COASTAL CONSERVANCY

Staff Recommendation May 24, 2018

Tenmile Creek Water Conservation and Restoration Pilot Planning Project

Project No. 18-008-01 Project Manager: Su Corbaley

RECOMMENDED ACTION: Authorization to disburse up to \$237,866 to the Eel River Recovery Project to develop fish habitat enhancement plans for Tenmile Creek and water conservation strategies for Streeter and Big Rock Creeks in the Tenmile Creek watershed, a tributary to the South Fork Eel River, Mendocino County.

LOCATION: Tenmile Creek watershed, Laytonville, Mendocino County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

<u>EXHIBITS</u>

- 1. Project Location
- 2. Support Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31111 and 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed two hundred thirty-seven thousand, eight hundred sixty-six dollars (\$237,866) to the Eel River Recovery Project to undertake the Tenmile Creek Water Conservation and Restoration Pilot Planning Project, a project to develop fish habitat enhancement plans for Tenmile Creek watershed and water conservation strategies for Streeter and Big Rock Creeks, tributaries to Tenmile Creek, located outside of Laytonville, Mendocino County. This authorization is subject to the following conditions:

- 1) 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:
 - a. A detailed work program, schedule, and budget.
 - b. Names and qualifications of any contractors to be employed in carrying out the project.
 - c. A plan for acknowledgement of Conservancy funding and Proposition 1 as the source of that funding.

2) Prior to disbursement of funds, the grantee shall submit evidence that it has entered into agreements sufficient to enable the grantee to access private property to conduct assessments and collect data."

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 Coastal and Marine Resources Protection projects.
- 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 existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

Staff recommends the disbursement of up to \$237,866 to The Eel River Recovery Project (ERRP) to undertake a pilot planning and community outreach project to develop fish habitat enhancement plans for Tenmile Creek, and water conservation strategies for Streeter and Big Rock Creeks in the Tenmile Creek watershed, a tributary to the South Fork Eel River (Exhibit 1). The proposed authorization will develop plans to restore and enhance fish habitat by developing a coordinated approach to creek restoration and water conservation. Ultimately, restoring fish habitat, including enhancing creek and riparian health and increasing streamflow volumes in Tenmile Creek, will benefit the northern California salmonid fish populations.

Fish habitat conditions in Tenmile Creek are deteriorating due to flow depletion, excess sediment supply, elevated summer water temperatures, poor riparian conditions, altered watershed hydrology, non-point source agricultural pollution, and invasive non-native species. Depleted surface flows are noted as a major problem in the South Fork Eel River and its tributaries in the National Marine Fisheries Service (NMFS 2014) *Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon*. Reductions in surface flow decrease water volumes and slow down transit times, causing stream warming which leads to temperatures harmful to salmonid survival. Streamflow data suggest that stream diversions have increased since the legalization of medical cannabis in 1995.

The report (NMFS 2014) also noted that the "lack of floodplain and channel structure in the South Fork Eel River is primarily due to excessive sediment loads occurring in the watershed, coupled with paucity of large woody and riparian vegetation." Poor riparian habitat conditions in the Tenmile Creek watershed are leading to bank erosion, decreased nutrient filter capacity, stream warming and low-quality fish habitat. Sedimentation is also compromising stream health, and the Tenmile Creek watershed contains extensive grasslands that are prone to gully erosion.

Culverts draining roads through grasslands cause gully formation if insufficient armoring is installed to dissipate the energy of winter flows down-slope.

Restoring Tenmile Creek flow is not only important for enhancing fish habitat and improving ecosystem function, it is also of vital importance to economically disadvantaged communities such as Laytonville, located downstream of Tenmile Creek. Loss of stream flows can create severe hardships for low income families and rural communities through the seasonal loss of domestic water supplies, or when degraded stream conditions lead to toxic cyanobacteria blooms proliferating in downstream reaches, causing health and safety concerns for humans and animals. Residents are concerned about deteriorating ecosystem health in Tenmile Creek and are ready to work cooperatively to address water use and watershed restoration issues in the basin.

