

COASTAL CONSERVANCY

Staff Recommendation  
January 17, 2008

**KLAMATH RIVER DAM REMOVAL STUDIES:  
WATER QUALITY AND BIOLOGICAL EVALUATIONS**

File No. 06-141-02  
Project Manager: Michael Bowen

**RECOMMENDED ACTION:** Authorization to augment an environmental services contract by \$150,000 to evaluate the water-quality benefits likely achieved by removing dams on the Klamath River, to refine characterization of the likely biological impacts of dam removal and their avoidance or offset, and to summarize this and other information in a dam-removal plan suitable for submission to the Federal Energy Regulatory Commission.

**LOCATION:** Klamath River dam sites (Exhibit 1).

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

Exhibit 1: [Project Location and Site Map](#)

Exhibit 2: [Klamath Study Board Briefing](#)

Exhibit 3: [Letters of Support](#)

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**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 disbursement of up to one hundred fifty thousand dollars (\$150,000) to evaluate water-quality benefits associated with dam removal, to refine studies regarding the likely biological impacts of dam removal and their avoidance or offset, and to develop a dam-removal plan.”

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 (Section 31251 *et. seq.*) of Division 21 of the Public Resource 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 September, 2007.”
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### **PROJECT SUMMARY:**

Staff requests authorization to augment the Conservancy’s current study evaluating dam removal on the Klamath River. The existing study has three goals. First, the contractor was asked to characterize sediment transport patterns within and downstream of the Klamath River Hydropower Project (“Project”) area in the event of dam removal. An estimated 3.7 million cubic yards of fine sediment could be expected to flow downstream of the project area in the event of dam removal, and understanding the rate and nature of the sediment movement is crucial to dam removal planning efforts. Second, the contractor was asked to characterize the biological resources of the Klamath River within and below the project area, and to evaluate how those resources would be impacted in the event of dam removal. Last, the contractor was to describe how any biological impacts could be avoided or offset in the event of dam removal.

The initial study efforts have revealed two important but poorly understood concepts. First, it appears likely that although the short term effects of dam removal will be severe, largely the result of a massive sediment pulse downstream of the project area, the long term result is likely to be a marked improvement in water-quality. Second, the tributaries to the mainstem are likely to play an important role in helping aquatic species recolonize the mainstem reaches following the immediate effects of dam removal. The information obtained in the initial study, as well as that to be derived in the future, would be best gathered and summarized in the form of a dam removal plan, similar to that which other hydropower project owners have submitted to the Federal Energy Regulatory Commission (“FERC”) during license surrender proceedings.

The proposed augmentation would enable staff to expand the contractor’s scope in three areas: First, to evaluate the probably beneficial water-quality effects derived downstream of the project in the event of dam removal; Second, to expand and refine ongoing biological evaluations of dam removal. Last, to develop a dam-removal plan in a form suitable for filing with the Federal Energy Regulatory Commission;

As with all of the Conservancy’s investigations on the Klamath River, the purpose of this contract is to assist interested parties in assessing the risks and benefits associated with the possible decommissioning of the Klamath River Project, a hydroelectric development comprised of seven mainstem Klamath dams and one tributary dam, all of which are located on the upper Klamath River.

The Klamath River Project is currently the subject of a relicensing proceeding before the Federal Energy Regulatory Commission (“FERC”). Pacificorp owns and operates the Project under a single license issued in 1956 by the Federal Power Authority. The 50-year license expired on March 1, 2006. Pacificorp has filed a standard application for

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relicensing with FERC that has been extensively considered and analyzed in an environmental impact statement (“EIS”) under the National Environmental Policy Act issued November 16, 2007. Although the final EIS took into consideration a variety of project alternatives including the addition of fishways at the dams and decommissioning of part of the project, the evaluation of dam removal was minimal, and not sufficient to develop a coherent dam removal strategy. Nonetheless, FERC did concur with the California Energy Commission’s findings that the project was of marginal economic value. Therefore, a more fulsome evaluation of dam removal as a project alternative appears to be in order.

As before, however, the consideration of alternatives is hampered by the lack of a clear understanding of the complexities of what would comprise the largest dam-removal effort in the country, if not the world. Understanding, and presenting clearly dam-removal as a future project-management alternative, is clearly in the State’s interest.

