

COASTAL CONSERVANCY

Staff Recommendation

June 25, 2015

**CARMEL RIVER LAGOON LARGE WOODY DEBRIS AUGMENTATION**

Project No. 15-007-01

Project Manager: Trish Chapman

**RECOMMENDED ACTION:** Authorization to disburse up to \$360,000 of Carmel River Settlement funds to the Carmel River Steelhead Association to install large woody debris in the Carmel River Lagoon to enhance rearing habitat for steelhead, Monterey County.

**LOCATION:** Carmel River Lagoon, Monterey County

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

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

Exhibit 2: [Project Letters](#)

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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 up to three hundred sixty thousand dollars (\$360,000) of Carmel River Settlement funds to the Carmel River Steelhead Association (CRSA) to install approximately seven large woody debris and boulder complexes in the Carmel River Lagoon in order to enhance steelhead rearing habitat, subject to the condition that prior to the disbursement of funds, CRSA shall submit for review and approval by the Executive Officer of the Conservancy the following:

1. A work program including a schedule and budget for the project;
2. The names and qualifications of all contractors to be employed for the project;
3. Evidence that CRSA has sufficient rights to access the project site for purposes of undertaking and maintaining the project , and that all necessary permits and approvals have been obtained; and
4. A signing plan for the project acknowledging Conservancy funding.

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 Chapter 6 of Division 21 of the Public Resources Code, regarding resource enhancement.
  2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
  3. CRSA is a nonprofit organization existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”
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### **PROJECT SUMMARY:**

Staff recommends providing a grant of \$360,000 to the Carmel River Steelhead Association in order to install approximately seven large woody debris and boulder complexes (“LWD”) into the Carmel River upper lagoon to enhance steelhead rearing habitat. The grant would be funded with monies stemming from a 2009 settlement agreement between California American Water Company (CAW) and NOAA’s National Marine Fisheries Service (NMFS) related to the impacts of CAW’s water withdrawals from the Carmel River on South-Central California Coast (SCCC) steelhead. SCCC steelhead are listed as a threatened species under the federal Endangered Species Act.

The Carmel River provides important spawning and rearing habitat for SCCC steelhead. In the 2013 *South-Central California Coast Steelhead Recovery Plan* (SCCCS Recovery Plan) prepared by the National Marine Fisheries Service, the Carmel River steelhead run is identified as a Core 1 population, which is the highest priority for recovery in the plan. The main impacts to the Carmel River steelhead come from excess water diversions, fish passage barriers and decreased lagoon habitat.

The Carmel River Lagoon serves a vital role for the Carmel River steelhead in all life form stages. During and prior to when smolts are preparing to enter the ocean, the lagoon and the few hundred yards above the lagoon provide critical habitat for steelhead to acclimate to saltwater conditions. During upstream adult migration this same area provides habitat for the fish to begin their upstream migration. During the summer, as the river dries up, the lagoon and the few hundred yards of river above the lagoon provide critical habitat for rearing countless juvenile steelhead. Numerous studies have shown that a lagoon is crucial habitat for juvenile steelhead, allowing them to grow to a size that supports higher marine survival.

An assessment of the Carmel River watershed prepared by the Watershed Institute at California State University Monterey Bay, noted the lack of cover for fish in the lagoon and recommended that habitat could be improved through the use of anchored logs or other natural materials. The SCCC Recovery Plan specifically calls out the need for placement of additional large woody debris in the lagoon to enhance rearing habitat. This project is intended to increase the quality, quantity, and stability of the lagoon rearing areas for steelhead.

The proposed project involves installation of up to seven LWD. The project site is part of Carmel Lagoon State Beach, and CRSA is coordinating with State Parks on the project. CRSA has already stockpiled most of the materials required for this project. The project consists of the following: 1) completing the design and permitting for the placement of the LWD; 2) preliminary assembling of the LWD; 3) lifting the partially constructed LWD by helicopter to specific locations starting near the mouth of the south arm of the lagoon and continuing upstream 300 to 400 yards; 4) completing assembly at site locations; and 5) restoring the staging area. The LWD will be sized to withstand the flood flows from at least a 10-year return flow.

CRSA intends to partner with several organizations to complete the project. Central Coast Salmon Enhancement will assist with permitting and contract management. The LWD will be assembled by a crew from the California Conservation Corps; students with MEarth, a local environmental education organization, will help grow and install the plants to restore the staging area.

CRSA's mission is to restore and conserve the steelhead fishery in the Carmel River and its watershed. Every year CRSA donates approximately 500 hours of volunteer time to rescuing juvenile steelhead from portions of the river that are drying up and transferring them to the lagoon or other areas where there is a chance of survival. In addition to the annual fish rescues, CRSA has completed a number of projects on the river including, an earlier phase of this project in 2006 when they placed LWD in the newly restored south arm of the lagoon.

