

COASTAL CONSERVANCY

Staff Recommendation  
October 3, 2006

**EEL RIVER SALMONID RESOURCES PROJECT**

File No. 06-071  
Project Manager: Michael Bowen

**RECOMMENDED ACTION:** Authorization to disburse up to \$100,000 to the Center for Ecosystem Management and Restoration to prepare the Eel River Salmonid Resources Project, a digital database of information and data for use in the development of strategic salmonid recovery projects throughout the Eel River watershed in the counties of Humboldt, Trinity, Mendocino, and Lake.

**LOCATION:** Eel River watershed, counties of Humboldt, Trinity, Mendocino and Lake.

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

- Exhibit 1: Maps
  - Exhibit 2: Eel River Area Plan: Local Coastal Program
  - 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 31251-31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one hundred thousand dollars (\$100,000) to the Center for Ecosystem Management and Restoration (“CEMAR”) for the preparation of the Eel River Salmonid Resources Project, as described in the accompanying staff recommendation. Prior to commencement of work, CEMAR shall submit for the review and approval of the Executive Officer of the Conservancy a work program, schedule for completion and project budget, and the names and qualifications of any contractors to be employed in the preparation of the Resources 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 (Sections 31251-31270) of Division 21 of the Public Resources Code regarding the enhancement of coastal resources.
  2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 25, 2001.
  3. The Center for Ecosystem Management and Restoration is a nonprofit organization existing under Section 501(c)(3) of the U.S. Internal Revenue Service Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”
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**PROJECT SUMMARY:**

Staff recommends disbursement of up to \$100,000 to the Center for Ecosystem Management and Restoration (CEMAR) to prepare the Eel River Salmonid Resources Project, a digital database of information and data for use in the development of strategic salmonid recovery projects throughout the Eel River watershed in the counties of Humboldt, Trinity, Mendocino, and Lake. CEMAR proposes to inventory, scan, and convert to readily accessible, electronic format information pertaining to stream habitat conditions, presence of barriers to fish passage, and other data critical to the development of strategic salmonid recovery projects throughout the Eel River watershed. The end result of this process will be the Eel River Salmonid Resources Project, an organized compilation and analysis of existing data from federal, state, and local sources.

The project will help CEMAR and its partners understand where land use practices, including the inappropriate design and construction of road crossings, has degraded habitat beyond its ability to support native anadromous salmonid populations. The project will also make readily accessible for public review all known stream surveys, habitat typing reports, barrier inventories, and other sources of information critical to the strategic development and prioritization of habitat improvement projects.

Significant investments in the recovery of salmonid populations have been made by public and private organizations, often with great benefit to natural resources. These investments would be better informed and of greater potential benefit to natural resources if comprehensive and authoritative information on the historical distribution and current status of salmonids could be included. The ability of funders and local public entities to implement strategic fishery restoration projects in the Eel River watershed has been somewhat limited by the unavailability of centrally and conveniently located data relating to subwatersheds targeted for restoration work. This proposal will provide funders and project proponents with a rich, comprehensible, and accessible information source that will assist the strategic selection of fishery habitat restoration projects.

Much historic and current data on salmonids exists, but these data are stored in hard copy frequently in home or regional offices of the California Department of Fish and Game (DFG), NOAA Fisheries, academics, and local water and flood control districts. Despite the willingness of public agency staff to collaborate and share this data, limited staff resources and the format of the data often preclude the practical exchange of information between sister agencies or the general public. Moreover, accessible information is not archived in a fashion that ensures future availability.

If this authorization is approved, CEMAR will work collaboratively with public agencies such as NOAA Fisheries and DFG to identify key files, review documents for content, and convert the documents and data to readily accessible electronic format. CEMAR staff will then, in cooperation with experts from NOAA Fisheries and DFG, analyze the data to provide an expert analysis of the historic status and current distribution of salmonids in the study region. CEMAR will analyze the available information, in consultation with local and regional experts, to identify key tributaries of high priority for restoration.

