

COASTAL CONSERVANCY

Staff Recommendation
March 25, 2021

Wood Creek Restoration Phase III: Felt Ranch Habitat Restoration Planning

Project No. 20-041-01
Project Manager: Julia Elkin

RECOMMENDED ACTION: Authorization to disburse up to \$188,480 to The Buckeye Conservancy to conduct planning and prepare designs, permit applications and environmental review documents for off-channel salmonid rearing habitat restoration along Wood Creek on the Felt Ranch property in Humboldt County.

LOCATION: Freshwater Creek Watershed, near the City of Eureka, Humboldt County

EXHIBITS

- Exhibit 1: [Project Location Map](#)
Exhibit 2: [Current Site Conditions](#)
Exhibit 3: Project Letters
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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 one hundred eighty-eight thousand four hundred and eighty dollars (\$188,480) to The Buckeye Conservancy (“the grantee”) to conduct planning and prepare designs, permit applications and environmental review documents for off-channel salmonid rearing habitat restoration along Wood Creek on the Felt Ranch property in Humboldt 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 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 Buckeye Conservancy is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of up to \$188,480 to The Buckeye Conservancy to conduct planning and prepare designs, permit applications and environmental review documents for off-channel salmonid rearing habitat restoration along Wood Creek on the Felt Ranch property in the Humboldt Bay watershed, Humboldt County (see Exhibit 1).

Estuarine environments, particularly the brackish transition zones between freshwater and tidal habitats, are essential for anadromous salmonids to undergo required physiological adaptations prior to entering the ocean. Brackish stream habitat is where young salmonids can find refuge from wintertime floodwaters as well as a food-rich environment. However, due to Humboldt Bay's legacy of levee construction and agricultural development, only 10-15% of the Bay's historically occurring brackish stream habitat remains accessible to fish.

Freshwater Creek supports the largest coho salmon runs of any Humboldt Bay tributary and yet brackish stream habitat remains scarce within the Freshwater Creek watershed. Wood Creek, a small tributary to Freshwater Creek, presents significant opportunities to restore brackish stream habitat.

The Conservancy has been closely involved in the restoration of Wood Creek for more than a decade, starting with the Conservancy's role supporting North Coast Regional Land Trust's (NCRLT) acquisition of the 54-acre Freshwater Farms Reserve property in 2005. With financial support from the Conservancy, the Wood Creek Phase I Project was completed on the Freshwater Farms Reserve in 2009, successfully restoring tidal influence into lower Wood Creek through the removal of a tide gate near the confluence of Wood Creek and Freshwater Slough and construction of a network of tidal channels (see Exhibit 1). These actions restored 35 acres of tidal marsh, creating critical habitat for listed salmonids and federally endangered tidewater goby while maintaining the Freshwater Farms Reserve's agricultural heritage as a working landscape.

In 2013, the Conservancy helped fund the acquisition of an additional 20 acres for the Freshwater Farms Reserve by NCRLT. This acquisition enabled the Wood Creek Phase II Project, which expanded and enhanced brackish backwater habitats directly upstream of the Phase 1 project area on Wood Creek. The Phase II project was completed in 2019.

The Wood Creek Phase III project is located upstream of these prior project efforts, on the privately-owned Felt Ranch, where the landowners have been working in partnership with the Natural Resource Conservation Service (NRCS) to protect and restore cold-water spring-fed freshwater wetlands that occur on that property. In 2019, the landowners and NRCS implemented a project to improve drainage on an established NRCS Wetland Reserve Easement by creating a channel to convey emergent surface water that occurs at the upper end of the Wood Creek basin on the ranch property. NRCS offers Wetland Reserve Easements under their Agricultural Conservation Easement Program.

The Wood Creek Phase III project will be designed to restore salmonid access to freshwater rearing habitat at the upper end of the Freshwater Creek stream estuary ecotone as well as greatly increase hydrologic connectivity between the Felt Ranch wetlands and restored tidal wetlands downstream in Wood Creek. These actions, when implemented, will improve the winter growth and survival of juvenile coho salmon while also benefitting other wildlife in the Freshwater Creek watershed.

Additionally, the Wood Creek Phase III project will continue enhancement of existing freshwater wetlands on Felt Ranch and extend the existing NRCS wetland drainage channel westerly to the project area to route seasonal freshwater inflows, ameliorating current poor drainage conditions on the Felt Ranch's agricultural lands. Thus, the Wood Creek Phase III Project seeks to both greatly enhance habitat conditions for salmonids and improve the viability of the remaining working lands on the property.

California Department of Fish and Wildlife (CDFW) will fund the Wood Creek Phase III project planning and design through a pending grant from their Fisheries Restoration Grant Program (see Project Financing section). The project recommended for Conservancy funding is to conduct planning and prepare designs, permit applications and environmental review documents, prepare permit applications, and conduct necessary environmental review under CEQA for the Wood Creek Phase III project.

