

COASTAL CONSERVANCY

Staff Recommendation  
October 25, 2003

**CARMEL RIVER RESTORATION PROGRAM**

File No. 02-090  
Project Manager: Neal Fishman

**RECOMMENDED ACTION:** Authorization to disburse up to \$300,000 to the Planning and Conservation League Foundation to develop a program to restore the resources of the Carmel River in conjunction with the removal or substantial modification of the San Clemente Dam.

**LOCATION:** The Carmel River , including the channel and adjacent floodplain, especially the areas from and including the San Clemente Dam and Reservoir, to the river mouth, Monterey County (Exhibits 1 and 2)

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

- Exhibit 1: Location Map
  - Exhibit 2: Site Map
  - 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 disbursement of an amount not to exceed three hundred thousand dollars (\$300,000) to the Planning and Conservation League Foundation (“PCLF”) to develop a program to restore the resources of the Carmel River, subject to the condition that, prior to the disbursement of any funds, PCLF shall submit for the review and written approval of the Conservancy’s Executive Officer a work program, including scope of work, budget and schedule, and the names of any contractors that it intends to use.”

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 of Chapter 6 of the Public Resources Code (Sections 31251-31270) 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 24, 2001.
  3. PCLF is a nonprofit organization existing under Section 501(c)(3) of the U. S. Internal Revenue Code, and subject to the Nonprofit Public Benefit Corporation Law (commencing with Section 5000 of the California Corporations Code), and whose purposes are consistent with Division 21 of the Public Resources Code.”
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**PROJECT SUMMARY:**

This project will result in the conceptual design of a restoration program for the Carmel River, especially that portion including the San Clemente Dam and reservoir and the lower river, including feasibility analysis, technical assistance, and a public outreach and education program. Enhancement measures would concentrate on plant and wildlife habitat improvements within the river and floodplain. The project will focused on the recovery of rare, threatened or endangered species, including steelhead trout and the California red-legged frog, in conjunction with plans to modify or remove the San Clemente Dam (Dam). The project could also focus on recreational improvements and flood protection that may be integrated with resource enhancement measures.

Specifically, PCLF would consult with the State Department of Water Resources (DWR), regarding its efforts to improve the safety of the San Clemente Dam, that are expected to lead to its modification or removal. PCLF would help to consider appropriate public and private agency and organization roles, in the physical modification of the dam. It would analyze the regulatory requirements for modifying or removing the dam and provide analysis on what aspects of dam removal or modification, if any, may be eligible for public funding, from various available sources. It would analyze what role various public and/or private agencies or organizations could take in the planning, design, engineering or implementation of the modification or removal of the dam. It would also review lands around the dam site to analyze whether any should be acquired for public purposes. Upon approval of the Executive Officer, PCLF would hire consultants as necessary to assist in these assessments.

In conjunction with the modification or removal of the dam, PCLF would assist local organizations in designing potential resource enhancement projects throughout the river, but would focus this effort on the dam and reservoir site and the lower river. The removal or modification of the dam is expected to increase passage of steelhead up and down the river. It will also impact the movement of sediments down the river to the ocean. This will change channel configurations. It could also greatly modify riparian habitat along the river and in the reservoir area behind the dam. PCLF would work with local groups in determining ways to build on the positive improvements expected from dam removal or modification, including assessing other barriers to passage or the need to otherwise modify the river channel, banks, or floodplain.

CLF would analyze what aspects of this work are expected to be considered as mitigation related to the modification or removal of the dam and what aspects may be enhancements that can be appropriately integrated with required mitigations related to the Dam’s removal, using various available public funds. Upon approval of the Executive Officer of the Conservancy, PCLF would hire consultants, and/or make grants to local groups to assist in this effort.

PCLF would help to institute a public participation and education program with existing local organizations, interest groups and residents of the Carmel River area, to inform them of the pos-

sibilities of resource enhancement associated with the removal or modification of the San Clemente Dam. It would work with the Department of Water Resources in this regard.

PCLF does policy research and public education on a wide range of environmental issues. PCLF's President, Gerald Meral, is a former deputy director for the Department of Water Resources and Executive Director, Fred Keeley, is a former Santa Cruz County Supervisor, and State Assemblyman with wide ranging knowledge of the issues involved in the Carmel River and the various interests groups involved in removal or modification of the San Clemente Dam.

**Site Description:** The Carmel River drains a 255-square mile watershed in the Santa Lucia range along the central coast of California. In the upper watershed, the river and its tributaries flow in steep-sided canyons. For the last 15 miles, the river flows across the relatively flat Carmel Valley floor to the Pacific Ocean.