CEMAR's prioritization of key watersheds and enhancement opportunities will rest in part on factors utilized in CEMAR's comparable Conservancy funded efforts for San Francisco Bay streams, and for the Southern Steelhead Resources Project. These factors include historic presence of anadromous fish, current status of fishery resources, habitat quality and quantity, development density in upper portions of subwatersheds, water quality and quantity, and other factors.

CEMAR, a nonprofit organization with extensive experience in the analysis of data to support restoration of aquatic and riparian habitat, has previously undertaken work of this type in the San Francisco Bay Area, where it launched a restoration prioritization process for Bay watersheds, and in the Central and South Coast regions, where it has conducted the Southern Steelhead Resources Project, a comparable effort for all streams and tributaries south of San Francisco Bay.

The Sonoma County Water Agency is particularly interested in supporting the project in order to help direct limited funds towards effective salmonid enhancement projects on the North Coast, thereby promoting the recovery of salmonid populations. The Agency, which is a recipient of water from the Eel River and other sources affected by salmonid recovery efforts, has contributed substantial funds and energy towards salmonid recovery efforts. It has agreed to commit \$100,000 towards the effort, and will work with CEMAR to ensure its timely completion.

**Site Description:** Data collection will include coastal anadromous fish-bearing streams throughout the Eel River watershed.

**Project History:** Three years ago, in response to an appropriation from the Salmon Habitat Restoration Program, sponsored by Senator Byron Sher (Palo Alto), the Conservancy conducted an extensive review of existing fish passage barrier data for coastal California. In this report, the Conservancy identified a number of known barriers to fish passage in coastal watersheds.

In addition to identifying more than 16,000 potential barriers to fish passage, the authors of the report learned that a great wealth of data relating to fish habitat conditions, including the presence of previously unknown barriers to fish passage, existed in DFG files, and elsewhere, but remained relatively inaccessible. This obstacle makes data consolidation and watershed restoration project prioritization most difficult. Moreover, due to drastic staff curtailments and office transitions at DFG and elsewhere, much of the data is in danger of being made even less accessible, by virtue of its being boxed and shipped to remote warehouses for storage and possible disposal. In fact, when the Resources Agency Library was closed and disbanded, much of that collection was shipped to the State Library, where agency staff were allowed to take for their own use valuable parts of the collection, and the rest was placed in boxes on shelves with no organization or indexing provided. If approved, this authorization would enable CEMAR to permanently archive, organize, and make available data for watershed analysis, project prioritization, and implementation of strategic recovery projects.

**PROJECT FINANCING:**

Coastal Conservancy	\$100,000
Sonoma County Water Agency	<u>\$100,000</u>
<b>Total Project Cost</b>	<b>\$200,000</b>

Funding for the proposed project is expected to come from the Conservancy's FY 2004/05 appropriation from the Safe Neighborhood, Clean Water, Clean Air, and Coastal Protection Bond Fund (Proposition 50). 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. The Eel River Salmonid Inventory Project would provide essential data and other planning necessary to achieve just these objectives and is consistent with Division 21, as discussed in detail below, under the heading "Consistency with Conservancy's Enabling Legislation." The Sonoma County Water Agency has expressed a keen interest in this enhancement strategy, and has therefore committed \$100,000 of its own funds to this effort.

**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, as follows:

In general, under §31111, the Conservancy may award grants to nonprofit organizations to prepare plans and feasibility studies. The proposed project, which involves the compilation of data for watershed enhancement projects, is the first, necessary step in preparing a credible and effective enhancement plan for the restoration of salmonid habitat in these regions.

Pursuant to §31251, the Conservancy may award grants to 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 project would provide funds to CEMAR to conduct data collection necessary to prepare enhancement plans or take other corrective measures with regard to coastal fishery resources disturbed by human activities and incompatible land uses.

Section 31251.2 (a) provides that "[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. . . ." The proposed project as a whole will expedite restoration of coastal zone resources and that will benefit the anadromous fish that rely on both the coastal and upstream habitats for their survival.