The Tenmile Creek Water Conservation and Watershed Restoration Pilot Planning Project will assess, identify, and prioritize opportunities for repairing riparian and gully erosion throughout the watershed which will lead to implementing measures to directly reduce chronic sedimentation, increase riparian canopies, stabilize gully erosion, and improve channel conditions in future project phases. Restored riparian habitats will help to alleviate further increases to stream temperature through increased shading throughout the watershed. Complementary to riparian restoration benefits, reducing sedimentation by remediating unstable stream banks and upslope gully sources will help to stabilize channel morphology. Developing a community-based water conservation strategy with this pilot project will lead to enhanced surface flows during low-flow summer months which will serve as a buffer against warming stream temperatures resulting from climate change.

This project will include plans for water conservation and a forbearance program to restore surface flows in Big Rock Creek and Streeter Creek, two key Tenmile Creek tributaries (Exhibit 1). If water conservation efforts are successful in these two sub-basins, surface flows in main stem Tenmile Creek could be maintained downstream from Streeter Creek to the confluence with the South Fork Eel River during late summer months. Big Rock and Streeter Creeks flow from the west into the middle reach of the Tenmile Creek watershed, and both streams share headwaters boundaries with Elder Creek, a control stream for this project (Exhibit 1). Elder Creek flows from the east into the South Fork Eel River and possesses a nearly intact watershed that is part of the University of California Berkeley's Angelo Reserve. Elder Creek has a U.S. Geologic Survey (USGS) gauge with a 50-year record and can be used to both calculate historic flows in Big Rock and Streeter Creeks and to provide a comparison of flow levels during the project.

The primary goal of the project is to get the community working together to conserve water and restore Tenmile Creek flow, starting with important west-side tributaries Streeter and Big Rock Creeks. The methods to achieve this outcome are patterned after the successful upper Mattole River forbearance project (the pilot of which was funded by the Conservancy in 2005 and developed by Sanctuary Forest, Inc.) where local cooperation on water conservation restored perennial surface flow. The second goal is to restore riparian zones within the Tenmile Creek basin by employing bioengineering, which creates living stream banks, prevents bank erosion, improves channel stability and sediment routing, traps sediment and builds terraces, provides shade to help cool the stream, and improves the quality of habitat for salmon and steelhead juveniles. The third goal is to reduce gully erosion in the Tenmile Creek watershed, further

decreasing fine sediment inputs to streams and helping to restore hillslope hydrology. The project will help foster the formation of the Tenmile Creek Watershed Council (TCWC) that will serve as the mechanism for community engagement and the ultimate vehicle for project implementation and on-going adaptive management. These efforts will improve reliability of water supplies in the face of future droughts through education and outreach promoting conservation, and sustainable water use. Because the Eel River watershed is largely in private ownership, working with the local residents is essential; this project could demonstrate an effective blueprint for similar efforts in other Eel River communities.

To develop a strategy for improving water quality for salmonid suitability, ERRP will complete an in-field assessment of instream temperature and sediment conditions, conduct an erosion assessment to identify sediment hotspots in gullies and creeks for possible remediation, and conduct an assessment of riparian canopy and condition to identify areas for restoration. To achieve the project goals for water conservation and forbearance in the pilot area of Streeter and Big Rock Creeks, ERRP will:

- collect flow data and photo documentation of stream conditions;
- compare flow changes over time in the pilot creeks with the benchmark adjacent Elder Creek watershed to approximate additional flow needed to establish perennial flow;
- establish video monitoring stations to capture and share with watershed residents the visuals of stream conditions as water flows become critical;
- establish a public forum for educating and training the public about water use and conservation;
- identify property owners who will commit to forbearance agreements; and
- develop an outreach program that includes press, direct mail/phone contact, public meetings, technical assistance for participating landowners, and expanded web and social media presence.

The results of the project will be summarized and future implementation opportunities outlined in a Tenmile Creek Watershed Conservation Action Plan.

Site Description: 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. Zoning maps for Mendocino County show large areas of the Tenmile Creek valley as range land and agricultural land, as well as some areas targeting timber harvest. Rural residential zoning prevails in the hills immediately surrounding the unincorporated community of Laytonville. Laytonville, a 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.

