

COASTAL CONSERVANCY

Staff Recommendation
December 2, 2021

Salmonid Habitat Enhancement in Coastal Tributaries of the Lower Klamath

Project No. 21-066-01
Project Manager: Peter Jarausch

RECOMMENDED ACTION: Authorization to disburse up to \$300,000 to the Yurok Tribe to enhance salmonid habitat in Hunter and McGarvey Creeks, tributaries to the lower Klamath River in Del Norte County, and adoption of findings under the California Environmental Quality Act.

LOCATION: Del Norte County

EXHIBITS

- Exhibit 1: [Project Location Map](#)
- Exhibit 2: [Initial Study/Mitigated Negative Declaration for a Master Agreement for Timber Operations and Road Management Waste Discharge Requirements for Green Diamond Resource Company Northern California Timberlands](#)
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RESOLUTION AND FINDINGS

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

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed three hundred thousand dollars (\$300,000) to the Yurok Tribe to enhance salmonid habitat in Hunter and McGarvey Creeks, tributaries to the lower Klamath River in Del Norte County.

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

4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project.

In implementing the project, the grantee shall comply with all applicable mitigation measures described in the Initial Study/Mitigated Negative Declaration for a Master Agreement for Timber Operations and Road Management Discharge Requirements for Green Diamond Resource Company Northern California Timberlands.

The funds shall not be granted until the Coastal Commission has approved the Conservancy's use of Violation Remediation Account funds for this project.

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 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Conservancy has independently reviewed and considered the Initial Study/Mitigated Negative Declaration for a Master Agreement for Timber Operations and Road Management Discharge Requirements for Green Diamond Resource Company Northern California Timberlands adopted by the California Department of Fish and Wildlife on May 18, 2010 pursuant to the California Environmental Quality Act ("CEQA") and attached to the accompanying staff recommendation as Exhibit 2. The Conservancy finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$300,000 grant to the Yurok Tribe to enhance salmonid habitat in Hunter and McGarvey Creeks, tributaries to the lower Klamath River (see Exhibit 1). The proposed project will improve the quality of off-channel and floodplain habitats to provide vital low velocity salmonid rearing habitat and boost watershed health to improve conditions for all salmonid life stages.

Land use activities over the last century have drastically reduced the quality of aquatic and riparian habitats of the Lower Klamath Sub-basin and estuary and have resulted in a substantial decline in the number of anadromous fish. Man-made dams and water diversions in the upper basin and in several major tributaries have reduced Klamath River flows and greatly impacted the productivity of the estuary.

Lower Klamath tributaries, particularly those draining to the estuary, are important rearing and staging habitats for salmonids. They provide refuge from high water velocities or poor water quality occurring in the river and offer diverse areas for juvenile fish to forage and grow before entering the ocean. They are also important for adult fish returning from the ocean to spawn. Studies conducted in Oregon suggest that ocean survival of juvenile Chinook salmon was greatly improved when fish entered the ocean at larger sizes.

The project consists of restoring seven acres on McGarvey Creek and 9 acres on Hunter Creek. The project goals are to introduce complexity and roughness, reconnect the floodplain, and use plantings to restore natural processes and create a self-sustaining project. Once the natural processes have been restored the tributaries will support a larger population of native fish and salmonids.

Specific restoration techniques that will be used on both sites include the installation of constructed wood jams, beaver dam analogs, and revegetation. Constructed wood jams benefit fish by slowing the water and providing refuge during higher flows. They also create deeper pools downstream of the structures which benefits summer survival by providing cool water habitat. Beaver dam analogs provide benefits by adding roughness, again slowing the flow of the water, limiting stream bank erosion, and by holding water on site for longer periods of time. In addition to helping create slow, deep-water habitats both of these techniques will be used to re-connect the streams to their floodplains.