Regional conservation experts have identified and prioritized the Wood Creek Phase III project through the ongoing Non-Natal Restoration Planning Project (funded by CDFW in 2017) as the second most important non-natal restoration site in all of Humboldt Bay. The project is supported by the Felt Ranch landowner, the adjacent downstream landowner NCRLT, and Humboldt County. The project will engage a Technical Advisory Committee of project partners including NRCS, NCRLT, CDFW, U.S. Fish and Wildlife Service, and NOAA Fisheries to convene at regular intervals during the planning process for design review and project discussions.

Site Description: The project is located on Humboldt County Assessor's Parcel Numbers 403-071-060; 403-071-061; and 403-071-052. Specifically, the project area consists of approximately 47 acres of Felt Ranch, a private working ranch owned and operated by Sean and Kathryn O'Day. Felt Ranch is located northeast of Myrtle Avenue at Felt Road, north of Eureka in

unincorporated Humboldt County, California (see Exhibit 1). The project area is bounded to the east by a recent NRCS-funded bridge installation and wetland restoration adjacent to the main ranch buildings and is bounded to the south by the inboard ditch system that conveys Wood Creek on the south side of Felt Road. The project area's western boundary lies slightly west of Myrtle Avenue adjacent to the upstream extent of the Wood Creek Phase II project on the Freshwater Farms property. The project area's northern boundary lies within an NRCS Reserved Grazing Rights Easement on Felt Ranch (NRCS Easement #66910412019DZ). The majority of the project area overlaps an existing NRCS Wetland Reserve Program easement on Felt Ranch (NRCS Easement #66910412019DW).

Historical maps indicate that the project area was previously the upper ecotone of the Freshwater Creek estuary and consisted of multiple channels and expansive wetlands. Today, most of the project area consists of a mixture of cattle pasture and cattail marsh.

Grant Applicant Qualifications: The Buckeye Conservancy (TBC) is a 501(c)(3) non-profit organization established in 1999 with the mission to protect open space and family ranch land values on California's North Coast. They are committed to the long-term economic and ecological viability of ranches and private forests throughout Humboldt County, and have demonstrated success developing and implementing projects with private landowners in the region.

As this project's non-profit fiscal sponsor, TBC will provide project oversight, grant administration and act as the link between funding agencies, project proponents, the landowner, and the project's team of qualified contractors, including the technical lead for the project, Thomas Gast & Associates Environmental Consultants.

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 proposed project is consistent with the following plans and policies:
 - Priority Action 4 identified in the 2014 California Water Action Plan, prepared by CalEPA, the California Natural Resources Agency, and the California Department of Food and Agriculture), which provides: "Protect and Restore Important Ecosystems". The project will implement this action by conducting the planning necessary to restore brackish stream corridor in an estuary that provides valuable fish and wildlife habitat.

- A Management Measure identified in the California Nonpoint Source Pollution Control Program prepared by the State Water Resources Control Board in 2000: MM6B-Restoration of Wetlands and Riparian Areas, which provides for the recovery of a range of wetland and riparian functions that existed previously by reestablishing hydrology, vegetation, and structure characteristics.
 - California Wildlife Action Plan, prepared by the California Department of Fish and Wildlife (CDFW) in 2007: Federal, state, and local agencies, nongovernmental conservation organizations, and private landowners should protect and restore under-protected and sensitive habitat types.
 - The following tasks identified in the Recovery Strategy for California Coho Salmon, prepared by CDFW in 2004:
 - Eureka Plain Task 2: Work with agencies and landowners to re-establish estuarine function.
 - Eureka Plain Task 10: In cooperation with willing landowners, restore and maintain historical tidal areas, backwater channels, and salt marsh.
 - Rangewide-Estuaries Task 2: Restore estuarine and associated wetland ecosystems.
4. **Support of the public:** The proposed project is supported by the project-site landowner, the adjacent downstream landowner, NCRLT, Humboldt County, and will engage a technical advisory committee of project partners including NRCS, NCRLT, CDFW, USFWS, and NOAA Fisheries (see Exhibit 3).
 5. **Location:** See the “Project Summary”.
 6. **Need:** The proposed project would not occur without Conservancy funding.
 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:** With a majority of the project area located in the Coastal Zone, the project site is vulnerable to long term sea-level rise impacts. The project design approach will consider future increases in tidal datums using the State’s most current projections for sea level rise.

Additional Criteria:

9. **Resolution of more than one issue:** The proposed project will address both flooding issues on the Felt Ranch property helping to protect working lands, and fish and wildlife habitat enhancement through the design of stream habitat restoration actions.
10. **Leverage:** See the “Project Financing” section below.
11. **Readiness:** TBC is prepared to finish the project in a timely manner.
12. **Realization of prior Conservancy goals:** “See Project Summary.”

13. **Cooperation:** The landowners of Felt Ranch are working closely with TBC and NRCS to identify and further successful project opportunities that benefit this working agricultural property and the health of Wood Creek. The project approach includes the regular convening of a Technical Advisory Committee of restoration practitioners and regulatory agencies.
14. **Vulnerability from climate change impacts other than sea level rise:** Increasing the connectivity and extent of Wood Creek’s wetland habitats will enhance the flood storage and conveyance functions of the creek during extreme rainfall events, addressing existing flooding issues that are predicted to worsen because of climate change.