The South Fork Eel River watershed, and therefore, the Tenmile watershed, is listed under the EPA 303(d) Total Maximum Daily Load program as impaired for sediment and temperature, likely resulting from elevated erosion and flow depletion related to cannabis cultivation and rural residential uses. Sediment problems are likely owing to road networks that can cause chronic

surface erosion and periodic catastrophic crossing failures during storm events. Grazing on ranchlands within Tenmile Creek has caused a loss of riparian cover, which contributes to warming stream temperatures. Temperature and flow surveys conducted by ERRP since 2012 show that the stream is losing surface flows in dry and moderate rainfall years, when it was perennial historically. Desiccated reaches are found in upper Tenmile Creek west of Laytonville and in lower Tenmile above Grub Creek, downstream of Highway 101.

Streeter Creek and Big Rock Creek, the two pilot watersheds targeted for flow enhancement, drain the west side of the watershed on the back of Cahto Peak. Streeter Creek is an important producer of steelhead and coho salmon historically, with Chinook using it for spawning in high flow years. In the last decade, the Streeter Creek watershed has experienced widespread subdivision and an influx of cannabis farms that are contributing to de-watering of the stream. Relative to watershed size, there are fewer landowners in the Big Rock Creek than in Streeter Creek, which results in streamflow persisting farther into late summer than on Streeter Creek.

Grantee Qualifications: The Eel River Recovery Project is a broad-based community initiative to address water conservation, nutrient pollution and ecosystem recovery in the Eel River system. The Eel River Recovery Project is a 501(c)(3) established to serve the community of the Eel River watershed by helping citizen monitors gauge the ecological health of the watershed, and to share information back with their neighbors. Its foundation of citizen science creates a trusted framework, so that communities can assess the health of their nearby streams and determine what efforts may work to restore the Eel River ecosystem. ERRP members have good relationships with neighbors that have allowed successful outreach to private landowners to commit to undertaking watershed assessment and restoration projects.

Project History: The ERRP was formed in 2011 in response to citizen concerns about Eel River tributaries drying up, portions of the river developing toxic cyanobacteria, and the potential loss of salmon and steelhead runs. Over that time, ERRP has collected water temperature readings from hundreds of locations and flow data to chronicle the condition of the Eel River watershed and identify areas to target for healing restoration. ERRP has also developed a strong public education component with the goal of making human activities in the Eel River basin compatible with ecosystem restoration. Interfacing with residents at public outreach events has given ERRP insight to the receptiveness of watershed residents and landowners to efforts to restore fish and flows to the river.

Recognizing the need to grow to meet the needs of the community, ERRP incorporated as an IRS-recognized 501(c)(3) tax exempt organization in March of 2016 and began developing the scope for this project. Initially, ERRP submitted a proposal in response to the Conservancy's spring 2017 Proposition 1 Request for Proposals. That proposal outlined a project similar in scope to address stream restoration and water flow forbearance outreach for the entire Tenmile Creek watershed. Conservancy staff recognized the need for such a project, but recommended ERRP submit a revised proposal for a smaller scale pilot project that could be tested and developed so as to be scalable to future projects. Therefore, ERRP resubmitted its proposal in the Fall 2017 Prop 1 grant round for Streeter and Big Rock Creeks to serve as a pilot project to develop water storage and forbearance projects that can translate to the broader Tenmile Creek watershed.

PROJECT FINANCING

Coastal Conservancy	\$237,866
Bill Graham Foundation	\$7,500
Private Donations	\$75,000
Project Total	\$320,366

The anticipated source of funding for this project is an appropriation 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 those purposes, including the following: (1) protect and increase the economic benefits arising from healthy watersheds, fishery resources and in-stream flow; (2) implement watershed adaptation projects to reduce the impacts of climate change on California's communities and ecosystems; (4) protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors and the acquisition of water rights for in-stream flow; (9) 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; (11) 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; (12) assist in the recovery of endangered, threatened, or migratory species by improving watershed health, in-stream flows, fish passage... or other means...; and (13) assist in water-related agricultural sustainability projects.

