

COASTAL CONSERVANCY

Staff Recommendation

May 18, 2005

HUMBOLDT FISH PASSAGE IMPROVEMENT PROGRAM

File No. 05-041

Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to \$466,272 to the County of Humboldt (“County”) to implement prioritized fish passage improvement projects identified in the Five Counties Salmonid Conservation Planning Program within the County of Humboldt.

LOCATION: Humboldt County coastal watersheds (Exhibit 1).

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: Letters of Support

RESOLUTION AND FINDINGS:

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

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed four hundred sixty-six two hundred seventy two thousand dollars (\$466,272) to the County of Humboldt to implement fish passage improvement projects, subject to the following condition that no Conservancy funds shall be disbursed toward implementation of any proposed project until the Conservancy authorizes the proposed project.”

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 project is consistent with the purposes and criteria set forth in Chapter 6 of Division 21, sections 31251 – 31270 of the Public Resources Code regarding the enhancement of coastal resources.

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2. The proposed authorization is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.”

PROJECT SUMMARY:

Staff recommends authorization to disburse up to \$466,272 to the County of Humboldt (“County”) to implement fish passage improvement projects consistent with the prioritization of projects developed by the Five Counties Salmonid Conservation Planning Program. The purpose of this authorization is to improve fish passage in streams where barriers to fish passage have resulted from the inappropriate design and construction of road crossings or other instream structures. Historically, road crossings, culverts, and other structures were inappropriately constructed, inadvertently preventing the upstream passage of anadromous fish, such as salmon, steelhead and coastal cutthroat trout. The proposed fish passage projects would be located throughout Humboldt County watersheds.

The County will use the funds to develop specific individual projects that improve fish passage in coastal watersheds. The County will allocate funds with assistance from Conservancy staff. Projects will be evaluated on the basis of several criteria, such as prioritization of individual projects by the Five Counties Program, consistency with the California Coho Recovery Plan, readiness for construction, local funding contribution, and compliance with the California Environmental Quality Act. Specific projects recommended for funding will be brought back to the Conservancy for final approval and authorization.

Like many such structures, culverts at road crossings have prevented fish from ascending streams due to excessive heights between culvert outlets and plunge pools below, and impassably high flow velocities within the culverts themselves. Fish capable of ascending barriers are often too fatigued to spawn. Fish prevented from ascending such culverts typically congregate in discharge pools below the culvert, where they may fall prey to predators or poachers. Moreover, culvert failures often result in road failure, mass failure of slopes, resultant erosion, property damage, and the degradation of waters and salmonid habitat downstream.

Thousands of such barriers to fish passage have been identified, and are cited in the Conservancy’s recently completed report, “Inventory of Barriers to Fish Passage in California’s Coastal Watersheds.”

The opportunity to recover fish populations while improving local roads and diminishing future maintenance costs has made county governments keen participants in fish passage improvement projects. However, the ability of county governments to implement fish passage improvement projects is hampered by the ability of local government staff to effectively design, permit and implement promising projects. This grant would expedite the implementation of a block of fish passage improvement projects, thereby expediting the recovery of habitat for anadromous fish and other aquatic species found in coastal watersheds.

Project History: In 1997, the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity agreed to collaborate on a proactive response to the federal listings of salmon as threatened species by forming the Five Counties Salmonid Conservation Program (“FCSCP”). The goal was to seek opportunities to contribute to the long-term recovery of salmon and

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steelhead in Northern California. The objectives were to: evaluate options for improving county plans, policies, and practices to provide or improve salmonid habitat; identify areas where Counties might be vulnerable to challenges under the ESA; and upgrade training programs and recovery project monitoring and reporting procedures. Initial meetings identified causative factors of salmonid declines and how county infrastructure contributed to that decline, information gaps on limits to salmonid recovery, and priority tasks required to obtain missing information necessary for concerted recovery efforts. A high-priority task included conducting culvert inventories on county roads to evaluate fish passage and prioritize treatments.

The inventories and fish passage evaluations of culverts within the five counties' road systems were conducted between 1998 and 2000. The objective was to assess passage of juvenile and adult salmonids and develop project scheduling documents to prioritize corrective treatments to provide unimpeded fish passage. The inventories were limited to county-maintained crossings within anadromous stream reaches known to historically and/or currently support runs of coho salmon (*Oncorhynchus kisutch*), chinook salmon (*O. tshawytschia*), and/or steelhead (*O. mykiss irideus*).