**Site Description:** The proposed project will be located in the upper reaches of the Carmel River lagoon. This area is flooded when the mouth of the river is closed and is riverine when the mouth is open. The lagoon is separated from the Pacific Ocean by a tall beach berm during most of the year. Under natural conditions, the berm is breached when winter stream flow is high enough to top the sand and carve a path to the sea. This cycle of berm breaching and closing is critical to the life cycle of steelhead trout that enter the lagoon from the sea in order to spawn, and also occupy the lagoon as young fish that are adjusting to salt water before taking to the sea.

The Carmel River historically supported one of the most important steelhead runs in the southern part of the fishery's range. These anadromous fish spend their adult years in the Pacific Ocean and return to spawn in the streams where they were born. Adults migrate up the river during high water flows to spawn in the River's upper reaches. Juveniles spend part of their first year in the lagoon at the mouth, where they increase their size before entering the ocean. Population declines in recent years have brought the fishery to near extinction.

The project area lies adjacent to a variety of land uses. Immediately to the west is the popular sandy stretch of the Carmel River State Beach. To the east is Highway One, and to the south the Carmel Area Wastewater District treatment facilities, the south arm of the lagoon, and then residentially developed bluffs. To the north are residential development, a school, and a resort development.

**Project History:** In 2009, CAW and NMFS entered into a settlement agreement that provided for CAW to pay a total of \$11.2 million to be used to fund projects to offset the impacts to steelhead in the Carmel River from CAW's over-pumping of water from the river. In July 2014, management of the settlement funds was transferred to the Conservancy. In September, the Conservancy solicited proposals for projects that were consistent with the purposes of the settlement agreement. CRSA submitted a proposal for the proposed project. Conservancy staff

consulted with NMFS and the California Department of Fish and Wildlife (CDFW) before selecting the project to recommend for funding.

In 2006, CRSA installed similar large woody debris features into the south arm of the Carmel River lagoon to enhance rearing habitat for steelhead. These installations have proven to be successful. Subsequently, CRSA began planning for this second phase of the project. CRSA has stockpiled most of the necessary materials while it has been working to secure sufficient funds to carry out the project.

**PROJECT FINANCING**

<b>Coastal Conservancy</b>	<b>\$360,000</b>
<b>Project Total</b>	<b>\$360,000</b>

The anticipated source of funds for the project is the Carmel River Settlement Account, which consists of funds paid by CAW pursuant to a settlement agreement with NMFS concerning alleged Endangered Species Act violations. The settlement requires CAW to pay \$11.2 million over a seven-year period. Originally these funds were managed by the CDFW, but they were subsequently transferred to the Conservancy for management. The settlement funds can only be used to improve habitat conditions for, and production of, SCCC steelhead, and/or otherwise aid in the recovery of SCCC steelhead in the Carmel River watershed; in addition, these funds can only be expended for mitigation of impacts from well-pumping and water withdrawals by CAW. The proposed project will enhance rearing habitat quality in the lagoon and lowest river reach and the project was identified in the SCCCS Recovery Plan as an important recovery action.

CRSA will provide the root balls and boulders needed for the project. These materials are valued at approximately \$15,000.

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

This project would be undertaken pursuant to Chapter 6 of the Conservancy's enabling legislation (Public Resources Code Sections 31251-31270). Pursuant to Section 31251, the Conservancy may award grants to public agencies and nonprofit organizations for the purpose of enhancement of coastal resources that have suffered loss of natural and scenic values. Such grants must be used for, among other things, corrective measures that will enhance the natural and scenic character of the areas. The habitat value of the Carmel River has been adversely affected by well-pumping and water withdrawals. The proposed project will enhance fish rearing habitat quality in the Carmel River lagoon and lowest river reach. Thus, the proposed project is corrective measure that will enhance the natural character of the area.

Consistent with Section 31252, Monterey County’s certified Local Coastal Program identifies the project area as an environmentally sensitive habitat that should be enhanced or restored where feasible. Several of the recommended actions in the LCP call for public action to protect resources of the Carmel River and lagoon. See the “Consistency with Local Coastal Program Policies” section, below.

Pursuant to Section 31253, the Conservancy may provide up to the total cost of any coastal resource enhancement project. Consistent with Section 31253, the following factors were considered in determining the amount of Conservancy funding for this project: the total amount of funding available for coastal resource enhancement projects, the fiscal resources of the applicant, the urgency of the project, and the Conservancy's project selection criteria, as described in detail below, under the heading "Consistency With Conservancy's Project Selection Criteria & Guidelines." CRSA is an all-volunteer organization with very limited financial capacity, and is undertaking the project to offset the impacts of CAW's water withdrawals. Therefore, the Conservancy will use the Carmel River Settlement funds to provide the total cost of the project.