In addition, restoration on Hunter Creek will include rerouting an existing 1,600' portion of mainline logging road out of the floodplain onto higher terrain, and modification or removal of about 1,100 linear feet of ad-hoc levee, a separate structure which had been constructed to protect the road. This will allow the project to re-connect the stream to its floodplain providing the benefit of slow-moving water for overwintering salmonids, and retaining water on site for a longer time in the summer months.

As part of the project, the Yurok Tribal Fisheries Department (YTFD) will conduct monitoring at both sites through the end of 2026. This is a critical project component to evaluate the success of the project and of the restoration techniques themselves. Monitoring will be used to evaluate whether or not to modify elements of the project so that they can perform better, and documenting the project outcomes will enable restoration practitioners to learn how to more cost-effectively restore similar sites in the future.

Site Description:

McGarvey and Hunter Creeks are tributaries to the Lower Klamath River, in northern California. Both creeks support spawning populations of Chinook, Coho, steelhead, coastal cutthroat trout, lamprey species, and numerous other native fish (sculpin, three-spined stickleback, Klamath

small-scale sucker, speckled dace). Both watersheds have been subjected to intense historic logging, road building, and loss of channel-stored wood and naturally formed wood jams. Virtually all old growth conifers were logged within these watersheds, which has led to significant decreases in wood recruitment to aquatic habitats.

Most of the McGarvey and Hunter Creek watersheds are owned and managed for industrial timber production by Green Diamond Resource Company (GDRC). The YTFD has built a strong partnership with GDRC over the last few decades that allows for vital physical and biological monitoring and implementation of innovative and effective fish habitat enhancement projects on GDRC managed lands within the Lower Klamath River. The proposed activities are part of larger-scale efforts to significantly improve fish habitats and watershed resiliency in these priority coastal tributaries. YTFD through its Yurok Watershed Restoration Program has been implementing upslope and instream habitat enhancements in these creeks since the late 1990s.

McGarvey Creek enters the south side of the Klamath River 6.4 river miles upstream of the Pacific Ocean. In addition to logging related impacts, McGarvey was further impacted with the construction of the U.S. Highway 101 bypass through its headwaters in the 1980's (Gale and Randolph 2000). Riparian areas are dominated by stands of red alders and there is considerable lack of channel complexity, off-channel alcoves and pools, and floodplain connectivity.

Hunter Creek enters the north side of the Klamath River estuary ~1.2 miles upstream of the Pacific Ocean. Forests in the watershed are comprised of coastal redwood, Sitka spruce, western red cedar, red alder, big-leaf maple, and willow species. Sections of GDRC's H10 Road occupy and disconnect once-productive floodplain habitats within Hunter Creek.

Grant Applicant Qualifications:

The Yurok Tribe is highly qualified to carry out the proposed project. The Tribe's Fisheries Department has been conducting fisheries related assessments of the Klamath River estuary and several off-estuary tributaries since the late 1990s. They have used this research to guide their restoration activities and tribal policies. The Yurok Tribe is highly motivated to restore fish populations of the Klamath Basin for the benefit of present and future generations of the Yurok People.

The YTFD has successfully completed numerous projects similar in scale (with respect to scope of work, proposed actions, budget) or larger than this proposed project. Two recent examples include a water quality and fisheries habitat restoration in Blue Creek in the Lower Klamath River watershed, and an off-channel rearing habitat enhancement project on Hunter Creek. Similar to the proposed project, these projects included: floodplain enhancement, installing constructed wood jams (CWJs), adding whole tree materials to floodprone surfaces, planting native trees, and relocating and decommissioning roads. The YTFD managed multiple funding sources to implement the projects.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the “Consistency with Conservancy’s Strategic Plan” section below.

2. Project is a good investment of state resources.

This project is a good investment of state resources because it will benefit the recovery of endangered salmonids in the Klamath Basin, a statewide priority. Removal of dams upstream will occur in the next five years which will open up more spawning habitat. Improved overwintering habitat in the Klamath estuary is needed to make the overall recovery of the species successful.

