastal waters...and protect or restore natural system functions that contribute to water supply, water quality, or flood management (79732(a)(11), 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 (79732(a)(12). The proposed project will lead to the restoration of stream function benefitting each of these goals.

As required by Proposition 1, the proposed project provides multiple benefits. By preparing to restore stream flows and control erosion the project will lead to improved stream function for fisheries, adequate summertime flows for endangered salmonid species, and clean and adequate water supply for the disadvantaged communities in and around Laytonville, Mendocino County.

The proposed project was selected through a competitive grant process under the Conservancy’s Proposition 1 Grant Program Guidelines adopted in December 2018 (“Prop 1 Guidelines”) (see section 79706(a)). The proposed project meets the evaluation criteria in the Prop 1 Guidelines as described in further detail in the “Project Financing” section, the “Project



Summary” section and in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section of this report.

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”, the project budget includes resident-volunteer Tenmile Creek citizen scientist monitors valued at \$10,000, and unpaid grantee and contractor staff time valued at \$125,000. These estimates are based on the tabulated value of volunteer and unpaid staff time for similar activities during the pilot project. ERRP has received a grant from the SWRCB (federal funds) for upstream gully repair work that includes funds for community outreach. While not directly associated with the proposed planning project, those outreach activities in the SWRCB grant (budgeted at \$12,500) will be coordinated with community meetings and outreach for the planning project to maximize information exchange.

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

The proposed project will be undertaken pursuant to Chapter 5.5 of Division 21 of the Public Resources Code, Section 31220, as follows: Pursuant to section 31220(b), the Conservancy may award grants to nonprofit organizations in order to improve and protect coastal, coastal watershed and marine water quality and habitat, including projects that restore fish habitat within coastal watersheds (§ 31220(b)(2)) and reduce unnatural erosion and sedimentation of coastal watersheds (§ 31220(b)(4)). As discussed above, the project will benefit anadromous salmonids and enhance coastal watershed habitat. This project will result in plans for numerous projects that will reduce surface sediment runoff from private lands thereby improving the water quality draining to the South Fork Eel River and the Pacific Ocean. Additionally, the project will prepare plans for two projects that, when implemented, will result in longer sustained summer flows in creeks that support (or historically supported) fish populations.

As required by Section 31220(a), staff has consulted with the North Coast Regional Water Quality Control Board about the project and established that the project will help enhance the beneficial uses, such as cold-water fisheries, identified in the basin plan for the Mattole River. Finally, consistent with section 31220(c), the plans produced under the proposed project will identify criteria to be used to monitor and evaluate the restoration, once implemented.

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

Consistent with **Goal 6, Objective 6C** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project would develop one plan to preserve and enhance coastal watersheds and floodplains, including plans to increase water storage to improve anadromous fish habitat and passage.

Consistent with **Goal 6, Objective 6F** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project would complete one plan to improve water quality to benefit coastal and ocean resources.

Consistent with **Goal 16, Objective 16A** of the Conservancy's 2018-2022 Strategic Plan, the proposed project prioritizes funding for a project that is in a disadvantaged community and that directly benefits disadvantaged communities.

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

The project is consistent with the North Coast Integrated Regional Water Management Plan Phase III (2014) Goal 3: Ecosystem Restoration and Enhancement, Objectives 5) Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity and 6) Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes; and Goal 4: Beneficial Uses Of Water, Objective 7) Ensure water supply reliability and quality for municipal, domestic, agricultural, cultural, and recreational uses while minimizing impacts to sensitive resources.

The project is also consistent with the North Coast Regional Water Quality Control Board's Action Plan to Implement Water Quality Objectives for Temperature in the Mattole, Navarro, and Eel River Watersheds as follows:

Associated actions include the following water quality objectives for temperature: 5.3.5 Address Temperature Concerns Using Other Tools, 5.3.6 Address Temperature Concerns Through Support of Restoration, 5.3.7, 5.3.8 Coordinate with the Division of Water Rights in the Development of Instream Flow Studies and Flow Objectives, and 6.5.9: Water Use, "to support efforts to develop off stream water storage for diverters that currently divert surface water during the dry season."

**CEQA COMPLIANCE:**

Staff has determined that the proposed project is statutorily exempt from the California Environmental Quality Act (CEQA) under Title 14 of the California Code of Regulations, Section 15262 because it involves planning studies and feasibility analyses for possible future actions that the Conservancy has not approved, adopted, or funded and will include consideration of environmental factors.

The project is also categorically exempt under Section 15306 because it involves information collection and resource evaluation for possible future action. The project will not result in disturbance to an environmental resource. Upon approval of the project, Conservancy staff will file a Notice of Exemption.