The Carmel River is the principal water supply for the Monterey Peninsula. Two dams, the Los Padres (at mile 25) and San Clemente (at mile 18) are operated to regulate streamflow to supply water users. Due to sediment loads that almost fill the reservoir, the San Clemente Dam site is currently used only as a point of diversion during high flows, and not as a water storage site. Cal-Am is the owner and operator of the dams and several groundwater wells in the lower reaches of the river that are also use for water supply.

In the past, the Carmel River was one of the premier steelhead streams in the state. In the 1920s, the river's steelhead population was estimated to be between 12,000 to 20,000. By the early 1990s, the population had declined to a few hundred fish. In 1997, Central Coast steelhead were listed as a threatened species by the National Marine Fisheries Service. The decline of the fishery related in large part to water diversions, dams, lack of riparian cover, and over-fishing.

San Clemente Dam was completed in 1921. The reservoir behind the dam receives runoff and sediment from a drainage area of 125 square miles, plus runoff from 44 square miles upstream of Los Padres Reservoir. Since 1921, the San Clemente Dam has retained nearly all of the sand and coarser sediment introduced from the watershed, eliminating bedload delivery in the downstream channel.

Sediment has nearly filled the existing San Clemente Reservoir, greatly reducing its water storage capacity, interfering with ease of passage for migrating anadromous fish, and creating concerns for future spillage of sediment into the channel downstream. Only 150 acre feet of water storage remain, compared with the original 1,450 acre feet for which the project was designed.

The San Clemente Reservoir is now a braided sediment field with very shallow water and no clearly defined channel. Fish must negotiate a fish ladder at the dam, one of the longest such structures in the country. The fish ladder will become dysfunctional in the future as sediment begins to overtop the dam and clog the ladder due to lack of storage capacity in the reservoir.

At present, fish that are able to ascend the ladder must negotiate the sediment field in the reservoir above the Dam in order to migrate to spawning grounds. Shallow conditions and the lack of clearly defined channels make conditions in the reservoir unsuitable for salmonids. Due to these factors, the Dam and reservoir are major obstacles to fish attempting to migrate to upstream sites.

Two-thirds of the potential spawning habitat for steelhead occurs above San Clemente Dam. A recent study concluded that "steelhead must pass over San Clemente Dam for access to the majority of spawning habitat." Of the 37 miles of tributary spawning habitat available in the basin, 18 miles are above the Dam. Of the 24 miles of potential tributary rearing habitat available in the

basin, 19 miles occur above the Dam. These figures indicate that it is critical to promote and enhance steelhead passage to the majority of habitat that is located above the Dam.

**Project History:** In 1992, the Department of Water Resources, Division of Dam Safety, found San Clemente Dam to be unsafe. The concern is that either an earthquake could cause a failure or a heavy flood could overtop and undermine the dam structures.

In the years since the Dam was declared unsafe, numerous studies have been conducted to identify and evaluate alternative solutions. Several Environmental Impact Reports have been prepared describing alternatives for remedying this condition. Cal-Am, the owner of the Dam, recommended a project to leave the dam in place and reinforce it with a new cast-in-place dam wall of about 5,600 cubic yards of concrete.

The National Marine Fisheries Service objected to the Dam strengthening alternative, stating in a November, 2001 report, that the Dam “would continue to have little purpose other than to hold back nearly 2000 acre feet of sediment for another 50+ years while serving as one of the many water diversion points along the river. By retaining the dam, the restoration and enhancement of the many miles of stream habitat would be unrealized, passage for migratory steelhead would continue to be adversely affected, and the effects of sediment releases from the sediment filled impoundment will continue to be an unresolved problem.”

During the last year, several alternatives have been evaluated, including one prepared by the Institute for Fisheries Resources, utilizing grant funds from the Coastal Conservancy. This alternative proposed storing sediments behind the dam in a series of constructed cells in front of the dam. With this and several other potential alternatives in hand, regulatory agencies are now supporting the concept of removing all or a large section of the Dam, and disposing of much of the sediment in the Reservoir. This would open up miles of spawning and rearing habitat and would present many opportunities for an integrated resource enhancement program as is proposed.

Because Dam removal would greatly alter downstream conditions, further studies, both at the Dam and Reservoir site, and the reach downstream of the Dam to the river mouth, are needed to characterize before and after river and floodplain habitat conditions and to assess the potential for habitat restoration and enhancement once the Dam is removed.

The Conservancy has a long history of involvement in this river system. The projects have focused on the river mouth, and consist of enhancement planning and implementation at the site of the Carmel River lagoon, wet of Highway 1. A major focus of these projects is the improvement of conditions at the mouth of the river for both juvenile steelhead and fish returning to spawn. The remaining river system upstream of the mouth to the Dam site offers many possible restoration opportunities that would further enhance conditions for steelhead and other wildlife species.