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

The project was developed by the Yurok Tribal Fisheries Department and the Yurok Tribe will be undertaking the work.

4. Project benefits will be sustainable or resilient over the project lifespan.

The project is designed to restore natural processes in two tributaries to the Klamath River. Once the restoration work is complete these sections of the streams will be self-sustaining. The project is at high enough elevation that it will not be impacted by predicted sea level rise. The restoration is specifically designed to provide refuge from high flow events for salmonids, and other native fish. These high flow events are expected to become more frequent over the next 50 years.

5. Project delivers multiple benefits and significant positive impact.

The project will provide multiple benefits. It will meet the Federal and State goals of helping restore endangered salmonids. Additionally, salmonids are highly important for the cultural life of the Yurok Tribe. A healthy cultural life is a key ingredient to the long-term well-being of the Yurok people.

6. Project planned with meaningful community engagement and broad community support.

The project occurs on homelands of the Yurok People and the surrounding communities are largely populated by Yurok citizens. The Yurok Tribe is a leader in water and fisheries protection and conservation throughout the Klamath Basin. YTFD worked with Fiori GeoSciences, a consulting firm, to design the project to meet salmonid habitat enhancement objectives identified through comprehensive watershed and biological assessments. The project will implement priority Klamath River Coho recovery actions identified by NMFS, USFWS, CDFW, GDRC, and PacifiCorp. USFWS has also contributed partial funding to support the project via their Partners for Fish and Wildlife Program (PFW) and award of an FY20 Klamath River Grant. PFW has and will continue to provide technical assistance as needed and permitting support for the project. The project also supports the

Klamath River Coho Ecology Study which is led by the Yurok and Karuk tribes and in collaboration with several key basin partners (U.S. Bureau of Reclamation, USFWS, Mid-Klamath Watershed Council, Scott River Watershed Council, U.S. Geological Survey, NMFS, CDFW). See Exhibit 2 for Project Letters.

PROJECT FINANCING

Coastal Conservancy (Violation Remediation Account)	\$300,000
United States Fish and Wildlife Service	\$244,720
Project Total	\$544,720

Unless specifically labelled “Required Match” the other sources of funding listed above are provided as estimates. The Coastal Conservancy does not typically require matching funds nor does it require documentation of expenditures from other funders. Typical grant conditions require grantees to provide any funds needed to complete the project.

The anticipated source of Conservancy funding will be funds deposited in the Conservancy’s Violation Remediation Account (VRA) pursuant to the settlement of a Coastal Act lawsuit: Coastal Law Enforcement Action Network v. California Dept. of Transportation, Del Norte County Superior Court Case No. CVUJ-07-1019, related to Caltrans work on the Highway 101 bridge crossing the Klamath River. The settlement agreement, entered into on November 21, 2008 between Coastal Law Enforcement Action, the California Department of Transportation, and the California Coastal Commission, required that the settlement funds be spent on fish habitat improvements in Waukell Creek, a tributary of the Klamath River. As the Waukell Creek projects have proved infeasible, the Coastal Commission and CalTrans are in the process of amending the agreement to broaden the permissible uses of the funds to cover fisheries restoration projects at other Klamath tributaries and associated administrative costs.

Two additional grants were secured by the Yurok Tribe for this project, a grant from the USFWS Klamath Fund as well as a USFWS Partners for Fish and Wildlife grant.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to the Conservancy’s enabling legislation, Division 21 of the Public Resources Code, in particular Chapter 6 (Pub. Res. Code Sections 31251-31270) regarding coastal resource enhancement projects.

Section 31251 authorizes the Conservancy to undertake and award grants to public agencies for projects that will enhance the natural character of coastal resources which, because of human induced events or incompatible land uses, have suffered loss of natural and scenic values.