The Conservancy has made great progress in addressing uncertainties associated with dam removal, and this augmentation would further that effort. This authorization would assemble existing information into a format more typical of FERC proceedings, would identify existing data gaps and study needs vital to further consideration of dam removal, would characterize how the existing project is affecting water quality downstream of the project area, and why dam removal would likely improve water quality conditions in the river below the project, and would enable the contractor to more precisely develop recommendations for protecting and enhancing the aquatic resources of the Klamath in the event of a dam removal.

If this authorization is approved, the Conservancy, and all concerned with evaluating dam removal as a future project management alternative, will obtain and present information that is essential to the consideration of dam removal as a management alternative for the Klamath River.

**Site Description:** The Project is located on the Upper Klamath River in north-central California. The Upper Klamath Basin includes the headwaters in south-central Oregon and north-central California, and contains the US Bureau of Reclamation's (BOR) Klamath Project Area. The Lower Klamath Basin includes the mouth of the Klamath River in the northwest coast region of California. The Klamath Basin is further divided into sub-basins, as shown in Exhibit 1.

The Upper Klamath Basin consists of the six hydrologic sub-basins that occur above the Iron Gate dam, and are included in the BOR's Klamath Project. It includes the Williamson, Sprague, Upper Klamath Lake, Lost, Butte and Upper Klamath (East) sub-basins. The Upper Klamath Basin is located parially in Oregon, and partially in California, in two counties: Siskiyou and Modoc.

The Lower Klamath Basin consists of the six hydrologic sub-basins that occur below Iron Gate, plus the West section of the Upper Klamath sub-basin. It includes the Shasta, Scott, Lower Klamath, Salmon, Trinity, South Fork Trinity, and the Upper Klamath (West) sub-basins. The Lower Klamath Basin flows through the California counties of Trinity, Humboldt, and Del Norte.

The Klamath basin is 10,040,354 acres, approximately half of which flows through California to its confluence with the Pacific Ocean at the town of Klamath.

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**Project History:** The Conservancy has an extensive history of involvement in the protection and enhancement of habitat and fishery resources in the Klamath River watershed. While Conservancy efforts have primarily been limited to lower watershed enhancement efforts, the Conservancy and other participants share a vision for the increase and enhancement of Klamath River habitat, whether it is in the lower or upper basin of the Klamath River.

In the early 1990's, the California State Coastal Conservancy began working with Simpson Timber Company (now "Green Diamond"), the Yurok Tribe, and other entities to build the foundation for a common effort in fisheries and watershed restoration for Lower Klamath River tributaries.

A working group called the Lower Klamath Restoration Partnership was formed in 1995 by members of the Yurok Tribe, Simpson, the Conservancy, and the Northern California Indian Development Council. This group sought to coordinate watershed restoration efforts, and achieve three goals concurrently: (1) improve the health of the Klamath River and its tributaries; (2) improve the health of the anadromous fishery, and; (3) train unemployed tribal members to become experts in the new and growing field of watershed restoration.

The Conservancy funded a study in 1995 that led to the development and publication of the *Background Report and Strategic Workplan for Watershed Restoration Planning: Lower Klamath River, California*. The report confirmed that the main cause of impaired habitat in the tributaries was sedimentation resulting particularly from intensive logging and unregulated road building on unstable slopes from the 1950's through the 1970s.

Concurrent with the development of these reports, an upslope road erosion potential inventory for McGarvey Creek was conducted in 1997 as part of the Yurok Tribe's Watershed Restoration Program. The report and its database identified, mapped and inventoried 63 miles of active and abandoned logging roads, and 4.5 miles of public highway for existing and potential erosion control treatment. The report identified and prioritized for treatment 408 sites, and revealed the potential, future loss of 234,900 cubic yards of sediment, and the delivery of nearly 164,800 cubic yards of sediment to McGarvey Creek and its tributary stream channels.

Funded in part by the Conservancy and others, the Tribe conducted a Watershed Restoration Training and Implementation Program within the McGarvey and Ah Pah Creek drainage basins from June through October, 1998. This was the initial phase of a projected multi-year restoration effort intended to remediate man-caused sediment sources from 30 tributary sub-basins within the lower Klamath River Basin.

With Conservancy funds, the Yurok Tribal Fisheries Program completed the *McGarvey/Ah Pah Watershed Restoration Training and Implementation Final Report* in 1998, and the *Lower Klamath River Sub-Basin Watershed Restoration Plan* in April, 2000. These documents outlined the training and implementation efforts, prioritized future restoration activities for the sub-basin, and identified tributaries where the activities would be implemented.