**PROJECT FINANCING:**

Coastal Conservancy	\$300,000
<b>Total Project Cost:</b>	<b>\$300,000</b>

The anticipated source of Conservancy funds is an appropriation to the Conservancy from the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50). The proposed analysis and educational activities related to the restoration of river resources and removal or modification of the dam is consistent with this funding source. Prop. 50 allows

funds to be used for protecting coastal watersheds, including but not limited to, acquisition, protection, and restoration of land and water resources and associated planning, permitting, and administrative costs. It allocates funds to the Coastal Conservancy for coastal watershed protection pursuant to Division 21 (commencing with Section 31000) of the Public Resources Code.

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

Chapter 6 of Division 21 of the Public Resources Code (Sections 31251 *et seq.*) provides for the Coastal Conservancy’s participation in a program of coastal resource enhancement. The proposed authorization will assist the Conservancy in meeting the purposes and objectives of Chapter 6 by facilitating the enhancement of the watershed resources of the Carmel River, a significant coastal watershed in Monterey County. Consistent with §31251, the proposed assessment will facilitate the enhancement of coastal watershed resources, which have been degraded and lost due to the filling of historic wetlands and to other impacts of development.

Pursuant to §31251.2, the Conservancy may enhance a resource within the coastal zone, where the resource is partly outside the coastal zone. The proposed activities are expected to lead to projects that enhance steelhead spawning and rearing habitat, and riparian habitat, which is a problem of the Carmel River watershed as a whole and adversely impacts coastal resources within the coastal zone.

Consistent with §31253, the amount of proposed Conservancy funding for this project was determined by the total amount of funding available for coastal resource enhancement projects, the fiscal resources of project partners and the urgency of the project relative to other eligible coastal resource enhancement projects. The Department of Water Resources is actively involved in developing plans for the removal or modification of the San Clemente Dam as is the owner, Cal-Am.

**CONSISTENCY WITH CONSERVANCY’S STRATEGIC PLAN GOALS & OBJECTIVES:**

Consistent with **Goal 6, Objective A** of the Conservancy’s Strategic Plan, the proposed project may lead to the improvement of habitat for anadromous fish, increase riparian habitat and promote public recreation. The Carmel River is specified as an area of interest in the plan.

**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:** The proposed project has strong community support. Letters of support from Senator Bruce McPherson, Assemblymember John Laird, and County Supervisor Dave Potter are attached (Exhibit 3).
4. **Location:** The Carmel River watershed is a coastal watershed, which is located partly inside and partly outside the coastal zone.
5. **Need:** The financial support and participation of the Conservancy are critical for the success of this project because local organizations lack the financial resources to proceed with this planning effort without outside funding.
6. **Greater-than-local interest:** The Carmel River watershed is one of the major coastal watersheds of the Central Coast and has been one of the major steelhead fisheries in the region.

#### **Additional Criteria**

7. **Urgency:** Selecting the final plan for the San Clemente Dam will be the focus of resource agencies and Cal-Am over the next six months. It is essential that watershed planning occur over the same time period to enable a coordinated restoration program the implementation of which can occur in conjunction with modification or removal of the Dam.
9. **Leverage:** The Department of Water Resources, National Marine Fisheries Service and Cal-Am will be contributing in-kind services to help with the development of a restoration program, in conjunction with planning for the modification or removal of the San Clemente Dam. The implementation of the program will be a multi-million dollar project, funding by multiple sources, including Cal-Am, public agencies and private foundations. The Resources Agency has set aside \$5,000,000 from the River Parkway Program for the development of projects along the river.
10. **Conflict resolution:** The project has the potential for helping to resolve the conflict between human safety needs and the needs of steelhead and other species which have declined greatly in recent years because of human uses in the watershed.

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

The Monterey County Local Coastal Program for the North County Area (Section 20.144.040), recognizes that “The environmentally sensitive habitats of North County are unique, limited, and fragile resources of Statewide significance, important to the enrichment of present and future generations of County residents and visitors.” The proposed project would evaluate and recommend feasible opportunities to restore the historic, aquatic and riparian resources of the Carmel River, consistent with this policy.

#### **COMPLIANCE WITH CEQA:**

The proposed project is statutorily and categorically exempt from the provisions of the California Environmental Quality Act (CEQA) under 14 Cal. Code of Regulations Sections 15262 and 15306, in that it involves planning and feasibility studies for possible future actions, which the Conservancy has not approved, adopted, or funded, and includes information collection. By definition and necessity, the studies proposed will thoroughly account for and consider environmental factors. Staff will file a Notice of Exemption upon approval of the proposed authorization.