Section 79732(a) states that these funds may be used to "implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems." Consistent with this provision, the project will help the Tenmile Creek watershed become resilient to climate change through planning activities that, when implemented, will lead to increased instream water supply and protection of water supply for both human and natural communities.

Section 79732(a) also states that these funds may be used to "protect and restore aquatic, wetland, and migratory bird ecosystems including fish and wildlife corridors" and "assist in the recovery of endangered, threatened, or migratory species by improving watershed health". Consistent with these provisions, the project would develop plans toward the restoration of aquatic and riparian ecosystems serving as fish and wildlife corridors for native Californian endangered Chinook, coho and steelhead. Furthermore, the project will result in improved water quality draining to the Eel River, utilized by aquatic endangered fish, and protected migratory waterfowl.

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

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", ERRP has received committed donations of approximately \$75,000 in private match funds, and another \$7,500 in foundation grant funds. Additionally, ERRP, its consultants and community TCWC members will provide donate staff time, materials and supplies valued at \$104,050, or approximately 25 per cent, toward the project.

The project was reviewed and subsequently recommended for funding 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 staff recommendation.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Section 31111 and Chapter 5.5 of Division 21 of the Public Resources Code, Section 31220, regarding grants for coastal watershed and coastal and marine habitat water quality, sediment management, and living marine resources protection and restoration projects. As required by Section 31220 staff has notified the State Water Resources Control Board of the nature of this project and provided the opportunity for comment, input and review.

Pursuant to Section 31220(b)(2), the Conservancy is authorized to award a grant for a project that protects or restores fish and wildlife habitat within coastal and marine waters and coastal watersheds. This project will result in a plan to 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 result in longer sustained summer flows in creeks that support (or historically supported) fish populations.

Pursuant to Section 31220(b)(4), the Conservancy is authorized to undertake a project or award a grant that reduces unnatural erosion and sedimentation of coastal watersheds. This project will result in a plan that prioritizes key stream restoration projects to reduce surface sediment runoff from private lands thereby improving the water quality draining to Tenmile Creek, the South Fork Eel River and the Pacific Ocean.

Consistent with section 31220(a), the Conservancy consulted with the State Water Resources Control Board in the development of this grant to ensure consistency with Chapter 3 (commencing with section 30915) of Division 20.4 of the Public Resources Code pertaining to its Clean Beaches Program. As Section 31220(c) requires, the proposed project is consistent with local and state watershed plans, and will include a monitoring and evaluation component through post-project erosion monitoring and reporting. This project's consistency with state and local watershed plans is discussed in detail below under "Consistency With Local Watershed Management Plan/State Water Quality Control Plan."

As provided in § 31111, the Conservancy may award grants to nonprofit organizations to undertake plans and feasibility studies for purposes consistent with Division 21. ERRP is a nonprofit organization undertaking planning for habitat enhancement, which is consistent with the purposes of Division 21.

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 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 located in a disadvantaged community and that directly benefits disadvantaged communities.

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 goal of the *California* @ 50 *Million: The Environmental Goals and Policy Report* to Steward and Protect Natural and Working Landscapes by supporting landscape-scale approaches to conservation and mitigation that account for multiple benefits. The proposed project includes consideration of multiple ecosystem benefits, species habitat and protection, impacts on water quality, and the effects of management actions on upstream and downstream communities and ecosystems, including the South Fork Eel River, the mainstem Eel River downstream of the South Fork confluence, and the Eel River estuary. The proposed project is consistent with the goal to Protect and Restore Water Resources for Important Ecosystems by prioritizing watershed protection and health in ecosystem management. Nearly two-thirds of the state's rain falls in the sparsely populated northern and mountain regions of the state. Preservation of these watersheds, therefore, is a critical component of the state's water system.

The project will help implement priorities in the *2014 California Water Action Plan*, Action 4: Protect and Restore Important Ecosystems. The proposed planning project will lead to projects that enhance water flows in stream systems statewide that support critical habitat for anadromous fish. The project will also help implement Action 5: Manage and Prepare for Dry Periods. The proposed project will develop adaptive management for water storage to reduce summer time water use. This will have significant benefit for fisheries, water quality and water supply.