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The Conservancy awarded a grant of \$600,000 to continue McGarvey Creek enhancement efforts on June 4, 2003. Every road in the McGarvey Creek watershed was assessed for potential erosion and future sediment delivery, a prioritized list of road work, along with fisheries and habitat enhancement, monitoring, and assessments was developed in preparation for a phased approach to watershed restoration and aquatic resource recovery, and the Tribe has completed its enhancement efforts in the McGarvey Creek watershed.

Enhancement of lower Klamath river tributaries continues apace, ensuring that these streams provide adequate and improving habitat for salmon, steelhead, and other aquatic resources. The Yurok Tribe recently was awarded an environmental stewardship prize for their watershed restoration program.

However, these streams are unable to compensate for the effects of the operation of the Klamath River Project, a series of facilities that has substantially affected available habitat in the watershed since 1916, and which may have contributed to conditions leading to the outbreak of diseases, such as that which decimated an estimated 35,000 salmon and steelhead, including at least 300 endangered Coho salmon, in September, 2002.

On February 25, 2004, PacifiCorp filed an application with the Commission for a new license for the 161-megawatt Klamath Hydroelectric Project, FERC No. 2082, located principally on the Klamath River, between Klamath Falls, Oregon and Yreka, California. The existing project consists of eight developments, one of which, (Keno) has no generating facilities. Major project dams with generating facilities are Iron Gate, Copco No. 1, Copco No. 2, and J.C. Boyle dams. The existing project occupies a total of 219 acres of lands of the United States, which are administered by the U.S. Bureau of Land Management and the U.S. Bureau of Reclamation. PacifiCorp proposes to decommission two powerhouses (East Side and West Side) and to remove Keno dam from the project.

The Yurok Tribe, the Karuk Tribe, commercial fishing, environmental, agricultural and many other interests joined a mediated settlement process ("Settlement Group") to discuss the future of the Klamath River Project, and what opportunities existed to increase access for salmon to rendered inaccessible following construction of the Klamath River Project. At times the Settlement Group included the project owner, PacifiCorp. At other times, PacifiCorp did not participate. That dialogue has continued for three years, and all parties involved have expressed interest in exploring options for providing Pacific salmon access to historic habitat above the Klamath River Project.

In order to assist the Settlement Group resolve scientific uncertainties about dam removal, the Conservancy has funded a number of studies. First, the Conservancy and the Ocean Protection Council authorized jointly the disbursement of \$350,000 for the purpose of studying the volume and character of the sediment impounded behind the Klamath River dams. In addition, and as part of that study, contractors developed preliminary dam removal plans and rough estimates of cost for dam removal. The results of that study are included as Exhibit 2, and were provided to the Board in January 2007. In short, the study concluded that dam removal is feasible and affordable.

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Shortly after the results of the study were released, members of the Settlement Group raised many additional concerns regarding the uncertainties of dam removal. First, group members asserted correctly that the biological effects of removal had not been sufficiently analyzed. In fact, they had not been analyzed at all, due to the fact that this would entail a much more extensive scope than was initially authorized. Second, the group in general, and Siskiyou County in particular, raised concerns that the reservoir area, following reservoir drawdown, would be aesthetically unpleasant, and would be an environmental risk, as remaining fine sediment eroded into the newly formed channel.

In order to address these concerns in an expeditious fashion, the Conservancy's executive officer authorized two environmental services contracts. The first, conducted by Stillwater Sciences, sought to better refine sediment transport models, and to characterize the biological effects of downstream sediment transport. The second, conducted by Phil Williams and Associates, Ltd., sought to develop a reservoir-enhancement plan, as well as to conduct additional due diligence geotechnical evaluations on the safety of rapid reservoir drawdown. Both of those studies have resulted in a number of technical memoranda generated for the Settlement Group. Both studies remain underway, and will be completed by the end of 2008. The latter study was funded through a grant to the Conservancy from the California Department of Fish and Game.

The proposed augmentation will further the Stillwater studies, and provide important but missing pieces of information necessary to a thorough analysis of project alternatives. One alternative, dam removal, may indeed come to pass, and help enhance and restore the Klamath River system's once legendary salmon runs.