Following completion of the final fish passage barrier reports, two of the counties sought financial assistance for project implementation from the Conservancy, and others sought funds from the California Department of Fish and Game. Subsequently, the Conservancy authorized grants to the Counties of Humboldt and Del Norte to help implement 10 fish passage improvement projects. These included: Lindsay Creek, a tributary to Mad River, and considered the best coho salmon and coastal cutthroat trout tributary within the entire Mad River watershed; And North and South Fork Anker Creek, tributaries to the Mad River. All of these projects have enjoyed tremendous success, with documented spawning and rearing of coho, steelhead, and Chinook salmon above the former barriers. Additionally, at the June, 2002 meeting, the Conservancy approved the Digger Creek Barrier Removal Project in Mendocino County, which was originally identified as a high priority in the Mendocino County inventory.

Simultaneously, and in response to an appropriation from the Salmon Habitat Restoration Program, sponsored by Senator Byron Sher (D-Palo Alto), the Conservancy conducted an extensive and first-of-its-kind inventory of existing fish passage barrier data for coastal California streams. That report identifies more than 20,000 potential barriers to fish passage, 65 of which are high – priority artificial total barriers to fish passage.

In an effort to expedite the design and permitting of high – priority projects, the Conservancy awarded a design and permitting grant to the County of Trinity to design, permit and prepare for implementation at least ten fish passage improvement projects on August 14, 2003. The County of Trinity and its partners in Humboldt County have utilized this grant effectively, leveraging the planning grant by securing funds to implement nearly all of the projects, and thereby ensuring the timely implementation of the projects. The Counties recently celebrated the 100th mile of historic habitat reopened to spawning and rearing for pacific salmon.

PROJECT FINANCING:

Coastal Conservancy

\$466,272

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Humboldt County <i>(Biological and Technical Services)</i>	\$32,000
Total Project Cost	\$498,272

The expected source of Conservancy funds for this project is the appropriation to the Conservancy from the Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Act of 2000 (Proposition 12), Coastal Salmon Funds. The County will provide approximately \$32,000 of in-kind contributions in the form of data collection, technical analyses, project design, and permit material preparation for pre-implementation planning and implementation purposes.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270, respectively), as follows:

Pursuant to Section 31251, the Conservancy may award grants to local public agencies and non-profit organizations for the purpose of enhancement of coastal resources which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to the County to enhance coastal fishery resources disturbed by incompatible land uses, such as inappropriate culvert installation.

Pursuant to §31251.2(a), “In order to enhance the natural or scenic character of coastal resources within the coastal zone, the Conservancy may undertake a project or award a grant...to enhance a watershed resource that is partly outside of the coastal zone....” Consistent with this section, the County, which is located partially outside of the coastal zone, requested Conservancy assistance with projects located within and outside the coastal zone. This assistance was sought in order to implement potential projects intended to benefit salmon populations known to travel many miles upstream of the coastal zone boundary in order to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high quality habitat both within and outside of the coastal zone in order to survive. If salmon and other highly prized aquatic resources are to be maintained and restored to historic levels, funding must be provided to improve salmon habitat both within and outside the coastal zone. This section also requires the support of the California Department of Fish and Game. The Department is highly supportive of these projects, and a letter of support letter for this authorization from the Department is included in Exhibit 2.

Pursuant to Section 31252, all areas proposed for resource enhancement should be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource problems. Consistent with this section, the Humboldt County Local Coastal Program identifies the need for public action to restore coastal streams (see “Consistency with Local Coastal Programs,” below).

Finally, pursuant to Section 31253, “(the) Conservancy may provide up to the total of the cost of any coastal resource enhancement project....” and the amount of the Conservancy contribution

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shall be determined only after an assessment of funding generally available and other factors. The proposed contribution by the Conservancy was determined based on application of priority criteria, as discussed below, and after taking into account other available resources and the matching contributions to the project by other funding sources.

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6 Objective A** of the Conservancy's Strategic Plan, the proposed project will contribute to the development of approximately 70 plans and projects that preserve and restore coastal watersheds and create river parkways.