As required by §31252 the proposed project will focus on coastal anadromous salmonid habitat specifically identified in the pertinent certified local coastal plans as being in need of enhancement and restoration. The Eel River Area Plan and Humboldt County Local Coastal Program state that opportunities should be investigated and measures implemented to augment and enhance the Eel River's fishery resources.

Finally, pursuant to §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 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 and after taking into account other available resources and the matching contributions to the project from 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 will preserve and restore coastal watersheds and create river parkways.

Consistent with **Goal 6 Objective A**, 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 grantee and other organizations to prepare plans to increase and improve available habitat for aquatic species, notably salmon, by targeting high priority watersheds, and identifying and preparing for implementation priority projects within those sub-watersheds. 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, and innumerable resources to be collected, compiled and analyzed as part of this effort, the Conservancy will ensure measurable increases in available habitat and, presumably, measurable increases in anadromous fish populations within and above the project areas.

**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 N.O.A.A. Fisheries, the California Department of Fish and Game, The Sonoma County Water Agency, the County of Humboldt, California Trout, Trout Unlimited, the Humboldt County Fish and Game Commission, and others. Letters of support are included in Exhibit 3.

4. **Location:** The proposed project will include data review and assimilation for projects within and outside of the coastal zone. In either case, the proposed project will provide the information needed for strategic habitat improvement efforts 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 Eel River is an enigma from a fishery management perspective. Despite its vast size --it is the third largest watershed in California at 3,625 square miles in size-- and despite its contribution to the State's overall population of salmon and steelhead --it is the third-largest producer of salmon and steelhead in California-- it remains chronically underprotected, relatively unenhanced, and generally misunderstood. However, the potential for fishery enhancement of this watershed is as large as the watershed itself. According to DFG reports of the early 1900s, the Eel River supported runs of salmon and steelhead trout that were estimated to exceed one-half million fish. Like the Klamath-Trinity, and Sacramento River systems, the Eel supported vibrant in-river commercial and sport fisheries. In 1964, the Department estimated the annual spawning escapement in the entire Eel River System at approximately 82,000 steelhead trout, 23,000 coho salmon, and 56,000 Chinook salmon for a total of 161,000 fish.

The most recent estimate of the average annual salmon and steelhead trout spawning populations in the Eel River system was made in the late 1980s and indicated that steelhead trout had declined to 20,000 fish, coastal chinook salmon to 10,000 fish, and coho salmon to 1,000 fish. This total of 31,000 fish reflects at least an 80% decline in salmon and steelhead trout populations from early 1960s levels.

Despite these declines from historic abundance, anchor watersheds remain, and continue to host the remaining populations of coastal chinook salmon, coho salmon, and steelhead trout, including the exceedingly rare Spring run summer steelhead. In order to restore these populations on a watershed basis, and thereby contribute to salmon recovery statewide, key Eel River tributaries must be protected, enhanced, and allowed to serve as points from which growing populations can radiate out to recolonize habitat from which populations have been extirpated. California Coastal Chinook and northern California Coho are now listed as threatened under the federal and State Endangered Species Acts. Habitat limitations, such as barriers to fish passage, inadequate riparian canopy, embeddedness of stream bottoms, inadequate instream flows, and other factors obstruct recovery within the full geographic range of species. The authorization will help prepare for the improvement of instream habitat and will substantially increase recovery efforts for these important fishery resources by preparing information and analysis necessary to the development of projects to provide anadromous salmonids and other aquatic organisms with access to high quality spawning and rearing sites throughout priority watersheds.

6. **Greater-than-local interest:** The Eel River likely supports the largest remaining native coho salmon population and one of the largest coastal Chinook populations in California. Therefore, with respect to recovering state and federally listed species, its importance for recovery actions cannot be overstated. 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 project's potential contribution to recovery of the sport and commercial fishery is of even greater significance in light of recent disaster declarations resulting from the closure of the salmon season along the Pacific Coast. The historic economic contributions from sport and