**PROJECT FINANCING:**

Coastal Conservancy	\$150,000
<b>Total Project Cost</b>	<b>\$150,000</b>

Conservancy funding for the proposed authorization is expected to come from Proposition 50 funds. Proposition 50 authorizes the Conservancy's use of these funds for the purpose of protecting coastal watersheds through projects undertaken pursuant to the Conservancy's enabling legislation (Division 21 of the Public Resources Code) to acquire, restore or protect water and land resources (Water Code Section 79570). Funds may also be used for planning and permitting associated with projects of this type.

Watershed activities funded under Proposition 50 must be consistent with applicable adopted regional water quality control plans and local watershed management plans. Consistent with the Clean Water Act, the North Coast Regional Water Quality Control Board has established a Basin Plan for the region. The plan identifies hydrologic units within the region, and lists beneficial uses for each unit. The project area falls into the Middle Klamath River Hydrologic Area, and most all of the possible beneficial uses identified in the Plan exist in that reach. These beneficial uses include, but are not limited to,

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hydropower generation, water contact recreation, cold freshwater habitat, commercial and sport fishing, rare, threatened or endangered species, and spawning, reproduction and early development of fish. The Basin Plans provide the basis for protecting or enhancing those beneficial uses. The earlier and proposed dam removal investigations conducted by the Conservancy will help the Board, and the State of California, to identify measure to protect and enhance the beneficial uses identified for the Klamath River, and to ensure achievement of resource enhancement objectives consistent with Division 21, as discussed in detail below, under the heading “Consistency with Conservancy’s Enabling Legislation”.

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

The authorization is proposed under Chapter 6 (coastal resource enhancement, §31111 and §31251 et seq.) of Division 21 of the Public Resources Code, as follows:

The proposed authorization is consistent with §31111, which enables the Conservancy to undertake plans and feasibility studies in implementing Division 21. As with its earlier Klamath dam removal investigations, the Conservancy has examined the feasibility of removing dams on the Klamath River for the purpose of increasing available habitat to coastal salmon populations which utilize the entire basin for their life history.

Under §31251.2(a), “[i]n 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 parties engaged in the relicensing of the Klamath River Project, which is located entirely outside of the coastal zone, require Conservancy assistance to determine the risks and benefits to coastal resources of various alternative management proposals for the Klamath River Project, one of which is the decommissioning of dams on the Klamath River. This assistance was sought in order to carefully evaluate a series of alternatives 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.

Under §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 biological and water quality analysis primarily, as well as associated work on sediment transport, represents a small component of the overall cost of relicensing and evaluation of project management alternatives.

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

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

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The project is consistent with the Conservancy's Strategic Plan, last updated on September, 2007, as follows:

Consistent with **Goal 6 Objective A** of the Conservancy's Strategic Plan, the proposed project will contribute to the development of plans to preserve and restore coastal watersheds and create river parkways. Consistent with that goal, the proposed project will leverage the results of the recently completed Klamath Sediment and Dam Removal Study (see Exhibit 2), and 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 members of the Settlement Group, explore possibilities to increase manifold the habitat available for aquatic species, notably salmon, by removing instream barriers to their free migration.

### **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 authorization include Congressman Mike Thompson, Senator Pat Wiggins, Assemblymember Patty Berg, the Counties of Humboldt and Trinity, the National Marine Fisheries Service, the Secretary of Resources, the Chair of the State Water Resources Control Board, the Department of Fish and Game, the Yurok Tribe, Trout Unlimited, American Rivers, the Pacific Coast Federation of Fishermen Association, and others. Letters of support are included in Exhibit 3.
4. **Location:** The proposed authorization will consist of biological and water quality evaluations both within and outside of the coastal zone, though primarily outside in Siskiyou County. Decisions made as a result of the information collected are anticipated to help improve fish passage within coastal watersheds for anadromous fish and other aquatic resources, and thereby benefit species that rely on both coastal and up-stream habitats for their survival.
5. **Need:** The Klamath River was once the Pacific Coast's third largest producer of salmon and steelhead, rivaled only by the Columbia and the Sacramento-San Joaquin River systems in that regard. However, existing barriers to fish passage obstruct recovery within the full geographic range of species either listed or potentially listed under the federal and state endangered species acts. The provision of fish passage over or the decommissioning of the Klamath River Project would provide anadro-



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mous salmonids and other aquatic organisms access to spawning and rearing sites in upper portions of the watersheds.