PROJECT FINANCING

Coastal Conservancy	\$188,480
California Department of Fish and Wildlife (pending)	
Fisheries Restoration Grant Program	\$315,589
Project Total	\$504,069

The expected source of Conservancy funds for this project are funds appropriated 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, 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 (Water Code Section 79732(4 &12).

The proposed project helps achieve the above-identified Chapter 6 purposes and provides multiple benefits. By completing the planning work necessary to restore hydrologic function and connectivity between freshwater habitat and adjacent downstream brackish habitat, the project will enable restoration of historic access to spawning and rearing habitat while also reducing upstream flooding on agricultural working lands. 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 Water Code § 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.

\$315,589 of project funding will be provided through California Department of Fish and Wildlife’s Fisheries Restoration Grant Program (FRGP). The FRGP is a competitive grant program established in 1981 in response to rapidly declining populations of wild salmon and steelhead

trout and deteriorating fish habitat in California. The program has invested millions of dollars to support qualifying projects throughout coastal California. Formal award of FRGP grant funds from California Department of Fish and Wildlife to TBC is anticipated to occur in June 2021.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The project is authorized pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Public Resource Code Section 31220. Pursuant to Section 31220(b), the Conservancy may award grants to nonprofit organizations to improve and protect coastal, coastal watershed and marine water quality and habitat, including projects that restore fish habitat within coastal watersheds (Sec. 31220(b)(2)), and projects that protect and restore floodplains and other sensitive watershed lands, especially watershed lands draining to sensitive coastal or marine areas (Sec. 31220(b)(6)). As discussed above, the project will conduct the planning necessary to restore natural hydrologic function, thereby increasing fish passage opportunity while also reducing nuisance flooding. As required by Section 31220(a), staff has consulted with the North Coast Regional Water Quality Control Board about the project. Finally, consistent with Section 31220(c), the proposed project will establish 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 A** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop a plan to restore coastal stream corridor habitat.

Consistent with **Goal 6, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop plans to improve and enhance fish passage.

Consistent with **Goal 7, Objective A** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop plans for a project that fosters the long-term viability of coastal working lands by reducing flooding on active ranchlands.

Consistent with **Goal 8, Objective B** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop plans for an adaptive project that expands and improves upstream brackish habitat reaches of increasing importance as rising sea levels push tidal influence further upstream.

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

The project is consistent with, and furthers the goals of, the Humboldt Bay Management Plan (HBMP), prepared in May 2007 by the Humboldt Bay Harbor, Conservation and Recreation District. The proposed project is consistent with Objective CAS-3: "Maintain and enhance habitat for sensitive species" (HBMP, p.204), in that it will lead to the restoration of habitat for coho and Chinook salmon, steelhead trout, tidewater goby, and coastal cutthroat trout.

The project is consistent with, and furthers the goals of, the Humboldt Bay Watershed Salmon and Steelhead Conservation (HBSSC) Plan, prepared by the Humboldt Bay Watershed Advisory Committee in March 2005. The HBSSC Plan highlights the importance of the Bay's tidal marshlands in supporting salmon populations, as well as diverse communities of fish and wildlife (p.11). The HBSSC Plan notes that estuarine habitat is necessary for the survival of salmon and that this habitat "has been significantly reduced by construction of levees and tidegates, and placement of fill" (HBSSC Plan, p.viii). One of the stated goals of the HBSSC Plan is to "[m]aintain and restore estuary processes that benefit salmonids" (HBSSC Plan, p.ix). The proposed project, when implemented, would further this goal by restoring brackish habitat.

The proposed project is consistent with the Water Quality Control Plan for the North Coast (adopted by the Regional Water Quality Control Board North Coast Region in 1988 and last updated in 2007) in that, when implemented, it will enhance wildlife habitat, habitat for rare, threatened and endangered species, and estuarine habitat in Humboldt Bay. The Water Quality Control Plan for the North Coast specifies beneficial uses and water quality objectives for North Coast water bodies, including the Eureka Plain HU, which includes the project area. By protecting wetlands and adjacent uplands, this project will protect and enhance beneficial uses of the Freshwater Creek watershed in the Eureka Plain HU identified in the Plan, including 1) wildlife habitat, 2) rare, threatened and endangered species habitat, and 3) estuarine habitat (Water Quality Control Plan for the North Coast, Table 2-1, pp. 2-8 to 2-12).

CEQA COMPLIANCE:

The proposed project is statutorily and categorically exempt from the California Environmental Quality Act (CEQA), pursuant to 14 California Code of Regulations Sections 15262 and 15306 because the project will only involve planning studies, basic data collection, research, and resource evaluation activities. Consistent with Section 15262, the project will consider environmental factors. Consistent with Section 15306, the project will not have a significant impact on an environmental resource and will be used as part of a study leading to an action that a public agency has not yet approved, adopted or funded.

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