

COASTAL CONSERVANCY

Staff Recommendation

October 2, 2014

**FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT**

Project No. 08-146-02

Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to \$200,000 to the Northwest California Resource Conservation and Development Council (“Council”) to design at least four fish passage and habitat quality improvement projects for future implementation in Del Norte, Humboldt, Mendocino and Trinity Counties.

LOCATION: Multiple watersheds in Del Norte, Humboldt, Mendocino and Trinity Counties, including, but not limited to the Eel, Mad, Smith, Trinity and Klamath watersheds.

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: [Council Program Area and Project Map](#)

Exhibit 2: [Council Progress Report and Project Priority List](#)

Exhibit 3: [08-046-01 Staff Recommendation of December 4, 2008](#)

Exhibit 4: [Project Letters](#)

RESOLUTION AND FINDINGS:

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

“The State Coastal Conservancy hereby authorizes the disbursement of up to two hundred thousand dollars (\$200,000) to the Northwest California Resource Conservation and Development Council (“Council”) for the preparation of engineering, design, environmental and permitting documentation for the future implementation of four fish passage improvement and water quality improvement projects (“Program”).

Prior to the commencement of work, the Council shall submit for the review and approval of the Executive Officer of the Conservancy a work program, schedule for completion, budget, and the names and qualifications of any contractors to be employed in the preparation of the Program.”

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

Prior to the disbursement of Conservancy funds, the Council shall submit for review and approval by the Executive Officer of the Conservancy:

1. A work program, including a schedule and budget.
2. The names of all contractors to be retained.
3. Documentation that all required funding has been secured.

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 the current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code, regarding resource enhancement.
3. The Northwest California Resource Conservation & Development Council is a nonprofit organization existing under section 501(c)(3) of the Internal Revenue Service, and whose purposes are consistent with Division 21 of the Public Resources Code.”

PROJECT SUMMARY:

Staff recommends the Conservancy authorize the disbursement of up to \$200,000 to the Northwest California Resource Conservation and Development Council (“Council”) to design, permit, and prepare for implementation at least four fish passage improvement projects in the Council’s Program area in the counties of Del Norte, Humboldt, Mendocino, Trinity, or Siskiyou (Exhibit 1). This authorization will enable the Council to continue improving fish passage and water quality in streams where barriers to fish passage and long-term sediment input from roads have resulted from the inappropriate design and construction of road-related stream crossings. Such efforts to date have measurably and demonstrably increased and improved coastal salmon habitat quality and quantity. Project sites will be derived from the Council’s Five Counties Salmonid Conservation Program (“5C Program”) Fish Passage and Sediment Reduction Priority Project List (Exhibit 2).

Historically, road-stream crossings were constructed with culverts or other structures that prevented the upstream passage of anadromous fish, such as salmon, steelhead, and coastal cutthroat trout. Blocking thousands of miles of historic habitat, these culverts prevent 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, like much public infrastructure, road-stream crossings are often in a state of decay, and pose a severe financial challenge to rural economies, as well as to coastal watersheds. Failing culverts can cause road fill failures, landslides, and can introduce thousands of cubic

*FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT*

yards of fine sediment into watersheds at a time when State and Federal agencies are expending millions to improve water quality by reducing erosion and controlling sediment inputs.

Many barriers to fish passage are identified in the Conservancy's report, "Inventory of Barriers to Fish Passage in California's Coastal Watersheds," as well as in the subsequently funded Passage Assessment Database ("PAD"). Together, these resources enable the Council, local governments, and others to prioritize fish passage improvement projects on criteria such as miles of habitat blocked, risk of failure, and other factors.