6. **Greater-than-local interest:** The historic population of salmon and steelhead on the Klamath River prior to the construction of the Klamath River project is legendary. One widely accepted estimate put the historic range of salmon abundance for the Klamath-Trinity River system at 650,000 to one-million fish. These runs contributed to substantial commercial, recreational, subsistence, and Tribal harvest.

Yurok and Karuk People have inhabited the lands of, and sustained themselves upon the resources of the Klamath River for centuries. In the case of the Yurok, this subsistence occurred chiefly in the coastal zone. Much of the Tribe's culture is based upon the Klamath River and its associated fish populations. Declines in historic levels of fish stocks, including the aforementioned fish kill, have at times reduced the Tribe's sustenance fishery to a largely ceremonial fishery. The commercial salmon fishery has been decimated by harvest limits governed by management proscriptions designed to protect weakened stocks on the Klamath River system.

Moreover, sport and commercial fishing provides an important economic benefit to the State of California. A study by the University of California's College of Natural Resources found that sport and commercial fishing contributed \$5.7 billion to the State's economy in 1992 alone.

### 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 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. Additionally, as climate change places additional stress on marine and freshwater ecosystems, it is increasingly important that society identify, protect and enhance those systems deemed most capable of supporting fish populations in adverse conditions. The Klamath River certainly qualifies as a candidate for such a system, and the reopening of more than 300 miles of historic habitat in that system, as well as the improvement of existing conditions, would do much to foster this recovery.
8. **Resolution of more than one issue:** The issue to be resolved by this authorization is the water quality and biological conditions affected by dam operations and dam removal. This and associated information will help inform a serious consideration of project management alternatives for the Klamath River Project, including either the provision of fishways at the dams, or decommissioning of the Project altogether.
9. **Leverage:** See the "Project Financing" section above.

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11. **Innovation:** The current effort to engage in a creative dialogue regarding project management. The Conservancy has assisted, and can continue to assist this dialogue through the provision of accurate and substantive information related to a dam removal alternative.
12. **Readiness:** Upon Conservancy approval, staff will augment the existing contract, and allow the additional work to proceed. The members of the Settlement Group, and the Dam Removal Subgroup of the Settlement Group, have expressed their desire to receive the information as soon as practicable.
13. **Realization of prior Conservancy goals:** The Conservancy's completion of the report "Assessment of Barriers to Fish Passage in California's Coastal Watersheds" 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 proposal provides an innovative way to dramatically expand fish-passage improvement into the arena of dam removal, and assist the development of the nation's largest fish-passage improvement project.
15. **Cooperation:** Many have expressed support for this authorization, and the members of the settlement discussions are prepared to assist the Conservancy.

### **CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The proposed authorization will include study areas located outside of the coastal zone, but will pertain to a proceeding that affects at least five northern California counties, two of which have certified Local Coastal Programs (LCPs), and three of which are outside of the coastal zone. However, 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.

The proposed authorization is consistent with the two 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." (Appx., p. 55)

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

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

Therefore, this recommendation’s goal of improving anadromous fish habitat by developing information to assist with the design of fishways or alternatively the removal of 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 County General Plan Volume II, North Coast Area Plan of the Humboldt County Local Coastal Program (LCP), which was partially certified by the Coastal Commission on January 12, 1982, and amended thereafter on various occasions, and which states:

“Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.”  
(LCP, 3-40 (a))

“Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.”  
(LCP, 3-40(b))

“Marine resources shall be maintained, enhanced, and, where feasible, restored. Special consideration shall be given to areas and species of special biological or economic significance.”  
(LCP, Chpt. 3, p. 27, Section G)

“The biological productivity and the quality of coastal waters, streams, wetlands...appropriate to maintain optimum populations of marine organisms...shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff...and minimizing alteration of natural streams.”  
(LCP, Chpt. 3, p. 27, Section G)

The proposed authorization will help prepare for projects designed to restore natural geomorphologic processes and open up previously unavailable habitat; therefore the proposed authorization is entirely consistent with the LCP policies stated above.

**COMPLIANCE WITH CEQA:**

Preparation of the sediment study and corollary information collection involves only data gathering, planning, and feasibility analyses for possible future actions and is thus statu-

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torily exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to 14 Cal. Code of Regulations Section 15262.

The authorization is also exempt under §15306 which exempts basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

Staff will file a Notice of Exemption upon approval.

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