The project is consistent with strategic actions identified in the CA Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan, to safeguard Biodiversity and Habitats from Climate Risks. The proposed project will support environmental stewardship across sectors to promote nature-based solutions for adapting to climate risks, and creating, maintaining, and supporting tools that help resources managers determine when and where to focus conservation activities that will protect biodiversity in the face of climate risks. Furthermore, the proposed project will provide a platform for information sharing and education. The planning proposed for the project will develop a system of information exchange through community forums and focused working groups to analyze need, prioritize opportunities for, and monitor effects of adaptive water use strategies to develop sustainable water supplies. The project is also consistent with the strategy to safeguard California Water Resources from Climate Risk. The project will prepare California for hotter and dryer conditions by improving water storage capacity and address water-related impacts of climate change on vulnerable and disadvantaged populations. Additionally, through collaboration between the state and entities working on water issues and ecosystem management issues the project will protect and restore water resources for important ecosystems.

The project is consistent with statewide conservation strategies for anadromous fish species identified in the *CA Wildlife Action Plan* in that it will help to address In-River Spawning and Rearing Habitat by promoting restoration actions that focus on ecological processes and climate change resilience (e.g.: removing barriers to migration, expanding riparian corridors). Restoration of estuarine processes and salmonid access to estuary habitat has been identified as a high priority in the *Recovery Strategy for California Coho Salmon*, prepared by CDFW in 2004. The project will help implement several range wide goals for Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (in that the project will support a comprehensive streamflow evaluation program to determine instream flow needs for coho salmon in priority watersheds (RW-I-D-08), and prepare an inventory of water use and water availability in streams with coho salmon habitat that accurately reflects existing water use and availability (RW-II-A-05).

The project will help implement several priority coho recovery actions identified in the *Southern Oregon/Northern California Coast Coho Recovery Plan* prepared by the National Marine Fisheries Service (NMFS) in 2014. The plan's discussion of the South Fork Eel River (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 project will: provide incentives and education to landowners to reduce water consumption and reduce groundwater pumping and surface water diversion by utilizing conservation and storage (SFER.3.1.6.4.); develop an educational program about water conservation programs and instream leasing programs (SFER.3.1.10.1); and assess sources of cool water and develop techniques to protect and/or improve cool water habitat (SFER.10.1.48.1).

The project will help implement recovery actions for the South Fork and Lower Eel River, identified in the *Coastal Multispecies Final Recovery Plan, Vol. II, California Coastal Chinook Salmon*, prepared by NMFS in 2016. The project will: assess watershed and prioritize potential refugia habitat sites (SFER-CCCh-2.1.1.1); 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).

The project will also help implement recovery actions identified in the *Coastal Multispecies Final Recovery Plan, Vol. III, Northern California Steelhead*, prepared by NMFS in 2016. Specifically, the project will: improve hydrologic flow conditions (SFEeR-NCSW-3.1.1); improve riparian canopy cover (SFEeR-NCSW-7.1.1); 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); prevent or minimize impairment to instream substrate/food productivity (SFEeR-NCSW-18.1.1); 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).

- 4. **Support of the public:** As discussed in the Project History section, this project is supported by local residents of the Tenmile Creek watershed who will allow their properties to be evaluated for water storage and creek enhancement opportunities. Additionally, the project is supported by several agencies and the public. See Exhibit 2 for Project Letters.
- 5. Location: The project is located outside of the coastal zone in a tributary watershed to the South Fork Eel River. Efforts to improve riparian habitat, reduce sedimentation, and increase summer water flows in the upper watershed(s) of the Eel River will translate to benefits to coastal zone resources such as anadromous fish.
- 6. Need: Without Conservancy funding, the project would not occur.
- 7. **Greater-than-local interest:** The proposed project will lead to the eventual sustainable yearround flows and healthy water quality and temperatures in these critical salmonid creeks, which will benefit the northern California populations of coho, Chinook salmon and steelhead trout.
- 8. **Sea level rise vulnerability:** This project will not be vulnerable to sea level rise because the project area (Tenmile Creek watershed) is located inland, well away from the coast in the upper South Fork Eel River drainage.