Pursuant to section 31251.2(a), to enhance coastal resources within the coastal zone, the Conservancy may award a grant for a project that enhances a watershed resource that is partly outside of the coastal zone. Portions of the project are located outside of the coastal zone however both McGarvey and Hunter Creek provide habitat for salmon populations known to travel many miles upstream of the coastal zone boundary to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high-quality habitat both within and outside of

the coastal zone to survive. Thus, salmon are watershed resources located both within and outside the coastal zone, and the restoration of McGarvey and Hunter Creek will enhance this watershed resource, thereby enhancing a coastal resource. To maintain and restore salmon to historic levels, projects to improve salmon habitat must be undertaken both within and outside the coastal zone.

The authorization is consistent with the relevant portions of the Del Norte County Local Coastal Program (DNLCP), 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 DNLCP, Chapter VI, the following goals and objectives are identified:

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.”(p. 55)

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

The County encourages programs (e.g., fish hatcheries, habitat rehabilitation) designed to improve the quality of coastal fisheries and other marine resources. (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. (p. 58)

The proposed project, when implemented, will improve anadromous fish habitat by improving juvenile rearing habitat thereby enhancing the aquatic resources of the county, and, thus, is consistent with the DNLCP.

Under Section 31017, public agencies include federally recognized Indian tribes. The proposed project will restore sections of Hunter and McGarvey Creeks and enhance habitat for threatened and endangered salmonids, an important coastal resource, and is thus consistent with Section 31251.

Pursuant to Section 31253, the Conservancy may provide up to the total cost of any coastal resource enhancement project, and the amount of funding provided is to be determined by the total amount of funding available for coastal resource enhancement projects, the fiscal resources of the applicant, the urgency of the project, and other factors. The proposed funding source for this project is available only for salmonid restoration projects in the lower Klamath basin.

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

Consistent with **Goal 6, Objective D** of the Conservancy's 2018-2022 Strategic Plan, the proposed project implements a project that restores coastal watersheds and floodplain by restoring 16 acres of Hunter and McGarvey Creeks.

Consistent with **Goal 6, Objective E** of the Conservancy's 2018-2022 Strategic Plan, the proposed project restores fish habitat in sections of Hunter and McGarvey Creeks.

Consistent with **Goal 8, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project implements a project to increase resilience to climate change impacts by increasing the capacity of Hunter and McGarvey Creeks to retain cool water during the summer, and by slowing down the water during intense winter storms.

CEQA COMPLIANCE:

All proposed activities will take place on Green Diamond Resource Company property and are covered under the Master Agreement for Timber Operations No. 1600-2010-0114-R1 (MATO) and the accompanying Initial Study/Mitigated Negative Declaration for a Master Agreement for Timber Operations and Road Management Discharge Requirements for Green Diamond Resource Company Northern California Timberlands (IS/MND). The MATO governs long term management of the Green Diamond property. This project is an allowable activity under Section 2 item 12 "Instream Restoration—installation, repair, replacement, maintenance, and upgrading of instream restoration structures." Under the MATO all in-stream restoration work shall follow the *California Salmonid Habitat Restoration Manual*. Alternative restoration techniques must be approved by the California Department of Fish and Wildlife and shall achieve or exceed the conservation objectives set forth in the *Manual* (MATO Section A.8 Instream Restoration Projects, page 106)

The IS/MND evaluated activities authorized under the MATO and found that there is only the potential for significant impacts to Biological Resources. Under Biological Resources there is the potential for impact to aquatic habitat & species, terrestrial species, as well as riparian habitat. The MATO covers a wide range of activities and the potential impacts to these resources come from timber harvest and road maintenance. Mitigation measures are identified for those activities which will reduce the potential impacts to less than significant. In-stream restoration work undertaken by this project such as the installation of large woody debris, increased bank stabilization, and improving canopy cover are all identified as having a positive impact on aquatic and riparian habitat (IS/MND page 20).

Staff has independently evaluated the IS/MND and concurs that there is no substantial evidence that the proposed project will have a significant effect on the environment. Staff therefore recommends that the Conservancy find that the project as mitigated avoids, reduces or mitigates the possible significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the project will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.

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