Consistent with **Goal 6 Objective A(1)** of the Conservancy's Strategic Plan, the proposed project, the proposed project will leverage the results of the recently completed study of barriers to fish passage, through the implementation of projects to improve habitat for anadromous fish. The proposed authorization will enable the Conservancy, in concert with the grantee, to increase available habitat for aquatic species, notably salmon, by preparing to remove instream barriers to their free migration. By employing the Conservancy's recently completed report, "An Inventory of Barriers to Fish Passage in California's Coastal Watersheds," as well as the expertise of the grantee, the Conservancy will ensure measurable increases in available habitat and, presumably, measurable increases in anadromous fish populations within and above the project areas. In order to ensure the success of this strategy, Conservancy staff will, in conjunction with the grantee, monitor the efficacy of the implemented projects and chronicle the degree of success at each site.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, 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. **Support of the public:** Supporters of this project include Congressman Mike Thompson, the Department of Fish and Game, the County of Humboldt, and others. Letters of support are included in Exhibit 2.
4. **Location:** The potential project sites are located throughout the County, geographically depicted on Exhibit 1.
5. **Need:** The County of Humboldt is especially rich in anadromous fish resources. However, existing barriers obstruct recovery within the full geographic range of species either listed or potentially listed under the federal and State endangered species acts. The removal of these prioritized barriers will substantially increase recovery efforts for these important fishery

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resources by providing anadromous salmonids access to spawning and rearing sites in upper portions of the watersheds.

6. **Greater-than-local interest:** The public trust value of California's salmon and steelhead populations is of great interest to all, and is a natural legacy too precious to lose. Moreover, the historic economic contributions from sport and commercial fishing can be recovered for the overall economic benefit of the State of California.

Additional Criteria

7. **Urgency:** Coho salmon are currently at six to 15% of their abundance during the 1940s. Given this decline, and in light of the State Recovery Strategy's primary objective of returning coho salmon to a level of sustained viability, while protecting their genetic integrity, enhancement projects with a high potential for recovering local populations of coho salmon are a high priority for the State.
8. **Leverage:** See the "Project Financing" section above.
9. **Innovation:** This partnership to recover anadromous fish populations through the improvement of existing County infrastructure, such as road culverts, represents an important trend in local government towards the proactive improvement of salmonid habitat on County property.
10. **Readiness:** The project applicant has demonstrated that it has the experience, expertise, local public support, and administrative capability necessary to commence and complete the project in a timely fashion.
11. **Realization of prior Conservancy goals:** The Conservancy has authorized grants to both the Humboldt Bay Harbor Commission and the Redwood Community Action Agency for the purpose of developing enhancement plans for Humboldt Bay and its tributary streams. The tributary streams and wetlands assessed in these plans serve as the nurseries of the juvenile salmonids outmigrating from tributary streams to Humboldt Bay. Therefore, the improvement of salmonid habitat in all streams tributary to Humboldt Bay will amplify enhancement measures regionally by increasing available upstream salmonid habitat. Similarly, the Conservancy has provided several grants to the Mattole Restoration Council and others for the purpose of improving fishery habitat in the Mattole watershed. Moreover, this project will further the Conservancy's goal of enhancing coastal watersheds generally.
12. **Cooperation:** The County, funding partners, and regulatory agencies have all proven themselves hearty supporters of fish passage improvement efforts. The unprecedented level of cooperation on these types of projects has directly resulted in the implementation of successful projects that have provided increased habitat and increased populations of anadromous fish in our coastal watersheds.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

Barriers to fish passage exist within and outside of the Coastal Zone. However, the aquatic resources and habitat quality of stream channels within and outside of the coastal zone

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boundaries are inextricably linked. Thus, projects proposed for the Humboldt Bay area are consistent with the policies of the Humboldt Bay Local Coastal Program which states:

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

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

Projects sited outside and south of the Humboldt Bay area are consistent with the policies of the Humboldt County General Plan, Volume II, South Coast Area Plan of the Humboldt County Local Coastal Program which states:

“The biological productivity and the quality of coastal waters, (and) streams...appropriate to maintain optimum populations of marine organisms...shall be maintained, and, where feasible, restored through...minimizing alteration of natural streams.” (LCP, 3.41E).

“New development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to...wetlands, fishery, and wildlife enhancement and restoration projects....” (LCP, 3.41E 3(a)).

COMPLIANCE WITH CEQA:

The proposed authorization does not have the potential to result in any physical changes to the environment and therefore are not “projects” subject to the California Environmental Quality Act (CEQA), as defined in 14 California Code of Regulations Section 15378. However, any projects later proposed for Conservancy authorization of funding for implementation will be evaluated as required by CEQA.