Additional Criteria

- 9. Urgency: Now that recreational cannabis is legal in California, it should be expected that operations increase in number throughout the state, and particularly in areas where cannabis grow operations already exist, resulting in increases in stream water withdrawals. As such, it is critical to work with current and potential cannabis farmers to commit to summer diversion forbearance as soon as possible to protect instream flows for fish.
- 10. **Resolution of more than one issue**: The project will lead to projects that result in adequate water supplies for cannabis farmers, fish and the general residents of the Tenmile Creek watershed and Laytonville community.
- 11. **Leverage**: See the "Project Financing" section above.
- 12. **Conflict resolution**: The project seeks to resolve water use conflicts that exist between rural residential agriculture operations and habitat restoration efforts.

- 13. **Innovation**: The project engages rural agricultural cannabis farmers to participate in water surveys and enter into water forbearance to reduce summertime stream diversions for the benefit of salmonid populations within the watershed.
- 14. **Readiness**: ERRP and partners are organized and ready to begin collecting flow measurement data and initiate outreach to local landowners beginning July 1, 2018. The project will be completed by the end of 2020.
- 15. **Realization of prior Conservancy goals**: The Conservancy has funded many projects to address poor habitat conditions in the Eel River system, including past projects in the tributaries of Howe Creek and, more recently, the Chadd Creek Fish Passage Project, and current 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. Return to Conservancy: See the "Project Financing" section above.
- 17. **Cooperation**: The project is a cooperative effort of a community- and scientist-based watershed forum, private landowners, and regulatory agencies to develop stream restoration and water conservation strategies. Additionally, the project will invite public input through public outreach and education events.
- 18. 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. The best available science from the California State scientific and research community (http://caladapt.org) predicts that the temperature increase due to GHG emissions by the end of this century will be between 3.0° and 5.3°F. Additionally, the average August high temperature is forecast to increase from 67.6° to 75.0°F and the heat wave duration will increase from 4 to 50 days. Precipitation will continue in the Mediterranean seasonal pattern of dry summers and wet winters, however the winters could be wetter and summers drier. 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 increase demand for stream diversions for human and agriculture uses, affecting critical water supplies for both salmonids and human populations in the watershed. This project will assess, identify, and prioritize opportunities for restoration and water use abeyance strategies that will lead to improved riparian habitat and enhanced surface flows during low-flow summer months.
- 19. **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. The practices will include carpooling to the project site, utilizing telecommunication technology for conferencing as opposed to driving to a location when feasible, and utilizing local personnel for fisheries surveys and water quality monitoring.

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) Section 4, NCIRWMP Goals and Objectives: Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity (Goal 3: Objective 5); and Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes (Goal 3: Objective 6). The project is also consistent with the *North Coast Regional Water Quality Control Board Watershed Management Initiative, Watershed Planning Chapter* (2005) Section 2.5 Eel River Watershed Management Area: Protect and enhance the salmonid resources (Goal 1) and Protecting other surface water uses (Goal 2). Finally, the project addresses the recommendation in the South Fork Eel River Basin Overview Final Report prepared by CDFW (2014) to carry out Flow and Water Quality Improvement Activities by protecting stream flows from diversion, particularly in low flow summer months.

CEQA COMPLIANCE:

Staff has reviewed the proposed project and determined that the project is exempt from the California Environmental Quality Act (CEQA) pursuant to the CEQA Guidelines because all project activities fall within the following exemptions.

Pursuant to CEQA Guidelines, 14 Cal. Code of Regs. section 15262, the proposed project is statutorily exempt from the requirement to prepare an environmental impact report or negative declaration because it includes the preparation of plans for possible future actions which the Conservancy has not approved, adopted, or funded. As required by section 15262, the proposed project will involve review and consideration of environmental factors associated with the restoration project.

The proposed project is also categorically exempt from review pursuant to 14 Cal. Code of Regs. section 15306 because it includes basic data collection and research and resource evaluation activities that will not result in a serious disturbance to any environmental resource and that will be undertaken as part of a study leading to an action which the Conservancy has not yet approved, adopted, or funded.

Staff will file a Notice of Exemption upon approval.