A prior recipient of Conservancy funding for similar work (Exhibit 3), the Council's 5C Program is an official association of counties sharing in common the desire to provide for the conservation and restoration of salmonid populations to healthy and sustainable levels in coastal streams. The 5C Program largely pioneered the field of fish passage improvement in California, particularly in coastal watersheds and on county roads. The Program's earlier barrier assessments and project prioritization directly led to the implementation of 29 projects between 1999 and 2002, nine of which received partial construction funding from the Conservancy. The work of the 5C Program is well known, and widely regarded. Amongst its awards, 5C has received the following:

- American Fisheries Society Fisheries Engineering and Ecohydrology Award (2013). Awarded for the Conner Creek migration barrier projects in Trinity County.
- The White House Conference on Cooperative Conservation, 2005. Awarded for outstanding leadership and personal stewardship in achieving results through cooperative conservation.
- NOAA 2004 Environmental Hero Award. Awarded to the 5C Program Director (and founder), Mark Lancaster, for his work with the 5C Program. Recipients were told that their "dedicated efforts and outstanding accomplishments greatly benefit the environment and make our nation a better place for all Americans."
- 2003 Governor's Environmental and Economic Leadership Award. Watershed and Ecosystem Restoration category for laudable efforts of restoring, enhancing, and improving California's watersheds, while promoting sustainable economic progress.
- Clean Water Partners for the 21st Century Award, 2003. Awarded by US EPA to the 5C Program and individual 5C participants for their watershed restoration efforts.
- Certificate of Special Congressional Recognition, April 2003. Awarded by US Congress to 5C Program for its conservation efforts in the community.
- Challenge Award, 2002. Awarded by California State Association of Counties to Siskiyou County for its anadromous fisheries restoration projects.
- Green Award, 2001. Awarded by Del Norte Solid Waste Management JPA to the Del Norte Community Development Department for its efforts in the Rowdy Creek Stream Enhancement Project.

*FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT*

- 2001 Nathaniel Bingham Award.
Awarded by the Klamath River Basin Fisheries Taskforce to the Siskiyou County Department of Public Works for supporting anadromous fisheries restoration.
- Resolution Honoring its Salmon Habitat Restoration Efforts, 2001.
Awarded by the California Department of Fish and Game to the Trinity County Department of Transportation.

Since its inception, the 5C Program has reopened more than one hundred miles of historic coastal salmon habitat.

Fish passage and water quality improvement projects provide proponents with the opportunity to recover coastal salmon populations, improve and modernize local roads, diminish future maintenance costs, and provide much needed design and construction jobs in areas frequently beset by high unemployment rates and lack of financial resources. This combination of benefits has made county governments, and others, keen participants in fish passage improvement and sediment reduction projects. However, the ability of local governments to implement fish passage improvement and sediment reduction projects is hampered by the inability of local government staff to effectively design, seek grant funding for, and eventually permit promising projects due primarily to low staffing levels. This grant would expedite the design and permitting of a block of fish passage improvement and sediment reduction projects, queuing up a suite of projects for implementation in the near future, thereby expediting the recovery of quality habitat for anadromous fish and other aquatic species found in coastal watersheds.

If this authorization is approved, the Council's 5C Program will design and prepare permits for the future implementation of a series of high priority fish passage and water quality improvement projects. The Council's 5C Program will then direct and oversee the development of these projects, and seek additional funds from a variety of sources, including the Conservancy, for implementation.

Site Description:

Project development will be limited to anadromous fish-bearing streams in the Program's service area (Exhibit 1), including Del Norte, Humboldt, Mendocino, Siskiyou and Trinity Counties. Specific watersheds and project sites, drawn from the Project Priority List (Exhibit 2) will be identified in the work plan, subject to the approval of the Conservancy's Executive Officer.

Project History: The Coastal Conservancy has invested heavily in both the design and implementation of fish passage improvement projects throughout California, and particularly on the North Coast. Prior grants to the Five Counties Salmonid Conservation Program alone have resulted in the reopening of more than 100 miles of high quality salmon and steelhead habitat formerly blocked by poorly constructed road-stream crossings. This in turn has resulted in numerous observations of salmon in previously inaccessible areas such as in Ryan Creek (Eel River) and Lindsay Creek (Mad River).

A more extensive history of the 5C Program and fish passage improvement efforts may be found in staff recommendation 08-046-01 (Exhibit 3).

