

COASTAL CONSERVANCY

Staff Recommendation
June 16, 2005

**FIVE COUNTIES FISH PASSAGE IMPROVEMENT PROGRAM:
ADDITIONAL DESIGN AND PERMITTING**

File No. 03-019
Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse \$270,178 to Trinity County to design, permit, and prepare for implementation additional fish-passage improvement projects within the Counties of Del Norte, Humboldt, Mendocino, Siskiyou and Trinity.

LOCATION: Coastal watersheds within the Five Counties Salmonid Conservation Program (FCSCP) service area (Exhibit 1)

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following Resolution pursuant to Sections 31257 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an additional two hundred seventy thousand one hundred seventy-eight dollars (\$270,178) to the County of Trinity (“County”) for the preparation of engineering, design, environmental documentation and permitting of fish passage improvement projects. Prior to the commencement of work, the County shall submit for the review and approval of the Executive Officer of the Conservancy a work program, schedule for completion, project budget, and the names and qualifications of any contractors to be employed in the preparation of the Program.”

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:

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1. The proposed authorization is consistent with Chapter 6 (Sections 31251-31270) of Division 21 of the Public Resources Code regarding the enhancement of coastal resources.
 2. The proposed authorization is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 25, 2001.”
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PROJECT SUMMARY:

Staff recommends authorization to disburse an additional \$270,178 to the County of Trinity (County) to design, permit, and prepare for implementation at least 7 fish passage improvement projects within the Five Counties Salmonid Conservation Program (FCSCP) service area (Exhibit 1), including the Counties of Del Norte, Humboldt, Mendocino, Siskiyou and Trinity. This authorization would augment the Conservancy’s August 2003 authorization of \$400,000 to Trinity County to undertake fish passage design, engineering and permitting projects.

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. Historically, road crossings were constructed with culverts or other structures that prevented the upstream passage of anadromous fish, such as salmon, steelhead, and coastal cutthroat trout. These culverts have prevented fish from ascending numerous 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, and the degradation of waters and salmonid habitat downstream.

Many 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,” a presentation of which was provided to the Conservancy Board at its May 18, 2005 meeting.

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 and permit promising projects. This grant would expedite the design and permitting 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.

If this authorization is approved, the County will continue to design and prepare permits for a series of high priority fish passage improvement projects as it has under this grant since its award at the August, 2003 meeting of the Conservancy. The County will then

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direct and oversee the development of fish passage improvement projects, and continue seeking funds for implementation.

The FCSCP, an official association of counties sharing in common the desire to recover salmon populations in their coastal streams, largely pioneered the field of fish passage improvement in California, particularly in coastal watersheds and on county roads. The FCSCP's earlier barrier assessments and project prioritization directly led to the implementation of 29 projects between 1999 and 2002, nine of which received partial funding from the Conservancy. The work of the FCSCP is well known, and was recognized with the EPA's Clean Water Partnership for the 21st Century award, as well as a certificate of special Congressional Recognition.

The FCSCP has successfully designed, permitted, and implemented many of the projects identified in its initial scope of work under the original grant from the Conservancy. In order to prepare additional projects for implementation, the County seeks additional funds for its program.

Site Description: Project development will be limited to anadromous fish-bearing streams in the FCSCP service area (Exhibit 1), including Del Norte, Humboldt, Mendocino, Siskiyou and Trinity Counties. Specific watersheds and project sites will be identified in an addendum to the existing work plan, subject to the approval of the Executive Officer.

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 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 October 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*).

During the course of these assessments, the FCSCP matured from a loose affiliation of county, agency, and nonprofit staff to a formal fishery restoration program administered through the County of Trinity, a non-coastal county adjoining two coastal counties, and highly dependent upon the fishery resources of the Trinity River, the largest tributary to the Klamath River system.

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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. 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.

During that same time, and in response to an appropriation from the Salmon Habitat Restoration Program, sponsored by then-Senator Byron Sher, the Conservancy conducted an extensive and first-of-its-kind inventory of existing fish passage barrier data for coastal California streams. In addition to identifying more than 16,000 potential barriers to fish passage, the authors of the report learned that, despite local willingness to pursue fish passage improvement projects, project implementation was limited by the ability of local public entities to design and permit their proposed projects. Therefore, despite available grant sources for implementation, local public entities lacked sufficient funds or staffing for project development.

The FCSCP sought funds from the Conservancy to facilitate project development and implementation, and, at its August, 2003 meeting, the Conservancy awarded \$400,000 to the County of Trinity to pursue this effort. That grant has been successfully managed, so much so that 14 projects have been designed, including sites on Ryan Creek, Caspar Creek, and the Albion River, and the FCSCP has utilized those plans to seek funding from other sources for the implementation of these projects. The FCSCP now seeks additional engineering, design, and permitting funds to continue and expand this successful effort.