Consistent with Section 31255, CRSA submitted a proposal for the proposed project.

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

Consistent with **Goal 5, Objective B** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will enhance coastal aquatic habitat in the lowest reach of the Carmel River.

Consistent with **Goal 5, Objective E** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will enhance habitat for steelhead and other fish by creating habitat complexity and hiding spaces.

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

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, 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. **Promotion and implementation of state plans and policies:**

The project implements CDFW's 1996 *Steelhead Restoration Management Plan*, management strategy #1: restore degraded habitat.

The project implements one of the critical recovery actions identified for the Carmel River biogeographic group in NMFS' SCCCS Recovery Plan specifically, to "identify, protect, and where necessary, restore estuarine and freshwater rearing habitats (including supplemental water to the estuary, management of artificial sandbar breaching at the river's mouth, and provision of spawning gravel and large woody debris within the lower mainstem.") [emphasis added].

The project is consistent with CDFW's 2005 *California Wildlife Action Plan*, which sets forth goals for the Central Coast region that include protecting sensitive species and important wildlife habitat and restoring anadromous fish populations.

The project also implements the *California Water Action Plan* (California Natural Resources Agency, California Environmental Protection Agency, and California Department of Food and Agriculture, 2014), which includes goal number 4: protect and restore important ecosystems by improving rearing habitat for SCCC steelhead.

4. **Support of the public:** The proposed project is supported by State Parks, Trout Unlimited, the Carmel River Watershed Conservancy, and others. See Exhibit 2, Project Letters.
5. **Location:** The proposed project is located within the coastal zone of the County of Monterey, just south of the City of Carmel-by-the-Sea.
6. **Need:** CRSA is an all-volunteer organization with very limited financial capacity. Without the Conservancy's support, the project would not occur.
7. **Greater-than-local interest:** SCCC steelhead is a federally threatened species and the Carmel River population has been identified as one of the highest priorities for recovery. The proposed project will enhance rearing habitat for SCCC steelhead.
8. **Sea level rise vulnerability:** The seven LWD that will be installed as part of the proposed project are designed to be functional when submerged; thus, they will continue to provide habitat enhancement as sea level rises.

#### **Additional Criteria**

9. **Urgency:** SCCC steelhead populations are at historically low numbers in the Carmel River and several years of drought have exacerbated the adverse conditions caused by over-pumping of the river's water. Immediate steps are needed to help steelhead survive until CAW's over-pumping of the river stops, which is estimated to be at least three to four years from now.
10. **Readiness:** CRSA is ready to start work on the project immediately; it anticipates that the LWD will be installed in spring 2016.
11. **Realization of prior Conservancy goals:** This project complements several other projects the Conservancy has funded to improve habitat in the Carmel River including restoration of the south arm of the lagoon, removal of San Clemente Dam, and floodplain restoration east of Highway 1.
12. **Cooperation:** CRSA is working State Parks, the Conservation Corps, Central Coast Salmon Enhancement and other community groups to undertake the project.
13. **Minimization of greenhouse gas emissions:** Except for the placement of the LWD by helicopter, most of the work will be done by crews working with hand tools or small power equipment that will minimize greenhouse gas emissions.

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

The proposed project is consistent with the Carmel Area Land Use Plan (LUP), which contains the policies of the certified Monterey County Local Coastal Program (LCP) that are applicable to

this area. The LUP identifies the Carmel River and its lagoon as environmentally sensitive habitats. LUP Key Policy 2.3.2 states in part: “The environmentally sensitive habitats of the Carmel Coastal Segment are unique, limited and fragile resources of statewide significance . . . accordingly, they shall be protected, maintained and, where possible, enhanced and restored.” Key Policy 2.3.5 recommends various actions including that the County work with State Parks and CDFW to protect the resources of the Carmel River and lagoon. The proposed project will enhance aquatic habitat in the Carmel River and lagoon, and is thus consistent with the LCP.

**COMPLIANCE WITH CEQA:**

Staff has reviewed the proposed project and determined that it is exempt from the California Environmental Quality Act (CEQA) pursuant to the CEQA Guidelines, Title 14 of the California Code of Regulations, Section 15333, as follows.

Pursuant to Section 15333, installation of the LWD is categorically exempt from CEQA because it is a small habitat restoration project that cumulatively does not exceed five acres in size and will enhance habitat for fish. Much of the project will be carried out with small power equipment and hand tools. A helicopter will be used to place the LWD in order to minimize impacts to riparian and wetland vegetation along the main river channel. The project meets the additional conditions of this categorical exemption in that there will not be significant adverse impacts on endangered, rare, or threatened species or their habitat as described in the section 15065, there are no hazardous materials at the site that could be disturbed by the project, and the project will not have impacts that are significant in light of past, future and other current similar projects.

Upon approval, staff will file a Notice of Exemption.