The Conservancy has also played a significant role in establishing barrier removal priorities, thereby ensuring that proposed projects are likely to yield significant biological responses in the form of returning salmon and steelhead. For instance, the Conservancy funded the development of the California Passage Assessment Database, a joint effort of the California Department of

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

Fish and Wildlife and the Coastal Conservancy. The Conservancy co-chairs the Fish Passage Forum, a multi-agency venture dedicated to streamlining the reopening of historic but blocked fish habitat. The Forum recently joined the National Fish Habitat Partnership; a national association of similar groups dedicated to restoring native fish populations, and has demonstrated to the partnership its leadership in pioneering the removal of high priority barriers to fish passage.

PROJECT FINANCING

Coastal Conservancy	\$200,000
Council Funds (Other Sources)	\$50,000
Project Total	\$250,000

The anticipated source of the Conservancy's funds will be the fiscal year 2005/2006 appropriation to the Conservancy from the Water Security, Clean Drinking Water, Coastal Beach Protection Fund of 2002 (Proposition 50). Proposition 50 authorizes the use of funds for the purpose of protecting coastal watersheds through projects to acquire, protect and restore land and water resources, including associated planning, that are undertaken pursuant to the Conservancy's enabling legislation. Proposition 50 also requires that "watershed protection activities" must be consistent with the applicable adopted local watershed management plan and the applicable regional water quality control plan adopted by the regional water quality control board. Although not every watershed has an adopted local watershed management plan, those that do exist expressly and consistently advise hydrologic connectivity, defragmentation of habitat, erosion prevention and other beneficial measures that fish passage improvement projects provide. This is also true of basin plans adopted by the Regional Water Quality Control Boards, all of which call for the protection and enhancement of coldwater fisheries as a "beneficial use."The proposed project will advance these goals and objectives by preparing necessary designs to restore fish passage and improve habitat for coho salmon and steelhead trout.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

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

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 Council to enhance coastal fishery resources disturbed by incompatible land uses, such as inappropriate culvert installation or legacy slide events resulting from historic timber operations.

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 Council, which operates inside and outside of the coastal zone, requested Conservancy assistance with planning for future projects located inside and outside the coastal zone. This assistance was sought in order to design a series of projects intended to benefit

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

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, projects to improve salmon habitat must be undertaken both within and outside the coastal zone. Section 31251.2 also requires the review and approval of the California Department of Fish and Wildlife. The Department is a frequent co-funder of Council projects. An earlier support letter for this authorization from the Department is included in Exhibit 4.

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, staff has proposed the funding amount in light of the fiscal resources of the applicant, the urgency of the matter, and the application of other factors relevant to project eligibility, as detailed in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section, below.

Pursuant to §31111, the Conservancy may award grants to nonprofit organizations for plans and feasibility studies.

**CONSISTENCY WITH CONSERVANCY’S 2013
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective E** of the Conservancy’s 2013-2018 Strategic Plan, the proposed authorization will prepare for implementation four future projects to improve barriers to fish passage...and provide instream habitat and favorable water temperatures.

**CONSISTENCY WITH CONSERVANCY’S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed authorization is consistent with the Conservancy’s Project Selection Criteria and Guidelines, last updated on November 10, 2011, 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:** The proposed project enjoys the support of U.S. Congressman Jared Huffman, Assemblyman Wesley Chesbro, the member counties of the 5C Program, the Hoopa Valley Tribe and many resource agencies including the Department of Fish and Wildlife, NOAA Fisheries and more. (Exhibit 4).
4. **Location:** The authorization will be implemented with respect to anadromous fish-bearing streams in the Program’s service area (Exhibit 1), including Del Norte, Humboldt, Mendocino, Siskiyou and Trinity Counties. Specific watersheds and project sites, drawn from the Priority Project List (Exhibit 2) will be identified in the work plan, subject to the approval of the Conservancy’s Executive Officer.