PROJECT FINANCING:

Coastal Conservancy (Prior Authorization)	\$400,000
Coastal Conservancy	\$270,178
Five Counties Salmonid Conservation Program (prior match)	\$290,000
Five Counties Salmonid Conservation Program (existing funds earmarked for environmental design and engineering)	50,000
Total Project Cost	\$1,010,178

Funding for the proposed authorization is expected to come from Proposition 12 funds designated for salmon habitat. The authorization is consistent with the funding source because of the importance of providing salmon, indeed all anadromous fish, with adequate passage throughout coastal watersheds.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code, as follows:

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Pursuant to §31251, the Conservancy may award grants to local public agencies and nonprofit 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 of Trinity 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 entirely outside of the coastal zone, requested Conservancy assistance with projects located within and outside the coastal zone. This assistance was sought in order to design and permit a series of 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. As one of the chief funders of the FCSCP, the Department is highly supportive of any authorization that furthers the objectives of the FCSCP.

Pursuant to §31253, “[t]he Conservancy may provide up to the total of the cost of any coastal resource enhancement project. . . .” Consistent with this section, the proposed contribution, intended for design and permitting, represents a small component of the future project cost.

The proposed authorization is consistent with the Del Norte, Humboldt, and Mendocino Local Coastal Programs as described in the Consistency with Local Coastal Program Policies below.

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 70 plans and projects that preserve and restore coastal watersheds and create river parkways.

Consistent with **Goal 6 Objective A** of the Conservancy’s Strategic Plan, the proposed project will leverage the results of the recently completed study of barriers to fish passage, and will lead to 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 designing and permitting projects that remove instream barriers to their free migration.

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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 the original authorization included the members of the FCSCP, Assemblymember Patty Berg, Senator Wes Chesbro, Congressman Mike Thompson, the Department of Fish and Game and others. These supporters, and others, have verbally indicated their continuing support for the Program and for this authorization.
4. **Location:** The proposed authorization will include design and permitting for projects within and outside of the coastal zone. In either case, the proposed authorization will improve fish passage within coastal watersheds for anadromous fish and other aquatic resources, and thereby benefit species that rely on both coastal and upstream habitats for their survival.
5. **Need:** The Five Counties are 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 resources by providing anadromous salmonids and other aquatic organisms access to spawning and rearing sites in upper portions of the watersheds. Moreover, preparation of designs and permits for high priority fish passage improvement projects is hampered by budget and staffing shortfalls at local and county levels. This seed money will enable local public entities continue to prepare projects for implementation, thereby expediting the implementation of clearly needed fish passage improvement projects.
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, sport and commercial fishing provides an important economic benefit to the State of California.

Additional Criteria

7. **Urgency:** Recovery of salmon and steelhead populations listed under the federal or state Endangered Species Acts will only occur if the concerted removal of barriers to fish passage, and subsequent recolonization of historic range, proceeds expeditiously. As populations of anadromous salmonids decline statewide, the need is urgent to recover populations by widening the available range of the species by restoring

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historically accessible habitat. 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 are a high State priority.

8. **Resolution of more than one issue:** The first and foremost issue to be resolved by this augmentation of the original authorization and the resulting projects is the recovery and improvement of the original range of anadromous fish species. As a secondary issue, decaying culverts can cause road failures and ensuing transportation problems locally. Lastly, this authorization will help resolve issues arising under the Endangered Species Act. Inasmuch as all parties agree on the importance of the work, and the protocol for proceeding with the work, the Conservancy can facilitate an agreeable solution through funding the proposed authorization.
9. **Leverage:** See the "Project Financing" section above.
11. **Innovation:** This cooperative effort to recover anadromous fish populations, including salmon, 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.
12. **Readiness:** Through the original grant to the County of Trinity, the project applicant has demonstrated the support and technical expertise necessary to commence and complete the project in a timely and cost effective fashion. The work is expected to be completed within two years.
13. **Realization of prior Conservancy goals:** The Conservancy's completion of the report "Assessment of Barriers to Fish Passage in California's Coastal Watersheds" in 2005 signals the agency's focus on and commitment to the improvement of fish passage in coastal watersheds. Having identified numerous barriers to fish passage in this report, and having supported several fish passage improvement projects already, this project provides a means of expanding the Conservancy's efforts in this area, and expediting the development of a greater number of projects in the near future.
15. **Cooperation:** The County, local, state, and federal agencies, and adjacent landowners, including the California Department of Fish and Game, have all expressed support for this authorization. Prior to site-specific project activities, the County will secure landowner cooperation.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed authorization will prepare for implementation sites from the Five Counties Salmonid Conservation Program service area in northern California, three counties of which have certified Local Coastal Programs (LCP), and two of which are outside of the coastal zone, but have important tributary streams that host large salmon and steelhead populations.