commercial fishing can and must be recovered for the overall economic benefit of 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 and strategic improvement of in-stream habitat, and subsequent recolonization of historic range, proceeds expeditiously. Extensive information regarding the historic and current condition of the habitat and range of species for anadromous salmonids exists, but is difficult to access and analyze for the purpose of recovery planning. Moreover, much of this information, frequently on file at home office locations and elsewhere, is at risk of being transferred to remote locations for long-term storage and eventual disposal. CEMAR will work quickly and efficiently in order to adequately archive this information, thereby making it accessible for informed regional recovery planning and habitat enhancement efforts as they have done in other regions of California. Lastly, 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. Given extremely low levels of coho populations, perhaps as low as 2,000 adults statewide, there is an urgent demand for projects such as this.
9. **Leverage:** See the “Project Financing” section above.
11. **Innovation:** This novel approach to data analysis and distribution is cost effective, and utilizes already collected, but relatively unavailable data, thereby precluding the need for high additional expenses associated with conducting new habitat surveys, watershed assessments, or other field examinations. This tactic has been applied successfully in the San Francisco Bay, on the Central and South Coast streams, and with this authorization will be extended to the Eel River watershed. It is worth noting that all of these areas share in common the theme that they once enjoyed concerted effort and attention by state and federal resource agencies, but have since experienced a general lack of focused recovery efforts, largely due to staffing limitations and shifting priorities.
12. **Readiness:** The project applicant has demonstrated that it has the support and technical expertise necessary to commence and complete the project planning in a timely fashion. The work should be completed within two years.
13. **Realization of prior Conservancy goals:** A variety of projects, including the Conservancy’s completion of the report “Inventory of Barriers to Fish Passage in California’s Coastal Watersheds,” signal the agency’s increased strategic focus on and commitment to the improvement of aquatic habitat and fishery enhancement in coastal watersheds. Furthermore, the Conservancy’s support of CEMAR’s efforts in the San Francisco Bay, and the Central and South coast watersheds, highlights the Conservancy’s willingness and ability to identify high priority and practical resource recovery opportunities that are justified by the historic record, and to assist areas that, for a variety of reasons, may have received less than optimum levels of recovery planning attention from the State and federal governments. The Eel fits this model, and would benefit similarly from a focused examination of the key watersheds most likely to contribute to meaningful recovery of diminished Pacific salmon populations.
15. **Cooperation:** State and federal agencies, as well as numerous project proponents, have all expressed support for and a willingness to cooperate with the grantee in accomplishing the

project. The DFG in particular has expressed support in the form of access to files, and the temporary provision of office space for housing of the subcontractors associated with this undertaking.

**CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The Eel River is treated in detail in the Humboldt County General Plan, Volume II, the Eel River Area Plan of the Humboldt County Local Coastal Program. Both the Eel estuary and its riparian habitats are identified as “Sensitive Environments” warranting special consideration and protection under the LCP. Because of the Eel’s importance as a natural resource to the State in general, and to the County of Humboldt in particular, Section 3.41 (F) of the LCP is included in entirety as Exhibit 2.

The LCP contains an interesting focus, unique for an LCP, on the protection of water and fisheries resources. The LCP notes that “(a)ll projects in and out of the Coastal Zone which may have a significant impact on instream flow regimes and coastal resources, shall overall, maintain in-basin beneficial uses of water, where feasible enhance instream beneficial uses of water, and prevent significant adverse effects to coastal resources.” (LCP 3.41 (1) (a)) The proposed project will assist substantially efforts to enhance beneficial uses of water, and ameliorate or prevent significant adverse affects to coastal resources, by identifying priority subwatersheds for recovery in the Eel and recommending specific salmonid enhancement strategies for those areas.

This data collection and analysis effort targets Eel subwatersheds mostly outside of the coastal zone boundary in an effort to establish historic and current habitat quality and quantity for purposes of anadromous fish restoration. As such, adherence to the Coastal Act, as well as Local Coastal Programs (LCPs), is necessary.

The proposed project will collect baseline data essential to the strategic restoration of coastal watersheds, and the species such as anadromous fish resources that depend upon those watersheds for their survival. The proposed project is therefore consistent with the Coastal Act, Section 30231, which states that “(t)he biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained, and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.”

**COMPLIANCE WITH CEQA:**

The project 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.