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

5. **Need:** No implementation may proceed without basic design work, and the Conservancy is one of the few funders willing to bridge the divide between concept and full implementation.
6. **Greater-than-local interest:** The State's coastal fisheries, and coastal communities that depend upon those fisheries, are imperative to the health and well being of the State.. Sportfishing is of ever-increasing importance to the State economy, and substantial investments have been made in creative marketing for commercial fisheries, but absent abundant fisheries, a ready source of a high quality sportfish or seafood product will, for practical purposes, disappear from our markets. Recovering coastal salmon populations to sustainable levels is of national interest. Reopening historic habitat while improving public infrastructure where advisable is an excellent way to achieve this goal.
7. **Sea level rise vulnerability:** Located well outside the coastal zone, the proposed projects suffer no vulnerability from sea level rise.

Additional Criteria

8. **Urgency:** For the last two years Mad and Eel River salmon returns have improved. Other coastal watersheds have also experienced improvements in adult returns recently. Leveraging the success of past investments in recovery throughout coastal watersheds while populations are relatively high is of the greatest importance so that in future years of depressed populations increased habitat availability will help offset lower returns of fish.
9. **Resolution of more than one issue:** The proposed project enhances coastal resources while modernizing decaying infrastructure and providing much needed jobs to depressed rural economies.
10. **Leverage:** See the "Project Financing" section above.
11. **Conflict resolution:** The Council effectively harmonizes the demands of the Endangered Species Act with the realities of upgrading and maintaining transportation infrastructure. This compatibility may seem intuitive, but it is not, and the conflict between the two frequently prevents otherwise good projects from proceeding.
12. **Readiness:** The Council retains its ability and desire to commence and complete the projects timely.
13. **Realization of prior Conservancy goals:** "See "Project History" above."
14. **Cooperation:** The Council's ability to navigate projects to completion demonstrates a high degree of cooperativeness from its many partners.
15. **Vulnerability from climate change impacts other than sea level rise:** The project sites have been selected in part due to their probable hospitability to pacific salmon populations in an era of climate change. Each creek enjoys cool and relatively undiverted streamflows that are likely to support pacific salmon populations for the foreseeable future.
16. **Minimization of greenhouse gas emissions:** The design work will cause few if any greenhouse gas emissions. The applicant is committed to ensuring that, in future implementation of projects, the contractors will employ best management practices (e.g. low idling rates) during project construction so as to minimize greenhouse gas emissions.

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed authorization will enable the grantee to prepare for implementation a suite of coastal resource enhancement projects inside and outside of the coastal zone. Thus, the proposed project and any future implementation projects stemming from this grant will be consistent with Sections 31251 and 31251.2. Consistency with Section 31251.2 is based on the fact that the aquatic resources and habitat quality of stream channels within and outside of the coastal zone 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. Under this proposal, the grantee shall make future selection from the Council's priority list a suite of at least four important project sites from five potential northern California counties, three of which have certified Local Coastal Programs (LCPs), and two of which lie outside of the coastal zone. Consistency with the three certified LCPs is discussed below. Future work sites will be located within and outside of the coastal zone. The linkage between coastal streams inside and outside of the coastal zone explains why the proposed project is called for in a bevy of resource management plans, including, but not limited to, basin plans administered by the Northcoast Regional Water Quality Control Board, the State Steelhead Recovery Plan, the California Coho Recovery Plan, the federal Recovery Plans for multiple listed salmonid species, and more.

The current authorization is consistent with the applicable 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)

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.

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

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....” (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)

The proposed authorization will prepare 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 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

FIVE COUNTIES SALMONID CONSERVATION PROGRAM FISH PASSAGE
IMPROVEMENT: DESIGN GRANT

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.

“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:

The proposed authorization is statutorily exempt from the California Environmental Quality Act (CEQA) under 14 California Code of Regulations § 15262. The proposed authorization involves only data gathering, planning, and feasibility analyses for possible future actions. The planning and design effort does not have a legally binding effect on future activities or authorizations, and will encompass consideration of environmental factors, as required. The proposed authorization is also categorically exempt under § 15306 as a resource evaluation activity that will not result in serious or major disturbance to an environmental resource. Capital improvements arising from the completed designs will be subject to further CEQA analysis.

Staff will file a Notice of Exemption upon approval.