Work sites will be located 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. Barriers to fish passage affect coastal resources regardless of barrier location within the watershed. The anadromous fish populations that spend part of their life history within the coastal zone reside for extended periods outside of the coastal zone, and therefore depend upon free passage within a watershed throughout their life history.

The proposed authorization is consistent with the three certified LCPs as follows:

Del Norte County

The authorization is consistent with the relevant portions of the Del Norte County Local Coastal Program (LCP), 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 LCP, Chapter VI, the following provisions are made:

“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.” (App., p. 55)

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

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

Therefore, this recommendation’s goal of improving anadromous fish habitat by removing barriers to fish passage, and providing access to historic habitat, thereby maintaining and enhancing the aquatic resources of the county, is consistent with the LCP.

Humboldt County

The authorization is consistent with the relevant portions of the Humboldt Bay Local Coastal Program (LCP), which was certified by the Coastal Commission on October 14, 1982, and 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)

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“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)

Because the proposed authorization will prepare for projects designed to re-create riparian habitat where it has been lost; restore the natural meander and in stream habitat of the project area; improve sediment flushing by restoring natural geomorphologic processes; and open up previously unavailable habitat; therefore the proposed authorization is entirely consistent with the LCP Policy stated above.

Mendocino County

This authorization is consistent with the relevant portions of the Coastal Element of the Mendocino County Land Use Plan (LUP)—part of Mendocino County’s Local Coastal Program (LCP), which was certified by the Coastal Commission on September 10, 1992, and which states:

“Channelization, dams, or other substantial alterations of rivers and streams shall be limited to . . . necessary water supply projects. . . . Where any of these uses are permitted the best feasible mitigation measures shall be incorporated into the development.” (LUP Policy No. 3-1-9) The proposed authorization seeks to reverse the ecological consequences of ill-conceived construction projects completed prior to the adoption of the natural resource protection policies enumerated in the LUP generally, and in this policy specifically. By planning for the provision of fish passage facilities at dams and other barriers to fish passage, this authorization will begin to remove existing limitations to the historic range of commercially and socially important anadromous fish species, as well as other aquatic organisms, and set new standards for future compliance with this Policy. The proposed authorization is therefore consistent with, and will enhance the objectives of this policy.

“. . . No structure or development . . . which could degrade the riparian area or diminish its value as a natural resource shall be permitted in the Riparian Corridor except for . . . channelizations, dams or other substantial alterations of rivers and streams as permitted in Policy 3.1-9; pipelines utility lines and road crossings, when no less environmentally damaging alternative route is feasible. . . .” (LUP Policy No. 3-1-10). The proposed authorization seeks to reverse the ecological consequences of ill-conceived construction projects completed prior to the adoption of the natural resource protection policies enumerated in the LUP generally, and in this policy specifically. By planning for the replacement of outdated road crossings and other barriers to fish passage with new fish passage facilities, this authorization will begin to remove existing limitations to the historic range of commercially and socially important anadromous fish species, as well as other aquatic organisms, and set new standards for future compliance with this Policy. The proposed authorization is therefore consistent with, and will enhance the objectives of this policy.

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“The Mendocino Coast is an area containing many types of marine resources of statewide significance. Marine resources shall be maintained, enhanced, and, where feasible, restored; areas and species of special biologic or economic significance shall be given special protection; and the biologic productivity of coastal waters shall be sustained.” (LUP Policy No. 3.1-25)

Whether within or outside of the coastal zone, the proposed authorization fits the general criteria and mandate of this policy by: 1) restoring marine resources such as anadromous fish which depend upon access to available habitat in coastal streams; 2) protecting areas of the Mendocino Coast and species there of special biologic or economic significance such as steelhead and coho salmon, both of which are species of both biologic and economic significance; and c) sustaining the biologic productivity of coastal waters by enabling anadromous fish to return to their spawning grounds. The proposed authorization is thus consistent with and implements Policy No. 3.1-25.

COMPLIANCE WITH CEQA:

Preparation of the intended designs and permitting involves only data gathering, planning, and feasibility analyses for possible future actions and is thus statutorily exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to 14 Cal. Code of Regulations Section 15262. Staff will file a Notice of Exemption upon approval